

Instruction Manual



1/3" Day-Night All in One Color Camera with AI Varifocal Lens & Cable Management Bracket

INTRODUCTION

The high resolution True Day/Night, all in one digital color cameras have been developed using the advanced technology of Digital Signal Processing LSI (DSP) together with a interline transfer CCD.

This series of cameras is suitable for surveillance applications or an input device for an image processing system.

PRECAUTIONS

1. Do not attempt to disassemble the camera.
To prevent electric shock, do not remove screws or cover. There are no user-serviceable parts inside. Refer servicing to qualified service personnel.
2. Handle the camera with care.
Do not abuse the camera. Avoid striking or shaking it. The camera could be damaged by improper handling or storage.
3. Never face the camera toward the sun.
Whether the camera is in use or not, never face it toward the sun. Do use cautiously when operating the camera in the vicinity of spot lights or other bright lights and light reflecting objects.
4. Do not operate the camera beyond its temperature, humidity or power source ratings.
Do not use the camera in an extreme environment where high temperature or high humidity exists. Use the camera under conditions where temperatures are within -10~+50, and humidity is below 80% RH.
5. Do not touch the CCD sensor directly with your fingers. If necessary, use soft cloth moistened with alcohol to wipe off the dust.
6. When the camera is not in use, keep the lens closed or lens cap attached to protect the CCD sensor.

Safety Advice

Don't touch the CCD Chip with your fingers.

Use the camera only with the voltage as mentioned on the type plate.

Use a monitor with 75 ohm impedance.

Never open the camera. Otherwise warranty is void.

FEATURES

- 1/3" Sharp / Sony High Res. IR Camera with External Focus Adjustment
- Plug & Play Installation - Compact Size + Sunshield + Cable Management Bracket
- Effective Range up to 40M with Low / Mid / High Level Selectable
- Flickerless, AGC, AES & BLC On/Off Selectable
- With Tempered Glass - Split Glass Technology to Avoid IR Reflection for Option
- 3.7-12mm AI Varifocal Lens with Removable IR-cut Filter (Option: 9-22mm Ai Varifocal Lens w/ Removable IR-cut Filter)
- 0 Lux with Built-in IR-LED
- 42x Built In IR LED
- Video Cable with BNC Connector
- Weatherproof

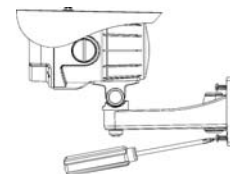
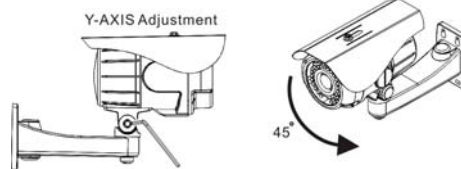
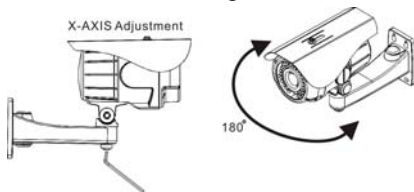
INSTALLATION & OPERATION

1. Install Camera

Use the supplied screws (in the accessories bag), and secure the camera in position.

2. Adjust 2-Axis Bracket

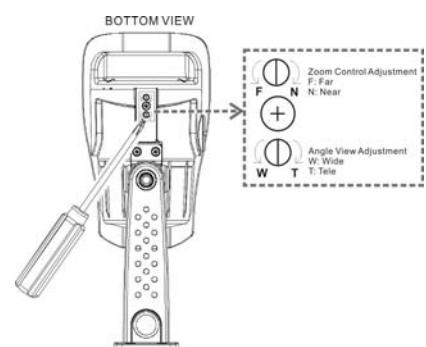
Adjust the bracket while checking the view angle from the monitor. Loosen the X-Y screws and then adjust the 2-Axis bracket (X-Y Axis) to get the desired viewing angle.



3. Focus Adjustment

Focus adjustment should be done with zoom focus at the same time. Use the screwdriver to adjust the zoom/ focus ratio (from wide to tele or near to far).

NOTE: Focus adjustment position differs depending on model type.



4. Remove the Controller Cap

Remove the controller cap using a coin to make adjustments.

(1) Auto Iris Level Adjustment

User needs to adjust the DC level especially for conditions described below:

- If camera is facing a window but is placed in a relatively dark room.
- If the subject background is extremely bright or dark.
- If brightness of the picture on the monitor is incorrect.

Auto Iris Level

- (counterclockwise): To decrease the contrast
- + (clockwise): To increase the contrast

(2) Function Selection Switch

FL (Flickerless) If the camera is used with 50Hz fluorescent lighting, flicker may appear on the screen. In this case, FL switch should be set to FL position and switched to OFF position under normal lighting.

AGC (Auto Gain Control) Set to AGC position, camera's sensitivity is automatically increased when level of ambient light drops. AGC function automatically controls signal gain to a maximum of 28dB.

AES (Auto Electronic Shutter) Set to OFF mode for auto iris control and AES mode for fixed or manual iris control (The default is OFF mode, this option is not applicable for units fitted with a DC iris lens)

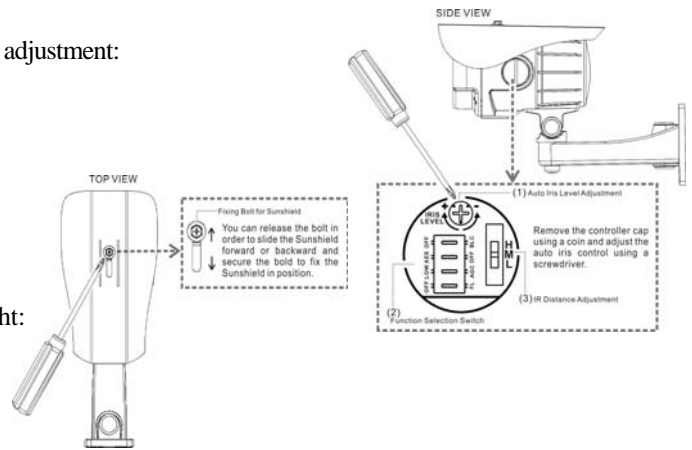
BLC (Back Light Compensation) This function set to BLC position, is useful when the camera is facing an object that has excessive light behind it (Ex.: Camera installed facing the doorway).

(3) IR Distance Adjustment

Installer may use IR adjustment function according to installation conditions. It is suggested that the view angle should be checked before setting up the IR distance.

Table below is the suggested LED brightness and IR distance adjustment:

LED Brightness	IR Distance	Focal Length
H (High)	25m~40m	9~22mm
M (Middle)	15m~25m	6~12mm
L (Low)	10m~15m	3.7~6mm



5. Install Sunshield

To install the sunshield, please follow the instruction shown right:

SPECIFICATIONS

Pick up Element	1/3" Sony Super HAD Hi-Res. CCD	1/3" Sharp Hi-Res. CCD
Effective Picture Element	NTSC: 768(H) x 494(V); PAL: 752(H) x 582(V)	
Synchronization	Internal	
Scanning System	2:1 Interlace	
Resolution	Horizontal 550 TV Lines	Horizontal 540 TV Lines
Sensitivity	0 Lux with IR-LED Built in	
S/N Ratio	> 48dB (AGC Off)	
Gain Control	High / Low Selectable	
Electronic Shutter	NTSC: 1/60 ~ 1/100000s ; PAL: 1/50 ~ 1/110000s	
Flickerless	On / Off Selectable	
Back Light Compensation	On / Off Selectable	
White Balance	Auto White Balance (2000 K ~ 10000K)	
Gamma Characteristic	0.45	
Video Output	1.0 Vp-p / 75 Ohms. BNC Connector.	
Lens Built in	DC Drive Varifocal Lens with Removable IR-Cut Filter 3.7 – 12 mm / F1.6, Wide: 83.9°x61.9°; Tele: 23.91°x17.93°(HxV) [Optional: f9 – 22 mm / F2.0, Wide: 83.9°x61.9°; Tele: 23.91°x17.93°(HxV)]	
Operating Temperature	-10 ~ +50 degree C/ RH85% or Less	
Power Consumption	840mA Max (IR On) 250mA Max (IR Off)	780mA Max (IR On) 190mA Max (IR Off)
Luminary	42 units of 850nm IR LED	
IR Project Distance	40 Meters – Low / Mid / High Selectable	
Power Supply	DC 12V ± 10 %	

Specifications are subject to change without prior notice.