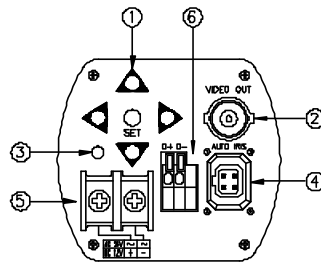


- Ⓐ LENS MOUNT CAP
- Ⓑ CS-C CONVERSION RING
- Ⓒ L SHAPE WRENCH
- Ⓓ CS MOUNT FIXING SCREW
- Ⓔ MOUNTING BRACKET
- Ⓕ MINIATURE PLUG/TERMINAL
- Ⓖ INSTRUCTION MANUAL
- Ⓗ IRON PLATE FOR FOCUS ADJUSTED

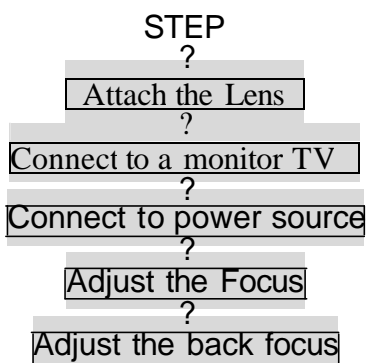


AC 24V/DC 12V

- ① CONTROL BUTTON
- ② VIDEO OUT BNC(F) JACK
- ③ POWER INDICATOR LED
- ④ 4 PIN-SOCKET FOR AUTO IRIS OR DC DRIVER LENS
- ⑤ POWER SUPPLY
- ⑥ RS-485

4 CONNECTION & ADJUSTMENTS

- A. Before connection, make sure that power is OFF and cords unplugged.
- B. Mount a lens onto the camera.
- C. Connect Video Output on Camera to Video Input of a Video Monitor, TV, DVR, etc., with 75 Ω coaxial cable.
- D. Connect the power terminal of the camera to power supply.



CAUTION:

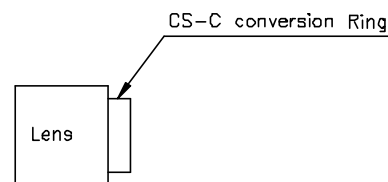
Installation should conform to all local codes.

Lens, coaxial cable for video signal and power supply are not supplied with the camera.

Connect the power cord and turn the power ON. Adjust the iris and focus of the lens to obtain the optimum image.

4.1 USING NORMAL LENS

CS-mount lens mode is the standard type. When use C-mount lens, use C-Mount conversion Ring.



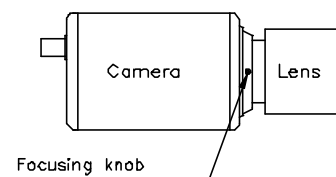
4.2 USING THE ZOOM LENS

(Adjustment of the back focus)

The camera is set at the standard back focus position when shipped from factory. Depending on types of zoom lenses, however slight adjustment may be necessary.

Adjust the lens back-focus by turning the focusing knob in either direction.

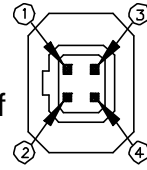
- A. Place an object at any fixed distance and set the focus ring of the zoom lens to be used with.
- B. Set the zoom lens to fully TELE position and obtain the best focus position by turning the focus ring of the zoom.
- C. Then set the zoom lens to fully WIDE position and obtain the best focus position by turning the focusing knob.
- D. Repeat the procedures B and C until focus remains in constant among the zoom range.



4.3 USING AN AUTO IRIS LENS

A. DC driver lens

When auto iris lens is used, set AI DRIVER switch to DC position and connect the plug of the lens (for iris terminal) to the IRIS terminal on the back of camera.



- DC
1. DAMP (-)
 2. DAMP (+)
 3. DRIVER (+)
 4. DRIVER (-)

B. DC Drive Level

When you use a DC Driver Lens you can adjust the DC Drive Level for the bright of video output.

RS-485 CONTROL CODES:

BAUD RATE	9600 bps
UP	20H,01H,02H,DCH
DOWN	20H,01H,03H,DBH
LEFT	20H,01H,04H,DAH
RIGHT	20H,01H,05H,D9H
ENTER	20H,01H,00H,DEH
DISPLAY MENU	20H,01H,06H,D8H
EXIT MENU	20H,01H,07H,D7H

FUNCTION KEY & OSD INDICATION :

- ? : UP key on OSD setting.
- ▼ : DOWN key on OSD setting.
- ▶ : RIGHT key for selecting or adding value on OSD setting.
- ◀ : LEFT key for selecting or decreasing value on OSD setting.
- SET : Menu/ Enter/ Confirm key.

NOTE: Please press & hold SET key more than 2 Seconds to enter Setup MENU.

OSD INDICATION :

If there is ◀ comes with each item of OSD, it means there is sub-menu. Please press SET key to execute, go to next page, or return to previous page.

MENU SETUP

Main Menu: Power on the WD Camera and press SET key for 2 seconds and then the following Main Menu will appear.

MAIN MENU	
?	PRESET NORMAL/CUSTOM/OUTDOOR/INDOOR
	EXPOSURE◀
	WHITE BALANCE◀
	VIDEO◀
	SYSTEM◀
	LOAD DEFAULT◀
	RESET CAMERA◀
	EXIT MENU◀

(I) PRESET : Set up the place of WD camera. Press UP or DOWN key to select PRESET and press LEFT or RIGHT key to select 4 kinds of preset modes as follows.

1. NORMAL Default Setting.
2. CUSTOM Customized Setting.
3. OUTDOOR Setting for outdoor use.
4. INDOOR Setting for indoor use.

(II) EXPOSURE :

EXPOSURE	
?	IRIS◀
	DAY/NIGHT ON◀/OFF
	WIDE DYNAMIC NORMAL/OFF/CUSTOM◀/HIGH
	AGC HIGH/MEDIUM/CUSTOM◀/LOW
	SLOW SHUT TIME OFF/X2/X4/X8/X16/X32
	BACKLIGHT ON◀/OFF
	RETURN◀

1. IRIS Press UP or DOWN key to select IRIS and press SET key and then the following menu will appear.

3. WIDE DYNAMIC Press UP or DOWN key to select WIDE DYNAMIC and press LEFT or RIGHT key to adjust 4 kinds of WD modes as follows.

4 kinds of WD modes:

- HIGH.
- NORMAL.
- CUSTOM Customized Setting.
- OFF.

◇ Select CUSTOM and press SET key and then the following menu will appear.

	WD RANGE	
?	LEVEL	MIN · · · · · · · · MAX
	RETURN↵	

- Press UP or DOWN key to select LEVEL and press LEFT key to decrease WD level or press RIGHT key to increase WD level.
- Press UP or DOWN key to select RETURN and press SET key to return previous page.

4. AGC : Press UP or DOWN key to select AGC and press LEFT or RIGHT key to select 4 kinds of AGC level.

- ? HIGH.
- ? MEDIUM.
- ? LOW.
- ? CUSTOM Customized Setting.

? Select CUSTOME and press SET key and then the

following menu will appear.

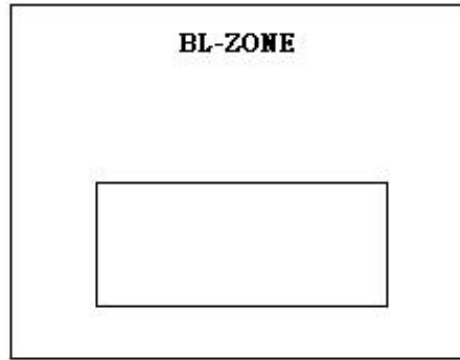
	AGC	
?	LEVEL	MIN · · · · · · · ·
	MAX	
	RETURN↵	

- ◇ Press UP or DOWN key to select LEVEL and press LEFT key to decrease AGC level or press RIGHT key to increase AGC level.
- ◇ Press UP or DOWN key to select RETURN and press SET key to return to previous page.

5. SLOW SHUT TIME Press UP or DOWN key to select SLOW SHUT TIME and press LEFT or RIGHT key to adjust SLOW SHUT TIME (6 choices).

6. BACKLIGHT : Press UP or DOWN key to select BACKLIGHT and press LEFT or RIGHT key to enable (ON) or disable (OFF) BACKLIGHT.

? BACKLIGHT function ON: Press SET key and then the following menu will appear.



- ⇒ When the frame is with WHITE color, press UP, DOWN, LEFT, or RIGHT key to move BACKLIGHT detection area. And then press SET key, the frame will be with Green color.
- ⇒ When the frame is with GREEN color, press UP, DOWN, LEFT, or RIGHT key to enlarge BACKLIGHT detection area. And then press SET key, the frame will be with RED color.
- ⇒ When the frame is with RED color, press UP, DOWN, LEFT, or RIGHT key to narrow BACKLIGHT detection area. And then press SET key, the frame will be with WHITE color.

? Press SET key again to exit BACKLIGHT

setting.

7. RETURN : Press UP or DOWN key to select RETURN and press SET key to return to previous page.

(III) WHITE BALANCE :

WHITE BALANCE	
?	WB MODE ATW↔/AWB↔/MANUAL↔
	RETURN↔

1. WB MODE Press UP or DOWN key to select WB MODE and press LEFT or RIGHT key to select

3

kinds of WB modes).

- ATW Auto Tracking White Balance. With ATW mode, it will adjust automatically in different environment. After ATW is selected and press SET key, the following menu will appear.

WHITE BALANCE LIMITS			
?	LOW	LIMIT	2K - - - - - -
			5.5K
	HIGH	LIMIT	5.5K - - - - - -
			11K
	RETURN↔		

increase WB BLUE element value.

- Press UP or DOWN key to select RETURN and press SET key to return to previous page.

2. RETURN Press UP or DOWN key to select RETURN and press SET key to return to previous page.

(IV) VIDEO :

VIDEO	
?	BRIGHTNESS↵
	SHARPNESS↵
	SATURATION↵
	RESOLUTION HIGH/NORMAL
	B/W MODE COLOR / BW
	RETURN↵

1. BRIGHTNESS Press UP or DOWN key to select BRIGHTNESS and press SET key and then the following menu will appear.

BRIGHTNESS	
?	LEVEL MIN · · · · · · ·
	MAX
	RETURN↵

- Press UP or DOWN key to select LEVEL and press LEFT key to decrease BRIGHTNESS LEVEL or press RIGHT key to increase BRIGHTNESS LEVEL.
- Press UP or DOWN key to select RETURN and then press SET key to return to previous page.

2. SHARPNESS Press UP or DOWN key to select SHARPNESS and press SET key and then the following menu will appear.

SHARPNESS	
?	SHARPNESS MIN · · · · · · ·
	MAX
	APERTURE MIN · · · · · · ·
	MAX
	RETURN↵

- Press UP or DOWN key to select SHARPNESS and press LEFT key to decrease SHARPNESS or press RIGHT key to increase SHARPNESS.
- Press UP or DOWN key to select APERTURE and press LEFT key to decrease APERTURE or press RIGHT key to increase APERTURE.
- Press UP or DOWN key to select RETURN and press SET key to return to previous page.

3. SATURATION Press UP or DOWN key to select SATURATION and press SET key and then the following will appear.

- ↵ UP-RIGHT.
- ↵ DWN-LEFT DOWN-LEFT.
- ↵ DWN-CENTER DOWN-CENTER.
- ↵ DWN-RIGHT DOWN-RIGHT.

- Press UP or DOWN key to select RETURN and press SET key to return to previous page.
2. LANGUAGE Press UP or DOWN key to select LANGUAGE and press LEFT or RIGHT key to select ENGLISH, TRADITIONAL CHINESE or SIMPFIFIED CHINESE.
 3. SYNC Press UP or DOWN key to select SYNC and press LEFT or RIGHT key to choose INTERNAL or LINELOCK.

After LINELOCK is selected and press SET Key, the following menu will appear.

LINELOCK	
?	V PHASE 0
	- - - - - - - 624
	RETURN↵

- Press UP or DOWN key to select V PHASE and press LEFT or RIGHT key to adjust VERTICAL PHASE.
 - Press UP or DOWN key to select RETURN and press SET key to return to previous page.
4. FW Version Firmware Version.
 5. RETURN Press UP or DOWN key to select RETURN and press SET key to return to previous page.

(VI) LOAD : LOAD Default.

LOAD DEFAULT SETTINGS?	
?	NO↵
	YES↵

1. NO Press UP or DOWN key to select NO and press SET key to return to previous page. In the other words, it won't LOAD DEFAULT.
2. YES Press UP or DOWN key to select YES and press SET key to LOAD DEFAULT. In addition, it will get back to previous page automatically.

(VII) RESET CAMERA : Press UP or DOWN key to select RESET CAMERA and press SET key to RESET. It will recover the previous setting.

(VIII) EXIT MENU : Press UP or DOWN key to select EXIT MENU and press SET key to EXIT OSD MENU. In addition, it will save all settings.