Underwater Network Camera

Quick Start Guide
Ultra-wide Panoramic Network Camera Quick Start Guide

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About this Manual

The Manual includes instructions for using and managing the Product. Pictures, charts, images and all other information hereinafter are for description and explanation only. The information contained in the Manual is subject to change, without notice, due to firmware updates or other reasons. Please find the latest version of this Manual at the Hikvision website (http://www.hikvision.com/).

Please use this Manual with the guidance and assistance of professionals trained in supporting the Product.

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Regulatory Information

FCC Information

Please take attention that changes or modification not expressly approved by the party responsible for compliance could void the user’s authority to operate the equipment.

FCC compliance: 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

**FCC Conditions**

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.
2. This device must accept any interference received, including interference that may cause undesired operation.

**EU Conformity Statement**

This product and - if applicable - the supplied accessories too are marked with "CE" and comply therefore with the applicable harmonized European standards listed under the EMC Directive 2014/30/EU, the RoHS Directive 2011/65/EU.

2012/19/EU (WEEE directive): Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon the purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see: www.recyclethis.info
2006/66/EC (battery directive): This product contains a battery that cannot be disposed of as unsorted municipal waste in the European Union. See the product documentation for specific battery information. The battery is marked with this symbol, which may include lettering to indicate cadmium (Cd), lead (Pb), or mercury (Hg). For proper recycling, return the battery to your supplier or to a designated collection point. For more information see: [www.recyclethis.info](http://www.recyclethis.info)

**Industry Canada ICES-003 Compliance**

This device meets the CAN ICES-3 (B)/NMB-3(B) standards requirements.

**Safety Instruction**

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into “Warnings” and “Cautions”

**Warnings:** Serious injury or death may occur if any of the warnings are neglected.

**Cautions:** Injury or equipment damage may occur if any of the cautions are neglected.
## Warnings

<table>
<thead>
<tr>
<th>Warnings</th>
<th>Cautions</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Warnings</strong> Follow these safeguards to prevent serious injury or death.</td>
<td><strong>Cautions</strong> Follow these precautions to prevent potential injury or material damage.</td>
</tr>
</tbody>
</table>

### Warnings

- **CAUTION:** Hot parts! Burned fingers when handling the parts. Wait one-half hour after switching off before handling parts. This sticker is to indicate that the marked item can be hot and should not be touched without taking care. For device with this sticker, this device is intended for installation in a restricted access location, access can only be gained by service persons or by users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken.

- Proper configuration of all passwords and other security settings is the responsibility of the installer and/or end-user.

- In the use of the product, you must be in strict compliance with the electrical safety regulations of the nation and region. Please refer to technical specifications for detailed information.
● The power source should meet limited power source or PS2 requirements according to IEC 60950-1 or IEC 62368-1 standard.

● Do not connect several devices to one power adapter as adapter overload may cause over-heating or a fire hazard.

● Please make sure that the plug is firmly connected to the power socket. When the product is mounted on wall or ceiling, the device shall be firmly fixed.

● If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

![Cautions]

● Make sure the power supply voltage is correct before using the camera.

● Do not drop the camera or subject it to physical shock.

● Do not touch sensor modules with fingers. If cleaning is necessary, use clean cloth with a bit of ethanol and wipe it gently. If the camera will not be used for an extended period, please replace the lens cap to protect the sensor from dirt.

● Do not aim the camera at the sun or extra bright places. Blooming or smearing may occur otherwise (which is not a malfunction), and affect the endurance of sensor at the same time.
The sensor may be burned out by a laser beam, so when any laser equipment is in using, make sure that the surface of sensor will not be exposed to the laser beam.

Do not place the camera in extremely hot, cold (the operating temperature shall be -30 °C to 60 °C (-22 °F to 140 °F) if the camera model has an “H” in its suffix), dusty or damp locations, and do not expose it to high electromagnetic radiation.

To avoid heat accumulation, good ventilation is required for operating environment.

Keep the camera away from liquid while in use.

While in delivery, the camera shall be packed in its original packing, or packing of the same texture.

Regular part replacement: a few parts (e.g. electrolytic capacitor) of the equipment shall be replaced regularly according to their average enduring time. The average time varies because of differences between operating environment and using history, so regular checking is recommended for all the users. Please contact with your dealer for more details.

Improper use or replacement of the battery may result in hazard of explosion. Replace with the same or equivalent type only. Dispose of used batteries according to the instructions provided by the battery manufacturer.

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

ATTENTION: IL Y A RISQUE D'EXPLOSION SI LA BATTERIE EST REMPLACÉE PAR UNE BATTERIE DE TYPE INCORRECT. METTRE
AU REBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS

- Improper replacement of the battery with an incorrect type may defeat a safeguard (for example, in the case of some lithium battery types).

- Do not dispose of the battery into fire or a hot oven, or mechanically crush or cut the battery, which may result in an explosion.

- Do not leave the battery in an extremely high temperature surrounding environment, which may result in an explosion or the leakage of flammable liquid or gas.

- Do not subject the battery to extremely low air pressure, which may result in an explosion or the leakage of flammable liquid or gas.

- If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the camera yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

**White Light Use**

The white supplement light source of the camera is classified as Risk Group 2 (RG2).

Possibly hazardous optical radiation emitted from this product.

Do not stare at operating light source. May be harmful to the eyes.

Wear appropriate eye protection or do not turn on the white light when you assemble, install or maintain the camera.
Statement

(for product with white light)

The product should be positioned so that prolonged staring into its white light source at a distance closer than 1 m is not expected.

**RISK GROUP 2**

**CAUTION** Possibly hazardous optical radiation emitted from this product.

Do not stare at operating lamp. May be harmful to the eyes.
# Table of Contents

1 Appearance Description ................................................................. 12  
   1.1 Overview of Underwater Camera ............................................ 12  
   1.2 Cable Description ................................................................... 13  
2 Installation ....................................................................................... 14  
   2.1 Mounting Selection ................................................................. 14  
   2.2 PT Joint Mounting ................................................................. 16  
3 Activate and Access Network Camera .............................................. 19
1 Appearance Description

1.1 Overview of Underwater Camera

Figure 1-1 Overview of the Camera

Table 1-1 Description of Overview

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>White light supplement</td>
<td>Underwater light supplement</td>
</tr>
<tr>
<td>2</td>
<td>Lens</td>
<td>Camera lens</td>
</tr>
<tr>
<td>3</td>
<td>Installation plate</td>
<td>Fix the camera on the base</td>
</tr>
<tr>
<td>4</td>
<td>Stainless steel shell</td>
<td>Water-proof camera shell</td>
</tr>
</tbody>
</table>
1.2 Cable Description

![Cable Diagram]

Figure 1-2 Disassemble of Camera

Table 1-2 Description of Overview

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Power cable</td>
<td>36V DC power cable</td>
</tr>
<tr>
<td>2</td>
<td>Network cable</td>
<td>RJ45 10M/100M Ethernet port</td>
</tr>
</tbody>
</table>
2 Installation

Before you start:

- Make sure the device in the package is in good condition and all the assembly parts are included.
- The standard power supply is 36V DC, please make sure your power supply matches with your camera.
- Make sure all the related equipment is power-off during the installation.
- Check the specification of the products for the installation environment.
- Make sure that the wall is strong enough to withstand four times the weight of the camera and the bracket.

Caution:

Do NOT connect the cables underwater. Connect the cables first and then install them underwater.

2.1 Mounting Selection

There are three mounting types selectable: PT joint mounting, pole mounting, and tripod mounting.

- For PT joint mounting, refer to 2.2 PT Joint Mounting.
- For pole mounting and tripod mounting, make sure their water-proof performance and prepare the extra brackets yourself.
Pole Mounting:
The pole mounting is applicable to the shallow water environment.

Tripod Mounting:
The tripod mounting is applicable to the deep water environment. You can use a rope to place the camera and tripod in the water and secure it.
2.2 PT Joint Mounting

Steps:

1. Connect the cables and make sure the insulation performance of power cable.

2. Fix the camera base to the PT joint top with four 1/4 UNC screws.

3. Fix the PT joint bottom to the installation base with four 1/4 UNC screws.
4. Fix the PT joint top with the PT joint bottom with three 1/4 UNC screws to secure the camera to the installation base.

5. Power on the camera, and set the network configuration to check whether the image is gotten from the optimum angle. If not, adjust the surveillance angle.

6. (Optional) Adjust the tilting position.
   1) Loosen the Tilt adjusting screw No.1 to adjust the tilting position [0° to +45°].
   2) Loosen the Tilt adjusting screw No.2 to adjust the tilting position [-45° to 0°].
   3) Tighten the adjusting screw.

7. Adjust the panning position.
   1) Loosen the pan adjusting screw to adjust the panning position [-45° to +45°].
   2) Tighten the No. 2 adjusting screw.
Tilt Adjusting Screw No. 1
Tilt Adjusting Screw No. 2
Pan Adjusting Screw

Figure 2-6 2-Axis Adjustment
3 Activate and Access Network Camera

Scan the QR code to get *Activate and Access Network Camera*. Note that mobile data charges may apply if Wi-Fi is unavailable.