

Marshall

Broadcast A/V Division



CV380-CS

True 4k30 Compact Camera

User Manual

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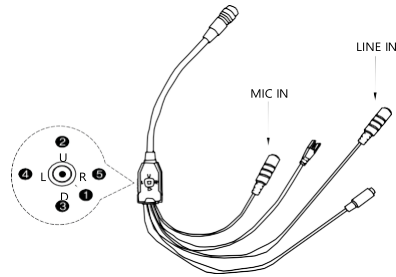
1. Menu Structure

SETUP	SUB MENU	SUB MENU
WB CONTROL	ATW	
	AWB	
	ONE PUSH	
	INDOOR	
	OUTDOOR	
	MANUAL	BLUE
		RED
AE CONTROL	BLACK BALANCE	AUTO
		MANUAL
		AGC MAX
		SENS UP
		AE BRIGHT
	AUTO	FLK CONTROL
		LENS MODE
		SHUTTER
		AGC MAX
	SHUT FIX	SENS UP
		AE BRIGHT
		AGC
		AE BRIGHT
	AGC FIX	FLK CONTROL
LENS MODE		
SHUTTER		
AGC		
MANUAL	SENS UP	

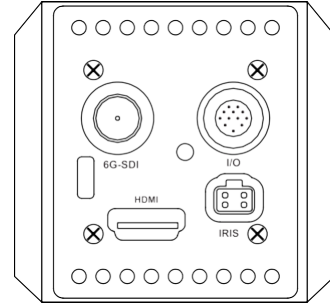
SETUP	SUB MENU	SUB MENU
DAY/NIGHT	DAY	
	NIGHT	NIGHT COLOR
	AUTO	
AUDIO	MIC/LINE	
	AUDIO LEVEL	
	MIC ATTENUATOR	
	SAMPLE BITS	
IMAGE CONTROL	LENS SHADING	
	CONTRAST	
	BRIGHTNESS	
	SATURATION	
	HUE	
	EDGE ENHANCE	
	AUTO SATURATE	
	AUTO EDGE	
	BLACK LEVEL	
	GAMMA CORRECT	
	DNR	DNR MODE
		DNR LEVEL
SPECIAL	DZOOM	
	DEFOG	
	DIS	
	BACKLIGHT	
	BINNING	
	DEFECT PIXEL	
	DISP FUNCTION	
	FLICKER DETECT	

SETUP	SUB MENU	SUB MENU
SPECIAL	PRIVACY	
PICTURE STYLE	MATRIX	
	WHITE BALANCE	
	GAMMA	
	DETAIL	
SETUP	CAM TITLE	
	COMMUNICATION	RS-485/ID
	Model	
	S/W Ver	
	OUTPUT FORMAT	
RESET	USER/FACTORY	
EXIT		

2. OSD Joystick and Button



I/O Cable for CV380-CS



CV380-CS

- ① SET *Used to access the menu and confirm selection.*
- ② UP *Used to move the cursor up.*
- ③ DOWN *Used to move the cursor down*
- ④ LEFT *Used to move the cursor to left and change the value.*
- ⑤ RIGHT *Used to move the cursor to right and change the value.*

Press SET button to access the MAIN MENU.

Use the UP & DOWN buttons to select the desired item

MENU	
WB CONTROL	AUTO
AE CONTROL	>
DAY/NIGHT	AUTO>
AUDIO	>
IMAGE CONTROL	>
SPECIAL	OFF
SETUP	>
RESET	ON>
EXIT	

Use the LEFT & RIGHT buttons to change the sub-item

> Icon indicates "Press OSD Button" or "Enter Sub Menu"

3. WB CONTROL

Select WB CONTROL using the UP or DOWN button. You can change between AWB, ATW, PUSH, INDOOR, OUTDOOR and MANUAL using the LEFT or RIGHT buttons.

- **AWB:** Controls the automatic adjustment of the light source's color temperature from 3,000°K ~ 8,000°K.
 - **ATW:** Continuously adjusts camera color balance in accordance with any change in color temperature. Compensates for color temperature changes within the range of 1,900°K to 11,000°K.
 - **BLUE OFFSET:** Adjust the Blue tone within AWB and ATW modes. (0 ~100)
 - **RED OFFSET:** Adjust the Red tone within AWB and ATW modes. (0~100)
 - **PUSH:** Color temperature will be manually adjusted by pushing the OSD button. Place the white paper in front of the camera when OSD button is pressed to obtain optimum result.
 - **MANUAL:** Select this to fine-tune White Balance manually.

You can adjust the blue and red tone level manually.

 - **BLUE:** Adjust the Blue tone of the image. (0~255)
 - **RED:** Adjust the Red tone of the image. (0~255)
 - **INDOOR:** Select this to adjust white balance to indoor lighting condition.
 - **OUTDOOR:** Select this to adjust white balance to outdoor lighting condition.
- BLACK BALANCE (AUTO and MANUAL)**
- **MANUAL** – Adjust the Blue, Red and Green components of black.

Continued on next page.

5. WB CONTROL

1. *Adjust White Balance first by using the AWB or ATW mode before switching to MANUAL mode.*
2. *White Balance may not work properly under the following conditions. In this case, select the ATW mode.*
 - *When the ambient illumination of the subject is dim.*
 - *If the camera is directed towards a fluorescent light or installed in a place where illumination changes dramatically, the White Balance operation may become unstable.*

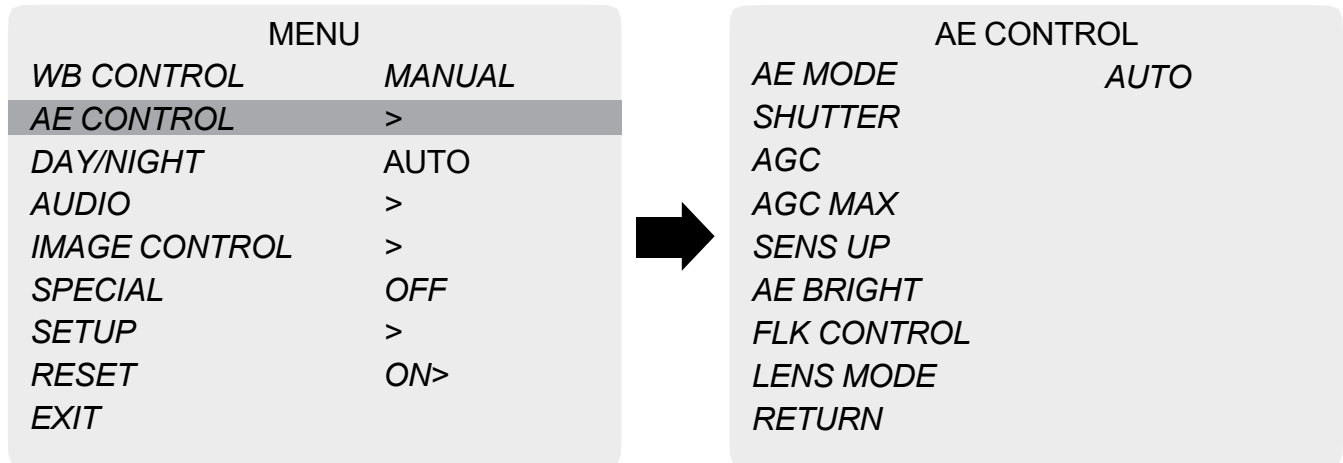
MENU	
WB CONTROL	MANUAL
AE CONTROL	>
DAY/NIGHT	AUTO>
AUDIO	>
IMAGE CONTROL	>
SPECIAL	OFF
SETUP	>
RESET	ON>
EXIT	



WB CONTROL	
MODE	PUSH
BLUE	10 ▬▬▬▬▬▬▬▬▬▬
RED	10 ▬▬▬▬▬▬▬▬▬▬
RETURN	>

6. AE CONTROL

Select AE CONTROL using the UP or DOWN button. You can select one sub-mode using the UP or DOWN buttons.



- **AUTO:** Adjusts the exposure level automatically. Detailed fine-tuning options are available under this menu.
- **SHUT FIX:** Provides more detailed shutter speed options. All other controls are tuned for the selected shutter speed.
- **AGC FIX:** Provides more detailed gain option. All other controls are tuned for the selected gain value.
- **MANUAL:** Adjusts the exposure level manually.
 1. **SHUTTER:** Speed can be set at auto or manual. (1/30~1/10,000)
 2. **AGC:** Electronic gain level can be controlled. (0dB ~ 46dB)
 3. **AGC MAX:** Used to set maximum gain value to control the video noise caused by Auto Gain Control. (0 ~ 15)
 4. **SENS UP:** Controls the digital slow shutter to allow extra light into the camera and adjust the picture quality. (Off, x2 ~ x15)
 5. **AE BRIGHT:** Select this to adjust auto exposure brightness levels. (0~24)
 6. **FLK CONTROL:** Provides a proper image sensor frequency to match the power frequency in order to minimize video flicker.
 7. **LENS MODE:** Lens setting will be optimized for selected environment, for DC Iris lens only.

Note: DC Iris is automatically set by camera ISP. It's not manually adjustable.

7. DAY / NIGHT

Select *DAY*, *NIGHT* or *AUTO* using the *Right* or *Left* button.

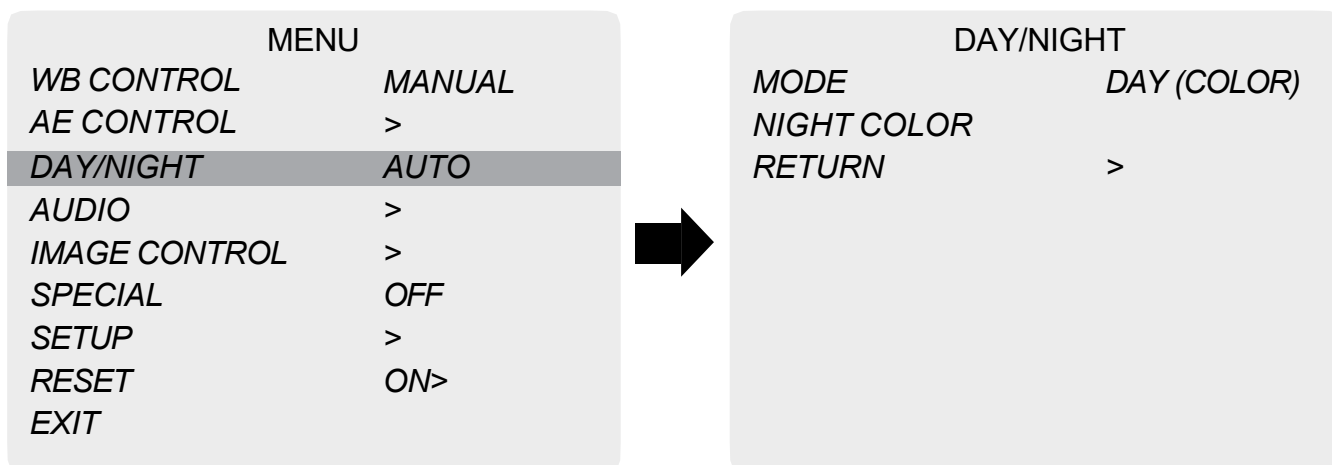
MODE: Set camera to either color mode or B&W mode. (Day, Night, Auto)

DAY: When set to DAY mode, camera stays in color and IR cut filter is engaged.

NIGHT: When set to NIGHT mode, camera stays in B&W and IR cut filter is removed.

- **NIGHT COLOR:** When on, camera stays on color mode. Night (B&W) can be selected from this mode. (On, Off)

AUTO: When set to AUTO mode, camera automatically switches between DAY and NIGHT mode depending on lighting condition.



8. AUDIO

Select *AUDIO* using the *UP* or *DOWN* button and enter *ON* using *SEL* button. You can select one sub-mode using the *UP* or *DOWN* buttons.

- **MIC / LINE:** When using audio microphone use MIC mode, when using other audio sources use LINE setting
 - **AUDIO LEVEL:** Select this to adjust audio levels manually.
 - **MIC ATTENUATOR:** Audio attenuation can be controlled from this menu to minimize the audio noise level
1. **SAMPLE BITS:** Select the bit depth of audio

MENU	
WB CONTROL	MANUAL
AE CONTROL	>
DAY/NIGHT	AUTO
AUDIO	>
IMAGE CONTROL	>
SPECIAL	OFF
SETUP	>
RESET	ON>
EXIT	

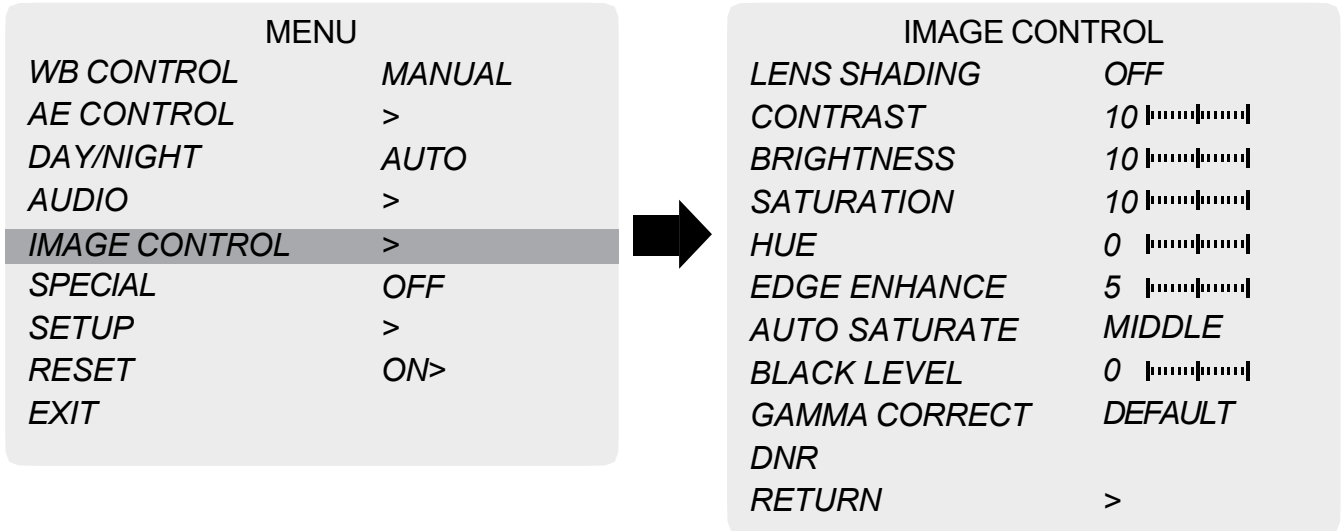


AUDIO	
MIC LINE	
AUDIO LEVEL	24
MIC ATTENUATOR	
SAMPLE BITS	24 BITS
RETURN	>

9. IMAGE CONTROL

Select **IMAGE CONTROL** using the **UP** or **DOWN** button.

You can select **LENS SHADING**, **CONTRAST**, **BRIGHTNESS**, **HUE**, And **EDGE ENHANCE** using the **UP** or **DOWN** buttons.



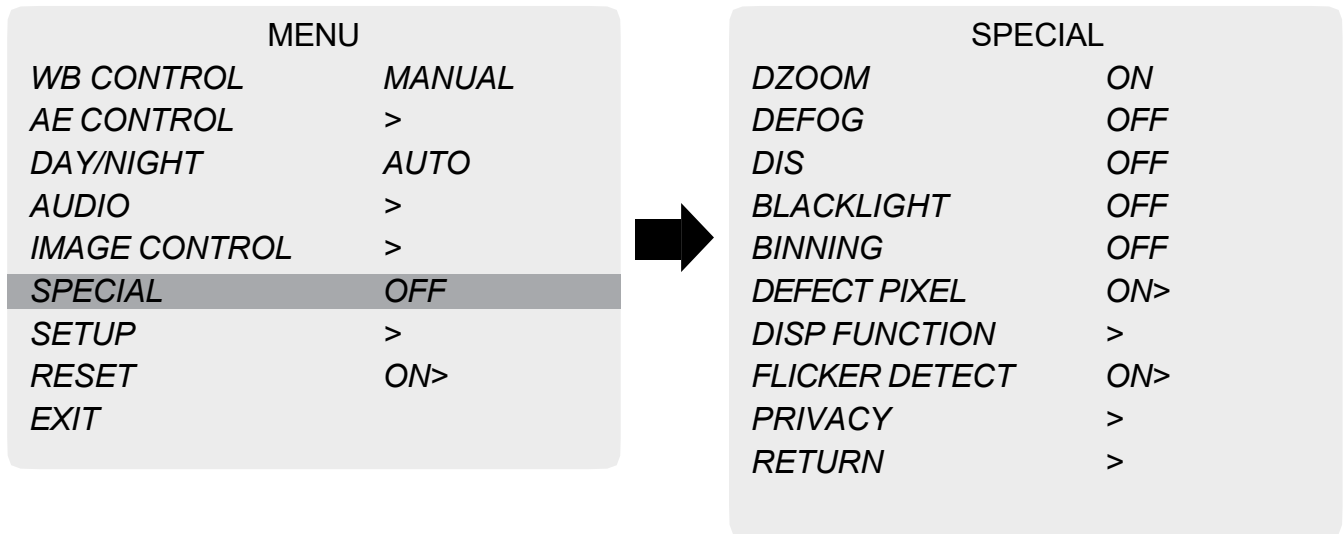
- **LENS SHADING:** Corrects inconsistent brightness level in the image.
- **CONTRAST:** Adjust the image contrast level.
- **BRIGHTNESS:** Adjust the image brightness level.
- **SATURATION:** Adjust the image saturation level.
- **HUE:** Adjust the image hue level.
- **EDGE ENHANCE:** Adjust the image sharpness level.
- **AUTO SATURATE:** Decrease saturation automatically when noise scene is detected.
- **AUTO EDGE:** Adjust sharpness level automatically.
- **BLACK WHITE LEVEL:** Adjust the image black level and white level value.
- **GAMMA CORRECT:** Adjust the image output gamma level.
- **DNR:** Reduces video noise at low ambient light.

Select the **DNR** level from **AUTO**, **LOW**, **MIDDLE**, and **HIGH** using the **LEFT** or **RIGHT** button.

10. SPECIAL

Select *SPECIAL* using the UP or DOWN button.

You can select *DEFOG*, *BACKLIGHT*, *DEFECT PIXEL*, and *FLICKER DETECT* using the UP or DOWN buttons.



- **DZOOM:** Digitally zoom the video by the desired ratio.
- **DEFOG:** This feature will help increase visibility in extreme weather conditions, such as fog, rain, or in strong luminous intensity.
- **DIS:** This feature enables digital image stabilization.
- **BACKLIGHT:** Adjust backlight compensation by choosing either BLC or HLM from this menu.
- **BINNING:** Enable or disable pixel binning.
- **DEFECT PIXEL:** Advanced defective pixel correction menu.
- **DISP FUNCTION:** Display effects such as freeze mirror, rotation, and style can be applied from this menu.
- **FLICKER DETECT:** Adjust the image sensor frequency to match the power frequency.
- **PRIVACY:** Mask an area you want to hide on the screen by applying the privacy zones.

11. PICTURE STYLE

MAIN MENU	
WB CONTROL	MANUAL
AE CONTROL	>
DAY/NIGHT	AUTO
AUDIO	>
IMAGE CONTROL	>
SPECIAL	OFF
PICTURE STYLE	OFF
SETUP	>
RESET	ON>
EXIT	



PICTURE STYLE	
STYLE	USER
MATRIX	OFF
WHITE BALANCE	OFF
GAMMA	OFF
DETAIL	OFF
DEFAULT	>
SAVE	PRESS OK
RETURN	

- **STYLE:** 6 different settings can be assigned.
- **MATRIX:** Matrix feature can be configured.
 1. **STYLE:** 4 predefined color matrix styles are available to choose from.
 2. **MASTER LEVEL:** Fine adjustment of master color gain (saturation).
 3. **MASTER PHASE:** Fine adjustment of master color hue.
 4. **COLOR SEL:** Select color to be adjusted. 6 colors to choose from.
 5. **COLOR LEVEL:** Fine level adjustment of selected color.
 6. **COLOR PHASE:** Fine phase adjustment of selected color.
- **WB:** Adjust camera white balance within the selected picture style.

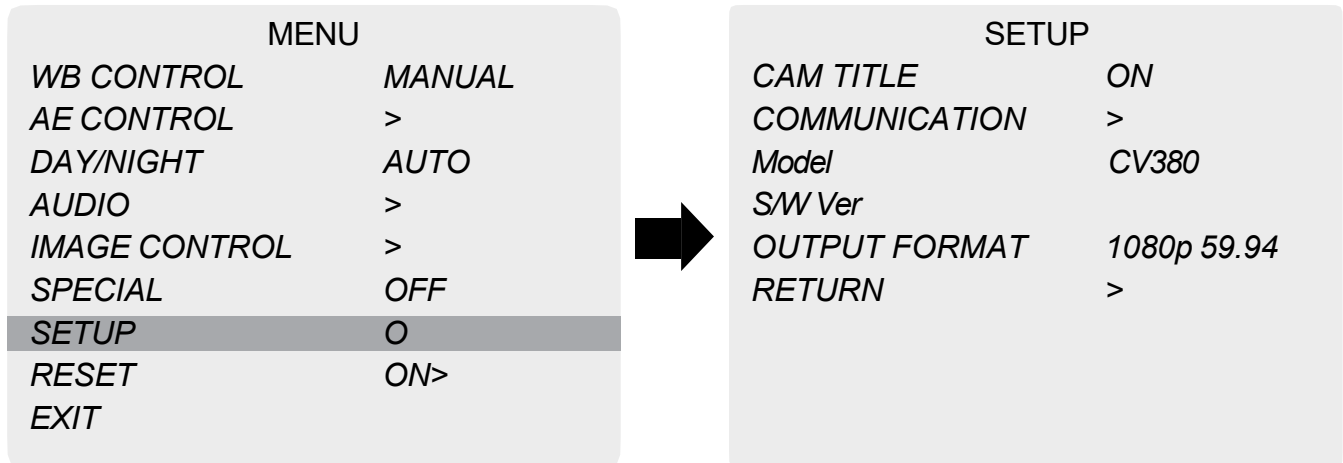
WB feature is identical as the one on the main menu. When Picture Style WB is enabled, main menu WB will be disabled.
- **GAMMA:** Adjust camera gamma value within the selected picture style.

Gamma feature is identical as the one from the main menu. When Picture Style Gamma is enabled, main menu Gamma will be disabled.
- **DETAIL:** Adjust camera peak levels (sharpness) balance within the selected picture style.
 1. **H-PEAK LEVEL:** Adjust horizontal peak level.
 2. **V-PEAK LEVEL:** Adjust vertical peak level.
 3. **VIDEO DEPENDENT:** Adjust image crispening.
 4. **CLIP & CLIP LEVEL:** Adjust sharpness peak clip.
- **DEFAULT:** Reset the selected user number to the default value.
- **SAVE:** Save the selected user settings.

10.SETUP

CAMERA setup can be adjusted from this menu.

You can select CAMERA ID, Communication, System Info, and Output Format using the UP or DOWN buttons.



- **CAM TITLE:** Camera title can be turned ON or OFF.
- **COMMUNICATION:** VISCA communication can be adjusted.
 1. **CAM ID:** Camera ID can be setup. (0~254)
 2. **ID DISPLAY:** Camera ID display can be displayed.
 3. **BAUDRATE:** Camera baudrate can be set.
(2400, 4800, 9600, 19200, 38400, 115200)
- **Model:** CV380
- **S/W ver:** Camera firmware version
- **OUTPUT FORMAT:** Camera resolution and frame rate can be set.
(1080 by default)

Select the FRAME RATE using the LEFT or RIGHT buttons.

Available Frame Rates are:

4096 x 2160p 30, 29.94, 25, 24, 23.98

3840 x 2160p 30, 29.94, 25, 24, 23.98

1920 x 1080p 60, 59.94, 50, 30, 29.97, 25, 24, 23.98

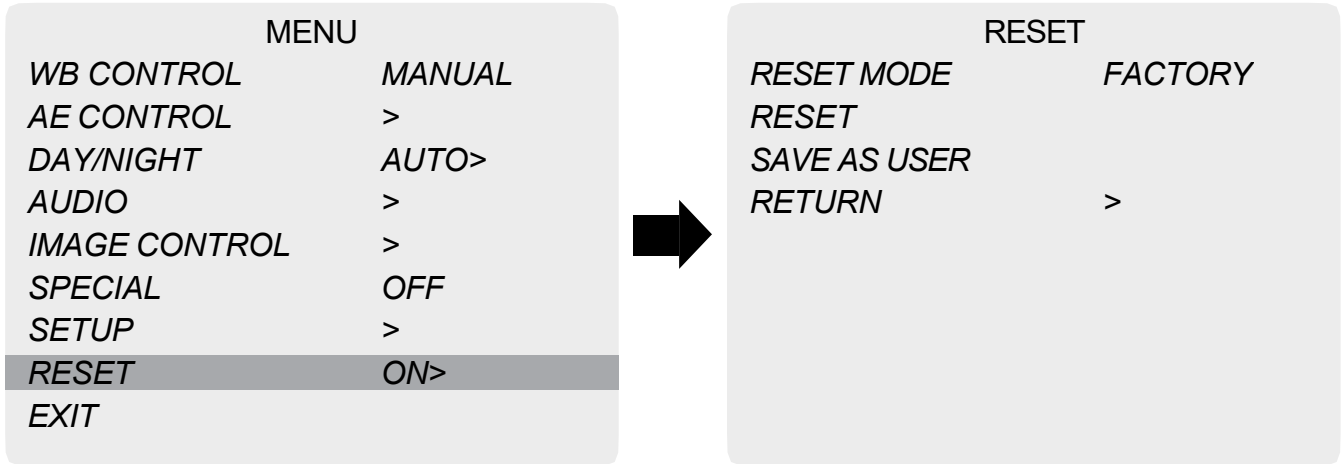
1920 x 1080i 60, 59.94, 50

1280 x 720p 60, 59.94, 50

11.RESET

Select **RESET** using the **UP** or **DOWN** buttons.

- **RESET:** Reset the camera settings the factory defaults or user setting value.



- **ON:** Set the camera setting to either “FACTORY” or “USER” of “CHANGE” menu. Make sure to select the right mode from “CHANGE” before defaulting the camera.
- **RESET MODE:** Select the desired setting mode.

Select from **USER** or **FACTORY** using the **LEFT** or **RIGHT** button.

1. **USER:** Select “USER” if setting value user saved last is needed.
2. **FACTORY:** Select “FACTORY” if factory default setting is needed.
“FRAME RATE”, “CAM ID”, and “BAUDRATE” will not change.

To **RESET** Camera to default settings (1920x1080p30fps) power-cycle the camera then use the following combo on OSD Joystick: UP, DOWN, UP, DOWN, then push and **HOLD** joystick in for 5 seconds then release.

12.EXIT

Select *EXIT* using the *UP* or *DOWN* button.

MENU	
<i>WB CONTROL</i>	<i>MANUAL</i>
<i>AE CONTROL</i>	<i>></i>
<i>DAY/NIGHT</i>	<i>AUTO</i>
<i>AUDIO</i>	<i>></i>
<i>IMAGE CONTROL</i>	<i>></i>
<i>SPECIAL</i>	<i>OFF</i>
<i>SETUP</i>	<i>></i>
<i>RESET</i>	<i>ON></i>
<i>EXIT</i>	

- i. **SAVE:** Exit the setup after saving the value changes.

13.TROUBLESHOOTING

Before sending the camera for repair, please check below to make sure that the camera is installed correctly. If it still does not perform adequately, please consult with your supplier.

Problem	Solutions
Nothing appears on the screen.	<ol style="list-style-type: none">Check that all connected devices are powered on.Confirm that the voltage is correct.Confirm that the power supply provides enough current to power the camera.Check that all video cables are correctly connected.
The picture is not clear.	<ol style="list-style-type: none">Check that your monitor is correctly adjusted.Confirm that the glass in front of the lens is clean. If there is dust, dirt, or fingerprints on the glass, the image quality will be affected. To clean the glass, use a soft, dry, and non-abrasive cloth or a commercially available lens cleaning set.Correctly adjust the focus.
The picture has interference.	<ol style="list-style-type: none">The camera may be close to a high voltage source, such as a power generator.The BNC cable is not terminated properly.The video cables are not connected properly.
The picture is flickering continually.	<ol style="list-style-type: none">Check the termination and set the impedance at 75Ω properly.Ensure that the camera is not pointing towards the Sun or any light source.Check if there is any intermediate device.Check if the distance of the video cable exceeds the maximum transferable limitation.
The camera is not synchronizing with the reference signal.	<ol style="list-style-type: none">Make sure Tri-Level reference signal is used.Locking takes up to 1 minute depending on the signal strength. Make sure the sync LED is solidly lit.Check if the cable and connectors used in reference sync are in good condition.Make sure the cable length used in reference sync does not exceed 100 ft.Make sure OUTPUT EN is on when using the genlock output.

Warranty

For Warranty information please refer to Marshall website page:

<https://marshall-usa.com/company/warranty.php>

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