

DC-Z Series

Operation Manual

DC-Z1163 DC-Z1263



Before reading this manual

This is a basic operation manual for installation and use of an IDIS network camera. Users who are using this product for the first time, as well as users with experience using comparable products, must read this operation manual carefully before use and heed to the warnings and precautions contained herein while using the product. Safety warnings and precautions contained in this operation manual are intended to promote proper use of the product and thereby prevent accidents and property damage and must be followed at all times. Once you have read this operation manual, keep it at an easily accessible location for future reference.



- The manufacturer will not be held responsible for any product damage resulting from the use of unauthorized parts and accessories or from the user's failure to comply with the instructions contained in this operation manual.
- It is recommended that first-time users of this network camera and individuals who are not familiar with its use seek technical assistance from their retailer regarding product installation and use.
- If you need to disassemble the product for functionality expansion or repair purposes, you must contact your retailer and seek professional assistance.
- Both retailers and users should be aware that this product has been certified as being electromagnetically compatible
 for commercial use. If you have sold or purchased this product unintentionally, please replace with a consumer
 version.

Safety Symbols

Symbol	Туре	Description
	Warning	An important instruction or set of important instructions that can lead to severe injury or even death if not followed.
Caution		An instruction or set of instruction that can lead to personal injury and/or property damage if not followed.

In-Text

Symbol	Туре	Description			
	Caution	Important information concerning a specific function.			
\checkmark	Note Useful information concerning a specific function.				

Safety Precautions

WARNING

RISK OF ELECTRIC SHOCK
DO NOT OPEN

WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER (OR BACK).
NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Important Safeguards

1. Read Instructions

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

2. Retain Instructions

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

3. Cleaning

Unplug this equipment from the wall outlet before cleaning it. Do not use liquid aerosol cleaners. Use a damp soft cloth for cleaning.

4. Attachments

Never add any attachments and/or equipment without the approval of the manufacturer as such additions may result in the risk of fire, electric shock or other personal injury.

5. Water and/or Moisture

Do not use this equipment near water or in contact with water.

6. Placing and Accessories

Do not place this equipment on an wall or ceiling that is not strong enough to sustain the camera. The equipment may fall, causing serious injury to a child or adult, and serious damage to the equipment. Wall or shelf mounting should follow the manufacturer's instructions, and should use a mounting kit approved by the manufacturer.



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

Do not place this equipment in an enclosed space. Sufficient ventilation is required to prevent an increase in ambient temperature which can cause malfunction or the risk of fire.

7. Power Sources

This equipment should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power, please consult your equipment dealer or local power company.

8. Power Cord

Operator or installer must remove power and TNT connections before handling the equipment.

9. Lightning

For added protection for this equipment during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the equipment due to lightning and power-line surges. If thunder or lightning is common where the equipment is installed, use a surge protection device.

10. Overloading

Do not overload wall outlets and extension cords as this can result in the risk of fire or electric shock.

11. Objects and Liquids

Never push objects of any kind through openings of this equipment 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 equipment.

12. Servicing

Do not attempt to service this equipment yourself. Refer all servicing to qualified service personnel.

13. Damage requiring Service

Unplug this equipment from the wall outlet and refer servicing to qualified service personnel under the following conditions:

- A. When the power-supply cord or the plug has been damaged.
- B. If liquid is spilled, or objects have hit the equipment.
- C. If the equipment has been exposed to rain or water.
- D. If the equipment does not operate normally by following the operating instructions, adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the equipment to its normal operation.
- E. If the equipment has been dropped, or the cabinet damaged.
- F. When the equipment exhibits a distinct change in performance this indicates a need for service.

14. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or that have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

15. Safety Check

Upon completion of any service or repairs to this equipment, ask the service technician to perform safety checks to determine that the equipment is in proper operating condition.

16. Field Installation

This installation should be made by a qualified service person and should conform to all local codes.

17. Correct Batteries

Warning: Risk of explosion if battery is replaced by an incorrect type. Dispose of used batteries according to the instructions.

18. Tmra

A manufacturer's maximum recommended ambient temperature (Tmra) for the equipment must be specified so that the customer and installer may determine a suitable maximum operating environment for the equipment.

FCC Compliance Statement

THIS EQUIPMENT HAS BEEN TESTED AND FOUND TO COMPLY WITH THE LIMITS FOR A CLASS A 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. OPERATION OF THIS EQUIPMENT IN A RESIDENTIAL AREA IS LIKELY TO CAUSE HARMFUL INTERFERENCE, IN WHICH CASE USERS WILL BE REQUIRED TO CORRECT THE INTERFERENCE AT THEIR OWN EXPENSE.

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WEEE (Waste Electrical & Electronic Equipment)

Correct Disposal of This Product

(Applicable in the European Union and other European countries with separate collection systems)



This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources.



Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

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Other company and product names are registered trademarks of their respective owners.

This product contains software built partially on open-source content. Codes for the corresponding open-source content are available for download. For more information, refer to the software CD (OpenSourceGuide\ OpenSourceGuide.pdf) or the open source guide accompanying this operation manual.

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Part 1 - Introduction

Product Features

DC-Z1163 / DC-Z1263 is an IP-based network camera that compresses and transmits video over ethernet. You can use the IDIS Discovery program to change network camera settings or the IDIS Solution Suite Compact program to manage multiple network cameras. In addition, the embedded web server (IDIS Web) lets you remotely view live video or scan recorded video using a web browser. Alternatively, you can use the provided remote access program to manage network cameras and view/record video.



In this operation manual, the term **Remote System** refers to the computer on which the remote program (IDIS Solution Suite Compact or IDIS Web) is running.

- Supports DirectIP mode working with a DirectIP™ NVR that allows users to simply set up all required configurations without a PC
- Supports ONVIF protocol (Core specification version 1.02)
- Multi-streaming for high-resolution and high-quality video monitoring and simultaneous recording in realtime as well as flexible configurations for those
- Supports H.264 video compression and M-JPEG still image compression algorithms
- Supports 4-stage video compression rate and multiple compression resolutions
- Bidirectional audio communication support for remote audio dialog
- Video stream buffering to counter pre-/post-event buffering and network delays for improved network recording reliability
- Remote monitoring via web browser or remote software
- Automatic web casting code (HTML) generation
- Up to 10 simultaneous remote monitoring connections
- IP filtering, HTTPS, SSL, IEEE 802.1X, and configurable user authority levels for greater security
- Network bandwidth limitation and MAT features for more efficient use of network bandwidth

- Easy network access via UPnP (Universal Plug and Play) function and embedded mDNS (Multicast DNS) protocol
- Wide dynamic range compensation (Digital WDR) for improved video quality in high-contrast situations
- Slow shutter support for improved low-lighting video capture performance
- Day & Night feature (built-in IR cut filter changer)
- Quick and easy firmware upgrade over the network
- Redundant firmware and auto recovery features for improved system stability
- Network-based integrated management of multiple network cameras
- Multiple event detection modes: Alarm-in, motion detection, trip zone, audio detection, and tampering
- Backup storage on a SD card as a safeguard against data loss during network interruptions
- Supports 12 VDC, 24 VAC and PoE (Power over Ethernet)
- Supports zoom function using an optical zoom lens
- · Supports auto focus function
- Supports pan/tilt driver control via RS485 interface
- Video out feature (selectable NTSC and PAL)
- Features a built-in microphone



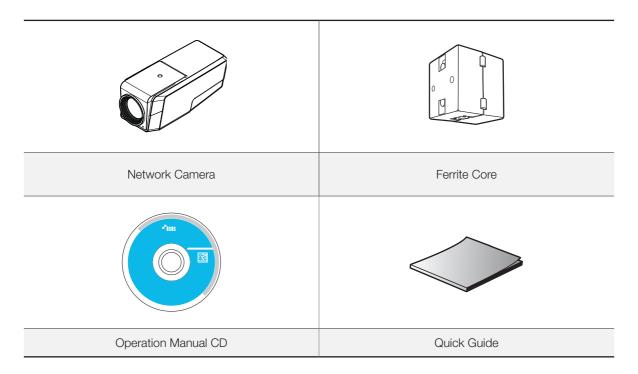
Remote monitoring and recording via multistreaming are available using the IDIS Solution Suite Compact programs. For more information on using IDIS Solution Suite Compact, refer to each operation manual.



There is a limit to the number of users allowed to connect remotely via the Internet at the same time.

Accessories

Upon purchasing the product, check inside the box to make sure all the following accessories are included. External appearances and colors of the accessories may vary depending on the model.

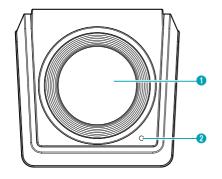


Overview



Product color and design may vary depending on the model.

Front



0	Lens
2	Built-In Microphone

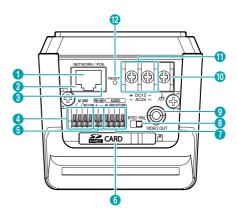
1 Lens

Optical zoom lens is installed.

2 Built-In Microphone

Receives audio.

Back



0	Network Port
2	Network LED
3	Power LED
4	Alarm Input /Alarm Output
6	RS485 Port
6	SD Memory Card Slot
7	Audio In / Audio Out
8	Video Signal Switch
9	Video Out
10	Frame GND
•	Power In
1	Factory Reset Switch

1 Network Port

Connect a network cable with an RJ-45 connector to this port. If using a PoE switch, you can supply power to the camera using an ethernet cable. For more information on PoE switch use, refer to the switch manufacturer's operation manual. You can configure, manage, and upgrade this camera and monitor its images from a remote computer over the network. For more information on network connection setup, refer to the **IDIS Discovery operation manual**.

2 Network LED

Indicates the network connection status. For more information, refer to the **LED Status Indications**.

③ Power LED

Indicates the system's operating status. For more information, refer to the **LED Status Indications**.

4 Alarm Input /Alarm Output

- Alarm Input: Connect an alarm-in device to this port. (Mechanism: Choose between an NC (Normally Closed) type or an NO (Normally Open) type) Connect a mechanical or electrical switch to the alarm in port and the GND (ground) connector. Alarm in range is 0V to 5V. In order to detect alarm input from an electrical switch, the signal must be higher than 4.3V from an NC switch or less than 0.3V from an NO switch and must last for longer than 0.5 seconds.
- Alarm Output: Connect an alarm out device's mechanical or electrical switch to the alarm out port and the COM (Common) connector. (Supported Types: NO (Normally Open), Electrical Specs: 0.3A sync current at 125 VAC, 1A sync current at 30 VDC)

⑤ RS485 Port

Connect a pan/tilt driver to this port. Connect the driver's TX+/RX+, TX-/RX- to the network camera's +/—. For more information on RS485 connections, refer to the pan/tilt driver manufacturer's **operation manual**.

6 SD Memory Card Slot

Pull on the connection cover and then insert a SD card into the slot. (A product of SanDisk or Transcend is recommended)

7 Audio In / Audio Out

- Audio In: Connect an audio source (line in). A built-in microphone is featured on the front.
- Audio Out: Connect an amplifier to this port (line out). This device does not feature a built-in audio amplifier unit and therefore requires the user to purchase a separate speaker system with a builtin amplifier.

® Video Signal Switch

Select the video signal between NTSC and PAL for video output.



- Do not remove the SD card while the system is in operation. Removing the card while the system is in operation can cause the system to malfunction and/or corrupt data stored on the SD card.
- An SD card is a consumable product with a finite service life. Prolonged use will damage the card's memory sectors and result in data loss or memory card failure. Test the SD card regularly and replace it whenever necessary.

Video Out

Connect the monitor.



Use these ports for previewing video and not monitoring video.

(10) Frame GND

Connect to the ground side of the power in by using the grounding wire.

11 Power In

Loose the screws of power connector by turning the screw counter-clockwise and connect two wires from the power adapter (12 VDC or 24 VAC). You do not need to distinguish power polarity when connecting the wires. Booting will commence once connected to a power supply.

12 Factory Reset Switch

Restores the camera's default factory settings. For more information, refer to the **Factory Reset**.

Factory Reset

Only use the factory reset switch to restore the camera to its factory default settings.



A factory reset will clear all camera settings configured by the user.

- 1 Shut off the power supply, insert a straight pin into the switch hole, and press down on the reset switch.
- 2 Hold the switch down and reconnect the power adapter.

- 3 Once the device turns back on and its LEDs start blinking, wait 5 seconds and then remove the pin.
- 4 The device will go through the resetting process and reboot. All camera settings will be restored to their factory defaults after the reboot.



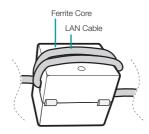
It's also possible to do a factory reset by pressing and releasing the reset switch while the camera is turned on or using the IDIS Discovery program from a remote location. A factory reset will reboot the system. For more information on factory reset, refer to the IDIS Discovery operation manual.



- Press down on the button and insert the video out/power connector cable into the opening.
 Release the button and then pull on the cable slightly to ensure it is held securely in place. To disconnect, press down on the button again and pull the wire out.
- When inserting an, audio in/out, or RS485
 connector, hold down the button and push the
 connector in through the exposed hole. Release
 the button and then gently pull on the wire to
 ensure a secure connection. To disconnect the
 cable, press down on the button again and pull
 the cable out.
- Check your local laws and regulations on making audio recordings. The user will be held liable for any violation of the law. (Article 25-5 of the Personal Information Protection Act: Operators of image data processing devices may not operate such devices for purposes other than as originally intended during device installation, place such devices at locations other than as originally intended, or use such devices to record audio.)



- When switching over from 12 VDC or 24
 VAC to PoE as the power source, the system will be rebooted once the power adapter is disconnected.
- Ground the power port's frame ground terminal before use.
- Organize the power cable so that it will
 not cause people to trip over or become
 damaged from chairs, cabinets, desks, and
 other objects in the vicinity. Do not run the
 power cable underneath carpet or a rug or
 plug the cable into a power outlet shared by a
 number of other devices.
- Wrap the camera-end of the network cable twice around the provided ferrite core (28A2024-0A2, Laird Technologies) to subdue electromagnetic wave generation.



Appendix

LED Status Indications

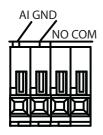
LED Status	Description		
	Off	Power not connected	
Power LED	Flashing	Booting	
	On	Powered on	
Network LED	On	Not connected to network	
Power LED/ Network LED	Flashing (sequentially)	Software upgrade in progress	

RS485 Connector



Master Device	Slave Device				
$+ \rightarrow To \rightarrow$	$+ \rightarrow \text{To} \rightarrow \text{TX+/ RX+}$				
- → To → TX-/RX-					

I/O Connector



Al	Alarm In
GND	Grounding
NO	Alarm Out (Normally Open)
СОМ	Common



IN	Audio In
GND	Grounding
OUT	Audio Out
GND	Grounding

Installation

- 1 Connect external devices, network and power adapter.
- Screw the camera to the wall or ceiling.
- 3 Supply the power.



Check the wall or ceiling to see if it needs to be reinforced. The camera may fall off if the wall or ceiling is not strong enough to support its weight.

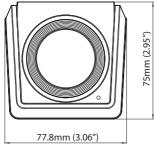
Bracket

This bracket(sold separately) can be installed on either top or bottom of the camera. Use 1/4-20 UNC (20-thread), 2.5mm +/- 0.2mm (ISO standard) or 0.197 (ASA standard) screws to attach the bracket.

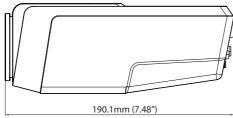
Dimensions

Front

DC-Z1163 / DC-Z1263

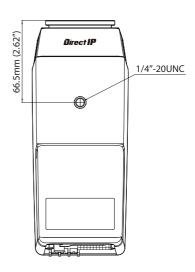


right DC-Z1163 / DC-Z1263



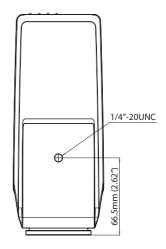
top

DC-Z1163 / DC-Z1263



bottom

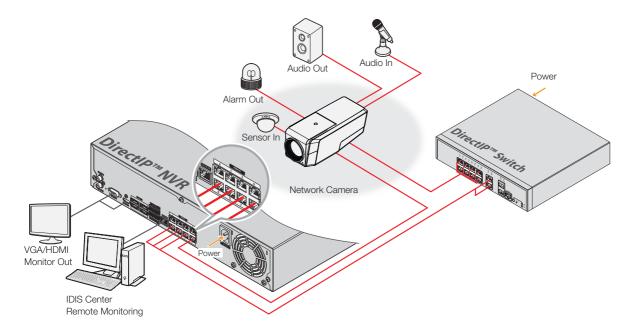
DC-Z1163 / DC-Z1263



Part 2 - Camera Connection

Use the camera by connecting to DirectIP™ NVR or non DirectIP™ NVR, VMS such as IDIS Solution Suite Compact.

With DirectIP™ NVR-based Layout



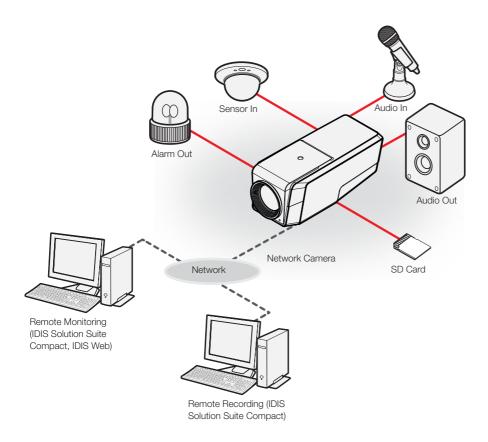
DirectIP NVR makes it easy to use cameras without extra network configurations.

Each camera can be controlled via the DirectIPTM NVR setup menu, without any PC.

For detailed camera settings, please see the camera setting pages of DirectIPTM NVR manual.

For users using the camera with DirectIP™ NVR connection, do not need to consider contents after page 14.

With non DirectIP™ NVR-based Layout



Control the camera over the network from software installed on a computer. Ideal for using the camera over the network from a remote location.

The contents after page 15 are only for users using the camera with non DirectIP™ NVR connection or VMS connection such as IDIS Solution Suite Compact.

Part 3 - Remote Setup

Configure basic network camera settings and all other system settings.



Screen images may vary depending on the model.

Camera Protocol

Camera supports **DirectIP™** and **IDIS** protocols.

- **DirectIP**TM protocol:
 - Using with a DirectIP™ NVR enables camera use without the need to configure network settings.
 - The DirectIP™ NVR also allows you to control all camera settings directly from the NVR, without the need for a computer.



For more information on configuring camera settings from a DirectIP™ NVR, refer to the DirectIP™'s operation manual.

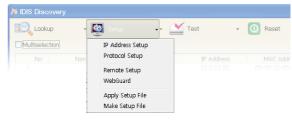
- IDIS protocol:
 - Control the camera over the network from software installed on a computer or a separate NVR.
 - Ideal for using the camera over the network from a remote location.

Remote Setup

- 1 Launch the IDIS Discovery program and then from the main screen select a network camera whose protocol you wish to change.
- 2 Click on the Setup

 icon and then select Setup

 → Protocol Setup. A Protocol Setup screen will
 appear.
 - Alternatively, you can select Network Camera from the main screen and then right-click to access the Protocol Setup screen.





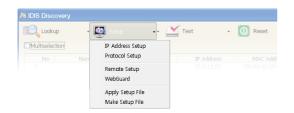
- From the Protocol Setup screen, select the IDIS and then click OK.
- 4 Click on the Setup

 icon and then select Setup

 → Remote Setup. A Remote Setup screen will
 appear.
 - Alternatively, you can select Network Camera from the main screen and then right-click to access the Remote Setup screen.



- This operation manual has been composed based on IDIS protocol use.
- System settings can also be changed using a remote program.





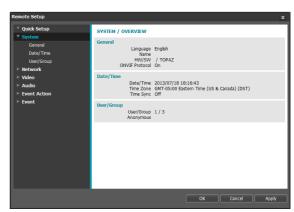
From the Remote Setup screen, select the menu on the left to display the current settings. Select an option under the menu to change the corresponding settings. Once you have changed the settings, click **OK** to apply the settings and exit from the Remote Setup screen.

Quick Setup



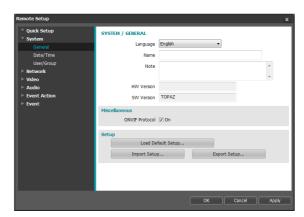
Quick Setup allows you to set up **System**, **Network**, **Video**, **Audio**, and other basic settings needed for camera use.

System



Change the camera's system information, add users/groups, and/or import/export settings.

General



• SYSTEM/GENERAL

- **Language**: Select the language you wish to use for remote setup.
- **Name**: Enter a name for the camera. (Up to 31 alphanumeric characters, including spaces)
- **Note**: Enter a description for the camera.
- HW Version/SW Version: Indicates the camera's hardware and software versions.

Miscellaneous

 ONVIF Protocol: Select to enable ONVIF protocol use. However, ONVIF Protocol is available only to users belonging to the standard user groups (Administrator, Operator, and User).

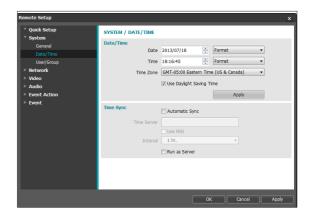
Setup

- Load Default Setup: Restores all settings other than Date/Time to their factory defaults. Select Include Network Setup to load default network settings as well. For more information on network setup, refer to the Network on page 19.
- Import Setup: Open a setup file and apply its settings to the camera. Click on the button and then select a setup file. Select Include Network Setup to apply the file's network setup settings (exc. FEN). For more information on network setup, refer to the Network on page 19.
- Export Setup: Export the current settings as a .dat file. Click on the button and then enter a file name.



- Load Default Setup and Import Setup options are available only to users belonging to the Administrator group.
- When applying the settings of a setup file, do not select the **Include Network Setup** option if the network settings contained in the selected file is currently being used by a different camera.
 Doing so can interfere with establishing a connection with the other camera.
- If IP Address, Admin Port, and/or SSL settings have been changed, Remote Setup will terminate after applying the current settings.

Date/Time



 Date/Time: Change the camera's date/time settings and display formats and configure the time zone and daylight saving time settings. Click Apply to apply the changes right away.

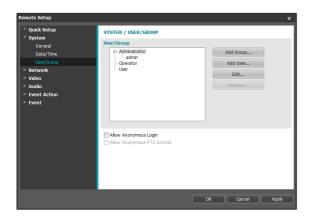
• Time Sync

- Automatic Sync: Select to synchronize the system's time with the time server at a specified interval. Enter the time server's IP address or domain name and then specify the interval. If the time server is FEN-enabled, select the Use FEN option and then enter the time server's name instead of its IP address or domain name.
- Run as Server: Select to run the camera as a time server. Other devices will then be able to synchronize its time setting with this camera's time setting.



If you wish to enter a domain name instead of an IP address for the **Time Server** setting, DNS server must be configured during **Network** setup. If you wish to enter a server name instead of an IP address or a domain name, the **FEN** option must be enabled during **Network** setup.

User/Group

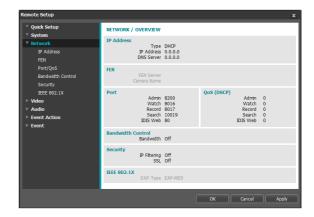


- User/Group: Change remote camera control permission settings for users and user groups.
 - Add Group: Add a new user group. Designate a name for the group and then specify control authorities.
 - Add User: Add a new user. Designate a name for the user, select which group to add the user to, and then enter a connection password.
 - Edit: Edit group authorities and/or user passwords. Select a group or user and then click on the button.
 - Remove: Delete groups or users. Select a group of user you wish to delete and then click on the button
- Allow Anonymous Login: Select if you are using Webcasting. For more information on webcasting, refer to the Webcasting on page 28.
- Allow Anonymous PTZ Control: Select to control the pan/tilt driver remotely from a website using webcasting.



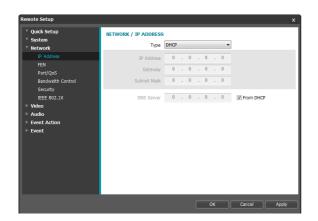
- **User/Group** settings can only be configured by users belonging to the **Administrator** group.
- There is no default password for the Administrator group's admin user.
- Standard groups (Administrator, Operator, and User) cannot be edited or deleted. Authorities assigned here apply identically to ONVIF protocol user groups.
- Group authorities that can be assigned are as follows:
 - **Upgrade**: Able to upgrade the system.
 - **Setup**: Configure the system's settings.
 - Color Control: Adjust the camera's brightness, contrast, saturation, and hue settings.
 - PTZ Control: Authority to control pan/tilt driver's pan/tilt functions.
 - Alarm-Out Control: Reset alarm outs.
 - System Check: View system event status.
 - Search: Search video recordings saved on the SD card from a remote program.
 - Clip-Copy: Search video recordings saved on the SD card and save them as video files from a remote program.

Network



Change the network settings, enable FEN and security features, and control network bandwidth use.

IP ADDRESS



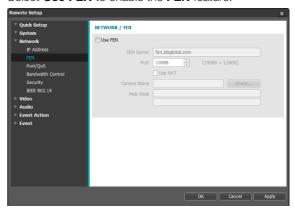
- Type: Select the type of network you are using. If this option has been changed, Remote Setup will terminate after applying the current settings.
 - Manual: Select if using a static IP. You will then be able to configure the related settings manually.
 - DHCP: Select if connected to the network using DHCP. Click OK to retrieve IP address and other network settings automatically from the DHCP server.
 - ADSL (with PPPoE): Select if connected to the network using ADSL. Enter the ID and password for ADSL connection and then click OK to log in and retrieve the IP address and other network settings automatically.
- DNS Server: Enter the DNS server's IP address. By using the DNS server, you will be able to use domain names instead of IP addresses when configuring the FEN, time, or SMTP server. If the camera is connected to the network via DHCP, select the From DHCP option to retrieve the DNS server's IP address from the DHCP server automatically. The updated address will be displayed upon the subsequent connection.



- Contact your network administrator for more information on the camera's network connection type, the DNS server's IP address, and other related information.
- If using DHCP or ADSL, the camera's IP address may change from time to time. We therefore recommend that you use the FEN feature.

FEN

Select **Use FEN** to enable the **FEN** feature.



- FEN Server: Enter the FEN Server's IP address or domain name.
- Port: Enter the FEN Server's port number.
- Use NAT: Select if the camera is connected to the network via a router.
- Camera Name: Enter a camera name you wish to register to the FEN Server. Click OK to check the name's availability.
- Help Desk: Change the settings and then click
 OK to register the entered camera name to the
 FEN Server. If all the settings have been configured
 correctly, the FEN Server's help desk information
 will be shown in the Help Desk fields next time you
 enter the FEN setup screen.

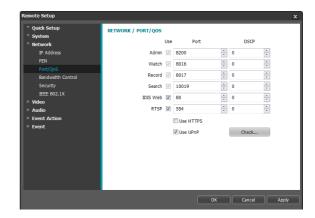


- Use FEN is a feature that allows you to register a
 unique name for a camera that utilizes a dynamic
 IP address to the FEN Server and connect to the
 camera using the registered name instead of an IP
 address, which can change from time to time. In
 order to use this feature, you must first register a
 camera name to the FEN Server.
- If network settings have been changed, click OK at the bottom of the setup window to save the changes and then setup the FEN.
- FEN Server's default address is fen.idisglobal.
 com. DNS server must be configured under network setup to ensure normal operation.
- If using an IP router (or NAT), port configuration and other network functions will depend on the usage method of the IP router (or NAT).
- You will not be able to save FEN settings unless you click on the OK button next to the Camera Name field and check the entered name's availability. In addition, you will be prompted with an error message if you do not enter a camera name or enter a name already registered to the FEN Server. If the camera name contains the #, \, and/or % symbol, it might not be able to connect to the camera from the IDIS Web program.



The FEN Server operated by IDIS is a service to its clients and may go offline without notice for server update purposes or due to an unexpected failure.

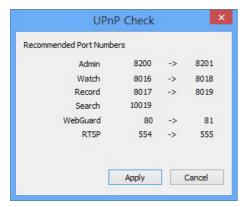
Port/QoS



- Use/Port: Enable/disable ports and designate corresponding port numbers. Admin, Watch, Record, and Search ports are enabled by default and cannot be disabled. By enabling IDIS Web and RTSP ports, you will be able to use the IDIS Web program or a media player that supports RTSP (Real-Time Streaming Protocol) service to connect to the camera. If this option has been changed, Remote Setup will terminate after applying the current settings. (Applicable to Admin port number only.)
- DSCP: Designate each port's QoS (Quality of Service) level using DSCP values. Assigning QoS levels prioritizes the ports for network bandwidth use. Higher the DSCP value, higher the QoS level and thus higher on the network bandwidth allocation priority list. Use 0 if you do not want to assign a QoS level. The network environment must support DSCP in order for this feature to function properly. Contact your network administrator for more details.
- **Use HTTPS**: Select this option to apply https protocol-based security on IDIS Web.

 Use UPnP: If the camera is connected to the network via an IP router (or NAT), select this option to connect to the camera without setting up port forwarding. The IP router (or NAT) must be enabled with UPnP in order for this feature to function properly. For more information enabling UPnP on your IP router (or NAT), refer to the IP router or NAT's operation manual.

Click **Check** to test the current port settings. A confirmation message will appear if all the selected ports are available for use. If not, a list of recommended port numbers will be shown.



Click **Apply** to use the recommended port numbers.



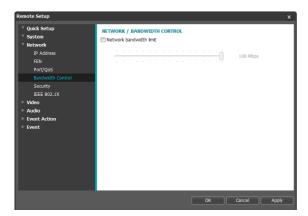
- Each port number must be unique. Otherwise, you will not be able to connect to the camera from the remote program.
- You can connect to the camera using a media player that supports RTSP service and monitor its video feed. If the camera is connected to the network via an IP router (or NAT) or is behind a firewall, you must open the ports. (All ports if using UDP protocol and RTSP ports if using TCP protocol) This feature may not be supported by al media player. In addition, video display on certain media players may not be smooth depending on the network status, video streaming compression method used, and/or the resolution setting. Connection methods are as follows:
 - Via PC: Launch the media player (such as VLC) and then enter rtsp://ID:Password@ IP Address: RTSP Port Number/ trackID='Stream Number' (Stream Number: 1 if Primary, 2 if Secondary, and 3 if Tertiary). (e.g.: rtsp://admin:@10.0.152.35:554/trackID=1 (User: admin, Password: None, Camera IP Address: 10.0.152.35, RTSP Port Number: 554, Stream: Primary)
 - Via Mobile Device: Launch the web browser and then enter http://IP Address:IDIS Web Port Number/ (If Use HTTPS has been enabled, enter https instead of http). Camera's IDIS Web port number and RTSP port number must be configured correctly in order to establish a connection this way.



- Port numbers of the remote program must be updated whenever the camera's port numbers are changed.
- ONVIF protocol may not function if using HTTPS.

Bandwidth Control

Regulates the camera's network bandwidth use based on network traffic fluctuations.

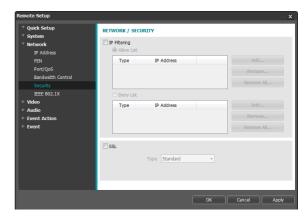


Select **Network Bandwidth limit** and then specify the maximum bandwidth. The camera will not be able to use more than the specified limit in the event of network traffic.



It may not be possible to produce the frame rate specified under **Video > Streaming** if a network bandwidth limit has been set.

Security



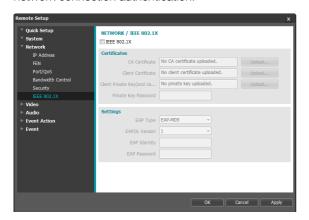
- IP Filtering: Select this option to enable IP Filtering.
 IP Filtering allows camera access from certain IP addresses and blocks access from others.
 - Add: Add new IP addresses to Allow List or Deny List. Select the Host option to add one IP address at a time. Select the Group option to define a range of IP addresses you wish to add.
 - Remove/Remove All: Remove individual or all IP addresses from Allow List or Deny List.
- SSL: Select this option to enable SSL (Secure Sockets Layer). Enabling this option applies SSL protocol protection on data transmitted out. However, programs and systems that do not support SSL will not be able to connect to the camera. If this option has been changed, Remote Setup will terminate after applying the current settings.



- Time server, FEN Server, and SMTP server's IP addresses must be added to Allow List under IP Filtering in order to use Time Sync, FEN, and Send Email features. No connection to the camera will be permitted whatsoever from IP addresses added to Deny List.
- Enabling the SSL option may place a greater load on the external system, depending on the level of security being used.
- This product contains software developed by Open SSL Project for use in Open SSL Toolkit. (http://www.openssl.org/)

IEEE 802.1X

Select the **IEEE 802.1X** option to enable IEEE 802.1X network connection authentication.

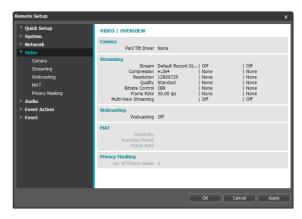


- Certificates: Upload a certificate or a private key.
 You may be prompted to enter a password for the private key.
- Settings: Configure EAP (Extensible Authentication Protocol) settings.
 - EAP Type: Choose a network connection authentication method. Selected method must be identical to the authentication method used on the authentication server.
 - EAPOL Version: Choose EAP authentication's version.
 - EAP Identity/EAP Password: Enter authentication ID and password.



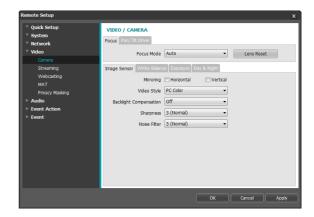
The authentication server and AP must support IEEE 802.1X authentication in order for the IEEE 802.1X network connection authentication feature to function properly.

Video



Configure Camera, Streaming, Webcasting, MAT, and Privacy Masking options.

Camera



- Focus: Select the Focus tab and set up a focus mode. If the camera image is changed by moving the object or changing the zoom magnification, it is required to adjust the focus.
 - Manual: Allows you to adjust the focus manually using remote programs
 - Auto: The camera changes its focus automatically whenever a change occurs in the image.
 - One Push: The camera changes its focus automatically only for the first change in the image after setting up the focus mode. If another change occurs after that, this setting must be adjusted manually.

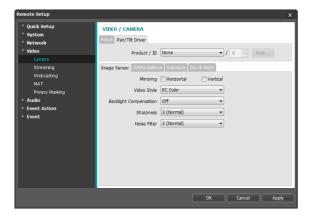
- Pan/Tilt Driver: Select the tab and configure the pan/tilt driver. Specify the mounted pan/tilt driver's model and then set up an ID. Click Port and enter the pan/tilt driver's port speed, data bit, stop bit, and parity values as per the driver manufacturer's instructions.
- Lens Reset: Adjust the focus by clicking the button to reset the lens setting when video is out of focus by external shocks.



Pan/tilt driver cannot be controlled if it is not properly connected to the RS485. For more information on RS485 port connection, refer to the <u>5 RS485 Port on page 10</u> in this operation manual and the pan/tilt driver manufacturer's **operation manual**.

Image Sensor

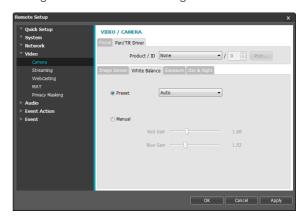
Configure Image Sensor settings.



- **Mirroring**: Select Horizontal Reverse or Vertical Reverse to flip the image horizontally or vertically.
- Video Style: Select TV Color or PC Color.
- **Backlight Compensation**: Enable/disable the Backlight Compensation feature. If enabled, objects are exposed brighter in backlit situations.
- Sharpness: Adjust the sharpness level. Adjust the contours to make the images look sharper. Increasing the value raises the sharpness level, but using too high a value can result in unwanted noise.
- Noise Filter: Select the noise filter level. Noise filter can reduce the noise in images taken under lowlighting conditions. Increasing the value reduces the noise, but using too high a value can result in blurry images.

White Balance

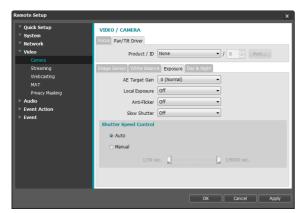
Configure White Balance settings.



- Preset: Use preconfigured white balance settings.
 - Auto: Allow the system to adjust the white balance automatically. The system will assess the lighting conditions and adjust the white balance automatically.
 - INCANDESCENT FLUORESCENT COLD: Select a lighting type to apply the appropriate white balance.
- Manual: Adjust the white balance manually. Adjust Red and Blue gain values. Greater the value, greater the intensity of the corresponding color.

Exposure

Configure **Exposure** settings.



- AE Target Gain: Specify exposure compensation's target gain. Exposure is compensated automatically based on the specified target gain. Higher the gain, brighter the images.
- Local Exposure: Activate Local Exposure. Use Local Exposure on images that appear too dark due to backlighting conditions and on images containing over-exposed sections. Dark parking lot entrances and gas station entrances at night, for example (Local Exposure compensates for the bright light coming from incoming vehicle headlights and makes it possible to see the license plates). Greater the value, clearer the image.
- Anti-Flicker: If the lights in the area where the camera is located use alternating current, specify the frequency of the lights to minimize flickering. Matching the frequencies can reduce flickering. (NTSC: 60Hz, PAL: 50Hz)
- Slow Shutter: Activate Slow Shutter. The electronic shutter's speed will decrease to the specified level under low-lighting conditions to allow more light in and therefore produce brighter images.

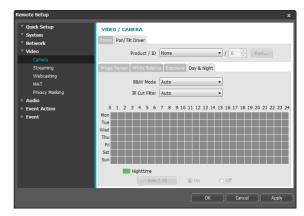
- Shutter Speed Control: Adjust Shutter Speed.
 This option is available only when Anti-Flicker and Slow Shutter are both set to Off.
 - Auto: The system will assess the lighting conditions and adjust the shutter speed automatically.
 - Manual: Use the slider to select the desired shutter speed. Select the most suitable minimum and maximum shutter speeds for the lighting conditions in the area where the camera is located.



With certain features, selecting **Auto** automatically loads settings suitable for the camera's installation environment.

Day & Night

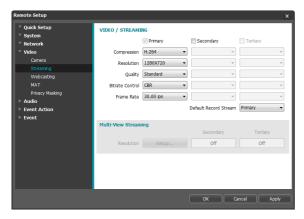
Configure Day & Night settings.



- B&W Mode: Display the images in greyscale for greater clarity in low-lighting conditions. When configuring Event > Alarm In, this feature will not function if Day & Night Mode event action has been configured.
 - On/Off: Enable/disable B&W Mode.
 - Auto: Allow the system to enable/disable B&W Mode automatically.
 - Schedule: Set up a B&W Mode schedule. B&W Mode is enabled on days and times designated as Nighttime and disabled at all other times. Select On or Off at the bottom of the schedule table and then click or drag on the dates and times to select/unselect as Nighttime. Select On or Off and then click Select All/Clear All to select/unselect all dates and times as Nighttime.

- IR Cut Filter: IR Cut Filter blocks out the infrared spectrum. You can ensure clear images at all times by blocking out the infrared spectrum in high-lighting conditions and allowing the infrared spectrum to pass through in low-lighting conditions. When configuring Event > Alarm In, this feature will not function if Day & Night Mode event action has been configured.
 - On/Off: Enable/disable IR Cut Filter.
 - **Auto**: Allow the system to enable/disable IR Cut Filter automatically.
 - Schedule: Set up an IR Cut Filter schedule. IR
 Cut Filter use is disabled during dates and times
 designated as Nighttime and enabled at all other
 times. Select On or Off at the bottom of the
 schedule table and then click or drag on the dates
 and times to select/unselect as Nighttime. Select
 On or Off and then click Select All/Clear All to
 select/unselect all dates and times as Nighttime.

Streaming



• Primary/Secondary/Tertiary: Multistreaming is supported. Enable/disable streaming use. Secondary's settings change depending on Primary's settings. Tertiary may not be available or have its settings changed depending on Primary and Secondary settings.

DC-71163 model

Primary		Secondary		Tertiary		Quaternary	
Resolution	ips	Resolution	ips	Resolution	ips	Resolution	ips
1280x720	30	1280x720	15	-	-	-	-

DC-Z1263 model

Primary		Secondary		Tertiary		Quaternary	
Resolution	ips	Resolution	ips	Resolution	ips	Resolution	ips
1920x1080	30	1280x720	10	1280x720	1	=	-
1920x1080	30	1280x720	10	352x240	10	=	-
1920x1080	30	704x480	30	-	-	-	-
1920x1080	30	704x480	15	704x480	15	=	-
1920x1080	15	1920x1080	15	704x480	30	=	-
1920x1080	15	1280x720	30	1280x720	15	-	-

- Compression: Choose the streaming compression method.
- **Resolution**: Choose a resolution setting for video streaming. The current stream resolution cannot be higher than the higher stream resolution.
- Quality: Choose a quality setting for video streaming.
- Bitrate Control: Choose a bitrate control mode for H.264 compression.
 - **CBR (Fixed Bitrate)**: Maintains the current bitrate regardless of motion change in the video.
 - VBR (Variable Bitrate): Bitrate varies depending on motion changes in the video. Less movement places less load on the network and takes up less storage space.
- Frame Rate: Choose a frame rate setting for video streaming. The frame rate of the current stream cannot exceed that of a stream of higher priority if the resolution of the current stream is the same as that of the stream of higher priority.
- Default Record Stream: Choose a stream to use for recording. This setting, however, may not apply if a recording stream has been designated from the remote program or the SD card recording feature has been enabled. For more information, refer to the Setup on page 34

Multi-View Streaming: Designate a specific area
of the screen and stream images from that area
only. (Secondary and Tertiary only) Click Setup to
designate a streaming area.

Select **On** and then specify the streaming area's resolution.



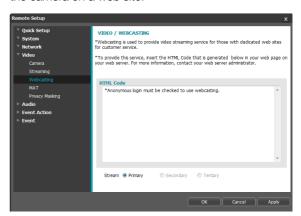
- **Resolution Limit**: Indicates the maximum resolution that can be set for the streaming area.
- Resolution: Designate a streaming area.
 Designated area is marked in red on the screen.
 You can adjust the resolution of the area or reposition the area by dragging and dropping using the mouse.
- Current Resolution: Displays the resolution of the designated streaming area.



If multiple users are connected to the camera, the increase in bandwidth use can lower the frame rate.

Webcasting

Use the webcasting service to view live images from the camera on a web site.



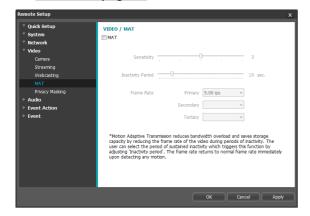
- **HTML Code**: Copy and paste the html code shown on the screen within the code of the web page you want the video to be displayed.
- **Stream**: Choose a stream to use for webcasting. Only a stream currently in use can be selected.



In order to use the webcasting service, the **Allow Anonymous Login** option under **System > User/ Group** must be selected.

MAT

Select the **MAT** option to use the MAT (Motion Adaptive Transmission) feature during video transmission and recording. This feature is supported only with the Slow Shutter mode disabled. For more information on Slow Shutter mode settings, refer to the **Camera on page 24**.



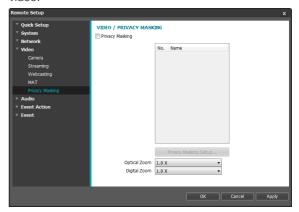
- Sensitivity: Set the motion detection sensitivity.
 Higher values will result in more sensitive motion
 detection.
- Inactivity Period: Set the Inactivity Period. If motion is not detected for the duration of time specified, video is transmitted and recorded using the frame rate designated below until movement is detected again.
- Frame Rate: Designate the frame rate to be used between the end of the Inactivity Period and the next motion detection. The frame rate of the secondary stream cannot be higher than that of the primary stream, and frame rates supported for the secondary stream change depending on the frame rate of the primary stream. Video is transmitted and recorded at the designated frame rate between then end of the Inactivity Period and the next motion detection. Once motion is detected again, the frame rate designated under **Streaming** is restored immediately.



MAT (Motion Adaptive Transmission) is a feature that lowers the frame rate when motion is not detected to reduce the load on the network and save on storage space. Based on the specified sensitivity setting, no movement will be assumed if there is no change between two consecutive images.

Privacy Masking

Select **Privacy Masking** to set up a privacy mask over a specific area. The section on which a privacy mask is applied will appear as black when monitoring video.



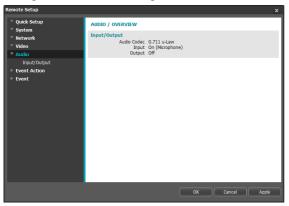
 Privacy Masking Setup: Set up privacy masks. (Up to 16)



- (Select)/((Unselect): Set or remove a privacy mask. Click on the button and drag & drop using the mouse to set up a privacy mask.
- No. / Name: Displays a list of active privacy masks. The numbers indicate privacy mask numbers. Select the empty space next to a number to assign a name to the corresponding privacy mask. Click **Delete** to remove the selected privacy mask.

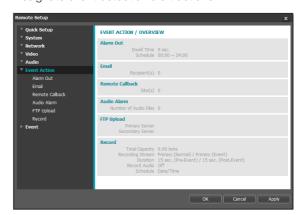
Audio

Configure audio in/out settings.

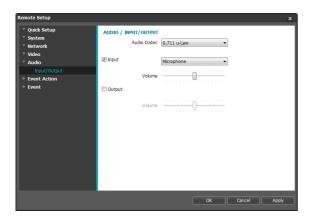


Event Action

Designate event detection alert actions.



In/Out



Audio Codec: Select an audio codec.

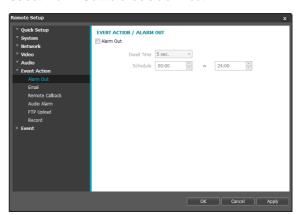
- **Input**: Select an option and then an audio input source (microphone or line-in). Adjust the volume.
- Output: Select an option and then adjust the volume.



Cameras do not feature built-in audio amplifier units and therefore require the user to purchase a speaker system with a built-in amplifier separately.

Alarm Out

Select Alarm Out to enable alarm out.

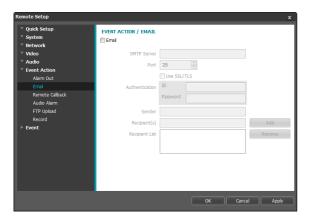


- **Dwell Time**: Designate the alarm out duration. When an event occurs, alarm out will be generated for the specified duration.
- **Schedule**: Specify the alarm out schedule. Alarm out is generated during the specified period only.

Email

option.

Select **Email** to send out emails.



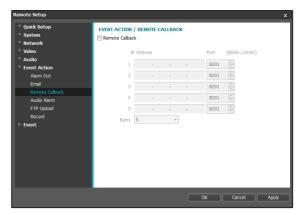
- SMTP Server/Port: Enter the SMTP server's IP address (or domain name) and port number you received from the network administrator.
 If a DNS server has been set up during network configuration, you can enter a domain name instead of an IP address. If using an SMTP server requiring an SSL connection, select the Use SSL/TLS
- Authentication: Enter a user ID and password if user authentication is required by the SMTP server.
- Sender/Recipient(s): Enter the sender and recipients' addresses. (Up to 10) The addresses must be properly formatted and include the @ symbol.

Remote Callback

Select **Remote Callback** to send callback messages to a remote system.



- Not supported from the IDIS Web program.
- The camera must be registered to the remote system in order to use the Remote Callback feature.



- **IP Address**: Enter the IP address and port number of the remote system that will receive the messages.
- Retry: Designate how many reattempts to make if message delivery fails.

Audio Alarm

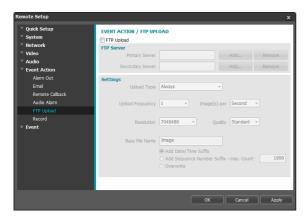
Select **Audio Alarm** to generate audio.



List: Displays a list of audio files to playback. Click
 Add or Remove to add/remove audio (.wav) files.
 (supports 16-bit, 16KHz encoded files only) Select
 an audio file from the list and then click Play to listen
 to the file.

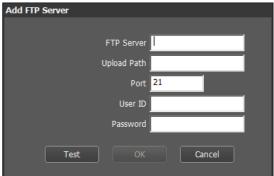
FTP Upload

Select **FTP Upload** to upload .jpg image of the event detected to an FTP server.



 FTP Server: Click Add to register a new FTP server. Click Remove to remove a registered FTP server. When an event is detected, a .jpg image of the event detected is uploaded to the Primary Server.

If the upload to the Primary Server fails, the file will be uploaded to the Secondary Server. Upload to the Secondary Server will continue to be attempted until successful. Fill out the fields below and click **Test** to test the FTP server connection settings. Once the test is complete, click **OK**.



- FTP Server: Enter the FTP server's IP address (or domain name).
- **Upload Path**: Designate the file upload path.
- **Port**: Enter the FTP server's port number.
- User ID, Password: Enter the user ID and password needed for connecting to the FTP server.
- **Setup**: Configure image and upload settings.
 - Upload Type: Choose an upload type. Select
 Always to upload images using the settings
 below, irrespective of event detection. Select
 Event to upload images using the settings below
 when an event is detected.
 - Upload Frequency: Activated only when Upload
 Type has been set to Always. Designate the
 upload speed. The specified number of images
 will be uploaded to the FTP server during the
 specified period of time.
 - Upload 1 image per: Activated only when
 Upload Type has been set to Event. Designate
 the upload speed. Select Upload for and specify
 a duration. Images will be uploaded for the
 specified duration at the specified upload speed.
 Select Upload while event status is active to
 upload images at the specified speed only while
 event status is active.

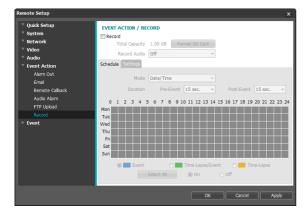
- Resolution/Quality: Choose the resolution and quality of the images to upload to the FTP server.
 The resolution cannot be higher than the primary stream resolution.
- Base File Name: Enter a name for the files to be uploaded to the FTP server and then choose file identification options. Select Add Date/
 Time Suffix to add event detection date and time information to each image file. Select Add Sequence Number Suffix max. Count to number the image files based on the order of event detection. Select Overwrite to overwrite the previous image with the new image. Event type is automatically added to the file names.



- When specifying the Upload Path or Base File
 Name, you cannot use special characters such as
 \, /, #, *, |, :, ", <, >, and ?.
- If each stream utilizes a different resolution, the resolution setting for Tertiary will be used for images uploaded to the FTP.
- Set speed settings for Upload Frequency and Upload 1 image per options in consideration of the FTP server's performance. FTP uploads can fail if the configured speed is higher than what the FTP server can handle.

Record

Select **Record** to record video on the SD card. First, make sure that an SD card (Class 6 or higher) has been properly inserted.



- **Total Capacity**: Indicates the SD card's total capacity if it has been inserted properly.
- Format SD Card: Click on this button to format the inserted SD card. Formatting the SD card erases all data saved on the card.



This function is only supported for users in **Administrator** group.

• Record Audio: Enable/disable audio recording.

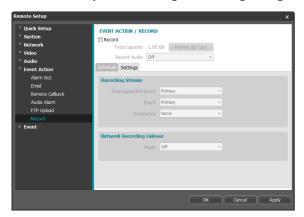
Schedule

Select the **Schedule** tab and set up a recording schedule.

- Mode: Choose a recording mode.
 - Always Event: Records video in event mode. In event recording mode, video is recorded when an event is detected.
 - Always Time-Lapse: Records video in time lapse mode. In time lapse recording mode, video is recorded continuously, irrespective of event detection.
 - Always Time-Lapse/Event: Records video in time lapse mode when event has not been detected and in event mode when one is detected.
 - Date/Time: Video is recorded in the specified mode according to the dates and times selected in the schedule. Select On or Off at the bottom of the schedule table and then choose a recording mode. Click on dates and times on the schedule table or drag to enable/disable recording mode. Select On or Off and then click Select All/Clear All to enable/disable recording mode on all dates and times.
- **Duration**: Specify the event recording duration.
 - Pre-Event: Select the pre-event recording duration. You can record up to 60MB of video. Using high resolution, quality, and frame rate settings can cause the recording to exceed the 60MB limit and stop before the end of the specified recording duration.
 - Post-Event: Select the post-event recording duration.

Setup

Select the **Setup** tab and configure recording settings.



- Recording Stream: Choose a stream to use for recording. It's possible to designate different streams for different recording modes.
 - Time-Lapse/Pre-Event: Designate the stream to use for recording in time lapse mode or event mode (pre-event).
 - Event: Designate the stream to use for recording in event mode (post-event).
 - **Preference**: Designate recording stream priority.

SD Recording	Recording using the Time- Lapse/Pre-Event and Event streams designated above.
Network Recording	Record from the remote program using the designated recording streams. If the remote program does not support recording streams, however, Default Recording Stream specified under Video > Streaming will be used.
None	Record using the SD Recording stream or the Network Recording stream, whichever has the higher resolution.

 Network Recording Failover: Select a network recording failover mode. You can recording video on the SD card when recording from the remote program fails. Video is recorded using the stream designated under Recording Stream > Event.



Not supported if the recording mode under the **Schedule** tab is set to **Always > Time-Lapse**.

- Off: Disables Network Recording Failover.
- Always: Records video continuously until recording from the remote program becomes functional again, regardless of the recording schedule.
- On SD Schedule: Records video based on the recording schedule set up under the Schedule tab until recording from the remote program becomes functional again.



- Recordings saved on the SD card can be searched and played back from the HDP program or remotely from the remote program. For more information, refer to each program's operation manual.
- Video search and playback may not function properly on the remote program while video is being recorded on to the SD card.



To remove the SD card, unselect the **Record** option and wait 30 seconds before doing so. Removing the SD card while recording is in progress of without waiting 30 seconds can damage the system and/or the recording data.

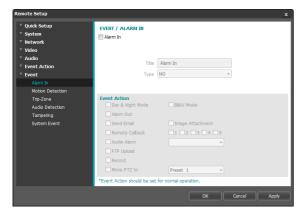
Event

Configure event detection settings.



Alarm In

Select **Alarm In** to enable alarm in event. With alarm in event enabled, alarm in detections by the alarm in connector will be assumed as events.



- Title: Enter a name for the alarm in device.
- Type: Select the alarm in type.

- Event Action: Select an alarm in event alert action.
 - Day & Night Mode: Select if you do not wish to use the IR cut filter when an event is detected.
 Select this option to override the Day & Night Mode settings under Video > Camera. Select B&W Mode to enable black and white mode when an event is detected. Expiration of the detected event will disable B&W Mode and restore IR Cut Filter.
 - Alarm Out: Select if you wish to generate an alarm out.
 - Send Email: Select if you wish to send an email.
 Select the Image Attachment option to attach a .jpg image of the event detected to the email.
 - **Remote Callback**: Select this option to send a message to a remote system and then select which system to send the message to.



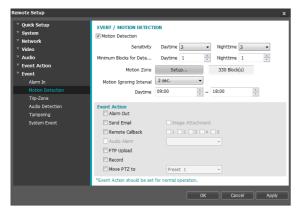
- Not supported from the IDIS Web program.
- The camera must be registered to the remote system in order to use the **Remote Callback** feature.
- Audio Alarm: Select this option to generate an audio alert and then choose an audio file (.wav).
- FTP Upload: Select this option if you wish to upload images to the FTP server.
- **Record**: Select this option to record video.
- **Move PTZ to**: Select a preset position to move the pan/tilt driver to that position. Preset positions can be set from the remote program.



Event Action settings must be configured correctly in order to perform event actions.

Motion Detection

Select **Motion Detection** to configure motion detection event settings. With motion detection event enabled, motion detections within the designated area will be assumed as events.



- Sensitivity: Select daytime and nighttime motion detection sensitivity levels. Higher values will result in more sensitive motion detection.
- Minimum Blocks for Detection: Select minimum blocks for daytime and nighttime motion detection.
 Motion must take place over the selected number of blocks in order for it to be considered as a motion detection event.
- **Motion Zone**: Click **Setup** and define the motion zone using blocks.
 - <a>
 (Select)/<a> (Unselect): Enable/disable motion detection.
 - (Single Block): Select/unselect motion detection blocks individually.
 - **(Zone)**: Select/unselect multiple motion detection blocks.
 - (AII): Select/unselect all motion detection blocks.
- Motion Ignoring Interval: With Motion Ignoring Interval configured, no event log or notification is generated for motions detected during a period of time following a motion detection event.
- Daytime: Specify when daytime starts and ends. All other times will be assumed as nighttime.
- Event Action: Select a motion detection event alert action.
 - Alarm Out: Select if you wish to generate an alarm out.

- Send Email: Select if you wish to send an email.
 Select the Image Attachment option to attach a .jpg image of the event detected to the email.
- Remote Callback: Select this option to send a message to a remote system and then select which system to send the message to.



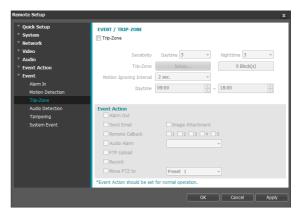
- Not supported from the IDIS Web program.
- The camera must be registered to the remote system in order to use the Remote Callback feature.
- Audio Alarm: Select this option to generate an audio alert and then choose an audio file (.wav).
- **FTP Upload**: Select this option if you wish to upload images to the FTP server.
- **Record**: Select this option to record video.
- **Move PTZ to**: Select a preset position to move the pan/tilt driver to that position. Preset positions can be set from the remote program.



Event Action settings must be configured correctly in order to perform event actions.

Trip-Zone

Select **Trip-Zone** to configure trip zone event settings. With trip zone event enabled, motion detected inside/outside the selected area will be assumed as an event.



• **Sensitivity**: Select daytime and nighttime motion detection sensitivity levels. Higher values will result in more sensitive motion detection.

- **Trip-Zone**: Click **Setup** and define the trip zone using blocks.
 - **. (Select)/ (Unselect)**: Enable/disable trip zone.
 - **I** (Single Block): Select/unselect trip zone blocks individually.
 - (Zone): Select/unselect multiple trip zone blocks.
 - (AII): Select/unselect all trip zone blocks.
 - Trip Direction: Define in which direction the motion has to occur in order for it to be considered as an event. Select In for movement occurring from outside the trip zone in and Out for movement occurring from inside the trip zone out.
- Motion Ignoring Interval: With Motion Ignoring Interval configured, no event log or notification is generated for motions detected during a period of time following a motion detection event.
- Daytime: Specify when daytime starts and ends. All other times will be assumed as nighttime.
- **Event Action**: Select a trip zone event alert action.
 - Alarm Out: Select if you wish to generate an alarm out.
 - Send Email: Select if you wish to send an email.
 Select the Image Attachment option to attach a .jpg image of the event detected to the email.
 - **Remote Callback**: Select this option to send a message to a remote system and then select which system to send the message to.



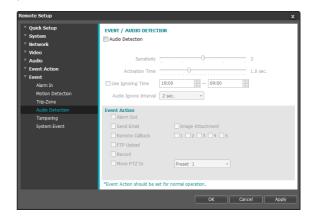
- Not supported from the IDIS Web program.
- The camera must be registered to the remote system in order to use the **Remote Callback** feature.
- Audio Alarm: Select this option to generate an audio alert and then choose an audio file (.wav).
- FTP Upload: Select this option if you wish to upload images to the FTP server.
- **Record**: Select this option to record video.
- **Move PTZ to:** Select a preset position to move the pan/tilt driver to that position. Preset positions can be set from the remote program.



Event Action settings must be configured correctly in order to perform event actions.

Audio Detection

Select **Audio Detection** to configure audio detection event settings. With audio detection enabled, an audio detection taking place during the specified activation period will be assumed as an event.



- Sensitivity: Define the audio detection sensitivity.
 Higher values will result in more sensitive detection.
- Activation time: Specify how long audio has to be detected for it to be considered as an event. Audio detections that do not last for the specified duration of time will not be considered as events.
- **Use Ignoring Time**: Define the event ignoring time. Audio detections taking place during the defined time range will not be assumed as events.
- Audio Ignore Interval: With Audio Ignoring Time configured, no event log or notification is generated for audio detections taking place during a period of time following an audio detection event.
- Event Action: Select an audio detection event alert action.
 - Alarm Out: Select if you wish to generate an alarm out.
 - Send Email: Select if you wish to send an email.
 Select the Image Attachment option to attach a .jpg image of the event detected to the email.
 - Remote Callback: Select this option to send a message to a remote system and then select which system to send the message to.



- Not supported from the IDIS Web program.
- The camera must be registered to the remote system in order to use the Remote Callback feature.

- FTP Upload: Select this option if you wish to upload images to the FTP server.
- **Record**: Select this option to record video.
- Move PTZ to: Select a preset position to move the pan/tilt driver to that position. Preset positions can be set from the remote program.

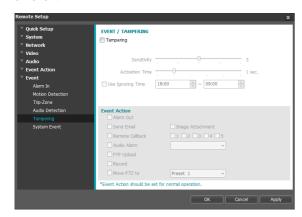


Event Action settings must be configured correctly in order to perform event actions.

Tampering

Select **Tampering** to configure tampering detection event settings.

With tampering detection event enabled, a sudden change in the video, such as due to movement of the camera or covering up of the lens, will be assumed as an event.



- Sensitivity: Define the tampering detection sensitivity. Higher values will result in more sensitive detection.
- Activation time: Specify how long tampering
 has to be detected for it to be considered as an
 event. Tampering detections that do not last for the
 specified duration of time will not be considered as
 events.
- Use Ignoring Time: Define the event ignoring time. Tampering detections taking place during the defined time range will not be assumed as events.

- Event Action: Select a tampering detection event alert action.
 - Alarm Out: Select if you wish to generate an alarm out.
 - Send Email: Select if you wish to send an email.
 Select the Image Attachment option to attach a .jpg image of the event detected to the email.
 - Remote Callback: Select this option to send a message to a remote system and then select which system to send the message to.



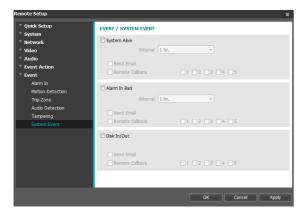
- Not supported from the IDIS Web program.
- The camera must be registered to the remote system in order to use the **Remote Callback** feature.
- Audio Alarm: Select this option to generate an audio alert and then choose an audio file (.wav).
- FTP Upload: Select this option if you wish to upload images to the FTP server.
- **Record**: Select this option to record video.
- Move PTZ to: Select a preset position to move the pan/tilt driver to that position. Preset positions can be set from the remote program.



Event Action settings must be configured correctly in order to perform event actions.

System Event

Select **System Event** and configure system event settings. With system event enabled, system status, alarm in status, and disk status will be checked periodically and corresponding alerts will be generated.



- System Alive: Select to check the system status and then set up a schedule.
 - **Send Email**: Select to send out an email when the system comes on line.
 - Remote Callback: Select this option to send a message to a remote system when the system comes on line and then select which system to send the message to.
- Alarm In Bad: Select to check the alarm in status and then set up a schedule.
 - Send Email: Select to send out an email if no change is detected in the alarm in status.
 - Remote Callback: Select this option to send a message to a remote system if no change is detected in the alarm in status and then select which system to send the message to.
- Disk In/Out: Select to check if the SD card has been inserted/removed.
 - Send Email: Select to send out an email when the SD card is inserted/removed.
 - Remote Callback: Select this option to send a message to a remote system when the SD card is inserted/removed and then select which system to send the message to.



- Email and Remote Callback settings under Event Action must be configured correctly in order to send out emails and messages.
- Remote Callback is not supported on IDIS Web.
- The camera must be registered to the remote system in order to use the Remote Callback feature.

Part 4 - IDIS Web

IDIS Web is a program that allows you to view and search video from remote locations over the Internet and can be accessed on a Microsoft Internet Explorer.

System requirements for running IDIS Web are as follows:

- OS: Microsoft Windows XP x86 (32 Bit) (Service Pack 3), Microsoft Windows Vista x86 (32 Bit) (Service Pack 1), Microsoft Windows 7 x86 (32 Bit)
- CPU: Intel Pentium IV 2.4GHz or above (Core 2 Duo E4600 recommended)
- RAM: 1GB or more
- VGA: 128MB or more (1280x1024, 24bpp or above)
- Internet Explorer: Ver. 7.0 or above
- 1 Launch Internet Explorer and then enter the following information in the address bar.
 - http://IP Address:Port Number (IDIS Web connection port number selected during camera IP address and port number setup)
 - Or http://FEN Server Address/Camera Name (FEN Server address and camera name registered to the FEN Server)
 - If the Use HTTPS option has been selected during IDIS Web port number setup, enter https instead of http. If prompted with a security certificate warning, select "Continue to this website (not recommended)." If the IDIS Web login page fails to load, configure Internet Explorer's settings as follows:
 - Tools → Internet Options → Security → Custom Level... → Medium-high (default) or Medium.
 - Tools → Internet Options → Advanced → Security → Use TLS 1.0 (select)
 - If connecting by entering an IP address and a port number, you can connect by entering just the IP address if IDIS Web connection port number has been set to 80 (443 when entering https).



Contact your network administrator for the IP address of the camera you wish to connect to the the IDIS Web port number.

When prompted with the IDIS Web login window, select **LIVE-PORT** or **PLAY-PORT** as the desired mode. Enter the ID and password and click **LOGIN** to sign in using the selected mode.

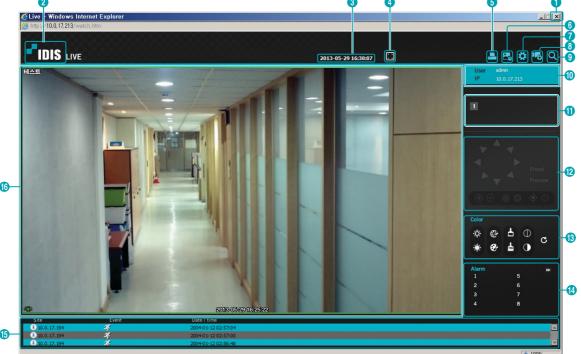




- IDIS Web supports Microsoft Internet Explorer only and no other type of web browser.
- Do not close the login window while IDIS Web is running. Switching over to Web Live or Web Search mode can cause a script error, requiring you to restart the IDIS Web program.
- If running IDIS Web on Internet Explorer 7.0, the bottom section of the screen may get cut off if the address bar or
 the status bar is shown. In this case, change Internet Options so that the address bar or the status bar is hidden.
 (Tools → Internet Options → Security → Custom level... → Allow websites to open windows without
 address or status bars (Enable))
- To use IDIS Web on Microsoft Windows Vista or above, launch Internet Explorer by right-clicking on the icon and selecting the **Run as administrator** option. Otherwise, certain IDIS Web functions might not be available.
- Launching a new version of IDIS Web for the first time can cause Internet Explorer to load information from the
 previous version. In this case, navigate to Tools → Internet Options → General, delete temporary Internet files,
 and then restart IDIS Web.
- On Microsoft Windows Vista or above, lowered image transmission rate can prevent the screen from being displayed or updated. In this case, we recommend that you disable the computer's auto tuning function. Open the command prompt as an administrator. (Start → Accessories → Command Prompt → Right-Click and then select Run as administrator) Type in "netsh int tcp set global autotuninglevel=disable" and then press Enter. Restart the computer to apply the change. To enable auto tuning again, launch the command prompt as an administrator and then type in "netsh int tcp set global autotuninglevel=normal". Restart the computer to apply the change.

Web Live Mode

A remote web monitoring program that allows you to monitor images from remote locales in real-time.



0	Press ▼ to terminate IDIS Web.				
2	Place the mouse pointer on the IDIS logo to check IDIS Web's version.				
3	Displays the current time.				
4	Click to view the video in full screen. Press the ESC key on the keyboard to return to the previous screen.				
6	Click I to print the current video screen using a printer connected to the computer.				
6	Click at to save the current video screen as an image file.				
0	Click to configure rendering mode and OSD settings. Select rendering mode to adjust the video output rate or select which OSD elements to display on the screen from the OSD list.				
8	Click 🖪 to load the camera setup window.				
9	Click 🔃 to switch over to Web Search mode.				
0	Shows login information.				
•	Indicates the camera's number.				
12	Used to control a PTZ camera at a remote location.				
13	Used to adjust live video quality.				
1	Click on off to control the alarm out device connected to the camera.				
	Event status window at the bottom of the screen displays a list of events detected at remote locales.				
	/ Enable/Disable Alarm In Tampering				
15	Motion Detection Audio Detection				
	Trip zone				

Right-click on the screen to display the pop-up menu.

• Change Camera Title: Used to change the camera's name.



Renaming the camera in Web Live mode does not affect the camera's name on the remote system. If no name is entered for the camera, the name used at the remote locale is shown on the screen.



• Enable Audio: Enables audio transmission with remote locales. Select to display [Select to display [Select

1	Enables transmission of audio to the remote locale via microphone.
•	Enables playback of audio from the remote locale on speakers.
1/1	Enables two-way audio communication with the remote locale.
×	Disables audio transmission.



If the remote locale connected to supports audio transmission, **4** icon appears on the corresponding camera screen.

- Aspect Ratio: Change the aspect ratio of the video displayed on the screen.
 - **Fit to Screen**: Fit the video to the size of the camera screen.
 - Fit to Aspect Ratio: Resizes camera screen to original aspect ratio of the video.
 - Half Size (x0.5) 4 Times Bigger (x4): Displays the camera videos in the selected size based on the original size of the video. For example, original size (x1) displays the video in its original size. Half size (x0.5) through 4 times larger (x4) options are only available if there is enough space on the camera screen to accommodate the selected size.
- MultiStream: If the camera is running on multi-stream mode, you can choose between the streams
- Anti-Aliasing Screen: Removes stair step effect (blocks) that are caused when zooming a video to improve overall quality of video output.

Web Search Mode

A remote web search program that allows you to search for recordings from remote locales in real-time.



While in Web Search mode, connection to remote locales will terminate automatically after 30 minutes of inactivity.

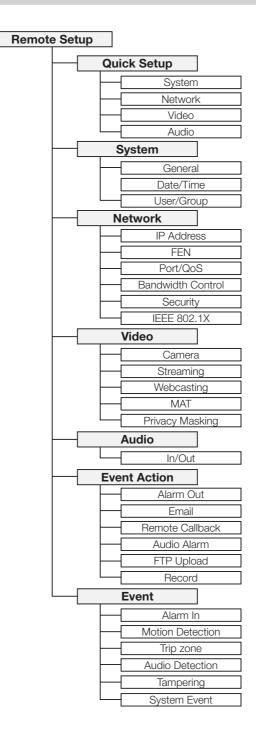


0	Press x to terminate IDIS Web.		
2	Place the mouse pointer on the *IDIS logo to check IDIS Web's version.		
3	Displays time information of the video recording from the remote locale.		
4	Click to view the video in full screen. Press the ESC key on the keyboard to return to the previous screen.		
6	Click I to print the current video screen using a printer connected to the computer.		
6	Click ■ to save the video recording as an executable file.		
7	Click I to save the current video screen as an image file.		
8	Click to configure rendering mode and OSD settings. Select rendering mode to adjust the video output rate or select which OSD elements to display on the screen from the OSD list.		
9	Click over to Web Live mode.		
0	Shows login information.		

•	Indicates the camera's number.				
12	Zoom in or out on the video.				
B	Adjust image brightness.				
•	Apply image filters (Sharpen, Blur, Equalizer, Interpolation, and Revert) to the images. Image calibration is applied only during the paused state.				
(5)	Dates containing video recordings are highlighte	Use the calendar to search for video recordings by specific dates. Dates containing video recordings are highlighted in light blue. Selecting a date containing video recording data loads the earliest recording from that date. Selected date is highlighted in orange.			
16	Select TimeLapse to enable time lapse search mode and search/playback video recordings in chronological order. In time lapse search mode, video recordings can be searched by selecting specific dates on the calendar. Time information of video recordings found on the selected dates is shown on the time table at the bottom of the screen. Select a point in time to display video from that moment. If multiple recordings are available for the selected point in time, you can select the desired segment.				
•	Select Event to enable event search mode and search for events matching user-designated parameters.			user-designated	
13	Use the playback controls to play back video. Go to First Play by Frame (backwards) Rewind Play/Pause	D D	Fast Forward Play by Frame (forward) Go to Last	ds)	
19	Click Goto to designate recent recordings the recording.				
20	Click Reload to reload recent video recording	gs from r	remote locales.		
4	Indicates the camera's recording data on a time bar. If the camera's system clock has been changed to a point in the past and more than one recording exists at the same point in time as a result, you will be able to choose which segment to search from the segment menu on the upper right portion of the time table.				
	Right-click on the screen to display the pop-up menu. • Change Camera Title: Used to change the camera's name.			Change Camera Title Enable Audio	
	Renaming the camera in Web Search mode does not affect the camera's name on the remote system. If no name is entered for the camera, the name used at the remote locale is shown on the screen.				
2	Enable Audio: If audio was recorded with the video, enabling this option plays audio upon playback.				
	 Aspect Ratio: Change the aspect ratio of the video displayed on the screen. Anti-Aliasing Screen: Removes stair step effect (blocks) that are caused when zooming a video to improve overall quality of video output. 				

Part 5 - Appendix

Setup Menu Tree (Remote Setup)



Troubleshooting

Problem	Check
The main unit won't turn on.	Check the power cable connection. Check the power outlet.
PoE switch isn't being recognized.	Check the grounding status of the I/O device connected to the camera and the PoE switch. If they are not grounded, ground them and try again.
I can't see Live videos.	 Check the camera's power status. Check the network connection status of the computer and the network camera.
Images are blurry.	 Make sure the lens is clean. If not, clean it using a soft piece of cloth or a brush. Make sure the lens is in focus. Adjust the focus during daytime. If there is too much light coming into the camera or the camera is picking up an overly bright light source, adjust the camera's position/angle accordingly.
Video color appears incorrect.	Check the white balance settings. If using the Auto option, it may take some time for the white balance to be adjusted.
Images are blinking.	If the camera is pointed at the sun or a fluorescent lamp, adjust the camera's angle away.
Lost the admin ID and password and unable to connect to a network camera.	You must perform a factory reset. A factory reset will revert all settings, including network settings, to their factory defaults. After performing a factory reset, make a memo of the admin ID and password as a safety precaution.
Unable to launch IDIS Web.	If the IDIS Web login screen is not loading, check which version of Microsoft Internet Explorer you are using. IDIS Web may not launch properly on versions 6.0 or below.

Specifications



These product specifications may change without prior notice.

Lens

Lens Type	Varifocal optical (18x) zoom lens
Focal Length	F1.6 ~ F2.8, f=4.7 mm to 84.6 mm
Angle View	67.3° ~ 42.1° (Wide) to 2.4° ~ 25.0° (Tele) – Diagonal
Lens Iris Control	DC auto iris
Day/Night Filter	Yes

Camera

Image Sensor	1/2.8" CMOS
Minimum Subject Lux	0.5 Lux @ F 1.6
Scanning Method	Sequential
Signal-to-Noise Ratio	> 45 dB
Dynamic Range	> 90 dB
(Digital WDR)	
Electronic Shutter	Auto
External Storage* SD (SDHC) card (Class 6 or above, up to 32 GB)	
(Optional)	



- An SLC (Single Level Cell) or MLC (Multi Level Cell) card by SanDisk or Transcend is recommended to ensure stable recording performance.
- An SD card is a consumable product with a finite service life. Prolonged use will damage the card's memory sectors
 and result in data loss or memory card failure. Test the SD card regularly and replace it whenever necessary.

Video

	DC-Z1163	DC-Z1263	
Signal Format	NTSC or PAL (selectable)		
Compression Algorithm	H.264, M-JPEG (supports 4-stage image compression rate)		
Compression Resolution	CIF (352x240), 4CIF (704x480), 720p (1280x720)	CIF (352x240), 4CIF (704x480), 720p (1280x720), 1080p (1920x1080)	
Bitrate Control	H.264 – CBR / VBR (up to 8 Mbps) H.264 – CBR / VBR (up to 12 Mbps)		
Maximum Transmission Speed (frames per second)	30 ips @ 720p + 15 ips @ 720p	15 ips @ 1080p + 15 ips @ 1080p + 30 ips @ 4CIF (Triple stream) 30 ips @ 1080p + 30 ips @ 4CIF (Dual stream)	
Multi-Stream	Primary, Secondary, Tertiary		

Audio

	DC-Z1163 / DC-Z1263
Compression Algorithm	G.726 (16KHz), G.711 µ – Law (8KHz)

I/O

	DC-Z1163 / DC-Z1263	
Video Out**	1 composite, 1 Vp-p	
Audio In	1 line in or 1 built-in microphone	
Audio Out	1 Line Out	
Alarm In 1 TTL, NC/NO programmable, 4.3V (NC) or 0.3V (NO) threshold, 5 VDC		
Alarm Out 1 relay out, NO only, 0.3A @ 125 VAC, 1A @ 30 VDC		
Network Connection	10/100 Mbps Ethernet	



Use these ports for previewing video and not monitoring video.

Connector

	DC-Z1163 / DC-Z1263
Video Out**	RCA
Audio I/O	Terminal Block
Alarm I/O	Terminal Block
Ethernet Port	RJ-45
RS485 Serial Port	Terminal Block



Use these ports for previewing video and not monitoring video.

General

	DC-Z1163 / DC-Z1263
Exterior Dimensions (W x H x D)	2.89" x 2.94" x 7.83" (73.5mm x 74.7mm x 199mm)
Packaging Dimensions (W x H x D)	9.76" x 4.33" x 5.71" (248mm x 110mm x 145mm)
Weight (Main Unit)	1.57 lbs. (710g)
Weight (Packaging)	2.4 lbs. (1.1kg)
Working Temperature	32°F to 122°F (0°C to 50°C)
Operating Humidity	0% ~ 90%
Power	12 VDC, 24 VAC, PoE (Power over Ethernet) (IEEE 802.3af, Class 0)
Power Consumption	Max. 6W
Certifications	FCC, CE

Index			Р	
			Pan/Tilt Driver ID	25
A			Q	
Admin/Watch/Recording/Search Ports		22	Quality	28
В			R	
Bitrate Control		28	Resolution RTSP Port	28 22
С			THOI TOIL	22
Camera Name	18	21	S	
Compression		28	SSL	24
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Date/Time		19	Time Sync	19
DSCP		22		
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FEN Server Frame Rate		21 28	Use HTTPS	22
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IDIS Web Port		22		
IP Filtering		24		
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