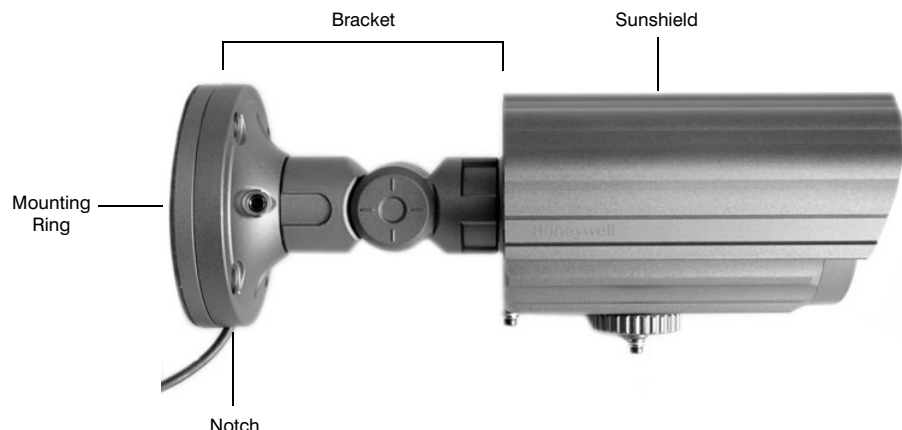


## HBD9 Series Camera Quick Install Guide

800-09587 Rev A 11/11

### Camera Overview



### Installing the Camera

HBD9 Series cameras (HBD92S/HBD92SX/HBD95S/HBD95SX) can be installed on a wall or ceiling indoors or outdoors.

#### Mounting the Camera

1. Find a suitable location for mounting the camera. The mounting surface must be flat and capable of supporting the combined weight of the camera, sunshield, bracket, and mounting ring (approximately 3.18 lb. [1.44 kg]).
2. Attach the mounting ring to the mounting surface using the four supplied 1-inch (25.4 mm) self-drilling screws.
3. Attach the camera and bracket to the mounting ring using the four supplied 3/8-inch (9.52 mm) socket cap screws. Tighten the screws using the supplied hex key.

**Note** For an outdoor wall mount installation, ensure that the notch in the base of the bracket is facing down.

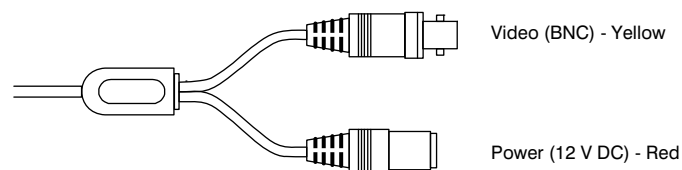
#### Positioning the Camera

You can position the camera to capture the desired field of view by adjusting the multi-directional bracket. To change the camera position, loosen the bracket screws with the supplied hex key, reposition the camera, and then tighten the screws.

### Connecting the Camera

1. Connect the camera's BNC video output to the video input on your monitor or digital video recorder.
2. Connect the camera's 12 V DC power output to a power supply appropriate for your installation (24 V AC or 12 V DC).

Figure 1 Video and Power Connections



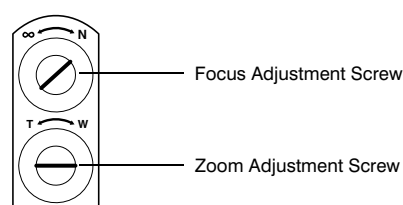
**Note** When the main video is connected to a terminated monitor or recording device, if the second video out is also connected to a terminated monitor, the video will become darker. For correct video level, ensure that only **one** video output is terminated with a 75 ohm load.

### Configuring the Camera

#### Setting the Focus and Zoom

The focus and zoom controls are located on the underside of the camera.

Figure 2 Focus and Zoom Controls\*



\* The HBD92S(2.8–12 mm) controls are shown here. The controls appear in reverse order on the HBD95S (5–50 mm).

#### To set the focus:

1. Loosen the focus set screw using the supplied hex key.
2. Turn the focus adjustment screw clockwise for near focus (N) or counterclockwise for far focus (∞).
3. Tighten the focus set screw to lock the focus setting.

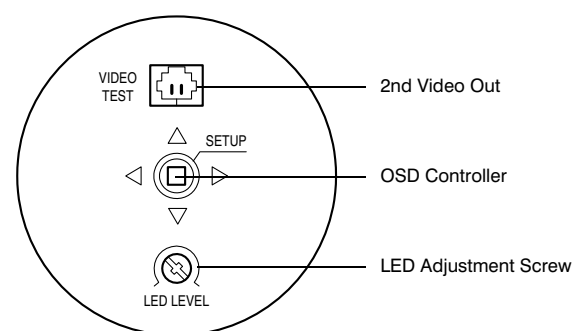
#### To set the zoom:

1. Loosen the zoom set screw using the supplied hex key.
2. Turn the zoom adjustment screw clockwise to decrease zoom (W) or counterclockwise to increase zoom (T).
3. Tighten the zoom set screw to lock the zoom setting.

### Setting the LED Brightness

You can adjust the LED brightness level in night (B/W) mode. The LED brightness control is located on the underside of the camera, next to the focus and zoom controls. Unscrew the cap to access the control board.

Figure 3 Camera Control Board



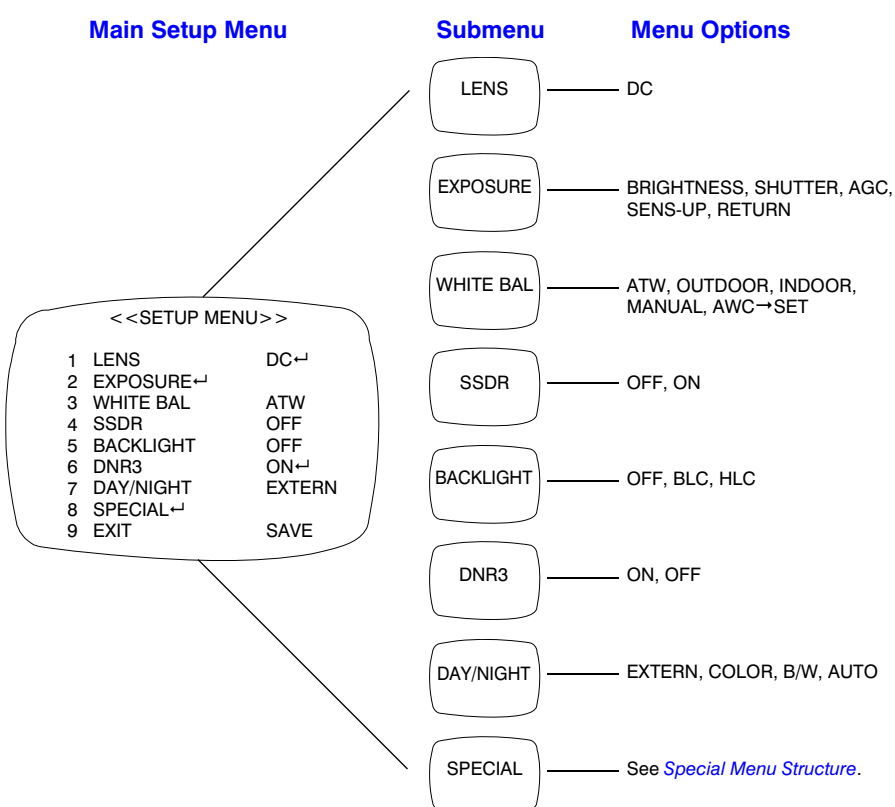
#### To set the LED brightness:

Turn the LED LEVEL adjustment screw either clockwise to increase the LED brightness or counterclockwise to decrease the LED brightness.

### Programming the Camera

You can program the camera using the onscreen display (OSD) menus. The menu controls are located on the camera control board (Figure 3). Move the OSD controller joystick up, down, left, or right to navigate through the menu options. Press the joystick to execute (set) a selection or to enter a submenu (↵).

Figure 4 Setup Menu Structure



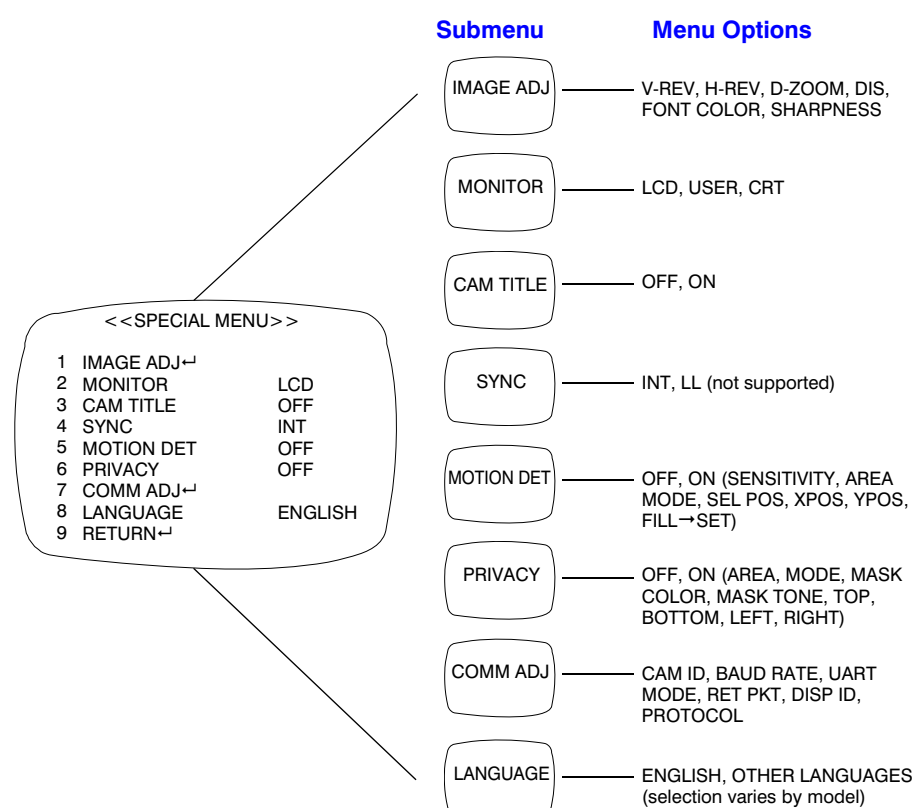
## Setup Menu

Menu Item	Description
1 LENS	<b>DC:</b> Set BRIGHTNESS (1 to 70), IRIS SPEED (1 to 5), and FOCUS ADJUST (mode and shutter range).
2 EXPOSURE	<b>BRIGHTNESS:</b> Set picture brightness (1 to 70). <b>SHUTTER:</b> Set to ESC, MANUAL, A.FLK, or --- (FIXED). ESC controls shutter speed automatically depending on ambient illumination of subject; MANUAL controls shutter speed manually (NTSC = 1/60 to 1/120,000 s, PAL = 1/50 to 1/120,000 s); A.FLK reduces picture flicker; --- fixes the shutter speed (NTSC = 1/60 s, PAL = 1/50 s) to prevent color rolling. <b>AGC (Auto Gain Control):</b> Set to OFF, LOW, or HIGH. Increasing gain allows for a useable picture in lower light conditions. The higher the gain the lower the light levels. As gain is increased, low light noise may also increase. <b>SENS-UP:</b> Set to OFF or AUTO (×2 to ×512). When activated, the camera automatically detects the light level and maintains a clear picture. <b>Note:</b> When SHUTTER is set to MANUAL or A.FLK mode, SENS-UP is disabled.
3 WHITE BAL	<b>ATW (Auto Tracing White Balance):</b> Select when the color temperature is between 1700 K and 11,000 K. <b>OUTDOOR:</b> Select when the color temperature is between 1700 K and 11,000 K (sodium light inclusion). <b>INDOOR:</b> Select when color temperature is between 4500 K and 8500 K. <b>MANUAL:</b> Select to fine-tune white balance (RGAIN, BGAIN levels adjustable). <b>AWC→SET (Auto White Balance Control):</b> To detect the optimal light level for the current environment, point the camera towards a sheet of white paper and then press Set.
4 SSSDR	<b>SSDR (Super Dynamic Range):</b> Set to ON to even out the overall brightness of high contrast images by lightening the darker areas of the image.
5 BACKLIGHT	<b>BLC:</b> Set backlight LEVEL (LOW, MIDDLE, HIGH) and area to be enhanced (TOP, BOTTOM, LEFT, RIGHT). <b>Note:</b> BLC does not work in the B/W mode of the DAY/NIGHT menu. <b>HLC:</b> Set highlight compensation LEVEL (LOW, MIDDLE, HIGH), LIMIT (ALL DAY, NIGHT ONLY), MASK COLOR (BLACK, RED, BLUE, CYAN, MAGENTA), MASK TONE (1 to 25), and area to be masked (TOP, BOTTOM, LEFT, RIGHT). <b>Note:</b> HLC is only activated when a bright light exceeds a specific size.
6 DNR3	<b>DNR3 (Digital Noise Reduction):</b> Set to ON and adjust level (1 to 32) to reduce low-light background noise.
7 DAY/NIGHT	<b>EXTERN:</b> Select to use built-in light sensor to automatically switch between day (color) and night (black and white) mode. <b>COLOR:</b> Select to always display picture in color. <b>B/W:</b> Select to always display picture in black and white. <b>AUTO:</b> Select to display picture in color in a normal environment, and in black and white in low light conditions (BURST MODE turns burst signal on or off; DURATION and DWELL TIME set day/night switching point).
8 SPECIAL	Opens the SPECIAL menu (see <a href="#">Special Menu Structure</a> ).
9 EXIT	<b>SAVE:</b> Select to save the current settings and exit. <b>NOT SAVE:</b> Select to exit without saving the current settings. <b>RESET:</b> Select to reset the camera to the factory default settings. Language, communication, and monitor settings are not initialized.

## Special Menu Structure

On the Setup menu, select **SPECIAL**, and then press **Set** to open the Special menu.

Figure 5 Special Menu



## Special Menu

Menu Item	Description
1 IMAGE ADJ	<b>V-REV:</b> Select to flip picture vertically. <b>Note:</b> Text does not flip. <b>H-REV:</b> Select to flip picture horizontally. <b>D-ZOOM:</b> Set digital zoom (×1 to ×16). <b>DIS:</b> Set digital image stabilization to ON or OFF. <b>Note:</b> Using DIS lowers the camera resolution. <b>FONT COLOR:</b> Set OSD color to blue, white, yellow, green, red. <b>SHARPNESS:</b> Set picture sharpness (1 to 20).
2 MONITOR	<b>LCD:</b> Select if using an LCD monitor. <b>USER:</b> Select if using a non-standard monitor. <b>CRT:</b> Select if using a CRT monitor. Adjust gamma, PED level (1 to 70), and color gain levels using the submenu.
3 CAM TITLE	Set to ON to display a camera title (up to 15 letters in length) on the monitor screen. <b>Note:</b> This option is only available in English.
4 SYNC	<b>INT:</b> Synchronize the vertical interval sync pulse of your camera with other equipment to reduce the effect of picture roll on the monitor.
5 MOTION DET	<b>SENSITIVITY:</b> Select motion detection areas (AREA1 to AREA8). <b>AREA MODE:</b> Enable or disable selected motion detection area. <b>SEL POS:</b> Select quadrant of motion detection area to use (L_TOP, R_TOP, L_BOTTOM, R_BOTTOM). <b>XPOS:</b> Set coordinate of horizontal axis for SEL POS. <b>YPOS:</b> Set coordinate of vertical axis for SEL POS. <b>FILL→SET:</b> Select to fill in selected motion detection area.
6 PRIVACY	<b>AREA:</b> Select privacy areas (AREA1 to AREA12). <b>MODE:</b> Enable or disable selected privacy area. <b>MASK COLOR:</b> Set color of privacy mask (GREEN, RED, BLUE, BLACK, WHITE, GRAY). <b>MASK TONE:</b> Adjust brightness of MASK COLOR. <b>TOP/BOTTOM/LEFT/RIGHT:</b> Adjust size and position of selected privacy zone areas.
7 COMM ADJ	This option is not currently supported.

## Regulatory Compliance Notices

**Information to the user:** This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. 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. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This Class A digital apparatus complies with Canadian ICES-003.  
Cet appareil numérique de la Classe A est conforme à la norme NMB-003 du Canada.

The manufacturer declares that the equipment supplied with this guide is compliant with the essential requirements of EMC directive 2004/108/EC, conforming to the requirements of standards EN 55022 for emissions, EN 50130-4 for immunity, and EN 60950 for electrical equipment safety.

## Warranty and Service

Subject to the terms and conditions listed on the Product warranty, during the warranty period Honeywell will repair or replace, at its sole option, free of charge, any defective product returned prepaid.

In the event you have a problem with any Honeywell product, please call Customer Service at 1.800.796.CCTV (North America only) for assistance or to request a **Return Merchandise Authorization (RMA) number**. For Europe and the United Kingdom, please contact your Honeywell dealer.

Be sure to have the model number, serial number, and the nature of the problem available for the technical service representative. Prior authorization must be obtained for all returns, exchanges, or credits. **Items shipped to Honeywell without a clearly identified Return Merchandise Authorization (RMA) number may be refused.**



### Waste Electrical and Electronic Equipment (WEEE)

Correct disposal of this product (applicable in the European Union and other European countries with separate collection systems): This product should be disposed of, at the end of its useful life, as per applicable local laws, regulations, and procedures.

# Honeywell

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