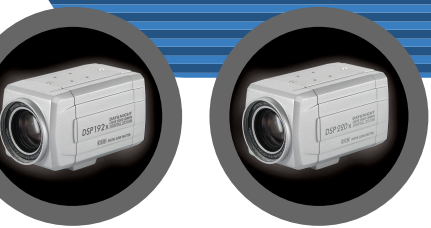


DSP Day & Night Color Camera 192x 220x Digital Zoom



COLOR ZOOM CAMERA SERIES DIGITAL POWER ZOOM

OWNER'S MANUAL



P/N : 3810-0046B (Ver.0506E) Color Zoom Camera Series

Design and specifications are subject to change without notice.

User Information



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK)...

Explanation of two Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of an un-insulated "dangerous voltage"...



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions...

THE GRAPHIC SYMBOLS WITH SUPPLEMENTAL MARKING ARE ON THE BOTTOM OF THE SYSTEM.

WARNING TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THE UNIT TO RAIN OR MOISTURE

INFORMATION

This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

WARNING

The manufacturer could void the user's authority to operate the equipment.

CAUTION - To prevent electric shock and risk of fire hazards: Do not use power sources except for that specified. Do not expose this appliance to rain or moisture.

This installation should be made by a qualified service person and should abide to all local codes.

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1. Model Description

Thank you for purchasing this COLOR ZOOM CAMERA. Before operating the camera, confirm the camera model and proper power voltage. In order to understand the manual thoroughly, we'll introduce our model descriptions.

Table with columns: Model No., Type (Rev), Signal System, Power Input, DSS, UTP Output, Communication System. Lists models A through 20.

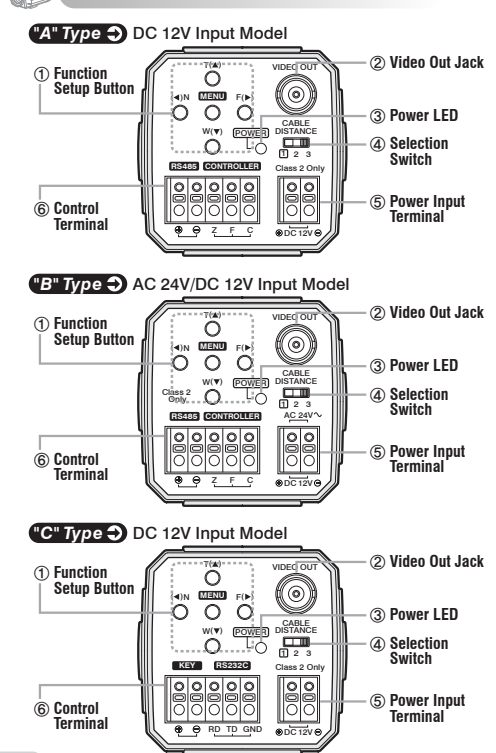
2. Safety and Precautions

- Avoid using the camera in extreme temperature environments.
Avoid using the camera in high humidity environments.
Avoid using the camera in unsteady lighting.
Make sure no foreign substances get on the front glass of the camera.
Make sure that the camera is not exposed to an intense light source such as direct sunlight.
Camera may be damaged if dropped or subjected to strong impact.
Keep camera dry.
Avoid using the camera in the presence of oil and gas.
Caution

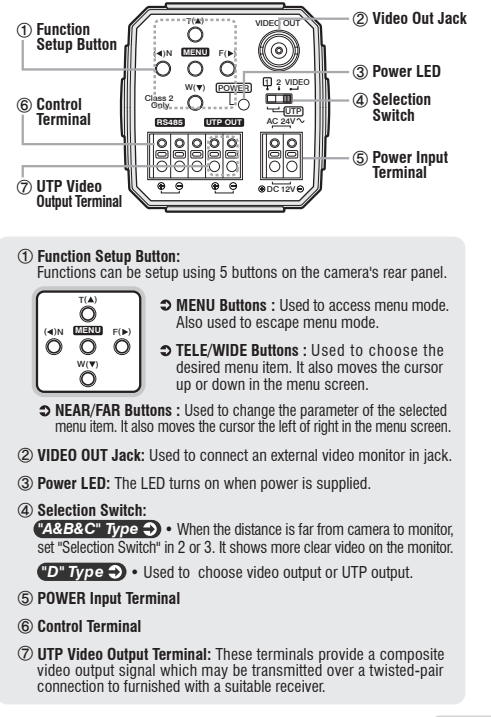
3. Features

- High Resolution
Built-in Power Zoom Lens
AI/Fuzzy Control Circuit with DSP
Remote Control through RS-232C/RS-485 Interface
Remote Control through RS-232C/RS-485 Interface for Focus and Zoom control.
Remote Control through RS-485 Interface
Remote Control through RS-485 Interface
Remote Control through RS-485 Interface
Remote Control through RS-485 Interface

4. Rear View and Part Names

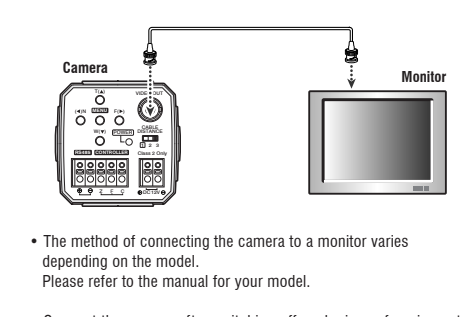


D' Type UTP Transmission Model



5. Installation

1. Connecting to Monitor
Connect the video out jack on the back of the product to the monitor.



The method of connecting the camera to a monitor varies depending on the model. Please refer to the manual for your model.

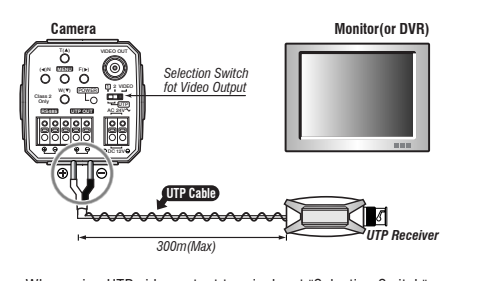
Connect the camera after switching off each piece of equipment.

Change the 75Ω/Hi-Z conversion switch of each piece of equipment according to the following diagram-move the switch of the intermediate video receiver to Hi-Z, and the end equipment to 75Ω.



UTP Video Output Model

Connect the UTP video output terminal on the back of the product to the monitor.



When using UTP video output terminal, set "Selection Switch" at the "UTP OUT".

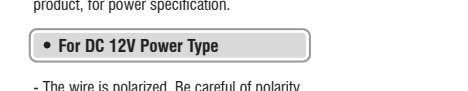
When the distance is far from camera to monitor, set "Selection Switch" in the middle. The picture will show a better image.

Connect UTP (Unshielded Twisted Pair) wire to the UTP output of the camera directly. UTP transmitter is included in the camera therefore additional UTP transmitter is not necessary.

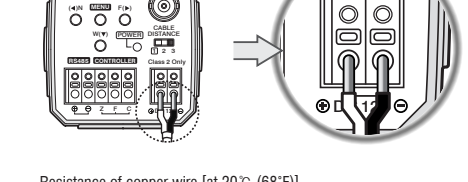
UTP receiver is necessary to connect UTP wire to Monitor or DVR. When connecting UTP wire, make sure the polarity of the video signal. Use UTP wire "CAT5 24AWG" to have the best transmission quality.

2. Connecting to Power

Each model has different power specification, please check the name of the model and power specification before connecting to power source. Please refer to the sticker identifying the model, which is attached on the product, for power specification.



The wire is polarized. Be careful of polarity. Use DC 12V ~ power source.



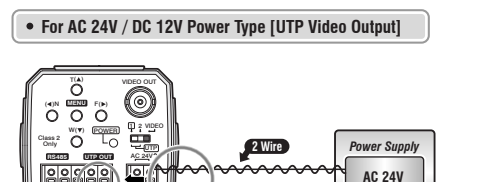
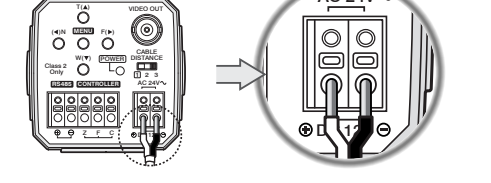
When using AC 24V power with UTP wire, it is possible to supply the power within 100m. Use 4-wires by 2 pair of wires. When using DC 12V power, UTP wire can not be used for power line.

Notes: Be sure to connect power after all the installation is done. Note that AC adaptor is not supplied with camera. Use only AC 24V / DC 12V (UL listed class 2 power supply). Do not use power sources other than that specified.

Table with columns: Copper wire size (#18, #20, #22, #24), Resistance (Ω/m), Voltage Drop (V/m).

For AC 24V / DC 12V Power Type

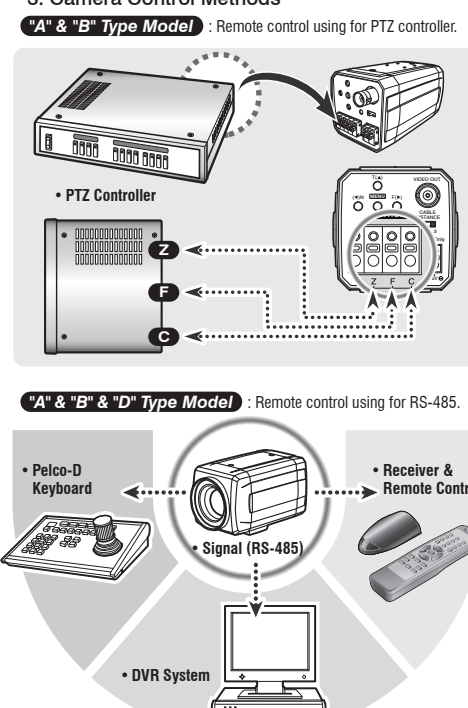
Use AC 24V ~ power source or DC 12V ~ power source.



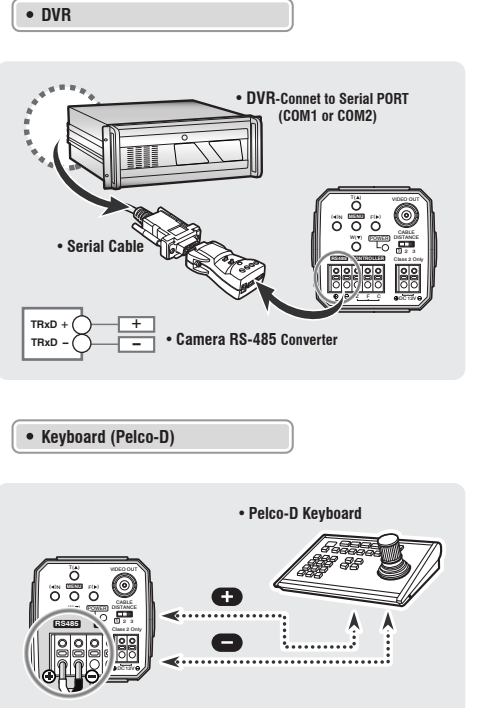
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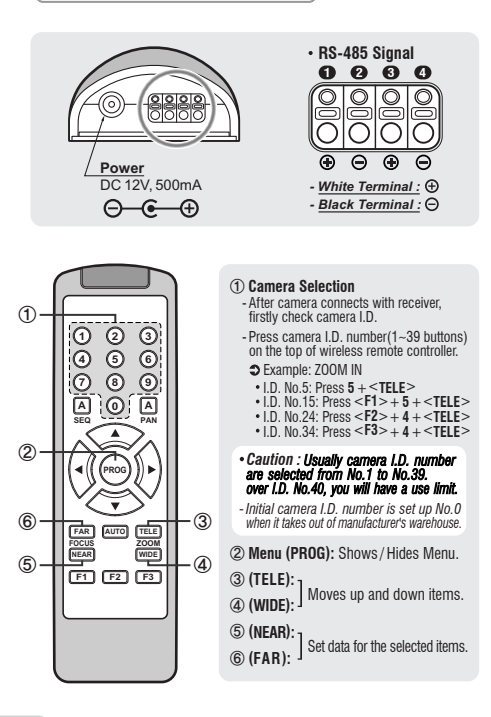
3. Camera Control Methods



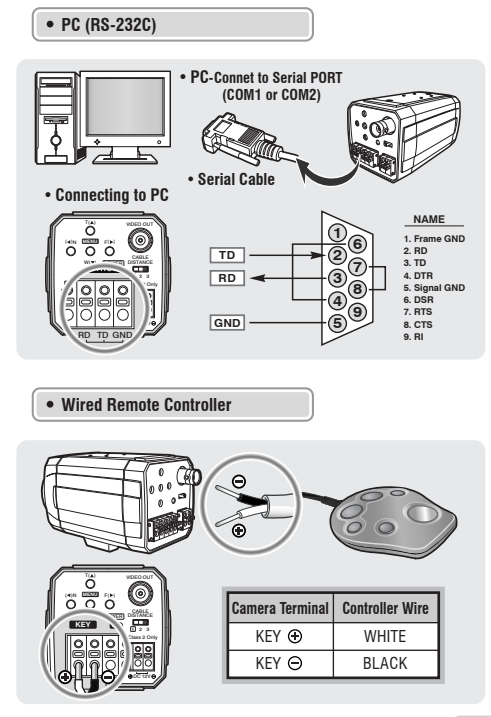
DVR



Receiver & Remote Control



C' Type Model Remote control using for RS-232C



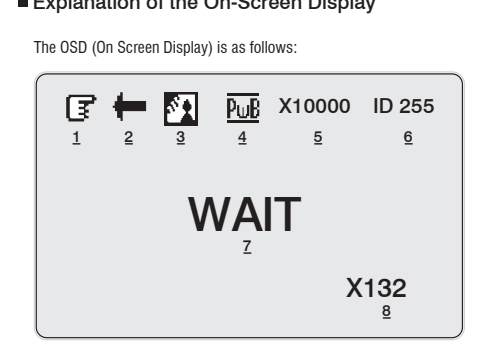
6. Communication Protocol

PELCO 'D' Byte Format RS-485, 2400bps, 1 Start bit, 8 data bits, 1 stop bit, no parity

Table with columns: Function, MSG, DnF, CamID, b0, b1, b2, b3, b4, b5, b6, b7, Checksum. Lists functions like Zoom, Focus, Mirror, etc.

7. On-Screen Display

Explanation of the On-Screen Display



- 1. Focus: The CF appears during the focus manual mode.
2. Mirror: When IMAGE MIRROR is ON state, the image is displayed in the opposite direction.
3. Back Light: The light appears during the mirror mode.
4. WBC (White Balance Control) Display: Indicates the camera stand-by mode until the camera power turns ON.
5. Shutter Speed: Use to select the shutter speed.
6. Camera ID Display: See Page 20.
7. Wait Mode: Indicates the camera stand-by mode until the camera power turns ON.
8. Example of Zoom, Brightness, Sharpness Display: See Page 20.