



## Quick Guide



### 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 taken apart.
- Protect this device from dropping, keep the device away from magnetic field interference, and do not install the device in places with unstable surfaces.
- 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.
- 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.
- Remove the power plug if the device is idle for a long time.

## Special Announcement

- The manufacturer will update this manual according to product function enhancement or changes. Update information will be added to new versions of this manual without prior notice.
- 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.



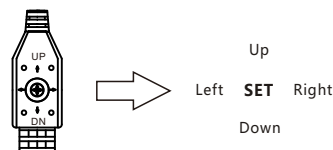
For more information, please refer to website: [www.northernvideo.com](http://www.northernvideo.com)

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 or 24V AC). After installing the camera, directly connect the video cable and power cable.

### 2.2 Function Keys

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



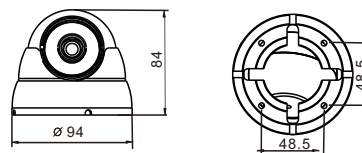
## 3 Camera Overview

### 3.1 Camera Dimensions



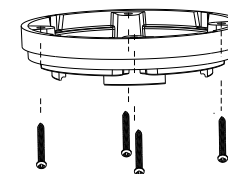
Different device may have different dimensions, please refer to the actual product.

Figure 3-1 Dimensions (Unit: mm)



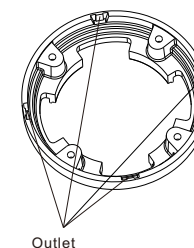
- Step 2 Stick the Installation location sticker on the ceiling or wall. Drill three holes based on the marks on the sticker. Drive the swell plastic buttons into the holes.
- Step 3 Fix the camera mounting base to the mounting surface, by use of self-tapping screws, as shown in figure 3-2.

Figure 3-2 Fixing the mounting base



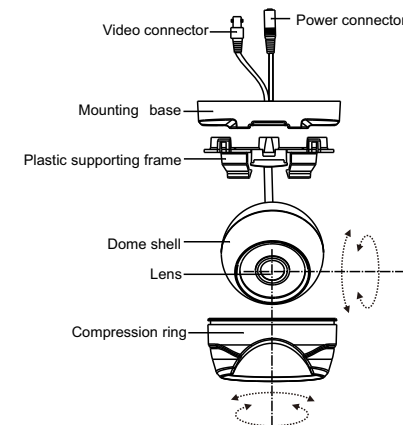
you can route cables from the top or from aside. If you use the top routing method, drill a hole in the surface first. If you use the aside routing method. When you route cables from aside, please cut the compression ring outlet, as shown in figure 3-3, and route the cable out from the side gap at the bottom of the camera.

Figure 3-3 Cutting the compression ring outlet



- Step 4 Install the dome shell and the compression ring on the mounting base, adjust the position so that the camera faces the monitored area, then tighten the screw, as shown in figure 3-4.

Figure 3-4 Installing and adjusting camera



## Precautions

Fully read this document before using this device, and strictly observe rules in this document when using this device.

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

### WARNING

- 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 requirements.
- Strictly conform to local electrical standards.
- 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.
- Do not expose internal components to water or moisture.
- 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.

## 1 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
Bullet HDVI Camera	1	
Quick Setup Guide	1	
Installation location sticker	1	
Black stainless self-tapping screw PA4.0×35mm	4	
Swell plastic button S8×30mm	4	

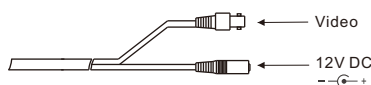
## 2 Device Structure

### 2.1 Power and video cables



Different device may have different power cable, please refer to the actual product.

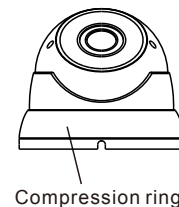
Figure 2-1 Power and video cable



### Installation Steps:

- Step 1 Open a package, take out the camera and the accessories, unscrew the compression ring or use the screwdriver to loosen the screw, remove the compression ring, as shown in figure 3-1.

Figure 3-1 Removing compression ring



## SPECIFICATIONS

Model No.	HDEIR60
Image Sensor	1/2.9" CMOS Sensor
Total Pixels	1984 x 1225
Active Pixels	1920 x 1080
Resolution	1920 x 1080 (1080p)
Scanning System	Progressive Scan
OSD (On Screen Display)	Dual OSD Access: Cable OSD Controlled / UTC Controlled (coaxial control)
D-WDR (Digital Wide Dynamic Range)	Open/Close
DNR (Digital Noise Reduction)	3D DNR - Auto, Manual (0~10)
Video Output	TVI, CVI, AHD & 960H (Selectable via OSD Cable)
Lens Type / Viewing Angle	2.8mm IR Lens - H: 105°, V: 56°
IR Cut Filter	Built in Mechanical
Minimum Illumination	Color 0.01 Lux, B/W 0.0 Lux, IR LED ON
IR LED Count / Range	18 IR LED's / 60' Range / 850nm
S/N Ratio	More than 48dB
Sync System	Internal
Gamma Characteristics	$\gamma = 0.45$ typ
White Balance	Gray/Pro, MWB - R & B Gain 0~127 Adjustable
Back Light Compensation	Globe / BLC 0-7 Adjustable
Day/Night	EXT / Auto / Color / B/W
Languages	English, French, Spanish, Italian, Polish (see OSD Menu for more)
Brightness	0 ~100 Adjustable
Power Input	12VDC Only
Power Requirement	100mA /280 mA IR LED ON
Overall Camera Dimensions	3.7" x 3.3" (94mm x 84mm)
Housing / Color	Aluminum / White
Weight	0.7lb / 318g
Operating Temperature	-14°F ~ 131°F
Weatherproof Rating	IP66

\* All specifications subject to change without notice for quality improvement

## HDEIR60 — OSD MENU TREE

MENU	ENGLISH			
MAIN MENU	MAIN MENU			
	AE			
	AWB			
	DAY/NIGHT			
	IMAGE ENHANCE			
	VIDEO SETTING			
	LANGUAGE			
	FUNC			
	RESET			
	SAVE & EXIT			
	EXIT			
AE	EXPOSURE			
	BRIGHTNESS	0~100 ADJUSTABLE		
	EXPOSURE MODE	GLOBE		
		BLC	0~7 ADJUSTABLE	
RETURN				
AWB	AWB			
	MODE	GRAY WORLD		
		MWB	R GAIN	0~127 ADJUSTABLE
			B GAIN	0~127 ADJUSTABLE
		ATW		
	PRO			
RETURN				
DAY NIGHT	DAY NIGHT			
	MODE	EXT		
		AUTO		
		COLOR		
		MONO		
	SMART IR	OPEN/CLOSE		
RETURN				
IMAGE ENHANCE	IMAGE ENHANCE			
	CONTRAST	AUTO		
		MANUAL	0~10 ADJUSTABLE	
	SHARPNESS	AUTO		
		MANUAL	0~10 ADJUSTABLE	
	COLOR GAIN	AUTO		
		MANUAL	0~10 ADJUSTABLE	
	3DNR	AUTO		
		MANUAL	0~10 ADJUSTABLE	
DWDR	OPEN/CLOSE			
RETURN				
VIDEO SETTING	VIDEO SETTING			
	HD	AHD/TVI/CVI/960H		
	STANDARD	PAL/NTSC		
	RETURN			
LANGUAGE	LANGUAGE	English, French, Spanish, Italian, Polish, Russian, Portugese, Korean, Japanese, Chinese, Traditional Chinese		
VIDEO SETTING	FUNC			
	PRIVACY			
	MOTION			
RESET				
SAVE EXIT				
EXIT				