

Preface

This is the UVD-XP3DNR(-P) Camera. This document includes an overview of the product and detailed instructions explaining:

- how to connect the camera; and
- how to program the camera; and
- how to adjust the camera angle and focus

To use this document effectively, you should have the following minimum qualifications:

- a basic knowledge of CCTV systems and components; and
- a basic knowledge of electrical wiring and low-voltage electrical connections.

Read these instructions and all ancillary documentation entirely before installing or operating this product.

Note: A qualified service person, complying with all applicable codes, should perform all required hardware installation.

Safety terms

These terms may appear in this manual:

CAUTION: Cautions identify conditions or practices that may result in damage to the equipment or other property.

WARNING: Warnings identify conditions or practices that could result in equipment damage or serious personal injury.

Product description

The UVD-EVRDNR color video camera uses a digital signal processor (DSP) to process video signals. The video camera includes a microcontroller to provide high-quality images with high-color reproduction and sharp pictures.

Features

Camera features include:

- Super HAD (hole accumulated diode) technology with 410,000 pixels NTSC (470,000 PAL).
- Use of LSI (large scale integration) digital processors to produce 540 lines of horizontal resolution.
- High-resolution picture production using digital signal processors for horizontal and vertical aperture enhancement.
- Smart digital automatic BLC (back light control).
- Advanced autoexposure system for both fixed iris and autoiris lenses to optimize the amount of light.
- Internal or line lock external synchronization.
- Long life and high reliability.
- OSD control allows eight masks to be shown on the screen for subjects requiring special protection due to privacy concerns.
- Advanced OSD (onscreen display) control.
- Signal-to-noise ratio better than 48 dB.
- Isolated switching power 12 VDC or 24 VAC.
- Vandal-resistant housing.

User guidelines

Use the following guidelines:

- Program as many camera settings as possible before mounting the camera. Take appropriate safety precautions while completing programming after installation.
- Always use a 12 VDC or 24 VAC UL listed Class 2 power supply to power the camera.
- Do not use the camera outside the temperature range specifications: - 22 to 122°F (-30 to +50°C)
- If the light source where the camera is installed experiences rapid, wide-variations in lighting, the camera may not operate as intended.

WARNING: To reduce the risk of fire or electronic shock, do not expose the camera to rain or moisture and do not remove the cover or back.

Components

The UVD-EVRDNR cameras consist of the following parts:

- The camera assembly (Figure 1 below)
- Monitor output cable (Figure 2 below)
- Mounting screws, wall anchors, and hex key

Use the video output BNC and power jack for normal system operation. Use the monitor output cable for installation and maintenance.

Figure 1: Camera assembly

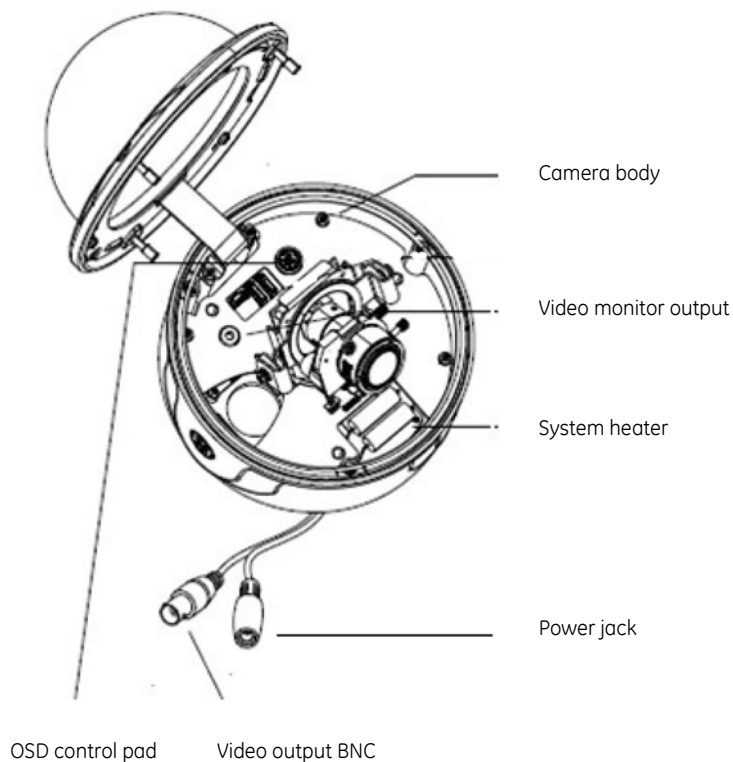
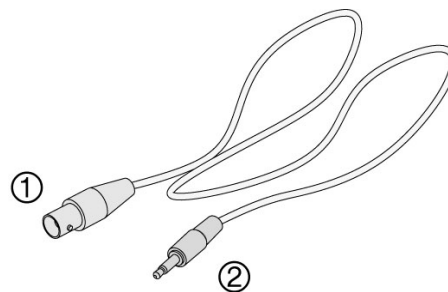


Figure 2: Monitor output cable



1. Monitor output BNC

2. Monitor output RCA

OSD control pad

The onscreen display (OSD) control pad (Figure 4) is a five-direction joystick that provides the ability to manually control the camera functions. Table 1 below lists the OSD control pad functions and describes their use.

Figure 3: OSD control pad

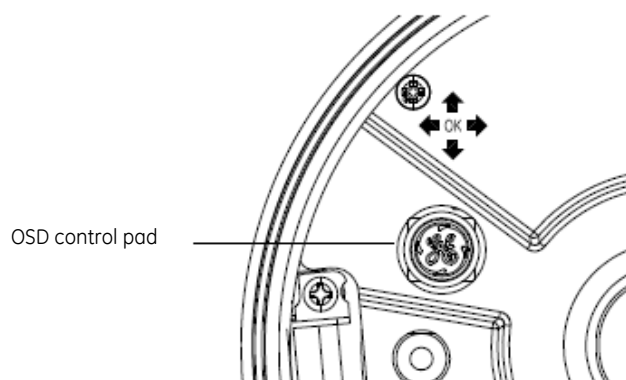


Table 1: OSD control pad functions

Pad directions	Description
Up	Moves the cursor upward to select an item.
Left	Moves the cursor left to select or adjust the parameters of the selected item.
Right	Moves the cursor to the right to select or adjust the parameters of the selected item.
Down	Moves the cursor downward to select an item.
Enter	Press the center of the control pad to display the Setup menu. If the selected item has its own menu, press the control pad to enter a submenu. Press the control pad for 2 seconds to save all settings and exit the Setup menu.

Installation

Complete all the necessary programming before you install the camera. This chapter provides information on how to install the camera and adjust camera angle and focus.

Installation overview

To install the camera you will need to prepare the mounting surface, make cable connections, and mount the camera.

Cable connection

To make cable connections, do the following:

1. Connect a coaxial cable from the camera's BNC connector to a CCTV monitor or video recording device.
2. Connect a 12 VDC or 24 VAC power supply to the power input. The label on the camera gives the following information:

Red cable. Power in.

Black cable. Power in.

White cable. Video out.

Black cable. Video ground.

Note: For AC24V or DC12V, Black or Red may be used for ground.

Camera installation

To mount the camera, attach the camera to the mounting surface using the appropriate fasteners

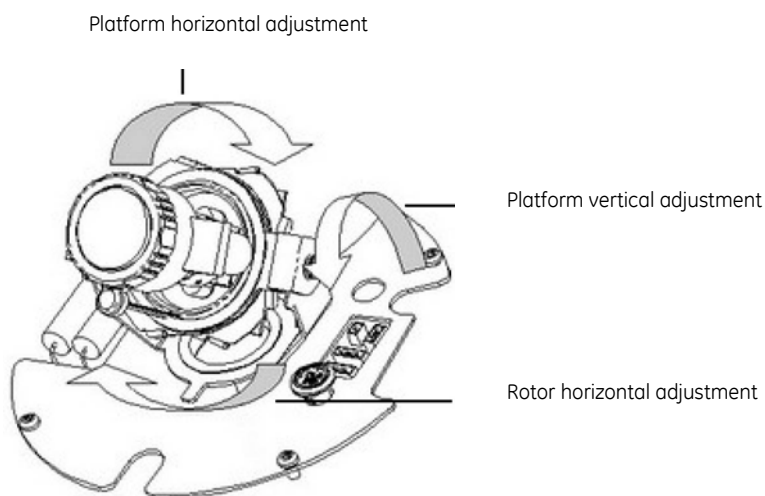
Angle adjustment

To adjust the horizontal angle of the platform up to 180 degrees, turn the platform (Figure 4 below).

To adjust the horizontal angle of the rotor up to 350 degrees, turn the rotor on the platform (Figure 4 below).

To adjust the vertical angle of the platform up to 90 degrees, turn the platform (Figure 4 below).

Figure 4: Camera adjustment

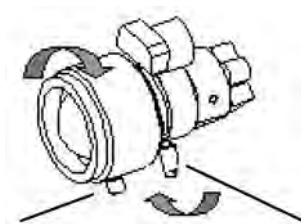


Focus adjustment

To adjust the camera zoom and focus, see Figure 5 below and do the following:

1. Loosen the zoom ring thumbscrew.
2. Turn the zoom ring to set the desired zoom.
3. Tighten the zoom ring thumbscrew.
4. Loosen the focus ring thumbscrew.
5. Turn the focus ring to set the desired focus.
6. Tighten the focus ring thumbscrew.

Figure 5: Zoom and focus adjustment



Zoom ring thumbscrew for VA2 and focus ring for VA9 lens

Focus ring thumbscrew for VA2 and zooming ring for VA9 lens

Connect the monitor

Program the cameras by attaching a standard video monitor to the system.

To connect the monitor, do the following:

1. Plug the monitor output cable (Figure 2 on page 5) to the video monitor output connector (Figure 1 on page 5).
2. Connect the BNC cable to the video monitor.
3. Press Enter (see OSD control pad on page 9) to display the Setup menu.

Programming

This chapter describes how to navigate the programming menus to adjust the camera settings.

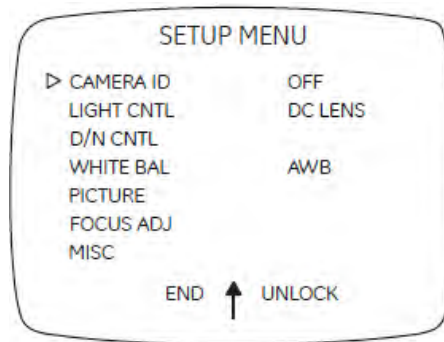
Setup menu

To access the Setup menu (Figure 6 on page 9), do the following:

- To navigate to a menu item, press Up, Down, Left, or Right (Table 1 on page 6).
- To select the item for adjustments, press Enter.
- To display the submenu for the selected item, press Enter.

There is a menu map provided on the back page of the manual.

Figure 6: Setup menu



- To close the Setup menu and return to normal camera operation mode, move the cursor to End at the bottom of the screen and press Enter.

Note: If you do not press the OSD control pad for one minute while any setting menu is displayed, all modified data will be stored and the camera will return to normal camera picture mode.

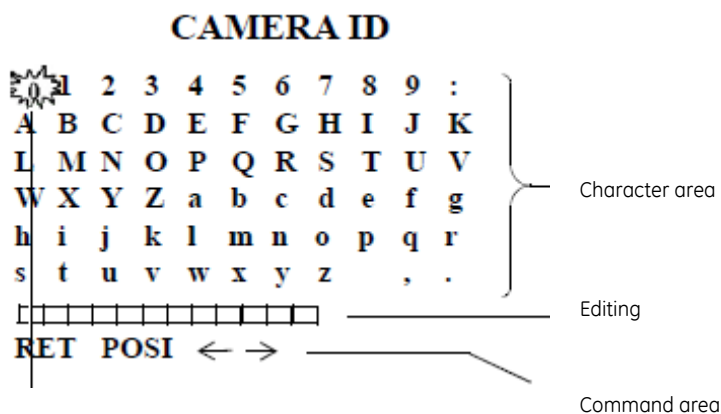
- For menu position setting, move the cursor to the K position and press Enter.
- To lock the Setup menu, move the cursor to Unlock and press Enter.
- To unlock the Setup menu, press Up, Down, and then press Enter (in that order).

Camera identification

To set the camera ID, do the following:

1. Move the cursor on the Setup menu (Figure 6 above) to Camera ID and press Enter to display the Camera ID submenu (Figure 7 below).

Figure 7: Camera identification

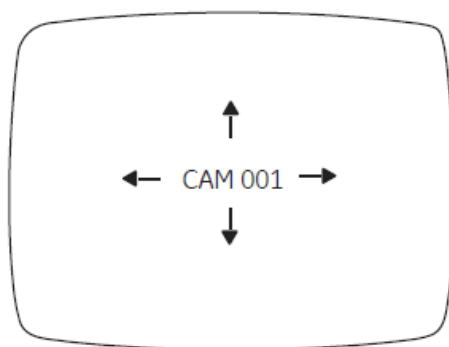


Blinking

2. Move the cursor to the character you wish to enter. Press Enter and the selected character displays in the editing data area.
3. Repeat the process until you have entered or edited all of the characters.
4. Move the cursor to the ← → in the Editing data area.

5. Move the cursor to the blank character position between "z" and ",".
6. To delete a character, select the character so that it blinks and either move the cursor to the blank character position between the "z" and "," or move it to the DEL position and press Enter.
7. Move the cursor to Posi and press Enter,. The camera ID displays on screen (Figure 8 below).

Figure 8: Camera ID display



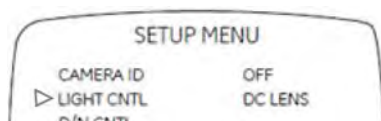
8. Press Up, Down, Right, or Left to move the Camera ID to the desired position.
9. Press Enter to fix the ID position and return to the previous menu.

Light control

To adjust the light control, do the following:

1. Move the cursor on the Setup menu (Figure 6 on page 9) to Light Cntl and press left or right to cycle between the DC Lens and ME (Figure 9 below).

Figure 9: Light control menu selection – DC lens



2. To set DC Lens, press Enter when the DC Lens option is displayed. The DC Lens menu appears (Figure 10 on page 11).