Northarn* 2995 Foothills Blvd, Suite 200, Roseville, CA 95747 ♦ 855-388-7422 ♦ www.northernvideo.com

Fully understand this document before using this device, and strictly observe rules in this document when using this device. If you install this device in public places, provide the tip "You have entered the area of electronic surveillance" in an eye-catching place. Failure to correctly use electrical products may cause fire and severe injuries.

⚠ WARNING	It alerts you to moderate dangers which, if not avoided, may cause minor or moderate injuries.
A CAUTION	It alerts you to risks. Neglect of these risks may cause device damage, data loss, device performance deterioration, or unpredictable results.
■ NOTE	It provides additional information.



- · Strictly observe installation requirements when installing the device. The manufacturer shall not be held responsible for device damage caused by users' non-conformance to these
- Strictly conform to local electrical safety standards and use power adapters that are marked with the LPS standard when installing and using this device. Otherwise, this device may be damaged
- Use accessories delivered with this device. The voltage must meet input voltage requirements for this device.
- If this device is installed in places with unsteady voltage, ground this device to discharge high energy such as electrical surges in order to prevent the power supply from burning out.
- · When this device is in use, ensure that no water or any liquid flows into the device. If water or liquid unexpectedly flows into the device, immediately power off the device and disconnect all cables (such as power cables and network cables) from this
- · Do not focus strong light (such as lighted bulbs or sunlight) on

- this device. Otherwise, the service life of the image sensor may be shortened
- · If this device is installed in places where thunder and lightning frequently occur, ground the device nearby to discharge high energy such as thunder strikes in order to prevent device damage.

A CAUTION

- · Avoid heavy loads, intensive shakes, and soaking to prevent damages during transportation and storage. The warranty does not cover any device damage that is caused during secondary packaging and transportation after the original packaging is
- Protect this device from fall-down and intensive strikes, keep the device away from magnetic field interference, and do not install the device in places with shaking surfaces or under shocks.
- · Clean the device with a soft dry cloth. For stubborn dirt, dip the cloth into slight neutral cleanser, gently wipe the dirt with the cloth, and then dry the device.
- Do not jam the ventilation opening. Follow the installation instructions provided in this document when installing the device.
- Keep the device away from heat sources such as radiators, electric heaters, or other heat equipment.
- Keep the device away from moist, dusty, extremely hot or cold places, or places with strong electric radiation.
- · If the device is installed outdoors, take insect- and moistureproof measures to avoid circuit board corrosion that can affect monitoring.
- · Remove the power plug if the device is idle for a long time.

- All complete products sold by the manufacturer are delivered along with nameplates, quick setup guide and accessories after strict inspection. The manufacturer shall not be held responsible for counterfeit products.
- The manufacturer will update this manual according to product function enhancement or changes and regularly update the software and hardware described in this manual. Update information will be added to new versions of this manual without prior notice.
- This manual may contain misprints, technology information that is not accurate enough, or product function and operation description that is slightly inconsistent with the actual product, the final interpretation of company is as a standard.
- This manual is only for reference and does not ensure that the information is totally consistent with the actual product. For consistency, see the actual product.

□ NOTE

For more information, please refer to website

Open Package Examination

Open the package, check the appearance of product for no obvious damage, and confirm the item list for table 1-1 is consistent

Table 1-1 Packing list

Component	Quantity	Remark
HDVI Dome Camera	1	
Quick Setup Guide	1	
T15 Screw driver	1	Optional
M3 Screw driver	1	
Plug wrench	1	Optional
Installation location sticker	1	Optional
Stainless self-tapping screw PA4.0×30mm	3	
Swell plastic buttonφ5.6×29mm	3	
Black screw PA3.2×70mm	3	Optional
Black screw PA3.2×10mm	3	Optional

Device Structure

Different device may have different power cable, please refer

2.1 Power and video cables

Figure 2-1 Power and video cable



Connect the BNC connector of the power or video cable to a video signal cable and connect the other connector to a low-voltage power cable (12V DC / 24V AC). After installing the camera, directly connect the video cable and power cable.

2.2 Function Kevs

Users can call OSD main menus through multi function switch control keys, and check and set camera parameters, function keys is shown as figure 2-2.

Figure 2-2 Function keys



Operation description

2.2.1 Camera without PTZ

SET key: It is used to enter OSD menus or select menu items when you press this key in the middle of the multi function switch. UP/DOWN keys: The UP and DOWN keys are used to select menu items upwards and downwards by prodding the multi function switch upwards and downwards, the menu items rapidly roll upwards and downwards accordingly;

LEFT/RIGHT keys: The LEFT and RIGHT keys are used to select menu items horizontally or modify parameters by prodding the multi function switch towards the left or the right, the parameter values will rapidly decrease or increase.

Press and hold the LEFT button for 5s to switch to AHD mode. Press and hold the RIGHT button for 5s to switch to TVI mode. Press and hold the UP button for 5s to switch to CVBS mode. Press and hold the DOWN button for 5s to switch to CVI mode.

2.2.2 Camera with PTZ

Press SET button and hold for 5s, the modes switch as follows: Pan/Tilt, Zoom, Camera.

Figure 2-3 Set keys for PTZ



Pan/Tilt: Press Up/Down/Left/Right to control the horizontal and vertical rotation.

Zoom mode: Press Up/Down/Left/Right to control the lens and focus.

Camera Mode: Press SET to camera OSD Menu.

Press and hold the LEFT button for 5s to switch to TVI mode. Press and hold the RIGHT button for 5s to switch to CVBS mode. Press and hold the UP button for 5s to switch to AHD mode.

Press and hold the DOWN button for 5s to switch to CVI mode.

The detail operation of OSD please refer to Camera OSD Operation

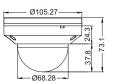
2.3 Camera Dimensions

■ NOTE

Different device may have different dimensions, please refer to the actual product

Figure 2-4 Dimensions (Unit:mm)

Ceiling installation



Wall installation

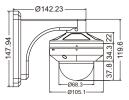


Figure 2-5 Dimensions (Unit:mm)

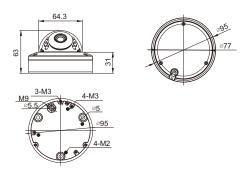


Figure 2-6 Plastic Dome Dimensions (Unit:mm)

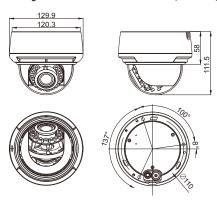
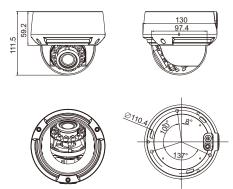


Figure 2-7 Vandal dome Dimensions (Unit:mm)



Device Installation



To avoid moisture influence, install the dome cover at least half an hour after the camera is installed and powered on.

The vandal dome camera can be installed in the ceiling, wall, wall bracket or ceiling bracket. This section describes how to install the camera in the ceiling.

3.1 Installation for camera in Figure 2-6.

- Step1 Stick the Installation location sticker on the ceiling or wall, Drill three holes based on the marks on the sticker. Drive the swell plastic buttons into the holes.
- Step 2 Fix shell with screws to the ceiling directly for ceiling installation, as shown in Figure 3-1.

Install bracket mount plate to the ceiling or wall with screws for wall installation, as shown in Figure 3-2.

Figure 3-1 Ceiling installation



Figure 3-2 Wall installation



Step 3 Detach protection vinyl from the dome cover.

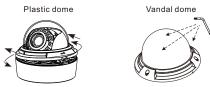
3.2 Installation for other cameras.

Step 1 Remove the upper cover.

For Plastic dome, press down the dome with one hand at position marked by an arrow, rotate the upper cover of the dome counterclockwise with the other hand, and gently pull the upper cover upward to remove it, as shown in Figure 3-3.

For vandal dome, use the T15 screw driver in the accessory package to unscrew the three screws on the dome cover. The camera is opened, as shown in figure 3-3.

Figure 3-3 Opening camera



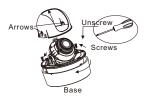
- Step 2 Stick the Installation location sticker on the ceiling or wall, Drill three holes based on the marks on the sticker. Drive the swell plastic buttons into the holes.
- Step 3 Connect the multi-head cable (If camera base installation and aside routing selected, this step is operated after step
- Step 4 If camera housing installation applied, Fetch three black self-tapping screws from the accessory package. Then fix the screws to fasten the camera on the ceiling as shown in figure 3-4.

Figure 3-4 Installing housing



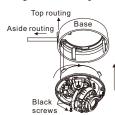
Step 5 If camera base installation applied, press the arrows marked on the lining to remove the lining aside. Unscrew the three black screws and put them aside. Turn the camera base clockwise for 5 degrees and remove it, as shown in figure 3-5.

Figure 3-5 Removing lining and base



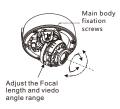
Step 6 Aim the three through-holes on the camera base at the three swell plastic buttons in the ceiling, and use screws with a length of 30 mm to fix the base on the ceiling. Turn the main body clockwise for about 5 degrees to assembly it with the camera base, and fix the three screws, as shown in figure 3-6.

Figure 3-6Installing base



Step 7 View the video, adjust the lens angle horizontally and vertically, Set the value in the Front-end Configuration for AF lens and use the focusing lever for MF lens to adjust the lens Focal length and video angle range

Figure3-7 Adjusting lens



Step 8 Assemble the lining with the main body and buckle the four button placements with the main body bracket. . Then fasten the dome cover, as shown in Figure 3-8.

Figure 3-8 Assembling lining and base

Vandal dome

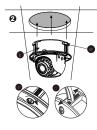


Plastic dome

3. 3 Embedded Installation for plastic dome

- Step 1 Remove the upper cover and the lower cover.
- Step 2 Take the embedded installation location sticker, drill a hole basing on the inner edge of the sticker.
- Step 3 Put an into the hole and attach it to the installation surface, hold the dome with one hand, and fasten the screws with the other hand till touches the inner side of the installation surface, and fasten the dome, as shown in figure 3-9.

Figure 3-9 Embedded Installation



- Step 4 Take the video patch cord out of the accessory, connect the RCA end of the line to the second video output port, and connect the BNC end of the line to a monitor for tests.
 - By default, the focusing lever is locked. To adjust the focusing lever, loosen it in counterclockwise direction and then tighten it after adjustment.
- Step 5 Remove the linling and adjust the angle of the camera, fix the focusing lever, and adjust the lens angle as required.
- Step 6 Install the linling and the upper cover.