Chapter. 1. Introduction

ACTi provides you a series of guides for your project from proposal stage to maintenance stage. They work as below

- **[IP surveillance Proposal Guide]**: Making proposal to your customer
- **[IP Surveillance Deployment Guide]**: Fulfill your project from proposal to practical to your customer.
- **[Tech Support and Troubleshooting Guide]**: Find the root cause of your problem and solve it.

This **[IP Surveillance Troubleshooting Guide]** contains step by step procedure for you to solve a problem. First, we divide the troubleshooting by solutions into “IP surveillance solution” and “Hybrid IP surveillance solution”.

![Flowchart](image)

Stage1. Know your problem Type
Stage2. Find out the possible cause
Stage3. Find the real cause and find respective solution

We start from “Define your problem type” to know what kind of problem it is and define the problem type. Then we follow the problem type and refer to the chapters after to know the possible cause of this type of problem. After that, we can follow the introduction to clarify what is the actual cause of the problem this time and how to solve it.

We will not include everything in this guide. Please refer to
1. **[IP Surveillance Proposal Guide]** for how make a proposal to your customer.
2. **[IP Surveillance Deployment Guide]** for how to fulfill your project from proposal to practical to your customer.
1-1 Tech Support Workflow

Below is the Tech support workflow, because the e-mail communication between ACTi and you will cost a lot of time.

1. Get a problem
2. Refer to Manual
   Most problems can be solved by reading the manual. Please check the manual for details about the hardware connection, software installation, software configuration, hardware configuration and other notes on use and installation.
3. Refer to On-line Tech Support
   In addition to Manual, you can also check the Tech Support Contents on the website
   Website Tech Support: http://www.acti.com/support/support_index.asp
4. Gather Problem Information
   If none of document solves your problem, please follow the trouble shooting guide and prepare necessary information to ACTi sales and technical support. It will greatly minimize the problem solving time.
5. Contact Sales
   Contact your sales representative and report the problem information for advanced trouble shooting.

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**Liability**

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Chapter. 2.  Find your solution type

We divided the IP surveillance Troubleshooting guide into two sections by solution.

a. IP Surveillance solution Troubleshooting
b. Hybrid IP surveillance solution Troubleshooting

Each section covers the troubleshooting material for different IP surveillance solutions. Please refer to the description below to find your find the solution type and go to respective sections for more details.

2-1-1  IP Surveillance solution

In Pure IP solution, everything is transmitted and stored digitally. The images are transmitted via Ethernet Network instead of the coaxial cable. The images are stored into a hard drive instead of cassettes.
2-1-2 Hybrid IP Surveillance solution

Hybrid IP solution simply works as a connection extension solution for coaxial cable and RS-485/RS-232 connection.

2-1.2.1 Imaging block

Normally, the images are generated by a video server connected to an analog camera. All images are digitalized before transmitted via network.

2-1.2.2 Network block

Most of the connection is done via coaxial cabling. This hybrid IP solution works only as an extension for certain cameras where coaxial cabling can’t reach.

2-1.2.3 Decoding block

Digitalized images are converted back to analog images here.
2-1.2.4 Monitor/Management block

All the monitor, management and storage are done via conventional DVR, VCRs and Matrix.
Chapter. 3. IP Surveillance solution troubleshooting section

This section includes chapters from 3 to 13. It includes step by step procedure for you to know your problem kind, define your problem type, find possible causes, how to clarify each possible cause and how to solve the problem.

3-1 IP Surveillance Solution building blocks

3-1.1 Imaging block

The images are generated by IP camera or a video server connected to an analog camera. All images are digitalized before transmitted via network.

3-1.2 Network block

All the data is transmitted via Ethernet Network. There’s no
coaxial cabling to transmit the video clip. The network could be a LAN (Local Area Network) or a WAN (Wide Area Network) including Internet.

3-1.1.3 Monitor block

Live images and recorded files are played onto PC monitor instead of Analog TV.

3-1.1.4 Monitor block

All the images, events are recorded into a PC with network connectivity to this network. The images stored can be playback and searched in the future.
3-2  Find your problem type

Please see the table below for definition of each problem type. Please see the problem type table from lower to higher (1~10). That’s because the problem type with higher number relies on the problem type with lower number type.
Example: If you have PTZ problem (No.3) that means you has no problem with
a. Video server/IP camera login (No1)
b. Monitor (No 2)

<table>
<thead>
<tr>
<th>No.</th>
<th>Problem Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Video Server/ IP camera Login</td>
<td>You have the IP camera / Video Server powered up but you fail to login the web-configurator to setup</td>
</tr>
<tr>
<td>2</td>
<td>Monitor</td>
<td>You can’t view live images from the IP camera / Video Server</td>
</tr>
<tr>
<td>3</td>
<td>PTZ control</td>
<td>You can’t control the Pan/Tilt/Zoom of the IP camera or the PTZ device connected to a video server</td>
</tr>
<tr>
<td>4</td>
<td>Video Quality</td>
<td>You don’t like the quality of the video; it could be wrong color rendering, image blur, mosaic and anything about video quality.</td>
</tr>
<tr>
<td>5</td>
<td>Latency</td>
<td>You feel a lot of latency “Time difference” between the actual event and the video displayed on the monitor</td>
</tr>
<tr>
<td>6</td>
<td>Video Jitter</td>
<td>You feel the video displayed on the monitor is jumping, not smooth.</td>
</tr>
<tr>
<td>7</td>
<td>DIO event</td>
<td>1. You can’t receive DI (Digital Input) signal from sensors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. You can’t trigger DO device via DO.</td>
</tr>
<tr>
<td>8</td>
<td>MD event</td>
<td>1. You can’t trigger event upon Motion Event</td>
</tr>
<tr>
<td>9</td>
<td>Recording &amp; Playback</td>
<td>1. You can’t record manually, on schedule, by motion or by event.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. The recording is okay, but you can’t find the recorded file.</td>
</tr>
<tr>
<td>10</td>
<td>NVR login (formal version)</td>
<td>1. You fail to login the NVR</td>
</tr>
</tbody>
</table>
Chapter. 4. Login Problem

In this Chapter, we will focus the problem that you can’t login the Video server. We will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

4-1 Find out the possible cause

Please refer to the diagnostic flow to find out the problem type of the Login Problem.
Then you can refer to next section for advanced clarification and troubleshooting.

<table>
<thead>
<tr>
<th>Check Item</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step1 Check the Control Device</td>
<td></td>
</tr>
<tr>
<td>Step2 Connect the PC directly to the Video server/Transcoder then via cross-over cable. Then input the Video server/Transcoder to see if you can connect?</td>
<td>Please connect to LAN or WAN you used to connect previously</td>
</tr>
<tr>
<td>Step3 Refer to the section of each problem type to do root cause clarification and find respective solutions.</td>
<td></td>
</tr>
</tbody>
</table>
4-2  Login Problem Type 1

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

4-2-1  Network block

The possible causes could be as below.

4-2.1.1  Inappropriate network infrastructure

Because you can connect to the video server/IP camera via cross-over cable but you can’t connect it via your LAN environment, your network layout of your LAN might be wrong.

Clarification:
1. Connect the PC and Video Server back to original LAN
2. Use the PC to ping the Video Server’s IP address
3. The ping is likely to fail.

Solution:
1. Contact your MIS or anyone that build your network infrastructure.
2. Give him the test report above and ask him to fix the ping fail problem.

4-2-2 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

4-2-2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Sub-category</td>
</tr>
<tr>
<td>Product model</td>
<td>Model number</td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
</tr>
<tr>
<td>LAN IP setting</td>
<td>Use it to connect?</td>
</tr>
<tr>
<td></td>
<td>Use it to connect?</td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
</tr>
<tr>
<td>WAN IP setting</td>
<td>Use it to connect?</td>
</tr>
<tr>
<td></td>
<td>Use it to connect?</td>
</tr>
<tr>
<td>PC IP setting</td>
<td>Use it to connect?</td>
</tr>
<tr>
<td></td>
<td>Use it to connect?</td>
</tr>
<tr>
<td></td>
<td>Use it to connect?</td>
</tr>
<tr>
<td>Network deployment</td>
<td>Network diagram</td>
</tr>
</tbody>
</table>
4-3  Login Problem Type 2

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

4-3-1 Network block

The possible causes could be as below

4-3.1.1 Inappropriate Video server/IP camera IP address setting

Sometimes you can’t link to the video server/IP camera It could be caused by the video server/IP camera IP address. This setting is relevant to PC’s IP address and Subnet mask setting. Then we will discuss both of them in this section.
Clarification:

1. Connect the Video Server/IP camera via cross-over cable.
2. Open IP utility and click Refresh to search for the Video Server/IP and PC’s IP address. (IP utility should be version later than 3.1.05).

3. Check the PC’s IP setting as below

4. Fill in the table below

<table>
<thead>
<tr>
<th>Video Server/IP camera</th>
<th>PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subnet Mask</td>
<td>E1.F1.G1.H1</td>
</tr>
</tbody>
</table>

5. Check according to the check item and see if it follows the rule below.

<table>
<thead>
<tr>
<th>Video Server/IP camera</th>
<th>PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>IP address</td>
<td>Setting</td>
</tr>
<tr>
<td></td>
<td>Rule to</td>
</tr>
<tr>
<td>A1=A2,</td>
<td></td>
</tr>
</tbody>
</table>
check \(B_1 = B_2,\)
\(C_1 = C_2,\)
\(D_1 \neq D_2\)

Setting \(E_1.\overline{F}_1.\overline{G}_1.\overline{H}_1\)
\(E_2.\overline{F}_2.\overline{G}_2.\overline{H}_2\)

Rule to
Check
\(E_1=E_2=255,\)
\(F_1=F_2=255,\)
\(G_1=G_2=255,\)
\(H_1=H_2=0\)

6. If yes, this is not IP address setting.
7. If not, please follow the solution as below.

Solution:

1. Follow the rule below to change the PC setting.

<table>
<thead>
<tr>
<th>Video Server/IP camera</th>
<th>PC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting (A_1.B_1.C_1.D_1)</td>
<td>(A_2.B_2.C_2.D_2)</td>
</tr>
</tbody>
</table>
   | Rule to check \(A_1=A_2,\)
   \(B_1=B_2,\)
   \(C_1=C_2,\)
   \(D_1 \neq D_2\) |

2. After change the PC setting, try connecting to the video server/IP camera again.

---

4-3.1.2 Wrong PC IP address setting

This site is included in the previous section 4-3.1.1. Please go there and see details.
4-3.1.3 Inappropriate Video server/IP camera network port setting

It could be caused by the video server/IP camera network port setting. Different network ports are for different functions.

Clarification:

1. Connect the Video Server/IP camera via cross-over cable.
2. Open IP utility and click Refresh to search for the Video Server/IP. (IP utility should be version later than 3.1.05).
3. Find the HTTP port of the video server/IP camera

4. Check if your login link follows the rule below

<table>
<thead>
<tr>
<th>HTTP port</th>
<th>Login link</th>
<th>Correct?</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td><a href="http://192.168.0.100">http://192.168.0.100</a>* or <a href="http://192.168.0.100:80">http://192.168.0.100:80</a>*</td>
<td></td>
</tr>
<tr>
<td>ports other than 80</td>
<td><a href="http://192.168.0.100:XX">http://192.168.0.100:XX</a>* (XX= the port setting you find above)</td>
<td></td>
</tr>
</tbody>
</table>

Note: 192.168.0.100 is the IP address of the IP camera

5. If yes, this is not port setting issue
6. If not, this is the port setting issue.

Solution:

1. Change the login link following the rules below.

<table>
<thead>
<tr>
<th>HTTP port</th>
<th>Login link</th>
<th>Correct?</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td><a href="http://192.168.0.100">http://192.168.0.100</a>* or <a href="http://192.168.0.100:80">http://192.168.0.100:80</a>*</td>
<td></td>
</tr>
<tr>
<td>ports other than 80</td>
<td><a href="http://192.168.0.100:XX">http://192.168.0.100:XX</a>* (XX= the port setting you find above)</td>
<td></td>
</tr>
</tbody>
</table>
4-3-2 Monitoring block

The possible causes could be as below

4.3.2.1 Inappropriate O/S and Browser software

The possible cause might be the browser software you use to login the video server/IP camera.

Clarification:

1. Check if your software

<table>
<thead>
<tr>
<th>Software</th>
<th>Recommended version</th>
<th>Correct?</th>
</tr>
</thead>
<tbody>
<tr>
<td>O/S (Operating</td>
<td>Windows 2000 SP2 or</td>
<td></td>
</tr>
<tr>
<td>software)</td>
<td>Window XP</td>
<td></td>
</tr>
<tr>
<td>Browser</td>
<td>Internet Explorer 6.0 and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>above</td>
<td></td>
</tr>
</tbody>
</table>

2. If they are correct, then it’s not software problem
3. If they are not correct, it might be software problem

Solution:

1. Please install and use the software recommended.

4.3.2.2 Wrong ID and password

The login might fail if you input the wrong account ID and password.

Clarification:

1. ID and password is captive sensitive, please make sure that you are inputting the right one.

   Default ID: Admin (captive sensitive)

   Default Password: 123456

Solution:

1. If you can’t recall the ID and password, please “Hardware reset” the camera. (See respective hardware user manual).
2. Then login with the default ID and password

   Default ID: Admin (captive sensitive)

   Default Password: 123456
4-3-3  If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

4-3.3.1  Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Other information you found during the testing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4-4 Login Problem Type 3

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

4-4-1 Imaging block
The possible causes could be as below

4-4.1.1 Inappropriate network physical connection

It might because of the physical connection error (such as network cable fail, or cabling wrong).

Clarification:

1. Connect your Video server/IP camera to a switch via the network cable you are using.
2. Check if the Network LED on Video Server and Switch on?
3. If both are on, then is it not physical connection problem
4. If any of those are not, the physical connection is wrong.

**Solution:**

1. If the Video Server/IP camera is using standard RJ-45 network connector, just replace with a new cable.
2. If the Video Server/IP camera is not using standard RJ-45 connector (ex: CAM-5130/CAM-5140/CAM-5150), please use follow the user manual of CAM-5130/CAM-5140/CAM-5150 and make new cable if necessary?

**4-4.1.2 Inappropriate network platform – temporarily failure**

The network platform very rarely might fail for unknown reason.

**Clarification:**

1. Please reboot the camera.
2. Check if you can find the camera afterward.
3. If yes, this is a network platform temporarily failure problem
4. If not, this is not a network platform temporarily failure problem

**Solution:**

1. Because the network platform is very rarely to fail, you can go on use it. But if your system temporarily fails too often, please contact our sales.

**4-4-2 If problem not solved, how to report this problem?**

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).
### 4-4.2.1 Problem feedback table

Problem feedback table of login problem 1

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Other information you found</td>
<td></td>
<td></td>
</tr>
<tr>
<td>during the testing</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4-5 Login Problem Type 4

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

4-5-1 Network block

The possible causes could be as below

4-5.1.1 Inappropriate Video server/IP camera network port forwarding setting

The problem could be the inappropriate network transmission. Network transmission involves correct setting below
<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Server</td>
<td>Internet connectivity</td>
</tr>
<tr>
<td></td>
<td>Port setting</td>
</tr>
<tr>
<td>Network</td>
<td>Port forwarding</td>
</tr>
<tr>
<td></td>
<td>Firewall setting</td>
</tr>
<tr>
<td>PC</td>
<td>Internet connectivity</td>
</tr>
</tbody>
</table>

Because each part is dependent to each other. Then we put them all together in this section.

**Clarification:**
1. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C: How to check the network communication
2. If the check fails, this is a network communication problem.
3. If the check ok, this is not a network communication problem.

**Solution:**
1. Follows the support package TS-00009 to build up the internet communication step by step.

4-5.1.2 **Inappropriate network port setting**

The problem is discussed in 4-5.1.1, please go there for details.

4-5.1.3 **Video server/IP camera has no internet connectivity**

The problem is discussed in 4-5.1.1, please go there for details.
4-5.1.4 Blocked by firewall

The problem is discussed in 4-5.1.1, please go there for details.

4-5.1.5 PC has no internet connectivity

The problem is discussed in 4-5.1.1, please go there for details.

4-5-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

4-5.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td>LAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td>WAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Chapter. 5. Monitor Problem

In this Chapter, we will focus on the problem that you

1. Can login the video server/IP camera
2. Can’t monitor the images

we will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

5-1 Find out the possible cause

Please refer to the diagnostic flow to find out the problem type of the Login Problem.
Then you can refer to next section for advanced clarification and troubleshooting.

<table>
<thead>
<tr>
<th>Check Item</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1 Check the Control Device</td>
<td></td>
</tr>
<tr>
<td>Step 2 Check if you see the Video server/Transcoder’s analog output on a TV monitor.</td>
<td></td>
</tr>
<tr>
<td>Step 3 Connect the PC directly to the Video server/Transcoder then via cross-over cable. Then input the Video server/Transcoder IP.</td>
<td></td>
</tr>
<tr>
<td>Step 4 Refer to the section of each problem type to do root cause clarification and find respective solutions.</td>
<td></td>
</tr>
</tbody>
</table>
5-2 Monitor Problem Type 1

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

5-2-1 Network block

The possible causes could be as below.

5-2.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:
1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-over</td>
<td>Login</td>
<td>Port name</td>
</tr>
<tr>
<td>View image</td>
<td>View image</td>
<td>HTTP</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>HTTP</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>Streaming</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your LAN.

Solution:

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-over</td>
<td>Login</td>
<td>Port name</td>
</tr>
<tr>
<td>View image</td>
<td>View image</td>
<td>HTTP</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>HTTP</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>Streaming</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
5-2.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Network transmission check table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC</td>
</tr>
</tbody>
</table>

Clarification:
1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

4. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C: How to check the network communication for Monitoring images

5. If the check fails, this is a network communication problem.
6. If the check ok, this is not a network communication problem.
problem.

Solution:
2. Follows the support package TS-00009 to build up the internet communication step by step.

5-2.1.3 Blocked by firewall (if you were connecting via WAN)

The problem is discussed in 4-5.1.1, please go there for details.

5-2.1.4 DNS problem (if you were connecting via DNS)

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: http://myroom.dyndns.org) instead of IP address (Ex: http://59.233.23.59).

Clarification:
1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

Solution:
1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Model</td>
<td></td>
<td>SED-2120</td>
</tr>
<tr>
<td>number</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP address instead of Domain name to connect to the video.
5-2-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

5-2.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td>LAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td>WAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC IP setting</td>
</tr>
<tr>
<td>Network deployment</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
5-3  Monitor Problem Type 2

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

5-3-1 Monitor block

The possible causes could be as below.

5-3.1.1 Inappropriate O/S and Browser software

The possible cause might be the browser software you use to login the video server/IP camera.

Clarification:

1. Check if your software
### Software Recommended version Correct?

<table>
<thead>
<tr>
<th>O/S (Operating software)</th>
<th>Windows 2000 SP2 or Windows XP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Browser</td>
<td>Internet Explorer 6.0 and above</td>
</tr>
</tbody>
</table>

2. If they are correct, then it’s not software problem
3. If they are not correct, it might be software problem

**Solution:**
1. Please install and use the software recommended.

**5-3.1.2 ActiveX control not installed**

This problem could be caused if you didn’t install the ActiveX control.

**Clarification:**
1. Login the web-configurator of video server/IP camera
2. Click the “Live Display”
3. Check if you see an error sign at the bottom left corner of the web-page.
4. If yes, this is an ActiveX control installation problem
5. If not, this is not an ActiveX control installation problem

**Solution:**
1. Please login this computer as an administrator.  
   (Sometimes only Administrator can install ActiveX)
2. For some models, you can install the ActiveX directly from the video server/IP camera, just click to allow your PC to install the ActiveX control
3. If you still can’t install the ActiveX control, please install the ActiveX control installer.  
   (You can always get it from http://actiptp.hosting4less.com/ACTIGENERAL/AP&Manual/ActiveX%20control/)
5-3-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

5-3.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>PC IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
<td>Network diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respective setting of switch / routers.</td>
<td></td>
</tr>
<tr>
<td>Other information during this troubleshooting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5-4 Monitor Problem Type 3

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

5-4-1 Image

The possible causes could be as below.

5-4.1.1 Analog Video- Lens problem

This could be the lens problem that caused no lighting income to the camera. This problem happens on BOX camera which requires you to install a lens onto it.
Clarification:
1. Remove the lens
2. See if the image become white
3. If yes, this is the lens problem
4. If not, this is not the lens problem

Solution:
1. The solution varies for different kind of lens you use.
   Please follow the table below for solutions.

<table>
<thead>
<tr>
<th>Lens type</th>
<th>Solution steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto-Iris</td>
<td>1. Check if there’s anything blocking the lens (ex: lens cover)&lt;br&gt;2. Be sure to connect the “Auto Iris” Cable to the camera&lt;br&gt;3. Be sure to switch the camera setting to “Auto Iris” or “DC Iris”</td>
</tr>
<tr>
<td>Fixed Iris</td>
<td>1. Check if there’s anything blocking the lens (ex: lens cover)&lt;br&gt;2. Be sure to switch the camera setting to “AES”</td>
</tr>
</tbody>
</table>

5-4.1.2 Analog Video- Camera power up fail

This could be the camera power up fail.

Clarification:
The clarification procedure different for different kinds of camera, please see below table for details.

<table>
<thead>
<tr>
<th>Camera Type</th>
<th>Clarification procedure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoom Lens camera</td>
<td>1. Reboot the camera&lt;br&gt;2. See if the zoom lens moves during start-up (It moves as if it wants to zoom-in then zoom-out)&lt;br&gt;3. If yes, this is a temporally camera power up problem</td>
</tr>
</tbody>
</table>
If not, this is the a camera power up problem

**Speed dome or PTZ camera**

1. Reboot the camera
2. See if the camera initialize during start-up (it will pan, tilt and zoom)
3. If yes, this is a temporally camera power up problem
4. If not, this is a camera power up problem

**Other cameras (Not zoom lens or speed dome or PTZ camera)**

1. Reboot the camera
2. See if the image becomes ok
3. If yes, this is a temporally camera power up problem
4. If not, this might be a camera power up problem. Please check other possible cause first. If you can’t find other possible cause, then we can think it as a camera power up problem.

**Solution:**

1. The solution varies for different kind situation. Please see the table below for respective solutions.

<table>
<thead>
<tr>
<th>Power up problem type</th>
<th>Solution steps</th>
</tr>
</thead>
<tbody>
<tr>
<td>Temporally power up problem</td>
<td>1. Normally, this problem happens rarely. You can just ignore this problem.</td>
</tr>
<tr>
<td></td>
<td>2. If the problem happens very often, please gather problem information and contact our sales.</td>
</tr>
<tr>
<td>Power up problem</td>
<td>1. If the problem happens very often, please gather problem information and contact our sales.</td>
</tr>
</tbody>
</table>

**5-4.1.3 Analog Video- BNC wiring fail**

It happens only when you are using a video server connecting to an analog camera. This could be the camera’s BNC wiring fail that
causes the video server receive no video signal

Clarification:
1. Get a BNC cable from a working system (a BNC cable that works fine)
2. Connect the Video server to the IP camera via the BNC cable and see if you can see the image via analog output
3. If yes, this is the BNC wiring problem.
4. If not, this is not the BNC wiring problem

Solution:
1. Simply replace current BNC cable with a working one.

5.4.1.4 Analog Video - DC level adjust

It happens for IP camera or analog camera with DC level adjusts. If the DC level is set to very low, the image will be completely dark. That is because the DC level directly affects the brightness of the camera.

Clarification:
1. Increase the DC level according to the hardware manual
2. See if the images is ok
3. If yes, this is DC level problem
4. If not, this is not DC level problem

Solution:
1. Adjust the DC level according to your environment.
5-4-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

5-4.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Camera Setting</td>
<td>DC level</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Auto Iris or AES</td>
<td></td>
</tr>
<tr>
<td>Other information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>during this</td>
<td></td>
<td></td>
</tr>
<tr>
<td>troubleshooting</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5-5 Monitor Problem Type 4

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

5-5-1 Network block
The possible causes could be as below.

5-5.1.1 Inappropriate network port setup
The network port setting of the video server/IP camera should be the same as the configuration in Streaming Activator, otherwise, there might be no images coming out.
Clarification:

1. Login the camera and open streaming Activator to fill in the port setting table below.

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td></td>
<td></td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td></td>
<td></td>
<td>6002</td>
</tr>
</tbody>
</table>

2. Check each function port and see if it is the same in both video server/IP camera and the Streaming Activator (below is a reference result)

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td>80</td>
<td>80</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td>7000</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
<td>7002</td>
<td>NO</td>
</tr>
</tbody>
</table>

3. If any of those are not the same, this is a port setting problem.

4. If all these port setting are the same, this is not a port setting problem.

Solution:

1. Adjust the setting of the streaming activator or video server/IP camera to make the port setting is the same for each port.

Example:

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td>80</td>
<td>80</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td>7000</td>
<td>Yes</td>
</tr>
</tbody>
</table>
5-5-2 Management block

The possible causes could be as below.

5-5.2.1 Inappropriate Streaming Activator version

For some previous Streaming Activator version, it doesn’t support all our IP cameras. Then it could cause the monitor to fail.

Clarification:

1. Check the table below to see if it is a Streaming Activator version problem

<table>
<thead>
<tr>
<th>Streaming Activator version</th>
<th>Video Server/IP camera Protocol version*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TCP1.0*</td>
</tr>
<tr>
<td>Version before 1.36.00.00</td>
<td>OK</td>
</tr>
<tr>
<td>Version after 1.36.00.00</td>
<td>OK</td>
</tr>
</tbody>
</table>

Note: Please refer to the support package TS-00104
- Firmware function comparison table of TCP1.0 and TCP2.0
- TCP2.0 and TCP1.0 supporting product list.

Note: For TCP1.0 and TCP2.0, please also make sure the firmware version as below
- TCP1.0 : The firmware function should be after 1.03.02
- TCP2.0 : The firmware and TCP1.0 supporting product list.

2. If your using environment is in the grey area above, this is a Streaming Activator version problem.
Solution:
1. Please go to our website to download the newest Streaming Activator software
   http://www.acti.com/support/support_index.asp

5-5-3 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

5-5.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Sub-category</td>
<td>Description</td>
</tr>
<tr>
<td>Hard model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Software model</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>PC IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
</tbody>
</table>
5-6 Monitor Problem Type 5

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

5-6-1 Network block

The possible causes could be as below.

5-6.1.1 Inappropriate network port setup

The network port setting of the video server/IP camera should be the same as the configuration in Streaming Activator, otherwise, there might be no images coming out.

Clarification:

1. Login the camera and open streaming Activator to fill in
the port setting table below.

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td></td>
<td></td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td></td>
<td></td>
<td>6002</td>
</tr>
</tbody>
</table>

2. Check each function port and see if it is the same in both video server/IP camera and the Streaming Activator (below is a reference result)

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td>80</td>
<td>80</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td>7000</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
<td>7002</td>
<td>NO</td>
</tr>
</tbody>
</table>

3. If any of those are not the same, this is a port setting problem.
4. If all these port setting are the same, this is not a port setting problem.

Solution:

1. Adjust the setting of the streaming activator or video server/IP camera to make the port setting is the same for each port.

Example:

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td>80</td>
<td>80</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td>7000</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
<td>7002</td>
<td>Yes</td>
</tr>
</tbody>
</table>
5-6-2 Monitor block

The possible causes could be as below.

5-6.2.1 Inappropriate Streaming Explorer version

For some previous Streaming Explorer version, it doesn’t support all our IP cameras. Then it could cause the monitor to fail.

Clarification:
1. Check the table below to see if it is a Streaming Explorer version problem

<table>
<thead>
<tr>
<th>Streaming Activator version</th>
<th>Video Server/IP camera Protocol version*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TCP1.0*</td>
</tr>
<tr>
<td>Version before 1.0</td>
<td>OK</td>
</tr>
<tr>
<td>Version after 1.1</td>
<td>OK</td>
</tr>
</tbody>
</table>

Note: Please refer to the support package TS-00104
- Firmware function comparison table of TCP1.0 and TCP2.0
- TCP2.0 and TCP1.0 supporting product list.

Note: For TCP1.0 and TCP2.0, please also make sure the firmware version as below
- TCP1.0 : The firmware function should be after 1.03.02
- TCP2.0: The firmware and TCP1.0 supporting product list.

2. If your using environment is in the grey area above, this is a Streaming Explorer version problem.

Solution:
1. Please go to our website to download the newest
5-6-3  If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

### 5-6.3.1  Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Software model</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>PC IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
</tbody>
</table>
5-7  Monitor Problem Type 6

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

5-7-1  Network block

The possible causes could be as below.

5-7.1.1  Inappropriate network port setup

The network port setting of the video server/IP camera should be the same as the configuration in Streaming Activator, otherwise, there might be no images coming out.

Clarification:
1. Login the camera and open streaming Activator to fill in
the port setting table below.

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td></td>
<td></td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td></td>
<td></td>
<td>6002</td>
</tr>
</tbody>
</table>

2. Check each function port and see if it is the same in both video server/IP camera and the Streaming Activator (below is a reference result)

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td>80</td>
<td>80</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td>7000</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
<td>7002</td>
<td>NO</td>
</tr>
</tbody>
</table>

3. If any of those are not the same, this is a port setting problem.

4. If all these port setting are the same, this is not a port setting problem.

**Solution:**

1. Adjust the setting of the streaming activator or video server/IP camera to make the port setting is the same for each port.

   **Example:**

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td>80</td>
<td>80</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td>7000</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
<td>7002</td>
<td>Yes</td>
</tr>
</tbody>
</table>
5-7-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

5-7.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Hard model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Software model</td>
</tr>
<tr>
<td>Software version</td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
</tr>
<tr>
<td>IP address</td>
</tr>
<tr>
<td>Submask</td>
</tr>
<tr>
<td>Gateway</td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
</tr>
<tr>
<td>IP address</td>
</tr>
<tr>
<td>Submask</td>
</tr>
<tr>
<td>Gateway</td>
</tr>
<tr>
<td>PC IP setting</td>
</tr>
<tr>
<td>IP address</td>
</tr>
<tr>
<td>Submask</td>
</tr>
<tr>
<td>Gateway</td>
</tr>
</tbody>
</table>
Chapter. 6. PTZ Problem

In this Chapter, we will focus the problem that you can
1. Can login the video server/IP camera
2. Can monitor the image
3. Can’t control camera’s PTZ function.

We will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

6-1 Find out the possible cause

Please refer to the diagnostic flow to find out the problem type of the Login Problem.
Then you can refer to next section for advanced clarification and troubleshooting.

<table>
<thead>
<tr>
<th>Check Item</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step1</td>
<td>Check the Control Device</td>
</tr>
<tr>
<td>Step2</td>
<td>Check if you can control the PTZ the Video server/Transcoder’s analog output on a TV monitor.</td>
</tr>
<tr>
<td>Step3</td>
<td>Connect the PC directly to the Video server/Transcoder then via cross-over cable. Then input the Video server/Transcoder IP.</td>
</tr>
<tr>
<td>Step4</td>
<td>Refer to the section of each problem type to do root cause clarification and find respective solutions.</td>
</tr>
</tbody>
</table>
6-2  PTZ problem Type 1

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

6-2-1 Network block

The possible causes could be as below.

6-2.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:
1. Below is the status of this problem definition so far.
2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTZ control</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
6-2.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Server</td>
<td>Internet connectivity</td>
</tr>
<tr>
<td></td>
<td>Port setting</td>
</tr>
<tr>
<td>Network</td>
<td>Port forwarding</td>
</tr>
<tr>
<td></td>
<td>Firewall setting</td>
</tr>
<tr>
<td>PC</td>
<td>Internet connectivity</td>
</tr>
</tbody>
</table>

Clarification:

1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTZ</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C: How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

**Solution:**

1. Follows the support package TS-00009 to build up the internet communication step by step.

6-2.1.3 **Blocked by firewall (if you were connecting via WAN)**

The problem is discussed in 6-5.1.2, please go there for details.

6-2.1.4 **DNS problem (if you were connecting via DNS)**

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: [http://myroom.dyndns.org](http://myroom.dyndns.org)) instead of IP address (Ex: [http://59.233.23.59](http://59.233.23.59)).

**Clarification:**

1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

**Solution:**

1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>Model number</td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera and a contingency plan.

6-2-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

6-2-2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------------------------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
6-3 PTZ problem Type 2

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

6-3-1 Image block

The possible causes could be as below.

6-3.1.1 Inappropriate Analog video –Serial setting (Baud rate, Parity, Bit length, Stop bit)

These serial setting (baud rate, parity, stop bit) must be the same for analog video and network platform for PTZ function to work. We will include both sections in this chapter below.
Clarification:

1. First, we have to check out the serial settings of analog video and control device (Web-configurator). The checkout procedure might be different. Please refer to the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog Video</td>
</tr>
<tr>
<td>1</td>
<td>Analog Camera + Video Server</td>
<td>Please refer to analog camera’s manual</td>
</tr>
<tr>
<td>2</td>
<td>IP PTZ camera with fixed serial setting*</td>
<td>Please see table below for information</td>
</tr>
<tr>
<td>3</td>
<td>IP PTZ camera with Adjustable serial setting*</td>
<td>Please refer to IP camera hardware manual</td>
</tr>
</tbody>
</table>

*: Please refer to the table below for how to differentiate the IP PTZ camera and relative settings.

```
<table>
<thead>
<tr>
<th>IP PTZ camera with fixed serial</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
</tbody>
</table>
```

```
<table>
<thead>
<tr>
<th>IP PTZ camera with Adjustable serial</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
</tr>
<tr>
<td>----</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>2</td>
</tr>
<tr>
<td>3</td>
</tr>
<tr>
<td>4</td>
</tr>
</tbody>
</table>
```

Sample baud rate setting in web-configurator
2. Then fill in the table below and check out if the settings from Analog Video and Control device are the same for each serial setting.

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analog Video</td>
<td>Control device</td>
</tr>
<tr>
<td>Baud rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Byte length</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stop bit</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sample table

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analog Video</td>
<td>Control device</td>
</tr>
<tr>
<td>Baud rate</td>
<td>4800</td>
<td>9600</td>
</tr>
<tr>
<td>Parity</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Byte length</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Stop bit</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

3. If all the serial settings are the same in Analog Video and
Network platform, this is not a Serial Setting issue.

4. If any of the serial settings is not the in Analog Video and Network platform, this is a Serial Setting issue.

Solution:
1. Follow the table below to adjust the setting of the Analog Video and Control device and make all the serial settings the same. (for how to adjust each setting, please refer to hardware manual and software manual)

Example:
· Before

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analog Video</td>
<td>Control device</td>
</tr>
<tr>
<td>Baud rate</td>
<td>4800</td>
<td>9600</td>
</tr>
<tr>
<td>Parity</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Byte length</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Stop bit</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

· After

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analog Video</td>
<td>Network Platform</td>
</tr>
<tr>
<td>Baud rate</td>
<td>4800</td>
<td>4800</td>
</tr>
<tr>
<td>Parity</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Byte length</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Stop bit</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

6-3.1.2 Inappropriate Network platform - Serial Setting (Baud rate, Parity, Bit length, Stop bit)

The problem is discussed in 6-3.1.1, please go there for details.
6-3.1.3 Inappropriate Analog video - Protocol setting

These PTZ settings (Protocol and Camera ID) must be the same for Analog Video and Controlled device for PTZ function to work. We will include both sections in this chapter below.

Clarification:

1. First, we have to check out the protocol of analog video and the controlled device (depends on what device you use to control the PTZ) the checkout procedure might be different. Please refer to the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>PTZ setting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog Video</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Control device</td>
</tr>
<tr>
<td>1</td>
<td>Analog Camera + Video Server</td>
<td>Please refer to analog camera’s manual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Please go the control device PTZ setup page</td>
</tr>
<tr>
<td>2</td>
<td>IP PTZ camera with fixed serial setting *</td>
<td>Please see table below for information</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Please go the control device PTZ setup page</td>
</tr>
<tr>
<td>3</td>
<td>IP PTZ camera with Adjustable serial setting*</td>
<td>Please refer to IP camera hardware manual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Please go the control device PTZ setup page</td>
</tr>
</tbody>
</table>

*: Please refer to the table below for how to differentiate the IP PTZ camera and relative settings.

**IP PTZ camera with fixed PTZ setting**

<table>
<thead>
<tr>
<th>No</th>
<th>Model</th>
<th>Protocol setting</th>
<th>Camera ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAM-5130</td>
<td>Campro_V1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>CAM-5140</td>
<td>Campro_V1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>CAM-5150</td>
<td>Campro_V1</td>
<td>1</td>
</tr>
</tbody>
</table>

**IP PTZ camera with Adjustable PTZ setting**

<table>
<thead>
<tr>
<th>No</th>
<th>Model</th>
<th>Protocol setting</th>
<th>Camera ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAM-6100</td>
<td>Adjustable Camera ID (Pelco-P, Pelco-D, VCL)</td>
<td>Adjustable (1~255)</td>
</tr>
<tr>
<td>2</td>
<td>CAM-6200</td>
<td>Adjustable Camera ID (Pelco-P, Pelco-D, Eyeview)</td>
<td>Adjustable (1~255)</td>
</tr>
<tr>
<td>3</td>
<td>CAM-6500</td>
<td>Adjustable Camera ID (Pelco-P,</td>
<td>Adjustable</td>
</tr>
</tbody>
</table>
2. Then fill in the table below and check out if the settings from Analog Video and Network Platform are the same for each serial setting.

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>PTZ Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Protocol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Camera ID</td>
<td></td>
</tr>
</tbody>
</table>

Sample table

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>PTZ Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Protocol</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Camera ID</td>
<td></td>
</tr>
</tbody>
</table>
3. If all the PTZ settings are the same in Analog Video and Control device, this is not a PTZ Setting issue.

4. If any of the PTZ settings is not the same in Analog Video and Control device, this is a PTZ Setting issue.

Solution:
1. Follow the table below to adjust the setting of the Analog Video and Network platform and make all the serial settings the same.

Example:
- Before

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Protocol</th>
<th>Pelco-P</th>
<th>Pelco-D</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog Video</td>
<td>Protocol</td>
<td>Pelco-P</td>
<td>Pelco-D</td>
<td>No</td>
</tr>
<tr>
<td>Control device</td>
<td>Camera ID</td>
<td>1</td>
<td>1</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- After

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Protocol</th>
<th>Pelco-P</th>
<th>Pelco-P</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog Video</td>
<td>Protocol</td>
<td>Pelco-P</td>
<td>Pelco-P</td>
<td>No</td>
</tr>
<tr>
<td>Network Platform</td>
<td>Camera ID</td>
<td>1</td>
<td>1</td>
<td>Yes</td>
</tr>
</tbody>
</table>

6-3.1.4 Inappropriate Analog Video – Camera ID setup

The problem is discussed in 6-3.1.3, please go there for details.
6-3.1.5 Inappropriate Network platform - Serial type setup (if you are connecting a video server to an analog camera)

The serial connection problem (might happen ONLY on video server + analog cameras. If you are not using video servers + analog cameras, please skip this section. The serial connection type and serial physical connection have to be right on both “Video server” and “Analog cameras” for PTZ function to work. Thus we put them both.

Clarification:

1. Check out the serial connection type of the analog camera and video servers and fill in the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog camera</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td>*</td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td>*</td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Please refer to the analog camera’s hardware manual for its serial connection type.

Sample table

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog camera</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td></td>
</tr>
</tbody>
</table>

2. If all the Serial Connection type is the same in Analog Camera and Video server, this is not a Serial Connection type. Then we go on next step to check out serial physical connection.

3. If any of the Serial Connection type is not the same in Analog Camera and Video server, this is a Serial Connection type issue. Please go to solution to solve it.
first.

4. Follow the system diagram below for how does each serial physical connection goes. (You might need to refer to video server and speed dome’s hardware manual for it’s serial pin details)

**RS-485:**

![RS-485 Diagram](image1)

**RS-232:**

![RS-232 Diagram](image2)
5. If your connection is the same as above, this is not a serial physical connection problem.

6. If your connection is not the same as above, this is a serial physical connection problem.

**Serial Connection Type Solution:**

1. Refer to the previous table and adjust both connection type to be the same (please follow the video server’s hardware manual)

Example:

- **Before**

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog camera</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td></td>
</tr>
</tbody>
</table>

- **After**

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog camera</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>-------</td>
<td>---------------</td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Serial Physical Connection Solution:**

1. Follow the serial physical connection diagram in Clarification Step 4. Then correct them accordingly.

**6-3.1.6 Inappropriate Network platform - Serial Physical Connection**

*(if you are connecting a video server to an analog camera)*

The problem is discussed in 6-3.1.5, please go there for details.

**6-3-2 Network block**

The possible causes could be as below.

**6-3.2.1 Inappropriate network port setup**

The network port setting of the video server/IP camera should be the same as the configuration in Streaming Activator, otherwise, there might be no images coming out.

**Clarification:**

1. Login the camera and open streaming Activator to fill in the port setting table below.

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td></td>
<td></td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td></td>
<td></td>
<td>6002</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td></td>
<td></td>
<td>6001</td>
</tr>
</tbody>
</table>

2. Check each function port and see if it is the same in both video server/IP camera and the Streaming Activator (below is a reference result)
3. If any of those are not the same, this is a port setting problem.

4. If all these port setting are the same, this is not a port setting problem.

**Solution:**

2. Adjust the setting of the streaming activator or video server/IP camera to make the port setting is the same for each port.

Example:

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td>80</td>
<td>80</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td>7000</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
<td>7002</td>
<td>NO</td>
</tr>
</tbody>
</table>

6-3-3 **Management block**

The possible causes could be as below.

**6-3.3.1 Inappropriate baud rate, parity, stop bit setting**

The problem is discussed in 6-3.1.1, please go there for details.

**6-3.3.2 Inappropriate PTZ setting (protocol, camera ID)**

The problem is discussed in 6-3.1.3, please go there for details.
**6-3-4 If problem not solved, how to report this problem?**

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

**6-3.4.1 Problem feedback table**

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Hard model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Software model</td>
</tr>
<tr>
<td>Software version</td>
</tr>
<tr>
<td>Analog Video Serial setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network Platform</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Software PTZ setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Software port setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Other details you find during clarification</td>
</tr>
</tbody>
</table>
6-4  PTZ problem Type 3

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

6-4-1 Management block

The possible causes could be as below.

6-4.1.1 Inappropriate control panel connection

The Control panel connection to Streaming Activator PC might be wrong and cause the PTZ control to fail.
Clarification:

1. Check out the control panel connection type by referring to the hardware manual

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RS-485</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td></td>
</tr>
</tbody>
</table>

2. Check if the connection between the control panel and the streaming activator PC as below. (please follow the converter manual for how to connect)

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RS-485</td>
<td>Control panel =&gt;Serial converter (RS-485 to RS-232) =&gt; PC com port</td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td>Control panel =&gt; PC com port</td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td>Control panel =&gt;Serial converter (RS-422 to RS-232) =&gt; PC com port</td>
</tr>
</tbody>
</table>

3. If the connection is right, this is not control panel connection problem.

4. If the connection is not right, this is a control panel connection problem.

Solution:

1. Please follow the system diagram above in the problem clarification and modify the connections.

6-4.1.2 Inappropriate Panel connection setting setting (Baud rate, Parity, Byte length, Stop bit, Com port setting)

These Panel connection settings have to be the same for the control panel and the streaming activator for this function to work. P
Clarification:

1. First, we have to check out these Panel connection settings of control panel and streaming activator. And fill in the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Panel connection settings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Control Panel</td>
</tr>
<tr>
<td>1</td>
<td>Baud rate</td>
<td>*</td>
</tr>
<tr>
<td>2</td>
<td>Parity</td>
<td>*</td>
</tr>
<tr>
<td>3</td>
<td>Byte length</td>
<td>*</td>
</tr>
<tr>
<td>4</td>
<td>Stop bit</td>
<td>*</td>
</tr>
<tr>
<td>5</td>
<td>Com port</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Please refer to the hardware manual for details

**: Please login the activator to view the settings as below

2. Check if all the setting is the same.

Sample table:

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Panel connection settings</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Control Panel</td>
<td>Streaming Activator</td>
</tr>
<tr>
<td>1</td>
<td>Baud rate</td>
<td>4800</td>
<td>9600</td>
</tr>
<tr>
<td>2</td>
<td>Parity</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>3</td>
<td>Byte length</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Stop bit</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Com port</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>
3. If all the settings are the same, this is not a Panel connection settings problem.

4. If any of the settings is not the same, this is a Panel connection setting problem.

Solution:
1. Follow the table below to adjust the setting of the Control Panel and Streaming Activator and make all the Panel connection settings. (for how to adjust each setting, please refer to hardware manual and software manual)
6-5  PTZ problem Type 4

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

![Diagram of Best MPEG-4 IP Surveillance Solutions]

6-5-1  Image block

The possible causes could be as below.

6-5.1.1  Inappropriate Analog video –Serial setting (Baud rate, Parity, Bit length, Stop bit)

These serial setting (baud rate, parity, stop bit) must be the same for analog video and network platform for PTZ function to work. We will include both sections in this chapter below.
Clarification:

1. First, we have to check out the serial settings of analog video and control device (Control Panel). The checkout procedure might be different. Please refer to the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog Video</td>
</tr>
<tr>
<td>1</td>
<td>Analog Camera + Video Server</td>
<td>Please refer to analog camera’s manual</td>
</tr>
<tr>
<td>2</td>
<td>IP PTZ camera with fixed serial setting *</td>
<td>Please see table below for information</td>
</tr>
<tr>
<td>3</td>
<td>IP PTZ camera with Adjustable serial setting *</td>
<td>Please refer to IP camera hardware manual</td>
</tr>
</tbody>
</table>

*: Please refer to the table below for how to differentiate the IP PTZ camera and relative settings.

<table>
<thead>
<tr>
<th>IP PTZ camera with fixed serial</th>
<th>Analog Video Serial Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Model</td>
</tr>
<tr>
<td>----</td>
<td>--------</td>
</tr>
<tr>
<td>1</td>
<td>CAM-5130</td>
</tr>
<tr>
<td>2</td>
<td>CAM-5140</td>
</tr>
<tr>
<td>3</td>
<td>CAM-5150</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IP PTZ camera with Adjustable serial</th>
<th>Analog Video Serial Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>Model</td>
</tr>
<tr>
<td>----</td>
<td>--------</td>
</tr>
<tr>
<td>1</td>
<td>CAM-6100</td>
</tr>
<tr>
<td>2</td>
<td>CAM-6200</td>
</tr>
<tr>
<td>3</td>
<td>CAM-6500</td>
</tr>
<tr>
<td>4</td>
<td>CAM-6600</td>
</tr>
</tbody>
</table>

2. Then fill in the table below and check out if the settings from Analog Video and Control Panel are the same for
each serial setting.

| Serial Setting | Serial Setting | The same?
|----------------|---------------|-------------
|                | Analog Video  | Control Panel |         |
| Baud rate      | 4800          | 9600         | No       |
| Parity         | None          | None         | Yes      |
| Byte length    | 8             | 8            | Yes      |
| Stop bit       | 1             | 1            | Yes      |

3. If all the serial settings are the same in Analog Video and Control Panel, this is not a Serial Setting issue.

4. If any of the serial settings is not the in Analog Video and Control Panel, this is a Serial Setting issue.

**Solution:**

1. Follow the table below to adjust the setting of the Analog Video and Control Panel and make all the serial settings the same. (for how to adjust each setting, please refer to hardware manual and software manual)

   **Example:**
   
   · Before

   | Serial Setting | Serial Setting | The same?
   |----------------|---------------|-------------
   |                | Analog Video  | Control Panel |         |
   | Baud rate      | 4800          | 9600         | No       |
### 6-5.1.2 Inappropriate Network platform - Serial Setting (Baud rate, Parity, Bit length, Stop bit)

The problem is discussed in 6-3.1.1, please go there for details.

### 6-5.1.3 Inappropriate Analog video - Protocol setting

These PTZ settings (Protocol and Camera ID) must be the same for Analog Video and Controlled device for PTZ function to work. We will include both sections in this chapter below.

**Clarification:**

2. First, we have to check out the protocol of analog video and the controlled device (depends on what device you use to control the PTZ) the checkout procedure might be different. Please refer to the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>PTZ setting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog Video</td>
</tr>
<tr>
<td>1</td>
<td>Analog Camera + Video Server</td>
<td>Please refer to analog camera’s manual</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Please go the control device PTZ setup page</td>
</tr>
<tr>
<td>2</td>
<td>IP PTZ camera with fixed serial setting *</td>
<td>Please see table below for information</td>
</tr>
</tbody>
</table>
**IP PTZ camera with Adjustable serial setting**: Please refer to IP camera hardware manual. Please go the control device PTZ setup page.

*: Please refer to the table below for how to differentiate the IP PTZ camera and relative settings.

<table>
<thead>
<tr>
<th>No</th>
<th>Model</th>
<th>Protocol setting</th>
<th>Camera ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAM-5130</td>
<td>Campro_V1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>CAM-5140</td>
<td>Campro_V1</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>CAM-5150</td>
<td>Campro_V1</td>
<td>1</td>
</tr>
</tbody>
</table>

**IP PTZ camera with Adjustable PTZ setting**

<table>
<thead>
<tr>
<th>No</th>
<th>Model</th>
<th>Protocol setting</th>
<th>Camera ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAM-6100</td>
<td>Adjustable Camera ID (Pelco-P, Pelco-D, VCL)</td>
<td>Adjustable (1~255)</td>
</tr>
<tr>
<td>2</td>
<td>CAM-6200</td>
<td>Adjustable Camera ID (Pelco-P, Pelco-D, Eyeview)</td>
<td>Adjustable (1~255)</td>
</tr>
<tr>
<td>3</td>
<td>CAM-6500</td>
<td>Adjustable Camera ID (Pelco-P, Pelco-D, Dynacolor*)</td>
<td>Adjustable (1~255)</td>
</tr>
<tr>
<td>4</td>
<td>CAM-6600</td>
<td>Adjustable Camera ID (Pelco-P, Pelco-D, Dynacolor*)</td>
<td>Adjustable (1~255)</td>
</tr>
</tbody>
</table>

*: This protocol is marked as DSCP in the hardware manual.

3. Then fill in the table below and check out if the settings from Analog Video and Network Platform are the same for each serial setting.

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>PTZ Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analog Video</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control Panel</td>
<td></td>
</tr>
</tbody>
</table>

Sample table

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analog Video</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control Panel</td>
<td></td>
</tr>
<tr>
<td>Protocol</td>
<td>Pelco-P</td>
<td>Pelco-D</td>
</tr>
<tr>
<td>----------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>Camera ID</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

5. If all the PTZ settings are the same in Analog Video and Control Panel, this is not a PTZ Setting issue.

6. If any of the PTZ settings is not the same in Analog Video and Control Panel, this is a PTZ Setting issue.

**Solution:**

3. Follow the table below to adjust the setting of the Analog Video and Control Panel and make all the serial settings the same.

**Example:**

- **Before**

```
<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog Video</td>
<td>Pelco-P</td>
<td>Pelco-D</td>
</tr>
<tr>
<td>Camera ID</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
```

- **After**

```
<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analog Video</td>
<td>Pelco-P</td>
<td>Pelco-P</td>
</tr>
<tr>
<td>Camera ID</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
```

6-5.1.4  **Inappropriate Analog Video – Camera ID setup**

The problem is discussed in 6-3.1.3, please go there for details.
6-5.1.5 Inappropriate Network platform - Serial type setup (if you are connecting a video server to an analog camera)

The serial connection problem (might happen ONLY on video server + analog cameras. If you are not using video servers + analog cameras, please skip this section.
The serial connection type and serial physical connection have to be right on both “Video server” and “Analog cameras” for PTZ function to work. Thus we put them both.

Clarification:
1. Check out the serial connection type of the analog camera and video servers and fill in the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog camera</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td>*</td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td>*</td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Please refer to the analog camera’s hardware manual for its serial connection type.

Sample table

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog camera</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td>Yes</td>
</tr>
</tbody>
</table>

2. If all the Serial Connection type is the same in Analog Camera and Video server, this is not a Serial Connection type. Then we go on next step to check out serial physical connection.

3. If any of the Serial Connection type is not the same in Analog Camera and Video server, this is a Serial Connection type issue. Please go to solution to solve it
first.

4. Follow the system diagram below for how does each serial physical connection goes. (You might need to refer to video server and speed dome’s hardware manual for it’s serial pin details)

**RS-485:**

- Data+ Data-

**RS-232:**

- T+ R+ GND

- Analog Camera

- Control panel
5. If your connection is the same as above, this is not a serial physical connection problem.

6. If your connection is not the same as above, this is a serial physical connection problem.

**Serial Connection Type Solution:**

2. Refer to the previous table and adjust both connection type to be the same (please follow the video server's hardware manual)

Example:

- Before
  
<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>RS-485</td>
<td>Default</td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- After

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Serial Physical Connection Solution:**

2. Follow the serial physical connection diagram in Clarification Step 4. Then correct them accordingly.

**6-5.1.6 Inappropriate Network platform - Serial Physical Connection**

(if you are connecting a video server to an analog camera)

The problem is discussed in 6-3.1.5, please go there for details.

**6-5-2 Management block**

The possible causes could be as below.

**6-5.2.1 Inappropriate panel protocol**

The problem is discussed in 6-1.1.1, please go there for details.

**6-5.2.2 Inappropriate panel baud rate, parity, stop bit setup**

The problem is discussed in 6-1.1.3, please go there for details.

**6-5.2.3 Inappropriate panel model number**

Because there are so many proprietary control panels on the market, sometimes the PTZ fail just because the control panel is not compatible with the video server.

**Clarification:**

1. Check with the IP camera or Analog camera vendor for its compatibility. Or you can test by yourself.

**Solution:**

1. Replace it with the control panel approved by the IP camera or analog camera vendor.
6-6 PTZ problem Type 5

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

6-6-1 Image block

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.
### 6-6-2 Image block

The possible causes could be as below.

#### 6-6.2.1 Inappropriate Analog video –Serial setting (Baud rate, Parity, Bit length, Stop bit)

These serial setting (baud rate, parity, stop bit) must be the same for analog video and network platform for PTZ function to work.

We will include both sections in this chapter below.
### Clarification:

1. First, we have to check out the serial settings of analog video and control device (Web-configurator). The checkout procedure might be different. Please refer to the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog Video</td>
</tr>
<tr>
<td>1</td>
<td>Analog Camera + Video Server</td>
<td>Please refer to analog camera’s manual</td>
</tr>
<tr>
<td>2</td>
<td>IP PTZ camera with fixed serial setting *</td>
<td>Please see table below for information</td>
</tr>
<tr>
<td>3</td>
<td>IP PTZ camera with Adjustable serial setting *</td>
<td>Please refer to IP camera hardware manual</td>
</tr>
</tbody>
</table>

*: Please refer to the table below for how to differentiate the IP PTZ camera and relative settings.

#### IP PTZ camera with fixed serial

<table>
<thead>
<tr>
<th>No</th>
<th>Model</th>
<th>Baud rate</th>
<th>Parity</th>
<th>Byte length</th>
<th>Stop bit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAM-5130</td>
<td>9600</td>
<td>None</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>CAM-5140</td>
<td>9600</td>
<td>None</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>CAM-5150</td>
<td>9600</td>
<td>None</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>

#### IP PTZ camera with Adjustable serial

<table>
<thead>
<tr>
<th>No</th>
<th>Model</th>
<th>Baud rate</th>
<th>Parity</th>
<th>Byte length</th>
<th>Stop bit</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAM-6100</td>
<td>Adjustable</td>
<td>None</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>CAM-6200</td>
<td>Adjustable</td>
<td>None</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>CAM-6500</td>
<td>Adjustable</td>
<td>None</td>
<td>8</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>CAM-6600</td>
<td>Adjustable</td>
<td>None</td>
<td>8</td>
<td>1</td>
</tr>
</tbody>
</table>

Sample baud rate setting in web-configurator
2. Then fill in the table below and check out if the settings from Analog Video and Control device are the same for each serial setting.

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analog Video</td>
<td>Control device</td>
</tr>
<tr>
<td>Baud rate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parity</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Byte length</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Stop bit</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Sample table

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analog Video</td>
<td>Control device</td>
</tr>
<tr>
<td>Baud rate</td>
<td>4800</td>
<td>9600</td>
</tr>
<tr>
<td>Parity</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Byte length</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Stop bit</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>
3. If all the serial settings are the same in Analog Video and Network platform, this is not a Serial Setting issue.

4. If any of the serial settings is not the in Analog Video and Network platform, this is a Serial Setting issue.

Solution:

2. Follow the table below to adjust the setting of the Analog Video and Control device and make all the serial settings the same. (for how to adjust each setting, please refer to hardware manual and software manual)

Example:

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baud rate</td>
<td>4800</td>
<td>9600</td>
</tr>
<tr>
<td>Parity</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Byte length</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Stop bit</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baud rate</td>
<td>4800</td>
<td>4800</td>
</tr>
<tr>
<td>Parity</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Byte length</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Stop bit</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

6-6.2.2 Inappropriate Network platform - Serial Setting (Baud rate, Parity, Bit length, Stop bit)

The problem is discussed in 6-3.1.1, please go there for details.
6-6.2.3 Inappropriate Analog video - Protocol setting

These PTZ settings (Protocol and Camera ID) must be the same for Analog Video and Controlled device for PTZ function to work. We will include both sections in this chapter below.

Clarification:

3. First, we have to check out the protocol of analog video and the controlled device (depends on what device you use to control the PTZ) the checkout procedure might be different. Please refer to the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>PTZ setting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog Video</td>
</tr>
<tr>
<td>1</td>
<td>Analog Camera + Video Server</td>
<td>Please refer to analog camera’s manual</td>
</tr>
<tr>
<td>2</td>
<td>IP PTZ camera with fixed serial setting*</td>
<td>Please see table below for information</td>
</tr>
<tr>
<td>3</td>
<td>IP PTZ camera with Adjustable serial setting*</td>
<td>Please refer to IP camera hardware manual</td>
</tr>
</tbody>
</table>

*: Please refer to the table below for how to differentiate the IP PTZ camera and relative settings.

<table>
<thead>
<tr>
<th>IP PTZ camera with fixed PTZ setting</th>
<th>No</th>
<th>Model</th>
<th>Protocol setting</th>
<th>Camera ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAM-5130</td>
<td>Campro_V1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CAM-5140</td>
<td>Campro_V1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>CAM-5150</td>
<td>Campro_V1</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>IP PTZ camera with Adjustable PTZ setting</th>
<th>No</th>
<th>Model</th>
<th>Protocol setting</th>
<th>Camera ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>CAM-6100</td>
<td>Adjustable Camera ID (Pelco-P, Pelco-D, VCL)</td>
<td>Adjustable (1~255)</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CAM-6200</td>
<td>Adjustable Camera ID (Pelco-P, Pelco-D, Eyeview)</td>
<td>Adjustable (1~255)</td>
<td></td>
</tr>
</tbody>
</table>
3 CAM-6500 Adjustable Camera ID (Pelco-P, Pelco-D, Dynacolor*) Adjustable (1~255)

4 CAM-6600 Adjustable Camera ID (Pelco-P, Pelco-D, Dynacolor*) Adjustable (1~255)

*: This protocol is marked as DSCP in the hardware manual

*: If the control device is Streaming Activator, please go to the page to find its PTZ setting. Please refer to the table below for how to differentiate the IP PTZ camera and relative settings.

4. Then fill in the table below and check out if the settings from Analog Video and Network Platform are the same for each serial setting.

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>PTZ Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Analog Video</td>
<td>Control device</td>
</tr>
<tr>
<td>Protocol</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camera ID</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sample table

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Serial Setting</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7. If all the PTZ settings are the same in Analog Video and Control device, this is not a PTZ Setting issue.

8. If any of the PTZ settings is not the same in Analog Video and Control device, this is a PTZ Setting issue.

Solution:

4. Follow the table below to adjust the setting of the Analog Video and Network platform and make all the serial settings the same.

Example:
- Before

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Analog Video</th>
<th>Control device</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol</td>
<td>Pelco-P</td>
<td>Pelco-D</td>
<td>No</td>
</tr>
<tr>
<td>Camera ID</td>
<td>1</td>
<td>1</td>
<td>Yes</td>
</tr>
</tbody>
</table>

- After

<table>
<thead>
<tr>
<th>Serial Setting</th>
<th>Analog Video</th>
<th>Network Platform</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protocol</td>
<td>Pelco-P</td>
<td>Pelco-P</td>
<td>No</td>
</tr>
<tr>
<td>Camera ID</td>
<td>1</td>
<td>1</td>
<td>Yes</td>
</tr>
</tbody>
</table>

6-6.2.4 Inappropriate Analog Video – Camera ID setup

The problem is discussed in 6-3.1.3, please go there for details.
**6-6.2.5 Inappropriate Network platform - Serial type setup (if you are connecting a video server to an analog camera)**

The serial connection problem (might happen ONLY on video server + analog cameras. If you are not using video servers + analog cameras, please skip this section.
The serial connection type and serial physical connection have to be right on both “Video server” and “Analog cameras” for PTZ function to work. Thus we put them both.

**Clarification:**

2. Check out the serial connection type of the analog camera and video servers and fill in the table below.

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog camera</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td>*</td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td>*</td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td>*</td>
</tr>
</tbody>
</table>

*: Please refer to the analog camera’s hardware manual for its serial connection type.

**Sample table**

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog camera</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td></td>
</tr>
</tbody>
</table>

7. If all the Serial Connection type is the same in Analog Camera and Video server, this is not a Serial Connection type. Then we go on next step to check out serial physical connection.

8. If any of the Serial Connection type is not the same in Analog Camera and Video server, this is a Serial Connection type issue. Please go to solution to solve it.
first.

9. Follow the system diagram below for how does each serial physical connection goes. (You might need to refer to video server and speed dome’s hardware manual for it’s serial pin details)

**RS-485:**

- Analog Camera
- Video Server
- Data+ Data-

**RS-232:**

- Analog Camera
- Video Server
- T+ R+ GND
10. If your connection is the same as above, this is not a serial physical connection problem.

11. If your connection is not the same as above, this is a serial physical connection problem.

**Serial Connection Type Solution:**

3. Refer to the previous table and adjust both connection type to be the same (please follow the video server’s hardware manual)

Example:

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog camera</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>No</th>
<th>Description</th>
<th>Serial Connection type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Analog camera</td>
</tr>
<tr>
<td>1</td>
<td>RS-485</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>RS-232</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>3</td>
<td>RS-422</td>
<td>Yes</td>
</tr>
</tbody>
</table>

**Serial Physical Connection Solution:**

3. Follow the serial physical connection diagram in Clarification Step 4. Then correct them accordingly.

**6-6.2.6 Inappropriate Network platform - Serial Physical Connection**

*(if you are connecting a video server to an analog camera)*

The problem is discussed in 6-3.1.5, please go there for details.

**6-6-3 Network block**

The possible causes could be as below.

**6-6.3.1 Inappropriate network port setup**

The network port setting of the video server/IP camera should be the same as the configuration in Streaming Activator, otherwise, there might be no images coming out.

**Clarification:**

5. Login the camera and open streaming Activator to fill in the port setting table below.

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>Default value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td></td>
<td></td>
<td>80</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td></td>
<td></td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td></td>
<td></td>
<td>6002</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td></td>
<td></td>
<td>6001</td>
</tr>
</tbody>
</table>

6. Check each function port and see if it is the same in both video server/IP camera and the Streaming Activator (below is a reference result)
<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td>80</td>
<td>80</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td>7000</td>
<td>NO</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
<td>7002</td>
<td>NO</td>
</tr>
</tbody>
</table>

7. If any of those are not the same, this is a port setting problem.
8. If all these port setting are the same, this is not a port setting problem.

**Solution:**
5. Adjust the setting of the streaming activator or video server/IP camera to make the port setting is the same for each port.

Example:

<table>
<thead>
<tr>
<th>Function</th>
<th>Port Function</th>
<th>Video Server/IP camera</th>
<th>Streaming Activator</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitor</td>
<td>HTTP</td>
<td>80</td>
<td>80</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td>7000</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
<td>7002</td>
<td>Yes</td>
</tr>
</tbody>
</table>

6-6-4 **Management block**

The possible causes could be as below.

6-6.4.1 Inappropriate baud rate, parity, stop bit setting

The problem is discussed in 6-3.1.1, please go there for details.

6-6.4.2 Inappropriate PTZ setting (protocol, camera ID)

The problem is discussed in 6-3.1.3, please go there for details.
6-6-5 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

6-6.5.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Sub-category</td>
<td>Description</td>
</tr>
<tr>
<td>Hard model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analog Video Serial setting</td>
<td>Serial Type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Connection diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baud rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Byte length, stop bit</td>
<td></td>
</tr>
<tr>
<td>Network Platform</td>
<td>HTTP port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Streaming port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Register port</td>
<td></td>
</tr>
<tr>
<td>Software PTZ setting</td>
<td>Serial Type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Connection diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Baud rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Byte length, stop bit</td>
<td></td>
</tr>
<tr>
<td>Software port setting</td>
<td>HTTP port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Streaming port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Register port</td>
<td></td>
</tr>
<tr>
<td>Other details you find during clarification</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Chapter. 7. Video Quality Problem

In this Chapter, we will focus the problem that you can
1. Can login the video server/IP camera
2. Can monitor the image
3. Video Quality is not good.

We will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

7-1 Find out the possible cause

Please refer to the diagnostic flow to find out the problem type of the Login Problem.
Then you can refer to next section for advanced clarification and troubleshooting.

<table>
<thead>
<tr>
<th>Step</th>
<th>Check Item</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step1</td>
<td>Check the Control Device</td>
<td></td>
</tr>
<tr>
<td>Step2</td>
<td>What is your video quality problem type?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>1. Image color is not true</td>
<td></td>
</tr>
<tr>
<td></td>
<td>2. Image blur</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Image flashing</td>
<td></td>
</tr>
<tr>
<td>Step3</td>
<td>Do you find the same problem on a TV connecting to the analog output?</td>
<td>Please make sure the TV color display is ok</td>
</tr>
<tr>
<td>Step4</td>
<td>Refer to the section of each problem type to do root cause clarification and find respective solutions.</td>
<td></td>
</tr>
</tbody>
</table>
7-2  Video Quality problem Type 1

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

7-2-1  Image block

The possible causes could be as below.

7-2.1.1  Inappropriate Network Platform – Video parameter

The in-correct image color might be resulted in-correct Video Parameter setup in the network platform. This will result in in-correct color rendering during image compression.
Clarification:

1. Login the video server/IP camera to check out its video parameter and fill in the table as below.

2. Fill them in the video parameter table below. The table below is divided by two parameter
   a. Monitor type
   b. Video Type of the Camera spec

<table>
<thead>
<tr>
<th>Monitor Type</th>
<th>Recommended parameter (Video server/IP camera)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Type</td>
<td>NTSC</td>
</tr>
<tr>
<td>Hue</td>
<td>50</td>
</tr>
<tr>
<td>Brightness</td>
<td>55</td>
</tr>
<tr>
<td>Contrast</td>
<td>55</td>
</tr>
<tr>
<td>Saturation</td>
<td>85</td>
</tr>
</tbody>
</table>

3. If these video parameters are the same as recommended, this is not a network platform – video parameter problem

4. If any of these video parameters are not the same as
recommended, this is a network platform – video parameter problem.

**Solution:**

1. Adjust the video parameter to make it exactly the same as the one in recommended.

### 7-2.1.2 Inappropriate Analog Video – Video Type

Sometimes if the analog video output is not right, the in-correct color issue might be caused by in-appropriate Video Type.

**Clarification:**

1. Login the video server/IP camera to check out its video parameter and fill in the table as below.

   ![Web Configurator](image)

   **Fill them in the video parameter table below.**

<table>
<thead>
<tr>
<th>Monitor Type</th>
<th>Recommended parameter (Video server/IP camera)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Type</td>
<td>NTSC</td>
</tr>
<tr>
<td>Hue</td>
<td>50</td>
</tr>
</tbody>
</table>
2. If these video parameters are the same as recommended, this is not a network platform – video parameter problem.

3. If any of these video parameters are not the same as recommended, this is a network platform – video parameter problem.

Solution:
1. Adjust the video parameter to make it exactly the same as the one in recommended.

### 7-2-2 Management block Block

The possible causes could be as below.

#### 7-2.2.1 Inappropriate Software Video Parameter setup

The in-correct image color might be resulted in-correct Software video Parameter setup in the Streaming Activator. This will result in in-correct color rendering during image compression.

Clarification:
1. Open Streaming Activator and go to “Camera Setup” page.

2. Click “Preview” to connect to the video server / IP camera and find the video parameter.
Fill them in the video parameter table below.

<table>
<thead>
<tr>
<th>Monitor Type</th>
<th>Recommended value</th>
<th>Software setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Type</td>
<td>NTSC</td>
<td>PAL</td>
</tr>
<tr>
<td>Hue</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Brightness</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Contrast</td>
<td>55</td>
<td>55</td>
</tr>
<tr>
<td>Saturation</td>
<td>85</td>
<td>85</td>
</tr>
</tbody>
</table>

3. If these video parameters are the same as recommended, this is not a software video parameter problem

4. If any of these software video parameters are not the same as recommended, this is a software video parameter problem

**Solution:**

1. Adjust the software video parameter to make it exactly the same as the one in recommended.
7-2-3 Other block

The possible causes could be as below.

7-2.3.1 Inappropriate – PC / TV monitor setting

The color rendering issue might be caused by incorrect monitor you use.

Clarification:

1. Make sure the Video Parameter in Web-configurator is ok first. (Follow the rules in 7-2-1, 7-2-3, 7-2-4)

2. Try to image on this monitor and see if the color is correct?

3. If yes, this is not PC / TV monitor setting issue.

4. If not, this is PC / TV monitor setting issue.

Solution:

1. Adjust the video parameter of the PC / TC monitor (following the monitor manual) to make the color right.

7-2-4 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

7-2.4.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Hard model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Software model</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Software version</td>
</tr>
<tr>
<td>Network Platform Video</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Software Video setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Other details you find during clarification</td>
</tr>
<tr>
<td>Other details you find during clarification</td>
</tr>
</tbody>
</table>
7-3  Video Quality problem Type 2

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

7-3-1 Image block

The possible causes could be as below.

7-3.1.1 Inappropriate Analog video – Video Type

If the analog video output is not right, the in-correct color issue might be caused by in-appropriate Video Type.

Clarification:
1. Check out your local TV video type (NTSC/PAL) and the IP camera / analog camera’s video type (NTSC/PAL)

<table>
<thead>
<tr>
<th>Video Type</th>
<th>TV</th>
<th>Analog camera/IP camera</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Check if the TV video type is the same as the IP camera / analog camera?

Example

<table>
<thead>
<tr>
<th>Video Type</th>
<th>TV</th>
<th>Analog camera/IP camera</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC</td>
<td>●</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>PAL</td>
<td></td>
<td>●</td>
<td></td>
</tr>
</tbody>
</table>

3. If the video type is the same, this is not an analog video – video type problem.

4. If the video type is not the same, this is an analog video – video type problem.

Solution:

1. Replace the current camera with a right video type camera.

Example:

Before:

<table>
<thead>
<tr>
<th>Video Type</th>
<th>TV</th>
<th>Analog camera/IP camera</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC</td>
<td>●</td>
<td></td>
<td>No</td>
</tr>
<tr>
<td>PAL</td>
<td></td>
<td>●</td>
<td></td>
</tr>
</tbody>
</table>
After:

<table>
<thead>
<tr>
<th>Video Type</th>
<th>TV</th>
<th>Analog camera/IP camera</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC</td>
<td>●</td>
<td>●</td>
<td>No</td>
</tr>
<tr>
<td>PAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7-3.1.2 Inappropriate Analog video – White balance setting

If the analog video output is not right, the in-correct color issue might be caused by in-appropriate analog video – white balance setting.

**Clarification:**

White balance settings are subject to different environments, and the clarification is done via testing different settings. Before we do that, we have to know what the white balance settings available are. (Some settings might not be available for some cameras)

a. AWB (Auto White Balance)

b. ATW (Auto Trace White Balance)

c. PWB (Push-to-lock White Balance)

d. Manually Adjust (Manually set Red and Blue parameters)

1. We will follow the flow below to try different white balance settings.

2. First, if you have AWBs and ATWS settings, please switch between AWB and ATWs and see if the color is
correct. You can refer to the table for what white balance setting a camera has. (Note: this only includes ACTi IP cameras, for other analog cameras, you have to refer to their hardware manual respectively)

<table>
<thead>
<tr>
<th>Camera Series</th>
<th>AWB</th>
<th>ATW</th>
<th>PWB</th>
<th>Manual Adjust</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAM-5100</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>CAM-5200</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>CAM-5300</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>CAM-5130</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-5140</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-5150</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-7100</td>
<td>●</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CAM-6100</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-6200</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-6500</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-6600</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

3. If step2 fail, switch the white balance to “PWB” and see if the color is correct. Please refer the following procedure for PWB setting.
   a. Use a white paper to fully cover the camera’s lens
   b. Switch to PWB setting
   c. Make camera to sync white balance setting with current paper (please see respective hardware manual)
   d. Remove the white paper
   e. Check if the color is correct now.

4. If step3 fail, switch the white balance to “Manual Adjust” for color correction. (please see respective hardware manual)

Solution:
The solution is done during the clarification stage above.

7-3-2  **If problem not solved, how to report this problem?**

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

7-3.2.1  **Problem feedback table**

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Analog Video</td>
<td>Video Type</td>
<td>White balance setting</td>
</tr>
<tr>
<td></td>
<td></td>
<td>On-site situation</td>
</tr>
<tr>
<td>Other details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>you find during</td>
<td></td>
<td></td>
</tr>
<tr>
<td>clarification</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7-4 Video Quality problem Type 3

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

7-4-1 Image block

The possible causes could be as below.

7-4.1.1 Inappropriate Analog Video – Focus

If the focus is not right, the image is likely to be blurred.

Clarification:

1. First, we have to what kind of camera you are using
2. Then refer to the table below for adjusting the focus and see if the image becomes clear.

<table>
<thead>
<tr>
<th>Camera Type</th>
<th>Manually adjust the lens</th>
<th>Adjust via software remotely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box / Dome camera with Fixed lens</td>
<td>●*</td>
<td></td>
</tr>
<tr>
<td>Box / Dome camera with varifocal lens</td>
<td>●*</td>
<td></td>
</tr>
<tr>
<td>Zoom lens camera</td>
<td>●**</td>
<td></td>
</tr>
<tr>
<td>Speed dome camera</td>
<td>●**</td>
<td></td>
</tr>
</tbody>
</table>

*. Please refer to lens’ hardware manual for focus adjust
**. Please refer to IP camera’s hardware manual to adjust the focus.

3. If adjusting the focus doesn’t solve this problem, this is not a focus problem.

4. If adjusting the focus solves the problem, please check the table for further action.

<table>
<thead>
<tr>
<th>Camera Type</th>
<th>Problem Fixed</th>
<th>Adjust OSD setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Box / Dome camera with Fixed lens</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Box / Dome camera with varifocal lens</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Zoom lens camera</td>
<td>●*</td>
<td>(go to Step5)</td>
</tr>
<tr>
<td>Speed dome camera</td>
<td>●*</td>
<td>(go to Step5)</td>
</tr>
</tbody>
</table>

5. This steps is for cameras supporting OSD function
   a. zoom lens camera
   b. speed dome camera

Please make sure the focus setting in the OSD menu is set to “Auto”. You can refer to respective hardware manual.
for how to setup.

Solution:

The solution is done during the clarification stage above.

7-4.1.2 Inappropriate Analog Video – Lens, CCD, Cover cleanliness

If the lens, CCD, cover is dirty, the image is likely to be blurred.

Clarification:

1. Please check if the items below are clear

<table>
<thead>
<tr>
<th>Item</th>
<th>Clean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lens</td>
<td></td>
</tr>
<tr>
<td>CCD</td>
<td></td>
</tr>
<tr>
<td>Cover</td>
<td></td>
</tr>
</tbody>
</table>

2. If not clear, please only clean it with special wipers for glass.

<table>
<thead>
<tr>
<th>Item</th>
<th>Wiper for Glass</th>
<th>Use blower</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lens</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>CCD</td>
<td></td>
<td>●</td>
</tr>
<tr>
<td>Cover</td>
<td>●</td>
<td></td>
</tr>
</tbody>
</table>

Solution:

The solution is done during the clarification stage above.

7-4.1.3 Inappropriate Analog Video – Lens type (for Box camera with day/night function)

This problem is because of the focus shift between the day/night modes of the camera.
This problem happens only on camera
a. with day/night function
b. without lens built-in (lens is bought in addition to the camera)  
please see the table below

<table>
<thead>
<tr>
<th>Day/Night cameras</th>
<th>Possible lens type problem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Camera Type</td>
<td>Model No.</td>
</tr>
<tr>
<td>Box camera</td>
<td>CAM-5120 Yes</td>
</tr>
<tr>
<td></td>
<td>CAM-5220 Yes</td>
</tr>
<tr>
<td></td>
<td>CAM-5320 Yes</td>
</tr>
<tr>
<td>Zoom lens camera</td>
<td>CAM-5140 -</td>
</tr>
<tr>
<td></td>
<td>CAM-5150 -</td>
</tr>
<tr>
<td>Speed dome</td>
<td>CAM-6110 -</td>
</tr>
<tr>
<td></td>
<td>CAM-6120 -</td>
</tr>
<tr>
<td></td>
<td>CAM-6220 -</td>
</tr>
<tr>
<td></td>
<td>CAM-6230 -</td>
</tr>
<tr>
<td></td>
<td>CAM-6510 -</td>
</tr>
<tr>
<td></td>
<td>CAM-6520 -</td>
</tr>
<tr>
<td></td>
<td>CAM-6610 -</td>
</tr>
<tr>
<td></td>
<td>CAM-6620 -</td>
</tr>
</tbody>
</table>

**Clarification:**

1. If you are using the camera above marked with this possible lens type problem, then you have to check the lens type you use.

<table>
<thead>
<tr>
<th>Item</th>
<th>Focus situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In either Day / Night situation</td>
</tr>
<tr>
<td>Normal Lens</td>
<td>●</td>
</tr>
<tr>
<td>IR correct</td>
<td></td>
</tr>
</tbody>
</table>

2. If you are using IR correct lens, this is not an analog video – lens type problem.
3. If you are not using IR correct lens, this is an analog video – Lens type problem.

**Solution:**

1. Please purchase the lens with IR correct function to ensure the focus right in switching between Day/Night modes.

### 7-4.1.4 Inappropriate Analog Video – OSD setting (for cameras supporting OSD function)

This is discussed in 7-4.1.1. Please go there and see details.

### 7-4-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

### 7-4.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Analog Video</td>
<td>Lens type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>OSD setting</td>
<td>(if the camera have)</td>
</tr>
<tr>
<td></td>
<td>Lens cleanness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>CCD cleanness</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cover cleanness</td>
<td></td>
</tr>
<tr>
<td>Other details you find during clarification</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Problem feedback table of login problem 1
7-5  Video Quality problem Type 4

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

7-5-1  Image block

The possible causes could be as below.

7-5.1.1  Inappropriate Network Platform – Bit rate, frame rate

The video quality is determined by 3 parameters
a. Resolution
b. Bit rate
c. frame rate
Thus, a wrong combination of the 3 parameters is very likely to cause the blurred images.

**Clarification:**
1. Please refer to support package TS-00055 about the respective video.

<table>
<thead>
<tr>
<th>Item</th>
<th>Focus situation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In either Day / Night situation</td>
</tr>
<tr>
<td>Normal Lens</td>
<td>●</td>
</tr>
<tr>
<td>IR correct</td>
<td></td>
</tr>
</tbody>
</table>

2. If you are using IR correct lens, this is not an analog video – lens type problem.

3. If you are not using IR correct lens, this is an analog video – Lens type problem.

**Solution:**
1. Please purchase the lens with IR correct function to ensure the focus right in switching between Day/Night modes.

**7-5-2 If problem not solved, how to report this problem?**

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

**7-5.2.1 Problem feedback table**

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Hard model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Analog Video</td>
</tr>
<tr>
<td>Frame rate</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Bit rate</td>
</tr>
<tr>
<td>Other details you find during clarification</td>
</tr>
</tbody>
</table>
### 7-6 Video Quality problem Type 5

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

#### 7-6-1 Image block

The possible causes could be as below.

#### 7-6.1.1 Inappropriate Analog Video – Video Type

The video flash is likely to be caused by inappropriate Video Type.

**Clarification:**

1. Check out your local TV video type (NTSC/PAL) and the IP camera / analog camera’s video type (NTSC/PAL)
2. Check if the TV video type is the same as the IP camera / analog camera?

Example

<table>
<thead>
<tr>
<th>Video Type</th>
<th>TV</th>
<th>Analog camera/IP camera</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. If the video type is the same, this is not an analog video – video type problem.

4. If the video type is not the same, this is an analog video – video type problem.

Solution:

1. Replace the current camera with a right video type camera.

Example:

Before:

<table>
<thead>
<tr>
<th>Video Type</th>
<th>TV</th>
<th>Analog camera/IP camera</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

After:
<table>
<thead>
<tr>
<th>Video Type</th>
<th>TV</th>
<th>Analog camera/IP camera</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC</td>
<td>●</td>
<td>●</td>
<td>No</td>
</tr>
<tr>
<td>PAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 7-6-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

#### 7-6.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Hard model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Analog Video</td>
</tr>
<tr>
<td>Serial setting</td>
</tr>
<tr>
<td>Environment condition</td>
</tr>
<tr>
<td>Other details you find during clarification</td>
</tr>
</tbody>
</table>
7-7  Video Quality problem Type 6

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

7-7-1  Image block

The possible causes could be as below.

7-7.1.1  Inappropriate Analog Video – Video Type

The video flash is likely to be caused by inappropriate Video Type.

Clarification:

1. Check out your local TV video type (NTSC/PAL) and the IP camera / analog camera’s video type (NTSC/PAL)
2. Check if the TV video type is the same as the IP camera / analog camera?

Example

<table>
<thead>
<tr>
<th>Video Type</th>
<th>TV</th>
<th>Analog camera/IP camera</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC</td>
<td>●</td>
<td>●</td>
<td>No</td>
</tr>
<tr>
<td>PAL</td>
<td>●</td>
<td>●</td>
<td>No</td>
</tr>
</tbody>
</table>

3. If the video type is the same, this is not an analog video – video type problem.

4. If the video type is not the same, this is an analog video – video type problem.

Solution:

1. Replace the current camera with a right video type camera.

Example:

Before:

<table>
<thead>
<tr>
<th>Video Type</th>
<th>TV</th>
<th>Analog camera/IP camera</th>
<th>The same?</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTSC</td>
<td>●</td>
<td>●</td>
<td>No</td>
</tr>
<tr>
<td>PAL</td>
<td>●</td>
<td>●</td>
<td>No</td>
</tr>
</tbody>
</table>

After:
### 7-7.1.2 Inappropriate Analog Video – Iris, ES (Electric Shutter) setting

Both of the Iris setting and ES setting is used to adapt the camera to current environment lighting conditions. If you use AES (Auto Electric Shutter) it is very likely for you to have the image flashing problem. Please see below for details.

**Clarification:**

1. Check out the setting of your camera to see its iris setting and ES setting.

<table>
<thead>
<tr>
<th>Video Type</th>
<th>Auto</th>
<th>Fixed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iris Setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Mostly, the ES setting will be fixed when Iris setting is set to Auto.

2. Please see if your setting is the same as recommended in the table. (please refer to respective hardware manual for how to setup)

<table>
<thead>
<tr>
<th>Video Type</th>
<th>Recommendation</th>
<th>Your setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auto</td>
<td>Fixed</td>
<td>Auto</td>
</tr>
</tbody>
</table>

| Iris Setting |  ●  |
| ES     |  ●  |
3. If the Iris and ES settings are the same, this is not an analog video – Iris and ES settings.

4. If the Iris and ES settings are not the same, this is an analog video – Iris and ES settings.

Solution:

1. Set the Iris and ES setting as recommended.

Example:

Before:

<table>
<thead>
<tr>
<th>Video Type</th>
<th>Recommendation</th>
<th>Your setting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Auto</td>
<td>Fixed</td>
</tr>
<tr>
<td>Iris Setting</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

After:

<table>
<thead>
<tr>
<th>Video Type</th>
<th>Recommendation</th>
<th>Your setting</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Auto</td>
<td>Fixed</td>
</tr>
<tr>
<td>Iris Setting</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>ES</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

7-7.1.3 Inappropriate Analog Video – Flickerless

This problem happens on places where TV video type’s frequency is different from the local electric frequency (ex: Japan).

If the TV video type’s frequency is the same as the local electric frequency, you can skip this section.

Clarification:

1. Check out the TV video type and the electric frequency and find your column in the table.

<table>
<thead>
<tr>
<th>Electric</th>
<th>TV Video Type</th>
</tr>
</thead>
</table>
2. If you are in column B, C, this is not a Flickerless problem

3. If you are in column A, D, this is a Flickerless problem.

Solution:

1. Please refer to the table for solution for each camera type in different kind of video type environment.

<table>
<thead>
<tr>
<th>Camera Series</th>
<th>NTSC</th>
<th>PAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Enable Flickerless</td>
<td>Set ES fixed at 1/100sec</td>
</tr>
<tr>
<td>CAM-5100</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-5200</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-5300</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-5130</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-5140</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-5150</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-7100</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-6100</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-6200</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-6500</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>CAM-6600</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>
7-7-2  If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

7-7.2.1  Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Analog Video</td>
<td>Video Type</td>
<td></td>
</tr>
<tr>
<td>Serial setting</td>
<td>Iris setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ES setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Flickerless setting</td>
<td></td>
</tr>
<tr>
<td>Environment</td>
<td>TV video type</td>
<td></td>
</tr>
<tr>
<td>condition</td>
<td>Electric frequency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Local lighting condition</td>
<td></td>
</tr>
<tr>
<td>Other details</td>
<td></td>
<td></td>
</tr>
<tr>
<td>you find during</td>
<td></td>
<td></td>
</tr>
<tr>
<td>clarification</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### 7-8  Video Quality problem Type 7

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

![Image of surveillance system components]

**7-8-1 Image block**

The possible causes could be as below.

**7-8.1.1 Unknown problem**

It is rare to see mosaic at the analog output. The possible cause could be CCD or Camera DSP mal-function. Please capture a picture of the analog mosaic images and send it back.
7-9  Video Quality problem Type 8

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

7-9-1 Monitor, Management, Storage Block

The possible causes could be as below.

7-9.1.1 Inappropriate PC specs

The mosaic problem might happen if your PC doesn’t have enough computing power to decode the image.

Clarification:

1. Check out the support package TS-00057 to check if you’re PC meets the system requirement of our software.
2. If your system meets the requirement, this is not an inappropriate PC spec problem.

3. If your system fails to meet the requirement, this is an inappropriate PC spec problem.

**Solution:**

1. Please follow the system requirement in support package TS-00057 to adjust your PC spec.

---

**7-9-2 If problem not solved, how to report this problem?**

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

**7-9.2.1 Problem feedback table**

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Hard model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Software model</td>
</tr>
<tr>
<td>Software version</td>
</tr>
<tr>
<td>Network connection</td>
</tr>
<tr>
<td>PC spec</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Other details</td>
</tr>
</tbody>
</table>
you find during clarification
7-10 Video Quality problem Type 9

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

7-10-1 Monitor, Management, Storage block

The possible causes could be as below.

7-10.1.1 Too many con-current users

The mosaic problem might happen if there are too many con-current users connecting to the video server/IP camera and cause it overload.

Clarification:

1. Please fill in the table below about the video setting and
number of con-current users. (If you use one PC to record, and one PC to view the images, there are two con-current user of this video server/IP camera)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bit rate</td>
<td></td>
</tr>
<tr>
<td>Protocol Type</td>
<td></td>
</tr>
<tr>
<td>(TCP1.0 or TCP2.0)*</td>
<td></td>
</tr>
<tr>
<td>Number of connections</td>
<td></td>
</tr>
</tbody>
</table>

* Please refer to the support package TS-00104 and your video setting in web-configurator for Protocol type are you using.

Example:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bit rate</td>
<td>3M</td>
</tr>
<tr>
<td>Protocol Type</td>
<td></td>
</tr>
<tr>
<td>(TCP1.0 or TCP2.0)</td>
<td>1</td>
</tr>
<tr>
<td>Number of connections</td>
<td>2</td>
</tr>
</tbody>
</table>

2. Refer to the table below to find out the con-current user we support. This table is divided by different combination of bit rate and protocol types.

<table>
<thead>
<tr>
<th>Bit rate</th>
<th>Protocol type</th>
<th>Protocol type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TCP1.0</td>
<td>TCP2.0</td>
</tr>
<tr>
<td>3M</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>1.5M</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>750K</td>
<td>6</td>
<td>12</td>
</tr>
</tbody>
</table>

3. If your con-current user exceeds the con-current user we supported, this is a problem of too many con-current users.
4. If your con-current user doesn’t exceed the con-current user we supported, this is a problem of too many con-current users.

**Solution:**

1. There are two types of solution to solve this problem.
   a. Decrease the bit rate to increase the con-current user (Note: Decrease the bit rate might cause the video quality to decrease as well)
   b. Decrease the number of con-current user. (decrease the number of user by changing system design)

**7-10-2 Network block**

The possible causes could be as below.

**7-10.2.1 Insufficient/instable network bandwidth**

Insufficient network bandwidth or instable network bandwidth is very likely to cause the network package to be lost during transmission. Too many drop network packages will cause mosaic.

**Clarification:**

1. Because the mosaic disappears when connecting via cross-over cable. The problem definition will be as below.

<table>
<thead>
<tr>
<th>Connection Type</th>
<th>Mosaic</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous network</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Cross-over</td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>

2. Please bring the test result to your MIS or the one build-up your network infrastructure and ask him to clarify if the network bandwidth is ok and stable.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bit rate</td>
<td>3M</td>
</tr>
<tr>
<td>Protocol Type (TCP1.0 or TCP2.0)</td>
<td>1</td>
</tr>
<tr>
<td>Number of</td>
<td>2</td>
</tr>
</tbody>
</table>
connections

<table>
<thead>
<tr>
<th>Connection Type</th>
<th>Mosaic</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous network</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Cross-over</td>
<td>●</td>
<td></td>
</tr>
</tbody>
</table>

3. If yes, this is not an insufficient/instable network bandwidth problem.

4. If not, this is an insufficient/instable network bandwidth problem.

Solution:

1. Because the network involves too many issues, it’s very hard for ACTi to provide you a solution. Thus, please ask your MIS or the one build up your network infrastructure about how to solve this problem.

7-10-3 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

7-10.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Bit rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Protocol type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>Number of con-current user</td>
<td></td>
</tr>
<tr>
<td>Network</td>
<td>Network diagram</td>
<td></td>
</tr>
<tr>
<td>deployment</td>
<td>Respective setting of switch / routers.</td>
<td></td>
</tr>
</tbody>
</table>
7-11 Video Quality problem Type 10

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

7-11-1 Image block

The possible causes could be as below.

7-11.1.1 Inappropriate Analog Video – Low lighting environment

If the environment lighting is now, it is very likely to cause noise to happen.

Clarification:

1. Switch the IP camera/analog camera to a place where
1. If the lighting condition is ok and see if there's still noises

2. If not, this is Analog video – low lighting environment problem

3. If yes, this is not Analog Video – Low lighting environment problem.

**Solution:**
1. To solve this issue, you have to increase the lighting condition in the environment.

7-11.1.2 Inappropriate Analog Video – Day/Night mode switch

This section is for cameras with Day/Night function only. Sometimes the noises is caused by inappropriate mode.

**Clarification:**
1. Switch the IP camera/analog camera to Night mode and see if the noise disappears.

2. If yes, this is Analog Video – Day/Night mode switch problem.

3. If not, this is not Analog Video – Day/Night mode switch problem.

**Solution:**
1. Please refer to camera’s hardware manual for how to
   a. Switch to Night mode
   b. Enable the camera to switch automatically between day/night mode.

7-11.1.3 Inappropriate Analog Video – AGC (Auto Gain Control)

Sometimes the AGC will cause the camera to have noises. But only if the lighting condition of your environment is always sufficient,
otherwise we would recommend you to skip this section.

Clarification:
1. Switch the IP camera/analog camera’s AGC to OFF and see if the noise disappears. There might be 3 results and see the table below for advanced action.

<table>
<thead>
<tr>
<th>No</th>
<th>Test result</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Image clear</td>
<td>Noises</td>
</tr>
<tr>
<td>1</td>
<td>Yes</td>
<td>OFF</td>
</tr>
<tr>
<td>2</td>
<td>Yes</td>
<td>Yes ON</td>
</tr>
<tr>
<td>3</td>
<td>Yes</td>
<td>ON Yes</td>
</tr>
</tbody>
</table>

Solution:
1. The solution is listed in the clarification procedure.

7-11-2 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

7-11.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Analog Video</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Environment</td>
</tr>
<tr>
<td>Others</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
7-12 Video Quality problem Type 11

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

7-12-1 Other

The possible causes could be as below.

7-12.1.1 Unknown

It is rare to see images with noise while the video servers/IP cameras’ analog output has no noise. Please prepare a snapshot of the analog image and a recording file of the digital images.
<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>A snapshot of analog image</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>Video clip of the digital images</td>
<td></td>
</tr>
</tbody>
</table>
Chapter. 8. Latency Problem

In this Chapter, we will focus the problem that you
1. Can login the video server/IP camera
2. Can monitor the image
3. The latency is very big

We will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

8-1 Find out the possible cause

Please refer to the diagnostic flow to find out the problem type of the Login Problem.
Then you can refer to next section for advanced clarification and troubleshooting.

<table>
<thead>
<tr>
<th>Check Item</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step1</td>
<td>Check the Control Device</td>
</tr>
<tr>
<td>Step2</td>
<td>Is the latency ok when connected directly via cross-over cable? Please refer to appendix A for how to test latency.</td>
</tr>
</tbody>
</table>

Latency problem Diagnostic Flow
8-2 Latency problem Type 1

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

8-2-1 Monitor, Management, Storage block

The possible causes could be as below.

8-2.1.1 Too many con-current users

The latency problem might happen if there’s too many con-current user connecting to the video server/IP camera and cause the it overload.

Clarification:
1. Please fill in the table below about the video setting and number of con-current users. (If you use one PC to record, and one PC to view the images, there are two con-current user of this video server/IP camera)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bit rate</td>
<td></td>
</tr>
<tr>
<td>Protocol Type</td>
<td></td>
</tr>
<tr>
<td>(TCP1.0 or TCP2.0)*</td>
<td></td>
</tr>
<tr>
<td>Number of connections</td>
<td></td>
</tr>
</tbody>
</table>

* Please refer to the support package TS-00104 and your video setting in web-configurator for Protocol type are you using.

Example:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bit rate</td>
<td>3M</td>
</tr>
<tr>
<td>Protocol Type</td>
<td></td>
</tr>
<tr>
<td>(TCP1.0 or TCP2.0)</td>
<td>1</td>
</tr>
<tr>
<td>Number of connections</td>
<td>2</td>
</tr>
</tbody>
</table>

2. Refer to the table below to find out the con-current user we support. This table is divided by different combination of bit rate and protocol types.

<table>
<thead>
<tr>
<th>Bit rate</th>
<th>Protocol type</th>
<th>TCP1.0</th>
<th>TCP2.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>3M</td>
<td>1</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1.5M</td>
<td>3</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>750K</td>
<td>6</td>
<td>12</td>
<td></td>
</tr>
</tbody>
</table>

3. If your con-current user exceeds the con-current user we supported, this is a problem of too many con-current users.

4. If your con-current user doesn’t exceed the con-current
user we supported, this is a problem of too many con-current users.

Solution:

1. There are two types of solution to solve this problem.
   a. Decrease the bit rate to increase the con-current user (Note: Decrease the bit rate might cause the video quality to decrease as well)
   b. Decrease the number of con-current user. (decrease the number of user by changing system design)

8-2-2 Network block

The possible causes could be as below.

8-2.2.1 Insufficient/instable network bandwidth

Insufficient network bandwidth or instable network bandwidth is very likely to cause the network package to be lost during transmission. Too many drop network packages will cause the latency to be poor.

Clarification:

1. Because the latency problem disappears when connecting via cross-over cable. The problem definition will be as below

<table>
<thead>
<tr>
<th>Connection Type</th>
<th>Latency</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous network</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Cross-over</td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>

2. Please bring the test result to your MIS or the one build-up your network infrastructure and ask him to clarify if the network bandwidth is ok and stable.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bit rate</td>
<td>3M</td>
</tr>
<tr>
<td>Protocol Type (TCP1.0 or TCP2.0)</td>
<td>1</td>
</tr>
<tr>
<td>Number of</td>
<td>2</td>
</tr>
</tbody>
</table>
3. If yes, this is not an insufficient/instable network bandwidth problem.

4. If not, this is an insufficient/instable network bandwidth problem.

**Solution:**

1. Because the network involves too many issues, it's very hard for ACTi to provide you with a solution. Thus, please ask your MIS or the one building your network infrastructure about how to solve this problem.

**8-2-3 If problem not solved, how to report this problem?**

If the solution above can't solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

**8-2-3.1 Problem feedback table**

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Bit rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Protocol type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>Number of con-current user</td>
<td></td>
</tr>
<tr>
<td>Network</td>
<td>Network diagram</td>
<td></td>
</tr>
<tr>
<td>deployment</td>
<td>Respective setting of switch / routers.</td>
<td></td>
</tr>
</tbody>
</table>
8-3 Latency problem Type 2

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

8-3-1 Monitor, Management, Storage Block

The possible causes could be as below.

8-3.1.1 Inappropriate PC specs

The latency problem might happen if your PC doesn’t have enough computing power to decode the image.

Clarification:

1. Check out the support package TS-00057 to check if your PC meets the system requirement of our software.
2. If your system meets the requirement, this is not an inappropriate PC spec problem.

3. If your system fails to meet to requirement, this is an inappropriate PC spec problem.

Solution:
1. Please follow the system requirement in support package TS-00057 to adjust your PC spec.

8-3.1.2 Inappropriate buffer setting

All software has a buffer to make sure the smoothness of video displays. This setting is directly related to latency test result.

Clarification:
1. Check out the buffer setting for the software.

2. If the buffer setting is 3 frames or less, this is not a buffer setting problem.

3. If the buffer setting is 4 frames or more, this is a buffer setting problem.

Solution:
1. Please adjust the buffer setting to be 3 frames.

8-3.1.3 Inappropriate PC network card

The PC network card directly effect the network performance of
a. Speed
b. Stability

If the PC network card is bad, the latency is likely to be bad.

Clarification:
1. Check out the PC network card spec, and see if it is using “Intel” chipsets.
2. If yes, this is NOT an inappropriate network card problem.

3. If not, this is an inappropriate network card problem.

**Solution:**

1. Please change the PC network card with Intel Chipset. 
   Note: Network cards with Intel Chipset have tested to be reliable and fast.

8-3-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

8-3.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Hard model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Software model</td>
</tr>
<tr>
<td>Software version</td>
</tr>
<tr>
<td>Network connection</td>
</tr>
<tr>
<td>Connection (LAN or WAN or cross-over)</td>
</tr>
<tr>
<td>PC spec</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Other details you find during clarification</td>
</tr>
</tbody>
</table>
Chapter. 9. Video Jitter Problem

In this Chapter, we will focus the problem that you
1. Can login the video server/IP camera
2. Can monitor the image
3. You see jitter (Image jumping from time to time)

We will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

9-1 Find out the possible cause

Please refer to the diagnostic flow to find out the problem type of the Login Problem.
Then you can refer to next section for advanced clarification and troubleshooting.

<table>
<thead>
<tr>
<th>Check Item</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step1 Check the Control Device</td>
<td></td>
</tr>
<tr>
<td>Step2 Do you see the video jitter when connected directly via cross-over cable?</td>
<td></td>
</tr>
</tbody>
</table>

Jitter problem Diagnostic Flow
9-2 Video Jitter problem Type 1

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

9-2.1 Monitor, Management, Storage Block

The possible causes could be as below.

9-2.1.1 Inappropriate PC specs

The jitter problem might happen if your PC doesn’t have enough computing power to decode the image.

Clarification:

1. Check out the support package TS-00057 to check if your PC meets the system requirement of our software.
2. If your system meets the requirement, this is not an inappropriate PC spec problem.

3. If your system fails to meet to requirement, this is an inappropriate PC spec problem.

**Solution:**
1. Please follow the system requirement in support package TS-00057 to adjust your PC spec.

### 9-2.1.2 Inappropriate PC network card

The PC network card directly effect the network performance of
a. Speed
b. Stability

If the PC network card is bad, the jitter is likely to happen.

**Clarification:**
1. Check out the PC network card spec, and see if it is using “Intel” chipsets.

2. If yes, this is NOT an inappropriate network card problem.

3. If not, this is an inappropriate network card problem.

**Solution:**
1. Please change the PC network card with Intel Chipset.
   Note: Network cards with Intel Chipset have tested to be reliable and fast.

### 9-2-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).
### 9-2.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hard model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network connection</td>
<td>Connection</td>
<td>(LAN or WAN or cross-over)</td>
</tr>
<tr>
<td>PC spec</td>
<td>CPU</td>
<td></td>
</tr>
<tr>
<td></td>
<td>RAM</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Motherboard FSB</td>
<td></td>
</tr>
<tr>
<td></td>
<td>VGA card</td>
<td></td>
</tr>
<tr>
<td></td>
<td>PC network card</td>
<td></td>
</tr>
<tr>
<td>Other details you find</td>
<td></td>
<td></td>
</tr>
<tr>
<td>during clarification</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9-3 Video Jitter problem Type 2

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

9-3-1 Monitor, Management, Storage block

The possible causes could be as below.

9-3.1.1 Too many con-current users

The Jitter problem might happen if there’s too many con-current user connecting to the video server/IP camera and cause the it overload.

Clarification:
1. Please fill in the table below about the video setting and number of con-current users. (If you use one PC to record, and one PC to view the images, there are two con-current user of this video server/IP camera)

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bit rate</td>
<td></td>
</tr>
<tr>
<td>Protocol Type (TCP1.0 or TCP2.0)*</td>
<td></td>
</tr>
<tr>
<td>Number of connections</td>
<td></td>
</tr>
</tbody>
</table>

* Please refer to the support package TS-00104 and your video setting in web-configurator for Protocol type are you using.

Example:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bit rate</td>
<td>3M</td>
</tr>
<tr>
<td>Protocol Type (TCP1.0 or TCP2.0)*</td>
<td>1</td>
</tr>
<tr>
<td>Number of connections</td>
<td>2</td>
</tr>
</tbody>
</table>

2. Refer to the table below to find out the con-current user we support. This table is divided by different combination of bit rate and protocol types.

<table>
<thead>
<tr>
<th>Bit rate</th>
<th>Protocol type</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>TCP1.0</td>
</tr>
<tr>
<td>3M</td>
<td>1</td>
</tr>
<tr>
<td>1.5M</td>
<td>3</td>
</tr>
<tr>
<td>750K</td>
<td>6</td>
</tr>
</tbody>
</table>

3. If your con-current user exceeds the con-current user we supported, this is a problem of too many con-current users.

4. If your con-current user doesn’t exceed the con-current
user we supported, this is a problem of too many con-current users.

Solution:
1. There are two types of solution to solve this problem.
   a. Decrease the bit rate to increase the con-current user (Note: Decrease the bit rate might cause the video quality to decrease as well)
   b. Decrease the number of con-current user. (decrease the number of user by changing system design)

9-3-2 Network block

The possible causes could be as below.

9-3.2.1 Insufficient/instable network bandwidth

Insufficient network bandwidth or instable network bandwidth is very likely to cause the network package to be lost during transmission. Too many drop network packages will cause the jitter to happen.

Clarification:
1. Because the jitter problem disappears when connecting via cross-over cable. The problem definition will be as below

<table>
<thead>
<tr>
<th>Connection Type</th>
<th>Jitter</th>
<th>Normal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous network</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>Cross-over</td>
<td></td>
<td>●</td>
</tr>
</tbody>
</table>

2. Please bring the test result to your MIS or the one build-up your network infrastructure and ask him to clarify if the network bandwidth is ok and stable.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bit rate</td>
<td>3M</td>
</tr>
<tr>
<td>Protocol Type (TCP1.0 or TCP2.0)</td>
<td>1</td>
</tr>
<tr>
<td>Number of connections</td>
<td>2</td>
</tr>
</tbody>
</table>
3. If yes, this is not an insufficient/unstable network bandwidth problem.

4. If not, this is an insufficient/unstable network bandwidth problem.

Solution:
2. Because the network involves too many issues, it’s very hard for ACTi to provide you a solution. Thus, please ask your MIS or the one who builds up your network infrastructure about how to solve this problem.

9-3-3 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

9-3.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Bit rate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Protocol type</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>Number of concurrent user</td>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
<td>Network diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respective setting of switch / routers.</td>
<td></td>
</tr>
</tbody>
</table>
Chapter. 10. DIO event Problem

In this Chapter, we will focus the problem that you
1. Can login the video server/IP camera
2. Can monitor the image
3. You can’t use DI and DO function (Example: You can’t record every time you receive DI or you can’t manually trigger DO.)

We will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

10-1 Find out the possible cause

Please refer to the diagnostic flow to find out the problem type of the DI/O Problem. You can see a table right beside each problem type indicating which building block of the IP surveillance might cause the problem. Then you can refer to next section for advanced clarification and troubleshooting.

<table>
<thead>
<tr>
<th>Step</th>
<th>Check Item</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step1</td>
<td>Check the Control Device</td>
<td></td>
</tr>
<tr>
<td>Step2</td>
<td>What DI/DO function do you have problem with?</td>
<td></td>
</tr>
<tr>
<td>Step3</td>
<td>Can Streaming Activator Receive DI signal while connecting directly via cross-over cable?</td>
<td>Operation procedure will be added in next version</td>
</tr>
<tr>
<td>Step4</td>
<td>Other advanced clarification related to each problem.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can your PC use the same FTP setting to send FTP?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can your PC use the same e-mail setting to send e-mail?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Can your PC send DO signal to the video server / IP camera?</td>
<td>Operation procedure will be added in next version</td>
</tr>
</tbody>
</table>
DI/O problem Diagnostic Flow-2 (Streaming Activator)

What's the control device
Control Device
Check Item
Problem Type

What's the control device
Streaming Activator

DI to FTP?
Can you receive DI signal while connecting directly via cross-over cable?
Can Your PC use the same FTP setting to send FTP?

DI to E-mail?
Can you receive DI signal while connecting directly via cross-over cable?
Can Your PC use the same e-mail setting to send e-mail?

DI to DO?
Can you receive DI signal while connecting directly via cross-over cable?
Can you send DO signal while connecting directly via cross-over cable?

DI to recording
Can you receive DI signal while connecting directly via cross-over cable?
Can your manual record the image?

Manual Trigger DO
Can you send DO when connecting directly via cross-over cable?

DIO problem Type 8
DIO problem Type 2
DIO problem Type 3
DIO problem Type 9
DIO problem Type 5
DIO problem Type 3
DIO problem Type 8
DIO problem Type 7
DIO problem Type 3
DIO problem Type 10
DIO problem Type 11
DIO problem Type 3
DIO problem Type 6
DIO problem Type 7
10-2  DIO problem Type 1

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-2-1 Image block

The possible causes could be as below.

10-2.1.1 Inappropriate network platform – FTP client setting

This problem could happen if you didn’t setup the FTP client setting in the web-configurator right.

Clarification:

1. Please read the support package TS-00019 for how to setup the FTP setting.
2. Clarify if your settings are right.
3. If yes, this is NOT a network platform – FTP client setting
4. If not, this is a network platform – FTP client setting.

Solution:
1. Please refer to the support package TS-00019 for how to correctly set it.

10-2.1.2 Inappropriate network platform – event setting

This problem could happen if you didn’t setup the event setting in the web-configurator right.

Clarification:
1. Please read the support package TS-00019 for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT a network platform – event setting
4. If not, this is a network platform – event setting.

Solution:
1. Please refer to the support package TS-00019 for how to correctly set it.

10-2-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-2.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td>LAN IP setting</td>
</tr>
<tr>
<td>---------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Video Server</strong></td>
</tr>
<tr>
<td><strong>WAN IP setting</strong></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td><strong>Video server</strong></td>
</tr>
<tr>
<td><strong>event setting</strong></td>
</tr>
<tr>
<td><strong>Network deployment</strong></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
10-3  DIO problem Type 2

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-3-1  Management block

The possible causes could be as below.

10-3.1.1  Inappropriate FTP server setup

The problem could be
  a. inappropriate FTP server setup
  b. inappropriate FTP client setting
We will discuss both in this section.
Clarification:

1. Because you fail to connect the FTP setting using your own PC, that means there’s something wrong about the a. FTP server setup and  
b. FTP client setting.

2. Because this problem involves mostly about your network and MIS infrastructure, it’s less possible for us to provide the solution.

Solution:

1. Please provide the following item and give it to your MIS or your network architect for this problem. Ask him for solution.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTP server</td>
<td>Server PC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>FTP Client</td>
<td>Server IP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Account</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td></td>
</tr>
<tr>
<td></td>
<td>File Path</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

10-3.1.2 Inappropriate FTP client setting (account and password)

The problem is discussed in 10-3.1.1, please go there for details

10-3-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).
### Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>LAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>WAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video server</td>
<td>FTP setting</td>
<td>Event action</td>
</tr>
<tr>
<td>event setting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FTP server</td>
<td>Server PC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>FTP Client</td>
<td>Server IP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Account</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td></td>
</tr>
<tr>
<td></td>
<td>File Path</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
10-4 DIO problem Type 3

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

**10-4-1 Image block**

The possible causes could be as below.

**10-4.1.1 Inappropriate DI devices**

The problem can be resulted by

a. Inappropriate DI devices or

b. Inappropriate DI connections
Clarification:
1. Please read the support package TS-00045 to clarify if your DI device spec is right.
2. Please read the support package TS-00045 to clarify if your DI connection is right.
3. If yes, this is NOT a DI device or DI connection problem.
4. If not, this is a DI device or DI connection problem

Solution:
1. Please refer to the support package TS-00045 for how to correctly set it.

10-4.1.2 Inappropriate DI connections

The problem is discussed in 10-4.1.1, please go there for details.

10-4-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-4.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Software model</td>
</tr>
<tr>
<td>Software version</td>
</tr>
<tr>
<td>DI</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Other data you find during clarification</td>
</tr>
</tbody>
</table>
10-5  DIO problem Type 4

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-5-1  Image block

The possible causes could be as below.

10-5.1.1 Inappropriate network platform – e-mail client setting

This problem could happen if you didn’t setup the e-mail client setting in the web-configurator right.

Clarification:

5. Please read the support package TS-00019 for how to setup the FTP client setting.
6. Clarify if your settings are right.
7. If yes, this is NOT a network platform – e-mail client setting
8. If not, this is a network platform – e-mail client setting.

Solution:
2. Please refer to the support package TS-00019 for how to correctly set it.

10-5.1.2 Inappropriate network platform – event setting

This problem could happen if you didn’t setup the event setting in the web-configurator right.

Clarification:
5. Please read the support package TS-00019 for how to setup the event setting.
6. Clarify if your settings are right.
7. If yes, this is NOT a network platform – event setting
8. If not, this is a network platform – event setting.

Solution:
2. Please refer to the support package TS-00019 for how to correctly set it.

10-5-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-5.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td><strong>IP address</strong></td>
</tr>
<tr>
<td><strong>Submask</strong></td>
</tr>
<tr>
<td><strong>Gateway</strong></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
</tr>
<tr>
<td><strong>IP address</strong></td>
</tr>
<tr>
<td><strong>Submask</strong></td>
</tr>
<tr>
<td><strong>Gateway</strong></td>
</tr>
<tr>
<td>Video server event setting</td>
</tr>
<tr>
<td><strong>Event action</strong></td>
</tr>
<tr>
<td>Network deployment</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
10-6  DIO problem Type 5

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

![Diagram of Best MPEG-4 IP Surveillance Solutions](image)

### 10-6-1 Management block

The possible causes could be as below.

#### 10-6.1.1 Inappropriate e-mail server setup

The problem could be

- a. inappropriate e-mail server setup
- b. inappropriate e-mail client setting

We will discuss both in this section.
Clarification:

1. Because you fail to connect the e-mail setting using your own PC, that means there’s something wrong about the
   a. e-mail server setup and
   b. e-mail client setting.

2. Because this problem involves mostly about your network and MIS infrastructure, it’s less possible for us to provide
   the solution.

Solution:

1. Please provide the following item and give it to your MIS or your network architect for this problem. Ask him for solution.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>e-mail server</td>
<td>Server PC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>e-mail Client</td>
<td>Server IP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Account</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td></td>
</tr>
<tr>
<td></td>
<td>File Path</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

10-6.1.2 Inappropriate FTP client setting (account and password)

The problem is discussed in 10-6.1.1, please go there for details

10-6-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).
### 10-6.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>LAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>WAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video server</td>
<td>FTP setting</td>
<td></td>
</tr>
<tr>
<td>event setting</td>
<td>Event action</td>
<td></td>
</tr>
<tr>
<td>e-mail server</td>
<td>Server PC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>e-mail Client</td>
<td>Server IP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Account</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td></td>
</tr>
<tr>
<td></td>
<td>File Path</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
10-7  DIO problem Type 6

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-7-1  Image block

The possible causes could be as below.

10-7.1.1  Inappropriate network platform – event setting

This problem could happen if you didn’t setup the event setting in the web-configurator right.

Clarification:

1. Please read the support package TS-00019 for how to
setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT a network platform – event setting
4. If not, this is a network platform – event setting.

Solution:
1. Please refer to the support package TS-00019 for how to correctly set it.

10-7-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-7.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Sub-category</td>
<td>Description</td>
</tr>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video server event setting</td>
<td>Event action</td>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
<td>Network diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respective setting of switch / routers.</td>
<td></td>
</tr>
</tbody>
</table>
10-8  DIO problem Type 7

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-8-1  Image block

The possible causes could be as below.

10-8.1.1  Inappropriate DO devices

The problem can be resulted by
a. Inappropriate DO devices or
b. Inappropriate DO connections
Clarification:
1. Please read the support package TS-00045 to clarify if your DO device spec is right.
2. Please read the support package TS-00045 to clarify if your DI connection is right.
3. If yes, this is NOT a DO device or DO connection problem.
4. If not, this is a DO device or DO connection problem

Solution:
1. Please refer to the support package TS-00045 for how to correctly set it.

10-8.1.2 Inappropriate DO connections

The problem is discussed in 10-8.1.1, please go there for details.

10-8-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-8.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Software model</td>
</tr>
<tr>
<td>Software version</td>
</tr>
<tr>
<td>DO</td>
</tr>
<tr>
<td>DO connection diagram</td>
</tr>
<tr>
<td>Other data you find during</td>
</tr>
</tbody>
</table>
10-9 DIO problem Type 8

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-9-1 Network block

The possible causes could be as below.

10-9.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:
1. Below is the status of this problem definition so far.
2. As you can see from the table, there’s something wrong about your LAN.

Solution:

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
10-9.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

### Network transmission check table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Server</td>
<td>Internet connectivity</td>
</tr>
<tr>
<td></td>
<td>Port setting</td>
</tr>
<tr>
<td>Network</td>
<td>Port forwarding</td>
</tr>
<tr>
<td></td>
<td>Firewall setting</td>
</tr>
<tr>
<td>PC</td>
<td>Internet connectivity</td>
</tr>
</tbody>
</table>

**Clarification:**

1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C : How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

Solution:
1. Follows the support package TS-00009 to build up the internet communication step by step.

10-9.1.3 Blocked by firewall (if you were connecting via WAN)

The problem is discussed in 10-9.1.2, please go there for details.

10-9.1.4 DNS problem (if you were connecting via DNS)

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: http://myroom.dyndns.org) instead of IP address (Ex: http://59.233.23.59).

Clarification:
1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

Solution:
1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Model number</td>
<td></td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera a contingency plan.

10-9-2 Management block
The possible causes could be as below.

10-9.2.1 Inappropriate Streaming Activator – FTP client setting

This problem could happen if you didn’t setup the FTP client setting in the Streaming Activator right.

Clarification:
1. Please read the Streaming Activator’s software manual for how to setup the FTP client setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate Streaming Activator – FTP setting
4. If not, this is an inappropriate Streaming Activator – FTP client setting.

Solution:
1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

10-9.2.2 Inappropriate Streaming Activator – event setting

This problem could happen if you didn’t setup the event setting in the Streaming Activator right.

Clarification:
1. Please read the Streaming Activator’s software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate Streaming Activator – event setting
4. If not, this is an inappropriate Streaming Activator – event client setting.
Solution:
1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

10-9-3 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-9.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>LAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>WAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Streaming Activator event</td>
<td>Version</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FTP setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Event action</td>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
<td>Network diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respective setting of switch / routers.</td>
<td></td>
</tr>
</tbody>
</table>
10-10  DIO problem Type 9

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-10-1 Network block

The possible causes could be as below.

10-10.1.1  Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:

1. Below is the status of this problem definition so far.
<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
10-10.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Network transmission check table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC</td>
</tr>
</tbody>
</table>

Clarification:

1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C : How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

Solution:
1. Follows the support package TS-00009 to build up the internet communication step by step.

10-10.1.3 Blocked by firewall (if you were connecting via WAN)

The problem is discussed in 10-10.1.2, please go there for details.

10-10.1.4 DNS problem (if you were connecting via DNS)

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: http://myroom.dyndns.org) instead of IP address (Ex: http://59.233.23.59).

Clarification:
1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

Solution:
1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>Model number</td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td>NVR</td>
<td></td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera a contingency plan.

10-10-2 Management block

The possible causes could be as below.

10-10.2.1 Inappropriate Streaming Activator – e-mail client setting

This problem could happen if you didn’t setup the e-mail client setting in the Streaming Activator right.

Clarification:

1. Please read the Streaming Activator’s software manual for how to setup the e-mail client setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate Streaming Activator – e-mail client setting
4. If not, this is an inappropriate Streaming Activator – e-mail client setting.

Solution:

1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

10-10.2.2 Inappropriate Streaming Activator – event setting

This problem could happen if you didn’t setup the event setting in the Streaming Activator right.

Clarification:

1. Please read the Streaming Activator’s software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate Streaming Activator – event setting
4. If not, this is an inappropriate Streaming Activator – event client setting.
Solution:

1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

10-10-3 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-10.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Streaming Activator event</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
10-11 DIO problem Type 10

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-11-1 Network block

The possible causes could be as below.

10-11.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:

1. Below is the status of this problem definition so far.
<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
10-11.2  Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Network transmission check table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC</td>
</tr>
</tbody>
</table>

Clarification:

1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C : How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

**Solution:**
1. Follows the support package TS-00009 to build up the internet communication step by step.

**10-11.1.3 Blocked by firewall (if you were connecting via WAN)**

The problem is discussed in 10-11.1.2, please go there for details.

**10-11.1.4 DNS problem (if you were connecting via DNS)**

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: [http://myroom.dyndns.org](http://myroom.dyndns.org)) instead of IP address (Ex: [http://59.233.23.59](http://59.233.23.59)).

**Clarification:**
1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

**Solution:**
1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Model number</td>
<td></td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera a contingency plan.

10-11-2 Management block

The possible causes could be as below.

10-11.2.1 Inappropriate Streaming Activator – event setting

This problem could happen if you didn’t setup the event setting in the Streaming Activator right.

Clarification:

1. Please read the Streaming Activator’s software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate Streaming Activator – event setting
4. If not, this is an inappropriate Streaming Activator – event client setting.

Solution:

1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

10-11-3 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-11.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td>--------------</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Streaming</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
10-12  DIO problem Type 11

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-12-1 Management block

The possible causes could be as below.

10-12.1.1 Inappropriate recording setting

This problem could happen if your recording settings are wrong.

Clarification:
1. Please read the Streaming Activator’s software manual for how to setup the record setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate recording – setting.
4. If not, this is an inappropriate recording – setting.

**Solution:**
1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

10-12.1.2 **Inappropriate PC authority**

This problem could happen if your have limited PC authority which will cause you problem when
a. Executing program
b. Save recordings

**Clarification:**
1. Please check if you login this PC as “Administrator” or any account with the same authority.
2. If yes, this is NOT an inappropriate PC authority.
3. If not, this is an inappropriate PC authority.

**Solution:**
1. Always login this PC as “Administrator”.

10-12.1.3 **Insufficient HD space**

If your HD space is not sufficient, you will have problem recording files.

**Clarification:**
1. Open Streaming Activator
2. See if there’s HD insufficient warning pop-out right after you login
3. If not, this is NOT an insufficient HD space.
4. If not, this is an insufficient HD space.

**Solution:**
1. Your system must have enough HD space for software to record all the time.
2. Please refer to each software’s manual for the space required.

10-12-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-12.2.1 Problem feedback table

| Problem feedback table of login problem 1 |
|-----------------------------|-----------------|------------------|
| Category | Sub-category | Description |
| Product model | Model number |   |
| Firmware | Firmware version |   |
| Software | Version |   |
|          | Recording setting |   |
|          | HD space |   |
| PC login | Authority |   |
|          | (As Admin, power user, or user) |   |
10-13  DIO problem Type 12

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-13-1  Network block

The possible causes could be as below.

10-13.1.1  Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:
1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
10-13.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet connectivity</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td></td>
</tr>
<tr>
<td>Port setting</td>
<td></td>
</tr>
<tr>
<td>Network</td>
<td>Port forwarding</td>
</tr>
<tr>
<td></td>
<td>Firewall setting</td>
</tr>
<tr>
<td>PC</td>
<td>Internet connectivity</td>
</tr>
</tbody>
</table>

Clarification:
1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C : How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

**Solution:**

1. Follows the support package TS-00009 to build up the internet communication step by step.

10-13.1.3 **Blocked by firewall (if you were connecting via WAN)**

The problem is discussed in 10-13.1.2, please go there for details.

10-13.1.4 **DNS problem (if you were connecting via DNS)**

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: [http://myroom.dyndns.org](http://myroom.dyndns.org)) instead of IP address (Ex: [http://59.233.23.59](http://59.233.23.59)).

**Clarification:**

1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

**Solution:**

1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>Model number</td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware</td>
<td>version</td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera a contingency plan.

10-13-2 Storage block

The possible causes could be as below.

10-13.2.1 Inappropriate NVR – E-mail client setting

This problem could happen if you didn’t setup the FTP client setting in the NVR right.

Clarification:

1. Please read the NVR’s software manual for how to setup the E-mail client setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate NVR –E-mail setting
4. If not, this is an inappropriate NVR–E-mail client setting.

Solution:

1. Please refer to the NVR software manual for how to correctly set it.

10-13.2.2 Inappropriate NVR – event setting

This problem could happen if you didn’t setup the event setting in the NVR right.

Clarification:

1. Please read the NVRs software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate NVR – event setting
4. If not, this is an inappropriate NVR – event client setting.

Solution:

1. Please refer to the NVR’s software manual for how to correctly set it.
10-13-3 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-13.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>NVR event</td>
<td>Version</td>
<td></td>
</tr>
<tr>
<td></td>
<td>FTP setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Event action</td>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
<td>Network diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respective setting of switch / routers.</td>
<td></td>
</tr>
</tbody>
</table>
10-14  DIO problem Type 13

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-14-1 Network block

The possible causes could be as below.

10-14.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:

1. Below is the status of this problem definition so far.
### Solution:

1. Because this problem involves mostly about your LAN environment, it's less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
10-14.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Network transmission check table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td>Port setting</td>
</tr>
<tr>
<td>Network</td>
</tr>
<tr>
<td>Firewall setting</td>
</tr>
<tr>
<td>PC</td>
</tr>
</tbody>
</table>

Clarification:

1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C: How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

Solution:
1. Follows the support package TS-00009 to build up the internet communication step by step.

10-14.1.3 Blocked by firewall (if you were connecting via WAN)

The problem is discussed in 10-14.1.2, please go there for details.

10-14.1.4 DNS problem (if you were connecting via DNS)

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: http://myroom.dyndns.org) instead of IP address (Ex: http://59.233.23.59).

Clarification:
1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

Solution:
1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Model number</td>
<td></td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera a contingency plan.

10-14-2 Storage block
The possible causes could be as below.

10-14.2.1 Inappropriate NVR – event setting
This problem could happen if you didn’t setup the event setting in the NVR right.

Clarification:
1. Please read the NVR’s software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate NVR – event setting
4. If not, this is an inappropriate NVR– event client setting.

Solution:
1. Please refer to the NVR’s software manual for how to correctly set it.

10-14-3 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-14.3.1 Problem feedback table

<p>| Problem feedback table of login problem 1 |
|----------------|----------------|----------------|
| Category       | Sub-category   | Description    |
| Product model  | Model number   |                |
| Firmware       | Firmware version |             |
| Video Server   | Use it to connect? |          |
| LAN IP setting | IP address     |                |</p>
<table>
<thead>
<tr>
<th>Video Server</th>
<th>Gateway</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAN IP setting</td>
<td>Use it to connect?</td>
</tr>
<tr>
<td></td>
<td>IP address</td>
</tr>
<tr>
<td></td>
<td>Submask</td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
</tr>
<tr>
<td>NVR event</td>
<td>Version</td>
</tr>
<tr>
<td></td>
<td>Event action</td>
</tr>
<tr>
<td>Network deployment</td>
<td>Network diagram</td>
</tr>
<tr>
<td></td>
<td>Respective setting of switch / routers.</td>
</tr>
</tbody>
</table>
10-15 DIO problem Type 14

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-15-1 Storage block

The possible causes could be as below.

10-15.1.1 Inappropriate recording setting

This problem could happen if your recording settings are wrong.

Clarification:

5. Please read the NVR’s software manual for how to setup the record setting.
6. Clarify if your settings are right.
7. If yes, this is NOT an inappropriate recording – setting.
8. If not, this is an inappropriate recording – setting.

Solution:
2. Please refer to the NVR’s software manual for how to correctly set it.

10-15.1.2 Inappropriate PC authority

This problem could happen if your have limited PC authority which will cause you problem when
a. Executing program
b. Save recordings

Clarification:
4. Please check if you login this PC as “Administrator” or any account with the same authority.
5. If yes, this is NOT an inappropriate PC authority.
6. If not, this is an inappropriate PC authority.

Solution:
2. Always login this PC as “Administrator”.

10-15.1.3 Insufficient HD space

If your HD space is not sufficient, you will have problem recording files.

Clarification:
5. Open NVR
6. See if there’s HD insufficient warning pop-out right after you login
7. If not, this is NOT an insufficient HD space.
8. If not, this is an insufficient HD space.

Solution:
3. Your system must have enough HD space for software to record all the time.
4. Please refer to each software’s manual for the space required.

10-15-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-15.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC login</td>
</tr>
</tbody>
</table>
10-16 DIO problem Type 15

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

**10-16-1 Network block**

The possible causes could be as below.

**10-16.1.1 Inappropriate network infrastructure (if you were connecting via LAN)**

The problem could be the inappropriate network infrastructure.

**Clarification:**

1. Below is the status of this problem definition so far.
<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-over</td>
<td>LAN</td>
<td>Port name</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-over</td>
<td>LAN</td>
<td>Port name</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
10-16.1.2  **Inappropriate network port forwarding (if you were connecting via WAN)**

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet connectivity</td>
<td>Video Server</td>
</tr>
<tr>
<td>Port setting</td>
<td></td>
</tr>
<tr>
<td>Port forwarding</td>
<td></td>
</tr>
<tr>
<td>Firewall setting</td>
<td></td>
</tr>
<tr>
<td>Internet connectivity</td>
<td>PC</td>
</tr>
</tbody>
</table>

**Clarification:**

1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
</tr>
<tr>
<td></td>
<td>Control</td>
<td>6001</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C: How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

Solution:
1. Follows the support package TS-00009 to build up the internet communication step by step.

10-16.1.3 Blocked by firewall (if you were connecting via WAN)

The problem is discussed in 10-16.1.2, please go there for details.

10-16.1.4 DNS problem (if you were connecting via DNS)

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: http://myroom.dyndns.org) instead of IP address (Ex: http://59.233.23.59).

Clarification:
1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

Solution:
1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>Model number</td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera an a contingency plan.

10-16-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-16.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
</tr>
<tr>
<td>IP address</td>
</tr>
<tr>
<td>Submask</td>
</tr>
<tr>
<td>Gateway</td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
</tr>
<tr>
<td>IP address</td>
</tr>
<tr>
<td>Submask</td>
</tr>
<tr>
<td>Gateway</td>
</tr>
<tr>
<td>Streaming Explorer</td>
</tr>
<tr>
<td>Network deployment</td>
</tr>
<tr>
<td>Respective setting of switch / routers.</td>
</tr>
</tbody>
</table>
10-17    DIO problem Type 16

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

10-17-1 Image block

The possible causes could be as below.

10-17.1.1 Inappropriate DO devices

The problem can be resulted by
a. Inappropriate DO devices or
b. Inappropriate DO connections

Clarification:
1. Please read the support package TS-00045 to clarify if your DO device spec is right.
2. Please read the support package TS-00045 to clarify if your DI connection is right.
3. If yes, this is NOT a DO device or DO connection problem.
4. If not, this is a DO device or DO connection problem

Solution:
1. Please refer to the support package TS-00045 for how to correctly set it.

10-17.1.2 Inappropriate DO connections

The problem is discussed in 10-17.1.1, please go there for details.

10-17-2 Network block

The possible causes could be as below.

10-17.2.1 Inappropriate network port setting

The problem could be the inappropriate network infrastructure.

Clarification:
1. Check out the port settings below of the web-configurator and the Streaming Explorer.

<table>
<thead>
<tr>
<th>Function</th>
<th>Respective network ports</th>
<th>Web-configurator</th>
<th>Streaming Explorer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Port name</td>
<td>Port number (Default)</td>
<td></td>
</tr>
<tr>
<td>Login</td>
<td>HTTP</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>View image</td>
<td>HTTP</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Control</td>
<td>6001</td>
<td></td>
</tr>
</tbody>
</table>

2. Check if any of the port not the same, this is Inappropriate
network port setting problem.

3. Check if all of the port are the same, this is not inappropriate network port setting problem.

Solution:
1. Change the control port setting on the streaming explorer to match the settings on the web-configurator.

10-17-3 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

10-17.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Web-configurator</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Software model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>DO</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Other data you find during clarification</td>
</tr>
</tbody>
</table>
Chapter. 11. MD event Problem

In this Chapter, we will focus the problem that you
1. Can login the video server/IP camera
2. Can monitor the image
3. You can’t use the Motion Detection function (Example: You can’t record every time there’s a motion happening.)

We will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

11-1 Find out the possible cause

Please refer to the diagnostic flows to find out the problem type of the MD Problem. We define two kinds of MD problem as below

1st: No event: You can’t trigger even when there’s a motion
2nd: False alarm: You have many unwanted motion events.

We have two diagnostic flows for different kinds MD problem. Please refer to the diagnostic flow to find the and refer to next section for possible cause clarification and solutions.

11-1-1 No event MD problem diagnostic flow

<table>
<thead>
<tr>
<th>Check Item</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step1 Check the Control Device</td>
<td></td>
</tr>
<tr>
<td>Step2 What MD function do you have problem with?</td>
<td></td>
</tr>
<tr>
<td>Step3 (Web-Configurator) Can you see RED square at the “Video Adjust” on the web-configurator?</td>
<td>Detailed procedure will be added in next version</td>
</tr>
<tr>
<td>(Streaming Activator) Can you see RED square at Motion Detection setup page while connecting directly via cross-over cable?</td>
<td>Detailed procedure will be added in next version</td>
</tr>
<tr>
<td>(NVR) Can you see RED square at the “Video Adjust” on the web-configurator?</td>
<td>Detailed procedure will be added in next version</td>
</tr>
</tbody>
</table>
Step 4

Other advanced clarification related to each problem.

Can your PC use the same FTP setting to send FTP?

Can your PC use the same e-mail setting to send e-mail?

Can your PC send DO signal to the video server / IP camera via cross-over cable? Detailed procedure will be added in next version

No Event MD problem Diagnostic Flow-1 (Web-Configurator)
11-1-2 False alarm MD problem diagnostic flow

<table>
<thead>
<tr>
<th>Step</th>
<th>Check Item</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step1</td>
<td>Check the Control Device</td>
<td></td>
</tr>
<tr>
<td>Step2</td>
<td>Are there a lot of activities in the shooting theme?</td>
<td></td>
</tr>
</tbody>
</table>
| Step3 | Are there  
1. Constant color shift  
2. Constant lighting shift  
3. A lot of noises | Detailed procedure will be added in next version |
False alarm MD problem Diagnostic Flow (All)

- What's the control device
- Control Device
- Check Item
- Problem Type

- Web-configuration
- Streaming Activator
- NVIR

Are there a lot of activities in the shooting theme?

- Yes
  - MD problem Type 16
  - MD problem Type 17
  - MD problem Type 18
  - MD problem Type 19

- No
  - MD problem Type 20

Are there:
1. Constant color shift
2. Constant lighting shift
3. A lot of noises

- Yes
  - Constant lighting shift
  - Constant color shift
  - A lot of noises

- No
11-2 MD Problem Type 1

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-2-1 Image block

The possible causes could be as below.

11-2.1.1 Inappropriate network platform – FTP client setting

This problem could happen if you didn’t setup the FTP client setting in the web-configurator right.

Clarification:

1. Please read the support package TS-00019 for how to setup the FTP setting.
2. Clarify if your settings are right.
3. If yes, this is NOT a network platform – FTP client setting
4. If not, this is a network platform – FTP client setting.

Solution:
1. Please refer to the support package TS-00019 for how to correctly set it.

11-2.1.2 Inappropriate network platform – event setting

This problem could happen if you didn’t setup the event setting in the web-configurator right.

Clarification:
1. Please read the support package TS-00019 for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT a network platform – event setting
4. If not, this is a network platform – event setting.

Solution:
1. Please refer to the support package TS-00019 for how to correctly set it.

11-2-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-2.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td>----------------</td>
<td>------------</td>
<td>------------------------</td>
</tr>
<tr>
<td><strong>LAN IP setting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Video Server</strong></td>
<td>Use it to connect?</td>
<td>IP address</td>
</tr>
<tr>
<td><strong>WAN IP setting</strong></td>
<td></td>
<td>Submask</td>
</tr>
<tr>
<td><strong>Video server</strong></td>
<td>FTP setting</td>
<td>Event action</td>
</tr>
<tr>
<td><strong>event setting</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Network deployment</strong></td>
<td>Network diagram</td>
<td>Respective setting of switch / routers.</td>
</tr>
</tbody>
</table>
11-3  MD Problem Type 2

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-3-1  Network block

The possible causes could be as below.

11-3.1.1  Inappropriate FTP server setup

The problem could be
a. inappropriate FTP server setup
b. inappropriate FTP client setting

We will discuss both in this section.
Clarification:
1. Because you fail to connect the FTP setting using your own PC, that means there’s something wrong about the a. FTP server setup and b. FTP client setting.

2. Because this problem involves mostly about your network and MIS infrastructure, it’s less possible for us to provide the solution.

Solution:
1. Please provide the following item and give it to your MIS or your network architect for this problem. Ask him for solution.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTP server</td>
<td>Server PC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>FTP Client</td>
<td>Server IP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Account</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td></td>
</tr>
<tr>
<td></td>
<td>File Path</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

11-3.1.2 Inappropriate FTP client setting (account and password)

The problem is discussed in 10-3.1.1, please go there for details

11-3-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).
### 11-3.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>LAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>WAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video server</td>
<td>FTP setting</td>
<td></td>
</tr>
<tr>
<td>event setting</td>
<td>Event action</td>
<td></td>
</tr>
<tr>
<td>FTP server</td>
<td>Server PC</td>
<td></td>
</tr>
<tr>
<td>FTP Client</td>
<td>Server IP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Account</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td></td>
</tr>
<tr>
<td></td>
<td>File Path</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
11-4 MD Problem Type 3

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-4-1 Image block

The possible causes could be as below.

11-4.1.1 Inappropriate network platform – MD setting

The problem could be that the MD setup procedure wrong.

Clarification:

1. Please recheck the testing procedure and see if the MD setting’s wrong again.
2. If not, this is an inappropriate network platform – MD setting problem.

3. If yes, let’s look at the problem scenario,
   a. you are connecting via cross-over cable
   b. you follow the test procedure
4. It’s less possible for you to have network problem and software setup problem. Thus, it would still be an inappropriate network platform – MD setting problem.

Solution:
1. Please follow the firmware manual for how to setup correctly.

11-4-2 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-4.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server MD setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Other information you find during clarification</td>
</tr>
</tbody>
</table>
11-5  MD Problem Type 4

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-5-1 Image block

The possible causes could be as below.

11-5.1.1 Inappropriate network platform – E-mail client setting

This problem could happen if you didn’t setup the FTP client setting in the web-configurator right.

Clarification:

1. Please read the support package TS-00019 for how to setup the e-mail client setting.
2. Clarify if your settings are right.
3. If yes, this is NOT a network platform – e-mail client setting
4. If not, this is a network platform – e-mail client setting.

Solution:
1. Please refer to the support package TS-00019 for how to correctly set it.

11-5.1.2 Inappropriate network platform – event setting

This problem could happen if you didn’t setup the event setting in the web-configurator right.

Clarification:
1. Please read the support package TS-00019 for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT a network platform – event setting
4. If not, this is a network platform – event setting.

Solution:
1. Please refer to the support package TS-00019 for how to correctly set it.

11-5-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-5.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
</tr>
<tr>
<td>Video server event setting</td>
</tr>
<tr>
<td>Network deployment</td>
</tr>
</tbody>
</table>
11-6  MD Problem Type 5

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-6-1 Network block

The possible causes could be as below.

11-6.1.1 Inappropriate E-MAIL server setup

The problem could be
  a. inappropriate E-MAIL server setup
  b. inappropriate E-MAIL client setting

We will discuss both in this section.
Clarification:
1. Because you fail to connect the E-MAIL setting using your own PC, that means there’s something wrong about the
   a. E-MAIL server setup and
   b. E-MAIL client setting.

2. Because this problem involves mostly about your network and MIS infrastructure, it’s less possible for us to provide the solution.

Solution:
1. Please provide the following item and give it to your MIS or your network architect for this problem. Ask him for solution.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Settings</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-MAIL server</td>
<td>Server PC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>E-MAIL Client</td>
<td>Server IP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Account</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td></td>
</tr>
<tr>
<td></td>
<td>File Path</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>

11-6.1.2 Inappropriate E-MAIL client setting (account and password)

The problem is discussed in 11-6.1.1, please go there for details

11-6-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).
### 11-6.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>LAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>WAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video server</td>
<td>E-MAIL setting</td>
<td></td>
</tr>
<tr>
<td>event setting</td>
<td>Event action</td>
<td></td>
</tr>
<tr>
<td>E-MAIL server</td>
<td>Server PC</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>E-MAIL Client</td>
<td>Server IP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Account</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Password</td>
<td></td>
</tr>
<tr>
<td></td>
<td>File Path</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td></td>
</tr>
</tbody>
</table>
11-7  MD Problem Type 6

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-7-1  Image block

The possible causes could be as below.

11-7.1.1  Inappropriate DO devices

The problem can be resulted by
a. Inappropriate DO devices or
b. Inappropriate DO connections
Clarification:
1. Please read the support package TS-00045 to clarify if your DO device spec is right.
2. Please read the support package TS-00045 to clarify if your DI connection is right.
3. If yes, this is NOT a DO device or DO connection problem.
4. If not, this is a DO device or DO connection problem

Solution:
1. Please refer to the support package TS-00045 for how to correctly set it.

11-7.1.2 Inappropriate DO connections

The problem is discussed in 10-8.1.1, please go there for details.

11-7.1.3 Inappropriate network platform – event setting

This problem could happen if you didn’t setup the event setting in the web-configurator right.

Clarification:
1. Please read the support package TS-00019 for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT a network platform – event setting
4. If not, this is a network platform –event setting.

Solution:
2. Please refer to the support package TS-00019 for how to correctly set it.

11-7-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to
11-7.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DO</td>
<td>DO device spec</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DO connection diagram</td>
<td></td>
</tr>
<tr>
<td>Other data you find</td>
<td>Server PC</td>
<td></td>
</tr>
<tr>
<td>during clarification</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
11-8 MD Problem Type 7

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-8-1 Network block

The possible causes could be as below.

11-8.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:

1. Below is the status of this problem definition so far.
<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
11-8.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Network transmission check table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC</td>
</tr>
</tbody>
</table>

Clarification:

1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C: How to check the network communication for Monitoring images
4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

**Solution:**

1. Follows the support package TS-00009 to build up the internet communication step by step.

**11-8.1.3 Blocked by firewall (if you were connecting via WAN)**

The problem is discussed in 10-9.1.2, please go there for details.

**11-8.1.4 DNS problem (if you were connecting via DNS)**

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: [http://myroom.dyndns.org](http://myroom.dyndns.org)) instead of IP address (Ex: [http://59.233.23.59](http://59.233.23.59)).

**Clarification:**

1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

**Solution:**

1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Model number</td>
<td></td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera an a contingency plan.

11-8-2 Management block

The possible causes could be as below.

11-8.2.1 Inappropriate Streaming Activator – FTP client setting

This problem could happen if you didn’t setup the FTP client setting in the Streaming Activator right.

Clarification:
1. Please read the Streaming Activator’s software manual for how to setup the FTP client setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate Streaming Activator – FTP setting
4. If not, this is an inappropriate Streaming Activator – FTP client setting.

Solution:
1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

11-8.2.2 Inappropriate Streaming Activator – event setting

This problem could happen if you didn’t setup the event setting in the Streaming Activator right.

Clarification:
1. Please read the Streaming Activator’s software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate Streaming Activator – event setting
4. If not, this is an inappropriate Streaming Activator – event client setting.
Solution:

1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

11-8-3 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-8.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Category</strong></td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Streaming Activator event</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
11-9 MD Problem Type 8

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-9-1 Network block

The possible causes could be as below.

11-9.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:

1. Below is the status of this problem definition so far.
2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it's less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-over</td>
<td>LAN</td>
<td>Port name</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>HTTP</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>HTTP</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Register</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Streaming</td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Port number (Default)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>6000</td>
</tr>
<tr>
<td>6002</td>
</tr>
<tr>
<td>6001</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
11-9.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Network transmission check table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC</td>
</tr>
</tbody>
</table>

Clarification:
1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C: How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

Solution:
1. Follows the support package TS-00009 to build up the internet communication step by step.

11-9.1.3 Blocked by firewall (if you were connecting via WAN)

The problem is discussed in 11-9.1.2, please go there for details.

11-9.1.4 DNS problem (if you were connecting via DNS)

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: http://myroom.dyndns.org) instead of IP address (Ex: http://59.233.23.59).

Clarification:
1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

Solution:
1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>Model number</td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware</td>
<td>version</td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera an a contingency plan.

11-9-2 Management block

The possible causes could be as below.

11-9.2.1 Inappropriate Streaming Activator – e-mail client setting

This problem could happen if you didn’t setup the e-mail client setting in the Streaming Activator right.

Clarification:
1. Please read the Streaming Activator’s software manual for how to setup the e-mail client setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate Streaming Activator – e-mail client setting
4. If not, this is an inappropriate Streaming Activator – e-mail client setting.

Solution:
1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

11-9.2.2 Inappropriate Streaming Activator – event setting

This problem could happen if you didn’t setup the event setting in the Streaming Activator right.

Clarification:
1. Please read the Streaming Activator’s software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate Streaming Activator – event setting
4. If not, this is an inappropriate Streaming Activator – event client setting.
Solution:

1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

11-9-3 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-9.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>-----------------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Streaming Activator event</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
11-10   MD Problem Type 9

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-10-1 Network block

The possible causes could be as below.

11-10.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:

1. Below is the status of this problem definition so far.
<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
<th>Port name</th>
<th>Port number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-over</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
<td>HTTP</td>
<td>80</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
<td>HTTP</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Register</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Streaming</td>
<td>6002</td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
<td>Control</td>
<td>6001</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
<th>Port name</th>
<th>Port number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
<td>HTTP</td>
<td>80</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
<td>HTTP</td>
<td>80</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Register</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Streaming</td>
<td>6002</td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
<td>Control</td>
<td>6001</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
11-10.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Network transmission check table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC</td>
</tr>
</tbody>
</table>

Clarification:

1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C: How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

**Solution:**
1. Follows the support package TS-00009 to build up the internet communication step by step.

11-10.1.3 **Blocked by firewall (if you were connecting via WAN)**

The problem is discussed in 11-9.1.2, please go there for details.

11-10.1.4 **DNS problem (if you were connecting via DNS)**

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: http://myroom.dyndns.org) instead of IP address (Ex: http://59.233.23.59).

**Clarification:**
1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

**Solution:**
1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>Model number</td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware</td>
<td>version</td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera an a contingency plan.

11-10-2 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-10.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Server LAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>Submask</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gateway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>Submask</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gateway</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Streaming Activator event</td>
<td>Version</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E-mail setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Event action</td>
<td></td>
</tr>
<tr>
<td>Network deployment</td>
<td>Network diagram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Respective setting of switch / routers.</td>
<td></td>
</tr>
</tbody>
</table>
11-11 MD Problem Type 10

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-11-1 Image block
The possible causes could be as below.

11-11.1 Inappropriate DO devices
The problem can be resulted by
a. Inappropriate DO devices or
b. Inappropriate DO connections

Clarification:
1. Please read the support package TS-00045 to clarify if
your DO device spec is right.
2. Please read the support package TS-00045 to clarify if your DI connection is right.
3. If yes, this is NOT a DO device or DO connection problem.
4. If not, this is a DO device or DO connection problem

Solution:
1. Please refer to the support package TS-00045 for how to correctly set it.

11-11.1.2 Inappropriate DO connections

The problem is discussed in 10-17.1.1, please go there for details.

11-11-2 Network block

The possible causes could be as below.

11-11.2.1 Inappropriate network port setting

The problem could be the inappropriate network infrastructure.

Clarification:
1. Check out the port settings below of the web-configurator and the Streaming Explorer.

<table>
<thead>
<tr>
<th>Function</th>
<th>Respective network ports</th>
<th>Web-configurator</th>
<th>Streaming Explorer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Port name</td>
<td>Port number (Default)</td>
<td></td>
</tr>
<tr>
<td>Login</td>
<td>HTTP</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td>View image</td>
<td>HTTP</td>
<td>80</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Control</td>
<td>6001</td>
<td></td>
</tr>
</tbody>
</table>

2. Check if any of the port not the same, this is Inappropriate network port setting problem.
3. Check if all of the port are the same, this is not
Inappropriate network port setting problem.

Solution:
1. Change the control port setting on the streaming explorer
to match the settings on the web-configurator.

11-11-3 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following
information and contact our sales. (Please see introduction about how to contact).

11-11.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Web-configurator</td>
<td>HTTP port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Streaming Port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control port</td>
<td></td>
</tr>
<tr>
<td>Software model</td>
<td>model</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Software version</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HTTP port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Streaming Port</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Control port</td>
<td></td>
</tr>
<tr>
<td>DO</td>
<td>DO device spec</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DO connection diagram</td>
<td></td>
</tr>
<tr>
<td>Other data you find during clarification</td>
<td>Server PC</td>
<td></td>
</tr>
</tbody>
</table>
11-12 MD Problem Type 11

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-12-1 Network block

The possible causes could be as below.

11-12.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:

1. Below is the status of this problem definition so far.
<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
11-12.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Network transmission check table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Network</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC</td>
</tr>
</tbody>
</table>

Clarification:

1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C : How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

Solution:
1. Follows the support package TS-00009 to build up the internet communication step by step.

11-12.1.3 Blocked by firewall (if you were connecting via WAN)

The problem is discussed in 10-11.1.2, please go there for details.

11-12.1.4 DNS problem (if you were connecting via DNS)

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: http://myroom.dyndns.org) instead of IP address (Ex: http://59.233.23.59).

Clarification:
1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

Solution:
1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware</td>
<td>Model number</td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera an a contingency plan.

11-12-2 Management block
The possible causes could be as below.

11-12.2.1 Inappropriate Streaming Activator – event setting
This problem could happen if you didn’t setup the event setting in the Streaming Activator right.

Clarification:
1. Please read the Streaming Activator’s software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate Streaming Activator – event setting
4. If not, this is an inappropriate Streaming Activator – event client setting.

Solution:
1. Please refer to the Streaming Activator’s software manual for how to correctly set it.

11-12-3 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-12.3.1 Problem feedback table

<p>| Problem feedback table of login problem 1 |
|-----------------|-----------------|-----------------|
| Category        | Sub-category    | Description     |
| Product model   | Model number    |                 |
| Firmware        | Firmware version|                 |</p>
<table>
<thead>
<tr>
<th>Video Server LAN IP setting</th>
<th>Use it to connect?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>IP address</td>
</tr>
<tr>
<td></td>
<td>Submask</td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
<td>Use it to connect?</td>
</tr>
<tr>
<td></td>
<td>IP address</td>
</tr>
<tr>
<td></td>
<td>Submask</td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
</tr>
<tr>
<td>Streaming Activator event</td>
<td>Version</td>
</tr>
<tr>
<td></td>
<td>Event action</td>
</tr>
<tr>
<td>Network deployment</td>
<td>Network diagram</td>
</tr>
<tr>
<td></td>
<td>Respective setting of switch / routers.</td>
</tr>
</tbody>
</table>
11-13  MD Problem Type 12

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-13-1 Management block

The possible causes could be as below.

11-13.1.1 Inappropriate recording setting

This problem could happen if your recording settings are wrong.

Clarification:

9. Please read the Streaming Activator’s software manual for how to setup the record setting.
10. Clarify if your settings are right.
11. If yes, this is NOT an inappropriate recording – setting.
12. If not, this is an inappropriate recording – setting.

Solution:
3. Please refer to the Streaming Activator’s software manual for how to correctly set it.

11-13.1.2 Inappropriate PC authority

This problem could happen if you have limited PC authority which will cause you problem when
a. Executing program
b. Save recordings

Clarification:
7. Please check if you login this PC as “Administrator” or any account with the same authority.
8. If yes, this is NOT an inappropriate PC authority.
9. If not, this is an inappropriate PC authority.

Solution:
3. Always login this PC as “Administrator”.

11-13.1.3 Insufficient HD space

If your HD space is not sufficient, you will have problem recording files.

Clarification:
9. Open Streaming Activator
10. See if there’s HD insufficient warning pop-out right after you login
11. If not, this is NOT an insufficient HD space.
12. If not, this is an insufficient HD space.

Solution:
5. Your system must have enough HD space for software to
record all the time.
6. Please refer to each software’s manual for the space required.

11-13-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-13.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>Version</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recording setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HD space</td>
<td></td>
</tr>
<tr>
<td>PC login</td>
<td>Authority</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(As Admin, power user, or user)</td>
<td></td>
</tr>
</tbody>
</table>
11-14  MD Problem Type 13

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-14-1 Network block

The possible causes could be as below.

11-14.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:
1. Below is the status of this problem definition so far.
<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>LAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
11-14.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet connectivity</td>
<td>Port setting</td>
</tr>
<tr>
<td>Video Server</td>
<td>Internet connectivity</td>
</tr>
<tr>
<td>Network</td>
<td>Port forwarding</td>
</tr>
<tr>
<td></td>
<td>Firewall setting</td>
</tr>
<tr>
<td>PC</td>
<td>Internet connectivity</td>
</tr>
</tbody>
</table>

Clarification:

1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C : How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

**Solution:**
1. Follows the support package TS-00009 to build up the internet communication step by step.

11-14.1.3 **Blocked by firewall (if you were connecting via WAN)**

The problem is discussed in 11-14.1.2, please go there for details.

11-14.1.4 **DNS problem (if you were connecting via DNS)**

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: [http://myroom.dyndns.org](http://myroom.dyndns.org)) instead of IP address (Ex: [http://59.233.23.59](http://59.233.23.59)).

**Clarification:**
1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

**Solution:**
1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Model number</td>
<td></td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video
server/IP camera an a contingency plan.

11-14-2 Storage block

The possible causes could be as below.

11-14.2.1 Inappropriate NVR – E-mail client setting

This problem could happen if you didn’t setup the E-mail client setting in the NVR right.

Clarification:
1. Please read the NVR’s software manual for how to setup the E-mail client setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate NVR –E-mail setting
4. If not, this is an inappropriate NVR–E-mail client setting.

Solution:
1. Please refer to the NVR software manual for how to correctly set it.

11-14.2.2 Inappropriate NVR – event setting

This problem could happen if you didn’t setup the event setting in the NVR right.

Clarification:
1. Please read the NVRs software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate NVR – event setting
4. If not, this is an inappropriate NVR – event client setting.

Solution:
1. Please refer to the NVR’s software manual for how to correctly set it.
If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-14.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>LAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>Video Server</td>
<td>Use it to connect?</td>
<td></td>
</tr>
<tr>
<td>WAN IP setting</td>
<td>IP address</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Submask</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gateway</td>
<td></td>
</tr>
<tr>
<td>NVR</td>
<td>Version</td>
<td></td>
</tr>
<tr>
<td></td>
<td>E-mail setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Event action</td>
<td></td>
</tr>
<tr>
<td>Network</td>
<td>Network diagram</td>
<td></td>
</tr>
<tr>
<td>deployment</td>
<td>Respective setting of switch / routers.</td>
<td></td>
</tr>
</tbody>
</table>
11-15 MD Problem Type 14

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-15-1 Network block

The possible causes could be as below.

11-15.1.1 Inappropriate network infrastructure (if you were connecting via LAN)

The problem could be the inappropriate network infrastructure.

Clarification:

1. Below is the status of this problem definition so far.
<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-over</td>
<td>LAN</td>
<td>Port name</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Port number (Default)</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Register</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Streaming</td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your LAN.

**Solution:**

1. Because this problem involves mostly about your LAN environment, it’s less possible for us to provide the solution.

2. Please fill in your definition table

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross-over</td>
<td>LAN</td>
<td>Port name</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Port number (Default)</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>View image</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Register</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Streaming</td>
</tr>
<tr>
<td>DIO signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.
11-15.1.2 Inappropriate network port forwarding (if you were connecting via WAN)

The problem could be the inappropriate network transmission. Network transmission involves correct setting below. Then we put them all together.

<table>
<thead>
<tr>
<th>Network transmission check table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td>Port setting</td>
</tr>
<tr>
<td>Network</td>
</tr>
<tr>
<td>Firewall setting</td>
</tr>
<tr>
<td>PC</td>
</tr>
</tbody>
</table>

Clarification:
1. Below is the status of this problem definition so far.

<table>
<thead>
<tr>
<th>Function</th>
<th>Network environment</th>
<th>Respective network ports</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Cross-over</td>
<td>WAN</td>
</tr>
<tr>
<td>Login</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Monitor</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Register</td>
<td>6000</td>
</tr>
<tr>
<td></td>
<td>Streaming</td>
<td>6002</td>
</tr>
<tr>
<td>MD signal</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>

2. As you can see from the table, there’s something wrong about your WAN.

3. Please read the support package TS-00009 attached.
   - Chapter 1~3: How does internet communication works
   - Appendix C : How to check the network communication for Monitoring images

4. If the check fails, this is a network communication problem.
5. If the check ok, this is not a network communication problem.

**Solution:**

1. Follows the support package TS-00009 to build up the internet communication step by step.

11-15.1.3 **Blocked by firewall (if you were connecting via WAN)**

The problem is discussed in 10-14.1.2, please go there for details.

11-15.1.4 **DNS problem (if you were connecting via DNS)**

This problem could happen if you connect to the video server/IP camera using Domain Name (Ex: http://myroom.dyndns.org) instead of IP address (Ex: http://59.233.23.59).

**Clarification:**

1. Please switch the software setting from IP address from Domain Name to IP address and see if you can monitor the images.
2. If yes, this is a DNS problem.
3. If not, this is not a DNS problem.

**Solution:**

1. Report the following information to our sales. We will provide you an updated version A.S.A.P.

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
<th>Example:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hardware Model number</td>
<td></td>
<td>SED-2120</td>
</tr>
<tr>
<td>Firmware version</td>
<td></td>
<td>A1D-V2.00.00</td>
</tr>
<tr>
<td>Software model</td>
<td></td>
<td>NVR</td>
</tr>
<tr>
<td>Software version</td>
<td></td>
<td>V1.00.00</td>
</tr>
</tbody>
</table>

2. Before you get that updated version, you can use IP
address instead of Domain name to connect to the video server/IP camera an a contingency plan.

11-15-2 Storage block

The possible causes could be as below.

11-15.2.1 Inappropriate NVR – event setting

This problem could happen if you didn’t setup the event setting in the NVR right.

Clarification:
1. Please read the NVR’s software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate NVR – event setting
4. If not, this is an inappropriate NVR– event client setting.

Solution:
1. Please refer to the NVR’s software manual for how to correctly set it.

11-15-3 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-15.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Video Server</td>
</tr>
<tr>
<td>LAN IP setting</td>
</tr>
<tr>
<td>Video Server WAN IP setting</td>
</tr>
<tr>
<td>-----------------------------</td>
</tr>
<tr>
<td>IP address</td>
</tr>
<tr>
<td>Submask</td>
</tr>
<tr>
<td>Gateway</td>
</tr>
<tr>
<td>NVR event</td>
</tr>
<tr>
<td>Event action</td>
</tr>
<tr>
<td>Network deployment</td>
</tr>
<tr>
<td>Respective setting of switch / routers.</td>
</tr>
</tbody>
</table>
11-16 MD Problem Type 15

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-16-1 Storage block

The possible causes could be as below.

11-16.1.1 Inappropriate recording setting

This problem could happen if your recording settings are wrong.

Clarification:

1. Please read the NVR’s software manual for how to setup the record setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate recording – setting.
4. If not, this is an inappropriate recording – setting.

Solution:
1. Please refer to the NVR’s software manual for how to correctly set it.

11-16.1.2 Inappropriate PC authority

This problem could happen if you have limited PC authority which will cause you problem when
a. Executing program
b. Save recordings

Clarification:
1. Please check if you login this PC as “Administrator” or any account with the same authority.
2. If yes, this is NOT an inappropriate PC authority.
3. If not, this is an inappropriate PC authority.

Solution:
1. Always login this PC as “Administrator”.

11-16.1.3 Insufficient HD space

If your HD space is not sufficient, you will have problem recording files.

Clarification:
1. Open NVR
2. See if there’s HD insufficient warning pop-out right after you login
3. If not, this is NOT an insufficient HD space.
4. If not, this is an insufficient HD space.

Solution:
1. Your system must have enough HD space for software to
record all the time.
2. Please refer to each software’s manual for the space required.

11-16-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-16.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>PC login</td>
</tr>
</tbody>
</table>
11-17 MD Problem Type 16

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-17-1 None

This is a normal situation.

Clarification:

1. Since there’re a lot of activities going on, you are sure to have a lot of motion events.

Solution:

1. We would recommend you to close the motion to event setting for these channels and change it to always on (ex: change it to always recording from record upon motion).
11-18  MD Problem Type 17

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-18-1 Image block

The possible causes could be as below. All the items below are directly related to image quality: please go to Chapter 7 for details about

A. Problem type 5
B. Problem type 6
11-19 MD Problem Type 18

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

**11-19-1 Image block**

The possible causes could be as below. All the items below are directly related to image quality; please go to Chapter 7 for details about

A. Problem type 1
B. Problem type 2
11-20 MD Problem Type 19

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-20-1 Image block

The possible causes could be as below. All the items below are directly related to image quality; please go to Chapter 7 for details about

A. Problem type 10
B. Problem type 11
11-21 MD Problem Type 20

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

11-21-1 Image, Management, storage block

The possible causes could be as below.

11-21.1.1 Inappropriate MD setting – sensitivity

If the sensitivity is too high, it is very likely to trigger false alarm for tiny little change happen in the scene.

If the sensitivity is too low, it is very likely to ignore everything happening in the scene.
Clarification:
1. Check out your sensitivity setting and if the camera is in indoor or outdoor.

2. Compare with the table for recommended sensitive setting and see if it in the range recommended.

<table>
<thead>
<tr>
<th>Environment</th>
<th>Indoor</th>
<th>Outdoor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitivity</td>
<td>60~80</td>
<td>70~80</td>
</tr>
</tbody>
</table>

3. If yes, this is not an inappropriate MD setting – sensitivity problem.

4. If no, this is an inappropriate MD setting – sensitivity problem.

Solution:
1. Adjust the sensitivity of the MD (following respective manual) to the number recommended.

11-21-2 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

11-21.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Hard model</td>
</tr>
<tr>
<td>Firmware</td>
</tr>
<tr>
<td>MD setting</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>MD sensitivity</td>
</tr>
<tr>
<td>----------------</td>
</tr>
<tr>
<td>Other details</td>
</tr>
<tr>
<td>you find during clarification</td>
</tr>
</tbody>
</table>
Chapter. 12. Record & Playback Problem

In this Chapter, we will focus on the problem that you

1. Can login the video server/IP camera
2. Can monitor the image
3. You can’t
   - record the video
   - search and find recorded video
   - playback recorded video

We will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

12-1 Find out the possible cause

Please refer to the diagnostic flow to find out the problem type of the Login Problem.

Then you can refer to next section for advanced clarification and troubleshooting.

<table>
<thead>
<tr>
<th>Step</th>
<th>Check Item</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step1</td>
<td>Check the Control Device</td>
<td></td>
</tr>
<tr>
<td>Step2</td>
<td>What function do you have problem with?</td>
<td></td>
</tr>
<tr>
<td>Step3</td>
<td>(Recording) Can you record manually?</td>
<td>Refer to software manual</td>
</tr>
<tr>
<td></td>
<td>(Search fail) Can you search while setting search start time to 1970/01.01 and end time to current time?</td>
<td>Refer to software manual</td>
</tr>
<tr>
<td></td>
<td>(Can’t playback) Can you find the file in the path</td>
<td>Detailed procedure will be added in next version</td>
</tr>
<tr>
<td>Step4</td>
<td>Other advanced clarification related to each problem.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Recording) Can you use streaming Activator to receive DI signal while connection to the devices via cross-over cable?</td>
<td></td>
</tr>
</tbody>
</table>
(Recording-Activator)
Can you see RED Square at motion detection setup page while connecting via cross-over cable?

(Recording-NVR)
Can you see RED Square at motion detection setup page while connecting via cross-over cable?

Detailed procedure will be added in next version
12-2  Record & Playback Problem Type 1

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-2-1 Management block

The possible causes could be as below.

12-2.1.1 Inappropriate recording setting

This problem could happen if your recording settings are wrong.

Clarification:

13. Please read the Streaming Activator’s software manual for how to setup the record setting.
14. Clarify if your settings are right.
15. If yes, this is NOT an inappropriate recording – setting.
16. If not, this is an inappropriate recording – setting.

Solution:
4. Please refer to the Streaming Activator’s software manual for how to correctly set it.

12-2.1.2 Inappropriate PC authority

This problem could happen if you have limited PC authority which will cause you problem when
a. Executing program
b. Save recordings

Clarification:
10. Please check if you login this PC as “Administrator” or any account with the same authority.
11. If yes, this is NOT an inappropriate PC authority.
12. If not, this is an inappropriate PC authority.

Solution:
4. Always login this PC as “Administrator”.

12-2.1.3 Insufficient HD space

If your HD space is not sufficient, you will have problem recording files.

Clarification:
13. Open Streaming Activator
14. See if there’s HD insufficient warning pop-out right after you login
15. If not, this is NOT an insufficient HD space.
16. If not, this is an insufficient HD space.

Solution:
7. Your system must have enough HD space for software to
record all the time.

8. Please refer to each software’s manual for the space required.

12-2-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

12-2.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>Version</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recording setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HD space</td>
<td></td>
</tr>
<tr>
<td>PC login</td>
<td>Authority</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(As Admin, power user,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>or user)</td>
<td></td>
</tr>
</tbody>
</table>
12-3 Record & Playback Problem Type 2

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-3-1 Management block

12-3.1.1 Inappropriate schedule setup

This problem could happen if you didn’t setup the schedule setting in the software right.

Clarification:

1. Please read the software’s software manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate schedule setting
4. If not, this is an inappropriate schedule setting.

Solution:
1. Please refer to the software manual for how to correctly set it.

12-3-2 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

12-3.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
12-4  Record & Playback Problem Type 3

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-4-1 Image Block

The possible causes could be as below.

12-4.1.1 Inappropriate network platform – Time setting

If you doesn’t setup the Time in the video server/IP camera well, you might be able to find the file. That’s because ACTi’s recordings has the time embedded, and the software search the recordings by its time embedded in the recorded file.
Clarification:
1. This is clear that your time of the video setting is wrong as you can see from the search result.

Solution:
1. Please refer to the firmware manual of the video server/IP camera for how to set it up.

12-4-2 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

12-4.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Sub-category</td>
</tr>
<tr>
<td>Product model</td>
<td>Model number</td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
</tr>
<tr>
<td>Video Server Time setting</td>
<td>NTP?</td>
</tr>
<tr>
<td></td>
<td>Manual</td>
</tr>
<tr>
<td></td>
<td>Time zone</td>
</tr>
<tr>
<td>Other things you find during clarification</td>
<td></td>
</tr>
</tbody>
</table>
12-5 Record & Playback Problem Type 4

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-5-1 Management block
The possible causes could be as below.

12-5.1.1 Inappropriate search procedure

You might fail to find the recording if your search procedure is wrong.

Clarification:
1. Please follow the software manual about how to search file and search again.
2. If it solves the problem, this is an inappropriate search procedure problem.

3. If it doesn’t solve the problem, this is not an inappropriate search procedure problem.

**Solution:**
1. Please follow the search procedure in the software manual.

**12-5.1.2 Inappropriate database**

If the software database is damaged, it might cause your search to fail but the recordings is ok at the same time.

**Clarification:**
1. This problem is very hard to clarify. Please send us the
   a. software database and
   b. information about the recording you wish to find.

**Solution:**
1. If the problem is truly database issue. It is not reversible. Be sure to backup the database for time to time and especially when you upgrade or re-install the software.

**12-5-2 If problem not solved, how to report this problem?**

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

1. **Problem feedback table**

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Schedule setting</td>
</tr>
<tr>
<td>MDB file (Software database)</td>
</tr>
<tr>
<td>Information about the recording you wish to find</td>
</tr>
</tbody>
</table>
12-6 Record & Playback Problem Type 5

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-6-1 Management block

The possible causes could be as below.

12-6.1.1 Recording re-cycling

Clarification:

If you enable the re-cycling recording, the software will attempt to delete both while the HD space is insufficient

a. the oldest recording files
b. the event database related to the recording files
Then it will cause you not be able to
a. search through software
b. search through recording folder

**Solution:**
1. Please read the software manual to find the best
   a. Software setting
   b. Hardware requirement
   for you to keep recordings for your desired time

**12-6-2 If problem not solved, how to report this problem?**

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

2. **Problem feedback table**

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>Version</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Schedule setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MDB file (Software database)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Information about the recording you wish to find</td>
<td></td>
</tr>
<tr>
<td>HD</td>
<td>HD space</td>
<td></td>
</tr>
<tr>
<td>Recording keep time</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12-7 Record & Playback Problem Type 6

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-7-1 Management block

12-7.1.1 Codec missing

If the codec is not installed correctly, you might not be able to playback the files.

Clarification:

1. Install the codec of FFDshow provided in the product CD

2. Check if you can playback the recording now.
3. If yes, this is a codec missing problem.
4. If not, this is not a codec missing problem.

Solution:
1. Make sure the codec is installed properly before you playback the file.

12-7-2 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

3. Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
12-8  Record & Playback Problem Type 7

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-8-1 Management block

12-8.1.1 Unauthorized delete or rename the recording file

Clarification:
1. This problem happens only when someone
   a. deletes the file name
   b. rename the previous recording file

Solution:
1. Make sure the unauthorized entry and operation of the PC.
12-9 Record & Playback Problem Type 8

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-9-1 Management block

12-9.1.1 Inappropriate database handling

This problem happens only on Streaming Activator version before 1.37 (exclude 1.37).

Clarification:
If you enable the re-cycling recording, the software will attempt to delete both while the HD space is insufficient
a. the oldest recording files
b. the event database related to the recording files
This problem happens when the software

a. delete the oldest recording
b. keep the event database related to the recording files

Only on Streaming Activator with version 1.36.xx and before has this problem

**Solution:**
1. Please upgrade your Streaming Activator version to 1.37 and above.
12-10  Record & Playback Problem Type 9

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-10-1 Storage block

12-10-2 Management block

The possible causes could be as below.

12-10.2.1 Inappropriate recording setting

This problem could happen if your recording settings are wrong.

Clarification:
1. Please read the NVR’s software manual for how to setup
the record setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate recording – setting.
4. If not, this is an inappropriate recording – setting.

Solution:
1. Please refer to the NVR’s software manual for how to correctly set it.

12-10.2.2 Inappropriate PC authority

This problem could happen if you have limited PC authority which will cause you problem when
a. Executing program
b. Save recordings

Clarification:
1. Please check if you login this PC as “Administrator” or any account with the same authority.
2. If yes, this is NOT an inappropriate PC authority.
3. If not, this is an inappropriate PC authority.

Solution:
1. Always login this PC as “Administrator”.

12-10.2.3 Insufficient HD space

If your HD space is not sufficient, you will have problem recording files.

Clarification:
1. Open Streaming Activator
2. See if there’s HD insufficient warning pop-out right after you login
3. If not, this is NOT an insufficient HD space.
4. If not, this is an insufficient HD space.
Solution:

1. Your system must have enough HD space for software to record all the time.
2. Please refer to each software’s manual for the space required.

12-10-3 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

12-10.3.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Sub-category</td>
<td>Description</td>
</tr>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td>Version</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Recording setting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HD space</td>
<td></td>
</tr>
<tr>
<td>PC login</td>
<td>Authority</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(As Admin, power user, or user)</td>
<td></td>
</tr>
</tbody>
</table>
12-11 Record & Playback Problem Type 10

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-11-1 Storage block

12-11.1.1 Inappropriate schedule setup

This problem could happen if you didn’t setup the schedule setting in the software right.

Clarification:
1. Please read the software’s manual for how to setup the event setting.
2. Clarify if your settings are right.
3. If yes, this is NOT an inappropriate schedule setting
4. If not, this is an inappropriate schedule setting.

Solution:
1. Please refer to the software manual for how to correctly set it.

12-11-2 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

12-11.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
12-12  Record & Playback Problem Type 11

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-12-1 Image Block

The possible causes could be as below.

12-12.1.1 Inappropriate network platform – Time setting

If you doesn’t setup the Time in the video server/IP camera well, you might be able to find the file. That’s because ACTi’s recordings has the time embedded, and the software search the recordings by its time embedded in the recorded file.
Clarification:
1. This is clear that your time of the video setting is wrong as you can see from the search result.

Solution:
1. Please refer to the firmware manual of the video server/IP camera for how to set it up.

12-12-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

12-12.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Category</th>
<th>Sub-category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product model</td>
<td>Model number</td>
<td></td>
</tr>
<tr>
<td>Firmware</td>
<td>Firmware version</td>
<td></td>
</tr>
<tr>
<td>Video Server Time setting</td>
<td>NTP?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Manual</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Time zone</td>
<td></td>
</tr>
<tr>
<td>Other things you find during clarification</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
12-13 Record & Playback Problem Type 12

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-13-1 Storage block

The possible causes could be as below.

12-13.1.1 Inappropriate search procedure

You might fail to find the recording if your search procedure is wrong.

Clarification:

4. Please follow the software manual about how to search file and search again.
5. If it solves the problem, this is an inappropriate search procedure problem.

6. If it doesn’t solve the problem, this is not an inappropriate search procedure problem.

Solution:
2. Please follow the search procedure in the software manual.

12-13.1.2 Inappropriate database

If the software database is damaged, it might cause your search to fail but the recordings is ok at the same time.

Clarification:
2. This problem is very hard to clarify. Please send us the
   a. software database and
   b. information about the recording you wish to find.

Solution:
2. If the problem is truly database issue. It is not reversible. Be sure to backup the database for time to time and especially when you upgrade or re-install the software.

12-13-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

1. Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td>--------------------------</td>
</tr>
<tr>
<td>Schedule setting</td>
</tr>
<tr>
<td>MDB file</td>
</tr>
<tr>
<td>Information about the</td>
</tr>
<tr>
<td>recording you wish to</td>
</tr>
<tr>
<td>find</td>
</tr>
</tbody>
</table>
12-14  Record & Playback Problem Type 13

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-14-1 Storage block

12-14.1.1 Recording re-cycling

Clarification:
If you enable the re-cycling recording, the software will attempt to delete both while the HD space is insufficient
a. the oldest recording files
b. the event database related to the recording files
Then it will cause you not be able to
a. search through software
b. search through recording folder

Solution:

1. Please read the software manual to find the best
   a. Software setting
   b. Hardware requirement
   for you to keep recordings for your desired time

12-14-2 If problem not solved, how to report this problem?

If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

12-14.2.1 Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>------------</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>HD</td>
</tr>
<tr>
<td>Recording keep time</td>
</tr>
</tbody>
</table>
12-15 Record & Playback Problem Type 14

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-15-1 Storage block

12-15.1.1 Codec missing

If the codec is not installed correctly, you might not be able to playback the files.

Clarification:

1. Install the codec of FFDshow provided in the product CD

2. Check if you can playback the recording now.
3. If yes, this is a codec missing problem.
4. If not, this is not a codec missing problem.

Solution:
1. Make sure the codec is installed properly before you playback the file.

12-15-2 If problem not solved, how to report this problem?
If the solution above can’t solve the problem, please gather the following information and contact our sales. (Please see introduction about how to contact).

2. Problem feedback table

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Software</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
12-16 Record & Playback Problem Type 15

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-16-1 Storage block

12-16.1.1 Unauthorized delete or file rename

Clarification:
1. This problem happens only when someone
   a. deletes the file name
   b. rename the previous recording file

Solution:
1. Make sure the unauthorized entry and operation of the PC.
12-17 Record & Playback Problem Type 16

Refer to the cause clarification and respective solutions of each problem type below. RED circled parts below indicating which building block might cause this problem.

12-17-1 Storage block

12-17.1.1 Inappropriate database handling

Clarification:
If you enable the re-cycling recording, the software will attempt to delete both while the HD space is insufficient
a. the oldest recording files
b. the event database related to the recording files
This problem happens when the software
a. delete the oldest recording
b. keep the event database related to the recording files

**Solution:**

1. Please provide the feedback table as below and contact our sales (See introduction about how to contact). We will give you an solution A.S.A.P.

<table>
<thead>
<tr>
<th>Problem feedback table of login problem 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
</tr>
<tr>
<td>Product model</td>
</tr>
<tr>
<td>Software</td>
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<tr>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
Chapter. 13. Appendix.

13-1 Appendix. A How to test your latency?

Below is the latency testing procedure for you to find your own latency. You can then refer this latency figure to our latency figure. Then you know whether you have the optimized latency performance or not?

13-1-1 A. Get the counter program

13-1.1.1 Download the program

http://www.acti.com/support/Package/TS-00066/counter.zip

13-1.1.2 Unzip the file

A counter.exe appears.

13-1-2 B. Test procedure

13-1.2.1 Execute the counter.exe

A counter window appears.
13-1.2.2 Let an IP camera shoot this counter window

An IP camera or a camera connected to video server.

13-1-3 Connect this IP camera to an analog monitor

13-1-4 View the IP camera images in a way you wish to test

Example: If you want to test the latency of our Transcoder, please connect the Transcoder to this IP camera and display images on to another monitor.

NOTE: The frame rate setting of this IP camera or this video server should be real time (NTSC: 30fps, PAL: 25fps) to make this latency test precise.
13-1-5 Use Digital Still Camera to capture the Counter difference between two displays.

13-1-6 Get your latency.

Minus the counter number from monitor A by counter number from monitor B to get your latency.

Example: As shown in picture, the latency is 10fps. (04:45:13 – 04:45:03)

13-1-7 Check if the latency ok

Below is the standard latency result. If your latency is higher than that, there is a latency problem.

<table>
<thead>
<tr>
<th>Protocol Type</th>
<th>Latency (ms)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TCP1.0</td>
<td>330~423</td>
</tr>
<tr>
<td>TCP2.0</td>
<td>232~297</td>
</tr>
</tbody>
</table>

Monitor B.
Images from IP camera via Transcoder

Monitor A.
Original images from counter window
| PAL | 400–520 | 280–360 |