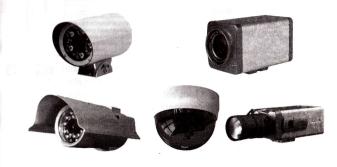
MANUAL

CCD CAMERA INSTRUCTION



COLOR B/W

WARNING



To prevent fire or shock hazard, do not expose the unit to rain or moisture

The sumbol is intended to alert the user to the presence of important operating and maintenance(servicing) instructions in the literature accompanying the appliance.



The symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient, magnitude to constitite a risk of electric shock to persons.



REFER SERVICING TO QUALI FIED SERVICE PERSONNEL

ference at his own espense.

CAUTION:

To prevent electric shocds and risk of fire hazards, do NOT use other than specified power source.

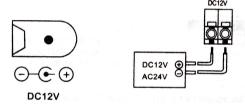
This equipment has been tested and found to comply with the limits for a Class A digital device. Pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable proection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can tadiate radio frequency energy and if not installed and used in accordane with the instruction manual, may cause harmfuk interference to radio communications. Operation of this equipment in a residential atea is likely to cause harmful interference in which case the user will be required to correct the inter-

CAUTION Any changes of modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

SYSTEM FUNCTION 1-2

SYSTEM FUNCTION 3-4

- VIDEO OUTPUT CONNECTOR(BNC)
 1.0Vp-p75 composite video signal is provided at this connector.
- 2. POWER INPUT CONNECTOR(SCREW TERMINAL)



this terminal accepts DC 12V/AC 24V

Power cource

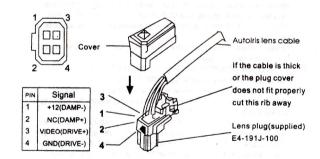
Recommended Power Suppy For

Color camera:750-800mA DC

B/W camera:300-800mA DC

Regulated Power Supplies are recommendable

- 3. Autoiris lens(LENS)DC/VIDEO Switch
- 4. AUTOIRIS LENS CONNECTOR(AUTO IRIS)



- # 5.AUTO TRACKING WHITE BALANCE(ATW)
- 6. AUTO GAIN CONTROL(AGC) ON/OFF SWITCH
- 7 TEE/AI SWITCH

This switch is used to select EE (electronic exposure of ELC electronic light control) mode or AL (automatic lens of ALC automatic light control)mode.

In the EE mode.a continuously variable electronic shutter is employed to automatically control the exposure time of the CCD image sensor according to the incoming light level. With this mode selected, a fixed or manual iris lens can be used instead of an autoiris lens in the AI mode. The CCD shutter speed is fixed to 1/60 (50)sec. and the incoming light level is controlled by the autoiris lens.

To use a video-drive type of the DC-drive type of autoiris lens.set this switch to the Al position.

8. BACK LIGHT COMPENSATION(BLC) ON/OFF SWITCH

Back light compensation(BLC) ON/OFF switch

If the subject you wish to view is too dim because of a bright background.set the BLC switch to ON to compensate for the bright background.

With BLC on, the background brightness may saturate in some cases. This function may not operate properly if the object os too small compared to the area of the background. This function can be used with either the linear shutter(EE mode) or an autoiris lens (All lens mode).



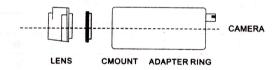


9, POWER INDICATORLED

This LED Turns ON only when power is supplied properly and the DC-DC converter (or the regulator) inside the camera works well.

■ 10、C-MOUNT ADAPTER RING

The C-mount adapter ring is used if a C-mount lens is used on the camera. If a CS-mount lens is used. The adapter is not necessary. To install the adapter, fitst screw it into the lens mount opening on the camera. Then screw the C-mount lens into the adapter.



■11.CCD-DUST RPOTE CTVE CAP

Remove this cap just before installing the lens.

Do not handle of Irave the camera with this cap open.

1.If no oscilloscope is available. Aless accurate adjustment can be made by observing the monitor and adjusting the V-phase poteRtiometer until no roll occurs on the monitor when switching back and forth between cameras A and B.

SPECIFICATIONS

SPECIFICATIONS

Model	22XAUTOFOCUS(100M)	16X22XMOVE FOCUS(100M)	16X22XMOVE FOCUS(60M)	
Signal system	PAL/NTSC			
Image sensor	1/4" CCD - 1/3" CCD		CCD	
Horizontal resolution	480 TV Lines/560 TV Lines	s/600 TV Lines/650 TV Lines/	700 TV Lines/800 TV Lines	
Lens	F=3.9~85.8 ·	F=3.9-	- 70	
Min.Illumination	OLUC(IRON)			
S/N ratio	More than 52dB			
Distance(Meter)	80°	100°	60-80	
View angle	80°	60°	80°	
IRLED	154unit850nm		84unit850nm	
Average life	20000hrs,warranty life:6000hrs			
Water resistance	IP65			
Video output	1.0Vp-p,75Ω			
Focus mode	push auto/manual push manual		manual	
OSD display	Function/Motion/Zoom MAG/USER Title			
Operation temperature	-20°C~50°C		-10℃~50°C	
Supplied power	AC220V±20%		DC12V 5%±100mA	

OPERATION:

- SYV-75: VIDEO OUT

1.0Vp-p75 composite video signal is provided at this connector AVVR6:

RED	BREAK	BPOWM	PUPPLE	ORANGE	GRAY
DC+12V	DC-12V(GND)	СОМ	ZOOM	FOCUS	IRIS

Remarks: Remarks: 30 meter, 25 meter, 20 meter, 15 meter, 10 meter, hemispheres series machines have no this electric cable. only video the line and power cables match topress the line.

1. POWER

NO.	COLOR	RUCTION	I/O	NOTE
1	RED	POWER(+)	INPUT	DC+12V
2	BREAK	POWER (- GND)	INPUT	DC-12V

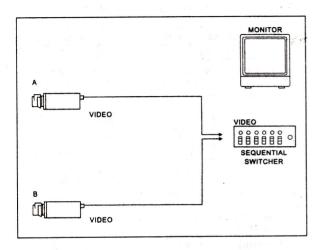
The 22X focuses automatically, an electricity moves to focuse (100M), 80 meter series model usage pwer supply, can choose the DC12V,AC 24V,AC220V,don' t explain specially all for AC220V,The rest model all uses the DC12V power supply power supply

The power supply power pleases read the technique parameter form 2. Lens protective cap

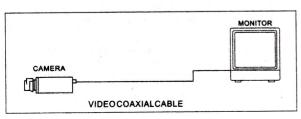
NO.	COLOR	FUCTION	I/O	NOTE
1	ORANGE	FOCUS(+NEAR,-FAR)	INPUT	±9V(±3V±12V)
2	PUPPLE	ZOOM(+TELE,-WIDE)	INPUT	±9V(±3V±12V
3	GRAY	IRIS(-ON,-OFF)/MENU	INPUT	±9V(±3V±12V
4	BROWM	COM(FORZOOM,FOCRS,IRIS)	INPUT	±9V(±3V±12V

Two functions or more can not be used at the same time. 80 meter, 40 meter models control the function cordlessly Above for an operating instructions for automatically focusing, an electricity moving focusing, 80 meter, 40 meter series models; 30 meter, 25 meter, 20 meter, 15 meter, 10 meter, hemispheres series models need and will see the line of video, power cable direct conjunction good then.

CONNECTORS AND CONTROLS 7-continued



2. SIMPLEST ONE MONITOR SYSYTEM WITH ONE CAMERA



DSP Infared CCD Colour Camera

IMAGE DEVICE	1/3" Exview HAD Interline CCD		
TVSYSTEM	PAL	NTSC	
PICTURE ELEMENTS	752(H)X582(W)	768(H)X492(W)	
SCANNING FREQUENCY	Horizontal:13625KHZ Vertical:50Hz	Horizontal:15.736KHZ Vertical:60Hz	
HORIZONTAL, RESOLUTION	480 TV Lines/560 TV Lines/600 TV Lines 650 TV Lines/700 TV Lines/800 TV Lines		
MINMUMILLUMINATION	0.01Lux/F1.2	0.01Lux/F1.2	
PICTURE ELEMENTS	500(H)X582(W)	510(H)X492(W)	
VIDEO OUTPUT	1.0Vp-pVBS75ΩBNC	1.0Vp-pVBS75ΩBNC	
AGC	ON/OFF	ON/OFF	
S/N RATIO	more than 48db	more than 48db	
BLC	ON/OFF	ON/OFF	
AUTOMATIC ELECTRONIC SHUTTER	EE/AI	EE/AI	
AUTO IRIS CONTROL	VIDEO/DC	VIDEO/DC	
Charifestians ata subject to change without notice			

^{*}Specifcations ate subject to change without notice

DSP Infared CCD Colour Camera

IMAGE DEVICE	1/3"Exview HAD Interline CCD		
TVSYSTEM	PAL	NTSC	
PICTURE ELEMENTS	500(H)X582(W)	510(H)X492(W)	
SCANNING FREQUENCY	Horizontal:15.625KHZ Vertical:50Hz	Horizontal:15.736KHZ Vertical:60Hz	
HORIZONTAL, RESOLUTION	480 TV Lines/560 TV Lines/600 TV Lines 650 TV Lines/700 TV Lines/800 TV Lines		
MINMUMILLUMINATION	0.05Lux/F1.2	0.05Lux/F1.2	
VIDEO OUTPUT	1.0Vp-pVBS75ΩBNC	1.0Vp-pVBS75ΩBNC	
AGC	ON/OFF	ON/OFF	
S/N RATIO	more than 48db	more than 48db	
BLC	ON/OFF	ON/OFF	
AUTOMATIC ELECTRONIC SHUTTER	EE/AI	EE/AI	
AUTO IRIS CONTROL	VIDEO/DC	VIDEO/DC	

^{*}Specifications ate subject to change without notice

COLOR HIGH RESOLUTION CAMERA

IMAGE DEVICE	1/3" CCD	
TVSYSTEM	PAL	NTSC
PICTURE ELEMENTS	752(H)X582(W)	768(H)X492(W)
SCANNING FREQUENCY	Horizontal:15.625KHZ Vertical:50Hz	Horizontal:15.736KHZ Vertical:60Hz
HORIZONTAL, RESOLUTION	480 TV Lines/560 TV Lines/600 TV Lines 650 TV Lines/700 TV Lines/800 TV Lines	
MINMUMILLUMINATION	0.8Lux/F1.2	0.8Lux/F1.2
VIDEO OUTPUT	1.0Vp-pVBS75QBNC	1.0Vp-pVBS75ΩBNC
AGC	ON/OFF	ON/OFF
S/N RATIO	more than 48db	more than 48db
BLC	ON/OFF	ON/OFF
AUTOMATIC ELECTRONIC SHUTTER	EE/AI	EE/AI
AUTO IRIS CONTROL	VIDEO/DC	VIDEO/DC

^{*}Specifcations ate subject to change without notice

COLOR NORMAL RESOLUTION CAMERA

1/4" CCD		
PAL:512(H)X582(V) NTSC:512(H)X492(V)		
3.6mm X 2.7mm		
PAL/NTSC		
480 TV Lines/560 TV Lines/600 TV Lines 650 TV Lines/700 TV Lines/800 TV Lines		
C/CS Mount(C Mount adoptor option)		
ON/OFF Switchable		
ON/OFF Switchable		
(1/60)-1/100,000(sec)		
VIDEO/DC		
Auto tracking white balance		
More than 48db		
F1.2/1.0Lux		
BNC 1.0vp p 75 Ω		
PAL:Horizontal:15.7343KHZ Vertical:50HZ		
NTSC: Horizontal:15.625KHZ Vertical:60HZ		

^{*}Specifcations ate subject to change without notice

B/W HIGH RESOLUTION CAMERA

IMAGE DEVICE	1/3" CCD	
TVSYSTEM	CCIR	EIA
PICTURE ELEMENTS	752(H)X582(V)	768(H)X494(V)
SCANNING SYSTEM	2:1 Interlace	2:1 Interlace
SCANNING FREQUENCY	Horizontal:15.625KHZ Vertical:50Hz	Horizontal:15.736KHZ Vertical:60Hz
HORIZONTAL, RESOLUTION	480 TV Lines/560 TV Lines/600 TV Lines 650 TV Lines/700 TV Lines/800 TV Lines	
MINMUMILLUMINATION	F1.2/0.05Lux	F1.2/0.05Lux
VIDEO OUTPUT	1.0Vp-pVBS75ΩBNC	1.0Vp-pVBS75ΩBNC
S/N RATIO	more than 48db	more than 48db
BLC	ON/ OFF	ON/ OFF
AUTOMATIC ELECTRONIC SHUTTER	EE/AI	EE/AI
AUTO IRIS CONTROL	VIDEO/DC	VIDEO/DC

^{*}Specifcations ate subject to change without notice.