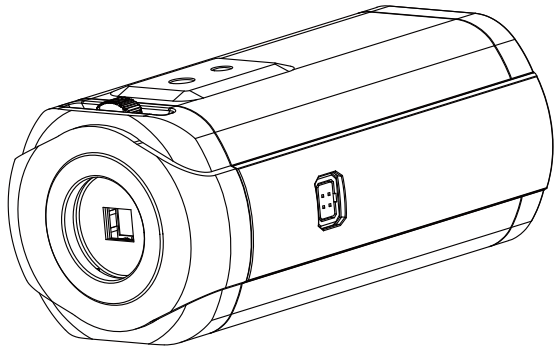


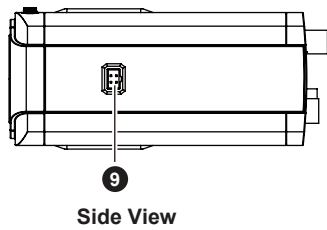
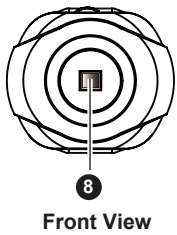
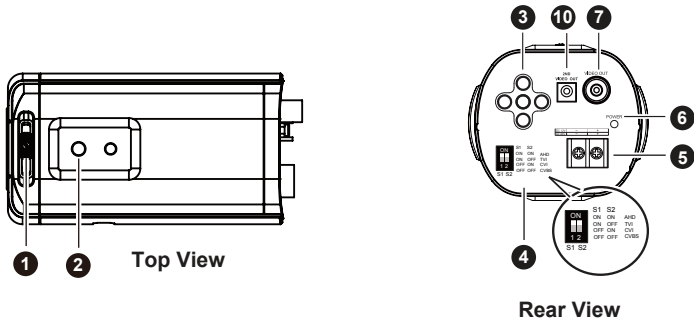


Analog HD Box Camera User Manual



V531-CR037-200
VER. 03/2020

Parts Descriptions



1. Back Focus Adjustment
2. Bracket Mount
3. OSD Control
4. Dip Switch
5. Power Input Terminal Block
6. Power LED Indicator
7. BNC Composite Video Output
8. CMOS Sensor
9. DC Lens Connector
10. Second Video Output

Accessories

C-CS Mount Adaptor X1

Specifications

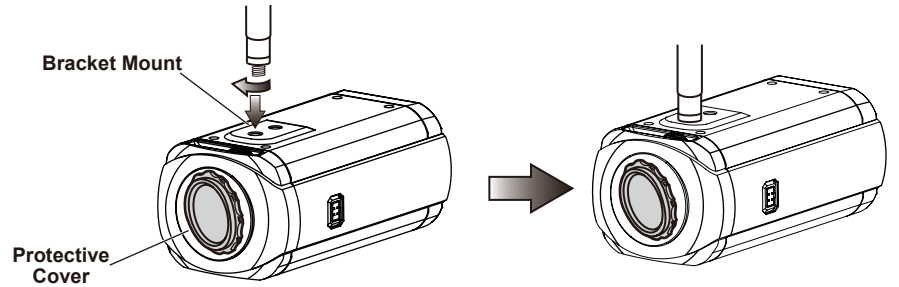
General Specifications	
TV System	NTSC / PAL
Scanning Frequency	NTSC: 60Hz / PAL: 50Hz
Iris Type	Auto Iris
Image Sensor	1/2.8" CMOS Sensor
Effective Picture	2.13 Megapixel
Resolution	1945(H)*1097(V)
S/N Ratio	≥42 dB (AGC Off)
Minimum Illumination	Color DSS: 0.0017Lux, BW DSS: 0.00008Lux
Video Output	AHD/TVI/CVI/CVBS
Power Source	DC12V±10%; AC24V±20%
Power Consumption	7.6W Max
Operating Temperature	-10 C ~+50 C
Storage Temperature	-20 C ~+60 C
Functional Specifications	
AES	AUTO/1/50 (60) -1/60000 Sec
BLC/HLC	Off / On
AGC Gain Control	Support
Day/Night Control	Auto/External Control/Color/B&W
White Balance	Auto / Auto Ext / Preset / Manual
UTC Remotely Transmission	DVR Remotely Control
T-WDR	Off / Low / Middle / High; WDR S/N Ratio:120dB
Defog	Off / On, Low / Middle / High
Motion Detection	OFF/ON, 4 Zones
Privacy Zone	8 Privacy Zones
Sharpness	0-10
Digital Noise Reduction	3D NR
Language	English/Simplified Chinese/Traditional Chinese/ Japanese/Korean/Italian

Precautions

- Do not attempt to aim the camera at the sun or other extremely bright objects. This may cause damage to the CMOS and the void of warranty.
- Do not touch the lens or the CMOS by hands while installing or adjusting the camera. This may cause damage to the camera.
- Do not attempt to disassemble the camera, any damage caused by disassembly is not covered by guarantee.

Camera Installation

The camera can be mounted by using either the bracket mount on the top or bottom. The bracket mounts accept standard photographic mounting bolts (1/4" BSW or 20 UNC).

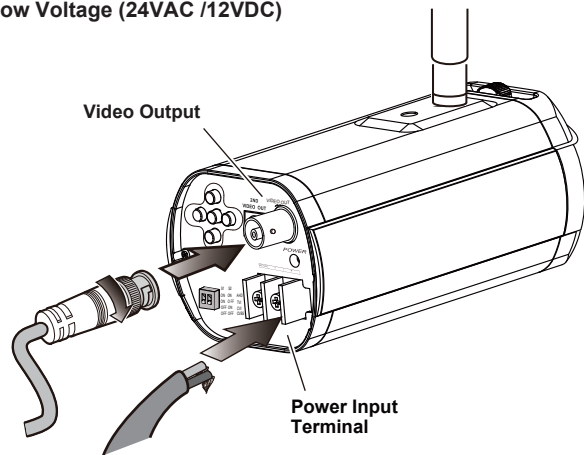


Ensure the bracket, screws (inc. wall plugs, if used) and mounting surface can support the load of the camera and bracket.

Connecting to the Power Source and Video Output

The camera operates at either 24 VAC or 12 VDC. Connections are indicated in the rear panel of the camera. The power supply must be stable power source and should only be installed by qualified personnel. Connect the 75 Ohm coaxial cable to video output.

AC/DC Low Voltage (24VAC /12VDC)



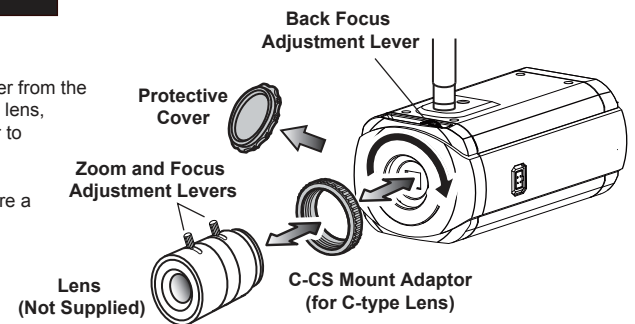
Connection and Adjustment

Lens Installation

Installing the Lens

First remove the protective cover from the camera. If mounting a C-Mount lens, attach the C-CS mount adaptor to the camera.

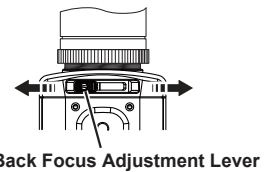
Adjust the Back Focus to acquire a sharp image (see Back Focus Adjustment).



Back Focus Adjustment

There is a mechanism for back focus adjustment. Loosen the back focus locking screw. Move the adjustment lever to obtain optimum focus of the image.

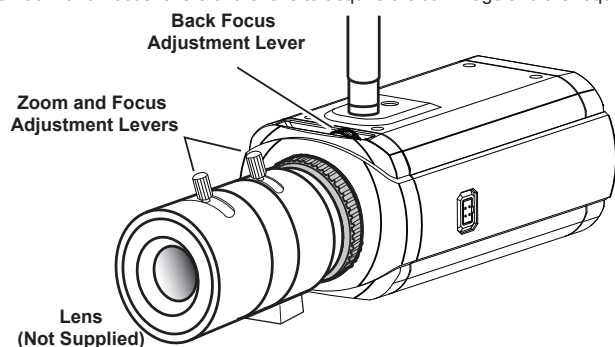
Tighten the screw to lock the back focus adjustment lever in place.



Manual / Fixed Lens Mounting

For Manual / Fixed Lens application

1. Adjust the Back Focus to the correct position then secure the screw.
2. Adjust the Zoom and Focus levers of the lens to acquire a clear image and the required field of view.



Camera OSD Menu

```
IRIS ..... ELC/ALC
EDGE DET..... OFF
              ON ..... LEVEL: 0-10
                  COLOR: WHT/YEL/CYN/GRE/MAG/RED/BLU/BLK
                  RETURN_

EXPOSURE ..... BRIGHTNESS ..... 0-20
                SHUTTER ..... AUTO ..... MODE
                  RETURN_
                MANUAL ..... SPEED: 1/30, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/15000, 1/30000
                  RETURN_
                SENSE-UP ..... OFF
                AGC ..... X2/X4/X8/X16/X32
                RETURN_

BACKLIGHT ..... OFF
              HLC ..... LEVEL ..... 0-20
                  COLOR ..... WHT/YEL/CYN/GRE/MAG/RED/BLU/BLK
                  RETURN_
              BLC ..... H-POS ..... 0-20
                  V-POS ..... 0-20
                  H-SIZE ..... 0-20
                  V-SIZE ..... 0-20
                  RETURN_
              WDR ..... WDR MODE ..... LINE/FRAME
                  ROI MODE ..... OFF ..... WINDOW ZONE: 0/1/2/3
                  ON ..... WINDOW USE: ON/OFF
                          H-POS: 0-1920
                          V-POS: 0-1080
                          H-SIZE: 0-1920
                          V-SIZE: 0-1080
                          RETURN_
                  WEIGHT ..... LOW/MIDDLE/HIGH
                  RETURN_
                  IR LED ..... OFF/ON
                  ANTI-SAT ..... 0-20
                  AGC THRES ..... 0-20
                  AGC MARGIN ..... 0-20
                  DELAY ..... LOW/MIDDLE/HIGH
                  RETURN_

DAY & NIGHT ..... COLOR
                B&W ..... IR LED ..... OFF/ON
                  ANTI-SAT ..... 0-20
                  RETURN_
                EXTERN ..... IR LED ..... OFF/ON
                  ANTI-SAT ..... 0-20
                  EXTERN SW ..... LOW/HIGH
                  D > N THRES ..... 0-20
                  N > D THRES ..... 0-20
                  DELAY ..... LOW/MIDDLE/HIGH
                  RETURN_
                AWB ..... AUTO
                  AUTO ext
                  PRESET ..... C-TEMP ..... 3000K/5000K/8000K
                  MANUAL ..... R-GAIN ..... 0-20
                  B-GAIN ..... 0-20
                  RETURN_
                COLOR GAIN ..... 0-20
                RETURN_

DNR ..... OFF/LOW/MIDDLE/HIGH

SHARPNESS ..... 0-10
GAMMA ..... 0.45/0.55/0.65/0.75
MIRROR ..... OFF/ON
FLIP ..... OFF/ON
D-ZOOM ..... 1.0X-16.0X
ACE ..... OFF/LOW/MIDDLE/HIGH
DEFOG ..... OFF
              ON ..... MODE ..... AUTO/MANUAL
                  LEVEL ..... LOW/MIDDLE/HIGH
                  RETURN_
SHADING ..... OFF
              ON ..... WEIGHT ..... 0%-100%
                  RETURN_

IMAGE ..... BOX ..... OFF
              ON ..... ZONE NUM ..... 0-15
                  ZONE DISP ..... OFF/ON
                  H-POS ..... 0-60
                  V-POS ..... 0-34
                  H-SIZE ..... 0-60
                  V-SIZE ..... 0-34
                  Y LEVEL ..... 0-20
                  CB LEVEL ..... 0-20
                  CR LEVEL ..... 0-20
                  TRANS ..... 0/1/2/3
                  RETURN_
              PRIVACY ..... POLYGON ..... OFF
                  ON ..... ZONE NUM ..... 0-7
                  ZONE DISP ..... OFF/ON
                  POS0-X ..... 0-120
                  POS0-Y ..... 0-68
                  POS1-X ..... 0-120
                  POS1-Y ..... 0-68
                  POS2-X ..... 0-120
                  POS2-Y ..... 0-68
                  POS3-X ..... 0-120
                  POS3-Y ..... 0-68
                  Y LEVEL ..... 0-20
                  CB LEVEL ..... 0-20
                  CR LEVEL ..... 0-20
                  TRANS ..... 0/1/2/3
                  RETURN_
              RETURN_

MOTION ..... OFF ..... WINDOW USE ..... 0/1/2/3
              WINDOW ZONE ..... OFF/ON
              DET H-POS ..... 0-60
              DET V-POS ..... 0-34
              DET H-SIZE ..... 0-60
              DET V-SIZE ..... 0-34
              RETURN_
              ON ..... SENSITIVITY ..... 0-10
                  MOTION OSD ..... OFF/ON
                  TEXT ALARM ..... OFF/ON
                  SIGNAL OUT ..... OFF/ON
                  RETURN_
              CAM ID ..... 0-255

COM ..... BAUDRATE ..... 2400/4800/9600/57600/115200
              RETURN_

OUTPUT ..... FRAME RATE: 720_30P/1080_60P
          FREQ: 50/60
          SDI MODE: OFF/135M(V2.0)/135M+(V2.0)/270M(V1.0)
          ANALOG MODE: OFF/CVBS HD_T
          RETURN_

IMAGE RANGE ..... FULL
              COMP
              USER ..... OFFSET ..... 0-32
              RETURN_

SYSTEM ..... COLOR SPACE ..... YUV/SD-CbCr/HD-CbCr
          COLOR BAR ..... ON/OFF
          LANGUAGE ..... ENG/TRA CHN/SIM CHN/JAN/KOR/ITA
          CAM TITLE ..... OFF
          RESET ..... RIGHT UP_
              LEFT DOWN_
          RETURN_

EXIT
```