

Honeywell



HD61 *Series*

Operation Manual

Color Dome Camera

● READ AND KEEP THIS
OPERATION MANUAL

CCD
Digital
COLOR

www.honeywellvideo.com



. User Information



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION! TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

Explanation of two Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance-(servicing) instructions in the literature accompanying the appliance.

THE GRAPHIC SYMBOLS WITH SUPPLEMENTAL MARKING ARE ON THE BOTTOM OF THE SYSTEM.

"WARNING-TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE"

INFORMATION

This equipment has been tested and found to comply with 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 instruction manual, 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 their own expense.

WARNING

The manufacturer could void the user's authority to operate the equipment.

CAUTION - To prevent electric shock and risk of fire hazards:

- Do NOT use power sources except for that specified.
- Do NOT expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should abide to all local codes.



. Contents

- Thank you for purchasing this COLOR VIDEO CAMERA.

Before using this camera, please read this operation manual carefully to obtain the best result and keep this manual for future reference.

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1. SAFETY INSTRUCTIONS

Read Instructions

Read all of the safety and operating instructions before using the product.

Retain Instructions

Save this instructions for later use.

Cleaning

Unplug this appliance from wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

Water and Moisture.

Do not use this product near water or moisture. (For example, near a bathtub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, etc)

Installation

Do not place this product on an unstable cart, stand, or table. The product may fall causing serious injury to a child or adult, and damage to the product.

Use only with a cart or stand recommended by the manufacturer, or sold with the product.

Mounting should follow the manufacturer's instructions, and should use a mounting accessory recommended by manufacturer.

Power source

This product should be operated only from the type of power source indicated on the marking label.

If you are not sure of the type of power supplied to your home, consult your dealer or local power company.



3-Axis

2. PRECAUTIONS

Handling

- ➔ Do not disassemble the camera and never touch parts inside the camera.
- ➔ Do not drop the camera or subject it to shocks and vibrations to avoid possible damage.
- ➔ When attaching or removing the lens, handle with care in order to that moisture and dust do not enter the camera.

Installation and storage

- ➔ Do not point the camera at the sun. This could damage the camera whether it is operating or not.
- ➔ Do not install the camera where the temperature could exceed the allowable range.

- ➔ Be sure the ambient temperature is less than 40 °C in installation intended for long term continuous operation.
- ➔ Avoid installing in a humid or dusty place.
- ➔ Avoid installing in places where there are strong magnetic fields and electric signals.
- ➔ Avoid installing in places where the camera would be subject to strong vibrations.
- ➔ Never expose the camera to rain and water.



3. FEATURES

High Sensitivity 1/3 Inch Sony Super HAD CCD

Min. Illumination (F1.2, 30 IRE) : 0.1 Lux (Color)
0.0 Lux (IR LED On)

Day & Night (Programmable)

OSD (On Screen Display)

High Performance Menus For Functions

- Privacy Zone Selectable (4 Programmable Zone)
- Motion Detection Selectable (64 Programmable Zone)
- Sharpness Enhanced Adjustable
- Flickerless Selectable
- Gamma Enhanced Selectable
- BLC Zone Selectable (64 Programmable Zone)



4. COMPOSITION

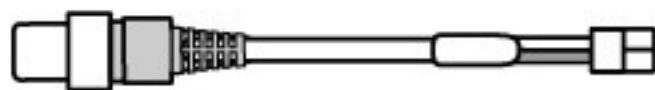


Operation Manual



Mounting Screw

Guide Pattern

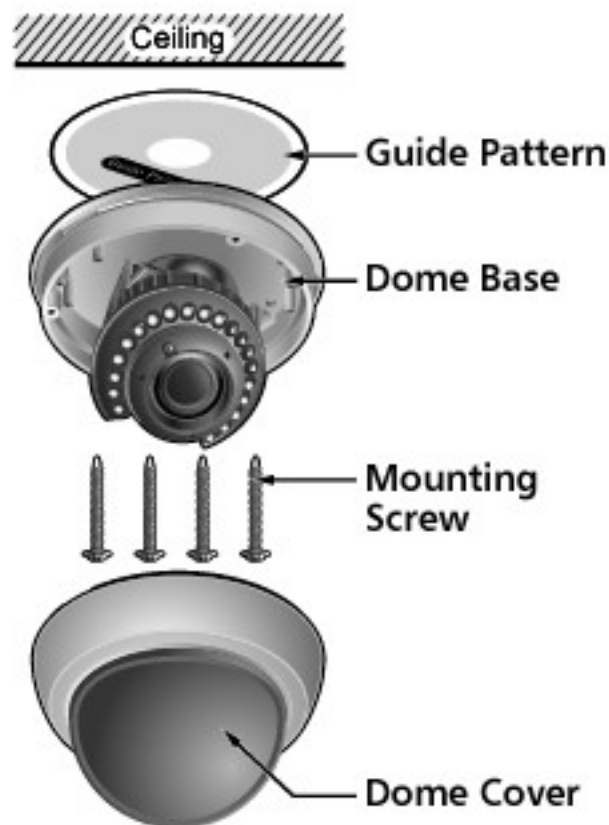


Service Monitor Cable



5. INSTALLATION

- 1** Stick the guide pattern on the wall or ceiling.
- 2** Drill four holes according to the guide pattern then insert anchors into the drilled holes.
- 3** Draw out power / video wires to the connecting places.
- 4** Fixed the camera to a ceiling using four screws.
- 5** Adjust desired focus and scene by turning and moving the 3-axis camera bracket by hand.
- 6** Put the dome cover over the base.
- 7** Fix the dome cover on the base by covering.

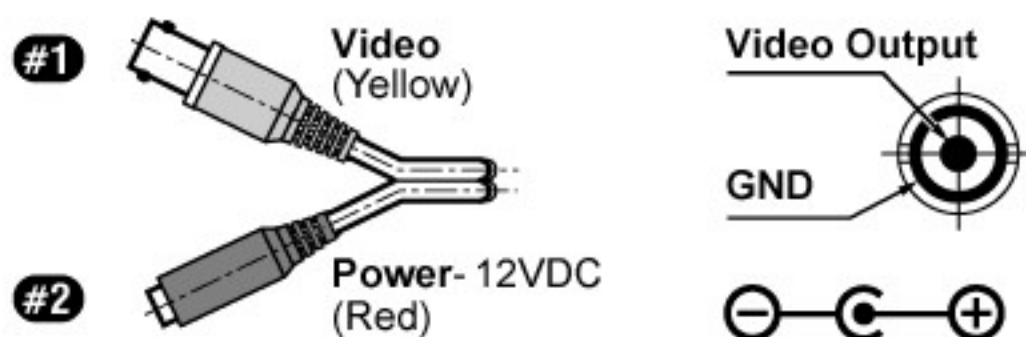


NOTE

● Insert coin to the side hole and remove the dome cover by twist coin.



6. CONNECTION

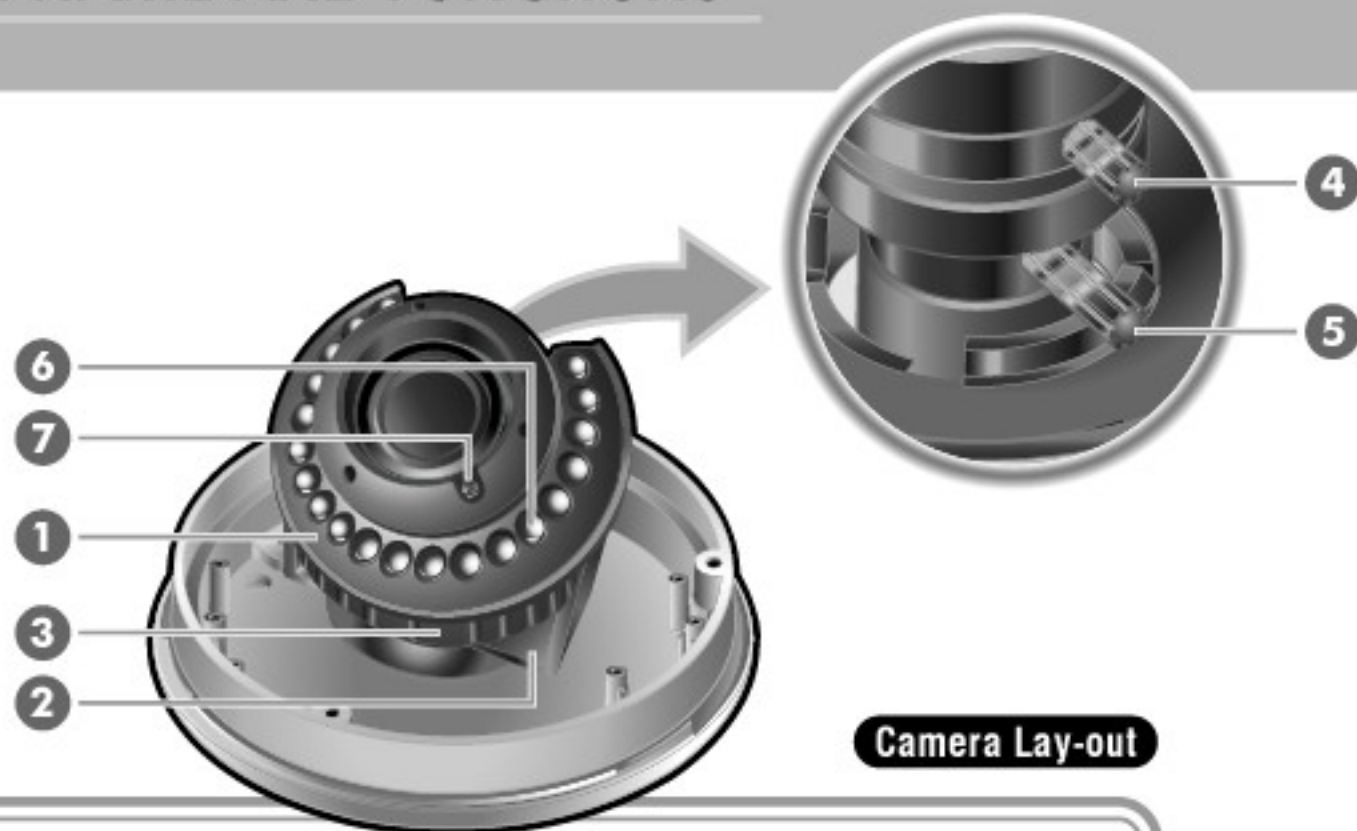


- The wire is polarized.
- Use 12V DC  power source.

No.	Function	Terminal Color	Remark
#1	Video Output	Yellow	1.0 Vp-p
#2	Power Input	Red	12VDC (10V~15V), 360mA (Max)



7. NAME AND FUNCTIONS



- ① **Tilt rotation:** Adjusting the vertical angle.
- ② **Pan rotation:** Adjusting the horizontal angle.
- ③ **Horizontal rotation:** Adjusting the horizontal position of the screen.
- ④ **Focus handle:** Focus (Far or Near)
- ⑤ **Zoom handle:** Zoom (Tele or Wide)
- ⑥ **IR LED(4mm~9mm):** 850nm / 30°(20EA), Power Consumption(4.5W)
- ⑦ **Sensor**

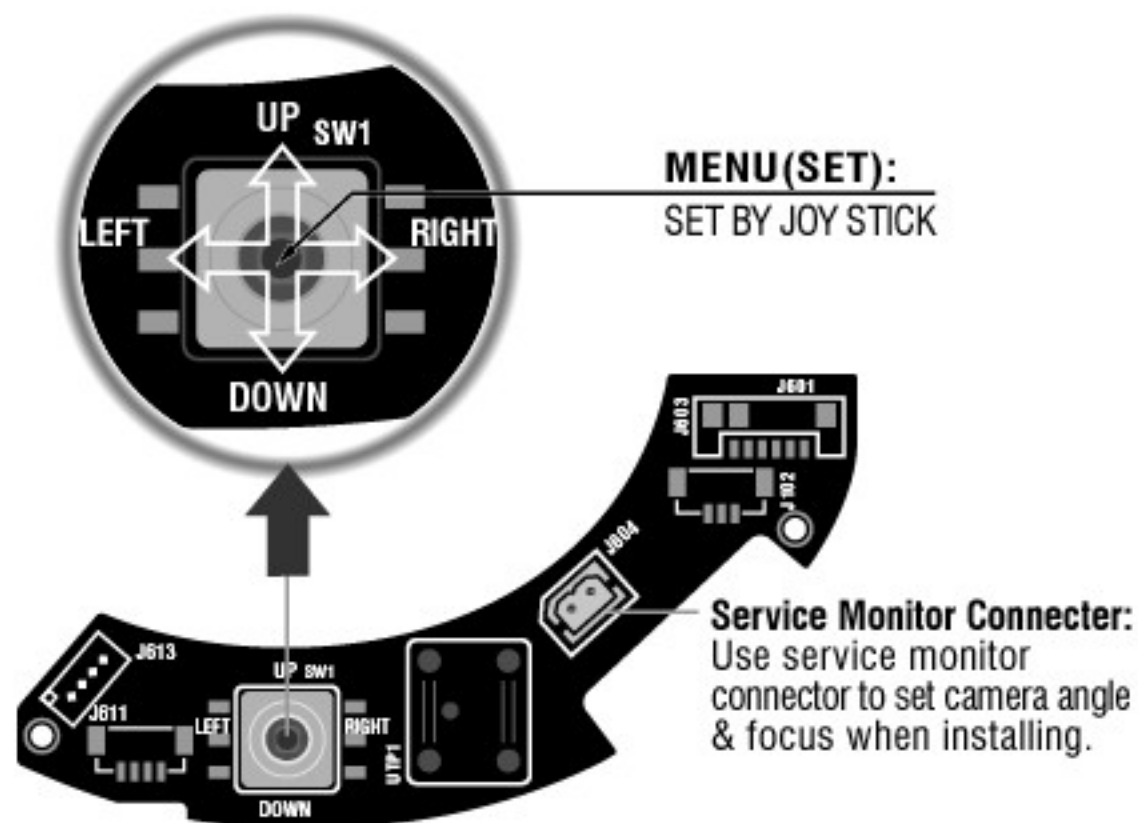


8. OPERATING CAMERA

SETUP MENU				
CAMERA ID	• ON		• OFF	
SHUTTER	• AUTO	• FLK	• FIXED	• MANUAL
WHITE BAL.	• ATW	• AWB	• FIXED	• MANUAL
FUNCTION	• BLC	• AGC	• DAY NIGHT	• PRIVACY
	• MIRROR		• GAMMA	• MOTION
ADJUST	• CONTRAST		• SHARPNESS	
	• CB_GAIN		• CR_GAIN	
LANGUAGE	• ENGLISH	• KOREAN	• CHINESE1	• CHINESE2 • JAPANESE
RESET				
EXIT				

➔ Setting up the Menu

- ! Push the Joy stick for one second, and the OSD appears on the screen. Move the Joy Stick up, down, left & right to control the OSD functions.



SETUP

- Push and hold MENU button 1 second to access the setup mode.
- Select the status using the joystick. (up, down, left, right)

SETUP

CAMERA ID	OFF
SHUTTER	AUTO ✓
WHITE BAL.	ATW
FUNCTION	✓
ADJUST	✓
LANGUAGE	ENGLISH
RESET	✓
EXIT	

1. Press MENU button, then SETUP mode is activated.

- MAIN SETUP menu is displayed on the monitor.



2. Select OSD item using UP, DOWN button.

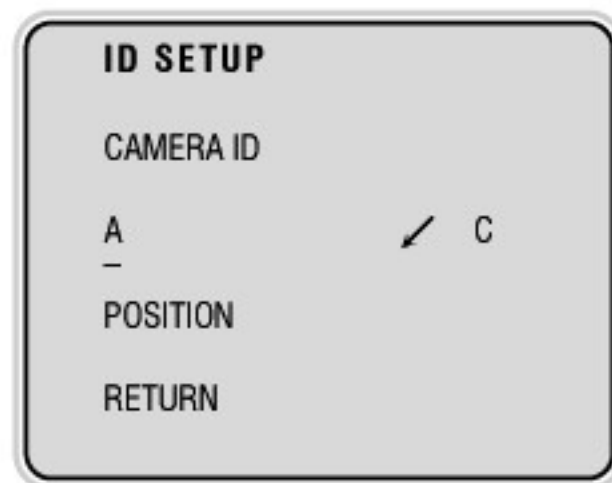
3. Set details using LEFT, RIGHT button.

4. Select "Exit" and then press the MENU button to finish the SETUP (Save and Exit)

SETUP	
CAMERA ID	OFF
SHUTTER	AUTO ✓
WHITE BAL.	ATW
FUNCTION	✓
ADJUST	✓
LANGUAGE	ENGLISH
RESET	✓
EXIT	

1) CAMERA ID setup (default setting OFF)

- ① Press MENU key in ON  state.
(Access ID setting MODE)
- ② Press MENU key in CAMERA ID.
- ③ Character is changed each time UP, DOWN is pressed. (Can select up to 63 letters)
- ④ Press MENU button in  to exit from ID setup mode
- ⑤ Press MENU button in 'C' to correct and erase the chosen entry.



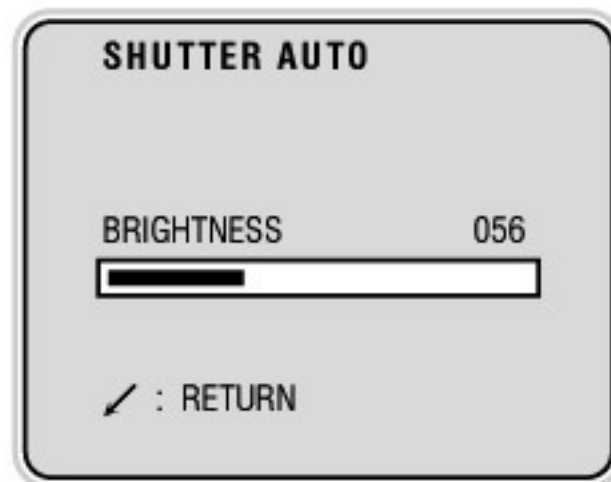
2) POSITION setup. Press POSITION .

- ① Move the character using UP, DOWN, LEFT, RIGHT button.
- ② Press Menu button to confirm selection of the character.
- ③ Press Return to go to previous screen. ID is displayed by pressing EXIT on MAIN MENU.

1) SHUTTER setup (for LENS MANUAL)

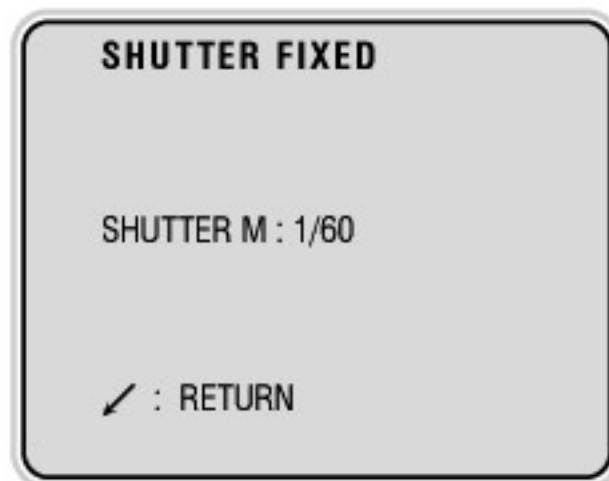
- ① Press LEFT or RIGHT button in SHUTTER to select the mode to
AUTO ↙ ◀ ▶ FLK ◀ ▶ FIXED ↙
◀ ▶ MANUAL ↙.

! ● Setting Mode : AUTO ↙



1) FIXED ✓ setup

- ① Press MENU button in FIXED ✓
to display the screen on the right side.
- ② Press LEFT or RIGHT button in SHUTTER.
Can be set in ([NTSC: 1/60 ~ 1/100,000]
[PAL: 1/50 ~ 1/100,000]) range.



1) **WHITE BALANCE setup**

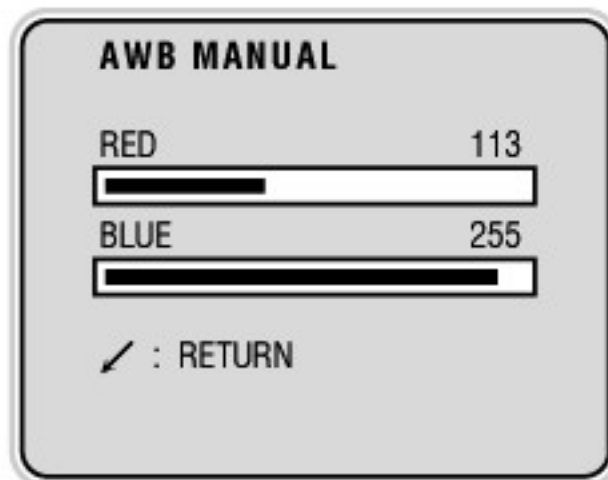
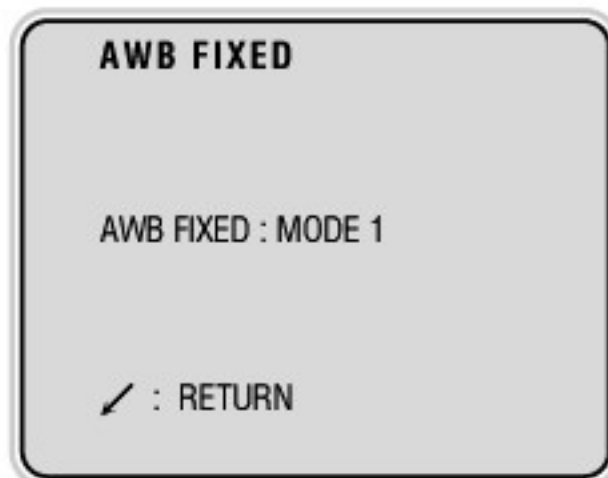
- ① In WHITE BAL., press LEFT, RIGHT button to select the mode you wish to operate
ATW ◀ ▶ AWB ◀ ▶ FIXED ✓
◀ ▶ MANUAL ✓.

2) **FIXED ✓ setup**

- ① Can set from MODE 1 to MODE 4.

3) **MANUAL ✓ setup**

- ① As shown on the lower right picture, set Red and Blue color value temperature.
② Press MENU button in RETURN to exit from setup mode.



1) FUNCTION ↙ setup

- ① Press MENU button in FUNTION to show the OSD display on the right.

2) Select item using UP, DOWN button.

3) Set details using LEFT, RIGHT button.

4) Click "Return" to go to MAIN SETUP

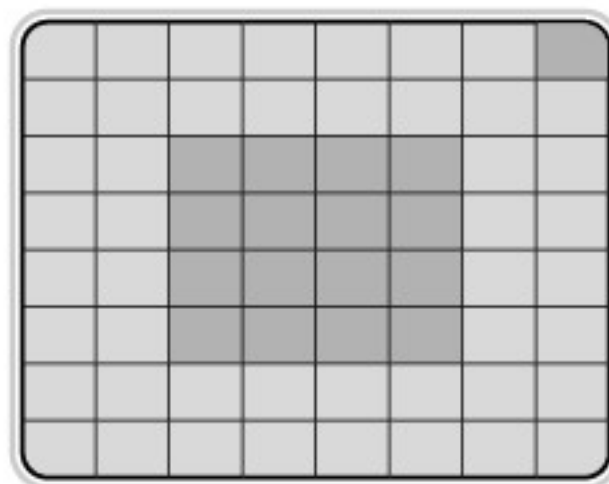
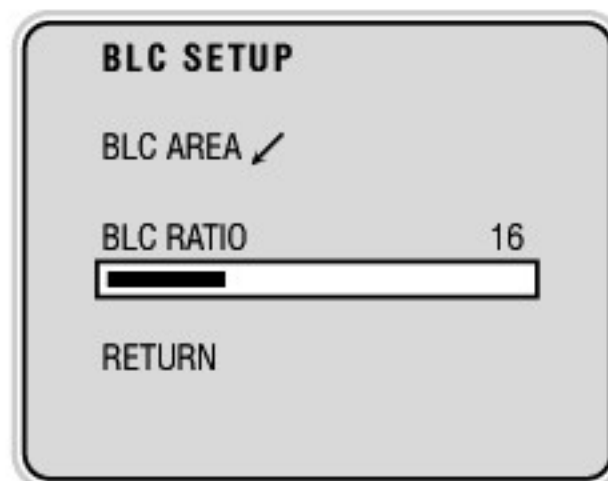
FUNCTION	
BLC	OFF
AGC	ON ↙
DAY NIGHT	AUTO ↙
PRIVACY	OFF
MIRROR	OFF
GAMMA	0.45
MOTION	OFF
RETURN	

1) BLC SETUP MODE

- ① Press MENU button in BLC ON ✓ ,
to display the screen on the right side.

2) BLC AREA ✓ setup

- ① Use UP, DOWN, LEFT, RIGHT button
to move the AREA setup position.
- ② Set or release BLC AREA
using MENU button.
- ③ Press MENU button for more than 1 second
to move to BLC AREA MODE.

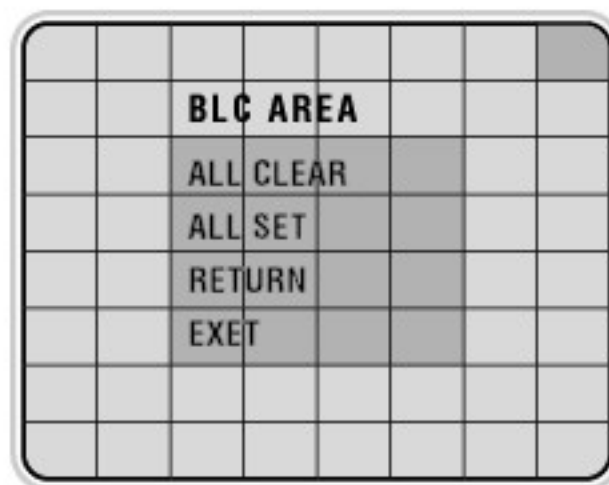


1) BLC AREA MODE

- ① Exit from BLC AREA MODE to move to BLC SETUP MODE screen.

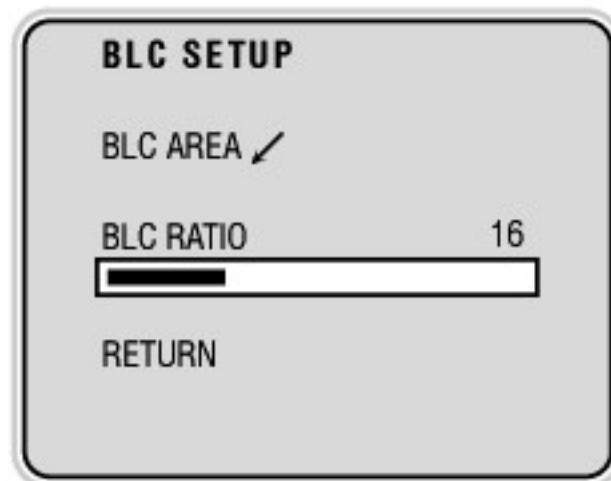
2) BLC OSD description

- ① **ALL CLEAR** - Clear all set AREA
- ② **ALL SET** - Set all 64 BLC AREA
- ③ **RETURN** - Return to BLC AREA setup mode.
- ④ **EXIT** - Save AREA and return to BLC SETUP MODE.



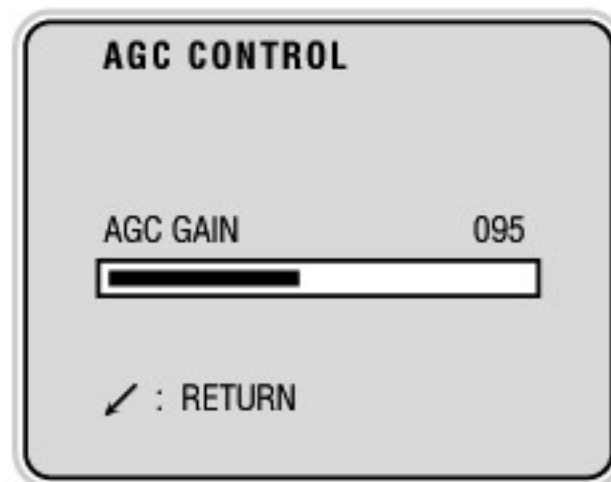
1) BLC RATIO setup (BLC LEVEL value setup)

- ① Use UP, DOWN button to move to BLC RATIO.
- ② Use LEFT, RIGHT button to change BLC LEVEL value (0~63)
0:MIN , 63:MAX
- ③ Press MENU button in RETURN to move to FUNCTION MODE.



1) AGC setup

- ① AGC default setting ON ✓
- ② Press MENU button in ON ✓
to display the screen on the right side.
- ③ Use LEFT, RIGHT button
to adjust AGC GAIN value (0~255)
0:MIN , 255:MAX
- ④ Press MENU button to return
to the previous screen.






1) DAY NIGHT setup

- ① Move to DAY NIGHT screen on the right side.
- ② Change setting using LEFT, RIGHT button.
AUTO ↙ ◀ ▶ B/W ↙ ◀ ▶ COLOR.

2) AUTO ↙ mode setup

- ① Press MENU button in AUTO ↙ setup mode.
- ② Move to screen on the right side.
- ③ Select item using UP / DOWN button.
- ④ Adjust value using LEFT / RIGHT button.
- ⑤ Press MENU in RETURN to return to the previous screen.

FUNCTION	
BLC	OFF
AGC	ON ↙
DAY NIGHT	AUTO ↙
PRIVACY	OFF
MIRROR	OFF
GAMMA	0.45
MOTION	OFF
RETURN	

DAY NIGHT AUTO	
DELAY	01
	
START LEVEL	092
	
END LEVEL	074
	
RETURN	

1) DAY NIGHT OSD description

① DELAY

- ➔ DAY --> NIGHT or NIGHT --> DAY conversion time setup
0 : No DAY NIGHT AUTO conversion
1~63 : Can set from 1 second to 15 seconds

② START LEVEL

- ➔ DAY --> NIGHT conversion illumination intensity setup 0~255 (DEFAULT : 4 Lux)
0 : High illumination intensity, 255 : Low illumination intensity

! ● Initial value setup is recommended.

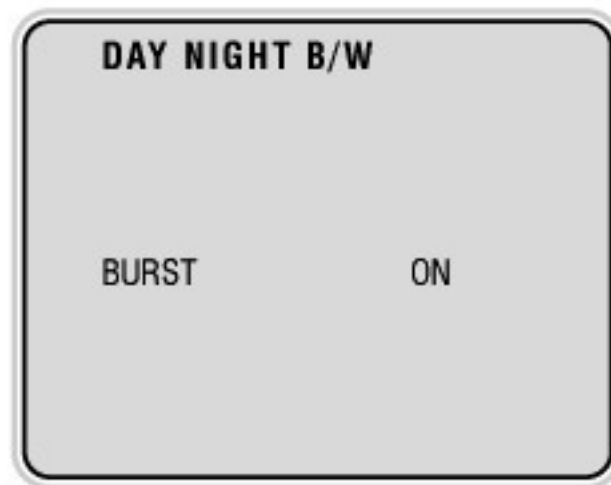
③ END LEVEL

- ➔ NIGHT --> DAY conversion illumination intensity setup 0~255 (DEFAULT : 12 Lux)
0 : High illumination intensity, 255 : Low illumination intensity

! ● Initial value setup is recommended.

1) B/W ↙ mode setup

- ① Press MENU in B/W ↙ setting
- ② Move to screen on the right side.
- ③ Use LEFT, RIGHT button to set BURST ON / OFF.
- ④ After setup, return to the previous screen by pressing MENU button.



1) PRIVACY setup

- ① Default setting OFF - Use LEFT,RIGHT button.
Change setup to ON ✓ mode.
- ② After ON ✓ mode setup, 4 AREA groups are
configured as displayed on the right-side picture.
- ③ Press MENU button.
Details of each area is dsplayed.

FUNCTION	
BLC	ON ✓
AGC	ON ✓
DAY NIGHT	AUTO ✓
PRIVACY	ON ✓
MIRROR	OFF
GAMMA	0.45
MOTION	OFF
RETURN	

2) PRIVACY details setup

- ① Select AREA SEL - PRIVACY 0~3.
- ② AREA STATE - 0~3 AREA ON/OFF
- ③ LEFT - Change left portion of each AREA size.
- ④ RIGHT - Change right portion of each AREA size.
- ⑤ TOP - Change top portion of each AREA size.
- ⑥ BOTTOM - Change bottom portion of each AREA size.
- ⑦ COLOR - Change entire color of the AREA (16 COLOR)

PRIVACY	
AREA SEL	AREA 0
AREA STATE	ON
LEFT	017
RIGHT	058
TOP	020
BOTTOM	055
COLOR	001
RETURN	

1) MIRROR setup

- ① MIRROR default setting OFF
ON setting - Use LEFT, RIGHT button.
- ② Left and Right side is switched
as shown on the picture.

FUNCTION	
BLC	OFF
AGC	ON ✓
DAY NIGHT	AUTO ✓
PRIVACY	OFF
MIRROR	OFF
GAMMA	0.45
MOTION	OFF
RETURN	

OFF



ON



1) GAMMA setup (DEFAULT 0.45)

- ① In FUNCTION MODE,
use UP, DOWN button to select GAMMA.

- ② Use LEFT, RIGHT button
to adjust GAMMA value.
(USER ◀ ▶ 0.05 ◀ ▶ 0.10 ◀ ▶ 0.15 ~ 1.0)

FUNCTION	
BLC	OFF
AGC	ON ✓
DAY NIGHT	AUTO ✓
PRIVACY	OFF
MIRROR	OFF
GAMMA	0.45
MOTION	OFF
RETURN	

1) MOTION DETECTION setup

- ① DEFAULT value OFF
- ② In ON ✓, press MENU button.
- ③ Display MOTION details.

2) AREA ✓ setup

- ① In AREA ✓, press MENU button. (see p.31)

3) MOTION TH. Setup


- ① Set motion sensitivity 0(MAX)~255(MIN)

4) MOTION TRACE setup

- ① ON : Display motion detection AREA.

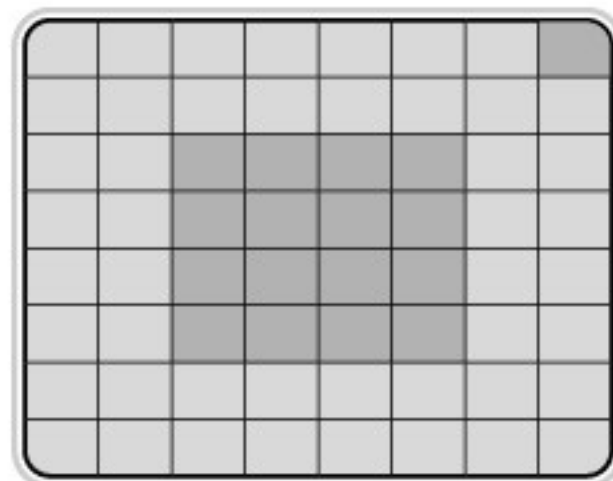
! Setting value can be adjusted using LEFT or RIGHT button.

FUNCTION	
BLC	OFF
AGC	ON ✓
DAY NIGHT	AUTO ✓
PRIVACY	OFF
MIRROR	OFF
GAMMA	0.45
MOTION	OFF
RETURN	

MOTION	
AREA ✓	
MOTION TH.	037
	
MOTION TRACE	OFF
RETURN	

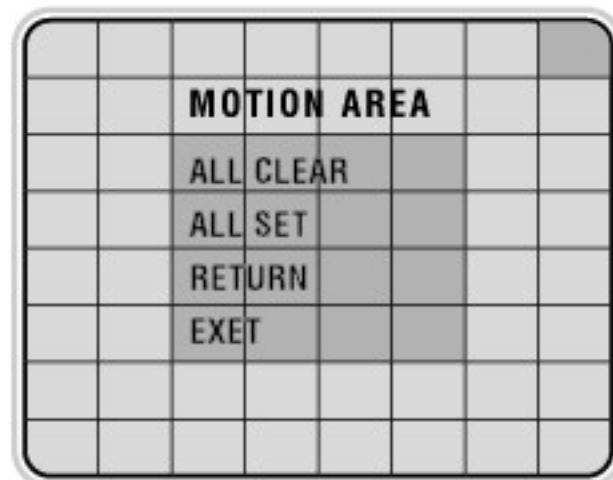
1) MOTION AREA setup

- ① Use UP, DOWN, LEFT, RIGHT button to move AREA setting position.
- ② Use MENU button to set and release AREA.
- ③ Press MENU button for more than 1 second to move to MOTION AREA MODE



2) MOTION AREA MODE

- ① You will return to MOTION AREA MODE after "Exit" from MOTION AREA MODE.



1) MOTION OSD description

- ① **ALL CLEAR** - Release all set AREA
- ② **ALL SET** - Set all 64 MOTION AREA.
- ③ **RETURN** - Return to MOTION AREA Setup Mode.
- ④ **EXIT** - Save AREA and return to MOTION SETUP MODE.

1) ADJUST setup

- ① Press MENU button in ADJUST.
- ② Move to screen on the right side.

! Each LEVEL value can be adjusted using LEFT, RIGHT button.

2) CONTRAST setup

- ① Adjust Y-gain value (0~255)

3) SHARPNESS setup

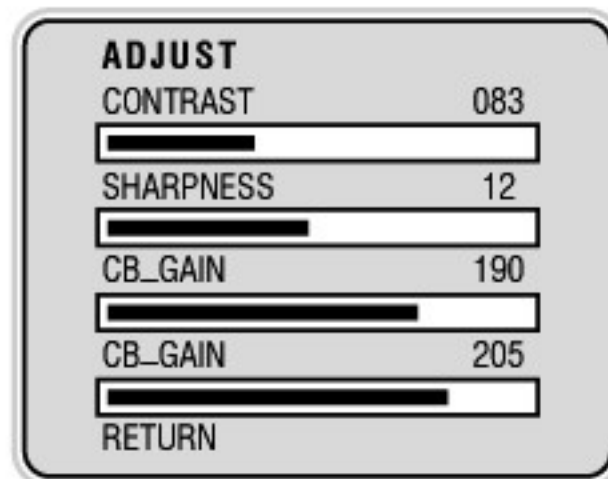
- ① Adjust aperture value (0~31)

4) CB_GAIN setup

- ① Adjust COLOR CB_GAIN value (0~255)

5) CR_GAIN setup

- ① Adjust COLOR CR_GAIN value (0~255)



1) **LANGUAGE** setup

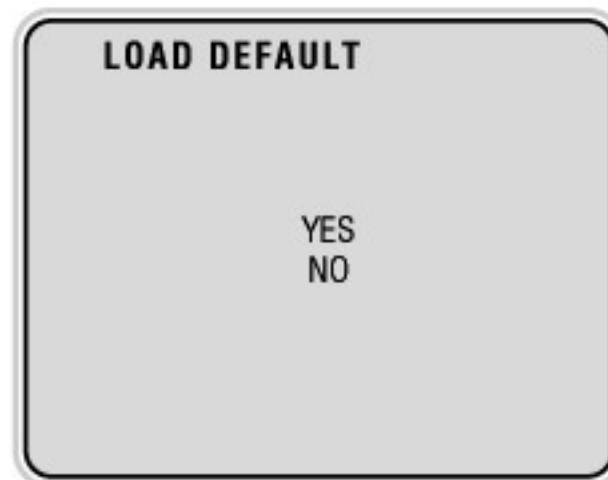
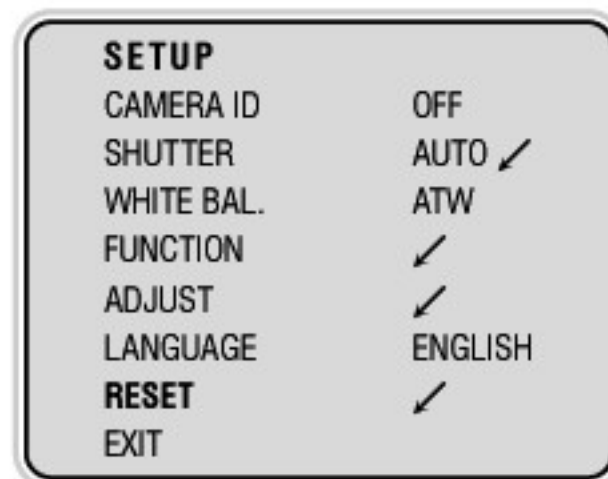
- ① DEFAULT value - ENGLISH
- ② After selecting LANGUAGE,
change setting using LEFT or RIGHT button.
- ③ Choose the language mode you
wish to operate in.

SETUP	
CAMERA ID	OFF
SHUTTER	AUTO ✓
WHITE BAL.	ATW
FUNCTION	✓
ADJUST	✓
LANGUAGE	ENGLISH
RESET	✓
EXIT	

! ENGLISH ◀ ▶ Korean ◀ ▶ Chinese1 ◀ ▶ Chinese 2 ◀ ▶ Japanese

1) **RESET**

- ① Select **RESET**.
Press **MENU** button.
The screen on the bottom appears.
- ② Select **YES** or **NO**.
- ③ Select **YES** to reset your camera
to default factory condition





9. SPECIFICATIONS

MODEL	HD61	HD61X
Signal System	NTSC	PAL
Image Sensor	2:1 Interlace Transfer 1/3 Inch Super HAD CCD	
Effective Pixels	510(H) x 492(V)	500(H) x 582(V)
Video Output	Composite: 1.0Vp-p, 75Ω, Unbalanced	
Sync. System	Internal Sync	
Luminance S/N Ratio	More than 50dB (AGC OFF)	
Horizontal Resolution	380 TV Lines	
Min. Illumination (F1.2)	0.1 Lux(30IRE, AGC ON), 0 Lux(IR LED)	
Lens	Manual Vari-focal (f=4~9mm)	
Focus	Manual	
Electronic Shutter	1/60 ~ 100,000	1/50 ~ 100,000
White Balance	ATW (1,800°K~10,500°K) / AWB / Fixed / Manual	
Camera ID	ON / OFF	
Language	English / Korean / Chinese 1 / Chinese 2 / Japanese	

BLC, AGC	ON / OFF (Level Adjustable)
Day & Night	BW / Color / Auto
Privacy	ON / OFF (4 Programmable Zone)
Mirror	ON / OFF (Horizontal)
Gamma	User / 0.5 ~ 1.0 Adjustable
Motion Detection	ON / OFF (64 Programmable Zone)
Contrast	0 ~ 255 (Level Adjustable)
Sharpness	0 ~ 31 (Level Adjustable)
Applicable Lens	Manual Lens
Supply Voltage	12VDC (10V~15V)
Power Consumption	Max. 4.5W / 360mA
Operating Temperature	-10°C ~ +50°C (Recommendation: -5°C ~ +40°C)
Storage Temperature	-20°C ~ +60°C
Dome Size (Ø)	100 mm
Weight	Approx. 366g



10. TROUBLESHOOTING

- If you have trouble operating your camera, refer to the following table. If the guidelines do not enable you to solve the problem, contact an authorized technician.

Problem	Solutions
Nothing appears on the screen.	<ul style="list-style-type: none">• Check that the power cord and line connection between the camera and monitor are fixed properly.• Check that you have properly connected VIDEO cable to the camera VIDEO output jack.
The image on the screen is dim.	<ul style="list-style-type: none">• Is lens stained with dirt? Clean your lens with soft, clean cloth.• Set the monitor to proper condition.• If the camera is exposed to too strong light, change the camera position.• Adjust the lens' focus properly.
The image on the screen is dark.	<ul style="list-style-type: none">• Adjust the contrast feature of the monitor.• If you have an intermediate device, set the 75Ω/ Hi-z properly.• Adjust DC Level, on the OSD menu.
The camera is not working properly, and the surface of the camera is hot.	<ul style="list-style-type: none">• Check that you have properly connected the camera to an appropriate power source.
The image on the screen flickers.	<ul style="list-style-type: none">• Is the camera facing to direct sunlight or fluorescent lighting? Change the camera position.



. Memo





● Design and specifications are subject to change without notice.

P/N:3810-0148B

Rev 0 07/04



Need Help?

Call 1.800.796.CCTV for sales, service and customer support.

www.honeywellvideo.com