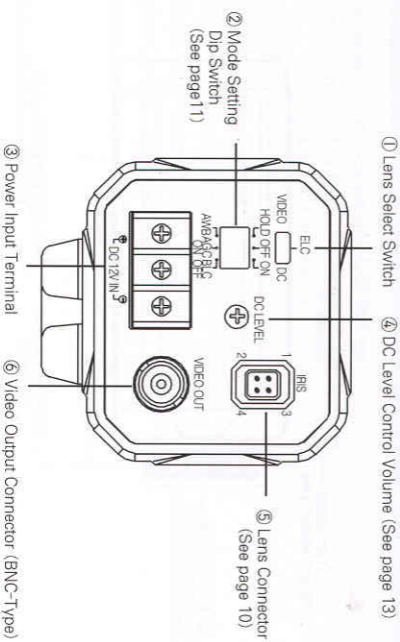
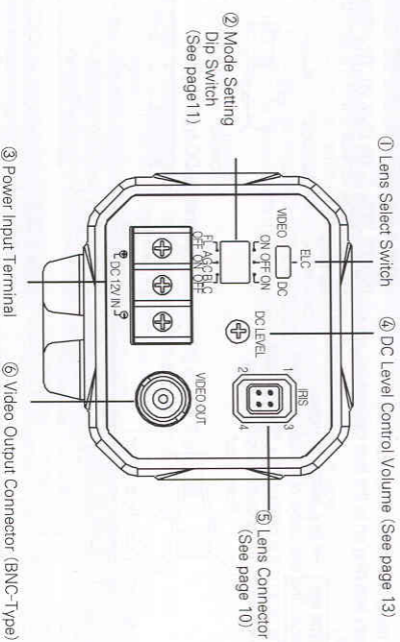


● Normal Resolution



● High Resolution

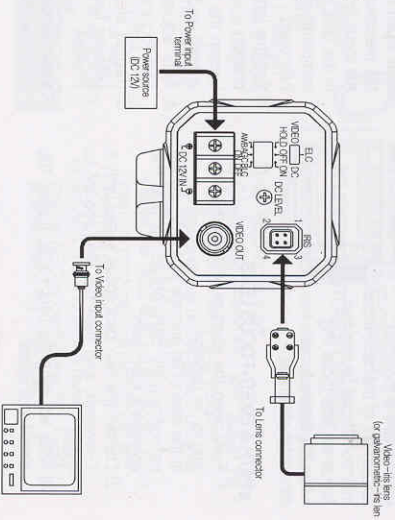


CONNECTIONS

Connect the video output of the camera to the video input of a monitor or other equipment. When using a "loop through" connection of two or more monitors, set the 75 Ω switch of only the final monitor to on.

Determine the type of cable according to the distance of the connected equipment.

- Do not turn any component's power on until all connections are completed.



SPECIFICATIONS

Item	High Resolution		Normal Resolution	
	NTSC	PAL	NTSC	PAL
Signal System	NTSC	PAL	NTSC	PAL
CCD Pick-up Element	2:1 Interlace Transfer 1/3 Inch Super HAD CCD			
Effective Pixels	768(H) x 494(V)	752(H) x 582(V)	510(H) x 492(V)	500(H) x 582(V)
	Video Output Composite: 1.0Vp-p, 75 Ω , Unbalanced			
Sync. System	Internal Sync.			
Luminance S/N Ratio	More than 48dB (AGC OFF)			
Horizontal Resolution	480TV Lines		380 TV Lines	
	Sensitivity		Sensitivity	
0.5 Lux (F1.4, 30IRE, AGC ON)		0.1 Lux (F1.4, 30IRE, AGC ON)		
Lens Mount	C / CS Mount			
Electronic Shutter	1/60 ~ 1/10,000 (NTSC), 1/50 ~ 1/10,000 (PAL)			

Mounting a Lens

- ① Remove the lens mount cap from the camera.
- ② Attach or remove the C-mount adapter depending on the lens to be used.
 - If the adapter is attached so tightly that is difficult to remove, use L-wrench into the M3 Nut holes to remove it. (Store the C-mount adapter for possible future use.)
- ③ Attach the lens to the lens mount. Secure it so that it does not become loose.
- ④ If the lens has an auto-iris mechanism, connect the lens cable to the lens connector.
 - When installing a video-iris lens, lens switch should be set to VIDEO position.
 - When installing a galvanometric-iris lens, lens switch should be set to DC position.

L-Wrench



- ⑤ When installing a fixed lens, lens select switch should be set to ELC position.

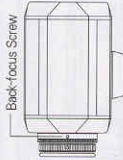
● ADJUSTING AUTO-IRIS LENSES

Make this adjustment after connecting the camera to a power source and a monitor.

- 1) Set AGC mode to off.
- 2) When using a Video type lens: Adjust the level control on the lens to produce minimum smear and optimum pictures.
- 3) When using a DC type lens: Adjust the video level control on the main menu to produce minimum smear and optimum pictures.
- 4) Set AGC mode to on it is recommended that the AGC be used in the "on" mode after adjusting the video level.

Back-focus adjustment

When a lens is mounted, adjustment of the back-focus may sometimes be required. Adjust the lens focus ring when the correct focus cannot be obtained.



● WITH A FIXED-FOCUS LENS

- 1) Fully open the aperture and set the focus ring to ∞ (infinity).
In the case of an auto-iris lens only, shoot a comparatively dark object so that the aperture is fully open.
- 2) Loosen the two back-focus screw with a L-wrench, and turn the lens mount to focus.
- 3) After adjusting the back-focus, tighten the back-focus screw.

● WITH A ZOOM LENS

- 1) Fully open the aperture and set the lens to the maximum tele-photo position. Then turn the focus ring to focus.
In the case of an auto-iris lens only, shoot a comparatively dark object so that aperture is fully open.
- 2) Set the lens to its maximum wide-angle position.
- 3) Loosen the two back-focus screw with a L-wrench, and turn the lens mount to focus.
- 4) After adjusting the back-focus, tighten the back-focus screw.
- 5) Repeat step 1)~3) until the difference between focusing position 1) and 2) becomes smallest.

Caution : Do not forcibly turn the back-focus screw, as it will cause damage to the camera.

● 1-2. F.L (Flickerless): High Resolution

If the camera is used with 50Hz fluorescent lighting, there is flicker on the screen. In this case, F. L switch should be set to ON position. But F. L function should be set to OFF in 60Hz power source.

Flickerless mode can overcome flickering on the screen in case that the AC power frequency is different from the vertical sync frequency of the camera.

● AGC (Automatic Gain Control)

At the AGC on setting, camera's sensitivity is automatically increased when the level of ambient light drops.

AGC function automatically controls signal gain in the range of maximum 28dB

● BLC (Back Light Compensation)

Strong light, such as a spotlight, entering the scene background causes the lens irls to close, thereby possibly obscuring desired portions of the scene. Backlight compensation function automatically adjust the video level so as to preserve visibility in important section of the scene.

ON OFF ON



FL AGC BLC
OFF ON OFF

HOLD OFF ON



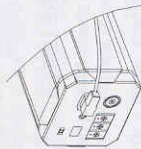
AWB AGC BLC
ON ON OFF

HOLD OFF ON

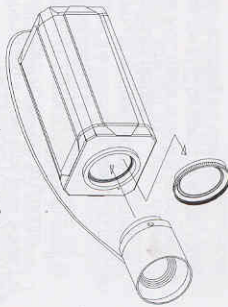


AWB AGC BLC
ON ON OFF

INSTALLATION (LENS)



- Please attach a lens cable when using the DC iris lens or Video iris lens
- Lens select Switch on the rear pannel should be Set to ELC position when using the manual Lens.



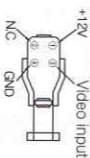
- When using the VIDEO type lens, please adjust a brightness of image by volume attached with the lens.
- When using the DC type lens, please adjust a brightness of image by DC level volume on the rear panel.
- Turn toward L(left)to make the picture brighter
- Turn toward R (right)to make the picture darker.

Lens connector

When using an auto-iris lens, install the accessory lens plug on to the lens cable as follows.

Video type lens: Set lens switch to Video.

Connect the lens cable of a video type lens. If the plug on the cable is of a different type, replace it with the provided 4-pin iris plug.



Pin Assignment: Video type (4-pin)

Pin No.	Signal
1	+12V DC(50mA max) N.C (Not connected)
2	Video (0.7Vp-p, high impedance, no sync)
3	
4	GND

DC type lens: Set lens switch to DC.

Connect the lens cable of a DC (Galvanometric) type lens. If the plug on the cable is of a different type, replace it with the provided 4-pin iris plug.



Pin Assignment: DC type (4-pin)

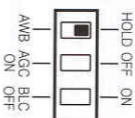
Pin No.	Signal
1	Damping coil(-)
2	Damping coil(+)
3	Drive coil(+)
4	Drive coil(-)

After installing the connector plug, connect it to the lens connector on the rear panel of camera.

Mode setting Dip Switch

●1-1 AWB (Auto-tracking White Balance) Normal Resolution

At the AWB on setting, white balance feature is accepted different types of lighting using an automatic tracking system and automatically controlled in the color temperature range of 2,400°K to 10,000°K
AWB mode ensures reliable color reproduction when lighting conditions change frequently.



●HOLD (Preset White Balance)

HOLD mode can also be selected by switching AWB to HOLD position.
HOLD mode is suitable where a lot of white objects appears in the scene, and is also ideal for situations where the object merges into the scene with a similar color shade.

Note : When shooting with non-standard lighting or a large part of the scene is occupied by a single color or a completely red or blue background, the AWB mode may not function properly. In such a case, set AWB to HOLD. (HOLD mode)

Note : In order to avoid failure of HOLD mode setting, do not move the camera or the object for a few seconds after switching AWB to HOLD.