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Infinity C233W C232D, C232T, C235T Bullet Camera User Manual



ABOUT MANUAL

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

PRECAUTIONS

- Do not open or modify.
- Do not open the case except during maintenance and installation, for it may be dangerous and can cause damages.
- Do not put objects into the unit.
- Keep metal objects and flammable substances from entering the camera. It can cause fire, short-circuits, or other damages.
- Be careful when handling the unit.
- To prevent damages, do not drop the camera or subject it to shock or vibration.
- Do not install near electric or magnetic fields.
- Protect from humidity and dust.
- Protect from high temperature.
- Be careful when installing near the ceiling of a kitchen or a boiler room, as the temperature may rise to high levels.
- Cleaning
- To remove dirt from the case, moisten a soft cloth with a soft detergent solution and wipe.
- Mounting Surface
- The material of the mounting surface must be strong enough to support the camera.

FCC COMPLIANCE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a residential environment. This equipment generates, uses, and radiates radio frequency energy; and if it is not installed and used in accordance with the instruction manual, it may cause harmful interference to radio communications.

WARNING: Changes or modifications are not expressly approved by the manufacturer.

TROUBLESHOOTING

Before sending your camera for repair, check the following or contact our technical specialist.

No VIDEO

Check the coaxial cable and make sure it is connected securely.
Check the lens' iris adjustment at the menu setup of the camera.
Check the power supply and make sure the camera has the proper voltage and current.

Out-of-Focus VIDEO

Check the clear dome cover and the lens for dirt or fingerprints. Use a soft cloth and gently clean.
Check the lens manual focal and zoom adjustment. Field test monitor is recommended.

FEATURES* (C232D, C232T)

- 1/3" Sony Super HAD II CCD
- High Resolution 520 TV Lines
- True Day & Night for C232T only
- Programmable Privacy Zone (4) & Motion Detection
- Mirror Image Control
- Easy Driven OSD Menu with Built-in Joystick
- No Fog or Condensation under Any Weather Condition

FEATURES*(C235T)

- 1/3" Pixim Cmos Sensor
- High Resolution 540 TV Lines (Vertical Resolution 460TV Lines)
- True Day & Night / TDN5 (Electro Magnetic Mechanism)
- Star-Light (Super Low Light Technology)
- 3D-DNR (3D Digital Noise Reduction)
Produces less noise and more color during low-light application
- WDR (Wide Dynamic Range)
Enables the camera to capture perfect image in both bright and dark environment simultaneously
- Programmable Privacy Zone (6) & Motion Detection
- Mirror Image Control
- Auto Sensing 12VDC or 24VAC with Line Lock
- Easy Driven OSD Menu with Built-in Joystick
- No Fog or Condensation under Any Weather Condition

FEATURES*(C233W)

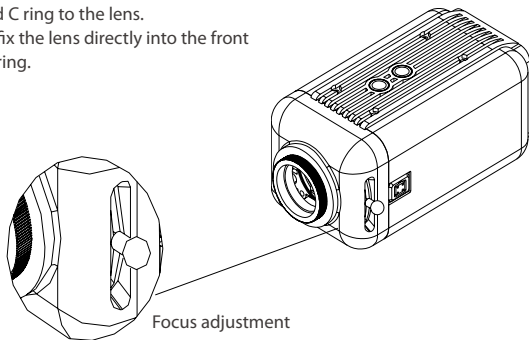
- 1/3" Sony Super HAD II CCD
- High Resolution 560 TV Lines
- True Day & Night / TDN5 (Electro Magnetic Mechanism)
- Star-Light (Super Low Light Technology)
- Max-DR (Electronic Wide Dynamic Range)
Enables the camera to capture perfect images in both bright and dark environments simultaneously
- 3D-DNR (3D Digital Noise Reduction)
Produces less noise and more color during low-light application.
- HME (Highlight Mask Exposure)
Masks overly exposed light to produce a true video image of any environment
- SLC (Side Light Compensation)
- DIS (Digital Image Stabilizer)
- Programmable Privacy Zone (6) & Motion Detection
- Easy Icon Driven OSD Menu with Built-In Joystick
- Negative Imaging
- Mirror Image Control
- Auto Sensing 12VDC or 24VAC with Line Lock
- No Fog or Condensation under Any Weather Condition

ADJUSTMENT OF BACK FOCUS*

1. Please make sure the lens is C or CS Mount.

To use C Mount lens, please fix the lens into front camera after mounting the included C ring to the lens.

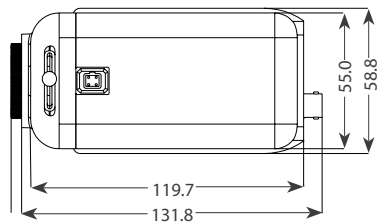
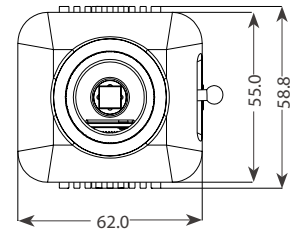
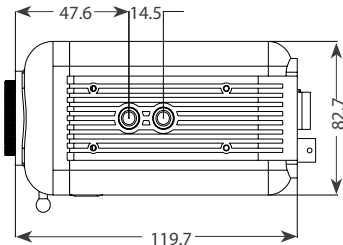
To use CS Mount lens, fix the lens directly into the front camera without the C ring.



2. To adjust the focus, slide the focus lever on the side of the front camera.

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

DIMENSIONS IN MILLIMETERS*



OSD MENU* (C235T)

EXPOSURE	
LENS	MANUAL-FOCUS SET / DC-FOCUS SET
AE PREFERENCE	OUTDOOR / INDOOR
WDR	LOW / NORMAL / MEDIUM / HIGH / CUSTOM
AGC	LOW / MEDIUM / HIGH / CUSTOM
STARLIGHT	X2 ~ X64
METER ZONE	ADJUST ZONE 1 / ADJUST ZONE 2
EXIT JUMP	
COLOR	
WB MODE	ATW DESAT / PUSH LOCK / MANUAL / ATW XTND / ATW NORMAL
COLOR GAIN	-8 ~ 8
EXIT JUMP	
DAY&NIGHT	
D&N MODE	AUTO / AUTO(EXT) / COLOR / BW
BW BURST	OFF / ON
EXIT JUMP	
FUNCTION	
MIRROR	OFF / MIRROR / V-FLIP / ROTATE
SHARPNESS	-8 ~ 8
GAMMA	25(0.25) ~ 100(1.0)
3DNR	MOVIE / INFO
D-ZOOM	ZOOM (1 ~ 12)
	PAN (-100 ~ 100)
	TILT (-100 ~ 100)
EXIT JUMP	

MOTION	
OFF / ON	ACTIVITY THR (0 ~ 255)
SET MOTION ZONES	1 ZONE / 1~2 ZONE / 1 ~ 3 ZONE / 1 ~ 4 ZONE
	ADJUST ZONE 1
	ADJUST ZONE 2
	ADJUST ZONE 3
	ADJUST ZONE 4
EXIT JUMP	RETURN
PRIVACY	
OFF / ON	AREA1
	AREA2
	AREA3
	AREA4
	AREA5
	AREA6
	RETURN
MASK COLOR	WHITE / BLACK / RED
EXIT JUMP	
SYNC	
INT1	
INT2	
LL	LL LIMIT (0.25% / 0.50% / 1.00% / 5.00%) V PHASE (0 ~ 624)
EXIT JUMP	RETURN

SETUP	
PC CONTROL	CAM ID (1~255)
	ID DISPLAY(OFF / ON)
	PROTOCOL (PELCO-D / CPRO / CPRO1 / CPRO2)
	BAUDRATE(2400 ~ 38400)
	RETURN
TITLE	OFF / ON
LANGUAGE	ENGLISH
OMNI LENS	ALRAM (OFF / ON)
	READ TIME (5 ~ 15)z
	ALRAM ZOOM (0 ~ 214)
	STAND BY (0 ~ 214)
	RETURN
FLUORESCENT...	OFF / CRR / CRR2
DIGITAL VIDEO OUTPUT	DIGITAL OUT (OFF / ON)
	FIELD ORDER (NORMAL / REVER5)
	FRAME RPT (OFF / 2X / FREEZE)
	RETURN
EXIT JUMP	
EXIT	
SAVE & EXIT	
FACTORY SET	

OSD MENU* (C232D / C232T)

SET UP	FUCNTION	SUMMARY
LENS	MANUL, DC	-DC :
SHUTTER	FIXED,MANUAL,FLK	-MANUAL shutter adjust
BLC	ON, OFF	-BLC AREA -BLC RATIO
AGC	ON, OFF	-AGC GAIN : Min ~ Max
WHITE BAL	ATW, AWB, FIXED, MANUAL	-MANUAL : RED, BLUE -FIXED : MODE 1,2,3,4
ADJUST	CONTRAST, SHARPNESS, CB_GAIN, CR_GAIN	-CONTRAST adjust -SHARPNESS adjust -CB_GAIN adjust -CR_GAIN adjust
FUNCTION		
CAMERA ID	ON, OFF	-CAMERA ID -POSITION
MIRROR	ON, OFF	-Mirror image on/off
DAY / NIGHT	AUTO, B/W, COLOR	-AUTO : DELAY START LEVEL END LEVEL
MOTION	ON, OFF	-AREA -MOTION TH -MOTION TRACE ON/OFF
PRIVACY	ON, OFF	-AREA SEL -AREA STATE
GAMMA	USER, 0.05 ~ 1.0	-GAMMA set.
LANGUAGE	English, Korean Chinese1, Chinese2, Japanese	-Language set.
RESET	YES, NO	-Returns to the level
EXIT		-Save out

OSD MENU* (C233W)

EXPOSURE	
LENS	DC (0~100) / MANUAL / VIDEO. (DCLens is recommended.)
SHUTTER	1/160 /1/100 / FLC / 1/250 ~ 10000 / SENS-UP x2 ~ x250
BLC	OFF / ON BLC (Back Light Compensation)
AGC	HIGH / MIDDLE / LOW / OFF AGC (Auto GainControl)
MAX-DR	OFF / ON (0~ 20) (Electronic WideDynamic Range)
STAR-LIGHT	AUTO (x2 ~ x250) / OFF (x32 is recommended.)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY RESET
COLOR	
WB MODE	AWC / ATW / MANUAL / PUSH LOCK
R-Y GAIN	0 ~ 100
B-Y GAIN	0 ~ 100
DAY & NIGHT	
Day&Night Mode	AUTO/ COLOR/ BW / EX-CONT COLOR---->BW : Switching fromcolor to BW; if the number is higher, the camera will only switch during a super low light condition. BW ---->COLOR : Switching from BW to color; this number should always be lower than COLOR to BW Read Time : Timeinterval to switch from Color to Black-and-White COLOR B&W: (BURST:OFF/ON) Whenthe burst is OFF will make less noise
C-SUP	Color Suppression :Color will be reduced at low illumination, if the C-SUP Level is higher. 0 ~ 100 (Not Available when DNR is On.)
A-SUP	ApertureSuppression : The sharpness of the edges will be reduced at low illumination, if A-SUP Level is higher.
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

FUNCTION	
MIRROR	OFF/MIRROR/V-FLIP/ROTATE
SHARPNESS	0 ~ 31
GAMMA	0.05 ~ 1.00 / USER
FREEZE	OFF / ON
NEGATIVE	OFF/ ON
3D-DNR	OFF / LOW / MIDDLE / HIGH 3D-DNR (3DDigital Noise Reduction)
D-ZOOM	OFF / ON (x1.0 ~ x32 PTZ)
SLC	OFF / ON SLC (Side Light Compensation)
HME	OFF / ON HME (Highlight Masking Exposure)
DIS	OFF / ON DIS (Digital Image Stabilizer)
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
MOTION (Omni-Focus Lens Only)	
MOTION	OFF / ON SET WINDOW ALL SET (Set theEntire Screen) ALL CLEAR (Clear theEntire Screen) SENSITIVITY (1 ~ 120) SHOW INDICATOR (OFF / ICON / TRACE) DELAY OUT (1 ~ 15) Motion Alarm Zoom-In Delay
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

PRIVACY	
PRIVACY	MASK 1 OFF / ON
	MASK 2 OFF / ON
	MASK 3 OFF / ON
	MASK 4 OFF / ON
	MASK 5 OFF / ON
	MASK 6 OFF / ON
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET
SETUP	
CAMERA ID	0 ~ 255
TITLE	OFF / ON
DPC	OFF / AUTO DPC (Dead Pixels Cancellation)
MONITOR	CRT / LCD
LANGUAGE	English, Japanese, Chinese
BAUDRATE	2400 / 4800 / 9600 / 14400 / 19200 / 38400. Protocol is Pelco-D (fixed cannot be changed; hard coded into the DSP)
OMNI LENS	OFF / 1 ~ 10 (for OMNI-PLUS CAMERA only)
SYNC	
SYNC	INTERNAL / AUTO
V-PHASE	0 ~ 199
EXIT JUMP	EXIT / SAVE & EXIT / FACTORY SET
EXIT	
EXIT	Exit the menu
SAVE&EXIT	Exit the menu and save the setting
FACTORY SET	Reset the menu setting to factory default
EXIT JUMP	EXIT / SAVE&EXIT / FACTORY SET

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 listed on the next page.

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.

SPECIFICATIONS*

C232D Series Color Box Camera

Camera TYPE	Color / BW	C232D
Image	Device	Super HAD II CCD
	Size	1/3"
	Pixels-Total	811 (H) x 508 (V)
Scanning	Pixels-Effective	768 (H) x 494 (V)
	System	525 line, 2:1Interlace
	Horizontal Frequency Internal Mode	15,734Hz
Min. Scene Illumination	Vertical Frequency Internal Mode	59.94Hz
	F1.2x256Star-Light	1.0 Lux
Functions	BLC	ON/OFF (Area Setting)
	AGC	ON/OFF (Gain Adjust)
	AWB	ATW / AWB / Fixed / Manual
	Mirror	ON/OFF
	Motion Detection	ON/OFF (Area / Sensitivity / Trace ON/OFF)
	Privacy Zone	4 Programmable Zone / Size
	C/CS	DC Vari Focal Lens [Option]
Lens		
Resolution	Horizontal	520TV 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°C~ +55°C(14°F ~ 131°F)
	Humidity	Less than 90%
Power	Power Requirement	12VDC / 24VAC
	Power Consumption	DC12 [V]: 130[mA]
Physical Specification	Dimensions(φ x H)	62.0 x 58.8 x 131.8mm

SPECIFICATIONS*

C232T Series Color Box Camera

Camera TYPE	Color / BW	C232T
Image	Device	Super HAD II CCD
	Size	1/3"
	Pixels-Total	811 (H) x 508 (V)
Scanning	Pixels-Effective	768 (H) x 494 (V)
	System	525 line, 2:1Interlace
	Horizontal Frequency Internal Mode	15,734Hz
Min. Scene Illumination	Vertical Frequency Internal Mode	59.94Hz
	F1.2 [30 IRE]	1.0 Lux [at TDN: 0.01Lux]
Functions	BLC	ON/OFF (Area Setting)
	AGC	ON/OFF (Gain Adjust)
	AWB	ATW/AWB/Fixed/ Manual
	Mirror	ON/OFF
	Motion Detection	ON/OFF (Area / Sensitivity / Trace ON / OFF)
	Privacy Zone	4 Programmable Zone / Size
	C/CS	DC Vari Focal Lens[Option]
Lens		
Resolution	Horizontal	520 TV Lines [at TDN (B/W) :570 TV Lines]
Video Output	VBS 1.0Vp-p	VBS 1.0Vp-p(75 Load)
OSD	OSD	YES
S/N Ratio	S/N Ratio	48dB
Environmental Conditions	Operating Temperature	-10°C~ +55°C(14°F ~ 131°F)
	Humidity	Less than 90%
Power	Power Requirement	12VDC / 24VAC
	Power Consumption	DC12 [V]: 130[mA]
Physical Specification	Dimensions(φxH)	62.0 x 58.8 x 131.8mm

SPECIFICATIONS*

C233W Series Color Box Camera

Camera TYPE	Color / BW	C233W	
Image	Device	3D Bracket	
	Size	1/3" Super HAD II CCD	
	Pixels-Total	811 (H) x 508 (V)	
Scanning	Pixels-Effective	768 (H) x 494 (V)	
	System	525 line, 2:1 Interlace	
	Horizontal Frequency Internal Mode	15,734Hz	
	Vertical Frequency Internal Mode	59.94Hz	
Min. Scene Illumination	F1.2x256Star-Light	0.14 Lux/0.0005 Luxin Color	
Functions	BLC	ON/OFF	
	AGC	HIGH/ MIDDLE / LOW /OFF	
	MAX-DR	OFF / ON	
	Mirror	OFF / MIRROR / V-FLIP / ROTATE	
	STAR-LIGHT	AUTO (x2~ x250) / OFF	
	3D-DNR	OFF / ON	
	SLC	OFF / ON	
	HME	OFF / ON	
	DIS	OFF / ON	
	Privacy Zone	OFF / ON	
	Lens	Focal Length	3.3~12mmVarifocal Auto Iris Lens
	Resolution	Horizontal	560 TV Lines [Color]; 580 TV Lines [BW]
	Video Output	VBS 1.0Vp-p	VBS 1.0Vp-p(75 Load)
S/N Ratio	S/N Ratio	50dB	
OSD	OSD	YES	
Environmental Conditions	Operating Temperature	-10°C~ +55°C(14°F~ 131°F)	
	Humidity	Less than 90%	
Power	Power Requirement	12VDC / 24VAC	
	Power Consumption	1.8 [W] / 2.4 [W]	

SPECIFICATIONS*

C235T Series Color Box Camera

Camera TYPE	Color / BW	License Plate Recognition Camera
Image	Device	Pixim Seawolf Sensor
	Size	1/3"
	Pixels-Total	768(H) x 548(V)
Scanning	Pixels-Effective	768 (H) x540(V)
	System	525 line, 2:1 Interlace
	Horizontal Frequency Internal Mode	15,734Hz
	Vertical Frequency Internal Mode	59.94Hz
Min. Scene Illumination	F1.2[30IRE]	0.22Lux[at TDN:0.08Lux]
Functions	WDR	LOW / NORMAL / MEDIUM / HIGH / CUSTOM
	AGC	LOW / MEDIUM / HIGH / CUSTOM
	Mirror	OFF / MIRROR / V-FLIP / ROTATE
	STAR-LIGHT	AUTO (x2 ~ x64) / OFF
	3D-DNR	MOVIE / INFO
	Privacy Zone	6 Programmable Zone / Size
	Focal Length	3.3~12mm Varifocal Auto Iris Lens
Lens	Horizontal	560 TV Lines
	Vertical	460 TV Lines
Video Output	VBS 1.0Vp-p	VBS 1.0Vp-p(75 Load)
S/N Ratio	S/N Ratio	53dB
OSD	OSD	YES
Environmental Conditions	Operating Temperature	-10°C~ +50°C(14°F~ 122°F)
	Humidity	Less than 90%
Power	Power Requirement	12VDC / 24VAC
	Power Consumption	2.6[W] / 2.85 [W]
Physical Specification	Dimensions(H x L)	62.0 x 58.8 x 131.8mm