



Powerful Zooming Function & Multi-Interface.



Auto Focus

Zoom

COLOR ZOOM CAMERA SERIES
DIGITAL POWER ZOOM

OWNER'S MANUAL

OSD
On-Screen Display



10. Specifications

Signal System	NTSC	PAL
Scanning System	2 : 1 Interlace	
Horizontal Scanning Frequency	15.734 kHz	15.625kHz
Vertical Scanning Frequency	59.94 Hz	50 Hz
Image Sensor	1/4 Inch SONY Super HAD CCD / EX-View CCD	
Total Pixels	811(H) x 508(V) 410K	795(H) x 596(V) 470K
Effective Pixels	768(H) x 494(V) 380K	752(H) x 582(V) 440K
Horizontal Resolution	More than 480 TV lines	
S/N Ratio	More than 48dB (AGC off)	
Lens	30x Zoom Video AF (F1.6(W), F3.2(T) f = 3.3~99.0mm)	
Angle of View (HOR)	58.0°C ~ 2.22°C	
Minimum Illumination	Day Mode: 1 Lux (30 IRE) / Night Mode : 0.5 Lux (30 IRE) DSS (128FLD) Mode: 0.001 Lux (30 IRE)	
Synchronization	Internal / External(Line Lock) : Auto Detect	
Signal Output	1Vp-p Composite Output with 75Ω Terminated	
Power Consumption	DC 12V (DC 9V~15V), Max. 4.56W / 380mA (Option: AC24V/DC12V) AC 24V (20V~28V) or DC 12V (10V~15V), Max 6W/ 0.5A	
Dimensions (WxHxD)	48 x 51 x 86 mm , [Long Body] 48 x 51 x 103 mm	
Weight	Approx 330g, [Long Body] 375g	

P/N:3810-0089A ver.0608E

. User Information



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

Explanation of two Symbols



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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

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.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

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.

Model No.	Type (Rear)	Signal System	Power Input	D&N DSS	UTP Output	Communication System
1	A	NTSC/High	DC 12V	0	X	RS-485/PTZ Controller
2	A	PAL/High	DC 12V	0	X	RS-485/PTZ Controller
3	C	NTSC/High	DC 12V	0	X	RS-232C
4	C	PAL/High	DC 12V	0	X	RS-232C
5	B	NTSC/High	AC24V/DC12V	0	X	RS-485/PTZ Controller
6	B	PAL/High	AC24V/DC12V	0	X	RS-485/PTZ Controller
7	D	NTSC/High	AC24V/DC12V	0	0	RS-485
8	D	PAL/High	AC24V/DC12V	0	0	RS-485

Design and specifications are subject to change without notice.

2. Safety and Precautions

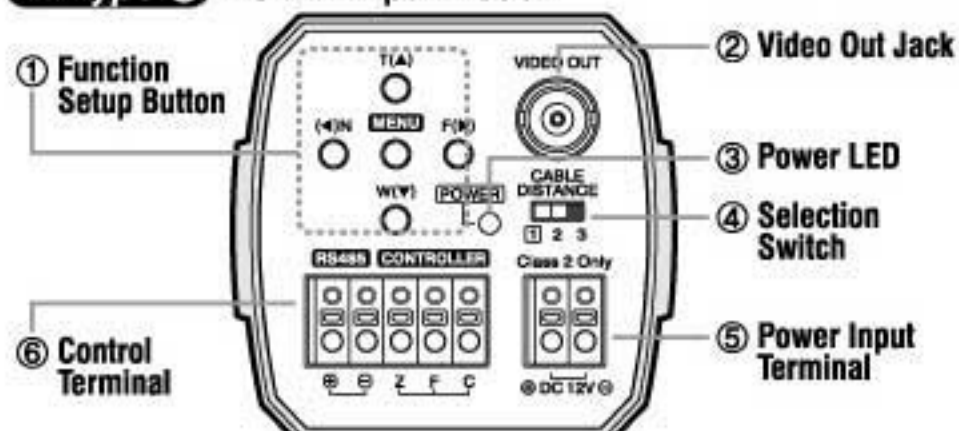
- Avoid using the camera in extreme temperature environments. Using the camera in temperatures exceeding 50°C or below -10°C may lessen picture quality or cause the camera to malfunction.
- Avoid using the camera in high humidity environments. Using the camera in places with high humidity may lessen picture quality because of moisture on the lens.
- Avoid using the camera in unsteady lighting. The camera will not work properly in places with great changes in illumination intensity, such as fluorescent lamps.
- Make sure no foreign substances get on the front glass of the camera. Do not disassemble the camera and prevent foreign substances from getting into the camera.
- Make sure that the camera is not exposed to an intense light source such as direct sunlight. It may damage the CCD.
- Camera may be damaged if dropped or subjected to strong impact.
- Keep camera dry. The camera will be damaged if immersed in water.
- Avoid using the camera in the presence of oil and gas. The camera will be damaged if oil or gas penetrates the exterior.
- Caution
 - Smear or blooming (when bright areas spreads out) may occur when photographing in strong light, i.e. car headlights, etc.
 - Make sure that you are using a compatible power adapter before connecting it to the camera.

3. Features

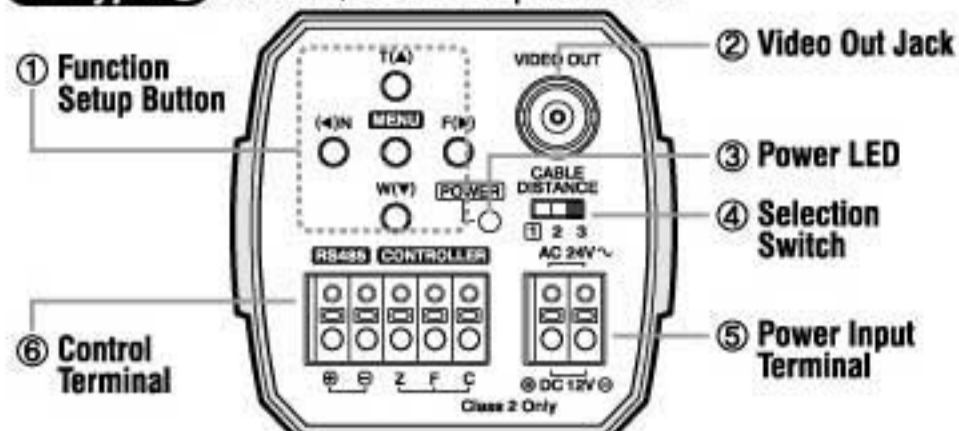
- **High Resolution**
The horizontal resolution of 480 TV lines can be achieved by using a high density CCD having effective 410K pixels, which provides clean, noiseless and reliable pictures.
- **Built-in Power Zoom Lens**
Subjects can be magnified up to 300 times with be 30x optical zoom and 10x digital zoom.
- **AI/Fuzzy Control Circuit with DSP**
Advanced DSP(Digital Signal Processor) technology automatically adjusts operations such as Iris, white balance flexibly adapting to environmental conditions.
- **Remote Control through RS-232C/RS-485 Interface**
Remote control operations are possible through RS-232C / RS-485 interface for Focus and Zoom control.
- In addition, the unit lets you command white balance and exposure manually using RS-232C / RS-485 interface.
- **PROTOCOL: Default, Pelco-D**
- **OSD(On-Screen Display) Function**
- **Wire Remote Controller (Option)**
- **Digital Slow Shutter for full color surveillance under very low light condition : 0.001Lux (at x 128 Field)**
- **Day & Night Function : 0.5Lux**
 - Day & Night Model
- **Coax or UTP(Unshielded Twisted Pair) Video Transmission.**
Built-in UTP Transmitter provide a significant advantage in labor/material saving on installations.
 - UTP Video Out Model

4. Rear View and Part Names

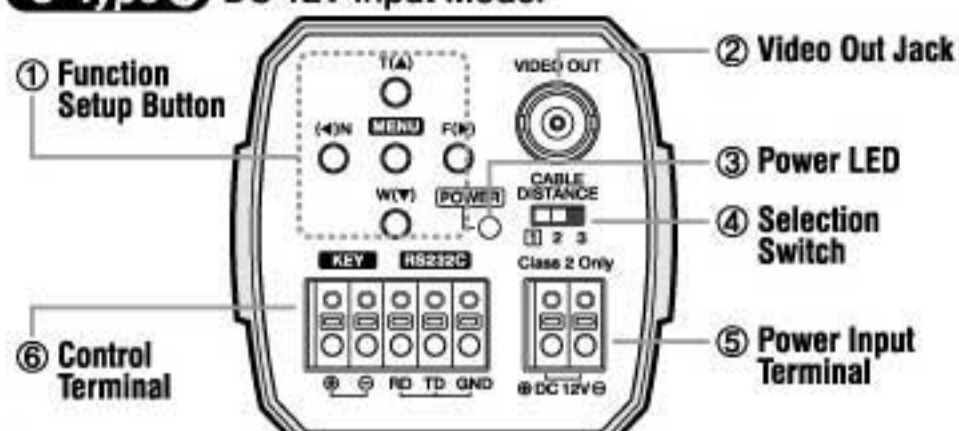
"A" Type → DC 12V Input Model



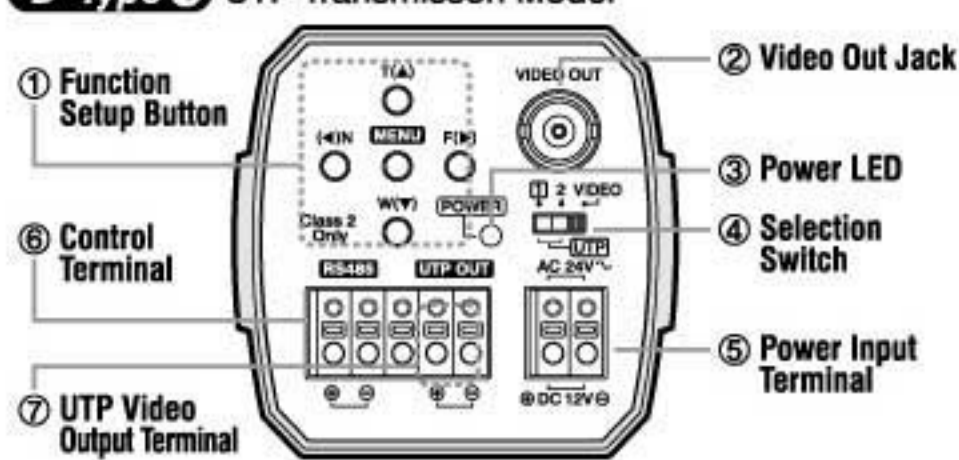
"B" Type → AC 24V/DC 12V Input Model



"C" Type → DC 12V Input Model

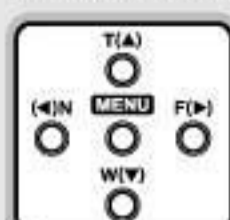


"D" Type → UTP Transmission Model



1. Function Setup Button:

Functions can be setup using 5 buttons on the camera's rear panel.



→ **MENU Buttons** : Used to access menu mode. Also used to escape menu mode.

→ **TELE/WIDE Buttons** : Used to choose the desired menu item. It also moves the cursor up or down in the menu screen.

→ **NEAR/FAR Buttons** : Used to change the parameter of the selected menu item. It also moves the cursor left or right in the menu screen.

2. **VIDEO OUT Jack**: Used to connect an external video monitor in jack.

3. **Power LED**: The LED turns on when power is supplied.

4. **Selection Switch**:
"A&B&C" Type → When the distance is far from camera to monitor, set "Selection Switch" in 2 or 3. It shows more clear video on the monitor.
"D" Type → Used to choose video output or UTP output.

5. **POWER Input Terminal**

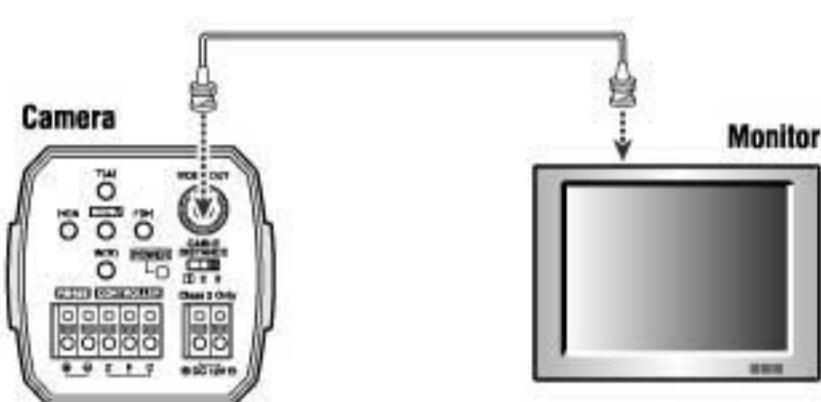
6. **Control Terminal**

7. **UTP Video Output Terminal**: These terminals provide a composite video output signal which may be transmitted over a twisted-pair connection to furnished with a suitable receiver.

5. Installation

1. Connecting to Monitor

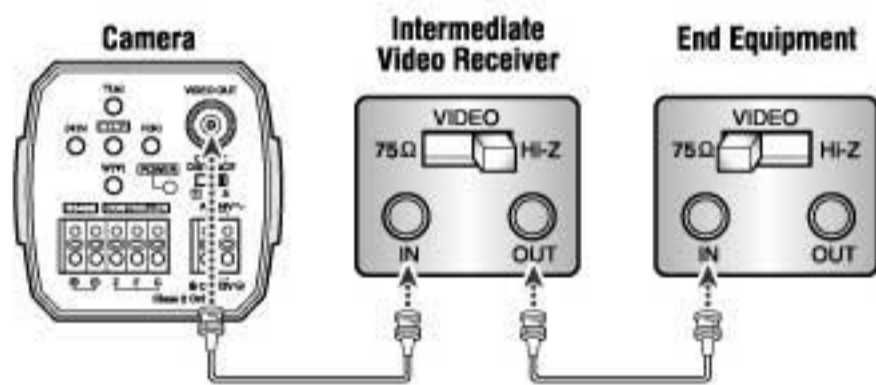
Connect the video out jack on the back of the product to the monitor.



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

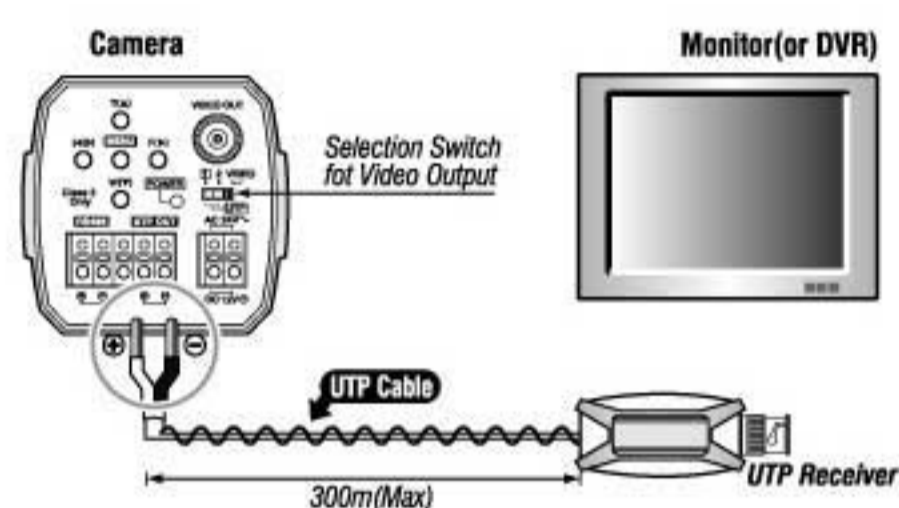
• Connect the camera after switching off each piece of equipment.

• 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.

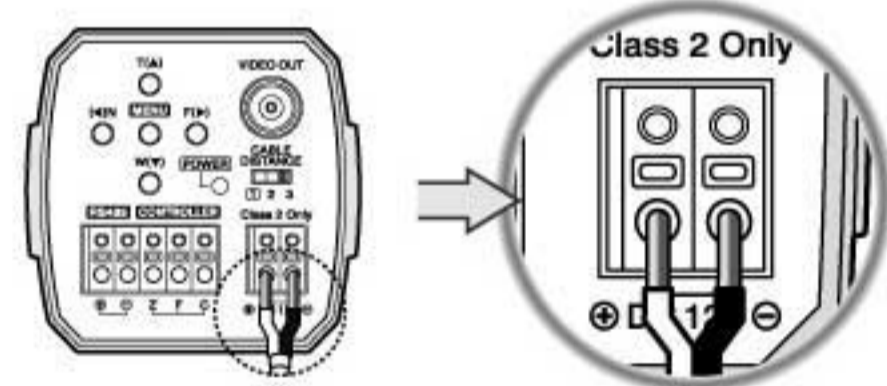
• Use UTP wire "CAT5 24AWG" to have the best transmission quality.

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.

• For DC 12V Power Type

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



Resistance of copper wire [at 20°C (68°F)]

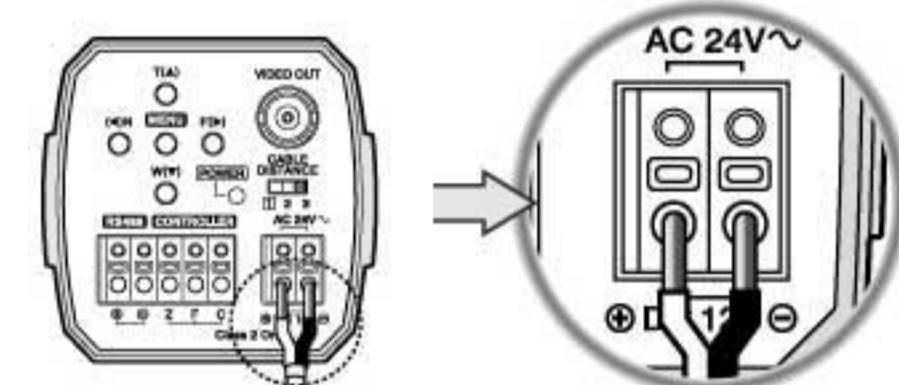
Copper wire size (AWG)	#24 (0.22mm ²)	#22 (0.33mm ²)	#20 (0.52mm ²)	#18 (0.83mm ²)
Resistance(Ω/m)	0.078	0.050	0.030	0.018
Voltage Drop(V/m)	0.028	0.018	0.011	0.006

• As voltage may drop according to the length of electric cord as above table, a camera may malfunction if too long output line of adaptor is connected to the camera.

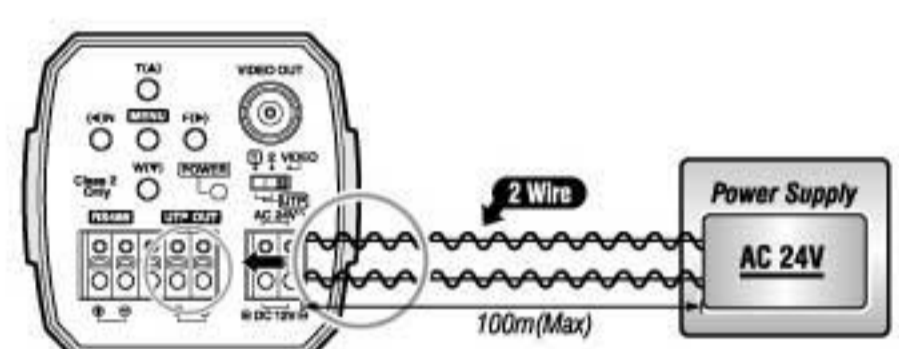
- Voltage for camera operation: DC 12V ± 10%
 - Voltage drops on above table are variable according to types of electric cord and makers.

• For AC 24V / DC 12V Power Type

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



• For AC 24V / DC 12V Power Type [UTP Video Output]



• 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.

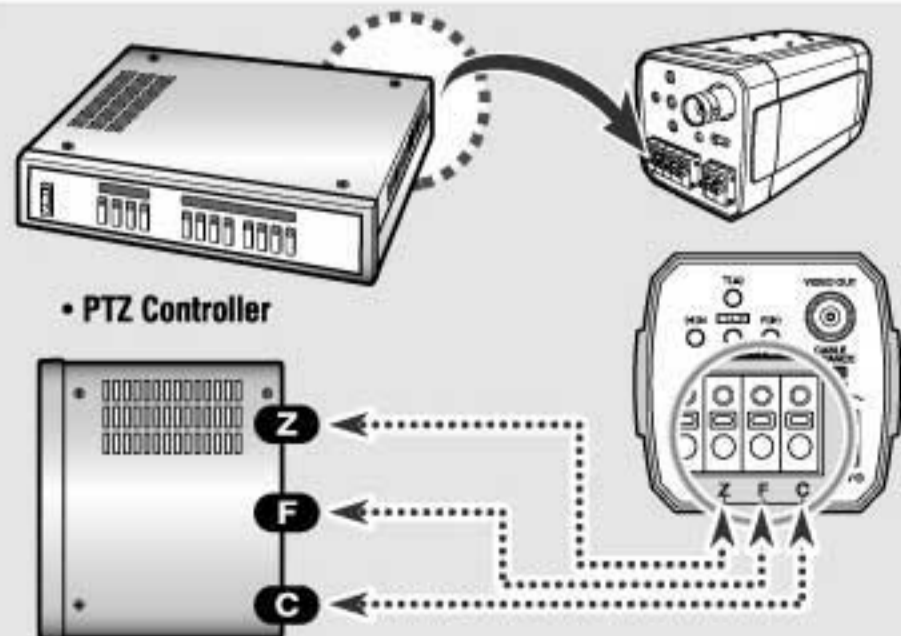
• When using DC 12V power, UTP wire can not be used for power line.

Notes

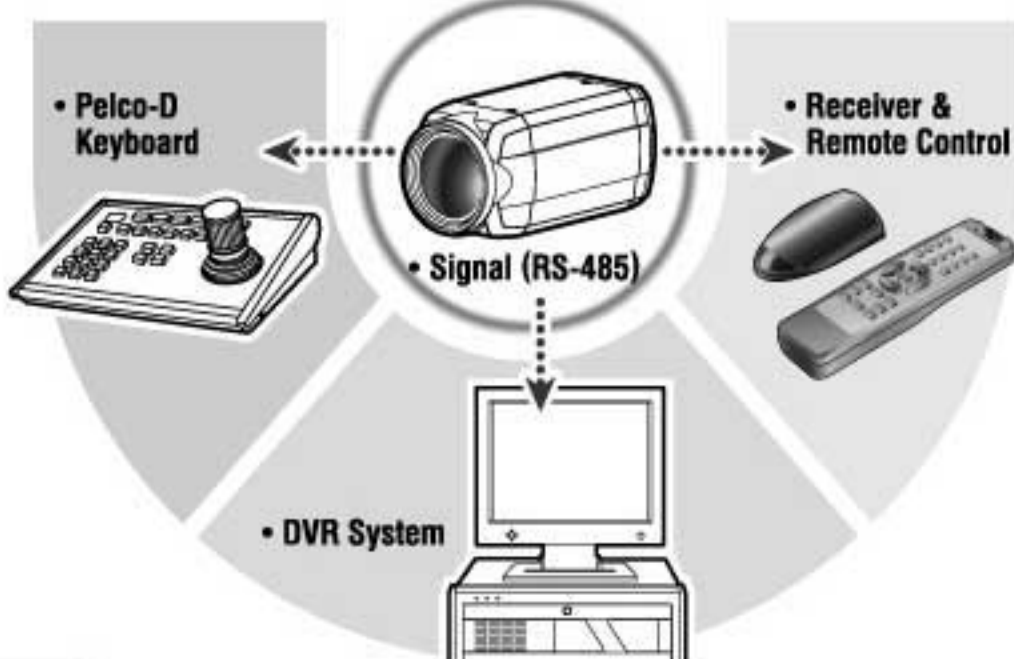
• Be sure to connect power after all the installation is done.
 • Note that AC adaptor is not supplied with camera.
 • Use only AC 24V / DC 12V UL listed class 2 power supply.
 • Do not use power sources other than that specified.

3. Camera Control Methods

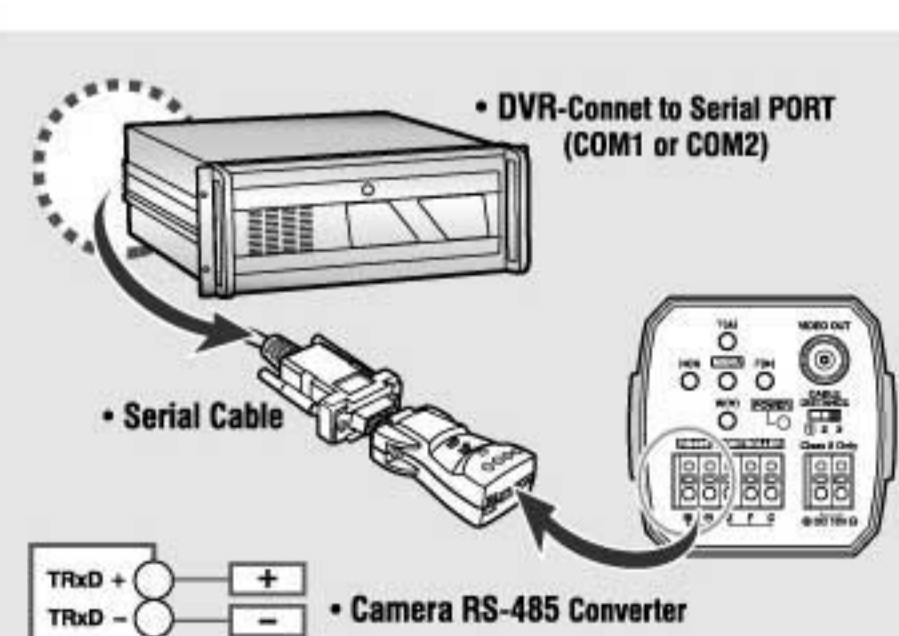
"A" & "B" Type Model : Remote control using for PTZ controller.



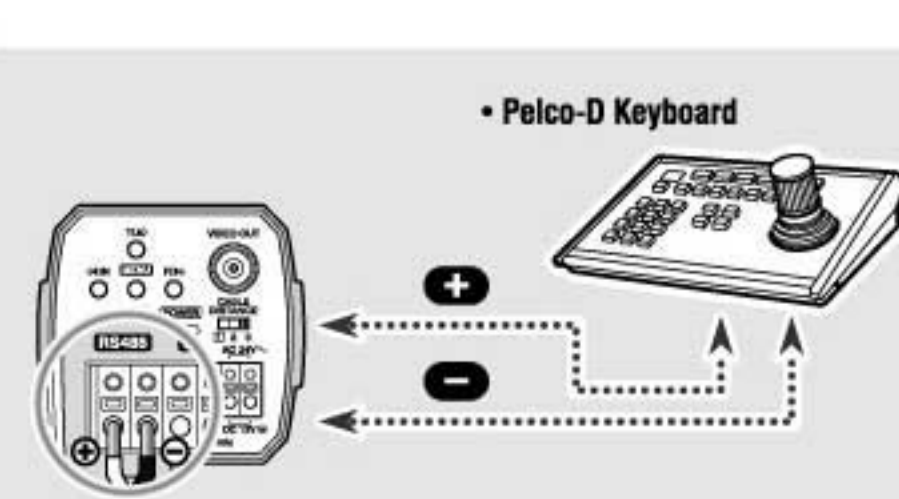
"A" & "B" & "D" Type Model : Remote control using for RS-485.



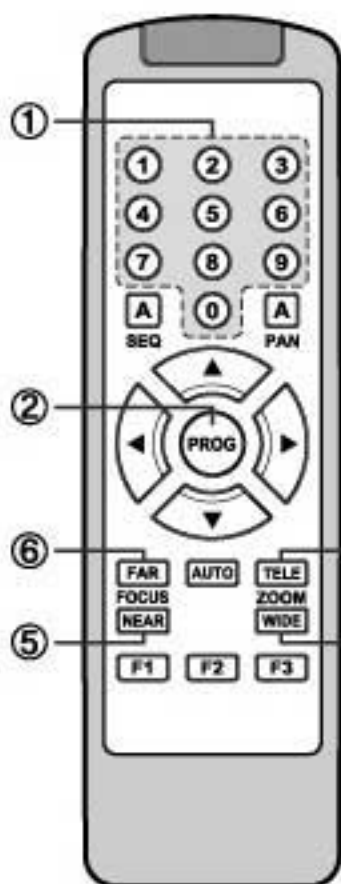
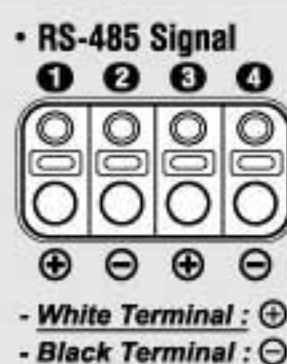
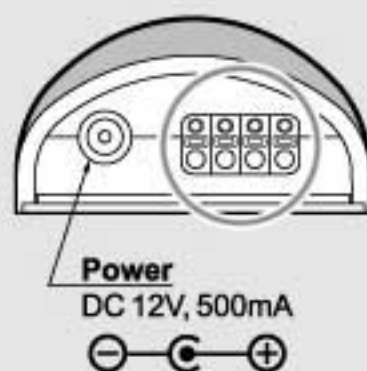
• DVR



• Keyboard (Pelco-D)



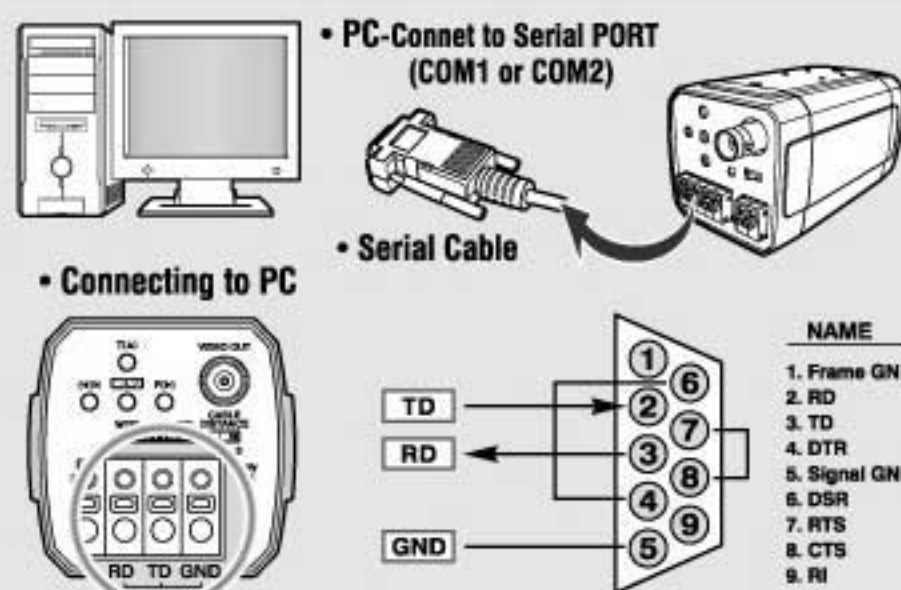
• Receiver & Remote Control



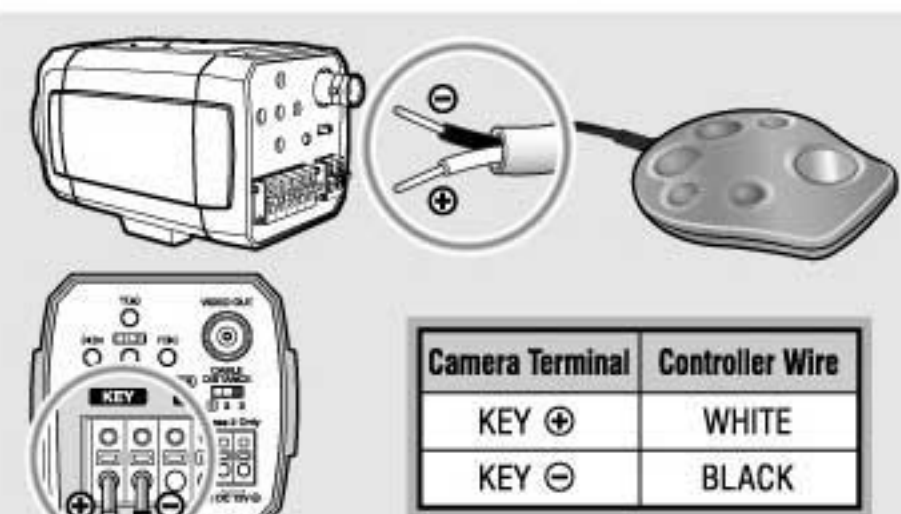
- 1 Camera Selection**
 - After camera connects with receiver, firstly check camera I.D.
 - Press camera I.D. number(1~39 buttons) on the top of wireless remote controller.
 • Example: ZOOM IN
 • I.D. No.5: Press 5 + <TELE>
 • I.D. No.15: Press <F1> + 5 + <TELE>
 • I.D. No.24: Press <F2> + 4 + <TELE>
 • I.D. No.34: Press <F3> + 4 + <TELE>
- Caution :** Usually camera I.D. number are selected from No.1 to No.39. over I.D. No.40, you will have a use limit.
 - Initial camera I.D. number is set up No.0 when it takes out of manufacturer's warehouse.
- 2 Menu (PROG):** Shows/Hides Menu.
3 (TELE): Moves up and down items.
4 (WIDE): Moves up and down items.
5 (NEAR): Set data for the selected items.
6 (FAR): Set data for the selected items.

"C" Type Model : Remote control using for RS-232C.

• PC (RS-232C)



• Wired Remote Controller



6. Communication Protocol

- PELCO "D" Byte Format -RS-485,2400bps,1 Start bit,8 data bits,1 stop bit,no parity
 ■ Command Message

Function	Zoom Tele						
MSG	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
	0xFF	CamID	0x00	0x20	0x00	0x00	Checksum
Function	Zoom Wide						
MSG	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
	0xFF	CamID	0x00	0x40	0x00	0x00	Checksum
Function	Focus Near						
MSG	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
	0xFF	CamID	0x01	0x00	0x00	0x00	Checksum
Function	Focus Far						
MSG	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
	0xFF	CamID	0x00	0x80	0x00	0x00	Checksum
Function	Menu On / Off						
MSG	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
	0xFF	CamID	0x40	0x00	0x00	0x00	Checksum
Function	Power On						
MSG	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
	0xFF	CamID	0x88	0x00	0x00	0x00	Checksum
Function	Power Off						
MSG	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
	0xFF	CamID	0x08	0x00	0x00	0x00	Checksum
Function	Pelco D Stop						
MSG	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
	0xFF	CamID	0x00	0x00	Don't care		Checksum

• Pelco Keyboard (95+ PATTERN)

Function	Menu On / Off						
MSG	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
	0xFF	CamID	0x00	0x23	0x00	0x5F	Checksum

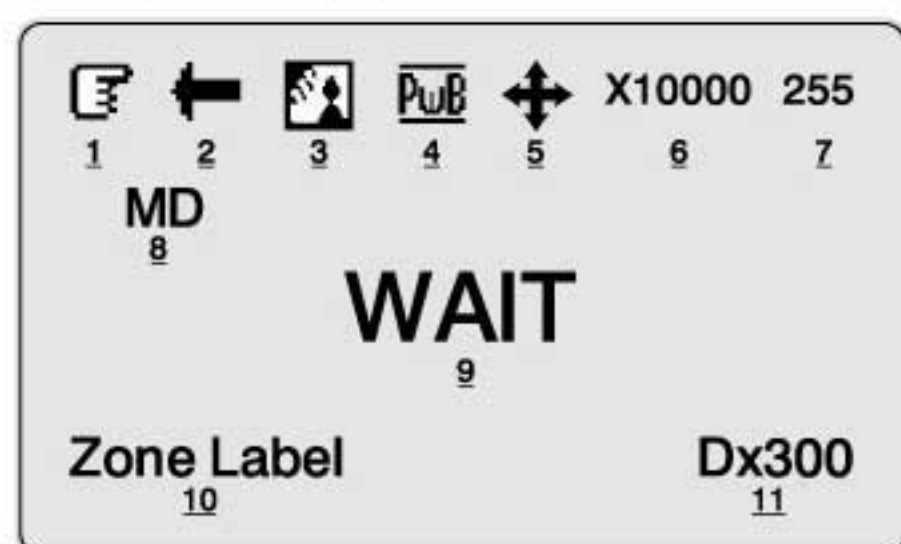
• V/D Keyboard (Set Preset + 98)

Function	Menu On / Off						
MSG	BYTE 1	BYTE 2	BYTE 3	BYTE 4	BYTE 5	BYTE 6	BYTE 7
	0xFF	CamID	0x00	0x03	0x00	0x62	Checksum

7. On-Screen Display

■ Explanation of the On-Screen Display

The OSD (On Screen Display) is as follows:



ND: No Display

FUNCTION	OSD	EXPLANATION
1	ND	Automatic focus mode
	Focus icon	Manual focus mode
2	ND	No screen inverted
	Mirror icon	Screen is inverted to the left or right
3	ND	Backlight compensation off
	Backlight icon	Backlight compensation mode
	Backlight icon	Automatic backlight compensation mode

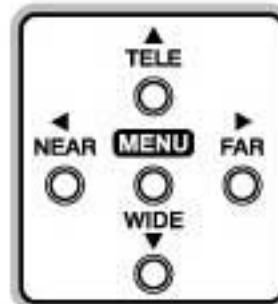
The OSDs of 1, 2, 3, 4, 5, 6, 8, 9, 11 disappear 5 sec later. "ND": No Display

FUNCTION	OSD	EXPLANATION
4	ND	Automatic color correction mode
	SwB	Special color correction mode
	IwB	Indoor mode
	OwB	Outdoor mode
	PwB	Temporary automatic mode
5	ND	No Act Digital Panning / Tilting
	Zoom icon	Digital Panning / Tilting
6	ND	Standard shutter speed (NTSC:1/60, PAL:1/50)
	F.L	Flicker correction mode
	x125 ~ x10000	Shutter speed indicator
7	000 ~ 255	Camera identification number
8	ND	No motion detected
	MD	Motion detected
9	WAIT	Displayed when POWER ON of the camera is in operation
10	-	Explanation of the scene capture by the camera (max. 10 letters)
11	x1 ... Dx300	Optical zoom: x1 ~ x30 Digital zoom: Dx31 ~ Dx300 * 'D' indicates digital zoom

8. Menu and Operation

■ How to Set Up Functions

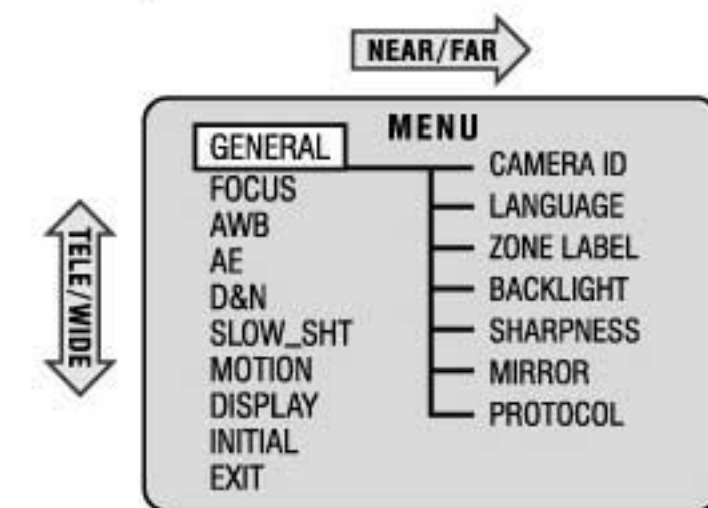
Functions can be setup using 5 buttons on the camera's rear panel.



- MENU Key : Shows/Hides Menu
 - TELE/WIDE : Moves up and down items
 - NEAR/FAR : Set data for the selected item
- (*) The above keys may be used differently in some functions : 'Zone Label'

1. Press the MENU button.

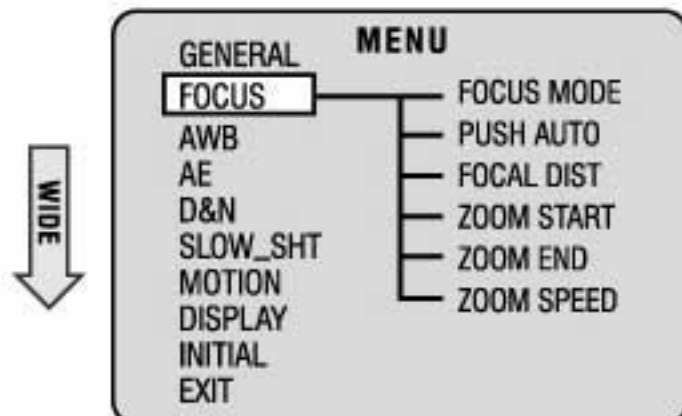
- The Menu consists of the „Main Menu“ and „Sub Menu“.
- The main menu is displayed where 10 camera functions can be selected.
- To the right of each main menu selection, the sub-menu is displayed.



✓GENERAL : This blinks to show that this category has been selected.

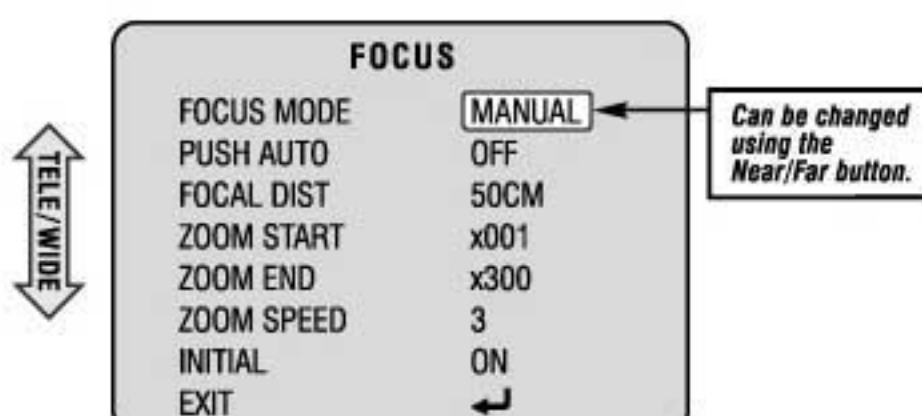
2. Press the TELE/WIDE button.

- It moves up and down the main menu category.
- The sub-menu functions of the main menu category are displayed on the right.



3. Press the NEAR/FAR button.

- It moves to the sub-menu window of the selected main menu.
- The current set state of each sub-menu can be checked.
- Press the TELE/WIDE button to move up and down the sub-menu category and set each category by pressing the NEAR/FAR button.

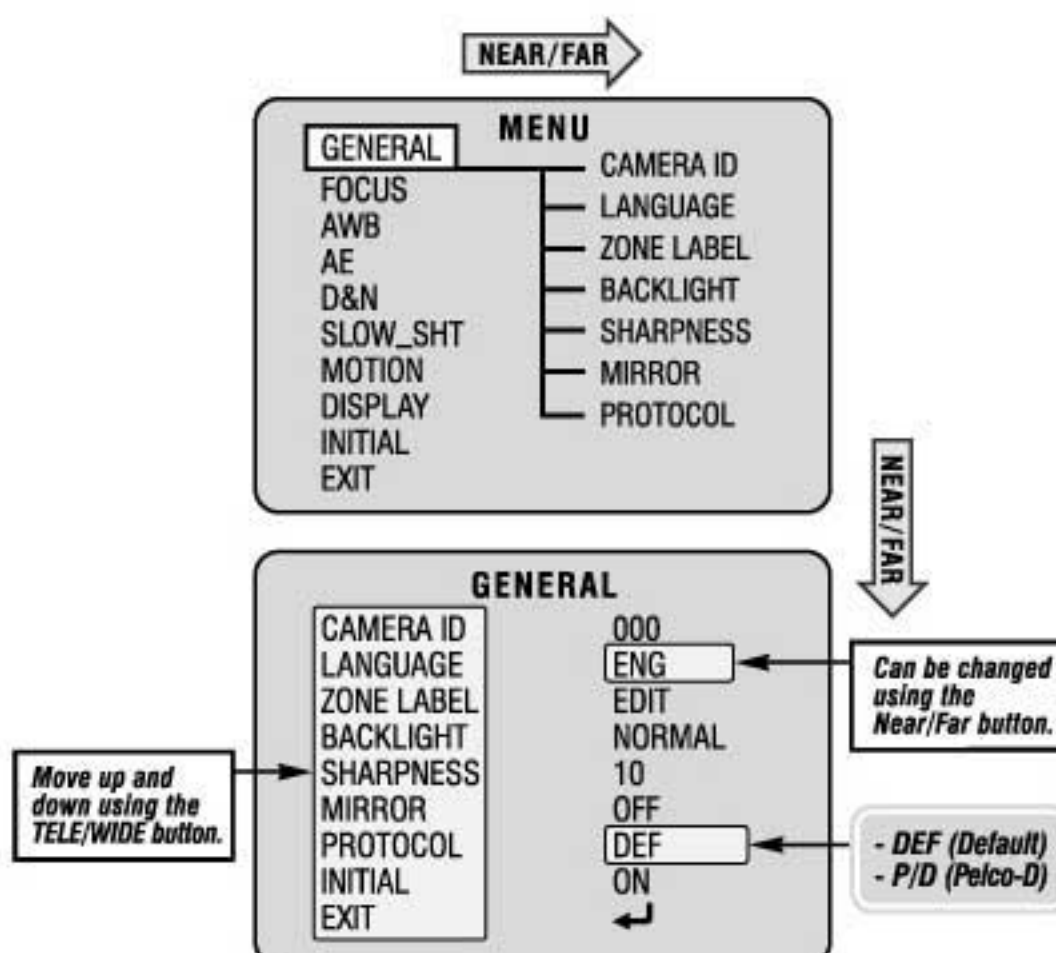


4. Press the OSD MENU button at the main menu or sub-menu screen to hide the menu.

- It does not apply when the MENU button is used for other uses.
- 'Zone Label' setup screen

■ Main Menu- GENERAL

- Sets up the general operation of the camera.
- Press the NEAR/FAR button to move to the sub-menu.



1. CAMERA ID

- Displays the camera's ID.
- Camera ID can be specified using numbers from 000 to 255 by using the NEAR/FAR button.

2. LANGUAGE

- ➔ Displays the currently set language.
- ➔ Language can be set from ENG to KOR and vice versa using the NEAR/FAR button.

3. ZONE LABEL

- ➔ Edits and displays the information of camera or explanation on the area of the image being captured at the bottom left of the screen.
- ➔ Maximum of 10 letters can be used/ edited.
- ➔ It is described in detail on page 39.

4. BACKLIGHT

- ➔ Use to select BLC mode.
- ➔ BLC can be set from NORMAL, C1, C2, L1, L2, U1, U2, D1, D2, R1, R2 and vice versa using the NEAR/FAR button.

5. SHARPNESS

- ➔ Adjusts sharpness of outlines.
- ➔ Can be set from 0 to 15.

6. MIRROR

- ➔ Inverts the screen to the right or left.

7. PROTOCOL

- ➔ DEF : Default
- ➔ P/D : Pelco-D

8. INITIAL

- ➔ Resets the current general settings category to the initial settings.

9. EXIT

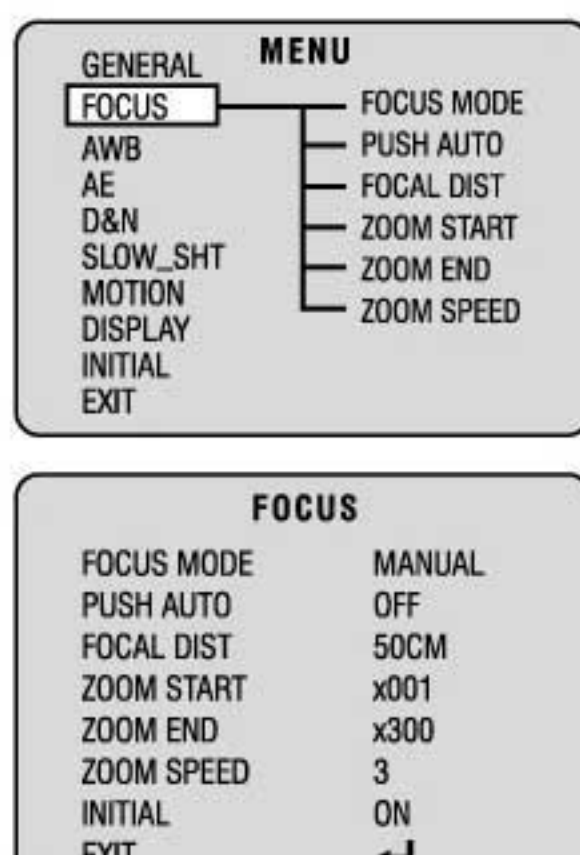
- ➔ Closes the sub-menu and moves to the main menu.

Caution

- Change the data of the sub-menu using the NEAR/FAR button.

■ Main Menu- FOCUS

- ➔ Sets camera zoom and focus.
- ➔ Press the NEAR/FAR button to move to the sub-menu.



1. FOCUS MODE

- ➔ AUTO: Focuses automatically when the menu including D&N changes.
- ➔ MANUAL: User focuses manually.

Note) Automatic focus in manual mode is only possible when the location of the zoom lens has changed or when the "temporary automatic focus" category is selected. Automatic focus is also possible based on external AF command (1 shot AF).

2. PUSH AUTO

- ➔ When temporary automatic focus is selected, the camera focuses automatically when only the NEAR/FAR button is pressed.
- ➔ In the Automatic Mode, it will be displayed as "Not Used".

3. FOCAL DIST

- ➔ Minimum distance the camera can focus.
ex) 10cm: Objects/subjects closer than 10cm cannot be brought into focus.

4. ZOOM START

- ➔ Minimum zoom movement.
- ➔ Possible from x 001 to x 30

5. ZOOM END

- ➔ Maximum zoom movement.
- ➔ Possible from x 001 to x 300

6. ZOOM SPEED

- ➔ Zoom speed movement. (Start x1 ~ End x30)
 - 1 : 15 sec
 - 2 : 7 sec
 - 3 : 5 sec

7. INITIAL

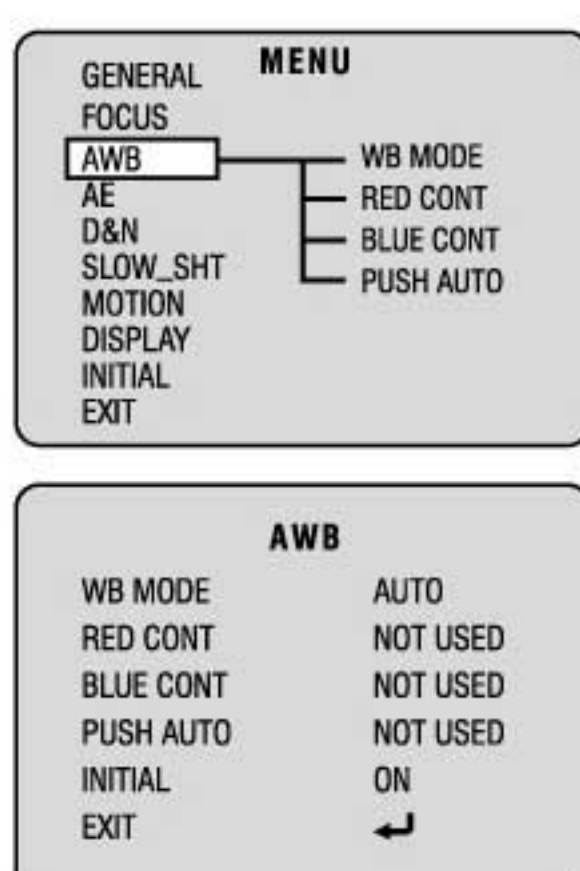
- ➔ Initializes the changed category in focus menu.

8. EXIT

- ➔ Closes the sub-menu and moves to the main menu.

■ Main Menu- AWB

- ➔ Adjusts picture color.
- ➔ Press the NEAR/FAR button to move to the sub-menu.



1. AWB

- ➔ AUTO : Automatically adjusts color according to the available lighting.
- ➔ PUSH AUTO : Color will be automatically adjusted while the NEAR/FAR button is pressed in the temporary automatic mode.
- ➔ INDOOR : Set color temperature to be 5400°K.
- ➔ OUTDOOR : Set color temperature to be 3200°K.
- ➔ SPECIAL : Color can be corrected when the user increases or decreases "Red Control" or "Blue Control".

2. RED CONT

- ➔ Can be changed in special mode only, and R-Gain value is adjusted.
- ➔ Can be set from 0 to 255.

3. BLUE CONT

- ➔ Can be changed in special mode only, and B-Gain value is adjusted.
- ➔ Can be set from 0 to 255.

4. PUSH AUTO

- ➔ Can change WB Mode to PUSH AUTO.
- ➔ Can be Push Auto whenever pushes NEAR/FAR button ('Off' is displayed to 'Push' whenever pushes key)

5. INITIAL

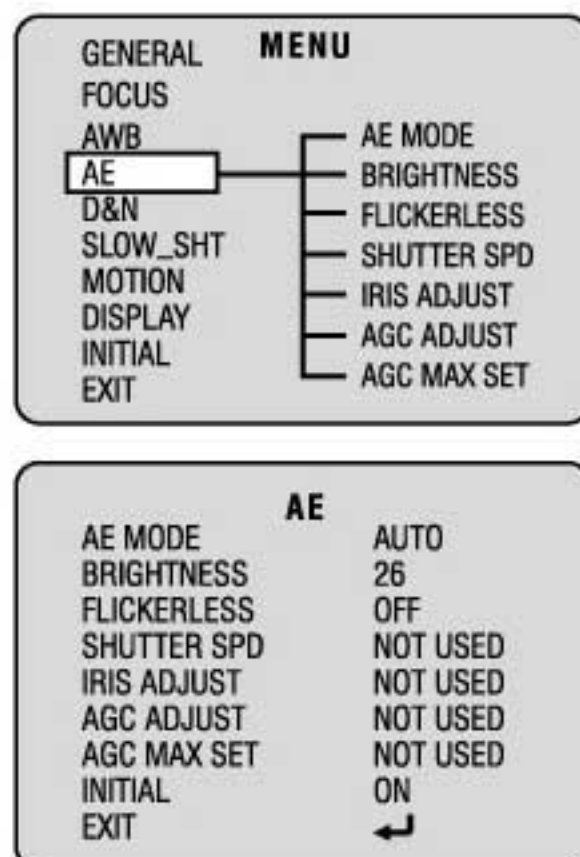
- ➔ Initializes the changed category in AWB menu.

6. EXIT

- ➔ Closes the sub-menu and moves to the main menu.

■ Main Menu- AE

- ➔ Adjusts picture brightness.
- ➔ Press the NEAR/FAR button to move to the sub-menu.



1. AE MODE

- ➔ AUTO : Automatically adjusts brightness according to the available lighting.
- ➔ MANUAL : Manually adjusts all brightness.
- ➔ AGC MAN : Allows you to adjust gain.
- ➔ IRIS MAN : Allows you to adjust iris.
- ➔ SHUT MAN : Allows you to adjust the shutter speed.

Note) Cannot adjust when D&N mode(refer to 31 page)is in Auto.

2. BRIGHTNESS

- ➔ Brightness can be adjusted from 0 (dark) to 48 (bright).
- ➔ Not used while in manual mode.

3. FLICKERLESS

- ➔ Removes screen flickering caused by discordance of frequency and lighting.

4. SHUTTER SPD

- ➔ Can be changed while in manual and shutter manual mode.
- ➔ Shutter speed can be changed from standard to 1/10000.
- ➔ Standard shutter speed: NTSC- 1/60, PAL- 1/50.

5. IRIS ADJUST

- ➔ Adjusts the opening of iris.
- ➔ Can be adjusted from 0 (closed) to 255 (opened).
- ➔ Change in screen can be recognized only within the certain range.
- ➔ Can be adjusted while in manual and gain adjustment mode.

6. AGC ADJUST

- ➔ Gain adjustment of image signal.
- ➔ Can be adjusted from 0 to 255.
- ➔ Can be adjusted while in manual and gain adjustment mode.

7. AGC MAX SET

- ➔ Maximum gain value used when gain is automatic.
- ➔ Can be adjusted from 0 to 255.

8. INITIAL

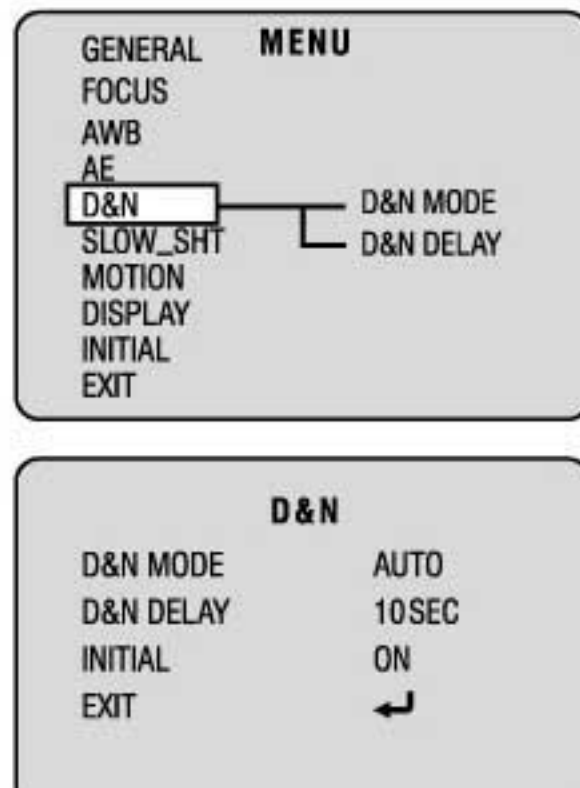
- ➔ Initializes the changed category in exposure menu to the initial settings.

9. EXIT

- ➔ Closes the sub-menu and moves to the main menu.

■ Main Menu- D & N

- ➔ Determines and operates in mode suitable for day or night.
- ➔ Press the NEAR/FAR button to move to the sub-menu.



1. D & N MODE

- ➔ AUTO : Filter operates automatically according to brightness.
- ➔ NIGHT : Manual Mode- removes IR cut filter.
- ➔ DAY : Manual Mode- does not remove IR cut filter.

2. D & N DELAY

- ➔ Sets conversion time of IR cut filter while in automatic mode
- ➔ Time can be adjusted from 1 to 10 seconds.

3. INITIAL

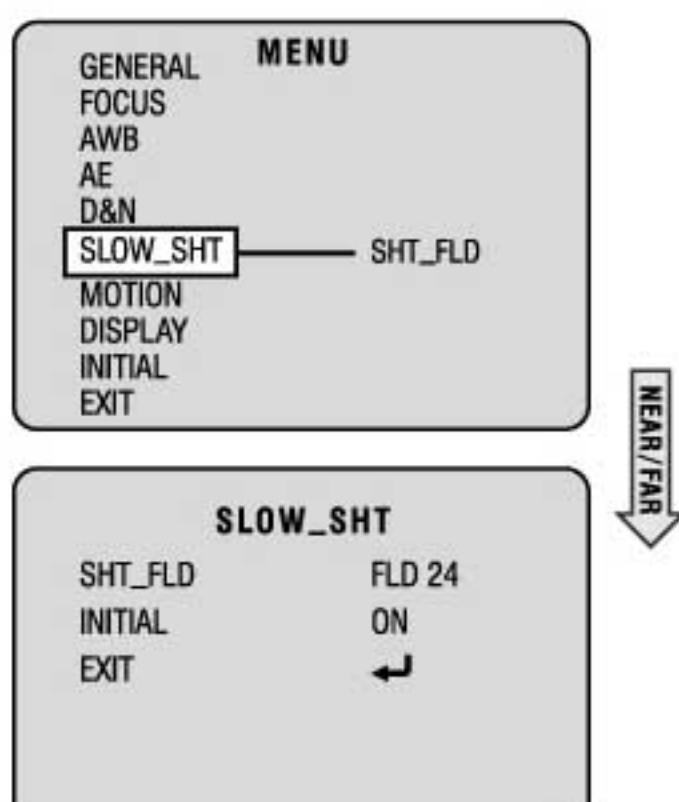
- ➔ Initializes the changed category in night Day/Night menu.

4. EXIT

- ➔ Closes the sub-menu and moves to the main menu.

■ Main Menu- SLOW_SHT

- Use under very low light condition for full color surveillance.
OFF -> FLD2 -> -----> FLD128
- Press the NEAR/FAR button to move to the sub-menu.



1. SLOW_SHT

- Use under very low light condition for full color surveillance.
- OFF: Digital slow shutter function is disabled.
- Can be adjusted from FLD 2 to FLD 128

2. INITIAL

- Initializes the changed category in digital slow shutter menu.

3. EXIT

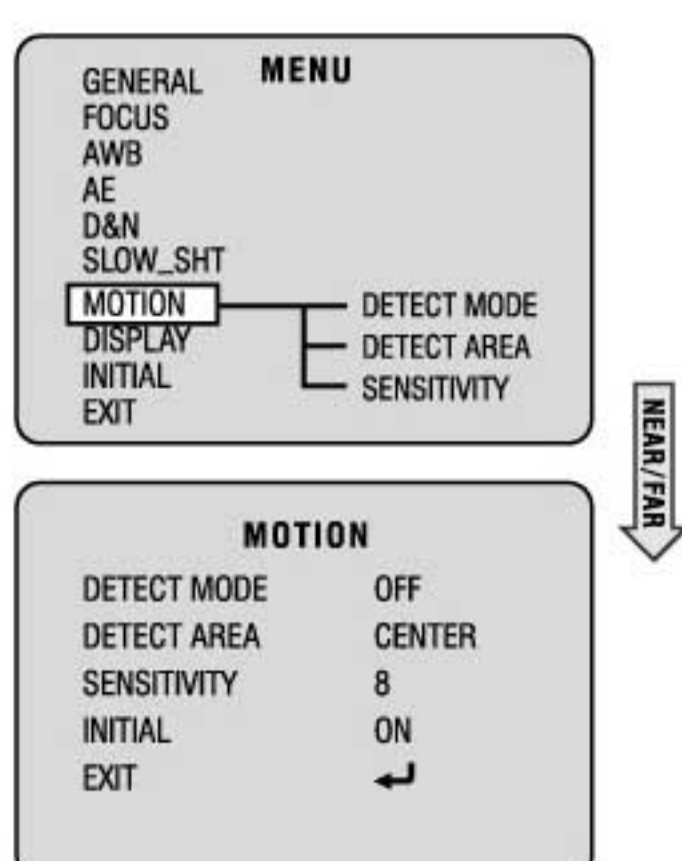
- Closes the sub-menu and moves to the main menu.

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■ Main Menu- MOTION

- When there is movement of the subject in the screen, there will be an alarm, or the user will be informed through communications or "MD" will display on the screen.
- Press the NEAR/FAR button to move to the sub-menu.



1. DETECT MODE

- Enables or disables motion detection function.

2. DETECT AREA

- Sets motion detection field.
- Can be set to CENTER, OUT, UPPER and WHOLE.

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3. SENSITIVITY

- Sets sensitivity to detect movement.
- Can be set from 1 (low response) to 15 (sensitive).

4. INITIAL

- Initializes the changed category in motion detection menu.

5. EXIT

- Closes the sub-menu and moves to the main menu.

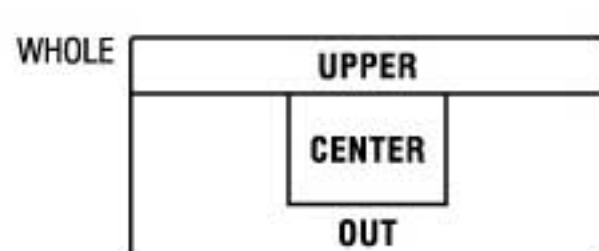
Note) There is a signal every time there is movement by the subject. If motion is detected, MD (Motion Detected) is displayed on the upper left of the screen. This message enables the user to set On-screen display state in the menu.

Caution

- Error can occur in the motion detection function in the following cases.
 - When lighting is unsteady.
 - When light changes often even though there is no movement of the subject.

It is recommended that this function should be used after setting the detection sensitivity and detection field after monitoring the environment for an extended time.

Note) The detection field on screen is as follows:

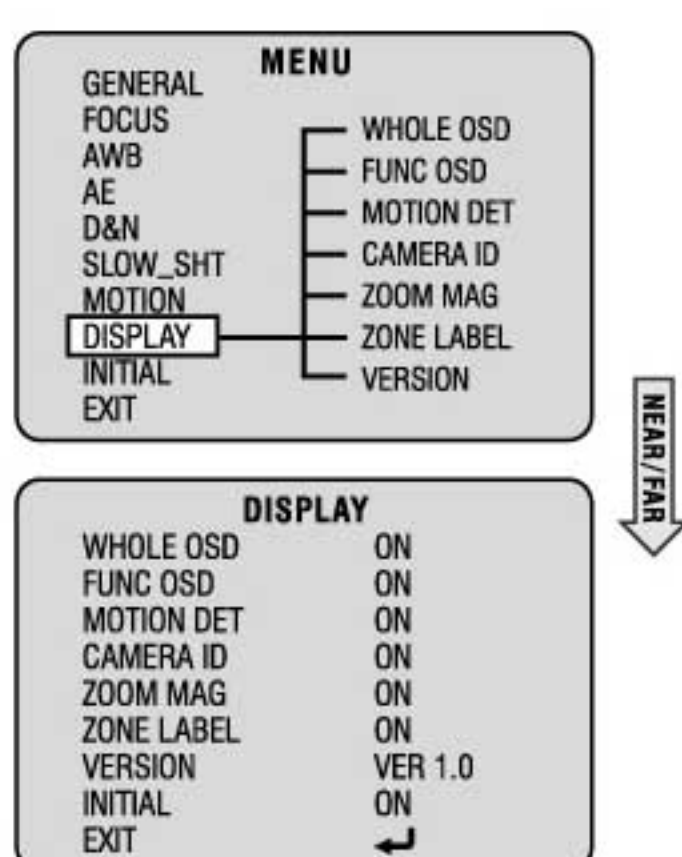


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■ Main Menu- DISPLAY

- Specify what to display on the screen.
- Press the NEAR/FAR button to move to the sub-menu.



1. WHOLE OSD

- All on-screen display is "ON" or "OFF".
- Nothing will be displayed if specified as "Hidden" even when other categories are individually set as "ON". (Exception: Initial logo when power is turned on.)

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2. FUNC OSD

- Images displayed on the upper area of the screen.
- Refer to the "On-Screen Display" section- images 1 to 6.

3. MOTION DET

- "MD" is displayed on the upper left of the screen when motion is detected.

4. CAMERA ID

- Displays ID number on the upper right of the screen.

5. ZOOM MAG

- Displays zoom on lower right of the screen.
- The number in Dx300 shows the magnification, and D represents digital zoom.

6. ZONE LABEL

- Displays texts explaining screen area on the lower left of the screen.

7. VERSION

- Displays the version information of camera (cannot be changed).

8. INITIAL

- Initializes the changed category in on-screen display menu.

9. EXIT

- Closes the sub-menu and moves to the main menu.

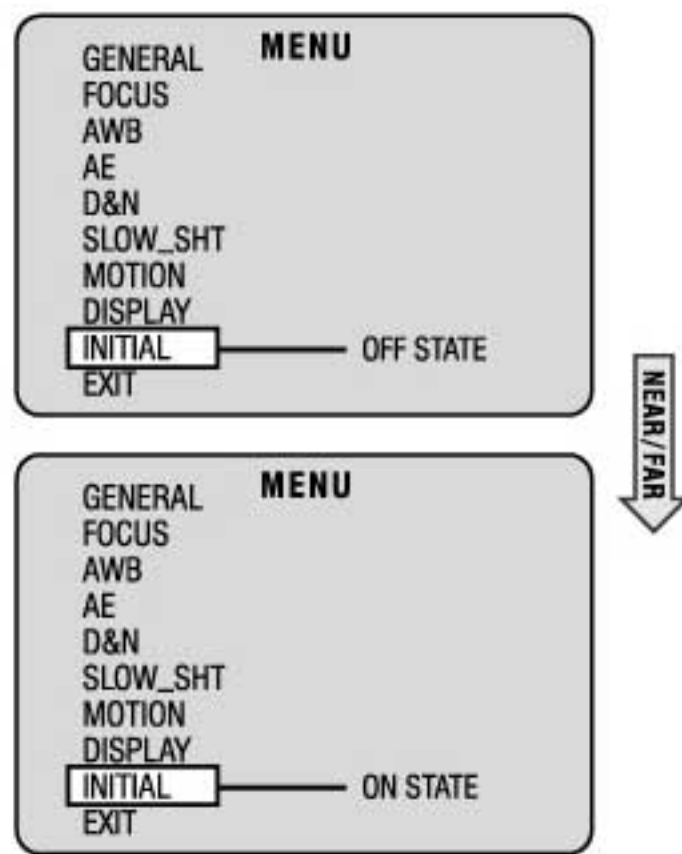
Note) Refer to the "On-Screen Display" for details.

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■ Main Menu- INITIAL

- Initializes all current settings.
- No sub-menu.
- Press the NEAR/FAR button to initialize the entire camera settings.
- Note that all settings in the sub-menus will be initialized.



- OFF STATE : Indicates that settings are not initialized.
- ON STATE : Indicates that camera settings have been initialized.

Caution

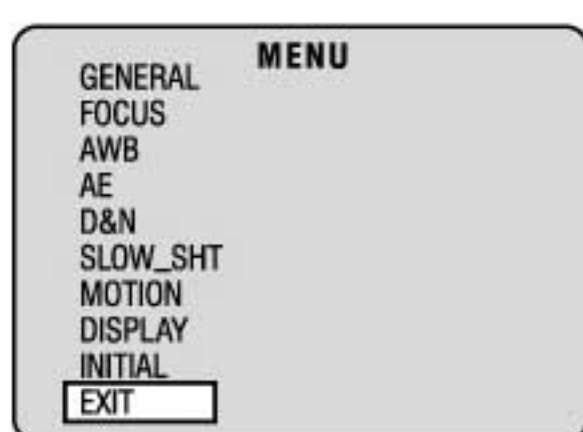
Please use caution when performing this function. Every setting (even in all sub-menus) will be initialized. Initialization in sub-menus will initialize each category of the sub-menu only.

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■ Main Menu- EXIT

- Closes menu.
- Press the NEAR/FAR button to close menu.

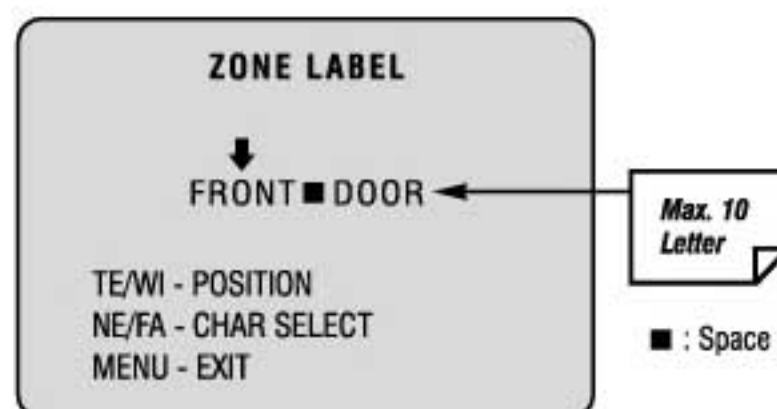


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■ ZONE LABEL

- User can edit explanation or condition of camera, and this will be displayed on the lower left screen.



- You can choose up to 84 symbols from the available symbols table.

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	G
H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
Y	Z	a	b	c	d	e	f	g	h	i	j	k	l	m	n	o
p	q	r	s	t	u	v	w	x	y	z	~	!	#	*	-	+
/	:	;	?	.	"	'	()	&	%	↑	↓	→	←	■	NU

- Select the location of letters using the TELE/WIDE button. A downward arrow will blink on top of the letter to edit.

- Select letters using the NEAR/FAR button.

- To exit, press the MENU.

Caution) ■ : denotes a blank letter and will be displayed as a blank space on the actual screen.

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