



**Day&Night
Hi-Res
Colour CCD
Camera**

INSTRUCTION MANU

Please read this manual thoroughly before use, and keep it handy for future reference.

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1. CAUTIONS

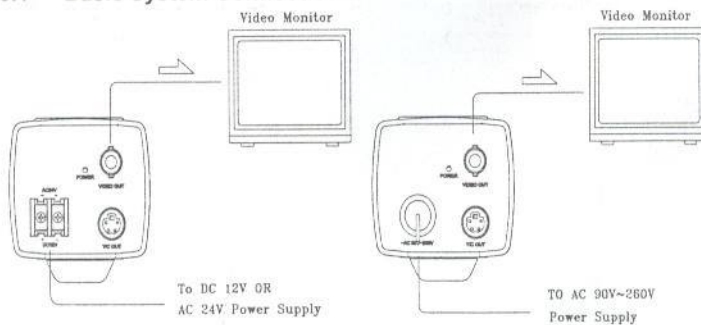
1. Do not touch the imaging surface of sensor. Use soft cloth moistened with alcohol to clean the surface if it is touched accidentally.
2. Ensure the supply voltage is correct as specified for the particular variant of camera before operation.
3. Do not expose the camera to rain, moisture or to temperature outside the specified limit, without a suitable housing.
4. Avoid focusing directly on the sun.
5. Do not attempt to service this unit yourself unless you are authorised to do so. Opening the camera may expose you to dangerous voltages or other hazards. Refer all servicing to qualified personnel only.
6. If connected to the mains :
THIS APPARATUS MUST BE EARTHED. The wires on the mains lead are in accordance with the following code :
GREEN/YELLOW ----- Earth
BLUE ----- Neutral
BROWN ----- Live
7. Warranty void if the S/N label on camera is removed.

2. SYSTEM COMPONENT

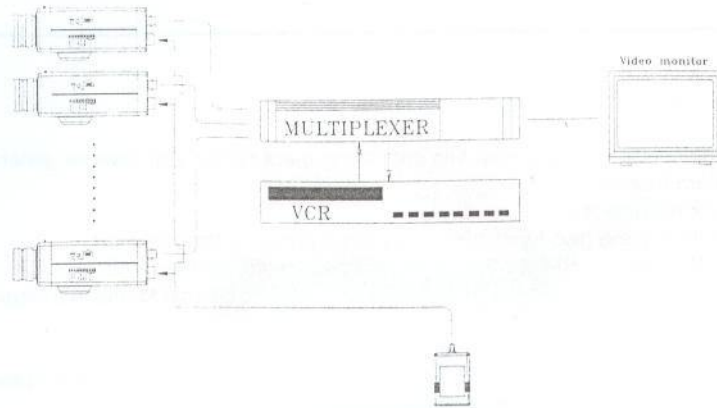
- | | | | |
|-----------------------------|---|-----------------------------|---|
| 1. Camera ----- | 1 | 4. Hexagonal Wrench ----- | 1 |
| 2. Instruction Manual ----- | 1 | 5. AI Lens 4-pin Plug ----- | 1 |
| 3. Lens Mounting Cap ----- | 1 | | |

3. SYSTEM CONNECTION

3.1 Basic System Connection :



3.2 Extended System Connection :



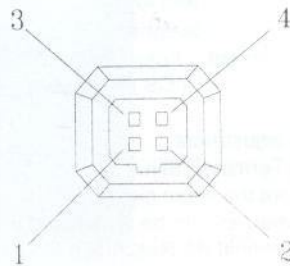
**⚠ TO AVOID THE RISK OF ELECTRIC SHOCK,
DO NOT LET POWER CABLES TOUCH EACH OTHER.**

4. PIN CONNECTIONS

IRIS Connector

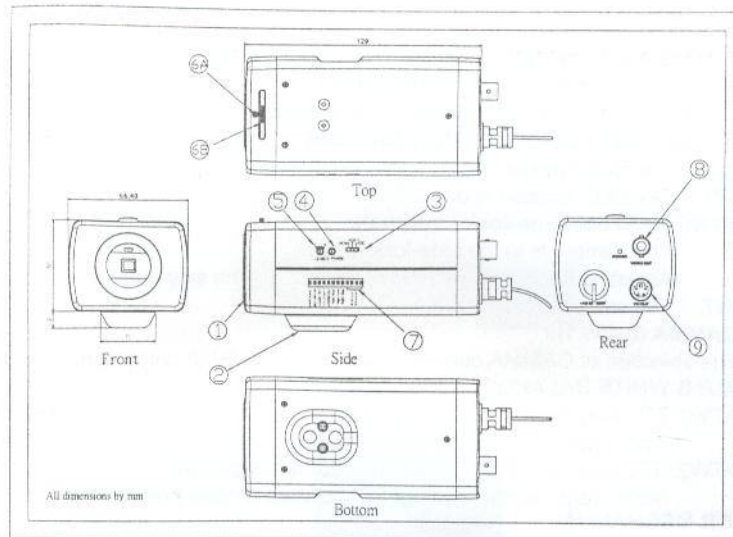
IRIS PIN DEFINITIONS

	VIDEO	DC
1	+12V	DAMP - (y)
2	NC	DAMP + (r)
3	VIDEO	DRIVER + (wh)
4	GND	DRIVER - (g)



5. PARTS NAME & FUNCTIONS

1. Lens Mount (CS Mount) :
For installation of CS Mount lenses only.
2. Tripod Stand :
Application for camera mounting onto the camera holder. Effective for general camera tripods.
3. Exposure Control :
Auto IRIS mode (two types of lens are appropriate for this function) :
DC IRIS Lens : Set the IRIS slide switch to the DC position and adjust the LEVEL control on the side panel to obtain a clear picture.
Video IRIS Lens : Set the IRIS slide switch to the VIDEO position and adjust the LEVEL and ALC controls on the lens to obtain a clear picture.
Automatic Electronic Shutter (AES) :
Set the IRIS slide switch to the AES position to automatically adjust speed according to the subjects brightness.
4. V-PHASE Adjustment :
When using two cameras or more, the image on the monitor may roll vertically when switching sources. This rolling can be minimized by adjusting this controller.
5. DC IRIS LEVEL Adjustment :
If using a DC type auto-iris lens, you will need to set the LEVEL volume.
Turn counterclockwise (L) for a darker picture. Turn clockwise (R) for a brighter picture.
6. Back-Focus Adjustment :
 - A. Back Focus Screw : Loosen this screw before using the Focus adjustment and to maintain correct focus afterwards ensure it is tightened.
 - B. Focus Adjustment : Adjust this dial to obtain correct back-focus whilst using a CS mount lens.
7. DIP Switch :
For functions adjustment.
8. Video Output Terminal (BNC) :
Used to give out the video signal. Connected to the video input terminal of a monitor, switcher, etc. (to be terminated with 75 ohm impedance).
9. Y/C Output Terminal (Hi Resolution Models Only) :
Used to give out the Y/C separation video signal.
Commercially available S video output cables can be employed.
Y=Luminance , 1 Vp-p, 75 ohms
C=Crominance , 0.3 Vp-p(burst) , 75 ohms



6. DIP SWITCH AND THEIR FUNCTIC

On the side panel of the camera, there are twelve dip switches as shown below.

Switch Name	Main Function
nAGC / sAGC	Auto gain control (normal AGC= 24 dB / super AGC=30 dB)
BLC Off / On	Back light compensation (Off / On)
L-Lock / INT	Sync system (Line-lock / internal)
r - 0.45 / 1	Gamma (0.45 / 1)
ATW2/ATW1	Auto White Balance (ATW2 / ATW1)
Auto / Man	ICR Mechanism (Auto / Manual)
High / Low	Day & Night Level (High / Low)
Night / Day	Dual Mode (Night / Day)
Manual Shutter	Ranged from 1/50 to 1/10k

7. DIP-SWITCH FUNCTION DESCRIPTION

1. **AUTO GAIN CONTROL (normal AGC / super AGC) :**
 Normal : Standard position, GAIN=30dB.
 Super : High-sensitivity position, GAIN=36dB.
2. **BACK LIGHT COMPENSATION (On / Off) :**
 OFF : The BLC function is off.
 ON : The BLC function is on.
3. **SYNC SYSTEM (Line-lock / Internal):**
 LL : The camera is in the Line-lock Mode.
 Adjusting degrees by V-PHASE control on the side panel.
 INT : The camera is in the internal SYNC mode.
4. **GAMMA (0.45 / 1):**
 The selection of GAMMA curvature is used for GAMMA correction.
5. **AUTO WHITE BALANCE (ATW1 /ATW2) :**
 ATW1:TTL auto trace white balance algorithm is designed to implement a perfect colour reproduction. Colour temperature ranged from 2500°K~6000°K.
 ATW2 :TTL auto trace white balance algorithm is designed to implement a perfect colour reproduction. Colour temperature ranged from 2500°K~9500°K.
6. **ICR MECHANISM:**
 Choosing day / night mode by simply set the switch at Auto or Manual position.
 AUTO : When set to this mode, the camera will change to COLOUR mode or B/W mode automatically according to a subject's brightness.
 MANUAL When set to this mode, the camera will remain in COLOUR or B/W mode by MANUAL selection.
7. **Day & Night LEVEL (HIGH / LOW):**
 Set up a switch-over point from B/W mode to COLOUR mode.
 Use the slide switch to select HIGH or LOW, under the AUTO mode,
 the switchover point of brightness from COLOUR mode to B/W is 1.5 lux(10S)
 LOW :The switchover point of brightness from B/W to COLOUR is 4.5 lux(15S)
 HIGH :The switchover point of brightness from B/W to COLOUR is 7.5 lux.(15S)
8. **DUAL MODE (DAY / NIGHT)**
 DAY :Y-signal filter of CCD output is narrow in B/W mode. In this position, the horizontal resolution is 480TV lines.
 NIGHT :Y-signal filter of CCD output is wide in B/W mode. In this position, the horizontal resolution is 580TV lines.
 (If there is horizontal noise in B/W mode,set to Day mode)
9. **9~12 Manual shutter:**
 Adjusting shutter speed by setting different profile of dip-switch.

Shutter Speed	1/50	1/120	1/250	1/500	1/1K	1/2K	1/4K	1/10K	Auto
Pin 9	0	0	0	0	0	0	0	0	1
Pin 10	0	0	0	0	1	1	1	1	1
Pin 11	0	0	1	1	0	0	1	1	1
Pin 12	0	1	0	1	0	1	0	1	1

0 : Down
1 : Up

8. SPECIFICATION:

NO	ITEM	SPECIFICATION	PAL		NTSC	
			1/3" Super HAD HI Res.	1/3" Exview HI Res.	1/3" Super HAD HI Res.	1/3" Exview HI Res.
1	Image Area	4.9mm×3.7mm	*	*	*	*
2	Pickup Elements	752(H)×582(V) Pixels 1/3" Exview Hi-Res CCD (PAL)	*			
		768(H)×494(V) Pixels 1/3" Exview Hi-Res CCD (NTSC)			*	
		752(H) X 582(V) 1/3" Super HAD Hi-Res CCD (PAL)		*		
		768(H) X 494(V) 1/3" Super HAD Hi-Res CCD (NTSC)			*	
		500(H) X 582(V) 1/3" Super HAD CCD (PAL)			*	
		510(H) X 492(V) 1/3" Super HAD CCD (NTSC)			*	
3	Scanning System	2:1 Interlace PAL V:50Hz, H:15.625KHz	*	*	*	*
		2:1 Interlace NTSC V:59.94Hz, H:15.734KHz			*	*
4	Sync System	Internal / Line lock Selectable (AC Only)	*	*	*	*
5	Video Output	BNC Composite, Y/C Output	*	*	*	*
6	Lens Mount	CS Mount Only	*	*	*	*
7	Resolution	480 TV Lines (Horizontal) Day Mode	*	*	*	*
		600 TV Lines (Horizontal) Night Mode	*	*	*	*
		350 TV Lines (Horizontal) Day Mode			*	*
		400 TV Lines (Horizontal) Night Mode			*	*
8	Gamma Correction	0.45 or 1 Selectable	*	*	*	*
9	Minimum Illumination	0.03 Lux (F1.4,3200°K,AGC WIDE,10IRE,C/L Mode)	*		*	*
		0.003 Lux (F1.4,3200°K,AGC WIDE,10IRE,B/W Mode)	*		*	*
		0.06 Lux (F1.4,3200°K,AGC WIDE,10IRE,C/L Mode)		*	*	*
		0.006 Lux (F1.4,3200°K,AGC WIDE,10IRE,B/W Mode)		*	*	*
10	S/N Ratio	48dB	*	*	*	*
11	Power Source	DC12V ± 10% Regulated Power Supply	*	*	*	*
		AC24V ± 10% 50Hz / 60Hz ± 1Hz			*	*
		AC90V to AC260V 50Hz / 60Hz	*	*	*	*
12	Power Consumption	10W (max) with AI Lens	*	*	*	*
13	Ambient	-10~50°C / 30~90% Relative Humidity	*	*	*	*
14	Dimensions	126(L) x 50(W) x 62(H)	*	*	*	*
15	Weights	500g (max.)	*	*	*	*
16	Shutter Control	Auto : 1/50(1/60)~1/100,000 sec.	*	*	*	*
		Manual : 1/50, 1/120, 1/250, 1/500, 1/1K, 1/2K, 1/4K, 1/10K Sec.	*	*	*	*
		Manual : 1/60, 1/100, 1/250, 1/500, 1/1K, 1/2K, 1/4K, 1/10K Sec.			*	*
17	Gain Control	Normal AGC / Super AGC	*	*	*	*
18	Backlight Compensation	On / Off	*	*	*	*

NO	ITEM	SPECIFICATION	PAL		NTSC	
			HAD HI Res 1/3" Exview Hi Res	HAD STD Res 1/3" Super Hi Res	HAD HI Res 1/3" Exview Hi Res	HAD STD Res 1/3" Super Hi Res
19	ICR Mechanism	AUTO, MANUAL	*	*	*	*
20	D/N LEVEL	HIGH, LOW	*	*	*	*
21	DUAL MODE	DAY / NIGHT	*	*	*	*
22	White Balance	ATW1 : 2500°K ~ 6000°K ATW2 : 2500°K ~ 9500°K	*	*	*	*
23	Iris Control	Video Out / DC Iris For Galvano Lens DC IRIS Output For Galvano Lens	*	*	*	*
24	Optical	Moveable OLPF	*	*	*	*

Notes :

The technical specifications are subject to change without notice.
Power consumption increases during D/N filter switchover.

MEMC

ZEIM-0050598
Ver : A.1
2003.11.17