



5436 W Crenshaw Street
Tampa, FL 33634
www.digital-watchdog.com
Technical Support : 1-866-446-3595 / 813-888-9555

INSTRUCTION MANUAL

C235T Series

About manual

Before installing the camera, please read this manual carefully. Be sure to keep it handy for later reference.

PRECAUTIONS

- Do not open or modify
 - Do not open the case except during maintenance and installation, as it may be dangerous and may damage the product.
- Do not put objects inside the unit
 - Make sure that no metal objects or flammable substances enter the camera as it can cause fire, short-circuits, or permanent damage.
- Be careful when handling the unit
 - To prevent damage, do not drop the camera or subject it to strong shock or vibration
- Install away from electric or magnetic fields.
- Protect from humidity and dust
- Protect from high temperature
 - Be careful when installing on the ceiling in a kitchen or boiler room, as the temperature may damage the camera.
- Cleaning
 - Dirt can be removed from the case only by wiping it with a soft cloth moistened with a soft detergent solution.
- Mounting Surface
 - The mounting surface must be strong enough to support the camera.

TROUBLESHOOTING

Before sending the camera out for repair, check the items below.

If the problem persists after checking these items, contact your service center.

■ If no image appears

Is the coaxial cable attached securely?

Is the power and voltage within operational specification?

Has the iris of the lens been adjusted correctly (within specification levels)?

Is there adequate illumination?

■ If the image is unclear

Is the lens in focus?

Is the lens dirty?

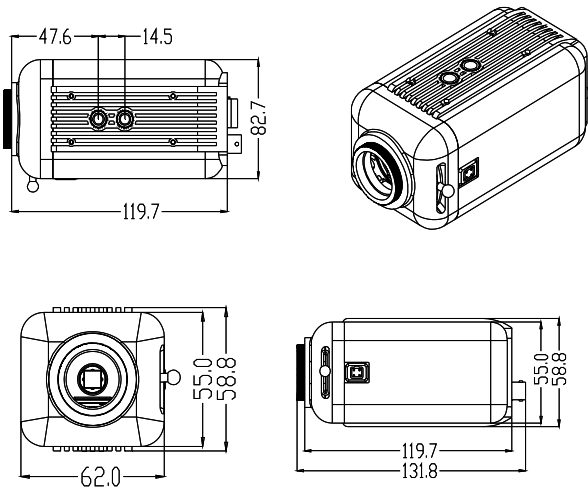
Dirt or fingerprints on the lens can adversely affect the image. Gently wipe any dirt or fingerprints off the lens with a soft cloth or lens cleaning paper and cleaning fluid (commercially available).

Is the monitor adjusted correctly?

WARNING:

TO PREVENT THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

DIMENSION (mm)



CONNECTION

***BNC / TERMINAL**

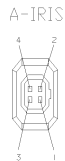
Connect the coaxial cable(with pre-wired BNC plug) to the BNC connector (Video) of the camera.

If you are using an automatic iris lens with the camera, the lens has to be connected to the A-Iris socket of the camera. If you are using a lens with manual or fixed iris, this socket is not used.

The operating voltage is either connected to the designated terminal block (12V/DC,24V/AC). Operation of the camera will be confirmed by the power LED at the rear side of the camera

***A-Iris socket**

Video Driven (VIDEO)
 1.+8,5 VDC
 2.NC
 3.Video signal
 4.GND

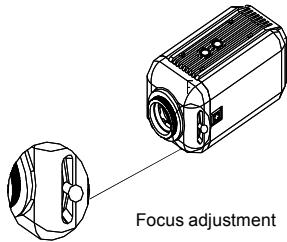


DC Driven (DC)
 1.control -
 2.control +
 3.drive +
 4.GND

ADJUSTMENT

*Adjustment of Back Focus

1. Please check the lens to see if it is a C mount or CS mount.
To use C mount lens', please fix the lens into front camera after mounting included C ring to lens.
To use CS mount lens, please fix the lens directly into front camera



2. To adjust the focus, slide the focus lever on the side of the front camera. In case of the vari focal lens, adjust the focus lever where the lens is focused in focusing position "wide" and "tele"

3. Please tighten the focus lever after the adjustment in order to prevent being out of focus.

ADJUSTMENT

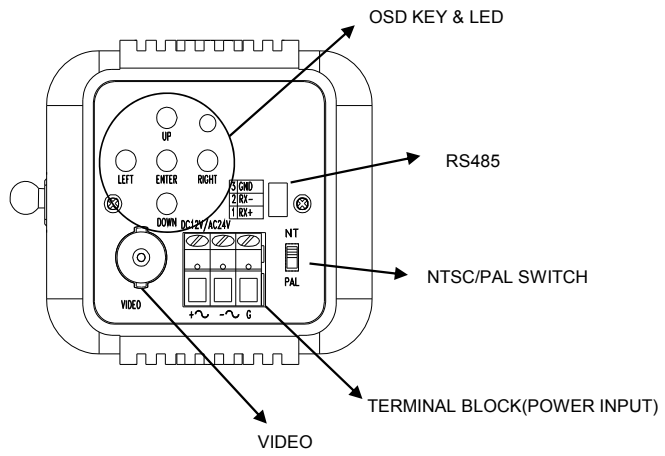
*Adjustment of DC Lenses

To adjust a lens with automatic iris (DC driven) to the camera, please proceed as follows:

1. Turn the Level potentiometer to the max. position H (turn right). The monitor picture then appears to be too bright.
2. Slowly turn the Level potentiometer back until the monitor picture appears to be perfect and is not too bright. Then turn the potentiometer back to the right (in direction "H") just a little bit.
3. Check the lens performance by using the camera under changing lighting conditions.

CAMERA SETTING

C235T Series WDR Color Box Camera



OSD MENU - C235T

■ OSD MENU CONTROL

- CENTER KEY - Used to access menu mode, Also used to confirm the setting
- UP/DOWN KEY - Used to choose the desired menu selection.
- LEFT/RIGHT KEY - Used to choose the desired menu feature adjustment.

■ OSD MENU ENTER/EXIT

A. OSD MENU ENTER

- Pushing Center Key for 3 seconds.

B. OSD MENU EXIT

- Press EXIT Menu from Main Menu
- If Pressing Set Key for 3 seconds from Main Menu appears
In this case, just press Set Key.

C. 'SAVE' and 'QUIT'

- Left or Right Key - Selecting Menu
 - Up or Down Key - Returning to Menu
1. Press the SET key to access the main setup mode.
 2. Select the desired feature using the UP or Down key.
 3. Change the status of the selected feature using the LEFT or RIGHT key.

■ MAIN MENU

A. SETUP ID

- DISPLAY ID
 - ON :The ID name will displayed in the monitor.
 - OFF : The name will not displayed in the monitor.
- CAMERA ID : You can be written to 12 characteristic.
- ID POSITION : Select on screen position of the camera ID.

B. LENS

- MANUAL : Use for Manual lens'.
- DC : You can control the brightness of the screen and adjust the desired DC level from 10 to -40.

C. WDR

- EXPO(EXPOSURE): This will lightening or darkening the picture
- WDR (Wide Dynamic Range) : You can adjust the desired WDR level from 20 to -20.

D. WB CONTROL

- ATW (Auto Tracking White Balance) : The camera will automatically control the white balance in any environment.
- AWB (Auto White Balance) : The white balance is automatically adjusted in a specific environment.
- MANUAL : Users can adjust the colors by adding or reducing the WB level. You can adjust the desired WB level from 2,500K to 9,500K

E. AGC

- ON : Activate automatic gain control feature.
You can adjust the desired AGC level from 0 to 38dB.
- OFF : Deactivate automatic gain control feature.

F. LOW LIGHT

- SLOW SHUTTER : Control Image brightness by adjusting shutter speed
 - AGC : shutter speed setting(Range 28 to 48)
 - MAX FIELD : Shutter open from Min. x2 to Max. x32 filed accumulation period.
- B&W SS (Black and White Slow Shutter)
- GAIN : To achieve a brighter picture.

G. SYNC

- INTERNAL : Internal synchronization
- LINE LOCK : Phase adjustment may be necessary in multiple camera installations to prevent picture roll when switching between cameras

H.RS485

- CAMERA # : Selectable from 1 to 255
(Note : Pelco D is the default)

I. DAY/NIGHT

- AUTO : For automatic switchover from day mode to night mode
(Note : This setting is dependent on the AGC setting.)
- B/W : To keep a B/W image at all times
- COLOR : To keep a color image at all times
- CDS : external input signal control

J. EXIT MENU

- EXIT NO CHANGES : No change
- SAVE NEW AND EXIT : Save change
- RESTORE FACTORY SETTINGS : Factory default
- SW REV

K. PREVIOUS PAGE

- PREVIOUS PAGE : Return page

WARRANTY INFORMATION

Digital Watchdog (referred to as "the Warrantor") warrants the Camera Series against defects in materials or workmanship as follows:

LABOR: For the initial five (5) years from the date of original purchase, if the camera is determined to be defective, the Warrantor will repair or replace the unit, with new or refurbished product at its option, at no charge.

PARTS: In addition, the Warrantor will supply replacement parts for the initial five (5) years.

To obtain warranty or out of warranty service, please contact a Technical Support Representative at **1-866-446-3595** Monday through Friday from 9:00 AM to 5:00 PM Eastern. A purchase receipt or other proof of the date of the original purchase is required before warranty service is rendered. This warranty only covers failures due to defects in materials and workmanship which arise during normal use. This warranty does not cover damage which occurs in shipment or failures which are caused by products not supplied by the Warrantor or failures which result from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, modification, faulty installation, set-up adjustments, improper antenna, inadequate signal pickup, maladjustment of consumer controls, improper operation, power line surge, improper voltage supply, lightning damage, rental use of the product or service by anyone other than an authorized repair facility or damage that is attributable to acts of God.

LIMITS AND EXCLUSIONS

There are no express warranties except as listed above. The Warrantor will not be liable for incidental or consequential damages (including, without limitation, damage to recording media) resulting from the use of these products, or arising out of any breach of the warranty. All express and implied warranties, including the warranties of merchantability and fitness for particular purpose, are limited to the applicable warranty period set forth above.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the above exclusions or limitations may not apply to you. This warranty gives you specific legal rights and you may also have other rights that vary from state to state.

If the problem is not handled to your satisfaction, then write to the Address above.

Service calls which do not involve defective materials or workmanship as determined by the Warrantor, in its sole discretion, are not covered. Costs of such service calls are the responsibility of the purchaser.

Camera TYPE	Model No.	C235T
Image	Device	PIXIM CMOS
	Size	1/3"
	Pixels-Total	742(H) x 552(V)
	Pixels-Effective	720(H) x 540(V)
Scanning	System	525 line, 2:1Interlace
	Horizontal Frequency Internal Mode	15,734Hz
	Vertical Frequency Internal Mode	59.94Hz
Min. Scene Illumination	F1.2 [30 IRE]	0.1 Lux [at TDN: 0.01Lux]
Functions	WDR	ON
	AGC	ON/OFF (Gain Adjust)
	AWB	ATW / AWB / Fixed / Manual
Lens	C/CS	C/CS DC Vari Focal Lens [Option]
Resolution	Horizontal	540 TV Lines [at TDN (B/W) :570 TV Lines]
Video Output	VBS 1.0Vp-p	VBS 1.0Vp-p(75 Load)
S/N Ratio	S/N Ratio	48dB
OSD	OSD	YES
Environmental Conditions	Operating Temperature	-10℃ ~ +55℃(14°F ~ 131°F)
	Humidity	Less than 90%
Power	Power Requirement	12VDC / 24VAC
	Power Consumption	12VDC: 190mA 24VAC: 165mA
Physical Specification	Dimensions(φ x H)	62.0 x 58.8 x 131.8mm