Quick Connection Guide
Wireless Camera
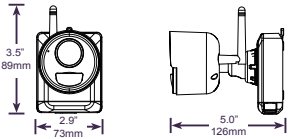## RS-CH222H1CGA-WL-36W

Dimensions

NVR-A

8.6" 210mm
0.16" 4mm
2.5" 64mm
6.7" 170mm

IPC-A

3.5" 89mm
2.9" 73mm
5.0" 126mm

NVR-B

1.9" 48mm
11.8" 300mm
8.2" 208mm

IPC-B

5.5" 134mm
2.9" 73mm
6.6" 168mm
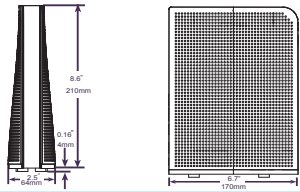
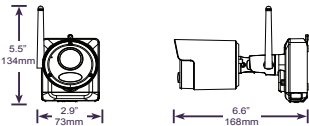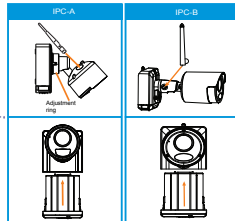## STEP 1: Initial Setup

Before you begin, you will need to prepare the wire-free cameras and Power Packs.

NOTE:Power Packs come fully charged with no need for initial charging.

To prepare the cameras:

|	IPC-A	IPC-B
1. Attach an antenna to each camera. For IPC-A / IPC-B Series cameras, twist the adjustment ring counterclockwise to reposition each camera as shown to the right. Twist clockwise to tighten when finished.	Adjustment ring	
2. Peel off the PLEASE REMOVE label covering the contacts on each Power Pack. Insert the charged Power Packs into each camera base. Push up until the Power Pack 'clicks' into place.		

3. Connect the two black antennas to the wireless receiver.
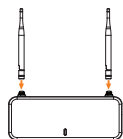
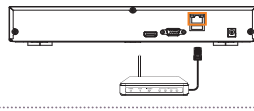NVR-B only

STEP 2: Setting Up the Recorder

NVR-B

To set up the recorder:

1. Connect the wireless receiver to the USB port on the back panel of the recorder.

   NOTE:The receiver includes double-sided tape and mounting screws for optional wall mounting for improved line-of-sight with cameras.
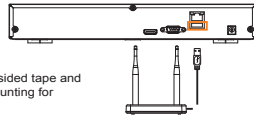
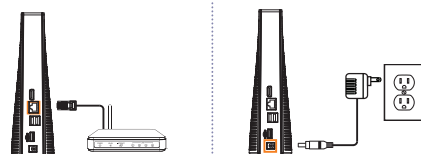2. Connect the recorder to your router using the included Ethernet cable.

3. Connect the included power adapter to the recorder. Wait a few minutes for the system to start up.
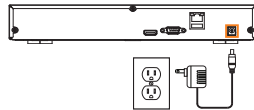
NVR-A

1. Connect the recorder to your router using Ethernet cable.

2. Connect the included power adapter to the recorder.

STEP 3: Connecting with RXCamView

Connect to your system using the free RXCamView app for smartphones and tablets (iOS and Android).

To connect with RXCamView :

1. Download and install the free RXCamView app from the App Store or Google Play Store.

2. Tap the RXCamView icon to launch the app.

3. Tap to open the menu. Tap Device , then tap .

4. Enter the following:
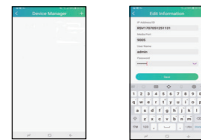
   A. Ensure Device ID is selected.
   B. Tap to scan the QR code on the back of your recorder using the camera on your mobile device.
   C. Ensure the Client Port reads 9000 .
   D. Enter the username (default: admin).
   E. Enter the password (default: empty).
   F. Tap Save.

5. Your cameras will appear on the Live screen of the app. Tap the play button ( ) to stream live video on channels that are in sleep mode.

STEP 4A: Installing the Cameras

Follow the instructions below to mount the cameras. It is recommended that you refer to the "Installation Tips" section to help you select good mounting locations.

To install your cameras:

1. Set the mounting bracket in the desired mounting position. Mark holes through the mounting bracket (shown as orange X's on the right).

2. Drill holes where marked for the mounting screws using the included drill bit .
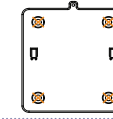
3. Secure the bracket to the mounting surface with the included mounting screws (×4). Make sure all screws are fastened tightly using the included screwdriver.
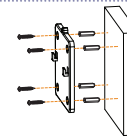
   NOTES:
   • Insert the included drywall anchors if you are mounting the camera onto drywall.
   • The hole at the top of the mounting bracket will be used in step 5, once the camera is attached to the mounting plate.

4. Lower the camera base onto the mounting bracket so the 2 tabs in the mounting bracket lock into the 2 slots in the camera base.

IPC-A	IPC-B
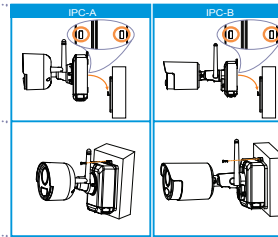
5. Insert the security screw through the fasteners on the top of the camera base and mounting bracket to secure the camera to the mounting bracket. Tighten using the included screwdriver.

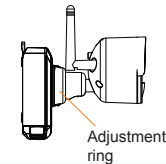6. OPTIONAL:Tighten the pre-installed locking screw on the base of the Power Pack using the included screwdriver.

   NOTE:You will need to loosen the locking screw to remove the Power Pack in the future.
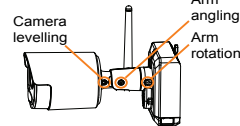
7. Adjust the angle of the camera:

IPC-A

Twist the adjustment ring counterclockwise to reposition the camera. Tighten the adjustment ring when finished.
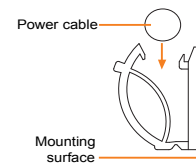
Adjustment ring

IPC-B

Use the included Allen Key to loosen the adjustment screws labelled below. Tighten all adjustment screws when finished.

Camera levelling
Arm angling
Arm rotation

8. Use the included cable clips to complete the installation.

Power cable
Mounting surface

ATTENTION:
This camera includes an Auto Mechanical IR Cut Filter. When the camera changes between Day/Night viewing modes, an audible clicking noise may be heard from the camera. This clicking is normal, and indicates that the camera filter is working.

STEP 4B: Installation Tips

Follow the tips below for more accurate motion detection and to optimize battery life:

• See images to the right for ideal setup. It is recommended to place your camera at least 7ft (2.1m) above the ground and angle it slightly downward toward the monitoring area, excluding any busy areas (e.g., sidewalks or roadways).
• Ensure the camera image is free of obstructions (i.e., tree branches).
• Position the camera no more than 20ft (6.1m) away from the area you wish to monitor.
• See the "Optimizing Motion Detection" section to customize motion settings for each camera on your system.
• Ensure you have configured the active area for motion detection so that only areas of interest are selected. See the "Optimizing Motion Detection" section for details.
• For best performance, position the camera so that objects of interest will move from side-to-side across the camera image, rather than moving towards or away from the camera.
• Install the camera within range of the recorder (noted in the camera's specifications).
• This camera is weather resistant for outdoor use (IP66 rated). Installation in a sheltered location is recommended. Battery life will vary based on temperature, settings and number of events.
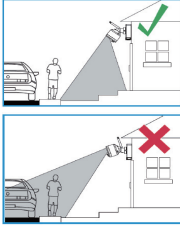
Optimizing Motion Detection

Customize motion detection settings to ensure motion events are being recorded and reduce false alarms.

To optimize motion detection:

1. Launch the RXCamView app.
2. Tap , then tap Remote Setting.
3. Select a device, then tap Motion.
4. Configure the following as needed:
   a. Sensitivity: The amount of motion needed to trigger recording (e.g., higher sensitivity requires less motion to trigger recording).
   b. Area Selection: Set the active area for motion detection. Video appears with a red grid overlayed, meaning the whole image is active. Tap red squares to disable motion detection in those areas (see example image to the right). Tap Save when finished.

      TIP: Disable areas that will trigger unwanted motion events, like busy streets or trees and shrubs that will move in the wind.

   c. Distance Setting: Configure distance setting for motion detection. While watching the camera's video on your mobile device, recreate a motion event in front of your camera. The icon will change from to when motion is detected by the camera. Change the distance setting if motion detection is being triggered by unwanted events.

      NOTE:Distance will be affected by temperature.
   d. Buzzer: Set the recorder to sound an alarm when motion is detected.
5. Tap Save when finished. Repeat for other cameras on the system.
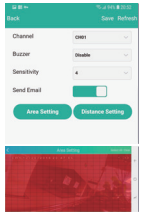
Pairing the Camera

Your cameras should be paired to the recorder and ready to use out of the package. If a camera becomes unpaired, or if you have purchased a wire-free add-on camera (max. 6 cameras per system), follow the instructions below.

1. From Live view, tap any free channel you would like to pair a camera to (marked with a icon).

2. Tap PAIR. A timer for 30 seconds appears.

3. Press and hold the pair button on the back of the camera for 3 seconds.

   IPC-A

   IPC-B
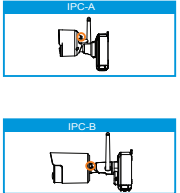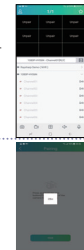
NOTE:A "pairing successful" message should appear on screen. If you do not see this message, repeat the steps above.

Charging the Power Pack

Connect the included power adapter to the micro USB port on the Power Pack.
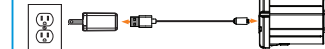
Power Pack	Charge Time
2-cell	Approx. 6 hours
3-cell	Approx. 8 hours

LED Color	Meaning
Green	Fully charged
Red	Currently charging

NOTE:The Power Pack LED flashes red while outside the safe charging temperature of 32-113°F (0-45°C). In this state, the camera remains powered up, but the Power Pack will not charge outside the safe temperature range.

Before You Start

⚠️ **Before You Start** ⚠️

- Upgrade your recorder firmware and mobile app to the latest versions.
- Please note that an upload speed of 3.5Mbps is equired for remote video streaming. Up to 3 devices may connect to the system at the same time.
- Ensure you have completed initial setup of the RXCamView app and the recorder as detailed in the Quick Connection Guide.

RXCamView : App Overview

- Main menu
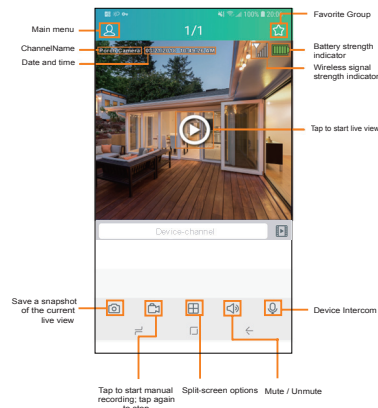- ChannelName
- Date and time
- Favorite Group
- Battery strength indicator
- Wireless signal strength indicator
- Tap to start live view
- Save a snapshot of the current live view
- Device Intercom
- Tap to start manual recording; tap again to stop
- Split-screen options
- Mute / Unmute

RXCamView : Playback

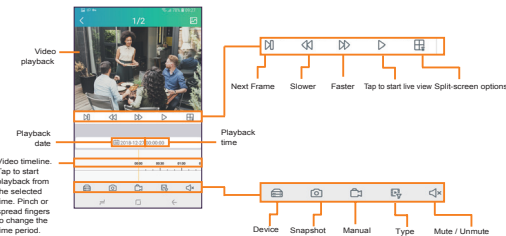Play back recorded video using the RXCamView app.

To play back recorded video:

1. Launch the **RXCamView** app.
2. Tap , then tap Playback .
3. Set search options for playback:
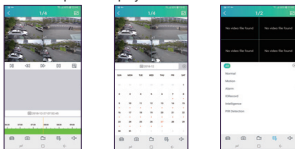
   a. Tap to select playback type.

   b. Tap a date from the calender to filter recodings by type.

4. Tap Play to begin playback.

Playback Controls:
You can use playback mode in portrait or landscape mode. Landscape mode shown below:


- Video playback
- Next Frame
- Slower
- Faster
- Tap to start live view
- Split-screen options
- Playback date
- Playback time
- Video timeline. Tap to start playback from the selected time. Pinch or spread fingers to change the time period.
- Device
- Snapshot
- Manual Recording
- Type
- Mute / Unmute

RXCamView :Remote Settings

Change camera settings using the RXCamView app.

To change camera settings:

1. Launch the **RXCamView** app.
2. Tap , then tap Remote Setting,select a device.

   Device
   - Date and Time
   - HDD
   - Record Schedule
   - Network
   - Motion
   - System Information

3. Tap on Device configure the following as needed:

   a. Date and Time: configure System time, Format,DST,NTP.

   b. HDD: format & overwrite Setting.

   c. Record Schedule: congfigure Record Schedule.

   d. Network: configure network parameter.

   e. Motion: configure motion detection setting. See the "Optimizing Motion Detection".
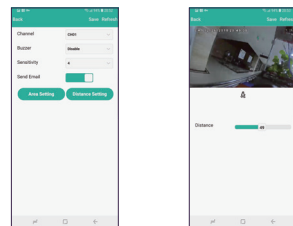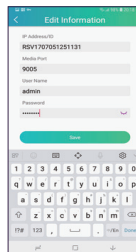
4. Tap SAVE to save settings.

RXCamView :Device Settings

Change recorder name using the RXCamView app.

1. Launch the **RXCamView** app.
2. Tap , then tap Device list.
3. Select a Device, enter a name of your choice for the recoder (e.g., wire-free system).
4. Tap Save to save settings.

FCC Statement

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.

-- Increase the separation between the equipment and receiver.

-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-- Consult the dealer or an experienced radio/TV technician for help

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.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

Recorder: Initial Setup Wizard

Wizard setting menu includes: start wizard page, Network, Network Configuration, Date/Time, IPC Setup, Disk, Resolution , Mobile and Summary.

1. Start wizard

Click the Start Wizard to proceed to the next step
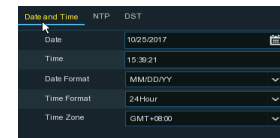

2. Network Configuration
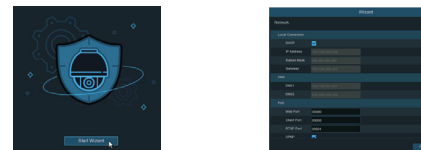
3. Date/Time

This menu allows you to configure the Date, Time, Date Format, Time Format, Time Zone, NTP and DST.

Date and Time
Click on the calendar icon to set the current system date.

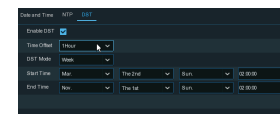| Date and Time	NTP	DST
Date	10/25/2017	
Time	15:39:21	
Date Format	MM/DD/YY	
Time Format	24Hour	
Time Zone	GMT+08:00	

NTP
NTP stands for Network Time Protocol. This feature allows you to synchronize the date and time automatically on the DVR over Internet. Therefore, the DVR needs to be connected to the Internet.

Date/Time

Date and Time	NTP	DST
Enable NTP	✓	
Server Address	pool.ntp.org	
	Update Now	
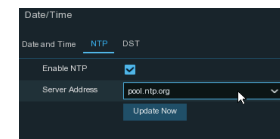
Check the "NTP" box, and select the NTP server.

DST
DST stands for Daylight Savings Time.

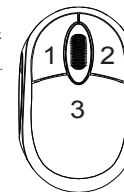| Date and Time	NTP	DST
Enable DST	✓	
Time Offset	1Hour	
DST Mode	Week	
Start Time	Mar / The 2nd / Sun / 02:00:00	
End Time	Nov / The 1st / Sun / 02:00:00	

Recorder: Using the Mouse

1. LEFT-CLICK:
- During split-screen display mode: Double-click an individual channel to view it in full-screen. Double-click again to return to the split-screen display mode.
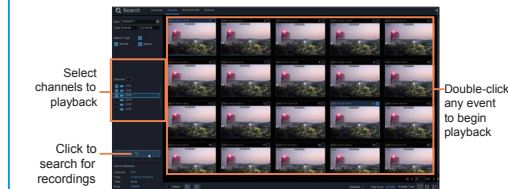- While navigating menus: Click to open a menu option.

2. RIGHT-CLICK:
- During live view: Right-click anywhere on the screen to show the menu-bar.
- While navigating menus: Right-click to exit menus.

3. SCROLL WHEEL:
- While navigating menus: Scroll to move up / down through the menu content.

Recorder: Search, Playback & Backup

- Select channels to playback
- Click to search for recordings
- Double-click any event to begin playback

To search, play & back up for events:

1. Choose the date & time you want to search.
2. Check the recording types you want to search, or check Search Type to choose all.
3. Choose the channels you want to search, or check Channel to choose all channels.
4. Click icon to start search.
5. Events fitting your search criteria are displayed in list form. You can double click the left button of your mouse upon one of the events to play the video immediately.
6. Click icons in the bottom-right corner of the menu to browse between pages of events, or input the page you want to browse.
7. You can switch the view of list form in by clicking below icons which is show at the right bottom corner of the screen:

   Thumbnails view. You can view the snapshots of the events.

   List view. The events will be displayed in list.

   Detailed view. You can view the details of the events.

   In the detailed view mode, you can lock the video events to keep events from being overwritten in the hard drive. Click the icon to lock or click to unlock the events.

8. When you click the left button of your mouse upon one of the event, system will show the event information on the left bottom corner of the screen.
9. Check the box next the number of the event to select files, or check the box next Select to select all events in the page.
10. The number of selected files, total size information will be displayed at the right bottom of the screen.
11. After selecting file, you can click icon to save the video to USB flash drive. Or click icon into event playback control window to play the video.

Troubleshooting

Problem	Solution
No picture / signal	• Ensure the wireless receiver is properly connected to the DVR. • Ensure the Power Pack is properly inserted into the camera base. • Ensure you have removed the PLEASE REMOVE label from the Power Pack. • Connect the power adapter to your Power Pack to ensure the Power Pack is charged. The LED indicator on the power pack glows green for full charge, red for less than full charge. • Remove obstructions between the receiver and camera. Materials such as brick, concrete and wood can significantly impact the wireless signal strength. • Try repositioning the camera, receiver, or both to improve the reception. The receiver can be wall mounted using the included double-sided tape or mounting screws.
Battery life is too short	• Ensure the camera is not pointing at a high-traffic area. Position the camera so it only captures areas of interest with no high-traffic area (e.g., a busy sidewalk or roadway) visible in the image. • Live video is being viewed too frequently. Viewing live video often will impact battery performance. • Ensure you have set an active area and distance setting for motion detection to reduce false alarms. See "Optimizing Motion Detection" for details. • Battery life will vary based on temperature, settings and number of events.
Picture is dropping	• Move the camera closer to the receiver. • Try repositioning the camera, receiver, or both to improve the reception.
Picture is or has become choppy	• Ensure the camera resolution is set to 720p using the RXCamView app or the DVR. • Try moving the camera closer to the receiver. • Remove obstructions between the receiver and camera.
Camera is not detecting motion	• Your camera may be too far away from the area of interest. Try to keep the camera within 20ft (6.1m) of the area you want to monitor. • Review the "Installation Tips" and "Optimizing Motion Detection" sections to ensure your camera is installed in an optimal location and motion detection is properly configured.
Picture is too bright	• Ensure your camera isn't pointed directly at a source of light (e.g., sun or spot light). • Move your camera to a different location.
Night vision is not working	• The night vision activates when light levels drop. The area may have too much light.
Picture is not clear	• Check the camera lens for dirt, dust, spiderwebs. Clean the lens with a soft, clean cloth. • Too much environmental interference will affect picture clarity. Move your camera to a different location.
Bright spot in video when viewing at night	• Night vision reflects when pointing a camera through a window. Move the camera to a different location.