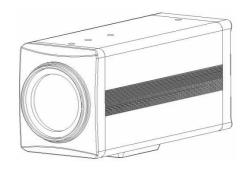


VHD-J2100S HD Color Box Camera



The user manual

V1.9 edition

(Englishedition)

ValueHD Corporation

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1 Notes

Electric Safety

Installation and operation must accord with electric safety standard.

Caution to transport

Avoid stress, vibration and soakage in transport, storage and installation.

Polarity of power supply

The power supply of the product is +12V, the max electrical current is 2A .Polarity of the power supply plug drawing as follows.



Careful of installation

Do not grasp the camera head when carrying the camera. Don't turn camera head by hand. Doing so may result in mechanical damage.

Never power on before installation is not completed.

Don't dismantle the camera

We are not responsible for any unauthorized modification or dismantl- eing.

△CAUTION!

The specific frequency of electromagnetic field may affect the image of the camera!

2 Main Features

•1080 p HD images

Use the Japanese panasonic new a third of an inch, and 2.12 million pixels high quality HD CMOS sensor, which can realize the biggest 1920 x1080 high-resolution images with good quality and the output frame rate of 30 frames per second.

•Low-light

High SNR **CMOS** of sensor effectively reduce image noise. low illumination conditions and application of the noise reduction of 2D and 3D noise reduction algorithm based on motion estimation, effectively reduce the noise, even under low illumination conditions. keep clean and clear picture.

High-definition digital interface

Support hd-sdi interface, the effective transmission distance up to 200 meters.

• Wide dynamic range

Unique Iridix exposure dynamic control algorithm based on human eye model, uniform picture exposure, administrative levels feeling. By the support of the industry's most advanced WDR (wide dynamic range) CMOS sensor, cooperate Iridix processing, in strong contrast between light and shade environment (e.g., light), can capture imaging clearly all scenery.

• Support flip/mirror

Support the camera flip, mirror function, meet the demand of different scenarios.

Motion Detection

Support motion detection function, reduce the cost of manual monitoring places of public institutions and enterprises, and to avoid staff fatigue caused by long-term unattended monitoring errors, greatly improve the efficiency of surveillance and monitoring accuracy.

Back keyboard directly control

Camera back with 5 buttons, exposure compensation can be performed, white balance, automatic gain adjustment and save, do not need to borrow the RS485 and RS232 all basic operations can be realized.

•RS232 remote control

Using RS232 serial port command (VISCA) interface, all parameters of the camera may be remotely high-speed communications control.

3 Standard Accessories

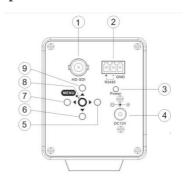
When opened the package, please check and confirm that all attachments shall be provided:

Auto Focus type HD Color Box Camera x1
The user manual x1
Certificate/warranty card x1

4 Camera Description

• The back of the interface

specifications

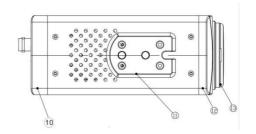


- 1. HD-SDI interface
- 2. RS485 interface
- 3. Work light
- 4. DC12V power light
- 5. Right key
- 6. Down key
- 7. Left key
- 8. OK key
- 9. Up key

Operating tips

Press "OK" button and then to electricity and keep holding down the "OK" button 8 seconds, the camera will restore factory Settings.

Camera appearance



- 1. Machine cover
- 2. Installation positioning tra
- 3. The front cover of the machine
- 4. Lens cap

Operating tips

Both sides threaded hole is consistent with the positioning hole size, installation can be used instead of each other.

5 OSD Menu Operation

•Key Description

The camera USES five buttons, respectively, to determine key [OK], select key 【▲▼】 up and down, left and right sides choose key "【◆】; Under normal image press "OK" key, the screen displays the main menu, press 【▲▼】, from top to bottom cycle options menu item and press 【◆▶】 select menu options, use a scroll arrow or highlight the selected item, press menu button "OK" to highlight the menu item; Each menu page has a "Return" option, to Return to the superior menu or exit the menu.

•MENU(Main Menu)

Directly press "OK" button to enter the main menu.

MENU

► Exposure

Color

Image

Focus

Noise Reduction

Setting

Version

Restore Factory Settings

Exit

Operating tips

Use the select key up and down [AV] Choose a menu item, press [OK] to enter submenu.

choose[Exit]press 【OK】 to exit menu.

EXPOSURE

EXPOSURE	
▶ Mode	Full Auto
ExpCompMod	Off
GainLimit	3
Backlight	Off
DRC Strength	1
Anti Flicker	Off
Return	

Operating tips

Mode: Set the camera exposure mode, Optional items: Full Auto, Shutter Priority, Bright, Manual, Iris Priority.

Shutter: Set the Shutter values, only when the Mode for the Shutter Priority Mode and Manual Mode effective, Optional items: 1/10000s,1/6000s,1/4000s,1/3000s,1/2000s,1/1 500s,1/1000s,1/725s,1/500s,1/30s,1/250s,1/20 0s,1/125s,1/100s,1/90s,1/60s,1/30s.

Iris: Set the Iris values, only when the Mode for the Iris Priority and Manual Mode effective, Optional items:F1.8,F2.0,F2.4,F2.8,F3.4,F4.0,F4.8,F5.6,F6.8,F8.0,F9.6,F11.0,Clos e

GainLimit: Set the Gain value, Optional items: $0 \sim 15$.

Bright: Set the brightness values, only when the effective Mode for Bright Mode, Optional items: $0 \sim 17$.

ExpCompMode: Set the exposure compensation mode, can be installed: On, Off.

ExpComp: Set the exposure compensation value, only when ExpCompMode item to On effective, Optional items: $-7 \sim 7$.

Backlight: Set the backlight compensation, Optional items: On, Off.

DRC Strength: Set up digital wide dynamic strength, can set up different levels of wide dynamic effect, Optional items: $0 \sim 8$.

Anti Flicker: Set the flashing function, Optional items: 50Hz,60Hz,Off.

Return: get back

• COLOR

COLOR	
▶ WB Mode	Auto
RG Tuning	0
BG Tuning	0
Saturation	100%
Hue	7
IR Filter	3
AWB sens	Low
Style	Style1
Return	

Operating tips

WB Mode: Set the camera white balance mode, Optional items: Auto, Indoor, Outdoor, One Push WB(OK), Manual.

R Gain: Adjust the camera white balance mode of red gain, are effective only when the white balance mode to Manual, Optional items: $0 \sim 255$.

B Gain: Adjust the camera white balance mode of blue gain, are effective only when the white balance mode to Manual, Optional items: $0 \sim 255$

RG Tuning: Red gain fine-tuning, Optional items: $-10 \sim +10$.

BG Tuning: Blue gain fine-tuning, Optional items: $-10 \sim +10$.

Saturation: Color saturation adjustment, Optional items: $60\% \sim 200\%$.

Hue: Chroma adjustment, Optional

items:0 ~ 14.

IR Filter: Choose IR Filter, Optional items:1,2,3.

AWB sens: The white balance sensitivity, Optional items: Low, Middle, High.

Style: Optional items: Style1, Style2, Style3.

Return: get back.

IMAGE

IMAGE		
Luminance	6	
Contrast	6	
Sharpness	1	
Flip-H	Off	
Flip-V	Off	
Return		

Operating tips

Luminance: **Brightness** adjustment, Optional items: $0 \sim 14$.

Contrast: Contrast adjustment, Optional items: $0 \sim 14$.

Sharpness: Sharpness adjustment, Optional items: Auto, $0 \sim 15$.

Flip-H: Image flipped horizontally. Optional items: On, Off.

Flip-V:Image Flip Vertical. Optional items: On, Off.

Return: get back.

FOCUS

FOCU	S
▶D-Zoom Limit	x1
AF Sensitivity	Low
Auto Focus	On

B Operating tips

Return

Z-Doom Limit: Digital zoom camera settings, Optional items:x1.

AF Sensitivity: Focus camera sensitivity, Optional items: Low, Middle, High.

Auto Focus: Autofocus camera settings, Optional items: On, Off.

Return: get back.

NOISE REDUCTION

NOISE RE	DUCTION
▶2D NR	3
3D NR	3
Return	

Operating tips

2D NR: 2D noise reduction, Optional items: $1 \sim 5$. Close, Auto.

3D NR: 3D noise reduction, Optional items:1 ~ 8,Close.

Return: get back.

SETTING

SETTING

LanguageEnglishProtocolVISCAVISCA Address1Baudrate9600Video Format720P50

Operating tips

Return

Language: Language Settings, Optional items: English, Chinese.

Protocol: Communication protocol
Settings, Optional items: VISCA, PELCO-D,
PELCO-P.

P-P Address: Address of the Visca Settings, Optional items: $0 \sim 7$.

P-D Address: P-D address settings, valid in PELCO-D mode, Optional items: 0 ~ 254.

P-P Address: P-P address settings, valid in PELCO-P model, Optional items: $0 \sim 31$.

Baudrate: Camera baud rate Settings, Optional items: 38400,19200,9600,4800,2400.

Video Format: Camera system Settings, Optional items:1080P30,1080P25,1080I60, 1080I50,720P60,720P50.

Return: get back.

VERSION

VERSION		
Verion	1.22	
Data	2014-11-12	
IR Filter Type	3	
AF Version	0.1.24	
► Return		

RESTORE FACTORY SETTINGS

RESTORE FACTORY SETTINGS ▶ Yes No Return

Operating tips

Yes: verify, press [OK] to restore factory Settings.

No: cancel, press [OK] to back to menue. Return: get back.

6 Maintenance and

troubleshooting

• Maintenance of the camera

If the camera is not used for a long time, after use, please disconnect the power switch, at the same time the ac power adapter and ac socket to disconnect.

Clear the dust on the camera housing, please use soft cloth or cotton paper.

Clean the camera lens, please use dry soft cloth to wipe, such as dirt serious when, please use neutral detergent wipe gently. Don't use strong or with corrosive cleaner, so as to avoid the lens scratches, influence the image effect:

• Beyond the camera work intensity of illumination

Camera may be more than camera work intensity of illumination, the image cannot achieve the best effect.

• The camera should avoid using at the following specific situation

Camera should avoid shooting especially bright objects, such as sunshine, lamplight, etc.

The camera don't work in lighting conditions unstable environment, otherwise the image will happen.

Don't can launch a large power of the facilities around the use of radio waves, such as television or radio transmitters, etc.

7 Fault phenomenon and

processing

Images

Display shows no image

1,Check whether the camera power supply is connected and the voltage is normal,

whether the power light shine.

2,Check whether video platform, TV cable connection is normal

3,Check for manual lens aperture and open the aperture.

Sometimes there is no image

1,Check whether video platform, TV cable connection is normal.

2,check whether the camera installation safety, if there is a strong shock.

image blurring

1, Check whether the installation.

2,Check whether the lens focusing accurately.

Control

Serial port can't control

1,The camera control parameters is set up correctly.

2,Check whether control line connection is good.

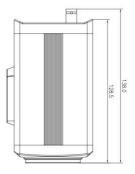
8 Standard Specification

	VHD-J2100S
Model parameter	200 万 1/3" CMOSAuto Focus type HD Color Box Camera (SDI)
Camera	
Sensor Type	1/3" CMOS
Scanning mode	Progressive
Minimal	0.05 Lux @ (F1.2, AGC ON)

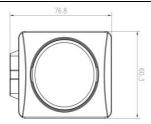
Shutter	1/25s 秒~ 1/10000 秒
Shutter	
WB Mode	Auto, indoor and outdoor,
	manual, One Push
Day And Night	ICR Infrared filter plate
System	
Digital noise	2D, 3D Digital noise reduction
reduction	2D, 3D Digital hoise reduction
Motion	gunnort
detection	support
Backlight	
compensation	support
Len	
Focal Length	20X , 4.42mm~88.5mm
Digital zoom	4x
Iris	F1.6~F2.8
Horizontal FOV	60.7° ~ 3.36°
Vertical FOV	34.1° ~1.89°
Image	
Maximum	1020 1090
image size	1920 x 1080
SDI output	1080p30, 1080p25,1080i60
format	1080i50,720p60, 720p50
SNR	≥55dB
Port	
video interface	One way HD-SDI (75Ω/BNC)
Communication	RS485
interface	N3403
Key	5
Other Features	
Day & Night	t AGC Type
	L OVIV. I VUG

	7 till 11g11to 10001 v 0a
Anti-Flicker	Off, 50Hz, 60Hz
Image inversion	H, V, HV
Generic specification	
IP level	IP60
Power supply	DC12V±10%
Working temperature and humidity	-40°C ~60°C humidity<95% (No conde nsation)
power dissipation	≤3.5W
size	138.5mmx76.8mmx60.3mm
weight	1Kg
mean time between failures	60000h

9 **Dimension**



Top view



Front view

10 Copyright Notice

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