INSTRUCTION MANUAL

Motorized Zoom Lens Series

CM696	A		AP	: 1/3" F1.4	/f=6-48mm	CS-mount
CM696	M			: 1/3" F1.4	/f=6-48mm	CS-mount
CN699	AB		APB	: 1/3" F1.6	/f=6-60mm	CS-mount
CN699	MB		MPB	: 1/3" F1.6	/f=6-60mm	CS-mount
CN699	A		AP	: 1/3" F1.6	/f=6-90mm	CS-mount
CN699	M		MP	: 1/3" F1.6	/f=6-90mm	CS-mount
CN697	A		AP	: 1/3" F1.6	/f=5.6-112mm	CS-mount
CN697	M		MP	: 1/3" F1.6	/f=5.6-112mm	CS-mount
CQ951	A	AP	XA XAP	: 1/3" F1.8	/f=5.5-165mm	CS-mount
CN628	A		AP	: 1/2" F1.2	/f=8.5-51mm	C-mount
CN628	M			: 1/2" F1.2	/f=8.5-51mm	C-mount
CP698	AB		APB	: 1/2" F1.8	/f=8-80mm	C-mount
CP698	MB		MPB	: 1/2" F1.8	/f=8-80mm	C-mount
CP698	A		AP	: 1/2" F1.8	/f=8-120mm	C-mount
CP698	M		MP	: 1/2" F1.8	/f=8-120mm	C-mount
CP926	A	AP	XA XAP	: 1/2" F1.9	/f=11-200mm	C-mount
CQ937	A	AP	XA XAP	: 1/2" F1.5	/f=10-250mm	C-mount
CP962	A	AP	XA XAP	: 1/2" F2.3	/f=15-375mm	C-mount
CP962	M	MP		: 1/2" F2.3	/f=15-375mm	C-mount
CP963	A	AP	XA XAP	: 1/2" F4.6	/f=30-750mm	C-mount
CP963	M	MP		: 1/2" F4.6	/f=30-750mm	C-mount
CN918	A	AP	XA XAP	: 2/3" F1.6	/f=10-100mm	C-mount

A(B) :with Auto Iris
AP(B) :with Auto Iris and Preset Potentiometer
M(B) :with 3-motor
MP(B) :with 3-motor and Preset Potentiometer

1)Product summary

A(B) & AP(B) : These zoom lenses are motorized zoom/focus lenses driven by built-in DC motors.
Each lens contains a galvanometric auto iris driven with an internal amplifier.
In addition to this, with the AP(B)type, there are built-in potentiometers linked to zoom and focus for preset modes.
M(B)& MP(B): These zoom lenses are motorized zoom/focus/iris driven by built-in DC motors.
With the MP(B)type, there are built-in potentiometers linked to zoom and focus for preset modes.

2)How to use

a)Lens Mounting

i)Mount Type

The standard CS-mount zoom lens is used for the 1/3" format cameras, and the standard C-mount zoom lens is for the 1/2" format cameras.

ii)Positioning

These lenses contain a mechanism by which the lens positioning can be freely changed.

☐CM696/CN628 series

To mount the zoom lens on the camera, screw the lens clockwise until it stops, and then rotate the lens counterclockwise, the lens will stays in its proper position.

☐CN699/CN697/CP698/CN918/CP926/CO951/CQ937/CP962/CP963 series

To mount the zoom lens on the camera, screw the lens clockwise until it stops, and then loosen the mount connection coupling ring, adjust the lens to its proper position and retighten the coupling ring.

b)Cable connection : Connect properly according to the circuit diagram in page 2.

c)Focus adjustment

After turning the camera power on, check the focus as follows. First, set the zoom-ring to maximum telephoto. With the zoom ring in this position, look at the picture on the TV monitor, and adjust the focus to obtain a focused image. Next, set the zoom ring to the widest angle, and check to see that the picture on the TV monitor is in focus. If the picture is not in focus using these steps, it is necessary to adjust the flange back of the camera.

d) ALC(Light Metering) adjustment

This function allows variable selection of light metering between average(A) and peak(P) by adjusting the ALC variable resistor. Turn the ALC variable resister on the lens body with a precision screwdriver until suitable exposure is obtained.

ALC Mode		ALC Adjustment
To Average Metering	P A ALC	Turn clockwise to "A" direction
To Peak Metering	P A ALC	Turn counter clockwise to "P" direction

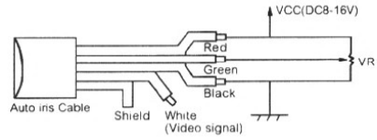
e) LEVEL(Image Signal Level) adjustment

This feature helps to adjust the brightness of the images projected on the TV monitor.
When it is necessary to make correction due to the characteristics of the camera and the lighting conditions, you will need to adjust the LEVEL variable resister on the lens body with a precision screwdriver until the optimum level is obtained.
The video signal can be adjusted from 0.5Vp-p to 1.0Vp-p. This lens can be operated by either composite video signal(VS) or video signal(V).

Picture Brightness		Level Adjustment
To get brighter picture	L H LEVEL	Turn clockwise to "H" direction
To get darker picture	L H LEVEL	Turn counter clockwise to "L" direction

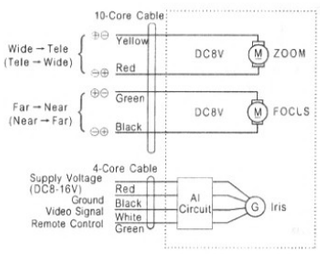
f) Adjusting LEVEL by Remote Control

If remote control adjustment of the video signal level is necessary, connect the green cable as shown in the figure below.

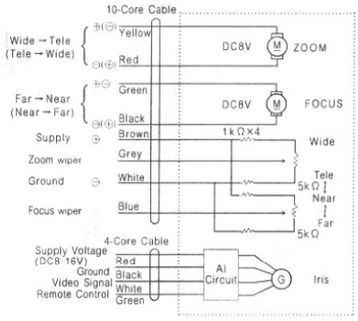


Circuit Diagram

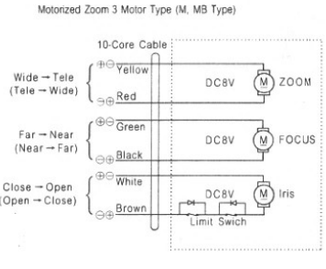
Auto iris with Motorized Zoom, Focus (A, AB Type)



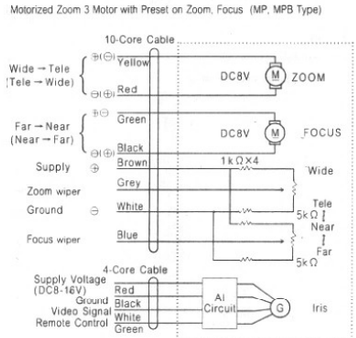
AI Motorized Zoom with Preset on Zoom, Focus (AP, APB Type)



Motorized Zoom 3 Motor Type (M, MB Type)



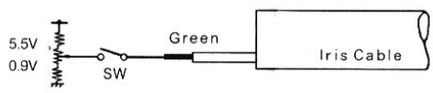
Motorized Zoom 3 Motor with Preset on Zoom, Focus (MP, MPB Type)



Manual override control (for XA type)

If remote control adjustment of the iris diameter is necessary, connect the green cable as shown in the figure below. To certain voltage between 0.9V(close) and 5.5V(open) supply, this iris can be fixed at desired position and right exposure.

the voltage between 0.9V-5.5V is supplied.



- Metering Method : Adjustable Peak-Average Metering Method.
- Supply Voltage & Current : DC8V to 16V at less than 40mA.
- Input Signal : Video Signal (VS or V).
- Sensitivity Adjustment : V signal Level 0.5 to 1.0V.
- Applicable Temperature Range : -10℃ ~ +50℃.

CN628/CM696
Zoom Speed Approx. 7.5sec. at DC8V Max. 30mA.
Focus Speed Approx.6.5sec. at DC8V Max. 30mA.
CN699/CN697/CP698
Zoom Speed Approx. 7sec. at DC8V Max. 30mA.
Focus Speed Approx.5.5sec. at DC8V Max. 30mA.
CN918/CP926/CO951
Zoom Speed Approx. 10sec. at DC8V Max. 30mA.
Focus Speed Approx.13sec. at DC8V Max. 30mA.
CQ937
Zoom Speed Approx. 12sec. at DC8V Max. 30mA.
Focus Speed Approx.12.5sec. at DC8V Max. 30mA.
CP962/CP963
Zoom Speed Approx. 12sec. at DC8V Max. 30mA.
Focus Speed Approx.30sec. at DC8V Max. 30mA.

■ Design and specifications are subject to change without notice.