Ax47R/67R-series
User Manual

CONTENTS

Before attempting to connect or operate this product, read these instructions carefully.
Save this manual for future use.

Disclaimer

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FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Firmware: 02_49-101

Address:
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780 Birchmount Road, Unit 16
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Web Site: www.i3international.com

1. Warnings and operation notes

Please read this guide carefully before you install the camera.
Keep this guide for future reference.

Thank you for purchasing an i3 Ax47R/67R-series IR Outdoor Dome Camera.
If the system needs to be modified or repaired, contact a certified i3 International
Dealer/Installer. When serviced by unauthorized technician, the system warranty will
be voided. Should you have any problems or questions regarding our products, contact
your local i3 International Dealer/Installer.

> Camera's default IP address is **192.0.0.16**
> Camera's default Subnet mask address is **255.255.255.0.**
> Default camera User Name: **i3admin** and default Password: **i3admin**

1.1 Precautions

Installation and servicing should be performed only by qualified and
experienced technicians to conform to all local codes and to maintain your
warranty.

> ⚠️ **WARNING! To reduce the risk of fire or electric shock, do not**
> **expose the product to rain or moisture.**

When installing your Ax47R/67R camera, be sure to avoid:
- excessive heat, such as direct sunlight or heating appliances
- contaminants such as dust and smoke
- strong magnetic fields
- sources of powerful electromagnetic radiation such as radios or TV transmitters
- moisture and humidity
- areas with mechanical vibrations
- fluorescent lamps or objects that reflect light
- unstable light sources as this may cause flickering
- temperatures below -20°C (-4°F) and above 50°C (122°F)

1.2 Power

This camera supports PoE power only. IEEE 802.3af Class 3, max load of 8.5W. Incorrect voltage may cause irreparable damage to the video camera and will effectively void the camera warranty. For PoE power, insert the RJ45 cable into the RJ45 jack on the camera's cable. Connect the other end of the RJ45 cable to a compatible PoE switch/hub/router. Use the included RJ45 waterproof connector assembly for outdoor installations.

1.3 Cleaning

- For maximum optical clarity, the camera or lens must remain clean. Use a soft, dry cloth to remove finger prints and dust from the dome cover.
- Use a blower to remove dust from the lens.
- Clean the body with a soft, dry cloth. If it is very dirty, use a cloth dampened with a small quantity of neutral detergent, then wipe dry.
- Do not use volatile solvents such as alcohol, benzene, or thinners, as they may damage the surface finish.

1.4 Servicing

To avoid electrical shock and to preserve the product warranty, DO NOT disassemble the camera. Refer servicing to qualified personnel only.

1.5 Routine Maintenance

- The dome bubble is an optical part. Use a soft and dry cloth to remove any fingerprints and dust.
- Clean the camera housing with a soft and dry cloth. For more stubborn marks, use a cloth dampened with a small quantity of neutral detergent, then wipe dry.
- **CAUTION: Do not use volatile solvents such as alcohol, benzene or thinners, as they may damage the surface finish.**

2. Unpacking

Ensure that the items received match those listed on the order form and the packing slip. In addition to this manual and a fully assembled camera, the dome camera packing box includes:

1. Drill Template sticker x1
2. Torx key x1
3. Plastic Anchor x3
4. Round Head Screw (Tapping type) x3
5. Desiccant (attach to the inside of the Inner Liner) x1
6. 3-ft network cable x1

If any parts are missing or damaged, contact the dealer you purchased the camera from.

*Note: Based on installation location and surface type, supplied screws and anchors may not be adequate. Mounting hardware is site-specific and may need to be supplied by the installer.

2.1 Accessories (not to scale)
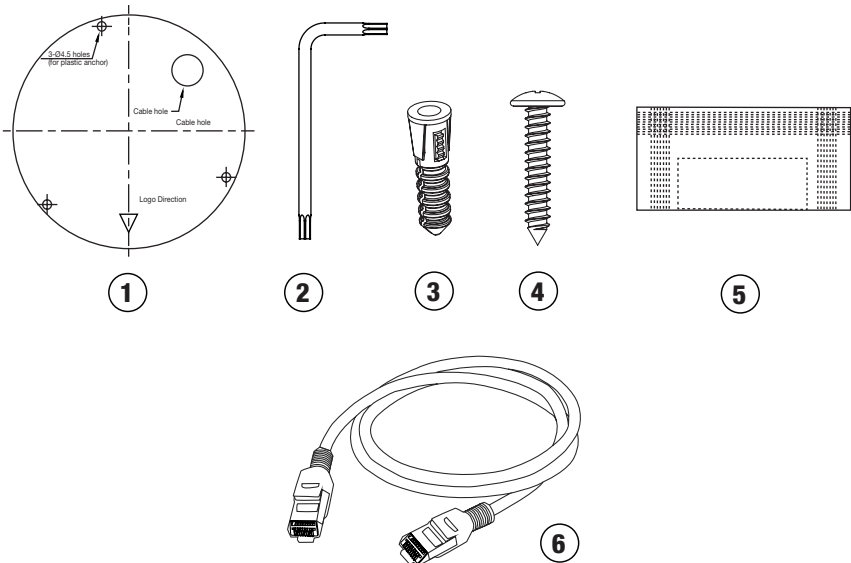
3. Dimensions & Parts Identification

This dome camera is suitable for both indoor and outdoor installation in commercial and residential environment. With 3-axis mount support, it provides flexible installation on a ceiling or wall, even on an angle. The dome camera is a fully integrated enclosure with camera and lens.
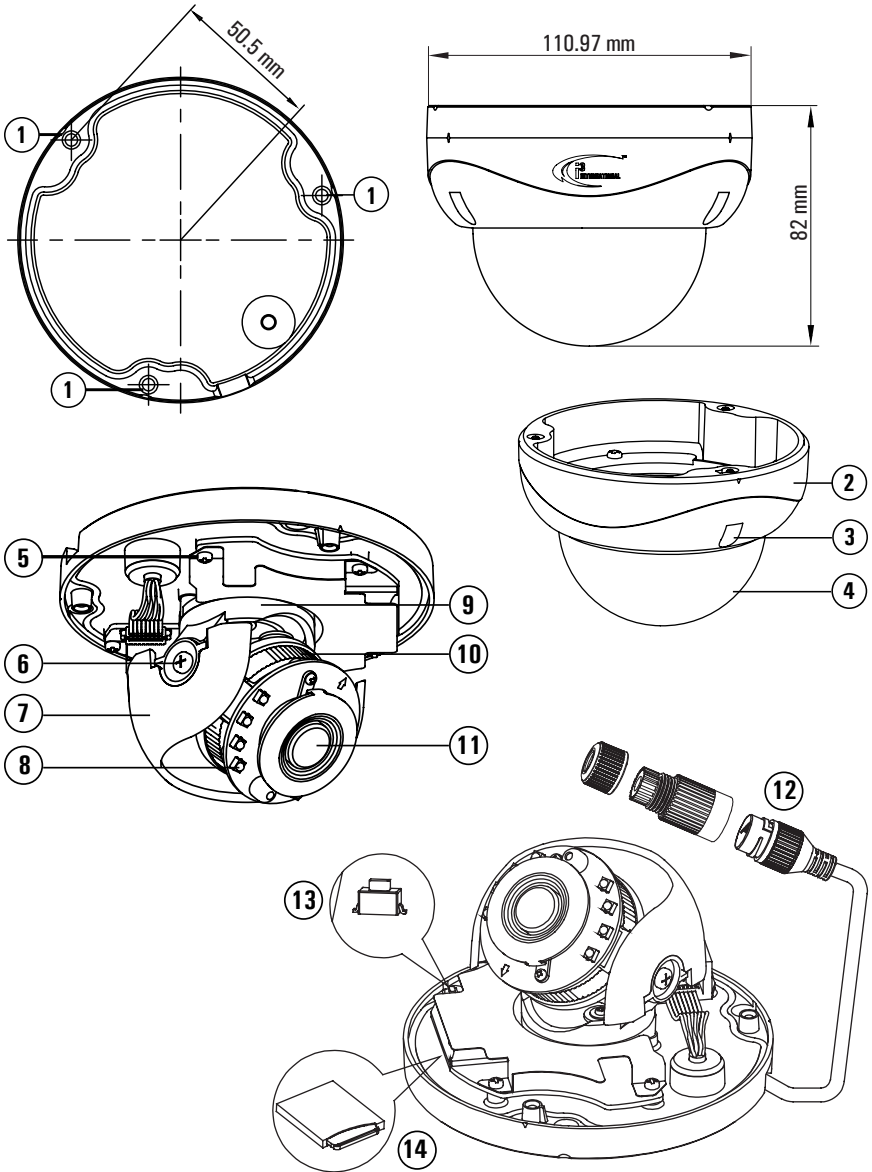
1. Mounting holes (x3)
2. Dome bubble housing / Dome cover
3. Screws securing the dome bubble housing to camera module (x3, silver)
4. Lexan bubble
5. Screws attaching camera module to the camera base (x4, black)
6. Tilt bracket with two locking screws. Loosen the screws and tilt to adjust lens angle.
7. Inner liner / Shroud. Attach the desiccant to the inside of the Inner Liner, without obstructing the lens movement.
8. IR board
9. Camera Lens Assembly. Pan to adjust lens angle.
10. Lens base. Rotate to adjust lens angle.
11. Camera lens.
12. RJ45 Ethernet PoE Port with waterproof RJ45 connector assembly. Insert an Ethernet cable into the port for network connection as well as PoE (Power over Ethernet) capability. To maintain water-resistant rating in outdoor installations, make sure to use the included waterproof RJ45 Connector assembly.
13. Reset/Default button. Press for 1 second to reboot the camera. Press for 6 seconds to restore camera settings to factory defaults.
14. MicroSD Card slot for on-camera video storage. (MicroSD card sold separately).

4. Installation

Ax47R/67R camera series can be wall, surface, or T-bar ceiling mounted without additional mounting accessories/brackets.

Start by marking out and preparing the mounting surface. Attach the supplied mounting template to the mounting surface. Use the appropriate brackets and equipment to mount the camera. Depending on the type of installation, additional mounting accessories may need to be purchased.

After installing the camera, your network camera must be accessible from your local network (LAN).

> ⚠️ **Important. Please Read:**
> - It is the installer's responsibility to ensure that the mounting surface is suitable for the chosen installation method.
> - Based on installation location and surface type, supplied screws and anchors may not be adequate.
> - Mounting hardware is site-specific and may need to be supplied by the installer.

Optional Mounting Accessories:
- Ax61BB (Back Box 3/4" & 1/2" NPT). Use for Horizontal wall mount, pendant mount, pole or corner mount.
- DB60 (Goose Neck Wall Bracket 3/4" NTP). Together with the optional DB60CPM bracket, DB60 goose neck bracket has the capability of being corner or pole-mounted.
- DB60CPM (Corner / Pole Mount bracket for DB60)

4.1 Disassembling the Camera

Before mounting and adjusting the camera, follow these steps to disassemble the camera.
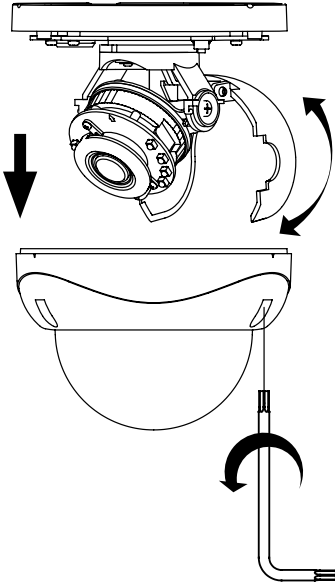
1. Use the provided security Torx key to loosen three screws securing the dome bubble housing to camera module. Do not completely remove the screws from the dome bubble.

2. Gently pull the dome bubble downwards and set aside.

4.2 Applying the Desiccant

Apply the desiccant to the inside of the Inner liner (Shroud). Make sure it does not interfere with the movement of the lens assembly.
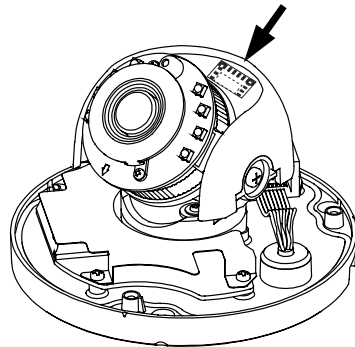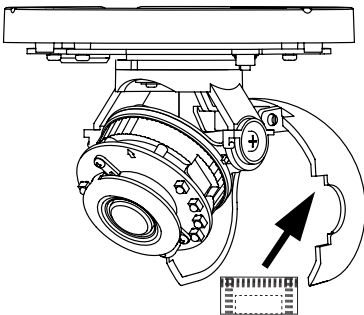
4.3 3-Axis lens position adjustment

Pan Adjustment

Rotate the lens base (max 360°) until satisfied with the field of view.
Note: Over-rotation past 360° will cause internal cables to become damaged, disconnected, or twisted.

Horizontal Rotation

Firmly grasp the camera lens assembly and rotate counter-clockwise / clockwise (max 350°) until satisfied with the field of view.
Note: Over-rotation past 350° will cause internal cables to become damaged, disconnected, or twisted.
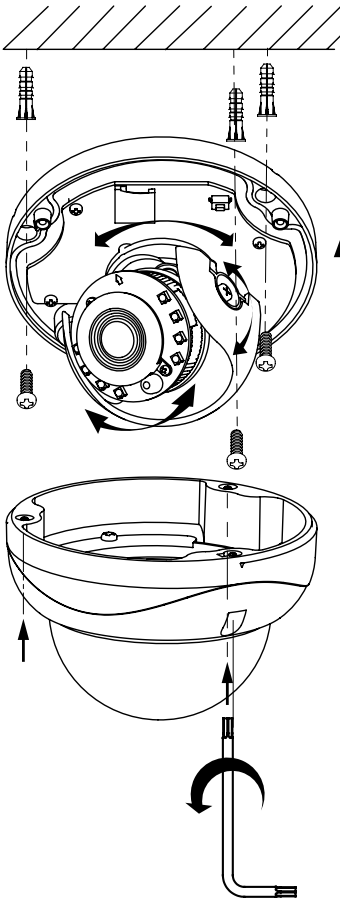
Tilt Adjustment

Tilt the camera lens until satisfied with the field of view.

Once the desired view has been achieved, replace the camera liner until it snaps into place.

Pan Adjustment
0° ~ 360°

Tilt Adjustment
20° ~ 90°

Horizontal Rotation
0° ~350° (±175°)
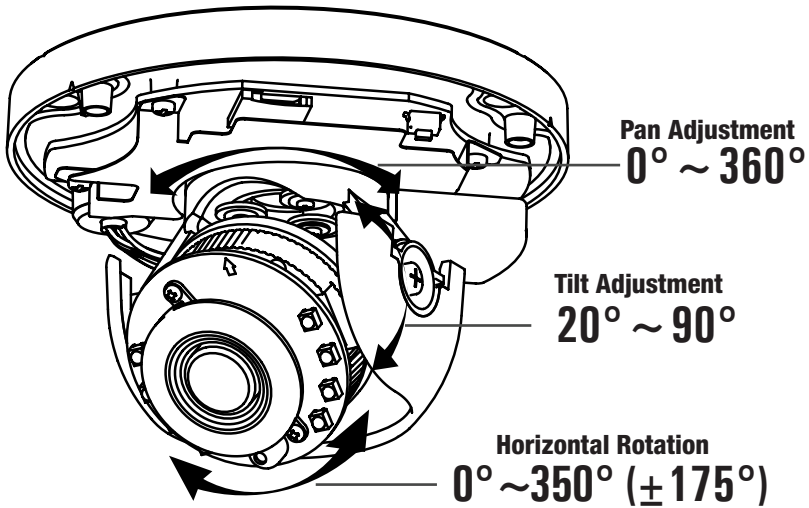
4.4 Surface Mounting

This installation method is suitable for both indoor and outdoor applications.

1. Attach the supplied Drill Template to the mounting surface.
2. Drill 3 (three) 4.5 mm (0.2") holes at the marked template positions on the mounting surface.
3. Insert the supplied screw anchors into the holes on mounting surface.
4. Based on installation requirements, you may route the cable through the cut-out opening on the side of the camera's mounting base. In that case, no additional openings are required on the mounting surface. Alternatively, drill a 13mm (0.5") circular opening in the mounting surface, corresponding to the "Cable hole" of the drill template. *See section 4.4 fore more info.*
5. Disassemble the camera by removing the dome bubble. Use the provided security Torx key to loosen three silver screws securing the dome bubble to the camera's mounting base. Do not completely remove the screws from the bubble. Lift the dome bubble off and set aside.
6. Route the camera cabling according to installation requirements, then use a Phillips screwdriver to secure the camera module to the mounting surface with the provided mounting screws, if suitable.
7. Connect the wiring.
8. Adjust the lens angle by rotating and panning the camera lens base. Do not over-rotate the camera lens beyond the stop point to avoid damage to the camera. *See section 4.1 for more info.*
   Tip: For the ease of setup, lift off the camera liner while adjusting the lens position. Once the desired view has been achieved, replace the camera liner until it snaps into place.
9. Replace the camera dome bubble housing on top of the camera module.
10. Use the supplied Torx bit to re-tighten 3 silver screws securing the dome bubble housing to the camera module.
11. Remember to use sealant to maintain IP67 rating in outdoor installations.

4.5 Mounting w/ Ax61BB Back Box (optional)

The Ax61BB is an optional extension back box for cable management and surface mounting. Ax61BB back box is also needed for pendant or horizontal wall mount installations (additional mounting accessories required). Ax61BB back box is compatible with i3's optional DB60 (Goose Neck Wall Bracket). EMT 3/4" Pipe can be used in combination with Ax61BB for pendant mounting.

Pendant Mount
EMT Pipe 3/4"
(Optional)

DB60 Goose Neck
Wall Bracket
(Optional)

Alignment
marks

Add Sealant

Ax61BB
Back Box
(Optional)

Align holes

Ax47R/67R
Camera

Ax47R/67R
Lexan dome
bubble

⚠ Always add silicon to the threads and use screws with the 'O' ring (not supplied) to maintain the IP67 rating.
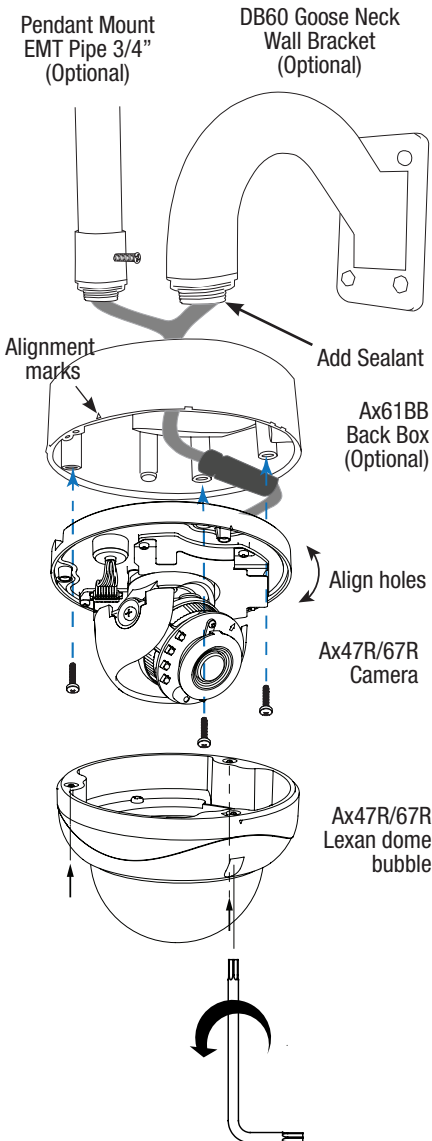
1. Install the Ax61BB for surface mount, pendant mount, or Horizontal wall mount as required.
2. When installing, position the 1/2" thread to the rear or, when surface mounting indoor - to the top. When installing outdoors, position thread downwards to aid in weatherproofing.
3. If surface mounting, note that the Ax61BB back box has 6 (six) 90% pre-drilled hole locations. Complete drilling of at least two of these holes for a secure installation.
4. Place the connector in line with the center wall and rotate the retaining clip to prevent the connector from dropping out. This will aid when rotating the camera base housing to guide the cable and find the mounting holes.
5. Mounting holes for the Ax47R/67R cameras are identified with a triangle on the lip of the Ax61BB back box.
6. Use the provided security Torx key to loosen three screws securing the Lexan (Dome) Bubble housing to the camera's mounting base. Do not completely remove the screws from the dome bubble. Lift the dome bubble off and set aside.

7. Secure the camera module to the Ax61BB back box with three screws (not provided with the camera).
8. Pull the camera cable through the opening in the Ax61BB housing. Feed the CAT5/6 cable through the supplied waterproof RJ45 connector assembly before crimping and plugging in.
9. Connect all wiring.
10. Adjust the lens angle by rotating and panning the camera lens base. Do not over-rotate the camera lens beyond the stop point to avoid damage to the camera. *See Section 4.1 for more info.*
   **Tip:** For the ease of setup, lift off the camera liner while adjusting the lens position. Once the desired view has been achieved, replace the camera liner until it snaps into place.
11. Replace the camera dome housing on top of the camera module.
12. Use the supplied Torx bit to re-tighten 3 silver screws securing the dome bubble housing to the camera module.


1/2" thread

Retaining clip
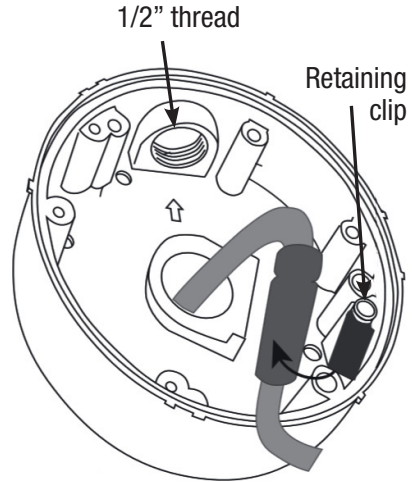
4.6 Camera Wiring Options

Based on installation requirements, you may route the cable through the cut-out opening on the side of the camera's mounting base (Option A) or through the pre-drilled opening in the surface (Option B). For Option B, drill a 13mm (0.5") circular opening in the mounting surface, corresponding to the "Cable hole" of the drill template.
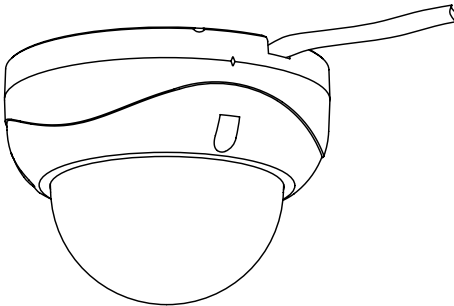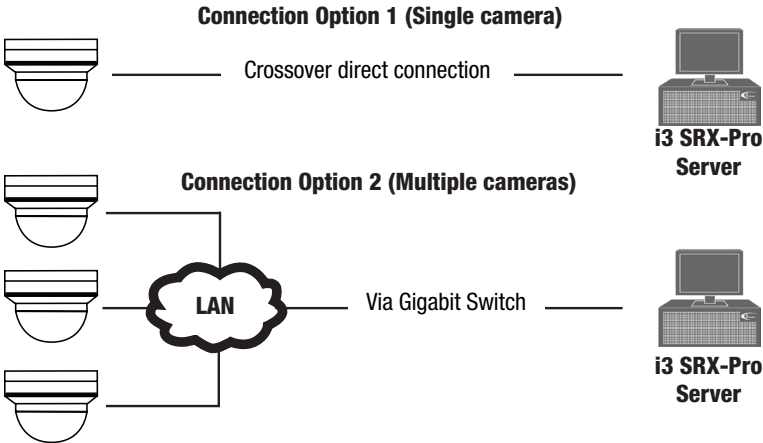

Option A
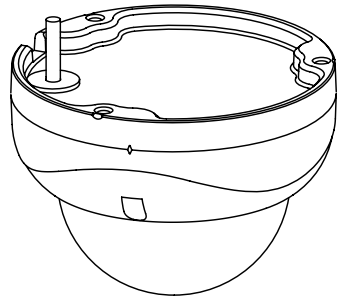
Option B

5. Connecting to the SRX-Pro Server

5.1 Camera Connection Options

Connection Option 1 (Single camera)

Crossover direct connection

i3 SRX-Pro Server

Connection Option 2 (Multiple cameras)

LAN

Via Gigabit Switch

i3 SRX-Pro Server

5.2 Hardware/Software Requirements

The following requirements must be met to achieve a successful network connection with the Ax47R/67R-series IP camera.

SRX-Pro Server:

- i3 SRX-Pro Version 3.3.3 or higher
- Latest GiPi adapter is installed. GiPi adapters can be downloaded from i3 FTP website. (Please contact i3 Technical Support for more information.)
- Windows 7 Pro or 7e
- **Internet Explorer Version 8.0 or later, or latest-available Firefox**
  IE8 and IE9 Limitations: No Logs setup page.
- CPU: Intel Pentium Core 2 or higher
- Memory: 1GB or more
- VGA card - supporting Direct X 9.0 or above

Power Supply

Your camera requires PoE power supply. Use a RJ45 network connector to connect the camera to your computer or hub switch.

Note: Camera damages resulted from improper power application are NOT covered by the camera warranty.

Switch

A Gigabit Switch is required to monitor two or more cameras from the same SRX-Pro Server.

5.3 RTSP Stream Information

Camera's RTSP stream URL information is as follows:
Stream 1>> rtsp://192.0.0.16:554/stream1
Stream 2>> rtsp://192.0.0.16:554/stream2
Stream 3>> rtsp://192.0.0.16:554/stream3

5.4 Configuring Internet Explorer for Video Display

Your Internet Explorer (v.10.0 or higher) must first be configured in order to properly display video stream from your Annexxus camera.

Follow these instructions to configure your Internet Explorer browser.

Enable Cookies

1. In Internet Explorer window, click **Tools -> Internet Options**
2. Open **Privacy** tab, move the slider to "Low" or "Accept All Cookies"
3. Click **Apply.** Do not close the Internet Options window.

Adjust Internet Security Settings

4. Open **Security** tab in the Internet Options window
5. If the camera operates inside of the Intranet, click the Intranet icon;
   If the camera operates outside of the Intranet, click the Internet icon.
6. Click **Custom Level.** Security Settings - Internet Zone window will be displayed.
7. Scroll down to the **ActiveX controls and plug-ins** radio buttons and configure as follows:
   » Automatic prompting for ActiveX controls -> **Enable**
   » Download signed ActiveX controls -> **Prompt** (recommended)
   » Download unsigned ActiveX controls -> **Prompt**
   » Initialize and script ActiveX not marked as safe for scripting -> **Prompt**
   » Run ActiveX controls and plug-ins -> **Enable**
   » Script ActiveX controls marked safe for scripting -> **Enable**
8. Click **OK** to save the Internet Security Settings
9. Close all Microsoft Internet Explorer Windows and open a new IE window. This will allow the new settings to take effect.

5.5 Changing Camera's Default IP

> Camera's default IP address is **192.0.0.16**
> Camera's default Subnet mask address is **255.255.255.0.**
> Login: **i3admin** / PW: **i3admin**

To connect your Annexxus camera to your SRX-Pro Server, follow these instructions:
1. Close SRX-Pro Server software by pressing **Alt+Shift+Ctrl+F4**.
2. Write down the IP address of the onboard NIC (LAN) (or of NIC1 if your SRX-Pro Server has two onboard NIC cards).
3. Connect your camera to i3 Server (*See Section 5.7 for more info*).

4. Turn on your Annexxus camera.
5. Launch the CD that came with your Annexxus camera and double-click "**AnnexxusConfigurationTool.msi**" file to install Annexxus Configuration Tool (ACT) application. ACT application discovers all Annexxus cameras connected to your network.
6. Follow the ACT installation instructions until the application has been successfully installed on your SRX-Pro Server.
7. Double-click i3 Annexxus Configuration Tool icon on the Desktop to launch the ACT application. Accept the ACT license agreement.
8. ANNEXXUS Configuration Tool window will display a list of active network cameras.
9. Select the desired Annexxus camera in the list (left-click).
10. In the **Device(s) Communication** area, enter the new IP Range (address) and Subnet Mask of the camera. The new camera IP address must match the IP range of your SRX-Pro LAN or NIC1 card (see Step 2).
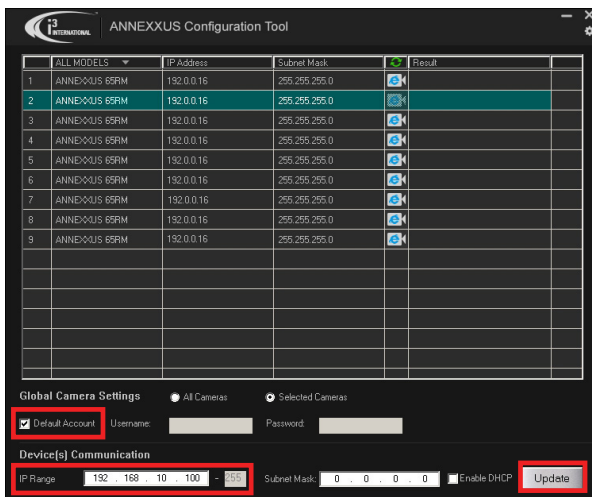
E.g. If your SRX-Pro Server's IP address is 192.138.10.122, change your Annexxus camera's IP address to 192.138.10.XXX. Remember: Annexxus Cameras cannot share an IP address, each camera requires its own unique IP address.

11. Make sure the **Default Account** checkbox is checked off.
12. Click **Update**. Then click **Yes** in the confirmation window.
13. Wait a few moments for a successful confirmation message.
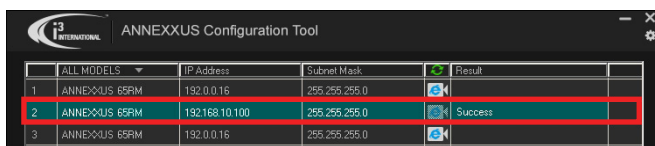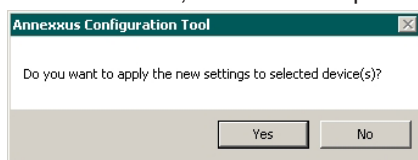
14. Repeat Steps 9-13 for all detected Annexxus cameras in the ACT application OR Select multiple cameras (Ctrl + left-click) and enter IP range to assign IP addresses sequentially to the selected cameras.

5.6 Viewing Camera in IE browser

Once the IP address of the Annexxus camera(s) has been changed, make sure you can connect to the camera(s) through Internet Explorer.

1. Launch Internet Explorer by double-clicking the IE icon next to the desired camera in the ACT [IE icon]. The password window will be displayed.
2. Enter the default camera User Name: **i3admin** and Password: **i3admin**.

3. Annexxus camera interface will be displayed in the Internet Explorer window.
4. If you have not connected to an Annexxus camera via IE before, you will see the following ActiveX download message.
    Note: If you do not have VC++ 2008 Redistributable installed on your unit, you must do that first. Once VC++ 2008 has been downloaded and installed, click on the ActiveX plug-in link in the Download message.
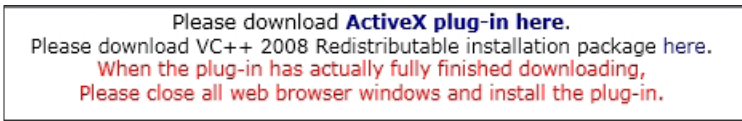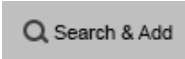

5. Click **Run** or **Save** in the download confirmation message at the bottom of the screen.
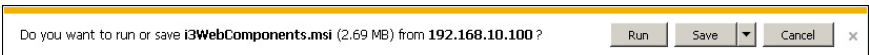
6. Launch the downloaded WebComponents.msi file, close your IE browser window and follow the installation instructions. Click **Finish** to close the final installation screen. This step must only be done once.
7. Repeat Step 1 to launch Internet Explorer for your Annexxus camera again. The camera's live video stream will now be seen in the Live View screen.
    If you do not see the camera image on the screen, call i3 International tech support for troubleshooting tips: 1.877.877.7241.

# 5.7 Adding your IP Camera to your SRX-Pro Server

1. Make sure that the latest version of GiPi adapter is installed on your SRX-Pro Server. Once the latest GiPi adapter has been installed, restart i3 SRX-Pro Server. Download the most recent GiPi from http://i3international.com/download.
2. Log In and go to the **Setup** > **IP Camera** tab.
3. Click the **Search & Add** button to display connected Annexxus cameras on the network.
4. Select the desired camera in the list and click **Select**.
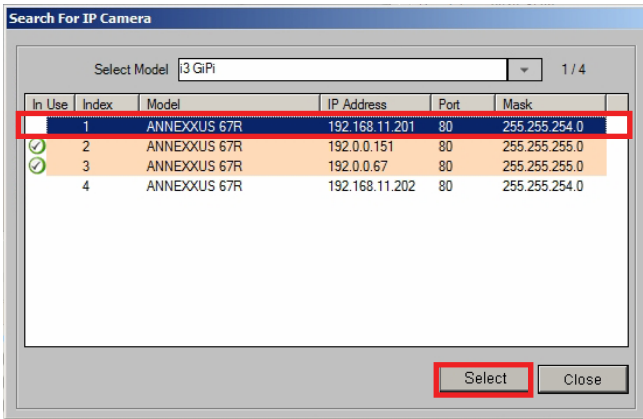
5. In the *Select IP Camera* window he default camera User Name: **i3admin** and Password: **i3admin** and click **Add**. Selected camera will be added to the IP Camera list.
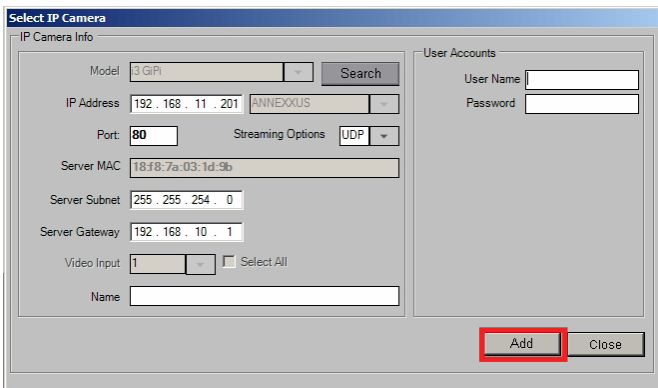
6. Assign the IP camera to the SRX-Pro video channel in the **Ch. In.** column.
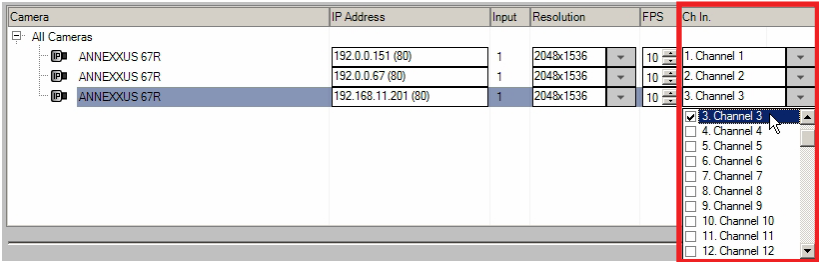
7. Click the **Save** button in the bottom right-hand corner to save settings.

8. Your Annexxus camera is now connected to SRX-Pro Server and is ready to record. You may change resolution and frame rate for the Annexxus camera in the IP Camera tab menu or you may choose to configure the camera's advanced settings through the IE browser. (*See Section 6.0 for more info*).

> ⚠️ Remember to configure the video Channel's recording schedule under SRX-Pro Schedule tab.

6. Advanced Camera Setup via IE

1. To access Annexxus camera's Advanced Setup, go to Setup > IP Camera tab, select the camera in the list of added IP cameras and click the **Web Setup** button.
2. Enter the default camera User Name: **i3admin** and Password: **i3admin**.
3. If you have not connected to an Annexxus camera via IE before, *see Sections 5.4 and 5.6 for more info*.
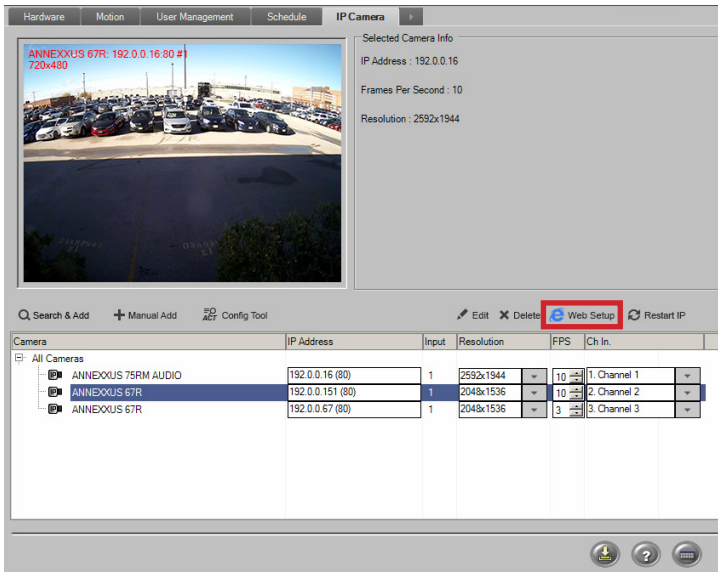
6.1 Main Screen

Use Brightness, Contrast, Saturation, Hue and Sharpness sliders on the Main screen to modify camera's live video stream appearance. Click **Save** to save new settings or click **Default** to return video adjustments to factory settings.
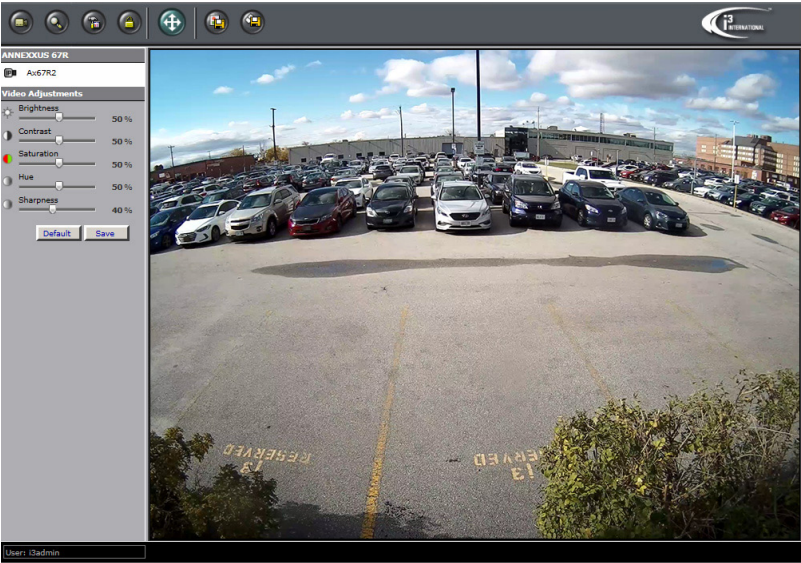
Live Mode. Click to view camera's live video.

Search Mode. Shown only when SD card is plugged in (sold separately). Click to search, preview and download video clips recorded on the SD card. Unavailable to "User" type accounts.

Setup Mode. Click to view and configure camera's settings. Unavailable to "User" type accounts.

Logout. Click to log out of the current account or to switch accounts. Click OK in the confirmation message. Enter your credentials in the Login window to log back in.

Full Screen. Click to hide the menu panels. Press Esc to exit Full Screen mode.

Save Snapshot. Click to save a JPG or PNG snapshot of live video to a local folder. In Save As window, select JPG or PNG file type, select the folder and click Save. Unavailable to "User" type accounts.
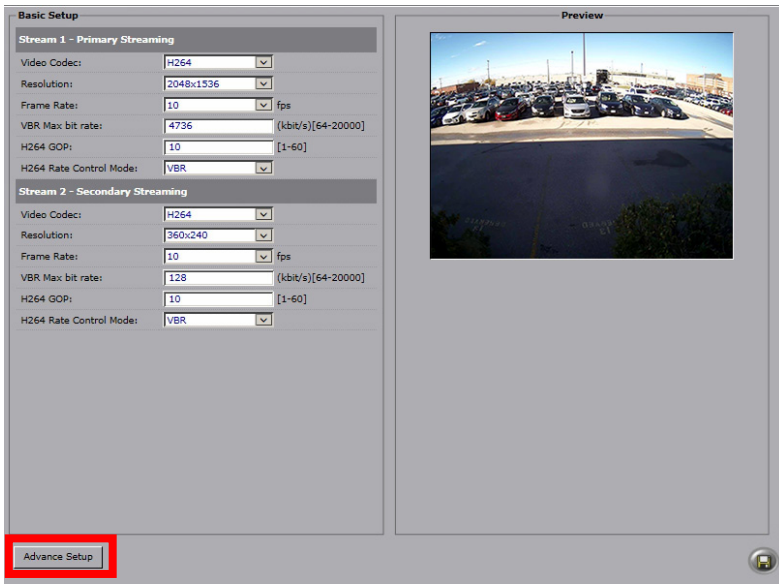
Save AVI. Click to start live AVI backup recording to a local folder. In Save As window, select the folder and click Save. Click the same button again on the Main Screen to stop recording and end the AVI file. Unavailable to "User" type accounts.

6.2 Basic Setup

Click the Setup button to access Annexxus camera Setup features.

You may switch to the Advanced Setup mode at any time by clicking the **Advance Setup** button in the bottom left-hand corner. To switch back to the Basic Setup, click the Basic Setup button.

Configure the camera's Primary and Secondary video streams in Basic Setup. After making any setting adjustments, click the **Save** button.

Stream 1 - Primary Streaming:

- **Video Codec:** Set the compression mode to H264 (recommended) or MJPEG.
- **Resolution:** Set the primary stream resolution of the recorded video to: QXGA (2048×1536) - Ax67R only, Full HD (1920×1080) - Ax67R only, Quad VGA (1280×960), HD (1280×720), SVGA (800×600)
- **Frame Rate:** Set the frame rate for the primary stream recording. Available frame rate settings: 1, 3, 7.5, 10, 15, 30 fps or choose Custom and enter frame rate.
- **VBR Max bit rate / CBR bit rate** (for H264): Set the video bit rate between 64-20000 kbit/s. Default value is dependent on the Resolution and Frame Rate.
- **H264 GOP** (I-Frame Interval): Provide a value from 1-60. The default value will follow the Frame Rate.
- **H264 Rate Control Mode:** (for H264 codec): VBR (Variable Bit Rate) or CBR (Constant Bit Rate).
    - » **VBR** (Variable Bit Rate) (recommended): This setting will produce a variable bit rate video stream, however the video quality will remain constant resulting

in high quality video images. Network infrastructure must be able to provide the set bandwidth to account for bit rate variations.

» **CBR** (Constant Bit Rate): This setting will produce a constant bit rate video stream at the cost of video quality. The quality may deteriorate considerably. This setting is beneficial for installations with limited bandwidth.

- **Quality** (for MJPEG codec): Low, Mid (default), High

Stream 2 - Secondary Streaming:

Secondary streaming is used for Live Viewing, Remote Streaming (VPC, SRX-Pro Remote, SRX-Pro Mobile) and in split-screen display mode. SRX-Pro v.6.0 and above also allows recording Primary (Main) stream only, Secondary (Sub) stream only, or both. Backup can also be created for either Main or Sub stream recording in SRX-Pro or VPC.

- **Video Codec:** Set the compression mode to H264 or MJPEG.
- **Resolution:** Set the secondary stream resolution of the recorded video to: SVGA (800×600), 720x480 (D1), 360x240 (CIF) or none (to disable secondary streaming).
- **Frame Rate:** same as Primary Streaming
- **VBR Max bit rate** / **CBR bit rate** (for H264): same as Primary Streaming
- **H264 GOP** (I-Frame Interval): same as Primary Streaming
- **H264 Rate Control Mode**: same as Primary Streaming
- **Quality** (for MJPEG codec): same as Primary Streaming

6.3 Video Setup

Switch to the Advanced Setup by clicking the **Advance Setup** button on the bottom left-hand corner of the screen as shown on the previous page. The Setup screen will change to reveal multiple setup tabs. Video setup tab is displayed by default.
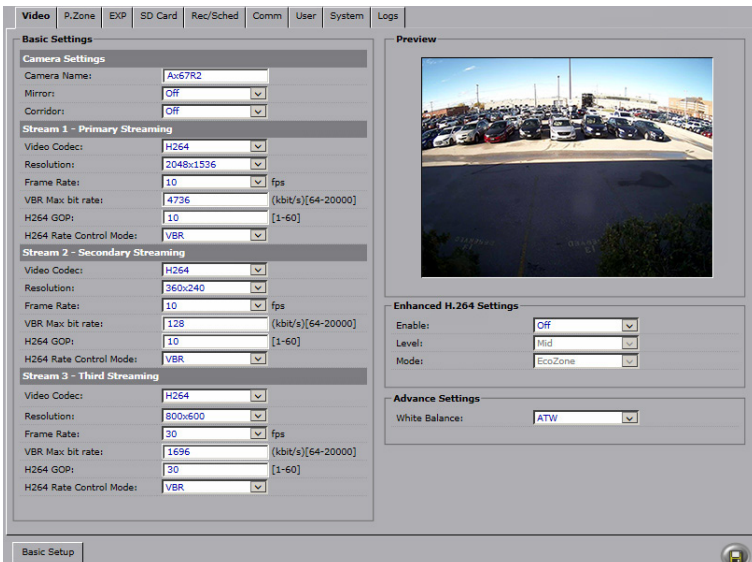
Camera Settings:

- **Camera Name:** Enter a descriptive name for your camera.
- **Mirror:** Flips the video image. The options for Mirror setting are:
  - » **Flip**: flip images upside-down.
  - » **Mirror**: flip images left to right.
  - » **Both**: flip the image upside-down AND from left to right.
  - » **Off**: Disables the Mirror feature
- **Corridor:** Set to **On** (enable) or **Off** (disable). When enabled, Corridor video format rotates video image for a vertically-oriented, "portrait" video stream. This format is meant for surveillance situations where the monitored area is more vertical than horizontal in shape. E.g. hallways, staircases, tunnels, etc. In these applications the sides of the typical landscape video format image often include unnecessary area, such as walls. This unneeded video data also leads to wasted bandwidth and storage space. Corridor video mode eliminates the unnecessary portions of the field of view in those installations.

Triple Video Streaming:

Annexxus 47R and 67R cameras support triple H264/MJPEG streaming, each stream can be configured separately:

- **Primary Streaming (Stream 1)** is used by SRX-Pro Server for video recording and live streaming in full-screen mode. Only Primary streaming supports maximum resolution of up to 1.3MP/3MP.
- **Secondary Streaming (Stream 2)** is used for Live Viewing, Remote Streaming (VPC, SRX-Pro Remote) and in split-screen display mode. Lower resolution settings are supported.
- **Third Streaming (Stream 3)** is disabled by default. Enable and set to MJPEG to use for camera edge microSD recording. Where Stream 2 is disabled, Stream 3 will be used by SRX-Pro Server. Lower resolution settings are supported.

Note: After enabling/disabling a video stream, the camera must be manually restarted to apply changes. Otherwise, the stream changes will not be recognized by the SRX-Pro Server software.

Stream 1 - Primary Streaming:

- **Video Codec:** Set the compression mode to H264 (recommended) or MJPEG.
- **Resolution:** Set the primary stream resolution of the recorded video to: QXGA (2048×1536) - Ax67R only, Full HD (1920×1080) - Ax67R only, Quad VGA (1280×960), HD (1280×720), SVGA (800×600)
- **Frame Rate:** Set the frame rate for the primary stream recording. Available frame rate settings: 1, 3, 7.5, 10, 15, 30 fps or choose Custom and enter frame rate.
- **VBR Max bit rate** / **CBR bit rate** (for H264): Set the video bit rate between 64-20000 kbit/s. Default value is dependent on the Resolution and Frame Rate.

- **H264 GOP** (I-Frame Interval): Provide a value from 1-60. The default value will follow the Frame Rate.
- **H264 Rate Control Mode:** (for H264 codec): VBR (Variable Bit Rate) or CBR (Constant Bit Rate).
  - » **VBR** (Variable Bit Rate) (recommended): This setting will produce a variable bit rate video stream, however the video quality will remain constant resulting in high quality video images. Network infrastructure must be able to provide the set bandwidth to account for bit rate variations.
  - » **CBR** (Constant Bit Rate): This setting will produce a constant bit rate video stream at the cost of video quality. The quality may deteriorate considerably. This setting is beneficial for installations with limited bandwidth.
- **Quality** (for MJPEG codec): Low, Mid (default), High

Stream 2 - Secondary Streaming / Stream 3 (Third Streaming):

Secondary streaming is used for Live Viewing, Remote Streaming (VPC, SRX-Pro Remote, SRX-Pro Mobile) and in split-screen display mode. Third streaming can be set to MJPEG compression and used for camera edge recording. SRX-Pro v.6.0 and above also allows recording Primary (Main) stream only, Secondary (Sub) stream only, or both. Backup can also be created for either Main or Sub stream recording in SRX-Pro or VPC.

- **Video Codec:** Set the compression mode to H264 or MJPEG.
- **Resolution:** Set the resolution of the recorded video to: 800x600, 720x480, 360x240 (Stream 2) / 800x600, 704x480, 352x240 (Stream 3).
  To disable the stream, select **none**.
  Note: i3 Recommends keeping the default factory streaming settings. You may choose to enable Third stream (MJPEG) for camera edge recording.
- **Frame Rate:** same as Primary Streaming
- **VBR Max bit rate** / **CBR bit rate** (for H264): same as Primary Streaming
- **H264 GOP** (I-Frame Interval): same as Primary Streaming
- **H264 Rate Control Mode**: same as Primary Streaming
- **Quality** (for MJPEG codec): same as Primary Streaming

Enhanced H.264 Settings:

- **Enable:** Set to **On** to enable, or **Off** to disable.
- **Level:** Set to **Low, Mid**, or **High**.
- **Mode:** Set to EcoZone or EcoZone+EcoFrame
  - » **EcoZone:** Recognizes dynamic motion within the image and compresses the static portion of the image at a higher compression level decreasing the overall bandwidth.
  - » **EcoZone+EcoFrame:** Combines EcoZone feature above with EcoFrame reducing the overall bandwidth further. EcoFrame reduces the frequency of I-frames in a static scene (e.g. storage room).

- **White Balance:** Set White Balance mode to ATW (Auto Tracing White Balance), Auto or Manual.
  - » **Auto:** Automatically controls color temperature ranging from 2500°K to 10000°K
  - » **ATW** (Auto Tracing White Balance): continuously adjusts the camera color balance in accordance with any change in color temperature.
  - » **Manual:** Set R (Red) Gain and B (Blue) Gain values manually between 0 and 511, according to your preference.

After making any setting adjustments, remember to click the **Save** button to save any changes made.

6.4 Privacy Zone (edge)
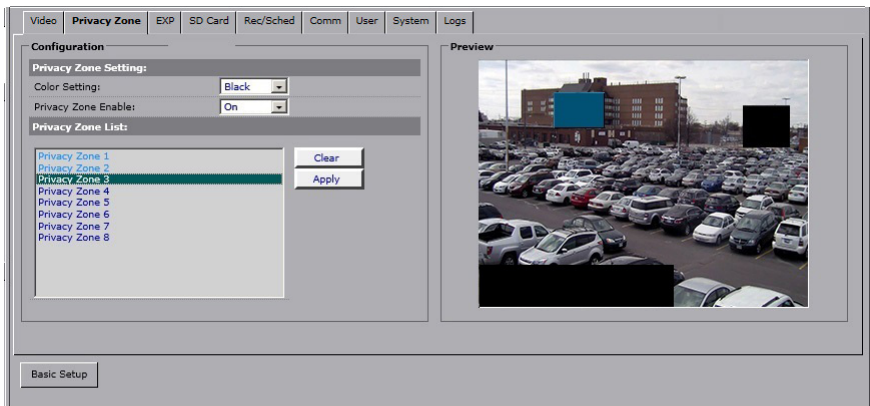
In the Privacy Zone setup tab, select an area that needs to be blocked off with a rectangle on Live View and from video recording because of privacy or other concerns. Up to 8 separate Privacy Zones can be configured.

Note: Camera's privacy zone feature is not related to SRX-Pro Server VideoPrivacy feature and functions independently.

Privacy Zone Setting:

- **Color Setting:** Select the Privacy Zone area color from Black, Grey and White options. The same solid color will be applied to all Privacy Zones drawn on the screen.
- **Privacy Zone Enable:** Set to **On** to enable, or **Off** to disable.

Privacy Zone List contains 8 place-holder entries for up to 8 custom Privacy Zones.

To create a new privacy zone,

1. Click on the placeholder Privacy Zone name in the Privacy Zone List.
   E.g. **Privacy Zone 1**.
2. Position your mouse cursor over the Preview window, press and hold left mouse button.
3. Drag the cursor to draw a rectangular area to conceal a portion of the image.
4. Release the mouse button. The privacy area rectangle will be shaded blue.
5. To re-position the privacy zone, hover the mouse cursor over the shaded area, left-click and hold, then drag the area to the new location on the preview window. To re-draw the privacy zone area, click on the video image in the Preview window outside of the shaded zone and repeat Steps 2-4.
6. Click **Apply** to save the new privacy zone. Saved privacy zone area will be filled with the solid color selected in the Color Setting.
7. To remove a saved privacy zone area, click on the Privacy Zone name in the list and click **Clear**.
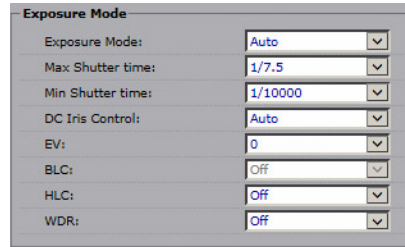
6.5 Exposure

The camera's exposure settings can be adjusted in the Exposure setup tab. Four Exposure modes are available: Auto (default), Flickerless, Shutter Priority and Manual).

Exposure Mode > Auto Exposure (Default):

Shutter speed (exposure time) is the length of time the camera's shutter stays open, exposing the CMOS sensor to light.
The lower (slower) the shutter speed, the more light enters; the higher (faster) the shutter speed, the less light. Longer shutter speeds are needed in the low light conditions but are not recommended in the scenes with a lot of movement, as long exposure time creates a blurring effect in the moving objects. Higher (faster) shutter speeds are helpful in reducing the blur of the fast-moving objects.

Exposure Mode

Exposure Mode:	Auto
Max Shutter time:	1/7.5
Min Shutter time:	1/10000
DC Iris Control:	Auto
EV:	0
BLC:	Off
HLC:	Off
WDR:	Off

- **Max Shutter time:** Set the maximum shutter time value from 1/60 (average shutter speed) to 1/7.5 (slowest shutter speed/longest exposure time) sec.
- **Min Shutter Time:** Set the minimum shutter time value from 1/10000 (fastest shutter speed/shortest exposure time) to 1/120 sec.
- **DC Iris Control:** Set the DC Iris Control to Auto or Full. DC iris is a motor-driven, automatically adjustable iris opening that responds to changes in light levels and resides inside the camera.
- **EV:** Set the Exposure Compensation value from -2 to 2, where -2 results in the darkest image and 2 - in the lightest image.
- **BLC: (This feature is disabled when Smart IR setting is On)**
  Set an area for Backlight Compensation from the 6 available options: Upper, Lower, Central 1/3rd, Central 1/6th, Left, or Right. Set to **Off** to disable BLC feature. BLC feature optimizes exposure in the foreground and background of the video image through digital signal processing. BLC splits the video scene into different regions, and uses a different exposure for each of these regions. BLC corrects regions with extremely high or low levels of light to maintain a normal and usable level of light for the object in focus. The diagram is an approximate representation of the selected areas.
- **HLC:** Set the Highlight Compensation feature to **On** or **Off**.
  HLC feature senses strong sources of light in video (headlights, spotlights) and compensates for exposure

Off   Upper   Lower   Central 1/3rd

Central 1/6th   Left   Right

  in these spots to enhance overall video quality. This feature is especially helpful in preventing blinding of security cameras at night time from headlights and is widely used for nighttime license plate readability (car speed <5mph).
- **WDR:** Set the Digital Wide Dynamic Range to **High**, **Medium**, **Low** or **Off**.
  Digital Wide Dynamic Range uses digital image manipulation to prevent direct bright light from washing out the video image. This feature is especially useful in indoor installations, where the camera's field of view includes an entryway or a window, which lets in a lot of natural light. Digital WDR feature is able to normalize the exposure for the underexposed object in focus inside and overexposed background outside.
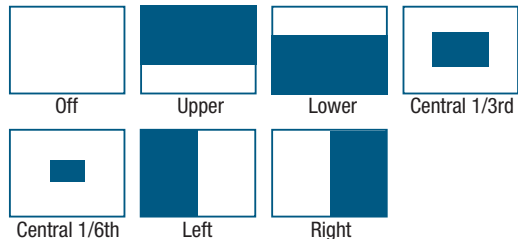
Exposure Mode > Flickerless:

- **DC Iris Control:** same as Auto Exposure Mode
- **EV:** same as Auto Exposure Mode
- **BLC:** same as Auto Exposure Mode
- **HLC:** same as Auto Exposure Mode
- **WDR:** same as Auto Exposure Mode

Exposure Mode > Shutter Priority:

- **Shutter Speed:** Set camera shutter speed between 1/7.5s to 1/10000s. This setting is useful for scenes with fast-moving objects or with a lot of movement in the scene. Higher shutter speeds make individual frames appear sharper and minimize motion blur, at the same time, however, movement can appear more jerky.
- **DC Iris Control:** same as Auto Exposure Mode
- **EV:** same as Auto Exposure Mode
- **BLC:** same as Auto Exposure Mode
- **HLC:** same as Auto Exposure Mode
- **WDR:** same as Auto Exposure Mode

Exposure Mode > Manual Exposure:

- **Shutter Speed:** Set camera shutter speed between 1/30s to 1/10000s. This setting is useful for scenes with fast-moving objects or with a lot of movement in the scene. Higher shutter speeds make individual frames appear sharper and minimize motion blur, at the same time, however, movement can appear more jerky.
- **Manual Gain:** Set Manual Gain value between 0 and 36.
  Gain is an electronic amplification of the video signal, where signal is boosted electronically, adding more voltage to the pixels on the camera's CMOS chip. Higher manual gain values will result in brighter image.
- **WDR:** same as Auto Exposure Mode

Day Night Setting

- **Day Night Switch Mode:** Set to Auto, Color or B/W. Color setting forces the camera to permanently stay in the Color mode, regardless of the amount of light in the scene. B/W setting forces the camera into Black/White mode permanently. Auto mode lets the camera switch between Color and B/W modes automatically, based on the amount of light.

- **Time:** Set the Time value to Slow, Normal or Fast. Time value is the time delay for Auto Day/Night mode switching. This setting is used in conjunction with the Day Night setting and is unavailable when Manual Exposure is enabled.
- **Sensitivity Day to Night:** Set the sensitivity value from 0 (lowest) to 6 (highest). The higher the value, the sooner the camera will switch from day (Color) mode to night (B/W) mode as the scene becomes darker.
- **Sensitivity Night to Day:** Set the sensitivity value from 0 (lowest) to 6 (highest). The higher the value, the sooner the camera will switch from night (B/W) mode to day (Color) mode as the scene becomes lighter.

IR Control

- **IR Control Mode:** Set to **On**, **Off** or **Auto**. Auto mode turns the IR LED On or Off based on the amount of available present. On/Off settings allow turning the IR LEDs permanently ON or OFF.

IR Control	
IR Control Model:	Auto
Smart IR:	On
IR Level:	Auto

- **IR Level:** Set to Auto or Manual. Auto setting will automatically adjust the LED luminance level based on the lighting conditions. Manual setting allows setting the IR LED luminance level from 10 to 100% of light intensity.
- **Smart IR:** Set the Smart IR On or Off. **Note, when Smart IR is ON (Enabled), BLC function is Off (Disabled)**. Smart IR compensates the overexposed area by adjusting exposure value so that the infrared light does not overexpose the object. Smart IR technology solves the problem of infrared LEDs whiting out images, such as people's faces, when they are too close to the IR LEDs of a camera at night.

Quality

- **Noise Reduction:** Set Noise Reduction value between 0 and 20. The higher the value, the more digital noise is removed from the image.
- **Defog:** Digital Defog function uses built-in video processing algorithm to improve video appearance in foggy conditions.

Reset Exposure		
Quality		
Noise Reduction:	20	[0-20]
Defog:	Off	
Gamma Correction:	0.45	

- **Gamma Correction:** Set Gamma Correction to 0.45 or 1.
- **Reset Exposure:** Reset Exposure settings to factory defaults.

6.6 SD Card (edge recording)

Your Ax47R/67R series camera supports edge video recording to a microSD card for the purposes of data redundancy. One microSD card (64GB max) is supported (not supplied with the camera).

Note: Camera's edge video recording is not related to SRX-Pro Server video recording and functions independently.

Plug your microSD card into the slot on your Ax47R/67R camera. To access microSD slot, camera's Lexan dome bubble must be removed first.

Once the microSD card is recognized by the camera, the microSD image will be displayed on the camera's main panel.
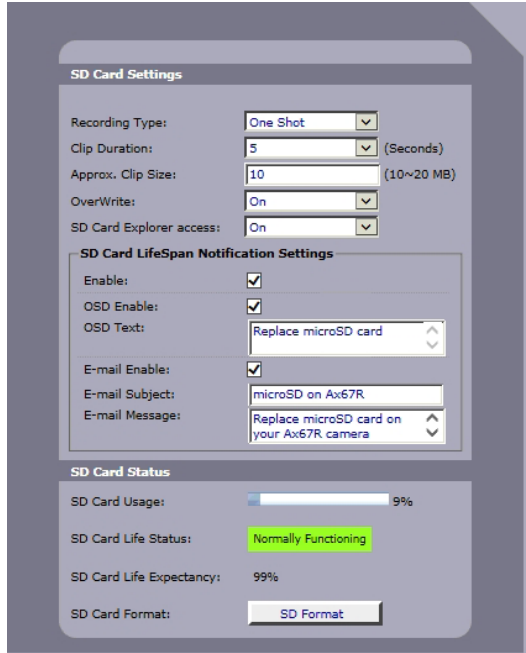
At least one video stream must be set to MJPEG codec in the Video tab to record *.jpg snapshots to microSD card.

At least one video stream must be set to H264 codec in the Video tab to record *.mp4 video clips to microSD card.

Inside the camera's SD Card setup tab, user can configure a type of edge video recording, clip size and overwrite mode status. This tab also includes the microSD card performance information.

SD Card Settings

- **Record Type:** Set to **One Shot**, **Continuous** or **Backup**.
  - » **One Shot:** This recording type will record 5- or 10-second *.mp4 video clips after the event starts (e.g. Tamper event). At least one stream must be set to H264 codec in the Video tab.
  - » **Continuous:** This recording type will start recording after the event starts This recording type can also be combined with Scheduled recording (Recording/Schedule tab). Primary or Secondary stream must be set to H264 codec in the Video tab.
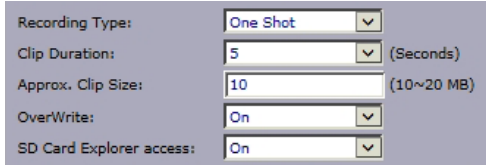
- » **Backup:** Same as Continuous recording type, however Third stream is used for recording. Third stream must be enabled and set to H264 codec in the Video tab.
- **Clip Duration:** (applies to One Shot recording type *only*) Set to 5 or 10 seconds.
- **Approx. Clip Size:** Set between 10 and 20 MB. Clip Size value ensures that any single *.mp4 video clip size does not exceed the set limit.
- **OverWrite:** Set the OverWrite mode to **On** or **Off**. When enabled, the information on the microSD card will be overwritten based on FIFO principle.
- **SD Card Explorer access:** When set to **On**, the video clips and snapshots on the microSD can be accessed through the Explorer using the following link: **ftp://CAMERA_IP_ADDRESS/ipcam**. (E.g. ftp://192.168.10.100/ipcam). Login credentials are required.

SD Card LifeSpan Notification Setting:

- **Enable:** Check to enable microSD card health notifications. Note that not all card manufacturers support this functionality.
- **OSD Enable:** Check to enable On Screen Display text for microSD card health notification.
- **OSD Text:** Enter the On Screen Display custom text for microSD card health notification.
- **E-mail Enable:** Check to enable an E-mail to be sent out for microSD card health notification. SMTP and email information must be correctly configured in the Recording/Schedule tab.
- **E-mail Subject:** Enter the E-mail subject.
- **E-mail Message:** Enter E-mail body message.

SD Card Status

- **SD Card Usage:** This percentage value is calculated as microSD Free Space / microSD Total capacity * 100%.
- **SD Card Life Status:** microSD Life Status is the maximum number of overwrite cycles, as defined by the microSD card manufacturer. Note that not all microSD manufacturers support Life Status notification functionality. If your microSD card does not support this feature, SD Card Life Status will say "Lifetime Notification Unsupported".
microSD cards that do support Life Status notification, may say "Normally Functioning", "Replacement Recommended" or "Has Reached its Lifetime" to indicate the health of the microSD media.

- **SD Card Life Expectancy:** Remaining writing lifespan is calculated based on the card's maximum supported number of overwrite cycles, as defined by the manufacturer. It is represented as a percentage value. Lower values indicate shorter remaining lifespan and can also be used as an indicator for microSD replacement.
- **SD Card Format:** Click to format the microSD card. Click **OK** in a confirmation window to proceed.

After making any setting adjustments, remember to click the **Save** button to save any changes made.

6.7 Recording/Schedule (edge)

In Recording/Schedule tab, the user can configure FTP recording, SMTP recording, and email notifications based on schedule or on a Defocus event. The following actions are supported for Defocus events: snapshot recorded to the microSD card or FTP, video clip recorded to microSD card, On-screen Display message shown and Email sent.

Note: All settings configured in this setup tab and all linked actions are not related to SRX-Pro Server settings or video recording and function independently.

To enable supported Defocus detection and resulting camera actions, the following conditions must be met:
- MicroSD card (not supplied) must be inserted into the microSD slot on the camera
- Email SMTP settings are required for all Email actions and must be configured in this tab.
- At least one H264 stream must be enabled in the Video tab for video recording.
- At least one MJPEG stream must be enabled for snapshot email or microSD/FTP recording.

FTP Record > FTP Server

- **FTP Server:** Enter your FTP Server address.
- **Login ID:** Enter your FTP login
- **Password:** Enter your FTP password
- **FTP Port:** Enter your FTP Port (Available ports: 21 and 1025~65535 range)

SMTP Record > SMTP Server

- **SMTP Server:** Enter your SMTP Server address.
- **Login ID:** Enter your SMTP email login
- **Password:** Enter your SMTP email password
- **Sender Email Address:** Enter the email address where the camera emails will be addressed from.
- **Port:** Enter your SMTP Port number
- **Authentication:** Select your SMTP Server authentication method from NO AUTH, SMTP PLAIN, LOGIN and TLS-TTLS.
- **Attach Image:** This setting controls whether *.jpg snapshots are allowed to be attached to the outbound emails. Set to **On** or **Off**.

Email Address List

Configure up to three unique email recipients. Enable the email entry by checking the Enable checkboxes for the corresponding email address lines, then enter the recipient's email address in the Address column.

Arming Schedule Setting > Schedule

Schedule event tab can be configured to trigger a snapshot recording to microSD card/FTP or video clip or recording to microSD card based on the set Trigger Interval.

Note: All actions configured in this setup tab are subject to arming schedule.

- **Enable:** Check to Enable custom recording schedule.
- **Trigger Interval:** Set to 1 to 3600 seconds (1 hour). This setting determines the frequency for Snapshot or Video clip recording, in conjunction with the custom arming schedule.

Store to:
- **Snapshot:** Check to save a *.jpg snapshot to the microSD and/or FTP after each Trigger Interval.
- **Record:** Check to save a *.mp4 video clip to the microSD after each Trigger Interval.

Sending E-mail by SCHEDULE:
Note: SMTP settings must be configured for this feature.
- **Enable:** Check to Enable scheduled E-mail after each Trigger Interval. Snapshot image will be added to the email. Note that at least one MJPEG stream must be enabled for this function in Video setup tab.
- **Subject:** Enter the E-mail subject.
- **Message:** Enter E-mail body message.

Schedule:
- Configure arming schedule. Enable days of the week when scheduled recording will be active (enabled). Set the active time period for each enabled day by using the drop-down menus for **Start** and **End Times** to select the hours and minutes, respectively. By default, Schedule arming schedule is set to stay active 24/7.

Arming Schedule Setting > Defocus

Defocus detection compares the sharpness of consecutive video frames.

Detected Defocus events can trigger a video clip or snapshot recording to the microSD card or snapshot recording to the configured FTP. On-screen display and email notifications are also available.

Note: All actions are subject to schedule.

- **Enable:** Check to Enable Defocus event detection.

Store to:
- **Snapshot:** Check to save a *.jpg snapshot to the microSD and/or FTP after each Defocus event.
- **Record:** Check to save a *.mp4 video clip to the microSD after each Defocus event.

On Screen Display:
On Screen Display feature will display entered text on the video screen whenever Defocus event is detected.
- **Enable:** Check to enable On Screen Display text when Defocus event is detected by the camera.
- **Text:** Enter the text that will be displayed at the time of Defocus event detection. The OSD text settings are configured under Communication setup tab *(See Section 6.8 for more information)*.

Sending E-mail by DEFOCUS:
Note: SMTP settings must be configured for this feature.
- **Enable:** Check to Enable scheduled E-mail after each Defocus Event. Snapshot image will be added to the email. Note that at least one MJPEG stream must be enabled for this function in Video setup tab.
- **Subject:** Enter the E-mail subject.
- **Message:** Enter E-mail body message.

Schedule:
- Configure arming schedule for Defocus events. Enable days of the week when Defocus event detection will be active (enabled). Set the active time period for each enabled day by using the drop-down menus for **Start** and **End Times** to select the hours and minutes, respectively. By default, Defocus event detection is set to stay active 24/7.

After making any setting adjustments, remember to click the **Save** button to save any changes made.

6.8 Communication Setup

The Communication tab is used to configure network and communication settings on the camera as well as camera OSD settings.
*Note: Do not configure SNMP settings in this tab as these are reserved for development and advanced troubleshooting by the manufacturer only and are not required for normal functioning of this camera*

RTSP Settings
- **Authentication:** Enable to allow users to get the video stream using third party players, such as VLC with the help or RTSP protocol.

UPnP Settings
- **UPnP:** Set to **On** to enable or **Off** to disable.
  Universal Plug and Play (UPnP) is a set of networking protocols that permits networked devices, such as personal computers, printers, Internet gateways, WiFi access points and mobile devices to seamlessly discover each other's presence on the network and establish functional network services for data sharing.
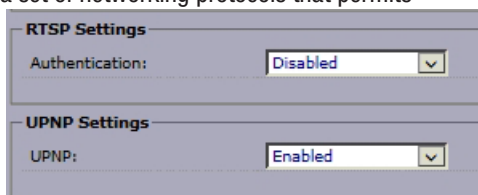
Network Settings
- **DHCP:** Set to **Enabled** or **Disabled** to have the network automatically assign an IP address to the camera.

- **IP Address:** Enter the camera's IP address here. This option is disabled when DHCP is enabled.
- **Subnet Mask:** Enter the camera's Subnet Mask here. This option is disabled when DHCP is enabled.
- **Default Gateway:** Enter the IP address of the network's router if necessary. Contact your network administrator for this information. This option is disabled when DHCP is enabled.
- **DNS:** Enter a DNS IP Address if necessary.
- **HTTP Port:** Enter a HTTP Port number if necessary. Available ports: 80, 1025~65535 range
- **Physical Address:** This field displays camera's MAC Address.

Network Settings	
DHCP:	Disabled
IP Address:	192.0.0.151
Subnet Mask:	255.255.255.0
Default Gateway:	192.0.0.1
DNS:	192.0.0.1
HTTP Port:	80 {80,[1025-65535]}
Physical Address:	18:f8:7a:01:14:07

OSD Settings

- **Basic Settings:** Enable or disable camera's OSD settings.
  - » **OSD Camera Name:** Turn Camera Name OSD **On** or **Off**. Camera Name is configured in the Video setup tab.
  - » **OSD Date Time:** Turn Camera Date/Time OSD **On** or **Off**. Camera date/time settings are configured in the System setup tab.
- **Event Settings:** Configure camera's event OSD settings. These settings apply to, Defocus, and tamper as well as microSD card notification OSD.
  - » **Background Color:** Set the on-screen text background color to **Transparent** or **Black**.
  - » **Text Color:** Set the on-screen text color to **Black** or **White**. It is not recommended to set both Background and Text colors to Black.
  - » **Location X:** Set the horizontal position of the OSD on the screen between 1 and 10, where 1 represents the left-hand corner or the screen, 5 - the middle, and 10 - the right-hand corner of the screen.

OSD Settings		
Basic Settings		
OSD Camera Name:	Disabled	
OSD Date Time:	Disabled	
Event Settings		
Background Color:	Transparent	
Text Color:	White	
Location X:	5	(1~10)
Location Y:	1	(1~10)

  - » **Location Y:** Set the vertical position of the OSD on the screen between 1 and 10, where 1 represents the top of the screen, 5 - the middle, and 10 - the bottom of the screen.

After making any setting adjustments, remember to click the **Save** button to save any changes made.
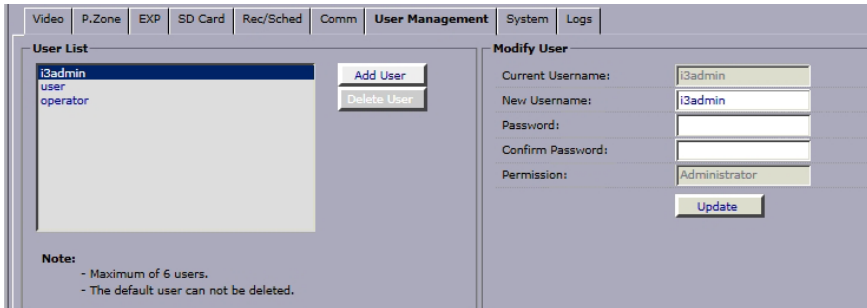
6.9 User Management

User Management tab displays the list of users that have access to the camera. Username and password from this setup tab are used when connecting to the camera through the supported Internet browser or SRX-Pro Server.

Three types of user permissions exist: **Administrator, Operator** and **User**. Administrator has access to the camera's setup settings and user administration, Operators have access to the camera's settings, but not user administration, while Users may only view camera's live streams. Each camera has one master Administrator user (i3admin); four additional users can be created and assigned either Operator or User privileges.

Note: The master Administrator account may not be deleted, however administrative user name and password can be changed.

Reminder: Whenever a change is made to the Annexxus camera user in the camera's Advanced Setup > User Management tab, remember to update this information in the IP Setup tab of the SRX-Pro Server.
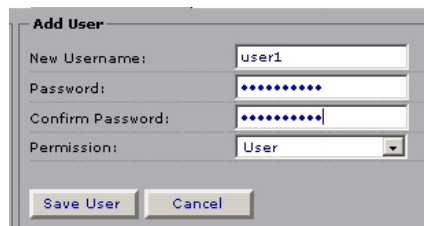

Add a User

To add a new user,

1.   Click **Add User** button.
2.   Enter **New Username**
3.   Enter new user **Password**
4.   Re-enter password in the **Confirm Password** field.
5.   Set user **Permission** to User or Operator.

6.   Click **Save User** button. The new user will be added to the user list on the left.

## Delete a User

To delete an existing User or Operator,

1.   Click on the user name in the list.
2.   Click **Delete User** button.
3.   Click **OK** in the confirmation message. The user will be removed from the list.

Note: After changing user credentials, do not forget to update SRX-Pro camera connection information in the SRX-Pro Setup>IP Camera tab.

To update an existing username, password, or user permission,

1. Click on the user name in the list.
2. In the Modify User setup area, enter **New Username** and/or **Password** and **Confirm Password**, or adjust **Permission** (not available for the Administrator account).
3. Click **Update** button. If changing administrative password, you will be asked to log in with the new administrative credentials. Enter updated administrative login/password and click **OK**.
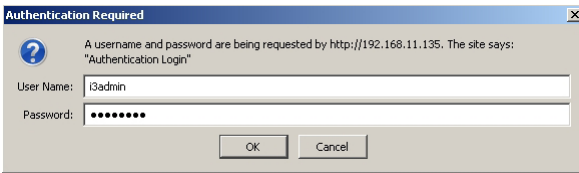

4. Click **OK** in the confirmation message. The new user settings are now saved.

6.10 System Setup

This setup tab allows setting camera to NTSC or PAL format, setting camera's date/time, restarting the camera, and exporting/importing/resetting camera settings.

System Information > Current Version Description

This section contains information on the Camera's Model Name and Firmware version. Camera's TV System can be set to NTSC or PAL format from the drop-down menu.
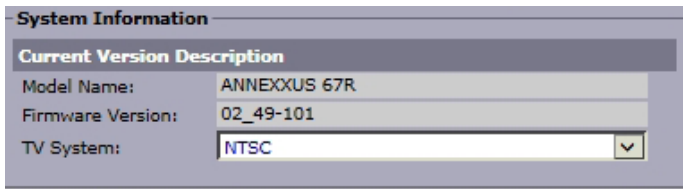
Date & Time

- **Time Zone:** Set your Time Zone to automatically adjust your camera to Daylight Savings Time. Default Time Zone: America/Toronto (EST).
- **Current Date & Time:** This section shows camera's current date and time. Set your camera's Date format. Default date format is set to YYYY/MM/DD
- **New Date & Time:** Select a method of updating your camera's date and time. Click the **Save** button to apply the new Date and Time.
  - » **Set Manually**. Manually enter the new Date and Time.
    Date format is YYYY/MM/DD, time format is HH:MM:SS.
  - » **Synchronize with Computer Time**. This option synchronizes camera date and time to the PC you are currently connecting to the camera from.
  - » **Synchronize with NTP Server**. Enter the NTP Server address and set the Sync Period in hours. Sync frequency can be set to every 1, 6, 12 or 24 hours.

Upgrade & Maintenance > Restart/Reset

- Click **Restart Camera** to restart your Annexxus-series camera, click **OK** in the pop-up confirmation window. This will cause a temporary disconnect, no video will be recorded while the camera is restarting but all custom settings will be saved. Camera restart is required after the firmware update.
- Click **Factory Reset** to return all settings, except for the IP Address to factory defaults. Click **OK** in the pop-up confirmation window to proceed.
- Click Hard Factory Reset to return all camera settings, including IP Address, to factory defaults. Click OK in the pop-up confirmation window to proceed.

> **Reminder:** Default IP address: **192.0.0.16**, default Subnet: **255.255.255.0**. Default Username/Password are **i3admin** / **i3admin**
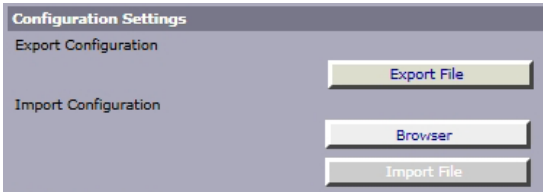
Export Configuration:

- Click **Export File** to export your camera's custom settings. If you have multiple cameras of the same model and you would like to apply a set of custom settings to each one, exporting the configuration file may save time.
- Click **Browser** to locate a (*.tar.gz) configuration file to apply new settings to your camera and click **Import File**.

After making any setting adjustments, remember to click the **Save** button to save any changes made.
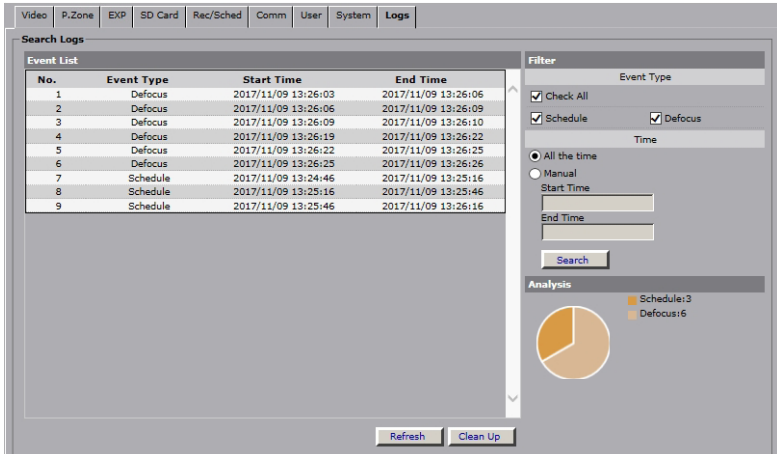
6.11 Logs

Note: Logs setup page is not available in IE v8 and IE v9. Use IE v10 or higher, or Firefox.

Logs tab allows searching for event occurrence by date, time and event type.

Log events are created for Defocus events and Scheduled recording occurrences.

Searching by Event Type:

To filter the Log Event List, check off one or more **Event Type**. When searching for more than one event type, pie chart report will show a visual representation of the number of each event type within the set time frame.

Searching by Date/Time:

To filter by Time, select **All the time** or **Manual** radio button.

When searching within a specific time frame, click inside the **Start Time** field. Configure the Start Date and Time in the pop-up window and click **Set**. Repeat for **End Time** and click **Search**. Only matching log entries will be displayed.

Sorting Event List:

To sort the Event List by Event Type, Start Time or End Time, click on the corresponding column to sort in ascending or descending order.

Refresh: Click to update search results.

Clean Up: Click to erase all logs.

7. Specifications

Features/Model	Ax47R2/4	Ax67R2/4
Image System		
Image Sensor	Progressive Scan CMOS 1/3" sensor	Progressive Scan CMOS 1/2.8" sensor
Signal System	NTSC/PAL	
Optical System		
Iris Control	Auto Iris	
Focal Length	Ax47R2: 2.8mm Ax47R4: 4mm	Ax67R2: 2.8mm Ax67R4: 4mm
F-stop Range (F-number)	Ax47R2: 1.8 Ax47R4: 1.6	Ax67R2: 1.8 Ax67R4: 1.6
Angle of View	Ax47R2: 93° (H) ~ 70° (V) Ax47R4: 63° (H) ~ 47° (V)	Ax67R2: 100° (H) ~ 74° (V) Ax67R4: 68° (H) ~ 51° (V)
Day/Night	Mechanical ICR	
Electric		
Digital Noise Reduction	3D	
Wide Dynamic Range (WDR)	Digital WDR	
Minimum Illumination	0.3 lux (Color mode), AGC=36dB, 50 IRE 0.1 lux (BW mode), AGC=36dB, 50 IRE 0 Lux w/ IR ON	
Electric Shutter	NTSC: 1/7.5~1/10000 sec; PAL: 1/6.25~1/10000 sec	
Back Light Compensation (BLC)	Off / On (6 Area Selectable)	
Highlight Compensation (HLC)	Off / On	
On-board (Edge) Storage	1 x microSD/SDHC/SDXC slot up to 64GB. Card sold separately	
Alarm In/Out	NA	
Network Specifications		
Video Streaming and Compression Method	Triple Streaming H264 / Motion JPEG	
Maximum Frame rate vs Resolution	1.3MP (1280x960) @ 30fps/25fps	3MP (2048x1536) @ 30fps/25fps
Network Protocols	IPv4, TCP/IP, UDP/IP, FTP, ICMP, ARP, DHCP, HTTP, SMTP, IGMP, RTSP, RTP, RTCP, SNMP	
Security Access	Multiple privilege control with password protection	
Users	1 Administrator, 5 Users/Operators	
Other Features		
Other	Privacy Mask, Mirror Flip, Corridor View, Edge Defocus Detection, Smart IR, FTP Recording, Digital Defog	
Mechanism		
Angle Adjustment	Pan: 360°, Tilt: 20° - 90°, Rotation: ±175°	
Dimensions (Ø x H)	Ø112mm x 82mm (Ø 4.4" x 3¼")	
Weight	approx. 460 g (1.01lb)	
Connectors	Network: RJ45	
IR Distance	25m	
Power Supply		
Power Requirement	IEEE 802.3af, Class 3	
Power Consumption (max.)	PoE 8.5W (max)	
Environment		
Operating Temperature	-20°C - 50°C (-4°F - 122°F)	
Operation Humidity	90%, non-condensing	
Power-On Temperature	-20°C	
Regulations, Ratings		
Regulations, Ratings	FCC Class B, CE, RoHS, UL, IP67, IK10, ONVIF	
Warranty		
Standard Warranty	i3 Superior 5-year warranty	