IP Surveillance TroubleShooting Guide

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www.acti.com

Chapter. 1. Introduction

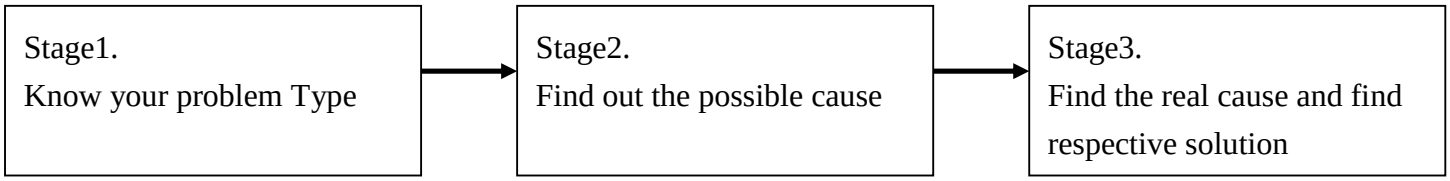
ACTi provides you a series of guides for your project from proposal stage to maintenance stage. They work as below

[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".



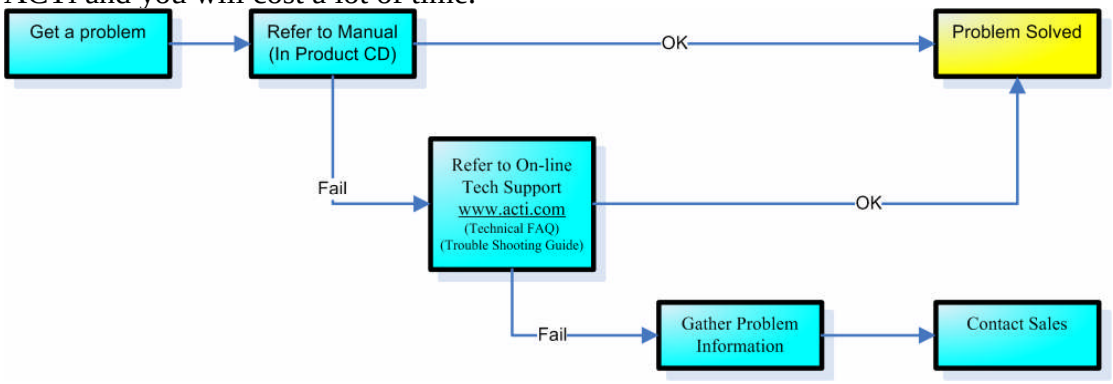
We start from "Define your problem type" to know what kind of problem it is and define the problem type. Then we follow the problem type and refer to the chapters after to know the possible cause of this type of problem. After that, we can follow the introduction to clarify what is the actual cause of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

   Technical FAQ: http://www.acti.com/support/support_package.asp

   Technical Guide: http://www.acti.com/support/on_line_support.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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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.

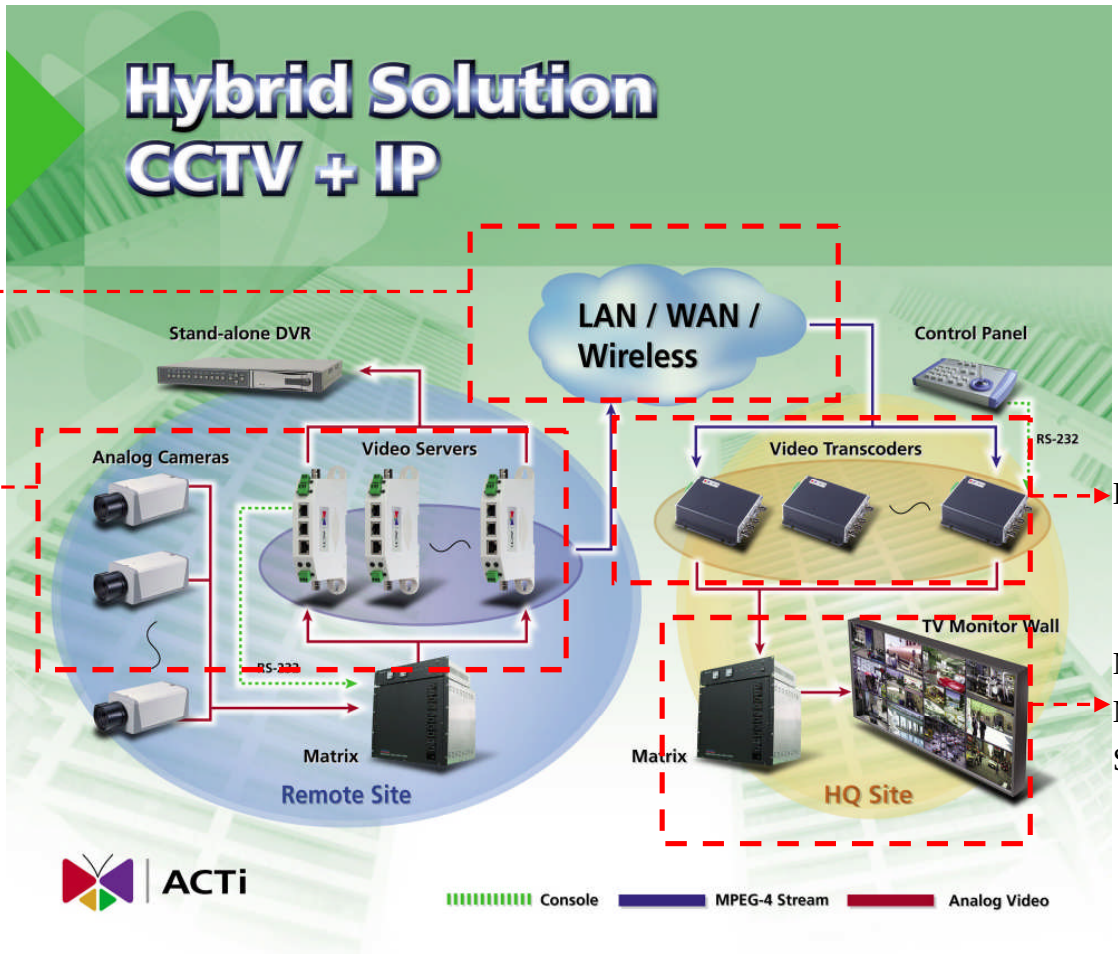
2-1-1 IP Surveillance solution

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.

Please refer to 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

3-1.1.1 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.

3-1.1.2 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)

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

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.

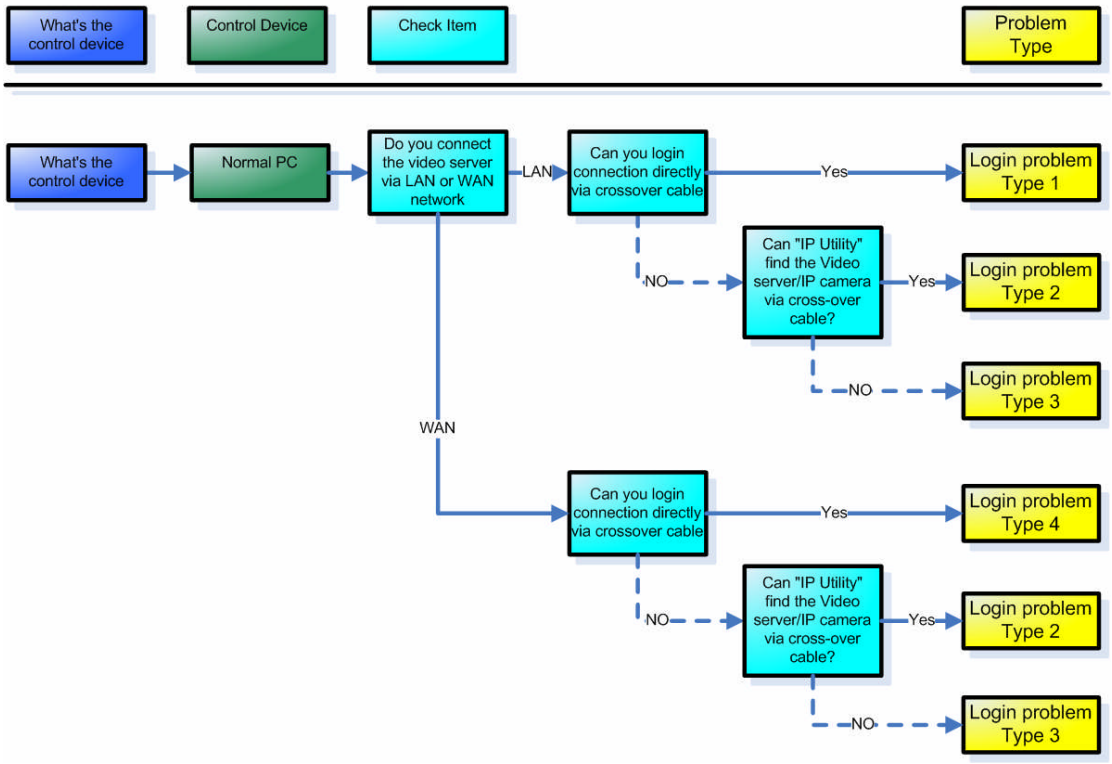
4-1 Find out the possible cause

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.

	Check Item	Remark
Step1	Check the Control Device	
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?	Please connect to LAN or WAN you used to connect previously
Step3	Refer to the section of each problem type to do root cause clarification and find respective solutions.	

Login problem Diagnostic Flow



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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
PC IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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

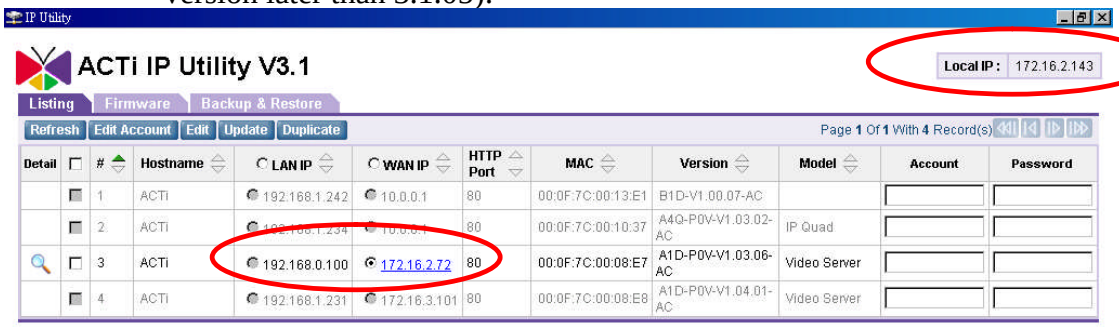
The possible causes could be as below

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

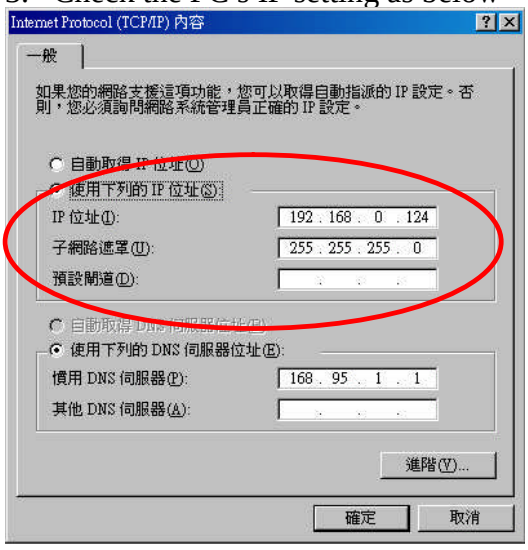
Sometimes you can't link to the video server /IP camera It could be caused by the video server/IP camera IP address. This setting is relevant to PC's IP address and Subnet mask setting. Then we will discuss both of them in this section.

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

	Video Server/IP camera	PC
IP address	A1.B1.C1.D1	A2.B2.C2.D2
Subnet Mask	E1.F1.G1.H1	E2.F2.G2.H2

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

		Video Server/IP camera	PC
IP address	Setting	A1.B1.C1.D1	A2.B2.C2.D2
	Rule to	A1=A2,	

	check	B1=B2, C1=C2, D1≠D2	
Subnet Mask	Setting	E1.F1.G1.H1	E2.F2.G2.H2
	Rule to Check	E1=E2=255, F1=F2=255, G1=G2=255, H1=H2=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.

		Video Server/IP camera	PC
IP address	Setting	A1.B1.C1.D1	A2.B2.C2.D2
	Rule to check	A1=A2, B1=B2, C1=C2, D1≠D2	
Subnet Mask	Setting	E1.F1.G1.H1	E2.F2.G2.H2
	Rule to Check	E1=E2=255, F1=F2=255, G1=G2=255, H1=H2=0	

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

4-3.1.2 Wrong PC IP address setting

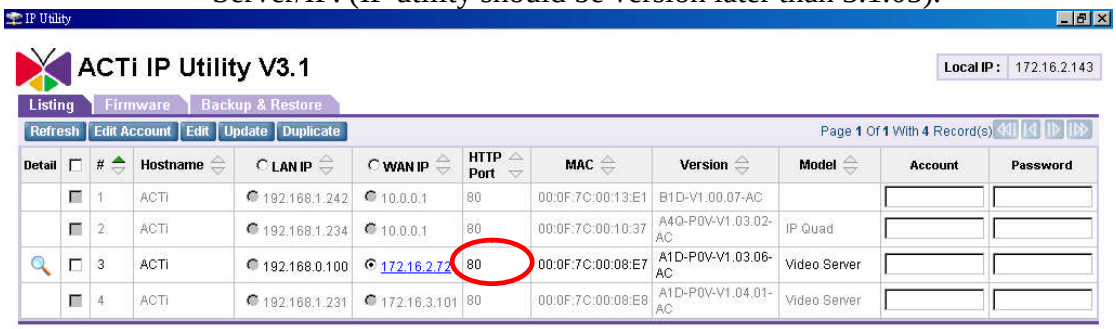
This site is included in the previous section 4-3.1.1. Please go there and see details.

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

HTTP port	Login link	Correct?
80	http://192.168.0.100* or http://192.168.0.100:80*	
ports other than 80	http://192.168.0.100:XX* (XX= the port setting you find above)	

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.

HTTP port	Login link	Correct?
80	http://192.168.0.100* or http://192.168.0.100:80*	
ports other than 80	http://192.168.0.100:XX* (XX= the port setting you find above)	

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

Software	Recommended version	Correct?
O/S (Operating software)	Windows 2000 SP2 or Window XP	
Browser	Internet Explorer 6.0 and above	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Other information you found during the testing		

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 – temporally 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 temporally failure problem
4. If not, this is not a network platform temporally failure problem

Solution:

1. Because the network platform is very rarely to fail, you can go on use it. But if your system temporally 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		
Category	Sub-category	Description
Product model	Model number	
Other information you found during the testing		

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

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Because each parts are 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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
PC IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

Chapter. 5. Monitor Problem

In this Chapter, we will focus 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.

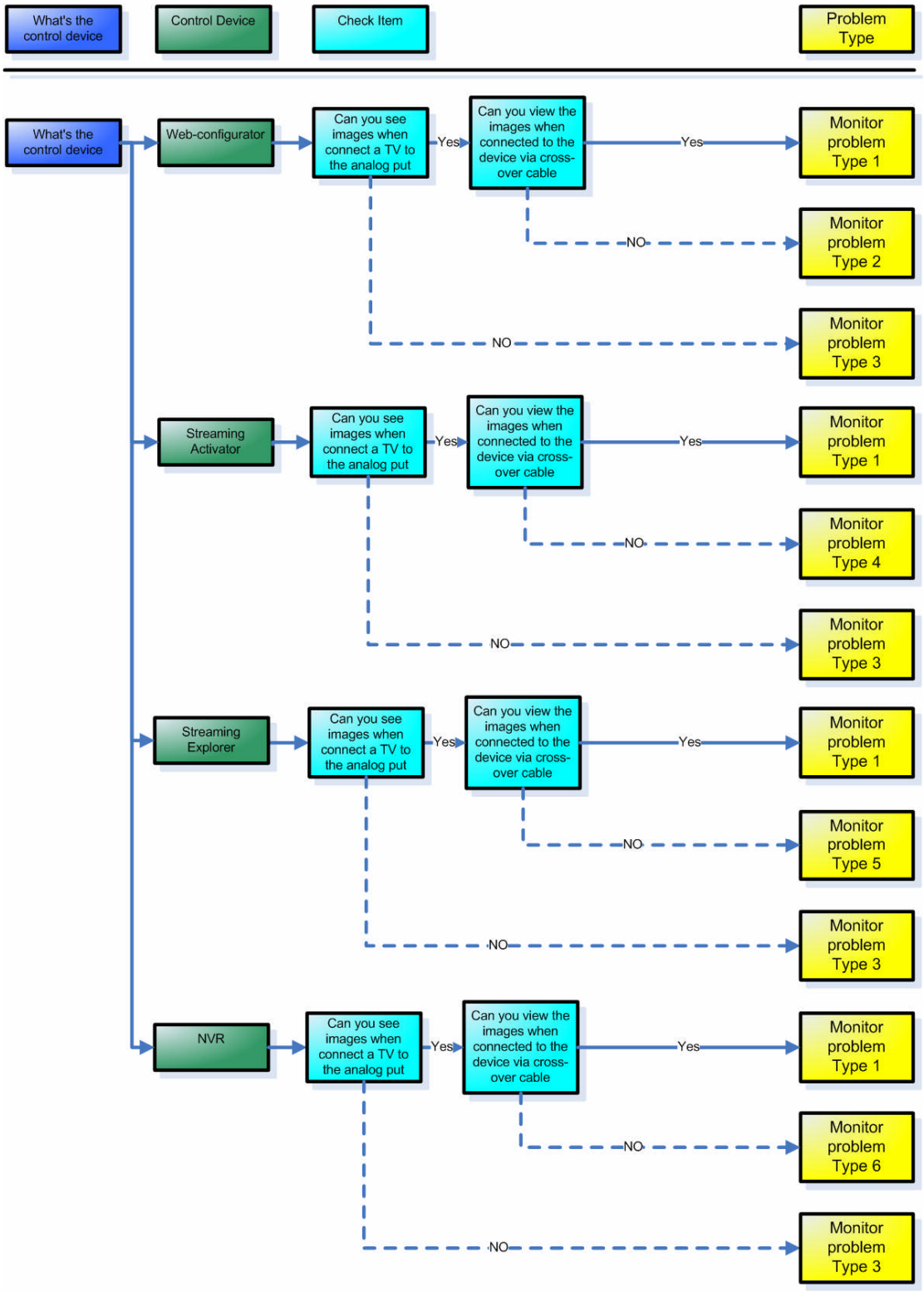
5-1 Find out the possible cause

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.

	Check Item	Remark
Step1	Check the Control Device	
Step2	Check if you see the Video server/Transcoder's analog output on a TV monitor.	
Step3	Connect the PC directly to the Video server/Transcoder then via cross-over cable. Then input the Video server/Transcoder IP.	
Step4	Refer to the section of each problem type to do root cause clarification and find respective solutions.	

Monitor problem Diagnostic Flow



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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	No	HTTP	80
			Register	6000
			Streaming	6002

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	No	HTTP	
			Register	
			Streaming	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	No	HTTP	80
			Register	6000
			Streaming	6002

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.

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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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.

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
PC IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Network deployment	Network diagram	
	Respective setting of switch / routers.	
Software	Model	
	Version	
	Setting	

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?
O/S (Operating software)	Windows 2000 SP2 or Windows XP	
Browser	Internet Explorer 6.0 and above	

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 AcitveX control, please install the ActiveX control installer. (You can always get it from http://actiftp.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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
PC IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Network deployment	Network diagram	
	Respective setting of switch / routers.	
Other information during this troubleshooting		

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.

Lens type	Solution steps	
Auto-Iris	1	Check if there's anything blocking the lens (ex: lens cover)
	2	Be sure to connect the "Auto Iris" Cable to the camera
	3	Be sure to switch the camera setting to "Auto Iris" or "DC Iris"
Fixed Iris	1	Check if there's anything blocking the lens (ex: lens cover)
	2	Be sure to switch the camera setting to "AES"

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.

Camera Type	Clarification procedure
Zoom Lens camera	1. Reboot the camera 2. See if the zoom lens moves during start-up (It moves as if it wants to zoom-in then zoom-out) 3. If yes, this is a temporally camera power up problem

	4. 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.

Power up problem type	Solution steps	
Temporally power up problem	1	Normally, this problem happens rarely. You can just ignore this problem.
	2	If the problem happens very often, please gather problem information and contact our sales.
Power up problem	1	If the problem happens very often, please gather problem information and contact our sales.

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Camera Setting	DC level	
	Auto Iris or AES	
Other information during this troubleshooting		

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.

Function	Port Function	Video Server/IP camera	Streaming Activator	Default value
Monitor	HTTP			80
	Register			6000
	Streaming			6002

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)

Function	Port Function	Video Server/IP camera	Streaming Activator	The same?
Monitor	HTTP	80	80	Yes
	Register	6000	7000	NO
	Streaming	6002	7002	NO

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:

Function	Port Function	Video Server/IP camera	Streaming Activator	The same?
Monitor	HTTP	80	80	Yes
	Register	6000	7000	Yes

			->6000	
	Streaming	6002	7002 ->6002	Yes

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

Streaming Activator version	Video Server/IP camera Protocol version*			
	TCP1.0*		TCP2.0*	
Version before 1.36.00.00	OK	OK	**Fail**	**Fail**
Version after 1.36.00.00	OK	OK	OK	OK

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Software model	Use it to connect?	
Software version		
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
PC IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	

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.

Function	Port Function	Video Server/IP camera	Streaming Activator	Default value
Monitor	HTTP			80
	Register			6000
	Streaming			6002

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)

Function	Port Function	Video Server/IP camera	Streaming Activator	The same?
Monitor	HTTP	80	80	Yes
	Register	6000	7000	NO
	Streaming	6002	7002	NO

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:

Function	Port Function	Video Server/IP camera	Streaming Activator	The same?
Monitor	HTTP	80	80	Yes
	Register	6000	7000 ->6000	Yes
	Streaming	6002	7002	Yes

			->6002	

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

Streaming Activator version	Video Server/IP camera Protocol version*			
	TCP1.0*		TCP2.0*	
Version before 1.0	OK	OK	**Fail**	**Fail**
Version after 1.1	OK	OK	OK	OK

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

Streaming Activator software
http://www.acti.com/support/support_index.asp

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Software model	Use it to connect?	
Software version		
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
PC IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	

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.

Function	Port Function	Video Server/IP camera	Streaming Activator	Default value
Monitor	HTTP			80
	Register			6000
	Streaming			6002

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)

Function	Port Function	Video Server/IP camera	Streaming Activator	The same?
Monitor	HTTP	80	80	Yes
	Register	6000	7000	NO
	Streaming	6002	7002	NO

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:

Function	Port Function	Video Server/IP camera	Streaming Activator	The same?
Monitor	HTTP	80	80	Yes
	Register	6000	7000 ->6000	Yes
	Streaming	6002	7002	Yes

			->6002	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Software model	Use it to connect?	
Software version		
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
PC IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	

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.

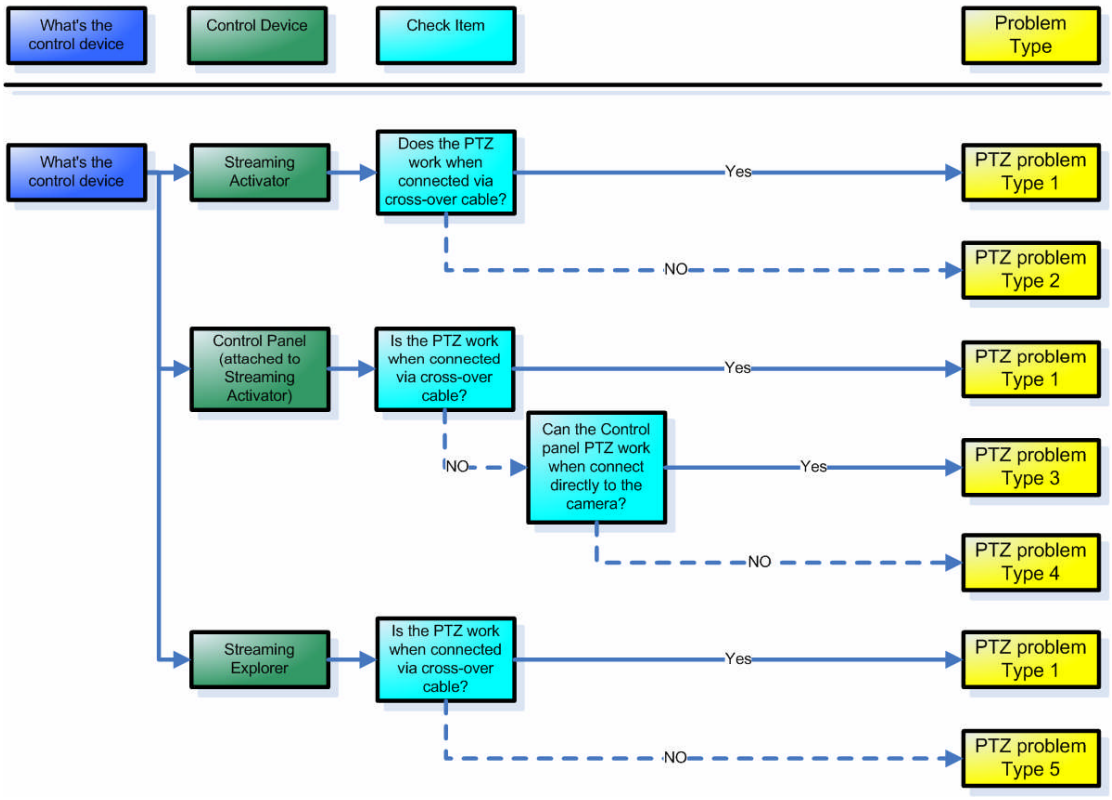
6-1 Find out the possible cause

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.

	Check Item	Remark
Step1	Check the Control Device	
Step2	Check if you can control the PTZ the Video server/Transcoder's analog output on a TV monitor.	
Step3	Connect the PC directly to the Video server/Transcoder then via cross-over cable. Then input the Video server/Transcoder IP.	
Step4	Refer to the section of each problem type to do root cause clarification and find respective solutions.	

PTZ problem Diagnostic Flow



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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
PTZ control	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
PTZ control	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
PTZ	Yes	No	Control	6001

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) 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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
PC IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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:

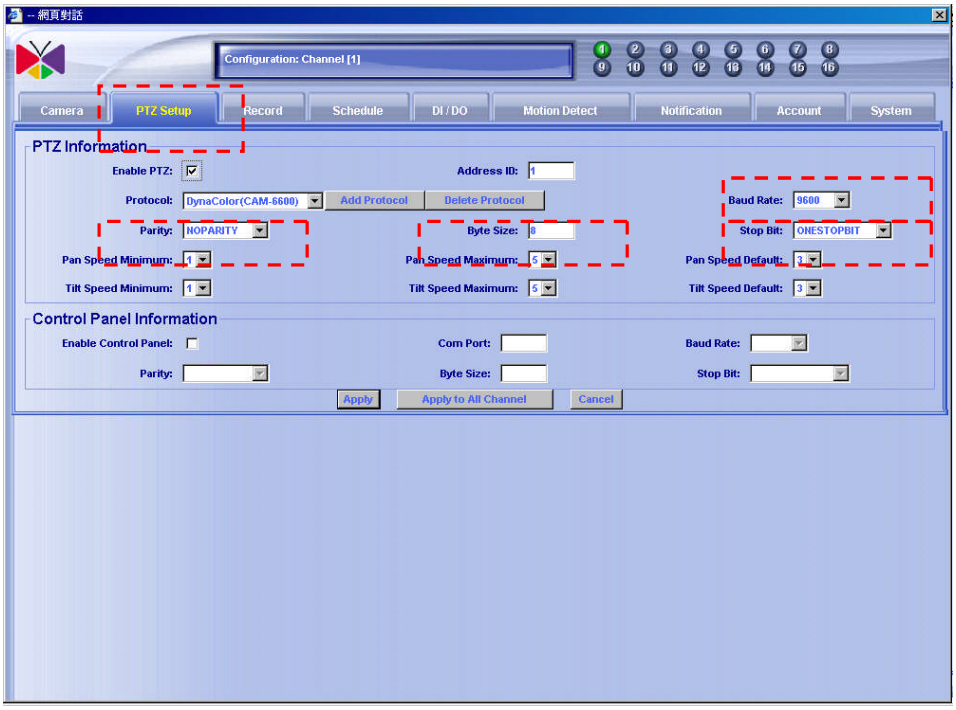
1. First, we have to check out the serial settings of analog video and control device (Web-configurator). The checkout procedure might be different. Please refer to the table below.

No	Description	Serial Setting	
		Analog Video	Control device
1	Analog Camera + Video Server	Please refer to analog camera's manual	Please login the web-configurator
2	IP PTZ camera with fixed serial setting *	Please see table below for information	Please login the web-configurator
3	IP PTZ camera with Adjustable serial setting*	Please refer to IP camera hardware manual	Please login the web-configurator

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

IP PTZ camera with fixed serial					
No	Model	Analog Video Serial Setting			
		Baud rate	Parity	Byte length	Stop bit
1	CAM-5130	9600	None	8	1
2	CAM-5140	9600	None	8	1
3	CAM-5150	9600	None	8	1
IP PTZ camera with Adjustable serial					
No	Model	Analog Video Serial Setting			
		Baud rate	Parity	Byte length	Stop bit
1	CAM-6100	Adjustable	None	8	1
2	CAM-6200	Adjustable	None	8	1
3	CAM-6500	Adjustable	None	8	1
4	CAM-6600	Adjustable	None	8	1

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.

Serial Setting	Serial Setting		The same?
	Analog Video	Control device	
Baud rate			
Parity			
Byte length			
Stop bit			

Sample table

Serial Setting	Serial Setting		The same?
	Analog Video	Control device	
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

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

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

   · After

Serial Setting	Serial Setting		The same?
	Analog Video	Network Platform	
Baud rate	4800	4800	yes
Parity	None	None	Yes
Byte length	8	8	Yes
Stop bit	1	1	Yes

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.

No	Description	PTZ setting	
		Analog Video	Control device
1	Analog Camera + Video Server	Please refer to analog camera's manual	Please go the control device PTZ setup page
2	IP PTZ camera with fixed serial setting *	Please see table below for information	Please go the control device PTZ setup page
3	IP PTZ camera with Adjustable serial setting*	Please refer to IP camera hardware manual	Please go the control device PTZ setup page

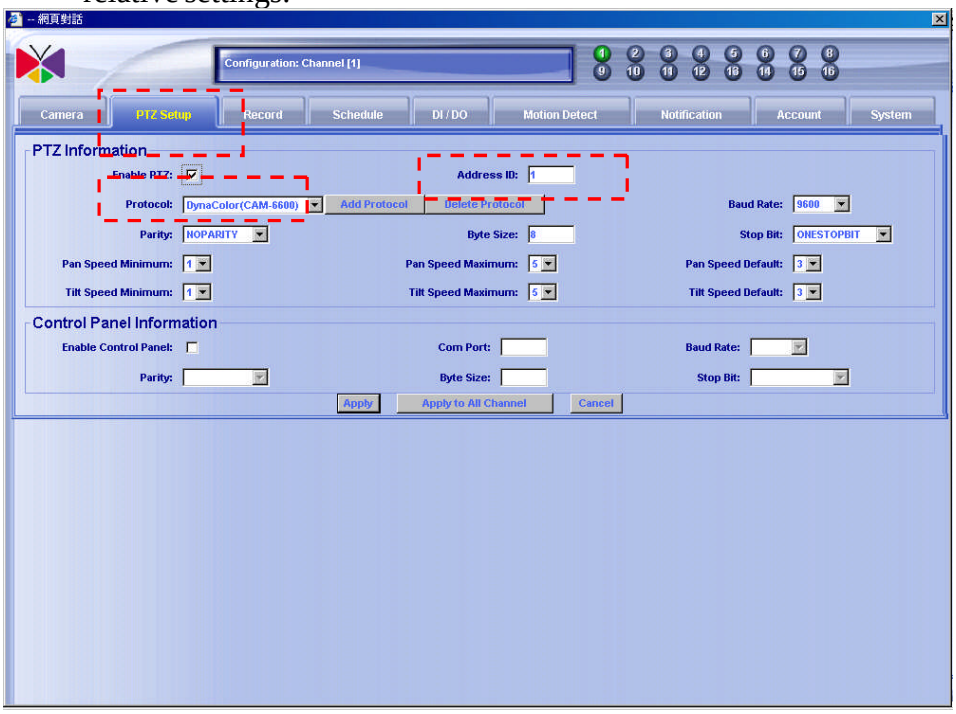
*: Please refer to the table below for how to differentiate the IP PTZ camera and relative settings.

IP PTZ camera with fixed PTZ setting			
No	Model	Protocol setting	Camera ID
1	CAM-5130	Campro_V1	1
2	CAM-5140	Campro_V1	1
3	CAM-5150	Campro_V1	1
IP PTZ camera with Adjustable PTZ setting			
No	Model	Protocol setting	Camera ID
1	CAM-6100	Adjustable Camera ID (Pelco-P, Pelco-D, VCL)	Adjustable (1~255)
2	CAM-6200	Adjustable Camera ID (Pelco-P, Pelco-D, Eyeview)	Adjustable (1~255)
3	CAM-6500	Adjustable Camera ID (Pelco-P,	Adjustable

		Pelco-D, Dynacolor*)	(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.



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.

Serial Setting	PTZ Setting		The same?
	Analog Video	Control device	
Protocol			
Camera ID			

Sample table

Serial Setting	Serial Setting		The same?
	Analog Video	Control device	

Protocol	Pelco-P	Pelco-D	No
Camera ID	1	1	Yes

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

Serial Setting	Serial Setting		The same?
	Analog Video	Control device	
Protocol	Pelco-P	Pelco-D	No
Camera ID	1	1	Yes

   · After

Serial Setting	Serial Setting		The same?
	Analog Video	Network Platform	
Protocol	Pelco-P	Pelco-P	No
Camera ID	1	1	Yes

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.

No	Description	Serial Connection type	
		Analog camera	Video server
1	RS-485	*	Default
2	RS-232	*	
3	RS-422	*	

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

Sample table

No	Description	Serial Connection type	
		Analog camera	Video server
1	RS-485		Default
2	RS-232		
3	RS-422	Yes	

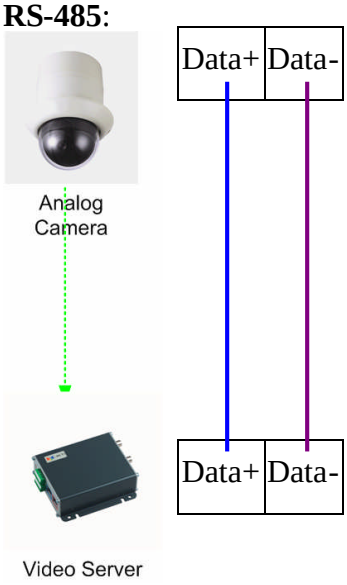
2. If all the Serial Connection type is the same in Analog Camera and Video server, this is not a Serial Connection type. Then we go on next step to check out serial physical connection.

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

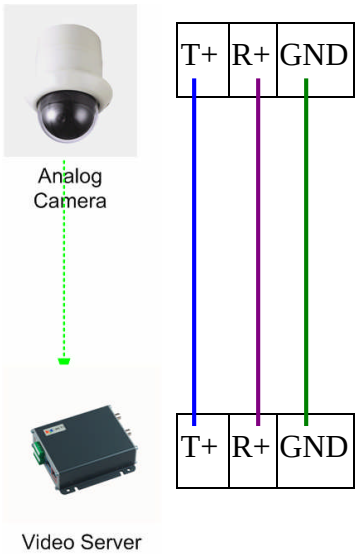
first.

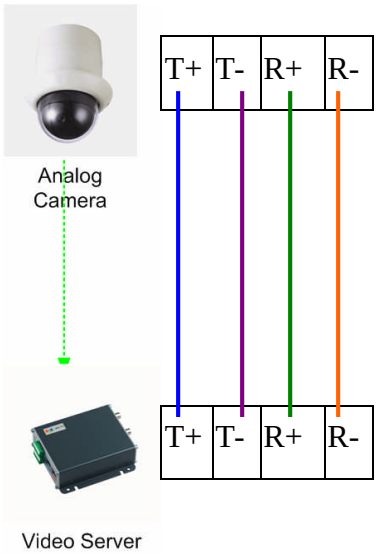
4. Follow the system diagram below for how does each serial physical connection goes. (You might need to refer to video server and speed dome's hardware manual for it's serial pin details)

RS-485:



RS-232:





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

No	Description	Serial Connection type	
		Analog camera	Video server
1	RS-485		Default
2	RS-232		
3	RS-422	Yes	

   · After

No	Description	Serial Connection type	
		Analog camera	Video server
1	RS-485		

2	RS-232		
3	RS-422	Yes	Yes

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.

Function	Port Function	Video Server/IP camera	Streaming Activator	Default value
Monitor	HTTP			80
	Register			6000
	Streaming			6002
	Control			6001

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)

Function	Port Function	Video Server/IP camera	Streaming Activator	The same?
Monitor	HTTP	80	80	Yes
	Register	6000	7000	NO
	Streaming	6002	7002	NO

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:

Function	Port Function	Video Server/IP camera	Streaming Activator	The same?
Monitor	HTTP	80	80	Yes
	Register	6000	7000 ->6000	Yes
	Streaming	6002	7002 ->6002	Yes

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Software model		
Software version		
Analog Video Serial setting	Serial Type	
	Connection diagram	
	Baud rate	
	Byte length, stop bit	
Network Platform	HTTP port	
	Streaming port	
	Control port	
	Register port	
Software PTZ setting	Serial Type	
	Connection diagram	
	Baud rate	
	Byte length, stop bit	
Software port setting	HTTP port	
	Streaming port	
	Control port	
	Register port	
Other details you find during clarification		

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

No	Description	Serial Connection type
1	RS-485	
2	RS-232	
3	RS-422	

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)

No	Description	Connection
1	RS-485	Control panel =>Serial converter (RS-485 to RS-232) => PC com port
2	RS-232	Control panel => PC com port
3	RS-422	Control panel =>Serial converter (RS-422 to RS-232) => PC com port

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

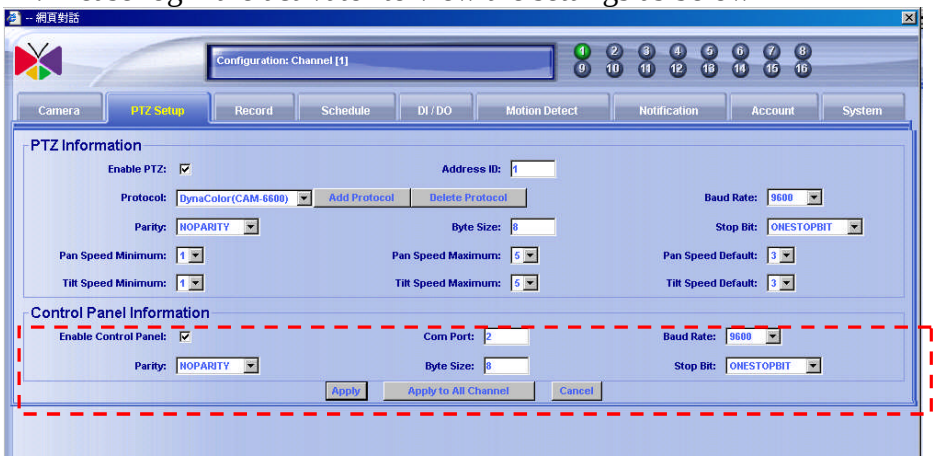
Clarification:

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

No	Description	Panel connection settings	
		Control Panel	Streaming Activator
1	Baud rate	*	**
2	Parity	*	**
3	Byte length	*	**
4	Stop bit	*	**
5	Com port	*	**

*: 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:

No	Description	Panel connection settings		The same?
		Control Panel	Streaming Activator	
1	Baud rate	4800	9600	No
2	Parity	No	No	Yes
3	Byte length	8	8	Yes
4	Stop bit	1	1	Yes
5	Com port	2	2	Yes

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.

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.

No	Description	Serial Setting	
		Analog Video	Control Panel
1	Analog Camera + Video Server	Please refer to analog camera's manual	Please refer to the control panel hardware manual
2	IP PTZ camera with fixed serial setting *	Please see table below for information	Please refer to the control panel hardware manual
3	IP PTZ camera with Adjustable serial setting*	Please refer to IP camera hardware manual	Please refer to the control panel hardware manual

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

IP PTZ camera with fixed serial					
No	Model	Analog Video Serial Setting			
		Baud rate	Parity	Byte length	Stop bit
1	CAM-5130	9600	None	8	1
2	CAM-5140	9600	None	8	1
3	CAM-5150	9600	None	8	1
IP PTZ camera with Adjustable serial					
No	Model	Analog Video Serial Setting			
		Baud rate	Parity	Byte length	Stop bit
1	CAM-6100	Adjustable	None	8	1
2	CAM-6200	Adjustable	None	8	1
3	CAM-6500	Adjustable	None	8	1
4	CAM-6600	Adjustable	None	8	1

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			
Parity			
Byte length			
Stop bit			

Sample table

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

Parity	None	None	Yes
Byte length	8	8	Yes
Stop bit	1	1	Yes

・After

Serial Setting	Serial Setting		The same?
	Analog Video	Control Panel	
Baud rate	4800	4800	yes
Parity	None	None	Yes
Byte length	8	8	Yes
Stop bit	1	1	Yes

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.

No	Description	PTZ setting	
		Analog Video	Control Panel
1	Analog Camera + Video Server	Please refer to analog camera's manual	Please go the control device PTZ setup page
2	IP PTZ camera with fixed serial setting *	Please see table below for information	Please go the control device PTZ setup page

3	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.

IP PTZ camera with fixed PTZ setting			
No	Model	Protocol setting	Camera ID
1	CAM-5130	Campro_V1	1
2	CAM-5140	Campro_V1	1
3	CAM-5150	Campro_V1	1
IP PTZ camera with Adjustable PTZ setting			
No	Model	Protocol setting	Camera ID
1	CAM-6100	Adjustable Camera ID (Pelco-P, Pelco-D, VCL)	Adjustable (1~255)
2	CAM-6200	Adjustable Camera ID (Pelco-P, Pelco-D, Eyeview)	Adjustable (1~255)
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

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.

Serial Setting	PTZ Setting		The same?
	Analog Video	Control Panel	
Protocol			
Camera ID			

Sample table

Serial Setting	Serial Setting		The same?
	Analog Video	Control Panel	

Protocol	Pelco-P	Pelco-D	No
Camera ID	1	1	Yes

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

Serial Setting	Serial Setting		The same?
	Analog Video	Control Panel	
Protocol	Pelco-P	Pelco-D	No
Camera ID	1	1	Yes

   · After

Serial Setting	Serial Setting		The same?
	Analog Video	Control Panel	
Protocol	Pelco-P	Pelco-P	No
Camera ID	1	1	Yes

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.

No	Description	Serial Connection type	
		Analog camera	Video server
1	RS-485	*	Default
2	RS-232	*	
3	RS-422	*	

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

Sample table

No	Description	Serial Connection type	
		Analog camera	Video server
1	RS-485		Default
2	RS-232		
3	RS-422	Yes	

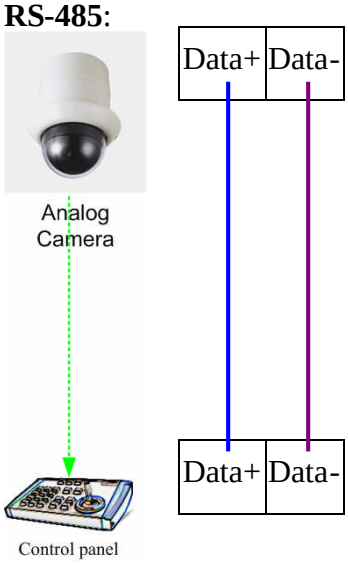
2. If all the Serial Connection type is the same in Analog Camera and Video server, this is not a Serial Connection type. Then we go on next step to check out serial physical connection.

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

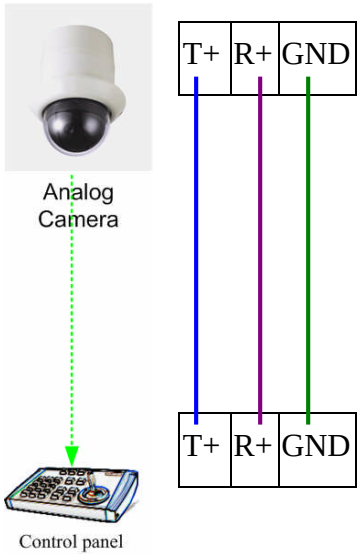
first.

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)

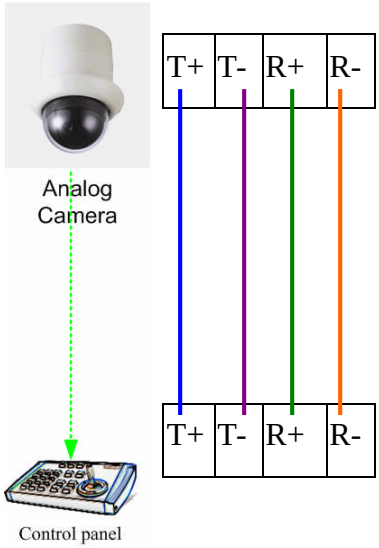
RS-485:



RS-232:



RS-422:



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

No	Description	Serial Connection type	
		Analog camera	Control Panel
1	RS-485		Default
2	RS-232		
3	RS-422	Yes	

・After

No	Description	Serial Connection type	
		Analog camera	Control Panel

1	RS-485		
2	RS-232		
3	RS-422	Yes	Yes

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:

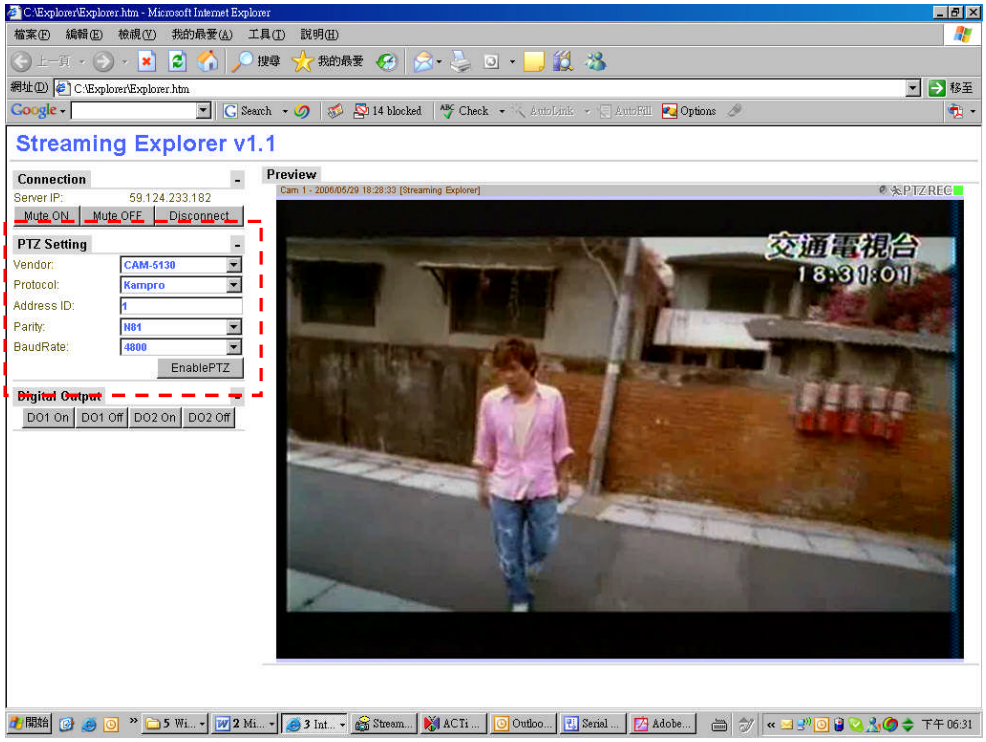
1. First, we have to check out the serial settings of analog video and control device (Web-configurator). The checkout procedure might be different. Please refer to the table below.

No	Description	Serial Setting	
		Analog Video	Control device
1	Analog Camera + Video Server	Please refer to analog camera's manual	Please login the web-configurator
2	IP PTZ camera with fixed serial setting *	Please see table below for information	Please login the web-configurator
3	IP PTZ camera with Adjustable serial setting*	Please refer to IP camera hardware manual	Please login the web-configurator

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

IP PTZ camera with fixed serial					
No	Model	Analog Video Serial Setting			
		Baud rate	Parity	Byte length	Stop bit
1	CAM-5130	9600	None	8	1
2	CAM-5140	9600	None	8	1
3	CAM-5150	9600	None	8	1
IP PTZ camera with Adjustable serial					
No	Model	Analog Video Serial Setting			
		Baud rate	Parity	Byte length	Stop bit
1	CAM-6100	Adjustable	None	8	1
2	CAM-6200	Adjustable	None	8	1
3	CAM-6500	Adjustable	None	8	1
4	CAM-6600	Adjustable	None	8	1

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.

Serial Setting	Serial Setting		The same?
	Analog Video	Control device	
Baud rate			
Parity			
Byte length			
Stop bit			

Sample table

Serial Setting	Serial Setting		The same?
	Analog Video	Control device	
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 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:

   · Before

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

   · After

Serial Setting	Serial Setting		The same?
	Analog Video	Network Platform	
Baud rate	4800	4800	yes
Parity	None	None	Yes
Byte length	8	8	Yes
Stop bit	1	1	Yes

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.

No	Description	PTZ setting	
		Analog Video	Control device
1	Analog Camera + Video Server	Please refer to analog camera's manual	Please go the control device PTZ setup page
2	IP PTZ camera with fixed serial setting *	Please see table below for information	Please go the control device PTZ setup page
3	IP PTZ camera with Adjustable serial setting*	Please refer to IP camera hardware manual	Please go the control device PTZ setup page

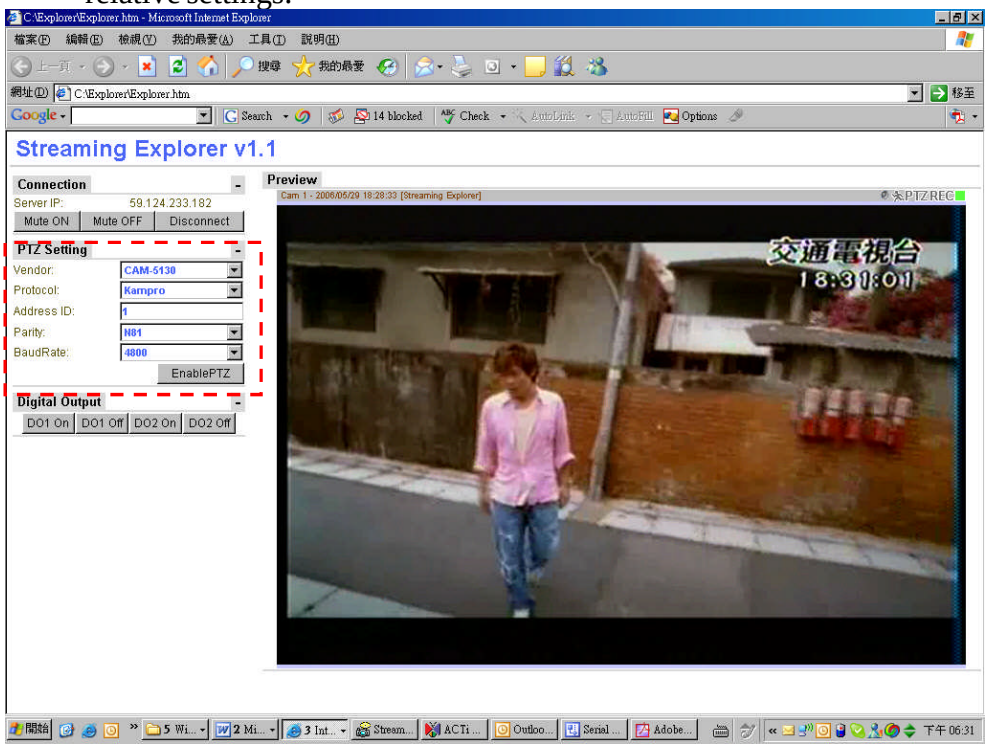
*: Please refer to the table below for how to differentiate the IP PTZ camera and relative settings.

IP PTZ camera with fixed PTZ setting			
No	Model	Protocol setting	Camera ID
1	CAM-5130	Campro_V1	1
2	CAM-5140	Campro_V1	1
3	CAM-5150	Campro_V1	1
IP PTZ camera with Adjustable PTZ setting			
No	Model	Protocol setting	Camera ID
1	CAM-6100	Adjustable Camera ID (Pelco-P, Pelco-D, VCL)	Adjustable (1~255)
2	CAM-6200	Adjustable Camera ID (Pelco-P, Pelco-D, Eyeview)	Adjustable (1~255)

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.

Serial Setting	PTZ Setting		The same?
	Analog Video	Control device	
Protocol			
Camera ID			

Sample table

Serial Setting	Serial Setting	The same?

	Analog Video	Control device	
Protocol	Pelco-P	Pelco-D	No
Camera ID	1	1	Yes

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

Serial Setting	Serial Setting		The same?
	Analog Video	Control device	
Protocol	Pelco-P	Pelco-D	No
Camera ID	1	1	Yes

   · After

Serial Setting	Serial Setting		The same?
	Analog Video	Network Platform	
Protocol	Pelco-P	Pelco-P	No
Camera ID	1	1	Yes

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.

No	Description	Serial Connection type	
		Analog camera	Video server
1	RS-485	*	Default
2	RS-232	*	
3	RS-422	*	

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

Sample table

No	Description	Serial Connection type	
		Analog camera	Video server
1	RS-485		Default
2	RS-232		
3	RS-422	Yes	

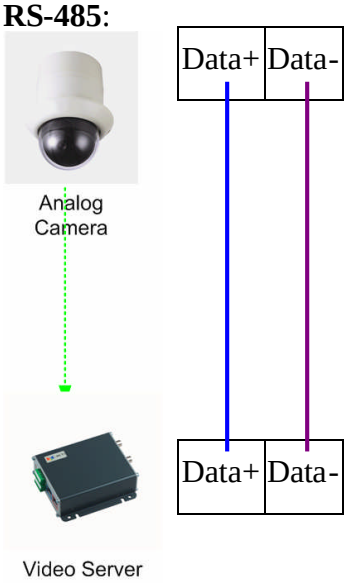
7. If all the Serial Connection type is the same in Analog Camera and Video server, this is not a Serial Connection type. Then we go on next step to check out serial physical connection.

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

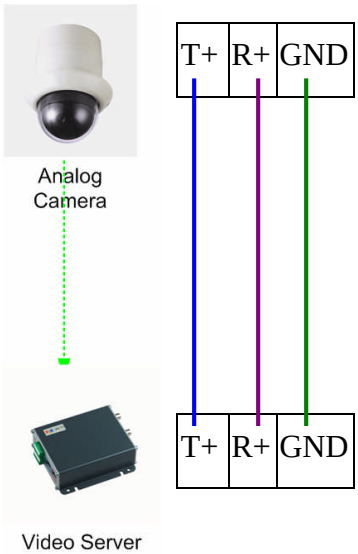
first.

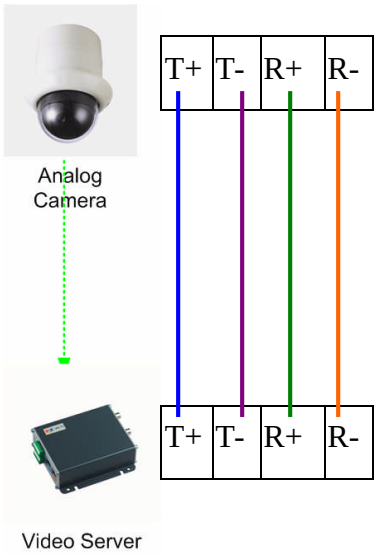
9. Follow the system diagram below for how does each serial physical connection goes. (You might need to refer to video server and speed dome's hardware manual for it's serial pin details)

RS-485:



RS-232:





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:

・Before

No	Description	Serial Connection type	
		Analog camera	Video server
1	RS-485		Default
2	RS-232		
3	RS-422	Yes	

・After

No	Description	Serial Connection type	
		Analog camera	Video server
1	RS-485		

2	RS-232		
3	RS-422	Yes	Yes

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.

Function	Port Function	Video Server/IP camera	Streaming Activator	Default value
Monitor	HTTP			80
	Register			6000
	Streaming			6002
	Control			6001

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)

Function	Port Function	Video Server/IP camera	Streaming Activator	The same?
Monitor	HTTP	80	80	Yes
	Register	6000	7000	NO
	Streaming	6002	7002	NO

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:

Function	Port Function	Video Server/IP camera	Streaming Activator	The same?
Monitor	HTTP	80	80	Yes
	Register	6000	7000 ->6000	Yes
	Streaming	6002	7002 ->6002	Yes

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Software model		
Software version		
Analog Video Serial setting	Serial Type	
	Connection diagram	
	Baud rate	
	Byte length, stop bit	
Network Platform	HTTP port	
	Streaming port	
	Control port	
	Register port	
Software PTZ setting	Serial Type	
	Connection diagram	
	Baud rate	
	Byte length, stop bit	
Software port setting	HTTP port	
	Streaming port	
	Control port	
	Register port	
Other details you find during clarification		

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.

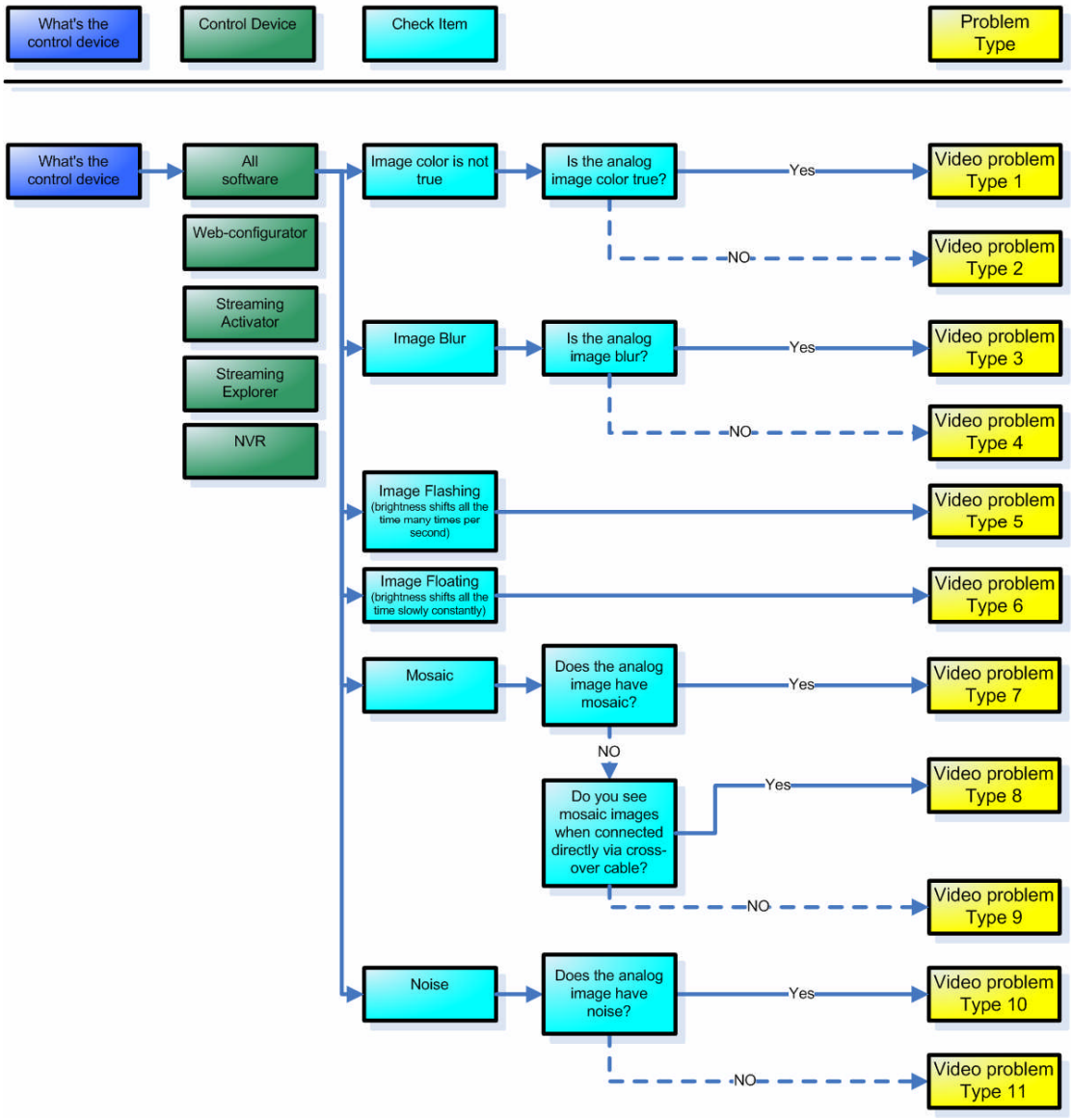
7-1 Find out the possible cause

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.

	Check Item	Remark
Step1	Check the Control Device	
Step2	What is your video quality problem type? 1. Image color is not true 2. Image blur 3. Image flashing	
Step3	Do you find the same problem on a TV connecting to the analog output?	Please make sure the TV color display is ok
Step4	Refer to the section of each problem type to do root cause clarification and find respective solutions.	

Video Quality Problem Diagnostic Flow



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

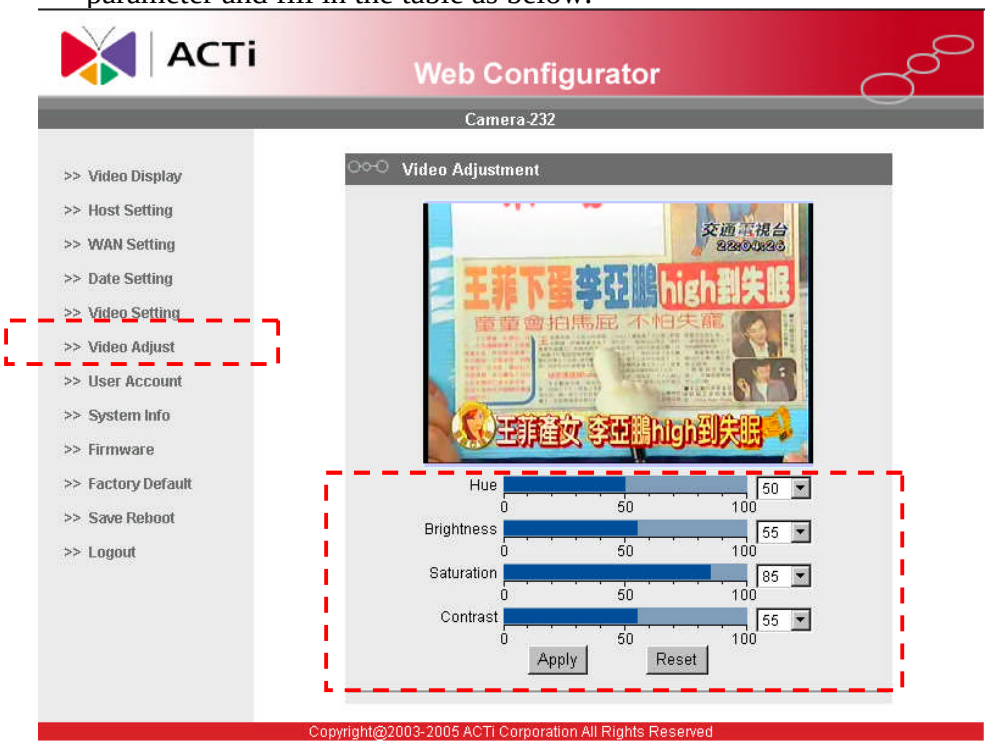
The possible causes could be as below.

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

Monitor Type	Recommended parameter		Your setting (Video server /IP camera)
Video Type	NTSC	PAL	
Hue	50	50	
Brightness	55	55	
Contrast	55	55	
Saturation	85	85	

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:

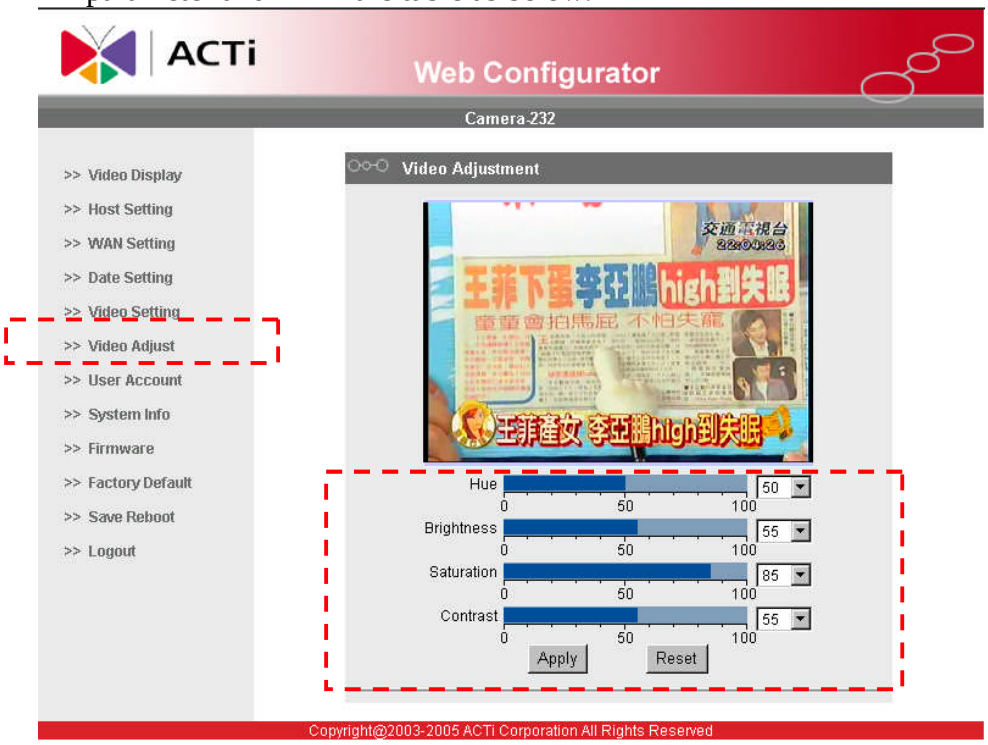
1. Adjust the video parameter to make it exactly the same as the one in recommended.

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.



Fill them in the video parameter table below.

Monitor Type	Recommended parameter		Your setting (Video server /IP camera)
Video Type	NTSC	PAL	
Hue	50	50	

Brightness	55	55	
Contrast	55	55	
Saturation	85	85	

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.

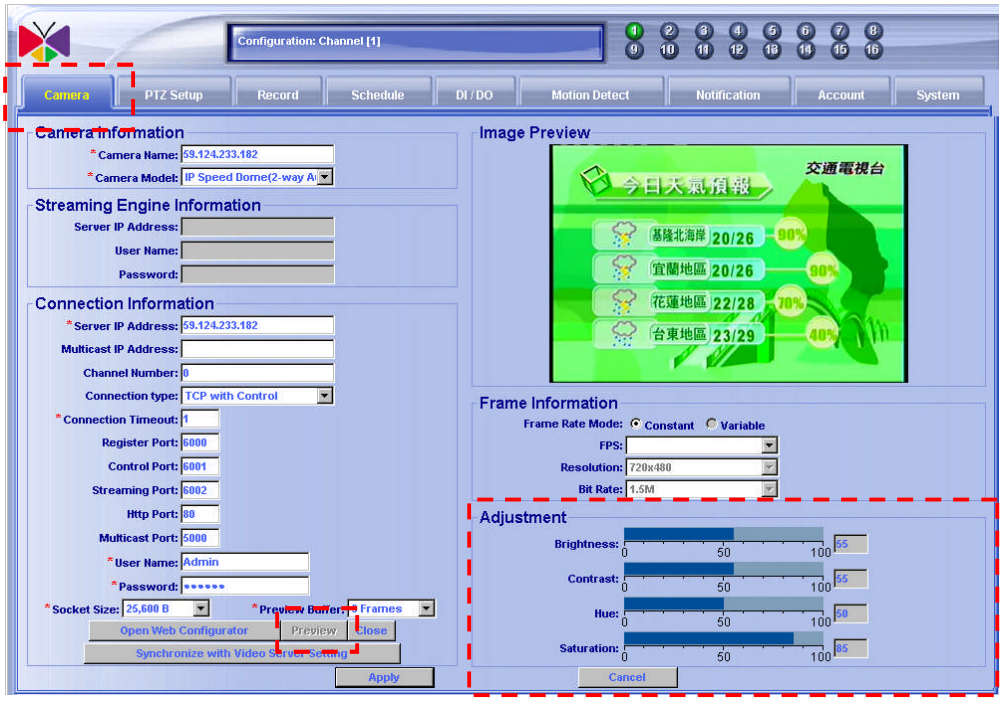
7-2.2.1 Inappropriate Software Video Parameter setup

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.

Monitor Type	Recommended value		Software setting
Video Type	NTSC	PAL	
Hue	50	50	
Brightness	55	55	
Contrast	55	55	
Saturation	85	85	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	

Software model		
Software version		
Network Platform Video	Video Type	
	Hue	
	Brightness	
	Contrast	
	Saturation	
Software Video setting	Video Type	
	Hue	
	Brightness	
	Contrast	
	Saturation	
Other details you find during clarification		

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)

Video Type	TV	Analog camera/IP camera	The same?
NTSC			
PAL			

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

   Example

Video Type	TV	Analog camera/IP camera	The same?
NTSC	●		No
PAL		●	

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:

Video Type	TV	Analog camera/IP camera	The same?
NTSC	●		No
PAL		●	

After:

Video Type	TV	Analog camera/IP camera	The same?
NTSC	●	●	No
PAL			

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)

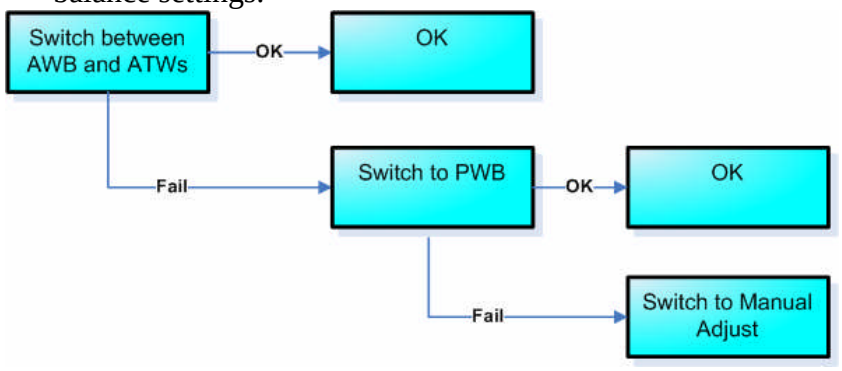
a. AWB (Auto White Balance)

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)

Camera Series	AWB	ATW	PWB	Manual Adjust
CAM-5100	●		●	
CAM-5200	●		●	
CAM-5300	●		●	
CAM-5130	●	●		●
CAM-5140	●	●		●
CAM-5150	●	●		●
CAM-7100	●	●		
CAM-6100	●	●	●	●
CAM-6200	●	●		●
CAM-6500	●	●	●	●
CAM-6600	●	●	●	●

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Analog Video	Video Type	
	White balance setting	
	On-site situation	
Other details you find during clarification		

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.

Camera Type	Manually adjust the lens	Adjust via software remotely
Box / Dome camera with Fixed lens	●*	
Box / Dome camera with varifocal lens	●*	
Zoom lens camera		●**
Speed dome camera		●**

*. 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.

Camera Type	Problem Fixed	Adjust OSD setting
Box / Dome camera with Fixed lens	●	
Box / Dome camera with varifocal lens	●	
Zoom lens camera		●* (go to Step5)
Speed dome camera		●* (go to Step5)

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 cleanness

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

Clarification:

1. Please check if the items below are clear

Item	Clean
Lens	
CCD	
Cover	

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

Item	Wiper for Glass	Use blower
Lens	●	
CCD		●
Cover	●	

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

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

Clarification:

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

Item	Focus situation	
	In either Day / Night situation	In switching between Day / Night situation
Normal Lens	●	
IR correct		●

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Analog Video	Lens type	
	OSD setting (if the camera have)	
	Lens cleanness	
	CCD cleanness	
	Cover cleanness	
Other details you find during clarification		

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.

Item	Focus situation	
	In either Day / Night situation	In switching between Day / Night situation
Normal Lens	●	
IR correct		●

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Analog Video	Resolution	

	Frame rate	
	Bit rate	
Other details you find during clarification		

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)

Video Type	TV	Analog camera/IP camera	The same?
NTSC			
PAL			

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

Video Type	TV	Analog camera/IP camera	The same?
NTSC	●		No
PAL		●	

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:

Video Type	TV	Analog camera/IP camera	The same?
NTSC	●		No
PAL		●	

After:

Video Type	TV	Analog camera/IP camera	The same?
NTSC	●	●	No
PAL			

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Analog Video Serial setting	Video Type	
Environment condition	TV video type	
	Electric frequency	
Other details you find during clarification		

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)

Video Type	TV	Analog camera/IP camera	The same?
NTSC			
PAL			

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

Video Type	TV	Analog camera/IP camera	The same?
NTSC	●		No
PAL		●	

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:

Video Type	TV	Analog camera/IP camera	The same?
NTSC	●		No
PAL		●	

After:

Video Type	TV	Analog camera/IP camera	The same?
NTSC	●	●	No
PAL			

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.

Video Type	Auto	Fixed
Iris Setting		
ES		

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)

Example

Video Type	Recommendation		Your setting	
	Auto	Fixed	Auto	Fixed
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:

Video Type	Recommendation		Your setting	
	Auto	Fixed	Auto	Fixed
Iris Setting	●			●
ES		●	●	

   After:

Video Type	Recommendation		Your setting	
	Auto	Fixed	Auto	Fixed
Iris Setting	●		●	
ES		●		●

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.

Electric	TV Video Type

Frequency	NTSC	PAL
50Hz	A	B
60Hz	C	D

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.

Camera Series		NTSC		PAL	
		Enable Flickerless	Set ES fixed at 1/100sec	Enable Flickerless	Set ES fixed at 1/120sec
Camera with Flickerless function	CAM-5100	●		●	
	CAM-5200	●		●	
	CAM-5300	●		●	
Camera with Flickerless function	CAM-5130		●		●
	CAM-5140		●		●
	CAM-5150		●		●
	CAM-7100		●		●
	CAM-6100		●		●
	CAM-6200		●		●
	CAM-6500		●		●
	CAM-6600		●		●

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Analog Video Serial setting	Video Type	
	Iris setting	
	ES setting	
	Flickerless setting	
Environment condition	TV video type	
	Electric frequency	
	Local lighting condition	
Other details you find during clarification		

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.

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 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.

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Software model		
Software version		
Network connection	Connection (LAN or WAN or cross-over)	
PC spec	CPU	
	RAM	
	Motherboard FSB	
	VGA card	
	Register port	
Other details		

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)

Item	Description
Bit rate	
Protocol Type (TCP1.0 or TCP2.0)*	
Number of connections	

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

Example:

Item	Description
Bit rate	3M
Protocol Type (TCP1.0 or TCP2.0)	1
Number of connections	2

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.

Bit rate	Protocol type	
	TCP1.0	TCP2.0
3M	1	2
1.5M	3	6
750K	6	12

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

Connection Type	Mosaic	Normal
Previous network	●	
Cross-over		●

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.

Item	Description
Bit rate	3M
Protocol Type (TCP1.0 or TCP2.0)	1
Number of	2

connections	

Connection Type	Mosaic	Normal
Previous network	●	
Cross-over		●

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 to 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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server	Bit rate	
	Protocol type	
	Gateway	
Software	Number of con-current user	
Network	Network diagram	

deployment	Respective setting of switch / routers.	

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

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.

No	Test result		Action	
	Image clear	Noises	AGC setting	Enhance local lighting
1	Yes		OFF	
2	Yes	Yes	ON	Yes
3		Yes	ON	Yes

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Analog Video	AGC setting	
	Day/Night setting (If the camera supports)	
Environment	Lighting condition	
Others information you find during test		

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Software model		
Software version		
Video Server	A snapshot of analog image	
Software	Video clip of the digital images	

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.

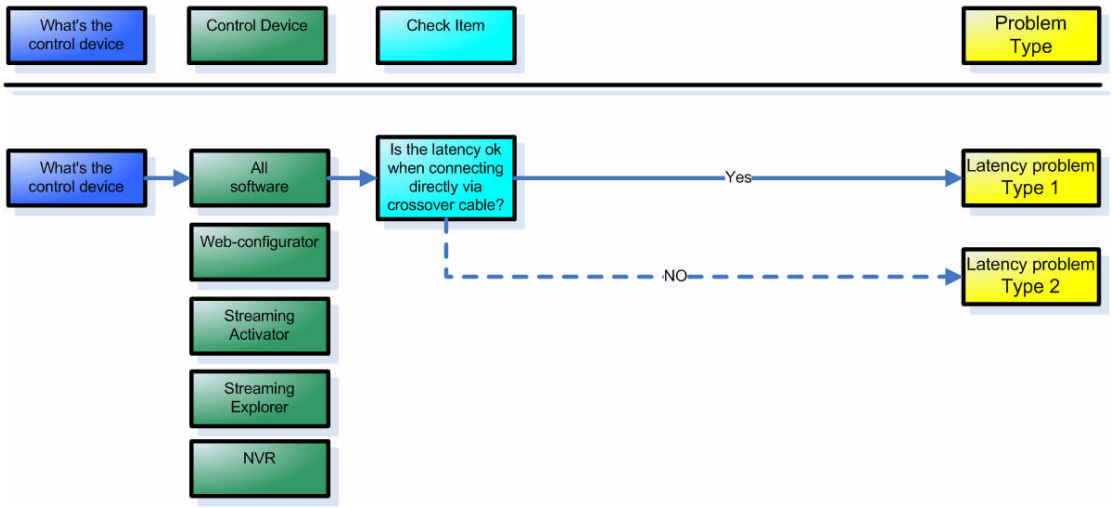
8-1 Find out the possible cause

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.

	Check Item	Remark
Step1	Check the Control Device	
Step2	Is the latency ok when connected directly via cross-over cable?	Please refer to appendix A for how to test latency.

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)

Item	Description
Bit rate	
Protocol Type (TCP1.0 or TCP2.0)*	
Number of connections	

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

Example:

Item	Description
Bit rate	3M
Protocol Type (TCP1.0 or TCP2.0)	1
Number of connections	2

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.

Bit rate	Protocol type	
	TCP1.0	TCP2.0
3M	1	2
1.5M	3	6
750K	6	12

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

Connection Type	Latency	Normal
Previous network	●	
Cross-over		●

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.

Item	Description
Bit rate	3M
Protocol Type (TCP1.0 or TCP2.0)	1
Number of	2

connections	

Connection Type	Latency	Normal
Previous network	●	
Cross-over		●

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 to solution. Thus, please ask your MIS or the one build up 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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server	Bit rate	
	Protocol type	
	Gateway	
Software	Number of con-current user	
Network	Network diagram	

deployment	Respective setting of switch / routers.	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Software model		
Software version		
Network connection	Connection (LAN or WAN or cross-over)	
PC spec	CPU	
	RAM	
	Motherboard FSB	
	VGA card	
	PC network card	
Other details you find during clarification		

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)

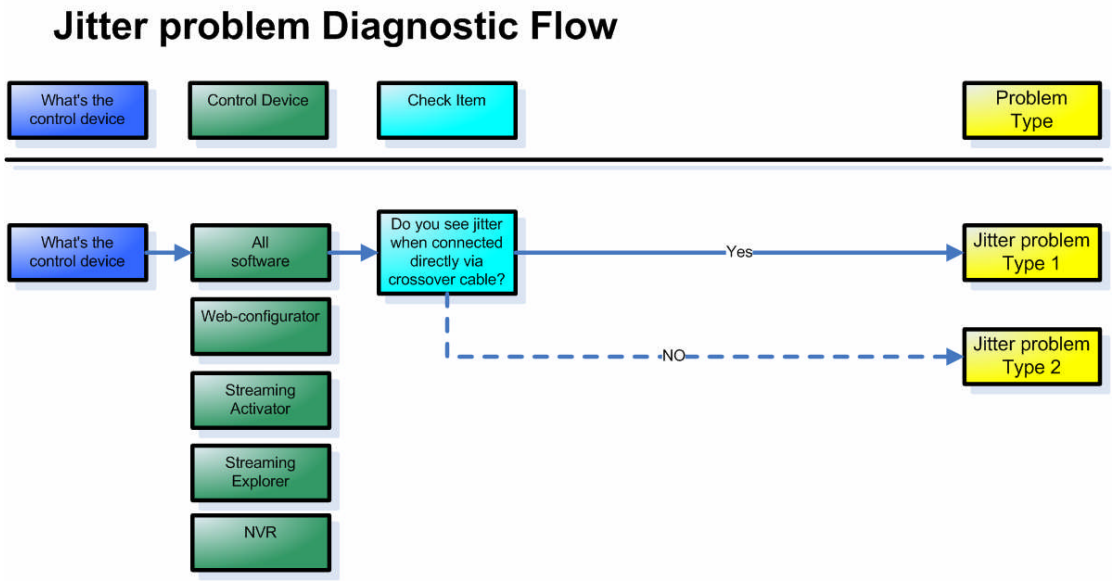
We will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

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.

	Check Item	Remark
Step1	Check the Control Device	
Step2	Do you see the video jitter when connected directly via cross-over cable?	



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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
Software model		
Software version		
Network connection	Connection (LAN or WAN or cross-over)	
PC spec	CPU	
	RAM	
	Motherboard FSB	
	VGA card	
	PC network card	
Other details you find during clarification		

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)

Item	Description
Bit rate	
Protocol Type (TCP1.0 or TCP2.0)*	
Number of connections	

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

Example:

Item	Description
Bit rate	3M
Protocol Type (TCP1.0 or TCP2.0)	1
Number of connections	2

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.

Bit rate	Protocol type	
	TCP1.0	TCP2.0
3M	1	2
1.5M	3	6
750K	6	12

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

Connection Type	Jitter	Normal
Previous network	●	
Cross-over		●

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.

Item	Description
Bit rate	3M
Protocol Type (TCP1.0 or TCP2.0)	1
Number of connections	2

Connection Type	Jitter	Normal
Previous network	●	
Cross-over		●

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

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

Solution:

2. Because the network involves too many issues, it's very hard for ACTi to provide you to solution. Thus, please ask your MIS or the one build 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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server	Bit rate	
	Protocol type	
	Gateway	
Software	Number of con-current user	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.)

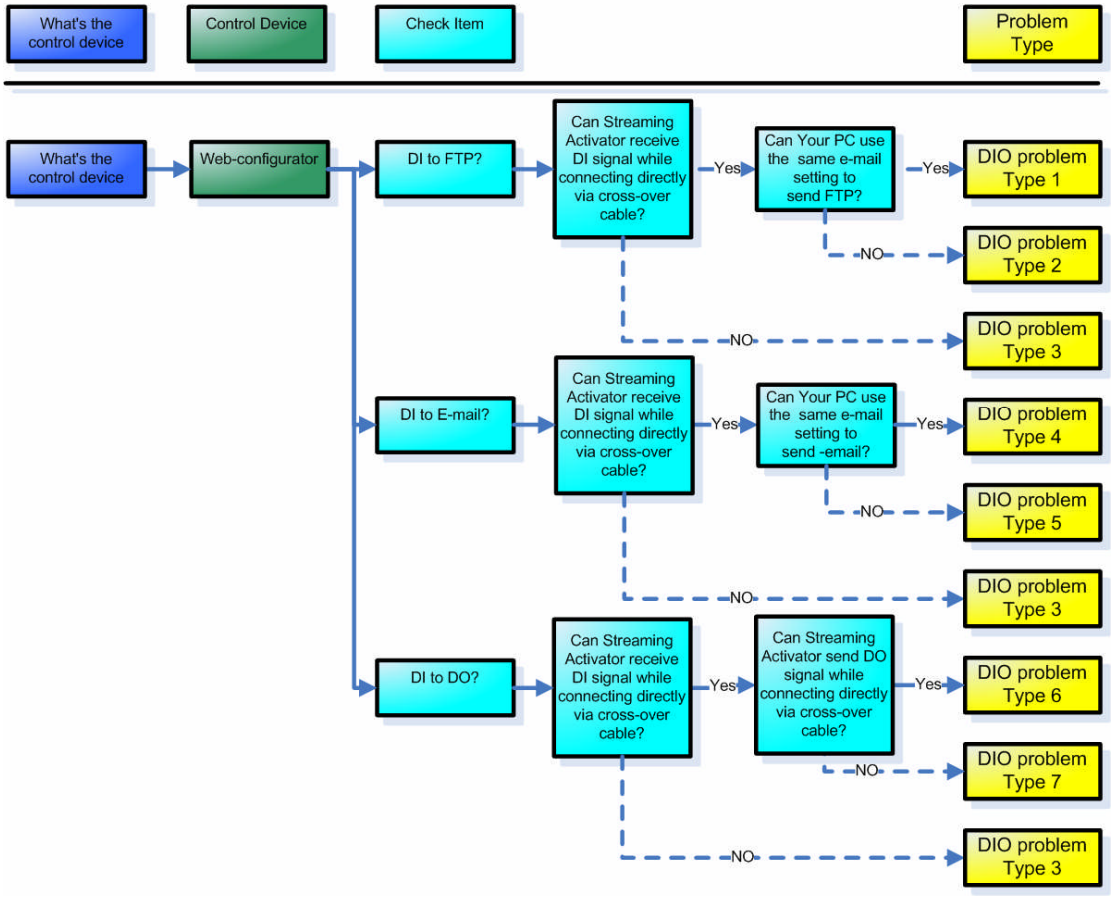
We will provide a diagnostic flow for customer to find out his problem type within this problem category. Then we will examine the possible cause for each problem type and find out the root cause and respective solutions.

10-1 Find out the possible cause

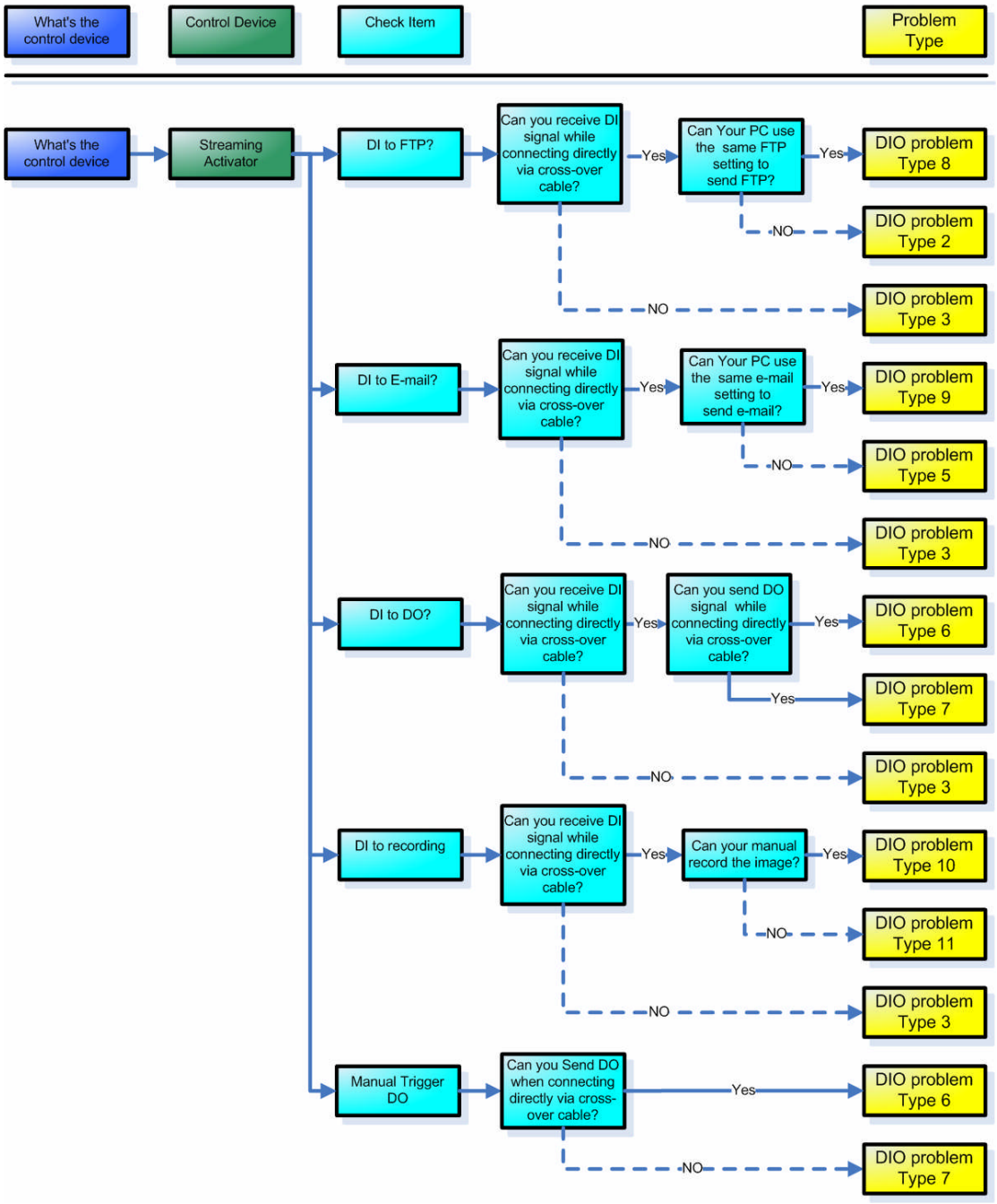
Please refer to the diagnostic flow to find out the problem type of the DI/O Problem. You can see a table right beside each problem type indicating which building block of the IP surveillance might cause the problem.
Then you can refer to next section for advanced clarification and troubleshooting.

	Check Item	Remark
Step1	Check the Control Device	
Step2	What DI/DO function do you have problem with?	
Step3	Can Streaming Activator Receive DI signal while connecting directly via cross-over cable?	Operation procedure will be added in next version
Step4	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?	Operation procedure will be added in next version

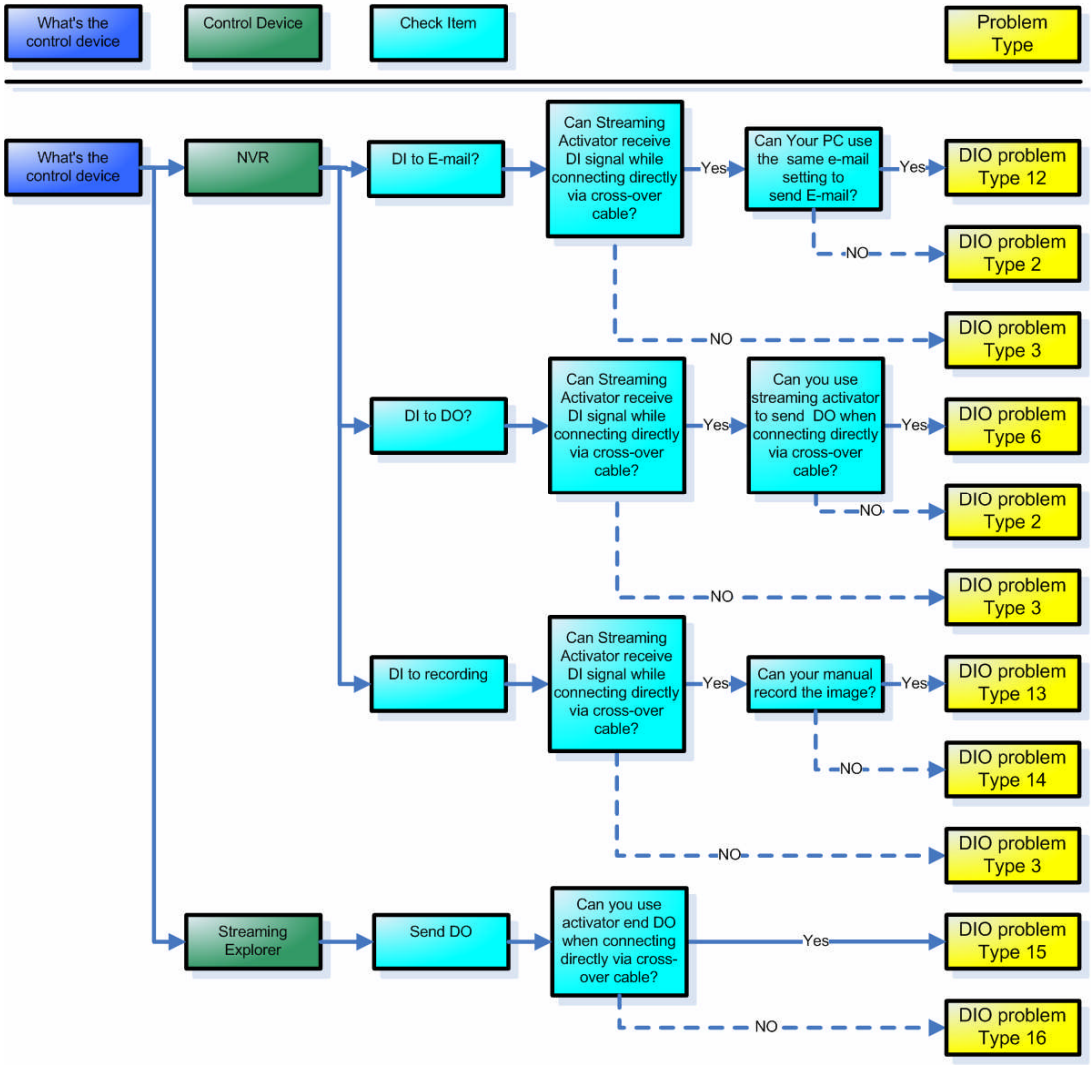
DI/O problem Diagnostic Flow-1 (Web-Configurator)



DI/O problem Diagnostic Flow-2 (Streaming Activator)



DI/O problem Diagnostic Flow-3 (NVR, Streaming Explorer)



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

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	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video server event setting	FTP setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

Category	Sub-category	Settings
FTP server	Server PC	
	Other	
FTP Client	Server IP	
	Account	
	Password	
	File Path	
	Other	

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).

10-3.2.1 Problem feedback table

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video server event setting	FTP setting	
	Event action	
FTP server	Server PC	
	Other	
FTP Client	Server IP	
	Account	
	Password	
	File Path	
	Other	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Software model		
Software version		
DI	DI device spec	
	DI connection diagram	
Other data you find during clarification	Server PC	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	

Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video server event setting	E-mail Client setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

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.

Category	Sub-category	Settings
e-mail server	Server PC	
	Other	
e-mail Client	Server IP	
	Account	
	Password	
	File Path	
	Other	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video server event setting	FTP setting	
	Event action	
e-mail server	Server PC	
	Other	
e-mail Client	Server IP	
	Account	
	Password	
	File Path	
	Other	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video server event setting	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Software model		
Software version		
DO	DO device spec	
	DO connection diagram	
Other data you find during	Server PC	

clarification		

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
DIO signal	Yes	No	Control	

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	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Streaming Activator event	Version	
	FTP setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
DIO signal	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Streaming Activator event	Version	
	E-mail setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
DIO signal	Yes	No	Control	

3. Please provide the definition table above to your MIS or your network architect for this problem. Ask him for solution.

10-11.1.2 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	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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) 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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	

Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Streaming Activator event	Version	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
DIO signal	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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) 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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
NVR event	Version	
	FTP setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
DIO signal	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

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	

	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
NVR event	Version	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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

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)	

10-16 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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
DIO signal	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Streaming Explorer	Version	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

Function	Respective network ports		Web-configurator	Streaming Explorer
	Port name	Port number (Default)		
Login	HTTP	80		
View image	HTTP	80		
	Register	6000		
	Streaming	6002		
DIO signal	Control	6001		

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Web-configurator	HTTP port	
	Streaming Port	
	Control port	
Software model	model	
	Software version	
	HTTP port	
	Streaming Port	
	Control port	
DO	DO device spec	
	DO connection diagram	
Other data you find during clarification	Server PC	

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.

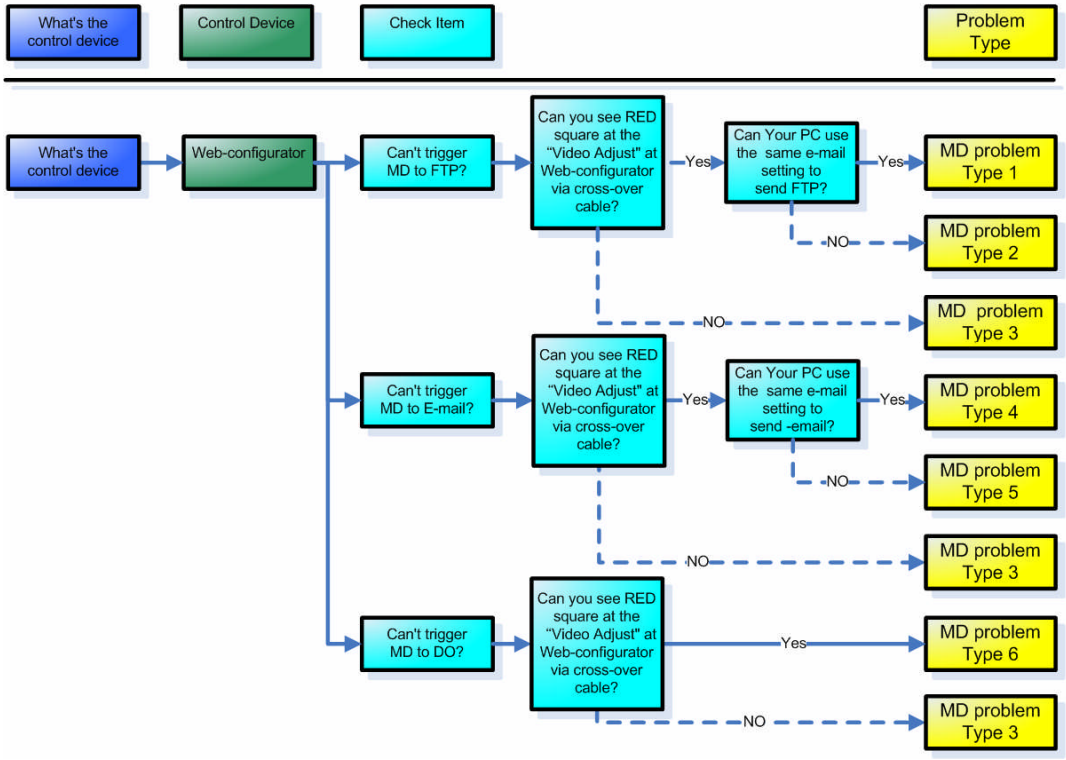
We have two diagnostic flows for different kinds MD problem. Please refer to the diagnostic flow to find the and refer to next section for possible cause clarification and solutions.

11-1-1 No event MD problem diagnostic flow

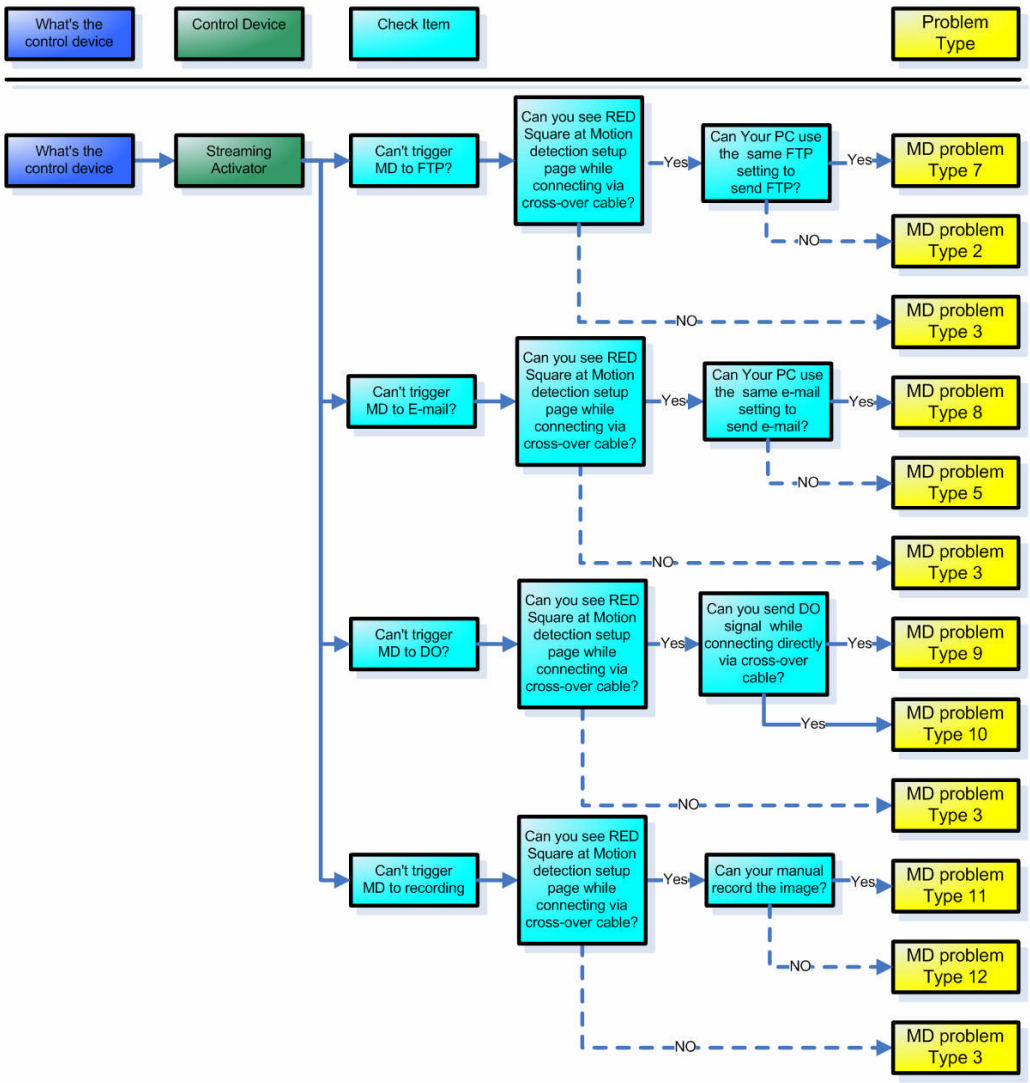
	Check Item	Remark
Step1	Check the Control Device	
Step2	What MD function do you have problem with?	
Step3	(Web-Configurator) Can you see RED square at the "Video Adjust" on the web-configurator?	Detailed procedure will be added in next version
	(Streaming Activator) Can you see RED square at Motion Detection setup page while connecting directly via cross-over cable?	Detailed procedure will be added in next version
	(NVR) Can you see RED square at the "Video Adjust" on the web-configurator?	Detailed procedure will be added in next version

Step4	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

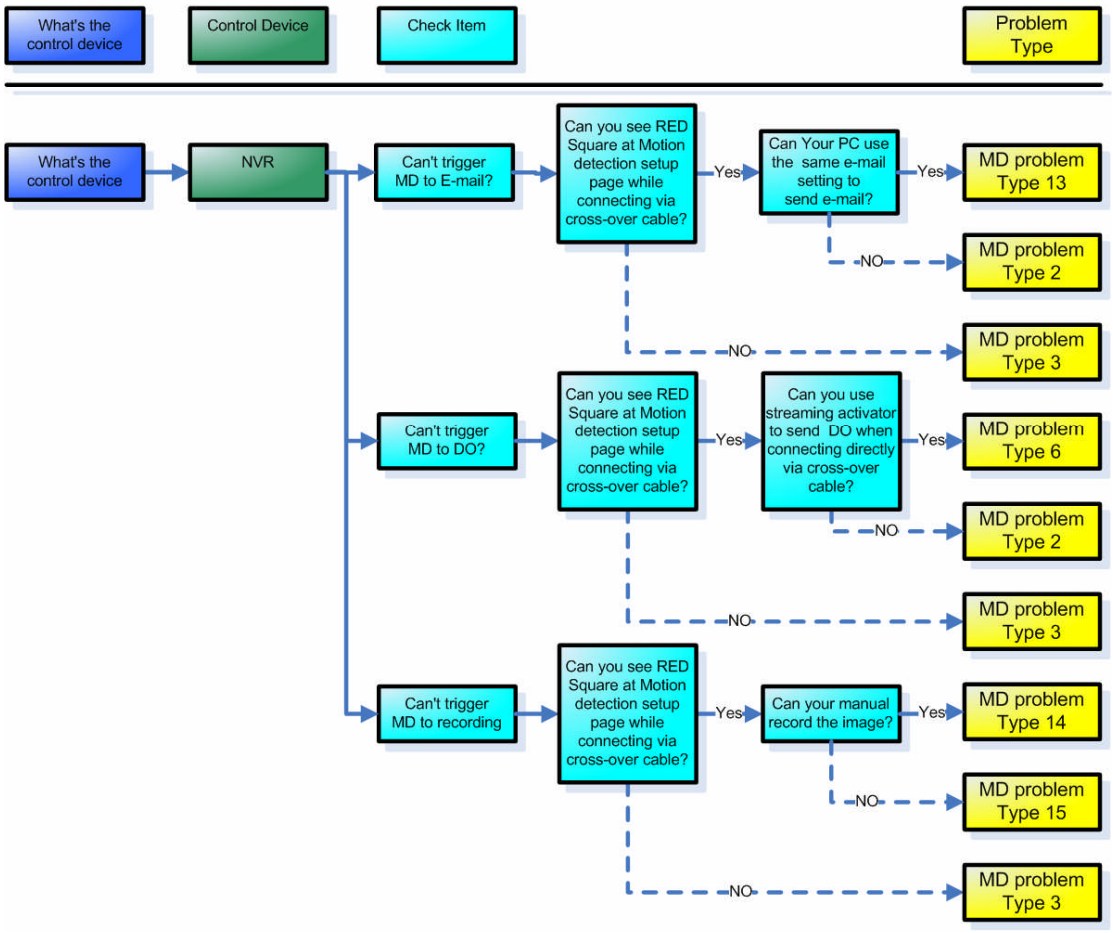
No Event MD problem Diagnostic Flow-1 (Web-Configurator)



No Event MD problem Diagnostic Flow-2 (Streaming Activator)



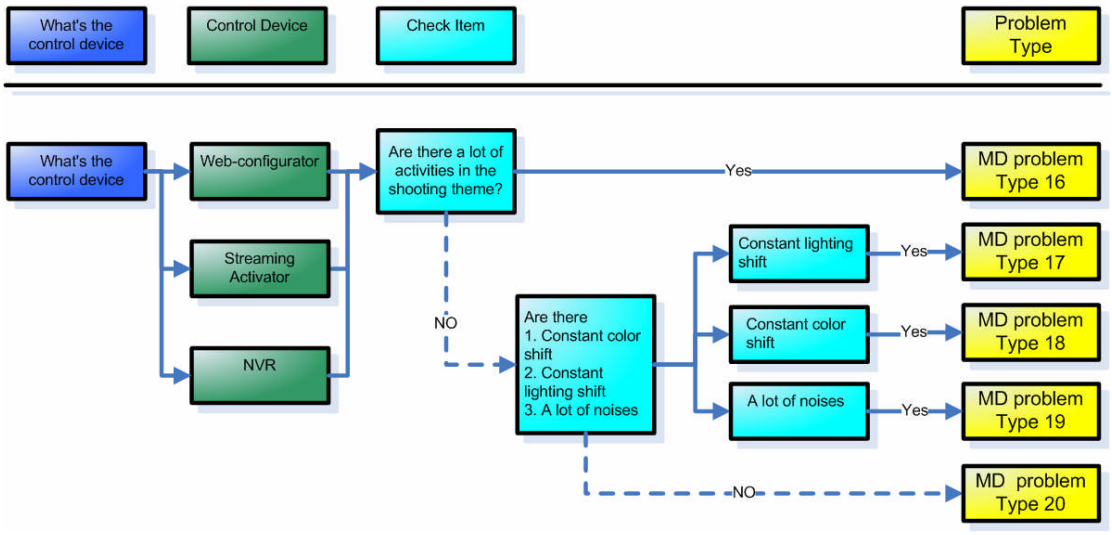
No Event MD problem Diagnostic Flow-3 (NVR)



11-1-2 False alarm MD problem diagnostic flow

	Check Item	Remark
Step1	Check the Control Device	
Step2	Are there a lot of activities in the shooting theme?	
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)



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

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	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video server event setting	FTP setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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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.

Category	Sub-category	Settings
FTP server	Server PC	
	Other	
FTP Client	Server IP	
	Account	
	Password	
	File Path	
	Other	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video server event setting	FTP setting	
	Event action	
FTP server	Server PC	
	Other	
FTP Client	Server IP	
	Account	
	Password	
	File Path	
	Other	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server MD setting	How do you set?	
	What do you see after you set it?	
Other information you find during clarification		

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	

Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video server event setting	E-mail setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

Category	Sub-category	Settings
E-MAIL server	Server PC	
	Other	
E-MAIL Client	Server IP	
	Account	
	Password	
	File Path	
	Other	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video server event setting	E-MAIL setting	
	Event action	
E-MAIL server	Server PC	
	Other	
E-MAIL Client	Server IP	
	Account	
	Password	
	File Path	
	Other	

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

contact).

11-7.2.1 Problem feedback table

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Software model		
Software version		
DO	DO device spec	
	DO connection diagram	
Other data you find during clarification	Server PC	

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
MD signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
MD signal	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
MD signal	Yes	No	Control	6001

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) 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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Streaming Activator event	Version	
	FTP setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
MD signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
MD signal	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
MD signal	Yes	No	Control	6001

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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Streaming Activator event	Version	
	E-mail setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
MD signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
MD signal	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
MD signal	Yes	No	Control	6001

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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Streaming Activator event	Version	
	E-mail setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

11-11.1.1 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.

Function	Respective network ports		Web-configurator	Streaming Explorer
	Port name	Port number (Default)		
Login	HTTP	80		
View image	HTTP	80		
	Register	6000		
	Streaming	6002		
DIO signal	Control	6001		

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Web-configurator	HTTP port	
	Streaming Port	
	Control port	
Software model	model	
	Software version	
	HTTP port	
	Streaming Port	
	Control port	
DO	DO device spec	
	DO connection diagram	
Other data you find during clarification	Server PC	

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
DIO signal	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
MD signal	Yes	No	Control	6001

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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	

Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Streaming Activator event	Version	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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 your 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

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)	

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
DIO signal	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
MD signal	Yes	No	Control	6001

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) 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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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.

11-14-3 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).

11-14.3.1 Problem feedback table

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server LAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
NVR	Version	
	E-mail setting	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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.

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
View image	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
DIO signal	Yes	No	Control	6001

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

Function	Network environment		Respective network ports	
	Cross-over	LAN	Port name	Port number
Login	Yes	Yes	HTTP	
View image	Yes	Yes	HTTP	
			Register	
			Streaming	
DIO signal	Yes	No	Control	

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.

Network transmission check table	
Category	Sub-category
Video Server	Internet connectivity
	Port setting
Network	Port forwarding
	Firewall setting
PC	Internet connectivity

Clarification:

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

Function	Network environment		Respective network ports	
	Cross-over	WAN	Port name	Port number (Default)
Login	Yes	Yes	HTTP	80
Monitor	Yes	Yes	HTTP	80
			Register	6000
			Streaming	6002
MD signal	Yes	No	Control	6001

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.

Category	Description	Example:
Hardware Model number		SED-2120
Firmware version		A1D-V2.00.00
Software model		NVR
Software version		V1.00.00

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

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	

	Submask	
	Gateway	
Video Server WAN IP setting	Use it to connect?	
	IP address	
	Submask	
	Gateway	
NVR event	Version	
	Event action	
Network deployment	Network diagram	
	Respective setting of switch / routers.	

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 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".

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

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)	

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.

Environment	Indoor	Outdoor
Sensitivity	60~80	70~80

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Hard model	Model number	
Firmware	Firmware version	
MD setting		
Software	Model	
	Version	

	MD sensitivity	
Other details you find during clarification		

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

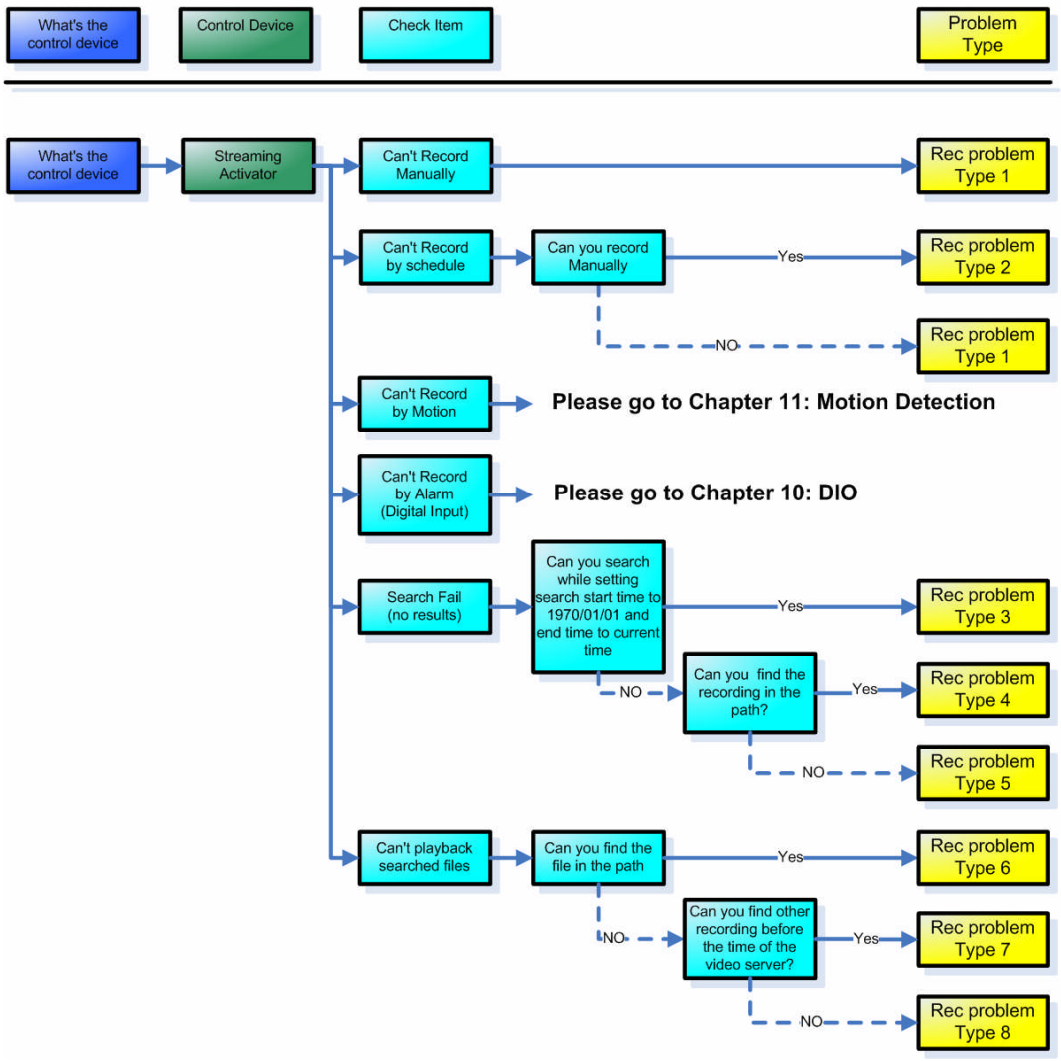
Please refer to the diagnostic flow to find out the problem type of the Login Problem.

Then you can refer to next section for advanced clarification and troubleshooting.

	Check Item	Remark
Step1	Check the Control Device	
Step2	What function do you have problem with?	
Step3	(Recording) Can you record manually?	Refer to software manual
	(Search fail) Can you search while setting search start time to 1970/01.01 and end time to current time?	Refer to software manual
	(Can't playback) Can you find the file in the path	Detailed procedure will be added in next version
Step4	Other advanced clarification related to each problem.	
	(Recording) Can you use streaming Activator to receive DI signal while connection to the devices via cross-over cable?	

	(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

Recording problem Diagnostic Flow -1 (Streaming Activator)



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 your 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

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)	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Software	Version	
	Schedule setting	
	MDB file (Software database)	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server Time setting	NTP?	
	Manual	
	Time zone	
Other things you find during clarification		

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	

Software	Version	
	Schedule setting	
	MDB file (Software database)	
	Information about the recording you wish to find	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Software	Version	
	Schedule setting	
	MDB file (Software database)	
	Information about the recording you wish to find	
HD	HD space	
Recording keep time		

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Software	Version	
	The recording file you wish to playback	

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 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".

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

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)	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Software	Version	
	Schedule setting	
	MDB file (Software database)	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Firmware	Firmware version	
Video Server Time setting	NTP?	
	Manual	
	Time zone	
Other things you find during clarification		

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	

Software	Version	
	Schedule setting	
	MDB file (Software database)	
	Information about the recording you wish to find	

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Software	Version	
	Schedule setting	
	MDB file (Software database)	
	Information about the recording you wish to find	
HD	HD space	
Recording keep time		

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

Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Software	Version	
	The recording file you wish to playback	

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.

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Problem feedback table of login problem 1		
Category	Sub-category	Description
Product model	Model number	
Software	Version	
	Your recording setup	
	Database	

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

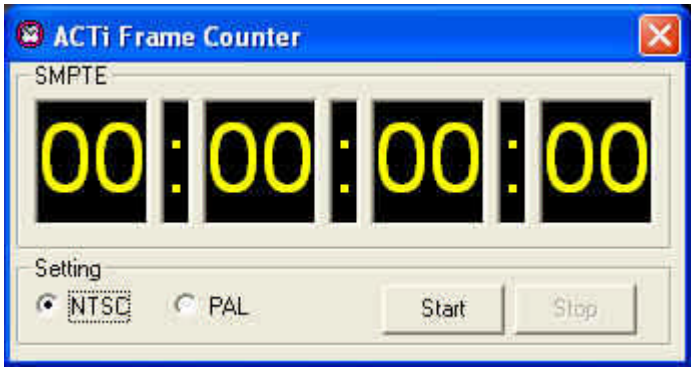
13-1.1.2 Unzip the file

A counter.exe appears.

13-1-2 B. Test procedure

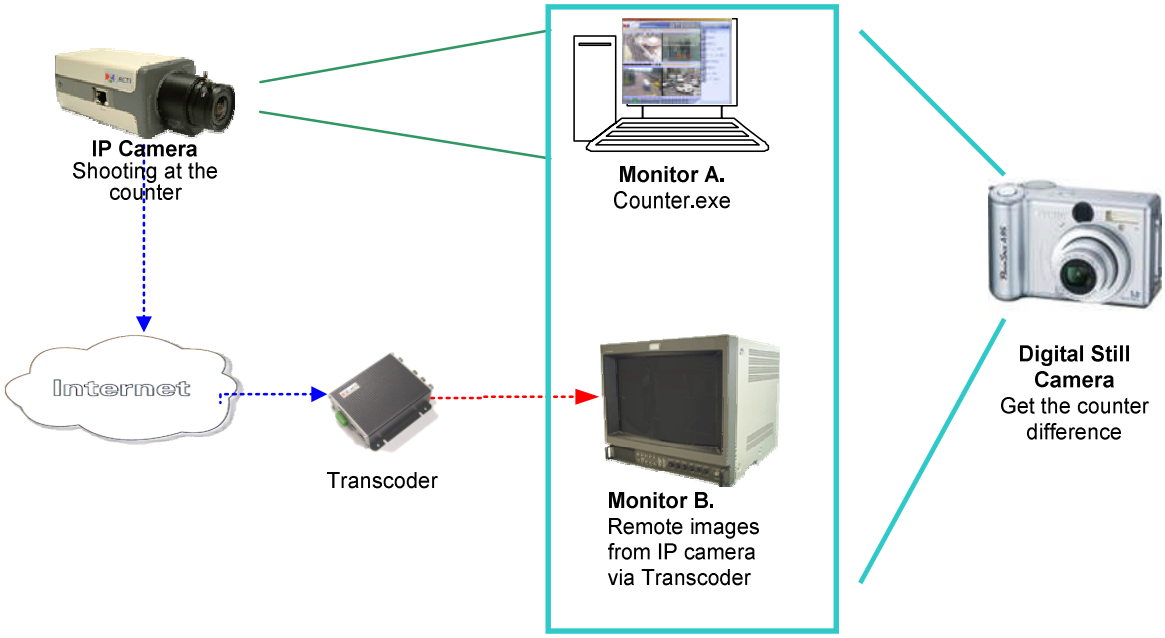
13-1.2.1 Execute the counter.exe

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.

Monitor B.
Images from IP camera via Transcoder

Monitor A.
Original images from counter window

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.

Latency (ms)	Protocol Type	
	TCP1.0	TCP2.0
NTSC	330~423	232~297

PAL	400~520	280~360