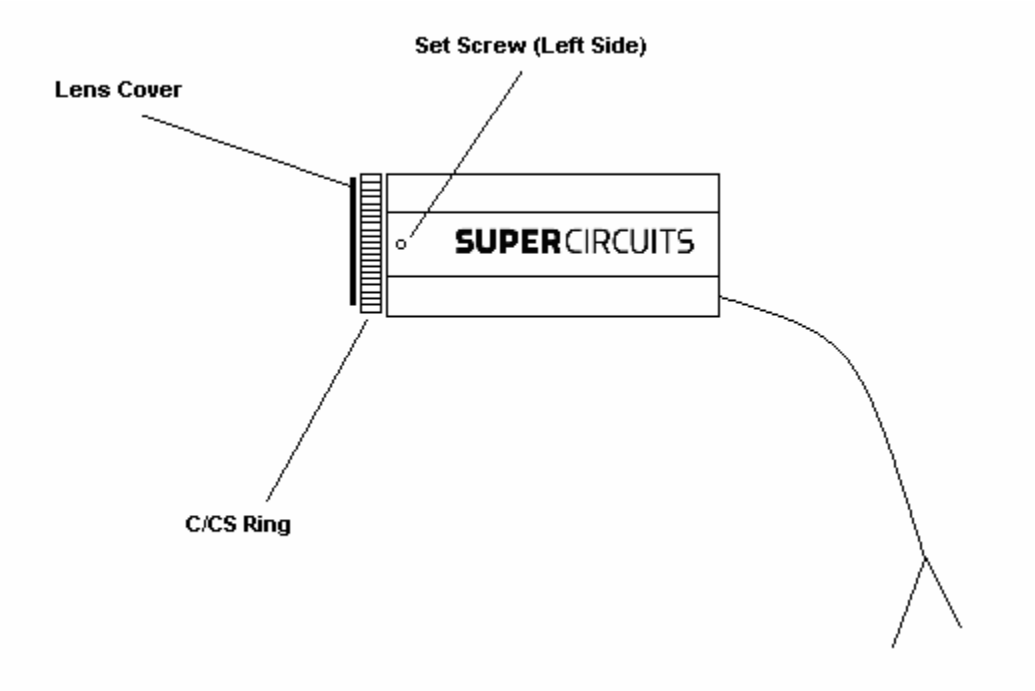
PC164C / PC165 Series Back Focus Procedure



Step 1- Remove Lens Cover
Step 2- If using a C-Mount lenses it can be applied to the camera at this time
Step 3- Most current lenses are CS-Mount and require removal of the C/CS ring
Step 4- To remove the C/CS ring loosen but do not remove completely the two set screws and then remove the C/CS ring.
Step 5- Screw on the CS-Mount lens until a good picture is obtained and tighten the set screws
Step 6- Use the focus ring on the lens to obtain a finer focusing.

Note- If a C-Mount lens was applied and focus could not be obtained, please try the following:
●Ensure that the lens is in fact a C-Mount and not a CS-Mount
●Check the focus adjust on the lens
●If need be loosen the set screws and adjust the position of the lens and C/CS ring as one unit until a good focus is obtained.

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK,
DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE

CAUTION

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE COVER(OR BACK),
NO USER - SERVICEABLE PATRS INSIDE.
REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

TABLE OF CONTENTS

A PRECAUTIONS

1. **Do not attempt to disassemble the camera.**
   There are no user serviceable parts inside. Ask a qualified service person for servicing.

2. **Handle the camera with care.**
   Do not abuse the camera. Avoid striking, shaking, etc. Improper handling or storage could damage the camera.

3. **Do not expose the camera to rain or moisture, or try to operate it in wet areas.**
   Turn the power off immediately and ask a qualified service person for servicing. Moisture can damage the camera.

4. **Do not use strong or abrasive detergents when cleaning the camera body.**
   Use a dry cloth to clean the camera when dirty. In case the dirt is hard to remove, use a mild detergent and wipe gently. Afterwards, wipe off the remained part of the detergent in it with a dry cloth.

5. **Clean the CCD faceplate with care.**
   Do not clean the CCD with strong or abrasive detergents. Use lens tissue or a cotton tipped applicator and ethanol.

6. **Never face the camera towards the sun.**
   Do not aim the camera at bright objects. Whether the camera is in use or not, never aim it at the sun or other extremely bright objects. Otherwise, blooming or smear may be caused.

7. **Do not operate the camera beyond the specified temperature, humidity or power source ratings.**
   Use the camera under conditions where temperature is between -10℃~+40℃, and humidity is below 80%.

B SPECIAL FEATURES

1. The following functions are built in.
   (1)Auto Light Control (ALC)/Electronic Light Control(E/S)
   (2)Automatic Gain control (AGC)
   (3)Automatic White Balance(AWB)

2. Conspicuous Low Lux Sensitivity and extremely clear vision.

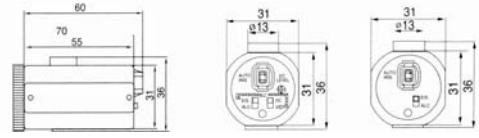
3. Signal-to-noise ratio of 45dB for colour & 50dB for B/W (Equivalent to AGC Off)

4. Horizontal resolution of 380TV lines & 420 TV lines for Standard resolution and 480TV lines & 600 TV lines for High resolution.

5. Built-in electronic shutter (Auto iris function) and blooming-free circuit
   Built in auto iris function enables it to view against strong light and add the outline clearer with blooming free circuit

6. OLPF Built-in for colour version
   Unlike usual cameras, this camera filters unnecessary noise signals in dark view and feedback them with more clear picture signals.
   This makes it possible to eliminate disturbing dark noises in low lux condition and ensure it to produce an extraordinary clear picture at any light condition.

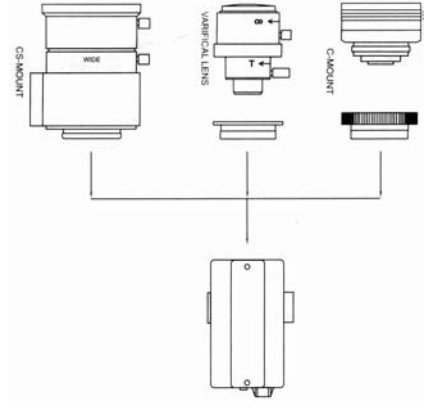
C APPEARANCE



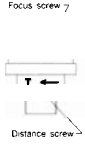
B/W Version Colour Version

D INSTALLATION

1. Mounting Lens



2. View of angle and focus adjustment for built in varifocal lens.



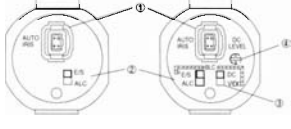
CLASS	W(wide)	T(Tele)
Horizontal	89.2°	44.2°
Vertical	65.5°	33.4°

★ Please adjust focus & distance with the screws on the varifocal lens

3. Cable Connection

4. Operating Controls and Functions

Colour Version **B/W Version**



① HOW TO INSTALL THE AUTO-IRIS LENS CONNECTOR

ⓐ. Cut off the iris control cable at the edge of lens connector and then cut off the outer cable cover as shown in the diagram.

ⓑ. Cut off inner cable covers of the iris control cable as shown in the diagram.

1/4"(Approximatly 6mm)

ⓒ. Put the heat shrinkable tubes or equivalent tubes on the inner cables of the iris control cable.

ⓓ. Solder the inner cables of the iris control cable at the pin-plug block according to the following pin assignment and cover the heat shrinkable tubes or equivalent tubes over the soldered area and heat on the tubes to shrink them.

Signal for Video-iris lens

Pin 1:Power source:+9V DC, 50mA Max.
Pin 2:N.C(Not used)
Pin 3:Video Signal:0.7Vp-p/10K ohms.
Pin 4:Shield, ground

Signal for DC-iris lens

Pin 1:DAMP-
Pin 2:DAMP+
Pin 3:DRV+
Pin 4:DRV-(GND)

When Auto-iris lens is used, please select E/S, BLC.ALC switch to ALC position

ⓔ. Both the connector cover and connector should be properly interlocked

Automatic Iris Lens

Note:Cut off the rib on the connector When the iris control cable is too thick, connector cover and connector can not be interlocked.

② Automatic Light Control/Electronic Light Control Selector (ALC, E/S)
Let you select the mode according to the lens type used.
ALC:Select this mode when an auto iris lens(ALC lens)is used with this camera.
E/S:Select this mode when a fixed iris lens or manual iris lens is used with this carr

③ DC or V/D
DC:Select DC if you are using the auto iris lens that requires a DC drive signal.
VIDEO:Select V/D if you are using the auto iris lens that requires a video drive signal

④ DC Level
DC Auto Iris lens level adjustment

Model	B/W STD-RES	B/W STD-RES EX	B/W STD-RES	B/W STD-RES EX
Signal Format	EIA		CCIR	
Image Sensor	B/W Sony 1/3" Super HAD CCD	B/W Sony 1/3" Super HAD EXview CCD	B/W Sony 1/3" Super HAD CCD	B/W Sony 1/3" Super HAD EXview CCD
Scanning System	2:1 Interlace			
Scanning Frequency	H:15.734[KHz],V:59.94[Hz]		H:15.625[KHz], V:50 [Hz]	
Total Pixels	537(H) × 505(V) 270K		537(H) × 597(V) 320K	
Effective Pixels	510(H) × 492(V) 250K		500(H) × 582(V) 290K	
Horizontal Resolution	420 TV lines			
Electronic Shutter	1/60-1/100,000[sec]automatic		1/50-1/100,000[sec]automatic	
S/N Ratio	More than 50dB (AGC OFF)			
Sensitivity	Normal	0.02Lux@F2.0 (30 IRE)		
	Exview	0.0003Lux@F1.2 (30 IRE)		
Gamma	γ=0.45			
Sync System	Internal			
Video Output	Composite 1 [Vp-p] 75 [Ω] unbalanced			
Power Supply	DC 12V (± 10%)			
Operating Temperature	-10℃ ~ +40℃			
Storage Temperature	-30℃ ~ +70℃			
Operating Humidity	10% ~ 80%			
Dimensions	31mm(W) × 31mm(H) × 55mm(L)			