16 CHANNEL DIGITAL NETWORK SURVEILLANCE SYSTEM

Instruction Manual

English Version1.0



MODEL: QLR1660



www.lorexcctv.com

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IMPORTANT SAFEGUARDS AND WARNINGS

THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: THIS DEVICE MAY NOT NOTE HARMFULL INTERFERENCE, AND THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY NOTE UNDERSIRED OPERATION.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS UNIT TO RAIN OR MOISTURE.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

Operation of this equipment in a residential area is likely to cause harmful interference in which case that you will be required to correct the interference at one's own expense.

CAUTION: CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE PARTY RESPONSIBLE FOR COM PLIANCE COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.

Important Safety Instructions

1) Read & Retain Instructions

All the safety and operating instructions should be read before the appliance is operated.

The safety and operating instructions should be retained for future reference.

2) Heed Warnings

All warnings on the product and in the operating instructions should be adhered to.

3) Follow Instructions

All operating and use instructions should be followed.

4) Cleaning

Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning the unit. (Exception: A product that is meant for uninterrupted service and that for some specific reason, such as the possibility of the loss of an authorization code for a CATV converter, is not intended to be unplugged by the user for cleaning or any other purpose, may exclude the reference to unplugging the product in the cleaning description otherwise required in 5).

5) Attachments

Do not use attachments not recommended by the product manufacturer as they may cause hazards.

6) Water and Moisture

Do not use this product near water, for example near a bath tub, wash bowl, kitchen sink, or laundry tube in a wet basement or near a swimming pool and the like.

7) Accessories

Do not place this product on an unstable cart, stand, tripod, bracket or table.

The product may fall, causing serious injury to a child or adult, and serious damage to the product. Use only with a cart, stand, tripod, bracket or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.

8) Handling

A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

9) Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the product and to protect it from overheating and these openings must not be blocked or covered.

Placing the product on a bed, sofa, rug or other similar surface, should never block the openings. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.

10) Overloading

Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

11) Object and Liquid Entry

Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the receiver.

12) Servicina

Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous volt-age or other hazards. Refer all servicing to qualified service personnel.

13) Heat

The product should be situated away from heat sources such as radiators, heat registers, stoves, or other products (including amplifiers) that produce heat.

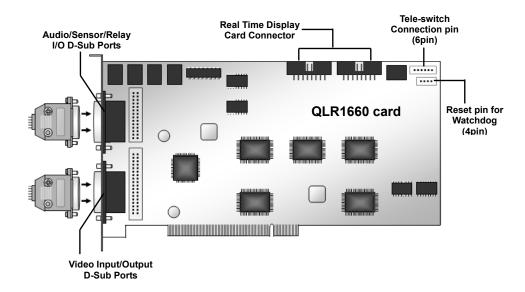
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[NOTE] The default ID and password of administrator for **Server** program are 'admin' and 'master'. The default password for **Client** program is '1111'.

SECTION 1 - PRODUCT INFORMATION

1. Video Capture Card Specifications



| Product | Video Card | Video Input | Recording Rate (NTSC / PAL) | Audio Input | Sensor Input | Relay Output | Resolution |
|-----------|------------|-------------|--------------------------------|----------------|-----------------|-----------------|-------------------------------|
| QLR1660 | 1 card | 4, 8, 16 | 120 / 100 | 4 | 8 | 4 | 320x240 640x240 640x480 |
| QLR1660-2 | 2 SD cards | 8, 16 | 240 / 200 | 8 | 16 | 8 | |

^{*} Recording Rate is the maximum frame rate in case of 320x240 resolution.

IO boar

2. System Requirement

| | QLR1660 | QLR1660-2 | | |
|--------|-------------------------------|-----------------------|--|--|
| os | Windows 98SE / ME / 2000 / XP | | | |
| CPU | P-IV 1.6GHz or higher | P-IV 3.0GHz or higher | | |
| Memory | more than 256MB | | | |
| HDD | 5Gbyte or higher | | | |
| VGA | 32MB or higher * | | | |

^{*} Recommended VGA: RIVA TNT 2, GeForce2 MX 100/200, GeForce2 MX 400, ATI XPERT 2000 Pro, ATI RADEON 7200

[NOTE] You should use the VGA card with Hardware Acceleration function.

3. Package Contents

Your QLR1660 package includes the following:

- ◆ 1/2 Video Card(s) for QLR1660
- QLR1660 Software CD (Including Driver, Application Software, and User Manual)
- QLR1660 User Manual
- ◆ 26-pin D-sub type Video Input/Output Cable and 26-pin D-sub type I/O connection Cable

QLR1660 is designed with applying Original Certification System Code to prevent unauthorized Copy. Video
 Capture card is also designed to operate after its authorized approval code is matched with Software program.

^{*} A Standalone Grapics card (not integrated with the Motherboard) is essential for the correct functioning of the QLR1660 system. If you are unsure of your specific PC configuration, please refer to your hardware vendor for more information.

SECTION 2 - INSTALLATION INSTRUCTIONS

1. QLR1660 Hardware Installations

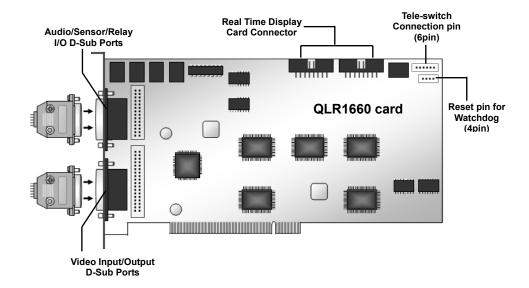
[NOTE] Before installing the video capture card, turn off the computer's power, unplug the power cable and disconnect all other cables attached to the back of the computer.

1.1 Video Capture Card Installation

1.1.1 QLR1660 Installation

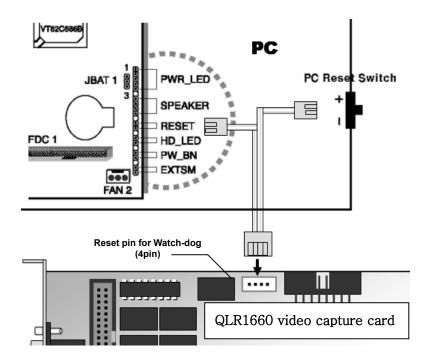
The QLR1660 uses a PCI interfaced video capture card that supports to 4, 8, 16 ports.

- 1. Remove the computer cover.
- 2. Insert the QLR1660 video capture card into the available PCI expansion slot.
- 3. Replace the computer cover and reconnect all cables.
- 4. Turn on the computer power. Windows will automatically detect the existing (QLR1660) card.
- 5. Now insert the CD and install the driver for QLR1660. (Refer to II-2. QLR1660 Driver Installation)



1.1.5 Watch-dog Installation for QLR1660

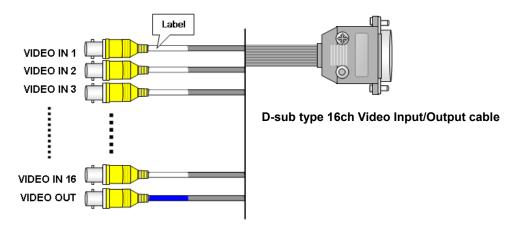
If the system is stopped by abnormal operation, watchdog will automatically reboot the computer. The watchdog will restart the computer automatically if it did not receive any response from the system for more than 5 minutes. Each QLR1660 video capture card has a Reset pin (4pin) for watch-dog. It should be connected to the motherboard's reset jumper and computer's reset switch. Your motherboards' RESET pin position might be different from the illustration below. Please refer to your motherboard user manual for the actual



[NOTE] In case QLR1660-2 with two video capture cards, the cable should be connected to the reset pin (4pin) for watch-dog of master card among two cards. Master card is that card is inserted in slot located near to VGA card slot.

1.2 Camera Installation

Cameras must be attached to the BNC connectors of the D-sub type video input/output cable connected to the video capture cards in a specific order to avoid transmission problems. Cameras need to be installed according to the numerical order marked on the BNC connector. Whether you use 4, 8 or 16 video input cables for 4, 8 or 16 channels system, the pattern is the same - cameras will be installed to the numerical order marked on the BNC connector. (For P/T/Z camera installation, refer to VI-1. Pan/Tilt/Zoom Camera Installation)

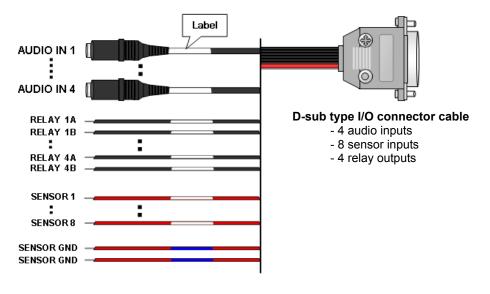


[REFERENCE] Video Output is connected to CCTV monitor for spot and only 'channel 1' is displayed into monitor.

1.3 Audio & External Sensor/Relay Installation

Each system can come with D-sub type 26-pin I/O connector cable enabling user to connect audio inputs and sensor inputs and relay outputs.

Audios, sensors and relays need to be connected according to the numerical order marked on the cable. Whether you use various I/O connector cables for 4, 8 or 16 channels system, the pattern is the same. (For detail sensor/relay installation, refer to VI-2. External Sensor and Relay Installation)



2. QLR1660 Driver Installations

- : Applied only to the QLR1660 Server Installation
- * The screenshots shown below are taken from Windows XP and may vary slightly depending the Operating System
- 1) When you boot your computer after you have inserted the QLR1660 cards to the PCI slot, Windows will automatically detect the existing card and the following message dialog appears automatically.

 The first time you install the video card. Insert the QLR1660 Software CD and select Install from a list or specific location (Advanced). Click the Next button.



2) Ensure that the driver CD is in the drive and select Search removable media. Click Next to continue



3) The system will then find the video driver in the Software CD. Select the driver for your QLR1660 card from the list. Click also **Next** button here.



- > Video driver for QLR1660, QLR1660-2: "WJ2160 Video Capture Device Ver5.0"
- 4) When the driver is located, the below screen will be shown. Click the Continue Anyway button to proceed.



5) After the video driver installation finished, click the **Finish** button.



6) You need to continue installing the audio driver. Select **Install the software automatically (Recommended)** and click the **Next** button.



> Audio driver for QLR1660, QLR1660-2: "WJ2160 Audio Capture Device Ver5.0"

8) When the driver is located, the below screen will be shown. Click the Continue Anyway button to proceed.



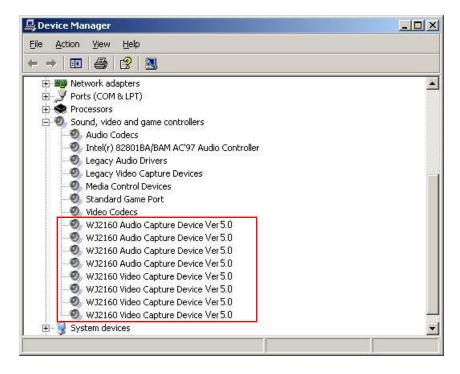
9) After the audio driver installation finished, click the Finish button.



For QLR1660 you are asked to repeat the procedures 4 times and for QLR1660-2, 8 times.

- Video driver for QLR1660, QLR1660-2: "WJ2160 Video Capture Device Ver5.0" ➤ Audio driver for QLR1660, QLR1660-2: "WJ2160 Audio Capture Device Ver5.0"

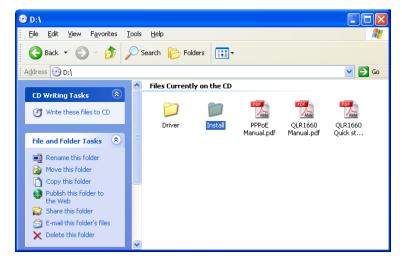
If you have installed QLR1660, you will find the system's device manager looking like the following figure.

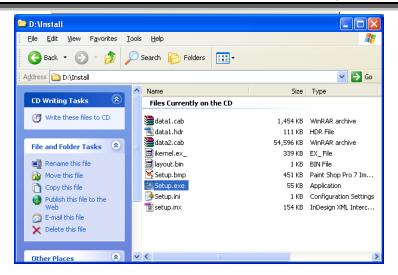


3. QLR1660 Software Installations (Server, Client, Search)

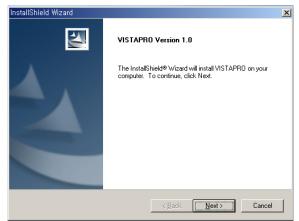
[NOTE] You will need the product's serial number to complete the installation of the software. The serial number may be found on the CD-ROM.

1) Begin the software installation by double-clicking the **Setup.exe** icon in **Install** directory on the provided CD.

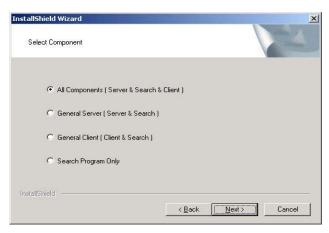




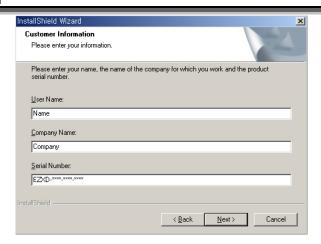
2) In "VISTAPRO Version 1.0" dialog, click the Next button.



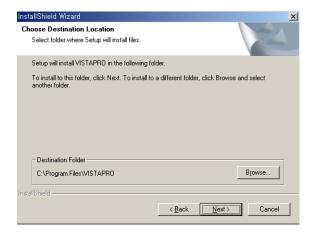
3) "Select Component" dialog appears. Choose one among 4 options that you want to install. Click Next button.



4) "Customer Information" dialog appears. Enter your (or your company's) name and the product Serial Number. Click **Next** button.



5) "Choose Destination Location" dialog appears. Select folder where Setup will install files. Click Next button.

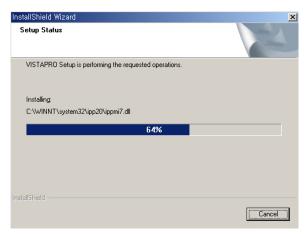


[CUASE] The default installation directory is C:\Program Files\VISTAPRO. When install is complete the following icons will be displayed on the desktop

6) "Select Program Folder" dialog appears. Choose a program folder name for this QLR1660 server system and click **Next** button.



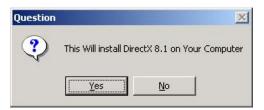
7) "Start Copying Files" dialog appears. Click the Next button.



8) If installing the files is finished, you choose whether or not register the QLR1660 Server on Startup Menu.



9) After this, if the following dialog appears, click the Yes button here.

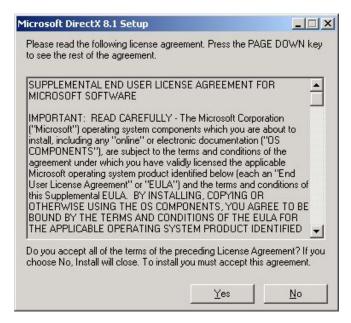


[REFERENCE] If DirectX 8.1 software is already installed, it is installation procedure of from (9) to (12) will be omitted.

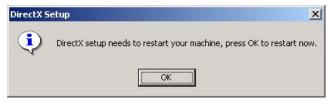
10) Click also Yes button here.



11) Click also Yes button here.



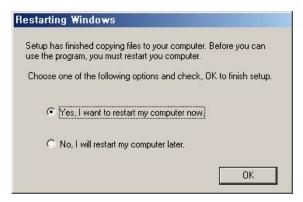
12) Click OK button. Now you have successfully installed the DirectX8.1 for QLR1660 system.



[REFERENCE] If DirectX 8.1 software is first installed, your computer with Windows 98 or ME will be restarted.

13) Before you use this QLR1660 program, must restart your computer.

Choose Yes, I want to restart my computer now and click OK button to finish setup.



14) After a moment, computer restarts and operates the QLR1660 Server system. And QLR1660 server will be displayed automatically on the main screen.



SECTION 3 - HOW TO USE QLR1660 SERVER

1. Main Interface Window

When entering the Server Program, the main interface screen will open as shown below. There are several view modes for efficient monitoring such as single channel, division screen (multi channel), and auto rotation view modes.

Launch the QLR1660 Server program by double-clicking the QLR1660 Server icon (_



) on the desktop.



■ Minimize button



Click to minimize the screen to the taskbar.

■ System Status

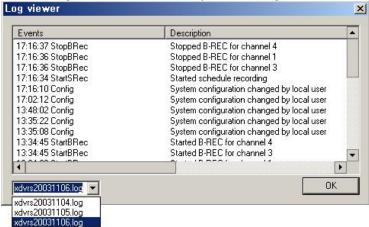


▶ Date and Time Status Display (Current)

- ► HDD Storage Status (% Used)
 - : The Recycle HDD icon (is shown if in overwrite mode.
- ► Client Connection Status
 - : Displays the Client connection status. By double-clicking mouse here, you can see clients connected. And, you can disconnect the clients using the administrator password. [NOTE] The default password of administrator is 'master'.



- ▶ Log View
 - : Shows event logs. You can see the details by double-clicking mouse on the viewer.



You can see the log list by day because of saving list daily.

The operation information of start/end system, connection/disconnection, changing system configuration, start/stop recording, etc. is recorded with time.

■ Setup button



Click here to enter the Setup Mode.

[NOTE] The default ID and password of administrator are 'admin' and 'master'.

■ Search button



Click here to enter the Search mode.

You can search recordings by camera number, date, time and event. **[NOTE]** The default ID and password of administrator are 'admin' and 'master'.

■ Shutdown button



Click this button to shutdown the main server application. [NOTE] The default ID and password of administrator are 'admin' and 'master'

■ Relay On buttons



If you click 'RELAY' tap, the relay on buttons appear.

 Clicking these buttons will activate the corresponding external relay outputs.

(Refer to 'SECTION 3-2-6. Speaker, Relay out Setup' and 'Appendix-2. External Sensor and Relay Installation'.)

■ Pan/Tilt/Zoom Control buttons



If you click 'PTZ' tap, the Pan/Tilt/Zoom control buttons appear.

- The following controls are available:
- Camera Selection to control Pan/Tilt/Zoom/Focus
- Tilt up/down (▲/▼)
- Pan left/right (◄/►)
- Zoom in/out (+/-)
- Focus in/out (+/-)
- Auxiliary (1,2,3)

(Refer to 'Appendix -1.Pan/Tilt/Zoom Camera Installation'.)

■ Color Control buttons



Clicking the 'Color' tab brings up the picture adjustment controls.

 You are able to control the brightness, contrast, hue and saturation of the video image.

Audio Speaker(On/Off) / Volume Control buttons



Use for full-duplex audio communication with the QLR1660 Client system.

- Clicking the speaker button enables you to listen to the sound that is transmitted from the connected QLR1660 Client.
- Control the volume by moving the volume control button.

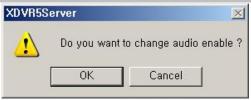
[NOTE] For full-duplex audio communication with the QLR1660 Client system, the amplified microphone has to be connected to QLR1660 card and an audio that microphone is connected actually has to be enabled at 'Audio recording and transferring' in System setup panel.

*Calling Message Window

: If the QLR1660 client tries to audio-communicate using 'Call' button (Eall), the 'Calling message' window is displayed as below.



If you click 'OK', the below window is displayed.



If you click 'OK', the audio setup of the QLR1660 Server program is enabled.

- Audio Speaker button: On
- Audio recording and transferring: audio buttons are enabled

Recording On/Off buttons



- ► Schedule Recording button (
 - : You can enable Schedule Recording according to Setup by clicking the 'Schedule Rec.' button.

[NOTE] If 'Schedule Rec.' button is off, all kind of recording (video and audio) components configured in the Setup mode are disabled

- ► Group buttons (A,B)
 - : By clicking each group button (A,B), displays 8 channel recording buttons belongs to each group
- ► Channel Recording buttons (1~16)
 - : Using these buttons, you are able to record each channel by clicking the desired channel. The Continuous record icon () will be displayed on the camera screen.

■ Channel Select buttons



- ► Group buttons (A,B)
 - : By clicking each group button (A,B), displays 8 channel select buttons belongs to each group
- ► Channel Select buttons (1~16)
 - : You are able to display each channel in the one-channel mode by clicking buttons
- ▶ Screen division buttons
 - : You can see the screen by various division modes of 1,4,6,9,10,13,16 channels with these buttons.
 - **2** 0
 - One channel screen (1-channel display)
- 4-division screen (4-channels display)
- : Four 4-division screens of A(1~4ch), B(5~8ch), C(9~12ch), D(13~16ch) are alternated by clicking.
- *By double-clicking a channel on the screen, One channel screen of the channel and 4-division screen are changed alternately.
- .
- 6-division screen (6-channels display)
- : Three 6-division screens of A(1~6ch), B(6~11ch), C(11~16ch) are alternated by clicking
- *By double-clicking a small channel on the screen, the channel are displayed on the left large screen.

- .
- 9-division screen (9-channels display)
- : Two 9-division screens of A(1~9ch), B(8~16ch) are alternated by clicking
- *By double-clicking a channel on the screen, One channel screen of the channel and 9-division screen are changed alternately.
- - 10-division screen (10-channels display)
 - : Two 10-division screens of A(1~10ch), B(7~16ch) are alternated by clicking
 - *By double-clicking a small channel on the screen, the channel are displayed on the above large screen.
- 13-division screen (13-channels display)
- : Two 13-division screens of A(1~13ch), B(4~16ch) are alternated by clicking
- *By double-clicking a small channel on the screen, the channel are displayed on the middle large screen.
- . |
 - 16-division screen (16-channels display)
 - : 16-division screen of **1~16ch** is displayed by clicking
 - *By double-clicking a channel on the screen, One channel screen of the channel and 16-division screen are changed alternately.
- ► Rotation button (
- : You can see channels by rotating according to auto switching interval time in Setup.
- Full Screen Mode Click the right mouse button on the screen to change to full screen mode. To convert back to the regular screen, click the right mouse button again.

2. Local Setup Mode

This section discusses the system setup mode of QLR1660 Server. In the setup mode, some dialogs will be displayed for the system configuration including the changing passwords, scheduling recordings, programming motion detection, and so on

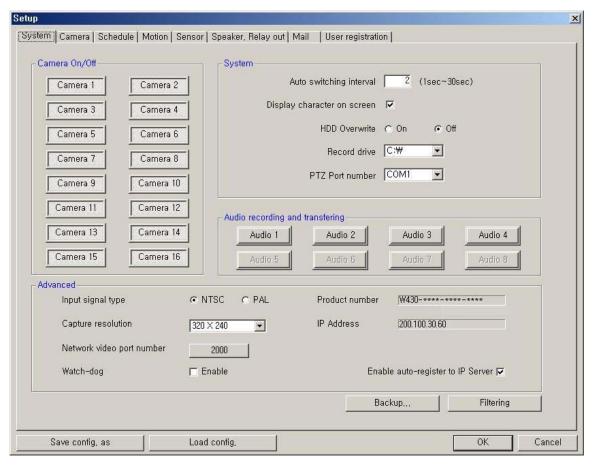
Click the Setup button () from the main application window to enter the setup mode. You will be prompted to enter your User ID and Password before proceeding to Setup mode.



- * In the setup mode, the following two buttons are displayed. (These buttons is privileged only to administrator.)
 - Save configuration as: You can save the current system configuration to a data file of CBF (Config Backup File) format.
 - Load configuration: You can load the system configuration from a data file of CBF format.

[NOTE] The default ID and password of administrator are 'admin' and 'master'. You can change password of administrator at the 'User Registration' setup panel.

2-1. System Setup



- ▶ Camera On/Off: Enable / Disable each camera. (16cameras)
- System
 - Auto switching interval: Setup the interval time for the auto switching. All cameras will be displayed sequentially
 with this interval time.
- Display character on screen: Displays the information associated with each camera on screen.
 - *OSD (On Screen Display) menu:
 - Camera location: camera name set in Camera setup panel
 - Record mode set: Continuous record(), Motion record(), Sensor record(), Event record()
 - Motion: Detect ()
 - Sensor: Detect (
 - Audio set: Enable ()
 - Recording: in recording (R)
- HDD Overwrite: Enable the HDD to overwrite when full.
 - On: When the selected record drive is full (when free space is under 500MByte), the QLR1660 will begin
 overwriting the drive from the beginning.
 - Whenever free space is under 500MByte, the QLR1660 system creates the free space of 2.0Gbyte by erasing oldest data to save new recording data.
 - Off: When the selected record drive is full (when free space is under 500MByte), the QLR1660 will stop recording.
 - [NOTE] If recording is stopped, all recording buttons on main window are off and 'Suspend' message is displayed on the event log viewer. Get the new space for recording

- Record drive: Setup the drive used for recording.
- PTZ Port number: Select the COM Port that the PTZ camera will be connected to. (Refer to 'Appendix -1.Pan/Tilt/Zoom Camera Installation'.)

► Audio recording and transferring

- Enable / Disable each audio to be recorded and transferred.
 - : If it enabled, you can record the Server's audio signal (entered from the audio cable connected to QLR1660 card of this computer) at the server computer. This audio will also be transferred to the QLR1660 Client is connected to.
- The audio is recorded with a video together in video-recording file of the camera
- : Audio inputs are associated to channels in numerical order.
- Namely, each 8 audio input is associated to 8 channels in numerical order and recorded in video-recording file of each channel. (audio1/channel1, audio2/channel2, audio3/channel3, audio4/channel4, audio5/channel5, audio6/channel6, audio7/channel7, audio8/channel8)
- <ex.> The case which uses 16 channel program, when the audio input of 4 comes in, the audio is associated to channel in the order of number the audio 1 is recorded in channel 1, the audio 2 is recorded in channel 2, the audio 3 is recorded in channel 3, the audio 4 is recorded in channel 4.
- The Audio icon () will be displayed on the screen of the selected channel.
- In search mode, a white-line at timetable indicates an audio file is recorded.

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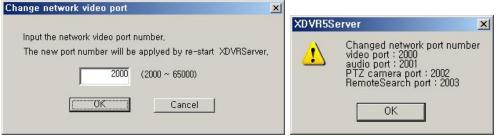
- Audio recording depends on the video recording of associated channel.
 Namely, the audio is only recorded when video is being recorded for the associated camera.
- 2. For full-duplex audio communication with the QLR1660 Client system, the amplified microphone has to be connected to QLR1660 card and the audio that microphone is connected actually must be enabled at 'Audio recording and transferring' in System setup panel

Advanced

- Input signal type: Setup the video signal type of connected cameras. (NTSC or PAL) All cameras should be the same type. This is applied only after you restart the QLR1660 Server program.
- Capture resolution: Setup the capture resolution of the input video signal. (Support 640*480, 640*240, 320*240)
- Network video port number: You can change the port number by clicking this button.

Input the new network video port number and click 'OK'.

The new port-numbers will be applied by re-starting QLR1660 Server program.



If you input the video port number to '2000', Port Numbers for Video and Audio and P/T/Z camera and Remote Search of QLR1660 Server will be each fixed to 2000 and 2001 and 2002 and 2003 automatically.

- [NOTE] 1. The video port number (2000) must be entered in the server registration section of the Client/Search.
 - In case that a Firewall is installed, these Ports must be opened to permit Remote Search/Client connection via external network.

Watch-dog: If this is checked, during the system stop by abnormal operation of QLR1660, computer will be
rebooted automatically if it did not receive any response from the system for more than 5 minutes.
And you can monitor continuously by this function during absence.

[NOTE]

- If this is checked, in case of simultaneous operations of QLR1660 and other PC works, when QLR1660 system stopped by abnormal operation, Computer will be rebooted automatically without relevant of simultaneous work.
- 2. Preparation for Watch Dog
 - Reset pin connection: The QLR1660 board has a reset pin for watch-dog. This pin should be connected to the
 motherboard's reset jumper. Please refer to your motherboard user manual for the
 actual position.
 - 2) Omission of Log-on password input procedure.
 - ► Setting Password Input omission by OS
 - Windows 98, 98SE, ME: Control Panel -> Passwords -> Change Passwords (Tip) -> Change Windows Password, set without inserting Password.
 - Windows 2000 pro: Control Panel -> User & Passwords -> Users (Tip), remove the Check of 'Users must enter a user name and password to use this computer'.
 - Windows XP: Control Panel ->User Accounts -> Pick an account to change, after select the Account icon that set 'Password protected', click 'Change Password' without any insertion in all space.
- Product Number: The Product Number is the unique number given to each QLR1660 product.
 - *If you use the Internet with Dynamic IP address or Private IP address(IP Sharer), the QLR1660 Client and Search can connect to the QLR1660 Server using the Product number because Dynamic IP address is changed continuously.
 - *If you want to connect to Client and Remote-Search with Product number, you have to check 'Enable autoregister to IP Server' because the connection using Product number is possible to network only through IP Server.
- IP Address: Shows the IP address of Server is appointed from the computer.

(Static IP address / Dynamic IP address / PPPoE IP address)

The QLR1660 Client and Search can connect to the QLR1660 Server remotely using 'Server IP' or 'Product number'.

*In case of the QLR1660 Server is connected to network using IP Sharer, the appointed Private IP address will be displayed in this section.

[NOTE 1]

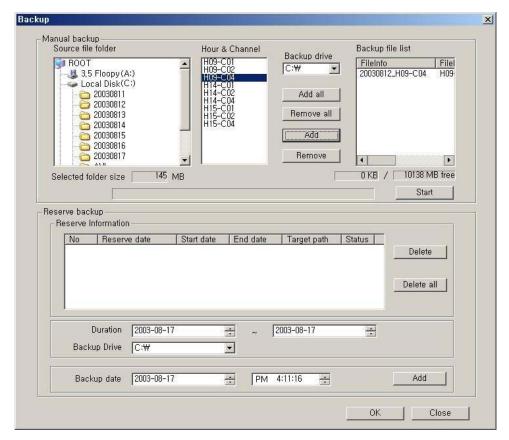
- 1. In case of the QLR1660 Server Network is set with Static IP address,
 - the QLR1660 Client/Search connect to the QLR1660Server remotely using this **Static IP address** of QLR1660 Server.
- In case of the QLR1660 Server Network is set with Dynamic IP address or Private IP address (IP Sharer), the QLR1660 Client/Search connect to the QLR1660 Server remotely using Product Number of QLR1660 Server..
- In case of the QLR1660 Server Network is set with PPPoE connection (Dial-up connection)
 the QLR1660 Client/Search connect to the QLR1660 Server remotely using IP address [100.0.0.1] is set
 by PPPoE.

[NOTE 2]

- <u><* The 'Dial-up Connection' Network Setting of Computer for QLR1660, refer the 'PPPoE Manual' included inside the Install CD by all means.</u>
- 1. In case of network connection by 'Dial-up Connection', the Server Address is specified by [100.0.0.1].
- The 'Dial-up Connection' is the Point to Point Communication. So, 'Dial-up Connection' can connect the only one QLR1660 Client with the only one QLR1660 Server.
- Enable auto-register to IP Server: If it is checked, during the QLR1660 Server wake-up and running, the IP address and product number of the QLR1660 Server are registered to the IP Server via Network automatically and continuously.
 - If you want to connect to Client and Remote-Search with **Product number**, you have to check (✓) here because the connection using Product number is possible to network only through IP Server.
 - -The new setting is applied by restarting the QLR1660 Server program.
 - Default is made of to be register to IP Server automatically.

- [NOTE] If you want to be closed to the public for protection of your information (product number, IP address), you must not check and then your information (product number, IP address) is not registered to IP Server. (But, Network connection by Product number is impossible.)
 - *IP Server: It is Server system that the information (product number and IP address) of the each product is registered and managed while the QLR1660 is starting and running.

 It is operated and managed directly from the manufacture company.
- Backup: Selected recordings may be backed up to another drive or folder. (Default Backup Directory: C:\XDVRBACKUP)

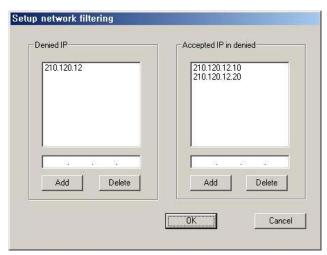


- o Manual backup: You can backup a recorded file of specific duration manually.
 - Select the Source file folder: Shows the size of selected folder.
 - Select the Hour and Channel: Shows the hour and channel with a recorded data.
 - * Adds/removes conveniently using 'Add all/Remove all/Add/Remove' buttons.
 - Select the Backup Drive: Select the backup drive in which the selected file will be saved.
 - Backup file list: Shows the information (file info, source path) of backup file.
 - * Shows the total size of selected backup files and the free size of selected drive.
- o Reserve backup: You can set the backup-schedule in advance.
 - Delete all: Deletes all scheduled backups from the list.
 - Delete: You can delete scheduled backup file copying by highlighting the number of the backup in the list and then clicking the Delete button.
 - Duration: Select the start and end duration dates that contains the recording that you wish to backup.
 - Backup Drive: You can change the folder to which backup video is recorded on your hard-drive.
 - Backup date: Select **the precise time** that you want the backup file copying to occur. Press 'Add' button to register in Backup list.

'OK' button to close the Backup window.

^{*}The reserved backup based on specified setting is executed automatically when appointed time comes.

• Filtering: Setup the network filtering. You can appoint IP address that will be denied connection. Also, within the IP address range, you can appoint specific IP addresses to accept.



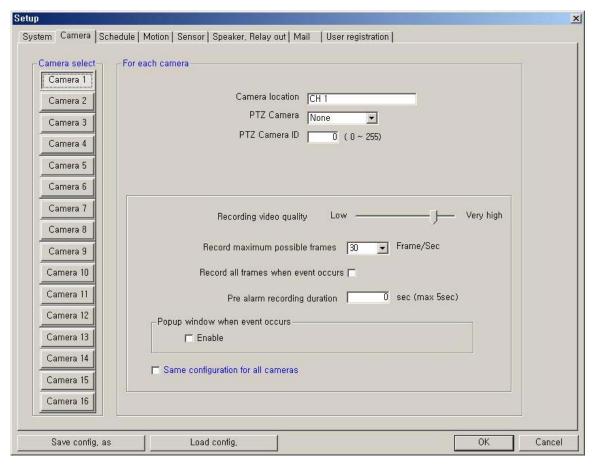
- Denied IP address: Input the IP address that will be denied.
- Accepted IP address in denied: Input the IP address that you wish to be exempted from the denied IP range.

You can control the network connection to the QLR1660 Server efficiently by filtering IP address

[NOTE]

- * When use the Internet Gateway (IP Sharer), you should set below;
- 1) QLR1660 Server Computer Setting: The Internet Protocol (TCP/IP) Settings of your Computer should be set to 'Use the Static IP' because this Computer is used as the Virtual Server for QLR1660.
- 2) Internet Gateway (IP Sharer) Setting: You should set Virtual Server Setting required for QLR1660 Server in your Internet Gateway (IP Sharer).
 - => Port Numbers for Video and Audio and P/T/Z camera and Remote Search of QLR1660 Server will be each fixed -2000, 2001, 2002, 2003- as the video port number (2000) inputted. These Ports must be opened to permit Client and Search connection via external network.
- 3) Firewall Setting: Port Numbers for Video and Audio and P/T/Z camera and Remote Search -2000, 2001, 2002, 2003 have to be opened to permit Client and Search connection via external network.
- * For the detail contents of 2) and 3) sections, refer to your IP Sharer and Firewall manuals.

2-2. Camera Setup



▶ Camera select: Select a camera to setup.

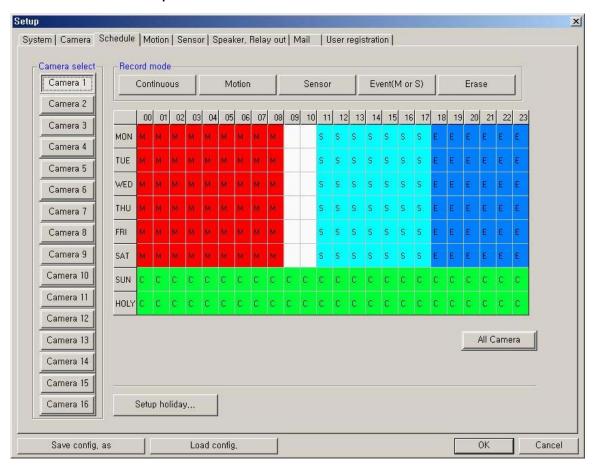
► For each camera

- Camera location: Describe the location where the selected camera is installed. This name will be displayed on screen when viewing this camera.
- PTZ Camera: If using a camera, select the type of PTZ camera connected to this channel. Click the scroll button to bring up a list of PTZ cameras that are currently available.
- PTZ Camera ID: Enter the switching ID of the PTZ camera connected to this channel. (Refer to 'Appendix -1.Pan/Tilt/Zoom Camera Installation'.)

Configuration

- Recording video quality: Setup the recording video quality of selected camera.
- Record maximum possible frames: Setup the record maximum frame rate of selected camera. (1~30 fps)
- Record all frames when event occurs: If checked, it records all frames of video of selected camera when event
 occurs at selected camera.
- Pre-alarm recording duration: Enter the pre-alarm recording duration (time) of selected camera when event occurs at selected camera. (max 5 sec.)
- Popup window when event occurs: If checked, in case of the QLR1660 Server window is minimized in execution, popup window when event occurs at selected camera.
- Same configuration for all cameras: If checked, configuration (video quality, record frame rate, etc.) of all cameras will be set the same as this camera.

2-3. Schedule Record Setup



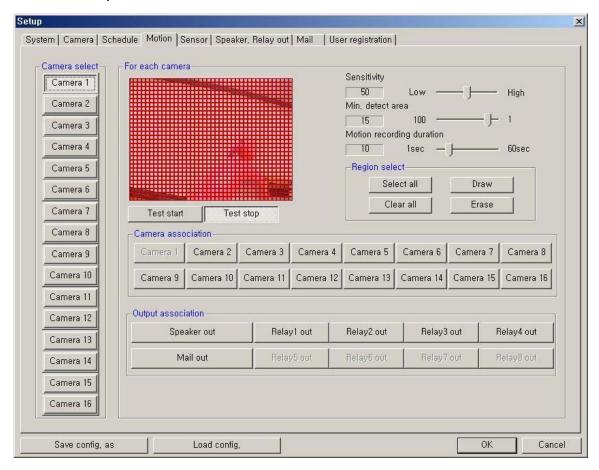
- ▶ Camera select: Select a camera to setup Recording Schedule. If you click 'All Camera', the Recording Schedule is applied to all cameras
- ▶ Record mode: Appoint the time by dragging on the timetable and click a record mode. Then, the selected record mode is assigned at the appointed time.
 - Continuous: Record continuously the monitoring video. (C)
 - Motion: Record when motion occurs in the appointed motion-detection region. (■),
 - Sensor: Record when the associated external sensor input is activated. (S)
 - Event (M or S): Record when event (motion detection or sensor input) occurs. (E)
 - Erase: Not record but only monitoring.

Recording mark (R) is displayed on screen of each camera when it is recording.

▶ Setup holiday: On selected holidays no recording will take place unless manually initiated. You can specify the holiday as desired. Select the date and click 'Add'. Then, the date lists in the holiday list. To remove the date, Select the date at the holiday list and click 'Remove'.



2-4. Motion Setup



▶ Camera select: Select a camera to setup.

▶ For each camera

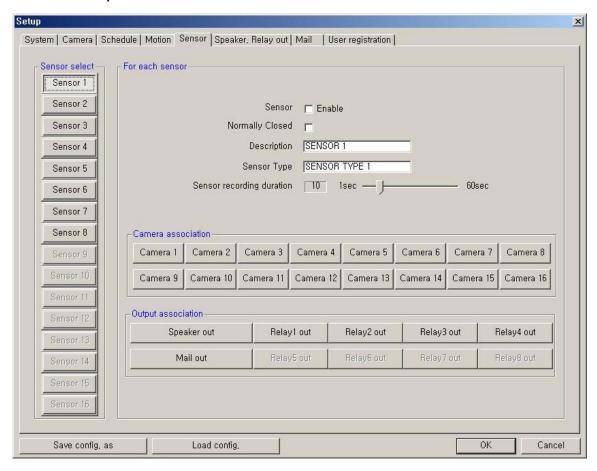
- Region Viewer: On this viewer, you can set the region and test. The active region is shown with a red grid.
- Sensitivity: Setup the sensitivity of brightness in the motion-detection region.
- Min. detect area: Setup the rate (sensitivity) of motion detection in the motion-detection region by minimum size of motion-detection area. The larger the number is, the lower the sensitivity. Conversely, the smaller the size(number) is, the higher the sensitivity.
- Motion recording duration: Setup the recording duration when motion occurs. (1~60 sec)
- Region select: Select all: The region is all selected.
 - Draw: Click 'Draw' and draw the grid by mouse-dragging on the viewer as desired.
 - Clear all: All regions are cleared.
 - Erase: Clear specific regions of the grid by mouse-dragging on the viewer as desired.
- Test start: Start the test of the motion-detection on the viewer.
- Test stop: Stop the test.

The Motion Detect symbol (1) is displayed on screen when motion occurs in the selected regions.

- ▶ Camera association: Select cameras to be associated and recorded together when motion occurs at this camera.

 [NOTE] This association will not affect cameras configured to record upon Sensor input. Namely it will be not recorded at the camera set with Sensor recording when motion occurs even if the camera is associated.
- ▶ Output association: Select the output condition(s) that will occur when motion occurs at this camera.
 - Speaker out: If selected, speaker will be operated according to 'Speaker, Relay out' setup when motion occurs at this camera.
 - Mail out: If selected, the capture-mail will be sent according to 'Mail' setup when motion occurs at this camera.
 - Relay out: If selected, the relay will be operated according to 'Speaker, Relay out' setup when motion occurs at this
 camera.

2-5. Sensor Setup

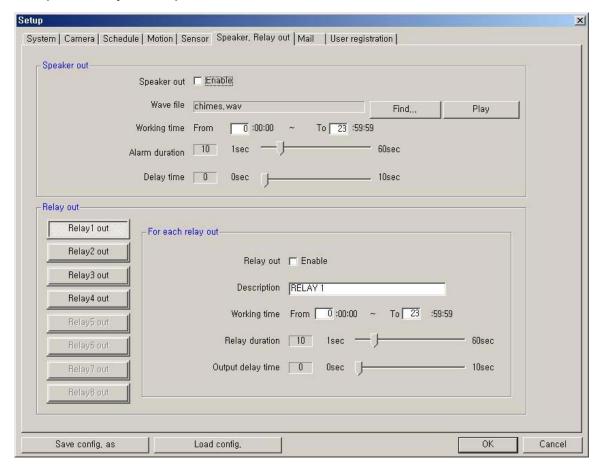


▶ Sensor select: Select the sensor input to configure.

► For each sensor

- Sensor Enable: If checked, this sensor is enabled.
- Normally Closed: Choose this option if using a Normally Closed sensor rather than Normally Open.
- Description: Describe the location where this sensor is installed.
- Sensor Type: Describe the type of sensor used.
- Sensor recording duration: Setup the recording duration that will occur when this input is triggered. (1~60 sec)
- ▶ Camera association: Select cameras to be associated and recorded together when this sensor input is activated.
- ▶ Output association: Select the output condition(s) that will occur when this input is activated.
 - Speaker out: If selected, the speaker will be activated according to 'Speaker, Relay out' setup when this input is triggered.
 - Mail out: If selected, the capture-mail will be sent according to 'Mail' setup when this sensor is triggered.
 - Relay out: If selected, the relay will be active according to 'Speaker, Relay out' setup when this sensor input is activated

2-6. Speaker, Relay out Setup



▶ Speaker out

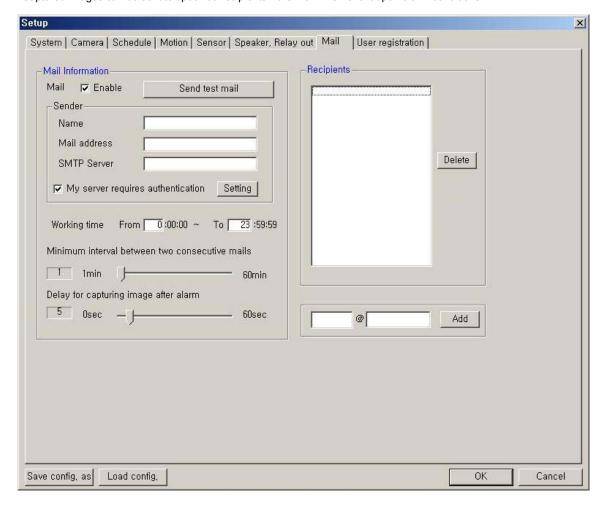
- Speaker out Enable: If checked, speaker output is enabled.
- Wave file: Setup the wave file for speaker output. (Use 'Play' to hear the file in advance.)
- Working time: Schedule the time frame during which the speaker will be able to activate.
- Alarm duration: Setup the duration that the output will sound when an alarm occurs. (1~60 sec)
- Delay time: Set a desired delay time. The speaker will sound after this delay time expires. (1~10 sec)
- * Speaker associated with motion/sensor will be operated according to Setup in here when event occurs.

► Relay out

- Relay out Enable: If checked, the relay output is enabled.
- Description: A description of the relay or function may be entered in this location.
- Working time: Schedule the time frame during which the relay will be able to activate.
- Relay duration: Set the duration that the relay will activate when an alarm occurs. (1~60 sec)
- Delay time: Set a desired delay time. The relay will activate after this delay time expires. (1~10 sec)
- *The relay that is associated with motion/sensor will activate according to settings in here when an event occurs.
- * If you click 'RELAY' buttons, the connected relays will activate immediately according to the Relay setup.

2-7. Mail Setup

Captured images can be sent to specified recipients via e-mail when event upon alarm conditions.



► Mail Information

- Mail Enable: Check to enable the e-mail function.
- Sender information: Enter the name, mail address, and SMTP Server of sender.

*SMTP (Simple Mail Transfer Protocol) Server: It is the server to send the e-mail to other computer.

(If not known, this may be obtained from the Internet Service Provider.)

My server requires authentication: If required, check this and set the logon information for your SMTP server.
 Enter your account name and password correctly to logon your outgoing mail server.



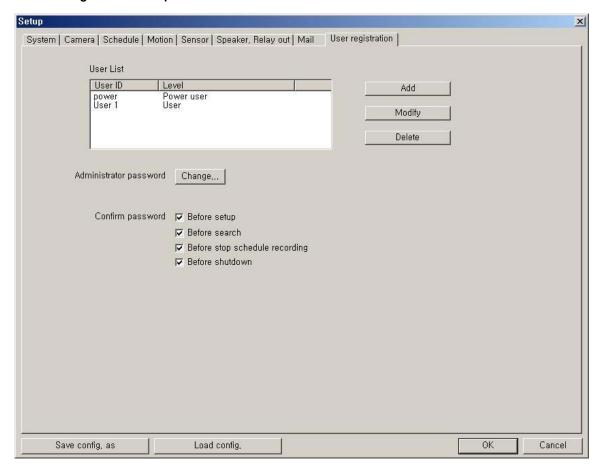
- Working time: Schedule the time frame during while the e-mail function will be able to activate.
- Minimum interval between two consecutive mails: Sets the minimum interval between two consecutive e-mails. (1~60 min)

 • Delay for capturing image after alarm: Sets the delay time for capturing an image after an event occur. (0~60 sec)

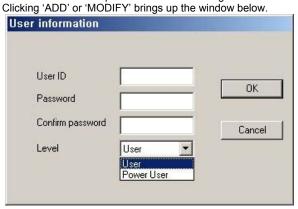
► Recipients Information

- : Enter the mail address of a recipient and click 'Add'. It will then be added to the list.
- ▶ Send test mail: Use this option to send a test message to the recipient.

2-8. User registration Setup



▶ User List: Displays users registered to use this system. You can add, modify, or delete user using this menu. The registered ID/password is used when accessing the system remotely from the Client or Search program. A user must be set up in the area in order to gain remote access.



- User ID: Enter user's ID to use.
- Password: Enter the password
- Confirm password: Enter again the password.
- Level: Select the user authority level

[NOTE] Default ID and password

- Administrator => ID: admin, PW: master
- Power user => ID: power, PW: 1111
- User => ID: User 1, PW: 1111

< Password Authority Levels >

| Level | Server | | | Search | | Client | |
|---------------|---|-------------------------------|--|------------------|----------|------------|-----------------|
| | System Setup> Network video port number, Backup, Filtering | User Registration Setup | Search / Stop Schedule Rec. / Shutdown | Remote Search | Download | Connection | Remote Setup |
| User | NO | NO | NO | YES | YES | YES | NO |
| Power User | NO | NO | YES | YES | YES | YES | NO |
| Administrator | YES | YES | YES | YES | YES | YES | YES |

- ▶ Administrator password: Changes the administrator password by clicking 'Change'.
- ► Confirm password: Check to confirm password before you execute the following Setup, Search, Stop Schedule Record, Shut-down.

SECTION 4 - HOW TO USE QLR1660 SEARCH

The Search Mode is divided into two modes - Local Search and Remote Search.

The **Local Search mode** retrieves video stored locally on the machine running the Server program. The **Remote Search mode** enables searching of the recorded data on the QLR1660 Server system via Network/Internet.

▶ Starting the QLR1660 Search program

Launch the search program by double-clicking the QLR1660 Search icon () on the desktop or by clicking the Search

button () from the QLR1660 Server main interface window or QLR1660 Client main interface window.

1. Main Interface Window

The recorded video data can be searched by date, specific camera (channel), and time. The image displayed on the screen is captured and stored to a file of JPEG or BMP format when the user clicks Capture button. And a video clip is stored to an AVI file when the user clicks 'Store to AVI' button.



■ Minimize button



Click to minimize the screen to the taskbar.

■ Search Path Viewer

Local Search : Server

Displays the present path on searching. (Search mode: Directory or Server ID)

■ Calendar / Zoom



▶ Calendar

Use the calendar to find dates that has a recorded data.

- Blue date: Has recorded data.
- Green date: Date currently selected.

To search other months, use \leftarrow and \rightarrow . (Any month with no recording data is skipped.)

Click the date you want to search.

Recorded data of the selected date will be displayed on a timetable.



▶ Zoom

Clicking the 'Zoom' button opens the zoom control window.

Enlarges or shrinks the current image on searching.

- To enlarge the image, click +.
- To shrink the image, click -.

You can see the zoom-region become expand/narrow as clicking +/-. Also, can move the region (red rectangular) by dragging with the mouse.

Clicking the 'calendar' button returns to calendar mode.

■ Local Search button



Loads data from the local hard disk of the PC.

- * During the Local Search, this button is disabled.

 During the Remote Search, use this button to return to the Local Search mode,
- Remote Search button



Connects to a remote QLR1660 Server via modem or TCP/IP network. Upon clicking this, the 'Connection' window appears.

- * During the Remote Search, this button is disabled.
- Download button



Use this button to download selected video from the remote server to the client PC. Select the time to download by clicking the desired block and then click 'Download'. The 'Download progress' window appears.

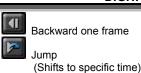
(Default Downloaded Directory: C:\XDVRDATA\Search\Server Name\YYYYMMDD)

* During the Local Search, this button is disabled.

■ Playback buttons



Go to First frame



Forward one frame

Go to Last frame



■ Smart Search button



Click this button to search only motion-data among the all recording data separately within desired region.

- In the Smart Search setup panel, set the region to smart-search and the show-area option by channel.
 - (Refer to 'section 4-2-(5). Smart Search'.)
- * During the Remote Search, this button is disabled.
- Audio Speaker(On/Off) / Volume Control **buttons**



Click the Speaker button if you want to playback the recorded audio. Control the volume by moving the volume control slider.

*Audio plays only on normal-playing by 'Play (button.

■ Screen Division **buttons**



You can see the screen by various division modes of 4,8,9,10,13,16 channels with these buttons.



- 4-division screen (4-channels display)
- : Four 4-division screens of A(1~4ch), B(5~8ch), C(9~12ch), D(13~16ch) are alternated by clicking.



- 8-division screen (8-channels display)
- : Two 8-division screens of A(1~8ch), B(9~16ch) are alternated by clicking



- 9-division screen (9-channels display)
- : Two 9-division screens of A(1~9ch), B(8~16ch) are alternated by clicking



- 10-division screen (10-channels display)
- : Two 10-division screens of A(1~10ch), B(7~16ch) are alternated by clicking



- 13-division screen (13-channels display)
- : Two 13-division screens of A(1~13ch), B(4~16ch) are alternated by clicking



- 16-division screen (16-channels display) : 16-division screen of **1~16ch** is displayed by clicking

*By double-clicking a channel on the screen, One channel screen of the channel and division screen are changed alternately.

■ Channel Select buttons

CH 2 CH 1 CH 3 **CH 4** CH 5 CH 6 CH 7 CH 8 CH 9 CH 10 CH 11 CH 12 CH 13 **CH 14** CH 15 CH 16

Individual channels may be displayed full screen via these buttons

*On playing, you can't change the channel.

*In case of displaying by screen division mode, plays pursuant to the recording data of selected channel.

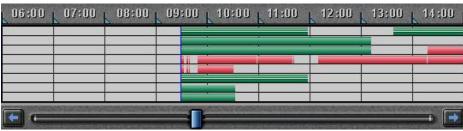
*By moving scroll bar located in right of timetable, use can see channel buttons from 1 to 16.

■ Time Indicator

10:08:00

This displays the time of the recorded data being played back.

■ Timetable



The recorded information is shown on timetable.

Select the specific time to playback by clicking the mouse on the desired segment or by scrolling using the scroll key from left to right. (selected time indicator: blue line)

The colors of the bar indicate various types of recording:

(Green = Continuous Recording, Red = Motion Detection, Orange = Sensor,

Pink = Pre-recording, White line = Audio Recording)

■ Select button by Event



Use to see the recorded data by event.

- A = Display all types of recording.
- C = Display only Continuous Recording data.
- M = Display only Motion Detection Recording data.
- S = Display only Sensor Recording data.

■ Setup button



Use this button to setup the directory for local search, and the network settings for remote search.

■ Bookmark button



The Bookmark Dialog box appears by clicking this button. Selected video segments may be saved as bookmarks for quick access at a later time. ■ Store to AVI button



Use this button to save the recording as an AVI video clip.

■ Panorama button



Using this button, video will be able to be played back image-by-image.

■ Capture button



Use the Capture button to save or print individual images.

■ Shutdown button



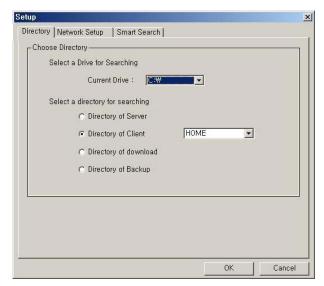
Exit the Search system by clicking this button.

2. Local Search Mode

* During local search, the Local Search button (is disabled

(1) Selecting Directory for local searching

Click the 'Setup' button (III). The following window will open: In the *Directory* section, select the drive and directory for local searching.



Select a drive for searching:

The default will be the drive that the QLR1660 software has been installed in.

Select a directory for searching:

The directory has recorded data is enabled.

* In case of directory of Client/Download, you can choice by name of connected Server.

Click 'OK' after choosing drive and directory for local searching.

* In case of Remote Search, you can search only 'Server' directory of the connected QLR1660 Server computer.

(Default Server Directory: C:\XDVRDATA\Server)

(2) Selecting date to search

In calendar, select the date you want to search by clicking the day in the window.



▶ Calendar

The Calendar shows dates that have recorded data.

- Blue date: Has recorded data.
- Green date: Currently selected date.

To search other month, use \leftarrow and \rightarrow . (Months with no recorded data will be skipped.)

Click the date you want to search.

Then, recorded data of the selected date will be displayed on the timetable.

* Clicking the 'Zoom' button opens the zoom control window.

(3) Selecting the recording data for playback on timetable

The recorded information of the selected date is shown on a timetable. You can see the recorded information by channel, time and event.

Select a channel for playback and click the point of time on recording bar. (The selected time indicator: blue line)

* You can move the time zone by scrolling using the scroll key $(\leftarrow / \rightarrow)$.



- ▶ Screen Division: You can see the screen by various division modes of 4,8,9,10,13,16 channels with these buttons.
 - 4-division screen (4-channels display): Four 4-division screens of A(1~4ch), B(5~8ch), C(9~12ch), D(13~16ch) are alternated by clicking.
 - 8-division screen (8-channels display): Two 8-division screens of A(1~8ch), B(9~16ch) are alternated by clicking.
 - 9-division screen (9-channels display): Two 9-division screens of A(1~9ch), B(8~16ch) are alternated by clicking.
 - 10-division screen (10-channels display): Two 10-division screens of A(1~10ch), B(7~16ch) are alternated by clicking.
 - 13-division screen (13-channels display): Two 13-division screens of A(1~13ch), B(4~16ch) are alternated by clicking
 - 16-division screen (16-channels display): 16-division screen of 1~16ch is displayed by clicking
 - *By double-clicking a channel on the screen, One channel screen of the channel and division screen are changed alternately.
- ▶ Time Indicator: Display the real time of the recorded data is on playback. (Data of current time: blue line)
- Channel Select: Select the channel for playback (by 1-channel mode).
 *By moving scroll bar located in right of timetable, use can see channel buttons from 1 to 16.
- ▶ Timetable: Display the recording data of the selected date by channel as bar of the various color.
 - *The colors of the bar indicate various types of recording:
 - (Green = Continuous Recording, Red = Motion Detection, Orange = Sensor, Pink = Pre-recording, White line = Audio Recording)
- ▶ Select by Event: Use to see the recorded data by event.
 - A = Display all types of recording.
 - C = Display only Continuous Recording data. (Green)
 - M = Display only Motion Detection Recording data. (Red)
 - S = Display only Sensor Recording data. (Orange)

(4) Playback the selected data recorded

Use the following controls to adjust playback specs and direction.

▶ Play tool:

Fast Backward Play (x5)
Backward Play
Stop
Play
Fast Forward Play (x5)

*During play, the following buttons are disabled.
(Enabled during stop.)

- Scroll bar and data bar on timetable
- Setup, Bookmark, AVI, Panorama, Capture buttons
- Remote Search, Zoom in/out buttons
- Jump button

[NOTE] Speed of fast forward play and fast backward play could differ according to PC system.

► Pause tool:



- * Play images frame by frame using Pause tool
- * Use the Jump button to go to a specific time.
- : Click the 'Jump' button, specify time to search, and click 'OK'



▶ How to play the Audio recording data

After selects only one channel being audio data recorded, you make play with play (butter) butter

(5) Smart Search

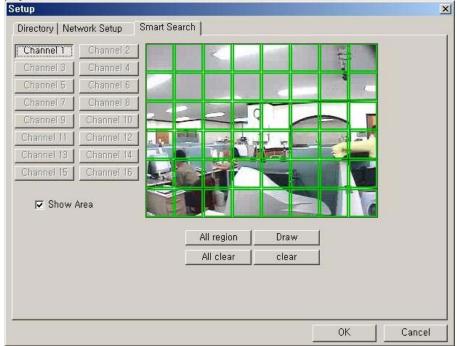
Using Smart Search function, you can search only motion-data among the all recording data separately within desired region.

- Even in C-REC and S-REC data, you can search *only motion-data* among the recording data separately within desired region.
- In M-REC data, you can search the recorded motion-data *only within desired region* among the motion detect-region set in motion setup panel of the Server.
- a) Click the 'Setup' button () to enter the Smart-Search setup panel.
- b) In the **Smart Search** section, set the region to smart-search and the show-area option by channel.

*The green region is set and the smart search is possible.

*In M-REC data, you should set the smart search region within the motion detect-region set at the channel in motion setup panel of the Server

*If 'show area' is checked, shows area that motion is detected within region set in setup with blue-block during playback.



- c) Click 'ok' button to save the changes and close the setup panel.
- d) Click smart search button to enable the smart search function. ()
 *If the selected channel has not the recording data for smart search, smart search button is disabled and not clicked. ()
- e) Select a channel to smart-search.
- f) Select a point of time (recording data) to smart-search.
 *Smart search playback is able only one channel.

[NOTE] The motion-detection in Smart Search is dependent on the **sensitivity** and **min. detect-area** in the motion setup panel of the Server.

(6) Advanced Functions



▶ Zoom

If you click the 'Zoom' button below calendar, the Zoom control window is shown.

Enlarges or shrinks the current image on searching.

- To enlarge the image, click +.
- To shrink the image, click -.

You can see the zoom-region become expand/narrow as clicking +/-. Also, you can move the region (red rectangular) by dragging with the mouse. Clicking the 'calendar' button returns to calendar mode.

* During play, Zoom in/out (+/-) buttons is disabled.



► Audio Play / Volume Control

Click the Audio Speaker button if you want to playback the recorded audio. Control the volume by moving the volume control button

▶ Bookmark



Click the bookmark icon to open the Bookmark Dialog box. Set playback bookmarks using add or delete and go to the desired time within bookmark lists. Use this to save favorites for quick access at a later time.

- Add: After click the 'Bookmark' button at the specific part (time) of a channel, click 'Add'. Then the part (time) is added in bookmark list.
- (Maximum 10 items can be registered in bookmark list.)
- Delete: After check an item to delete in bookmark list, click 'Delete'.
- Goto: After check an item to search in bookmark list, click 'Goto'.

Then image at the part (time) is displayed on screen.

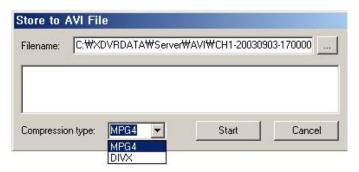
* During play, this button is disabled. (Only during stop, is enabled.)



► Store to AVI



Here, a file can be converted to an AVI file, which will be able to be played back on any PC.



- After clicking the 'Store to AVI' button, select the compression type and click 'Start'.
 Then, the conversion to AVI file will be progressed until you click 'Done' or the file is end.
- The converted AVI file is saved in the 'AVI' directory.
 (Default Directory: C:\XDVRDATA\Search\ServerName\AVI)
- * During play, this button is disabled. (Only during stop, is enabled.)

[NOTE] To store to AVI file, the MPEG4 or DIVX Codec for playback of full-motion video and audio file have to be installed on your computer. Please install these codecs. These Codecs are available to be downloaded as freeware - search

Please install these codecs. These Codecs are available to be downloaded as freeware - search the web for 'DIVX', or visit http://www.divx.com

The PLAYBACK Codecs do not come installed with the software - you are required to download these from the web.



▶ Panorama

Panorama allows reviewing of images frame by frame.

- After clicking the 'Panorama' button at the specific part (time) of a channel, set the frame interval and click 'Refresh'. Then, total nine frames will be displayed at the frame intervals set from current frame.
- Also, is able to search more conveniently using the 'Rewind Page', 'Next Page', 'Rewind Frame' and 'Next Frame' buttons.

▶ Capture



Images are able to be saved or printed using this function.



The following options are available in regards to the captured image:

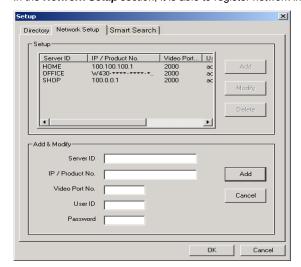
- Zoom: You can enlarge or shrink the current capture image using Zoom In/Out buttons. You can see
 the zoom-region become expand/narrow as Zoom In/Out. Also, you can move the region (red
 rectangular) by dragging using mouse.
- Image Processing: You can process the current capture image using various image processing buttons.
- Print & Save: You can print out or save to BMP or .JPEG the current capture image (Default Saved Directory on searching 'Server': C:\XDVRDATA\Server\SnapShot)
- Image Control: You can control Brightness, Contrast, Hue of the current capture image.
- * Capture image is displayed differently in size according to resolution of image on the viewer. In case image that the resolution is 320*240, you can enlarge it by double-clicking the image on the viewer.

3. Remote Search Mode

* If connected, in the Remote Search, Remote Search (), Setup (), Bookmark (), Panorama (),
Store to AVI (), Smart Search () buttons are disabled and Local Search & Download buttons are enabled.

(1) Network Setup for remote searching

Click the 'Setup' button (). The following window will open: In the **Network Setup** section, it is able to register network information of QLR1660 Server to search remotely.



Register information of server to search remotely in 'Add & Modify' part shown by clicking 'Add' button.

- Server ID: Name of server to search remotely
- IP / Product No.: IP address or Product no or Dial-up Connection IP address of server to search remotely
- Video Port number: Video Port number of server for remote search (default: 2000)

*When the Search tries to connect to QLR1660 Server, you have only to input the video port number (2000).

- User ID: User ID registered in server to search remotely
- Password: Password registered in server to search remotely

By click 'Add', registration is completed. Able to modify and delete, Maximum 10 Servers can be registered.

[NOTE 1]

- In case of the QLR1660 Server Network is set with Static IP address, you should enter 'Static IP address' of QLR1660 Server to connect in 'IP/Product No' section.
- 2. In case of the QLR1660 Server Network is set with **Dynamic IP address or Private IP address (IP Sharer)**, you should enter '**Product Number**' of QLR1660 Server to connect in '**IP/Product No**' section.
- In case of the QLR1660 Server Network is set with PPPoE connection (Dial-up connection)
 you should enter IP address '[100.0.0.1]' of QLR1660 Server to connect in 'IP/Product No' section.
 INOTE 21

<* The 'Dial-up Connection' Network Setting of Computer for QLR1660, refer the 'PPPoE Manual' included inside the Install CD by all means.>

- 1. In case of network connection by 'Dial-up Connection', the Server Address is specified by [100.0.0.1].
- The 'Dial-up Connection' is the Point to Point Communication. So, 'Dial-up Connection' can connect the only one QLR1660 Client with the only one QLR1660 Server.

(2) Connecting to QLR1660 Server to search data remotely

Click the 'Remote Search' button (), to open the Connection Dialog box.



Select the 'server ID' that you want to connect and enter the User ID and Password correctly and click 'Connect' button.

It connects network between QLR1660 Search and Server. Then 'Remote Search' button will be disabled and the last data recorded in the connected computer appears on calendar and timetable.

* Load registered User ID and Password.

If you check this, the User ID/password registered at the Network setup panel of Search program is loaded automatically whenever one connects.

[NOTE] Although the unit supports Dial-up, it is not recommended as the video size does not transfer effectively via dial-up speed. High Speed connectivity is highly recommended.

(3) Selecting date to search

In calendar, select the date you want to search by clicking the day in the window.



▶ Calendar

The Calendar shows dates that have recorded data.

- · Blue date: Has recorded data.
- Green date: Currently selected date.

To search other month, use \leftarrow and \rightarrow . (Months with no recorded data will be skipped.)

Click the date you want to search.

Then, recorded data of the selected date will be displayed on the timetable.

* Clicking the 'Zoom' button opens the zoom control window.

(4) Selecting the recording data for playback on timetable

The recorded information of the selected date is shown on a timetable. You can see the recorded information by channel, time and event.

Select a channel for playback and click the point of time on recording bar. (The selected time indicator: blue line) * You can move the time zone by scrolling using the scroll key $(\leftarrow / \rightarrow)$.



- ▶ Screen Division: You can see the screen by various division modes of 4,8,9,10,13,16 channels with these buttons.
 - 4-division screen (4-channels display): Four 4-division screens of A(1~4ch), B(5~8ch), C(9~12ch), D(13~16ch) are alternated by clicking.
 - 8-division screen (8-channels display): Two 8-division screens of A(1~8ch), B(9~16ch) are alternated by clicking.
 - 9-division screen (9-channels display): Two 9-division screens of A(1~9ch), B(8~16ch) are alternated by clicking.
 - 10-division screen (10-channels display): Two 10-division screens of A(1~10ch), B(7~16ch) are alternated by clicking.
 - 13-division screen (13-channels display): Two 13-division screens of A(1~13ch), B(4~16ch) are alternated by clicking
 - 16-division screen (16-channels display): 16-division screen of 1~16ch is displayed by clicking

*By double-clicking a channel on the screen, One channel screen of the channel and division screen are changed alternately.

- ▶ Time Indicator: Display the real time of the recorded data is on playback. (Data of current time: blue line)
- ► Channel Select: Select the channel for playback (by 1-channel mode).
 - *By moving scroll bar located in right of timetable, use can see channel buttons from 1 to 16.
- ▶ Timetable: Display the recording data of the selected date by channel as bar of the various color.
 - *The colors of the bar indicate various types of recording:

 (Green = Continuous Recording, Red = Motion Detection, Orange = Sensor, Pink = Pre-recording, White line = Audio Recording)

- ▶ Select by Event: Use to see the recorded data by event.
 - A = Display all types of recording.
 - C = Display only Continuous Recording data. (Green)
 - M = Display only Motion Detection Recording data. (Red)
 - S = Display only Sensor Recording data. (Orange)

(5) Playback the selected data recorded

Use the following controls to adjust playback specs and direction.

* In the Remote Search, the fast backward play(), backward play(), fast forward play() and backward one frame (buttons are disabled.

► Play tool:



*During play, the following buttons are disabled. (Enabled during stop.)

- · Scroll bar and data bar on timetable
- Capture button
- Local Search, Download, Zoom in/out buttons
- Jump button
- · Channel Select button, Quad button

Pause tool:



Backward one frame



Forward one frame



Go to Last frame



- * Play images frame by frame using Pause tool
- * Use the Jump button to go to a specific time.
- : Click the 'Jump' button, specify time to search, and click 'OK' ..



▶ How to play the Audio recording data

After selects only one channel being audio data recorded, you make play with play (



(6) Advanced Functions



▶ Zoom

If you click the 'Zoom' button below calendar, the Zoom control window is shown.

Enlarges or shrinks the current image on searching.

- To enlarge the image, click +.
- To shrink the image, click -.

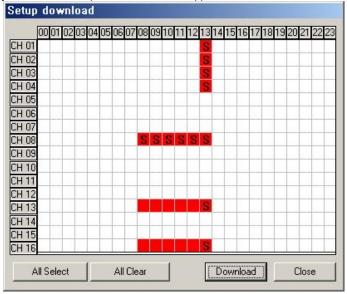
You can see the zoom-region become expand/narrow as clicking +/-. Also, you can move the region (red rectangular) by dragging with the mouse. Clicking the 'calendar' button returns to calendar mode.

* During play, Zoom in/out (+/-) buttons is disabled



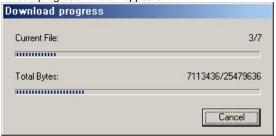
▶ Download

Use this button to download selected video from the remote server to the client PC. If you click, the 'Setup download' window appears.



Time has a recorded data is specified by red block.

Select the time to download by clicking the desired block and then click 'Download'. The 'Download progress' window appears.



(Default Downloaded Directory: C:\XDVRDATA\Search\Server Name\YYYYMMDD)



► Audio Play / Volume Control

Click the Audio Speaker button if you want to playback the recorded audio. Control the volume by moving the volume control button



Bookmark: In the Remote Search, 'Bookmark' button is disabled.



▶ Store to AVI: In the Remote Search, 'Store to AVI' button is disabled.



▶ Panorama: In the Remote Search, 'Panorama' button is disabled.



▶ Capture

Images are able to be saved or printed using this function.



The following options are available in regards to the captured image:

- Zoom: You can enlarge or shrink the current capture image using Zoom In/Out buttons. You can see
 the zoom-region become expand/narrow as Zoom In/Out. Also, you can move the region (red
 rectangular) by dragging using mouse.
- Image Processing: You can process the current capture image using various image processing buttons.
- Print & Save: You can print out or save to BMP or .JPEG the current capture image (Default Saved Directory on searching 'Server': C:\XDVRDATA\Server\SnapShot)

Image Control: You can control Brightness, Contrast, Hue of the current capture image.

* Capture image is displayed differently in size according to resolution of image on the viewer. In case image that the resolution is 320*240, you can enlarge it by double-clicking the image on the viewer.

(7) Disconnecting



If you click the 'Local Search' button, network connection between the QLR1660 Search and Server is disconnected and loads the last recorded data from the local hard disk. Then 'Remote Search' button will be enabled

SECTION 5 - HOW TO USE QLR1660 CLIENT

The Client software allows for remote surveillance of the DVR via LAN, Internet, or Dial-up.

1. Main Interface Window

Launch the QLR1660 Client program by double-clicking the QLR1660 Client icon (_______) on the desktop.



The functions/controls within this window are nearly identical to the Server Window functions.

■ Minimize button



Click to minimize the screen to the taskbar.

■ System Status



- ▶ Date and Time Status Display (Current)
- ► HDD Storage Status (% Used)
 - : The Recycle HDD icon () is shown if in overwrite mode.
- ➤ Server Connection Status
 : Displays the Server name and network speed.
- ▶ Log View
 - : Shows event logs.

You can see the details by double-clicking.

■ Setup button



Click here to enter the Setup Mode.

[NOTE] The default password for user of Client is '1111'.

■ Search button



Click here to enter the Search mode.

You can search recordings by camera number, date, time and event.

[NOTE] The default password for user of Client is '1111'.

■ Shutdown button



Click this button to shutdown the main server application. **[NOTE]** The default password for user of Client is '1111'.

■ Pan/Tilt/Zoom Control buttons



It enables you to control remotely the P/T/Z camera that you select to move and get the scene according to your direction dynamically.

- The following controls are available:
- Camera Selection to control Pan/Tilt/Zoom/Focus
- Tilt up/down (▲/▼)
- Pan left/right (◄/►)
- Zoom in/out (+/-)
- Focus in/out (+/-)
- Auxiliary (1,2,3)

(Refer to 'Appendix -1.Pan/Tilt/Zoom Camera Installation'.)

Audio Speaker(On/Off) / Volume Control buttons



Use for full-duplex audio communication with the QLR1660 Server system.

- Clicking the speaker button enables you to listen to the sound transmitted from the connected QLR1660 Server.
- Control the volume by moving the volume control button.

[NOTE] For full-duplex audio communication with the QLR1660 Server system, 'Audio recording and transferring' in System setup panel have to be enabled. And, the Microphone have to be connected to sound card of computer and the 'Microphone In' at the Volume Control setup of windows have to be muted.

■ Connect button



Click to connect/disconnect with the Remote Server.

Recording On/Off buttons





► Schedule Recording button (

: You can enable Schedule Recording according to Setup by clicking the 'Schedule Rec.'

[NOTE] If 'Schedule Rec.' button is off, all kind of recording (video and audio) components configured in the Setup mode are disabled

- ► Group buttons (A,B)
- : By clicking each group button (A,B), displays 8 channel recording buttons belongs to each group
- ► Channel Recording buttons (1~16)
 - : Using these buttons, you are able to record each channel by clicking the desired channel. The Continuous record icon () will be displayed on the camera screen.

■ Channel Select buttons



- ► Group buttons (A.B)
- : By clicking each group button (A,B), displays 8 channel select buttons belongs to each group
- ► Channel Select buttons (1~16)
 - : You are able to display each channel in the one-channel mode by clicking buttons
- ▶ Screen division buttons
 - : You can see the screen by various division modes of 1,4,6,9,10,13,16 channels with these
 - 7 One channel screen (1-channel display)
 - 4-division screen (4-channels display)
 - : Four 4-division screens of A(1~4ch), B(5~8ch), C(9~12ch), D(13~16ch) are alternated by clicking.
 - *By double-clicking a channel on the screen, One channel screen of the channel and 4-division screen are changed alternately.
 - 6-division screen (6-channels display)
 - : Three 6-division screens of A(1~6ch), B(6~11ch), C(11~16ch) are alternated by
 - *By double-clicking a small channel on the screen, the channel are displayed on the left large screen.
 - - 9-division screen (9-channels display) : Two 9-division screens of **A(1~9ch)**, **B(8~16ch)** are alternated by clicking
 - *By double-clicking a channel on the screen, One channel screen of the channel and 9-division screen are changed alternately.
 - 10-division screen (10-channels display)
 - : Two 10-division screens of A(1~10ch), B(7~16ch) are alternated by clicking
 - *By double-clicking a small channel on the screen, the channel are displayed on the above large screen.
 - 13-division screen (13-channels display)
 - : Two 13-division screens of A(1~13ch), B(4~16ch) are alternated by clicking
 - *By double-clicking a small channel on the screen, the channel are displayed on the middle large screen.
 - 16-division screen (16-channels display)
 - : 16-division screen of 1~16ch is displayed by clicking
 - *By double-clicking a channel on the screen, One channel screen of the channel and 16-division screen are changed alternately.
- ▶ Rotation button (
 - : You can see channels by rotating according to auto switching interval time in Setup.

■ Call button



Use when try to do audio communication with the QLR1660 Server connected. Click this button to call the server for an audio session. The 'Calling message' window is displayed on the Server PC.



■Full Screen Mode

Click the right mouse button on the screen to change to full screen mode To convert back to the regular screen, click the right mouse button again.

2. Remote View Mode

2-1. Local Setup Mode

The Local Setup Mode allows configuration changes to be made to the remote PC running the Client software. These settings only affect the PC running the client software and do not affect the server in any way. For the most part these settings have to do with the recording and display of remotely received video. Each of the settings are explained in the below sections.

Entering the Local Setup Mode

Click the 'Setup' button (), to open 'Select setup system' Dialog box of QLR1660 Client appears.



In this dialog, click 'Local' and click 'OK'.



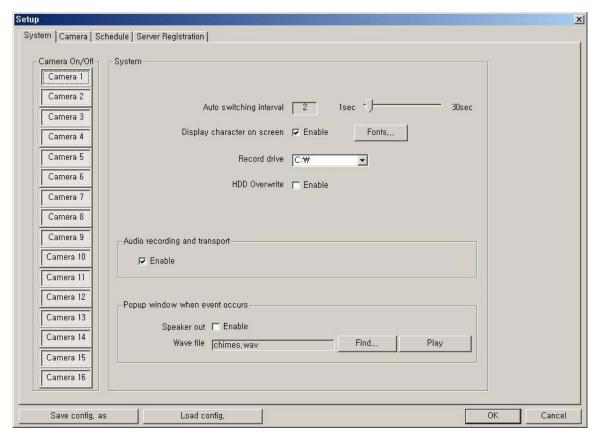
To enter the Local Setup mode panel, input the client setup login password set in server registration setup panel of Client Setup mode and click 'OK'.

- * In the setup mode, the following two buttons are displayed.
 (When it's connected with the QLR1660 Server, these are disabled.)
- Save configuration as: You can save the current system configuration to a data file of CBF (Config Backup File) format.
- Load configuration: You can load the system configuration from a data file of CBF format.

[NOTE] The default password for local setup login of the Client is '1111'.

You can change this password in the 'Server Registration' section of the Client Setup mode.

(1) System Setup



▶ Camera On/Off: Enable / Disable each camera. (16 cameras)

▶ System

- Auto switching interval: Setup the interval time for the auto switching. All cameras will be displayed sequentially with this interval time. (1~30sec)
- Display character on screen: Displays the all information associated with each camera on screen.
- Record drive: Setup the drive to be used for recording.
- HDD Overwrite: Enable the HDD to overwrite when full.
 When the selected record drive is full (when free space is under 500MByte), the DVR will begin overwriting the drive from the beginning.
 - * Whenever free space is under 500MByte, the DVR system creates the free space of 2.0GByte by erasing oldest data to save new recording data.

[NOTE] In case of unchecked if recording stop on account of full of selected drive, all recording buttons on main window are off and 'Suspend' message is displayed on the event log viewer. Get the new space for recording.

▶ Audio recording and transport

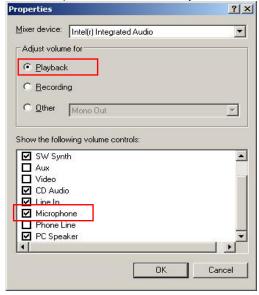
- Enable / Disable audio to be recorded and transferred.
 - : If enabled, you can record the audio signal transmitted from the QLR1660 Server. And, can transfer the Client's audio signal (using a microphone connected to the sound card of this computer) to the computer running the QLR1660 Server.

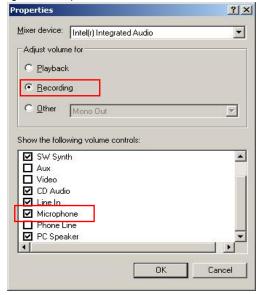
[NOTE] This setting is changeable only when client is disconnected to server.

- The audio is recorded in video-recording file of the channel is associated to 'Record audio' at the 'System' Setup mode of the VISTAPRO Server connected. The audio signal will be recorded with video signal of selected channel.
- The Audio icon () will be displayed on the screen of the selected camera.
- In search mode, a white-line at timetable indicates an audio file is recorded.
- [NOTE] 1. Audio recording depends on the video recording of the associated channel.
 Namely, the audio is only recorded when video is being recorded at the associated camera.
 - For full-duplex audio communication with the QLR1660Server system, the a Microphone has to be connected to sound card of computer and the 'Microphone In' at the Volume Control setup of windows must be muted
- ▶ Speaker out: If enabled, in case of system window minimization, speaker is sounded-out when event (motion, sensor input) occurs at the QLR1660 Server is connected.
 - Wave file: Setup the wave file for speaker output. ('Play' to hear the file in advance.)

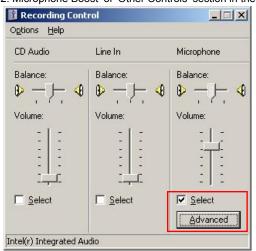
* How to set the audio on Windows of Client PC for QLR1660 Audio communications

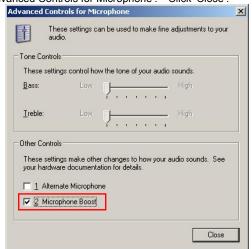
- 1. On the Windows Desktop, Click the [Start -> Programs -> Accessories -> Entertainment -> Volume Control].
- 2. Click the [Options -> Properties] on Menu bar of the 'Master volume' window shown.
- 3. Check 'Microphone' in case of both 'Playback' and 'Recording' in the 'Properties' window shown. Click 'OK'.



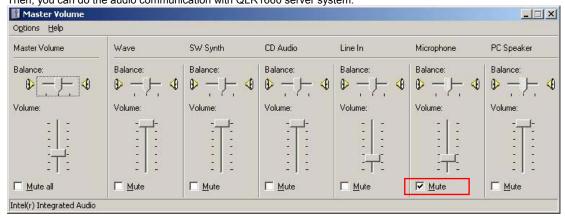


4. Check 'Select' of 'Microphone' section in the 'Recording Control' window shown. And, click 'Advanced' and check '2. Microphone Boost' of 'Other Controls' section in the 'Advanced Controls for Microphone'. Click 'Close'.

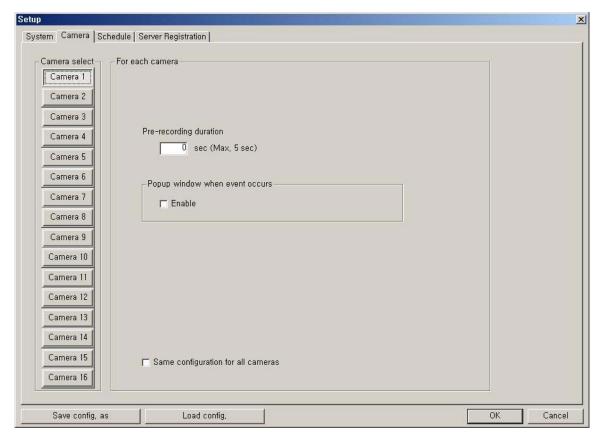




Check 'Mute' of 'Microphone' section in the 'Master Volume' window shown.Then, you can do the audio communication with QLR1660 server system.



(2) Camera Setup



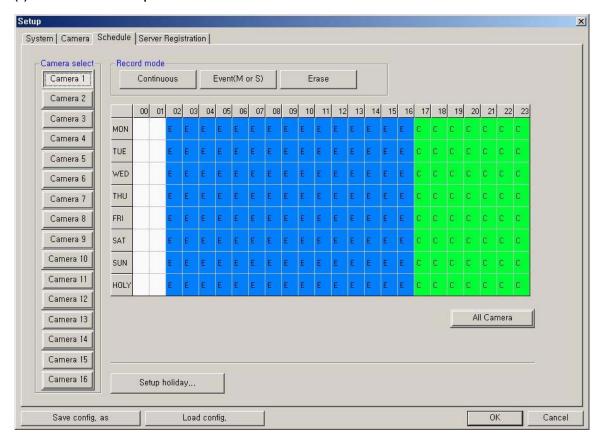
▶ Camera Select: Select a camera to setup.

▶ For each camera

- Prerecording duration: Enter the pre-recording duration (time) of the camera when event occurs at selected camera. (max 5sec.)
- Popup window when event occurs: If an event occurs while the window is minimized, the window will return to its maximized state.
- Same configuration for all cameras: Use this option to make the selections common to all cameras.

[NOTE] Event (motion, sensor input) at the QLR1660 Client system occurs on the signal when event (motion, sensor input) occur according Motion/Sensor Setup at QLR1660 Server system connected.

(3) Schedule Record Setup

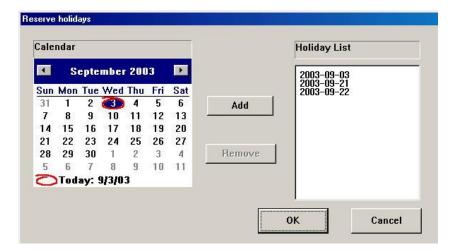


- ▶ Camera select: Select a camera to setup Recording Schedule. If you click 'All Camera', the Recording Schedule is applied to all cameras.
- ▶ Record mode: Appoint the time by dragging on the timetable and click a record mode. Then, the selected record mode is assigned at the appointed time.
 - Continuous: Record continuously the monitoring video. ()
 - Event (M or S): Record when event (motion detection or sensor input) occurs.
 - Erase: Not record but only monitoring.

Recording mark (R) is displayed on screen of each camera when it is recording.

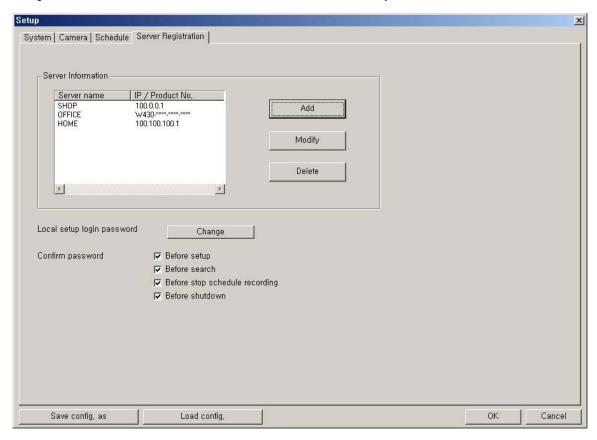
[NOTE] Event (motion, sensor input) at the QLR1660 Client system occurs on the signal when event (motion, sensor input) occur according Motion/Sensor Setup at QLR1660 Server system connected.

▶ Setup holiday: On selected holidays no recording will take place unless manually initiated. You can specify the holiday as desired. Select the date and click 'Add'. Then, the date lists in the holiday list. To remove the date, Select the date at the holiday list and click 'Remove'.

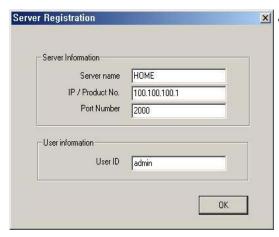


(4) Server Registration Setup

Register the network information and User ID/Password of QLR1660 Server you want to connect to.



If you click 'Add', the 'Server Registration' window appears as follow.



- Server Information: Enter the information of QLR1660
 Server you want to connect to.

 Name, Address (IP number or Product Number), Port Number
 - *When the Search tries to connect to QLR1660 Server, you have only to input the video port number (2000).
- User Information: Enter the User ID is you would like to use when logging into the DVR. This user name must be enabled in the Server setup.

You can modify or delete the information of Server registered.

[NOTE 1]

- In case of the QLR1660 Server Network is set with Static IP address, you should enter 'Static IP address' of QLR1660 Server to connect in 'IP/Product No' section.
- 2. In case of the QLR1660 Server Network is set with **Dynamic IP address or Private IP address (IP Sharer)**, you should enter '**Product Number**' of QLR1660 Server to connect in '**IP/Product No**' section.
- 3. In case of the QLR1660 Server Network is set with PPPoE connection (Dial-up connection) you should enter IP address '[100.0.0.1]' of QLR1660 Server to connect in 'IP/Product No' section.

[NOTE 2]

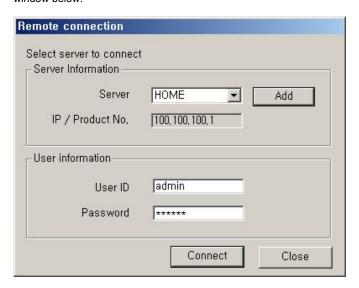
- <* The 'Dial-up Connection' Network Setting of Computer for QLR1660, refer the 'PPPoE Manual' included inside the Install CD by all means.>
- 1. In case of network connection by 'Dial-up Connection', the Server Address is specified by [100.0.0.1].
- The 'Dial-up Connection' is the Point to Point Communication. So, 'Dial-up Connection' can connect the only one QLR1660 Client with the only one QLR1660 Server.
- ▶ Local setup login password: Changes the client local setup login password by clicking 'Change'.

[NOTE] The default password for the local setup login of Client is '1111'

► Confirm password: Check to confirm password before you execute the following — Setup, Search, Stop Schedule Record, Shut-down.

2-2. Connecting to the QLR1660 Server

▶ Clicking the 'Connect' button () on the main screen of the Client application opens the 'Remote connection' window below.



- Server Information: Select the server to connect to.
 - It will show the servers registered in Local setup.
 - You can also add a new server by clicking 'Add' button.
- User Information: Enter the User ID and Password that is registered in the Local setup information.

Click 'Connect' to log into the remote server.

If the Network Connection is successful between the Client and Server, a 'Connected' message appears and Network connection (server name, network speed) status is shown on the LOG viewer on the main screen.

The 'Connection' button () will be changed to a blue color while connected. Clicking this button will disconnect the client from the server and button color will change to gray

3. Remote Setup Mode

* This setup mode is available only to the administrator.

You can setup remotely the system configuration of QLR1660 Server system using *Remote Setup mode* of Client program.

• After clicking the 'Setup' button (III), click the 'Remote' option.



Select the Server name you want to connect and click 'OK'. (* Show servers registered in Local setup.)

• The 'Remote connection' window will appear.



Enter the administrator User ID and Password and click 'Connect'.

If the connection is successful, the setup window will appear. Most settings can be changed in this setup window, with the exceptions shown below.

The following options cannot be setup remotely.

- System Setup -> Record drive, Product number, IP address, Enable auto-register to IP server, Network video port number, Backup, Network filtering
- Camera Setup -> PTZ camera section (camera type, camera switch ID)
- Motion Setup -> Test start/stop buttons
- Mail Setup -> Send Test mail
- User Registration Setup -> Confirm password section
- Save Configuration as, Load Configuration buttons (for saving/loading the configuration by CBF format)

[NOTE] However, the Motion setup panel is enabled and able to set remotely only during remote viewing by connecting.

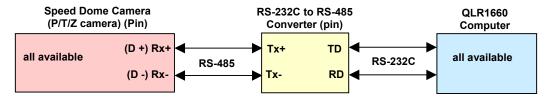
APPENDIX

1. Pan/Tilt/Zoom Camera Installation

If you want to use P/T/Z camera with QLR1660, you need to connect with 'RS-232C to RS-485 Converter'. You need to pay for 'RS-232C to RS-485 Converter' extra.

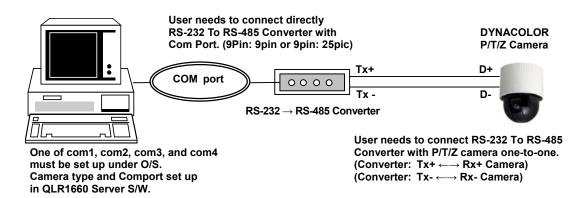
1-1. Concept of system configuration

| Camera Model | QLR1660Channel | Connecting p | Camera Channel (Dome ID Switch) | |
|--|-----------------|-------------------------------------|------------------------------------|---------------|
| Carriera Model | QLR 1000Channel | Camera pin Converter (pin of RS 485 | | |
| DYNACOLOR | all available | D+, D- | Tx+, Tx- | all available |
| ACED-1000 SMART PTZ GC-655N SD-290 DRX-502A&CNB CA 1170 | all available | Rx+, Rx- | Tx+, Tx- | all available |



Attention The number of Camera Channel Dome ID Switch(s/w) needs to correspond to the number of a channel of QLR1660 when installed. (ex. In case of 8 channels) Dome ID Switch Dome ID Switch QLR1660 Channel QLR1660 Channel (Camera Channel) (Camera Channel) 1 1 5 5 2 6 6 3 3 8

1-2. Example of Matching QLR1660 with Camera channels



2. External Sensor and Relay Installation

(1) Selection of sensor type

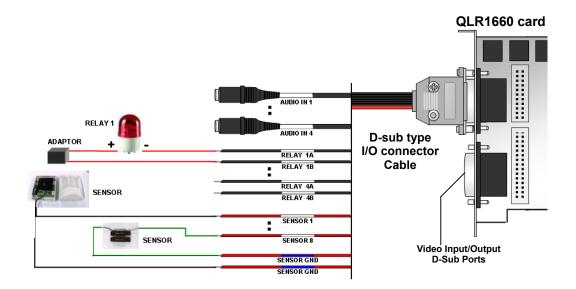
Choose Anode type (When it works, 0 ohm is remained) as a sensor and NO type (Normal Open type. When it works, 0 ohm is remained) as a Relay.

(2) Required Specification of Sensor connecting wire

Connection wire that has small internal resistance is recommended. Please refer to the following.

- (1) Number of Sensor: 8 ea
- (2) Voltage between sensor input and GND, when sensor input is opened: +5 Volt
- (3) Terminal voltage: **High = stand by**, **Low = Activated**
- (4) Max resistance for activation: 500 Ohm

(3) Example of operation test of external devices including a Light



3. Trouble shooting

1. What is the product number?

The product number is provided with QLR1660 main product. Please check this number in the license document provided with the item. Especially, it is necessary to connect to server of QLR1660 by networking.

2. With LAN connection, is it available to connect with Modem?

If you set network with Modem (PPPoE connection), networking works only via Modem-to-modem. In the same manner, if you set network with LAN, networking works only via LAN. So, it is impossible to use LAN and modem at the same time.

I have a firewall on my network system. It is impossible to normally interface with internal XDVR server via external client S/W.

In case of system with a firewall, you need to open the ports to interface with internal QLR1660 server via external client S/W or search S/W. The ports are set at System setup of the Environment Setup of QLR1660 server.

Please open the following ports: 2000, 2001, 2002 and 2003 (default ports).

4. Can I change the display screen resolution of computer while QLR1660 is running?

If you changed the screen resolution while QLR1660 is running, the QLR1660 system will be stopped abnormally. You must change it after shutdown the QLR1660 program.

5. It appears that the QLR1660 server system impacts with the mother-board of the computer.

Some mother-board of VIA chipset could impact with the QLR1660 server system.

6. Although I reinstalled the QLR1660 program, the Setup of QLR1660 system is not set to factory-defaults. Although uninstall the QLR1660 program, LOG and CFG files may affect the QLR1660 system installed newly still left over in program folder. (C:\ProgramFiles\ VISTAPRO \) Therefore, after uninstall, must delete these all files left over by all means.

9. Although HDD Overwrite is set to enable (On), recording is stopped.

In case that HDD Overwrite is set to enable (On), whenever free space is under 500MByte, QLR1660 system creates the free space of 2.0GByte by erasing oldest data to save new recording data. But, if the total capacity of recorded data for QLR1660is smaller than 2.0GByte, recording could be stopped. Please make the new space for recording.

It's all on the web

- Product Information
- **Specification Sheets**
- User Manuals
- Software Upgrades
- Quick Start Guides
- Firmware Upgrades



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