Thank you for purchasing a PTZIRW Series CCTV Surveillance Camera. This Quick Install Guide covers basic setup, installation and use of your surveillance system. For the full user manual, instructional videos, tips on using your surveillance system & warranty information, please visit: www.vip-vision.com
Safety Information

Electrical safety
- All installation and operation here should conform to your local electrical safety codes.
- Check that the power supply is correct before operating the camera.
- Ensure the power supply conforms to the requirement in the SELV (Safety Extra Low Voltage) and the Limited power source is rated DC 12V or AC 24V in the IEC60950-1. (Power supply requirement is subject to the device label).
- Do not install wiring while the camera is powered on.
- Prevent the power cable from being trampled or pressed, especially the plug, power socket and junction.
- We assume no liability or responsibility for any fires or electrical shock caused by improper handling or installation.
- We assume no liability or responsibility for any problems caused by unauthorized modification or attempted repair.

Environment
- Do not aim the camera at strong light (such as lighting, sunlight, etc) to focus; this may cause overexposure, which will affect the longevity of the CCD and/or CMOS.
- Transport, use and store the camera within the specified range of humidity and temperature.
- Do not store the camera in a wet, dusty, extremely hot, or extremely cold location, or in an area with strong electromagnetic radiation or unstable lighting.
- Do not allow water or other liquids to fall into the camera; this may damage internal components.
- Do not allow water or other liquids to make contact with indoor cameras (cameras with no IP rating); this may damage the camera or cause fire/electrical shocks.
- Keep the camera well ventilated in case of heat accumulation.
- Pack the camera with the included factory packaging (or material of similar quality) while transporting to prevent damage.
- While being transported, stored or installed, ensure the camera does not experience heavy stress, strong vibration or liquid contact.

Warning
- Change the default password after login in order to avoid unauthorised access.
- Install the camera using the standard accessories provided by the manufacturer and make sure the device is installed and fixed by professionals.
- Keep the camera away from laser beams while using a laser device.
- Do not connect two power sources to the device at the same time; this may result in damage to the camera.

Statement
- Refer to the actual product for more details; the manual is just for reference.
- The manual will be regularly updated as the product updates; the updated content will be added to the manual without prior announcement.
- Contact the supplier or customer service if there is any problem occurred camera using the camera.
- Contact the supplier or customer service for the latest procedure and supplementary documentation.
- Actual value of some data and the value provided in the manual may differ due to environmental differences, etc.
- VIP Vision is not liable for any damages caused by operation which is not followed in the manual.
Operation and Daily Maintenance

- Do not touch the heat dissipation component of the camera directly in order to avoid burns.
- Do not dismantle the device; there is no component which can be fixed directly by users in the camera. Contact the supplier to replace desiccant if it becomes green.
- Grounding the camera is recommended to enhance the reliability of it.
- Do not touch the CCD (CMOS) optic component directly. Use an air duster to clean dust or dirt on the lens surface, or use a cloth lightly wet with alcohol to wipe away dust gently.
- Use a dry soft cloth to clean the camera. If there’s a large amount of dust, use a mild detergent diluted with water first. Don’t use volatile solvents such as alcohol, benzene, thinner or strong detergents, as this may damage the surface coating or damage the camera.
- To clean the lens, use a dry soft cloth to wipe water or oil gently until dry, then use an oil-free cotton cloth or paper soaked with alcohol/detergent to wipe from the centre of the lens outwards.

FCC information

FCC conditions

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

FCC compliance

- This equipment has been tested and found to comply with the limits for a digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communication. 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 technician for help.

Note: Refer to the disk for more details, check and download corresponding user’s manual and tool. Before installation, open the package and check that all components are included. If any components are broken, contact your local supplier.
1. Pre-install Information

1.1 Included Components

<table>
<thead>
<tr>
<th>1 x</th>
<th>PTZIRW Series IP PTZ Camera</th>
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<tbody>
<tr>
<td>1 x</td>
<td>Junction Box</td>
</tr>
<tr>
<td>1 x</td>
<td>Installation Guide</td>
</tr>
<tr>
<td>1 x</td>
<td>Installation Accessories Bag:</td>
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<tr>
<td></td>
<td>• Position installation map</td>
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<tr>
<td></td>
<td>• Expansion bolts</td>
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<td>• Installation screws</td>
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<td>• Screwdriver</td>
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<td>1 x</td>
<td>CD</td>
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1.2 Dimensions
1.3 Camera Cabling

The camera is equipped with a multi-functional combination cable by default, which includes power cable, video cable, RS485 control cable, alarm cable, network cable, and audio cable etc. Details are shown below.
2. Camera Installation

2.1 Mounting

2.1.1 Installation Conditions

The camera must be installed on a hard surface in both indoor and outdoor environments. The platform should meet the following installation conditions:

1. Be thick enough to install expansion bolts.
2. Be large enough to fit the entire camera bracket/base.
3. Able to sustain at least 8x weight of the camera and bracket.

2.1.2 Vertical Surface Mount

1. Use the included template to select an installation location and mark where to drill on the platform.
2. Drill the holes and install the expansion bolts, as shown below.

3. Use screws to fix the junction box on the mounting platform.
4. Place the camera on the junction box after connecting the camera cabling to the surface cabling. 
   (Note: The groove of the camera pedestal should align with the convex on the junction box).
5. Use screws to fix the camera on the junction box
6. Installation complete!
2.1.3 Vertical Wall Mount

1. Use the included template to select an installation location and mark where to drill on the wall.
2. Drill the holes and install the expansion bolts, as shown.

3. Place the camera on the wall mount bracket, fix the camera with screws and buckle the safety rope, as shown below.

4. Connect the camera cabling to the wall cabling.
5. Lift the camera and bracket to the same height as the mounting holes on the wall and use the flat gasket and hex nuts to fit it to the wall.
6. Installation complete!
2.1.4 Inverted Wall Mount

1. Use the included template to select an installation location and mark where to drill on the wall.
2. Drill the holes and install the expansion bolts, as shown.

![Drill holes and install expansion bolts](image)

3. Place the camera on the wall mount bracket, fix the camera with screws and buckle the safety rope, as shown below.

![Camera on wall mount bracket](image)

4. Connect the camera cabling to the wall cabling.
5. Lift the camera and bracket to the same height as the mounting holes on the wall and use the flat gasket and hex nuts to fit it to the wall.
6. Installation complete!
2.2 Accessing the microSD card slot and reset button

2.2.1 Installing the microSD card

1. Unscrew the rear cover of the camera and lift it off.
2. Locate the microSD card slot on the camera, as pictured above.
3. Install the microSD card into its dedicated slot, making sure it’s properly secured.

2.2.2 Resetting the camera

1. Unscrew the rear cover of the camera and lift it off.
2. Locate the reset button on the main control board, as pictured above.
3. Hold it down for 10 seconds to reset the device. Replace the rear cover.

2.2.3 Advantages of the microSD

The microSD card is useful for anyone who wishes to have another way to back up storage, or is on a budget and doesn’t have a recorder. The microSD card is placed inside of the camera, and can hold a set amount of storage (dependent on size of card) for any intended use, such as: video playback, storage, backup etc.

The microSD card utilises “Edge Recording”. This is when the camera records video directly onto the installed card in the camera, instead of a separate NVR or storage device. This gives the user more flexibility in recording video.

**Note:** Having a standalone microSD card will not ensure that you have the same quality playback, nor the capacity compared to a separate NVR or storage device.
2.3 Lighting Proofing and Surge Protection

2.3.1 Outdoors Protection

This PTZ adopts TVS lighting protection technology. It can effectively prevent damages from various pulse signals below 6000W, such as sudden lighting and surge. While maintaining your local electrical safety code, you still need to take necessary precaution measures when installing the speed dome in the outdoor environment.

- The distance between the signal transmission cable and high-voltage device (or high-voltage cable) shall be at least 50 meters.
- Outdoor cabling should be sheltered, if possible.
- For long cabling distances, use an underground sealing steel tube to implement cable layout and connects one point to the earth. Unsheltered cabling will damage the camera.
- In areas susceptible to thunderstorms or near high sensitive voltage (such as near high-voltage transformer substation), you will need to install an additional high-power thunder protection device or lightning rod.
- The system should adopt equipotential bonding. The earth device should meet anti-jamming conditions and conforms to your local electrical safety code. The earth device should not short circuit to the N (neutral) line of high voltage power grids or be mixed with other wires. When connected to the earth alone, the earth resistance should be no more than 4Ω and the earth cable cross-sectional area should be no less than 25 mm² (see below).
2.3.2 Indoors Protection

The yellow and green GND wire or GND screw of the PTZ should be reliably connected by several strands of copper wire with no less than 25mm² and indoor equipotential GND terminal. Refer to below for lightning proof installation.

![Speed dome yellow and green GND wire with indoor equipotential GND Terminal]

2.4 Waterproofing the camera

1. Install the rubber ring into the network port, keeping the smaller hole of the rubber ring facing outwards and fixing the rubber ring onto the main body of the waterproof cable.

2. Pull the network cable (without the crystal head) through the main body of the waterproof connector. Fix the rubber ring and waterproof locking cover, attach the crystal head of network cable, and insert it into the network cable.

3. Put the main body of the waterproof connector on the network port and rotate it clockwise to lock the network port and waterproof connector firmly.

4. Put the waterproof cover on the main body of the waterproof connector and rotate it clockwise to lock them firmly together.
2.5 Alarm setup

1. Connect the alarm input device to the alarm input of I/O cable.
2. Connect the alarm output device to the alarm output of I/O cable.
3. Open the WEB and set the alarm input and output. Alarm input on WEB corresponds to I/O cable on device. When there is an alarm, the input device will generate a signal. Set corresponding NO and NC inputs.

<table>
<thead>
<tr>
<th>Port</th>
<th>Name</th>
<th>Function</th>
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<tbody>
<tr>
<td>1</td>
<td>ALARM_NO</td>
<td>Alarm output port</td>
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<tr>
<td></td>
<td></td>
<td>NO: Normal open alarm output port</td>
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<tr>
<td></td>
<td></td>
<td>Must be used with ALARM_COM</td>
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<tr>
<td>2</td>
<td>ALARM_COM</td>
<td>Alarm output public port</td>
</tr>
<tr>
<td>3</td>
<td>ALARM_IN1</td>
<td>Alarm input port 1</td>
</tr>
<tr>
<td>4</td>
<td>ALARM_IN2</td>
<td>Alarm input port 2</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>Ground port</td>
</tr>
</tbody>
</table>
Note:
This quick install guide is for reference only. Slight difference may be found in user interface.

All the designs and software here are subject to change without prior written notice.

Please visit our website or contact your local service engineer for more information.

For the full user manual, instructional videos, tips for using your surveillance system and warranty information, please visit:

www.vip-vision.com