

# DIGIMERGE

*A better way to a secure future*

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Model : DPP12D

## Electronic Day/Night Professional Camera

Instruction Guide

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**Model : DPP12D**

Electronic Day/Night Professional Camera

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Printed in KOREA

Digimerge Technologies Inc.





The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated 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.

**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 & CE 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 his own expense.

**WARNING** - Changes or modifications not expressly approved by 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 other than those specified.
- ◆ Do NOT expose this appliance to rain or moisture.

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

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## ■ Features

**1/3" Super-HAD™ II CCD**

**High Resolution : 560 TV Lines**

**Min. illumination 0.00004Lux (F1.2, 50 IRE, Sens-Up 256x)**

**OSD menu control**

**Internal / Linelock (phase control) function**

**Electronic day / night function, Sens-Up function (256x)**

**Motion adaptive digital noise reduction (3D-DNR)**

**Back light compensation (BLC)**

**Extended Dynamic Range (XDR)**

**8-Zone privacy masking function (polygonal mosaic)**

**32x digital zoom**

**Remote OSD menu control (requires optional OSD remote)**

**Horizontal & vertical image mirroring**

**Auto sensing DC12V / AC24V**

## Warning ■

### **The camera requires periodic inspection.**

Contact an authorised technician to carry out the inspection.

### **Stop using your camera when you find it malfunctioning.**

If the camera emits smoke or is unusually hot for a long period, a fire may be caused.

### **Do not install the camera on a surface that can not support it.**

If the camera is installed on an inappropriate surface, it may fall and cause injury.

### **Do not hold plug with wet hands.**

It could cause an electric shock.

### **Do not dis-assemble the camera.**

It may result in an electric shock or other hazards.

### **Do not use the camera close to a gas or oil leak.**

It may result in a fire or other hazards.

## ■ Precautions

**Do not install the camera in extreme temperature conditions.**



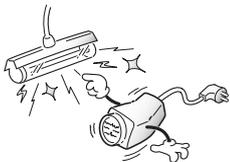
Only use the camera under conditions where temperatures are between  $-10^{\circ}\text{C}$  and  $+50^{\circ}\text{C}$ . Be especially careful to provide ventilation when operating under high temperatures.

**Do not install or use the camera in an environment where the humidity is high.**



It can cause the image quality to be poor.

**Do not install the camera under unstable lighting conditions.**



Severe lighting change or flicker can cause the camera to work improperly.

**Do not touch the front lens of the camera.**



This is one of the most important parts of the camera. Be careful not to leave fingerprints on the lens cover.

**Do not drop the camera and protect it to physical shocks.**



It can cause malfunctions to occur.

**Never keep the camera pointed directly at strong light.**



It can damage the CCD.

**Do not expose the camera to rain or spill beverage on it.**



If it gets wet, wipe it dry immediately. Liquids can contain minerals that corrode the electronic components.

**Do not expose the camera to radioactivity.**



If exposed to radioactivity the CCD will fail.

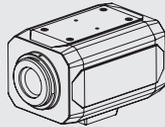


### Note

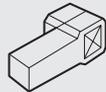
- If the camera is exposed to spotlight or object reflecting strong light, smear or blooming may occur.
- Please check that the power satisfies the normal specification before connecting the camera.

## ■ Components

1. COLOR BOX CAMERA



2. AUTO IRIS LENS CONNECTION PLUG



3. L-WRENCH



4. C-MOUNT ADAPTOR

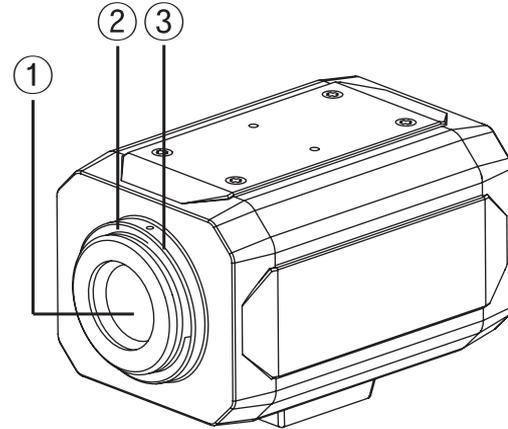


5. INSTRUCTION GUIDE



## Names and Functions of Parts ■

Front



① **Lens protection cap**

Cover the lens when not in use.

② **CS-Mount lens adaptor**

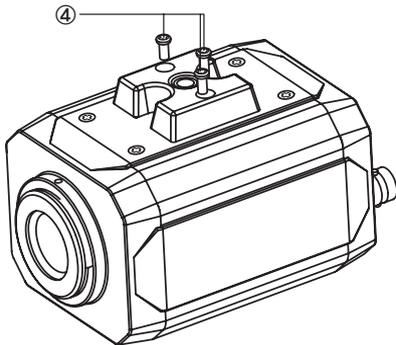
Attach the CS-Mount lens here.

③ **Back Focus clamp screw**

Loosen the clamp screw with a L-wrench before adjusting the Back Focal length.

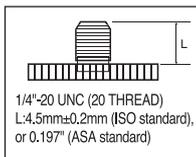
## Names and Functions of Parts

### Top

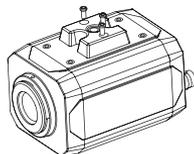


#### 4 Mounting Bracket

Use the screw holes provided when fixing the camera onto a mounting bracket. Use the clamp screw as shown in the picture.



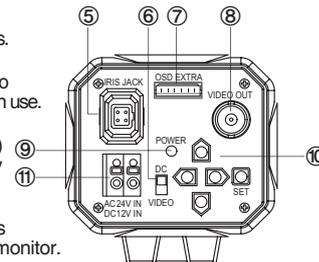
※ The mounting bracket can be attached to either the bottom or the top of the camera. Be careful not to tighten the screws more than 5mm into the body, otherwise serious damage can occur.



## Names and Functions of Parts

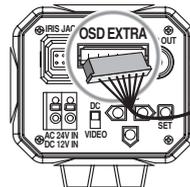
### Rear

- 5 **Auto iris lens connector**  
Connection terminal for an auto iris lens.
- 6 **Auto iris lens selection switch**  
Used to change between DC or Video depending upon the type of auto iris in use.
- 7 **OSD Extra**  
Connects to the remote controller (option) when you want to control OSD away from the camera
- 8 **Video output terminal**  
Sends video signals and connects to the video input terminal of the monitor.
- 9 **Power lamp**  
Lights up when the correct power is supplied to the camera.
- 10 **Setting button**  
● **SET button** : Used for the menu display. This button can be used to confirm settings after changing the value of the selected function or current conditions.  
● **UP & DOWN buttons** : Used for selecting items by moving the cursor up or down on the menu screen.  
● **LEFT & RIGHT buttons** : Used when changing item values, by moving the cursor to the left or right on the menu screen.
- 11 **Power input terminal**  
Low voltage power connection.



#### Key Extra Connector (Optional - ACCRC01)

Connects to the remote controller (option) when you want to set up OSD remotely.



※ Contact an authorized technician for inspection.

## Installation

### Lens

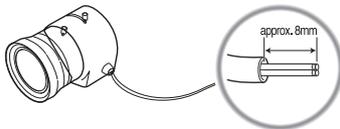
The camera is supplied without a lens. Lenses, such as auto iris, CS-Mount and C-Mount, can be used.

#### Note

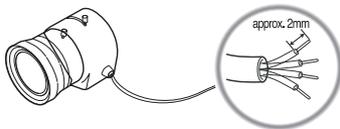
- Using a DC auto iris lens is recommended to achieve the best possible results from the camera.
- Please keep the lens clean.
- Foreign objects or fingerprints on the lens will result in inferior image quality, especially in low light level conditions.

#### Using the auto iris

1. Strip back about 8mm of the outer sheath of the auto iris lens cable.



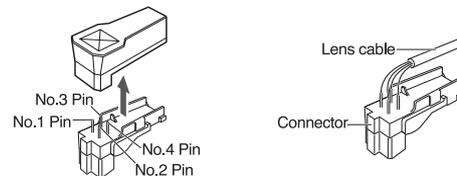
2. Strip off about 2mm of the insulation of wires inside the lens cable.



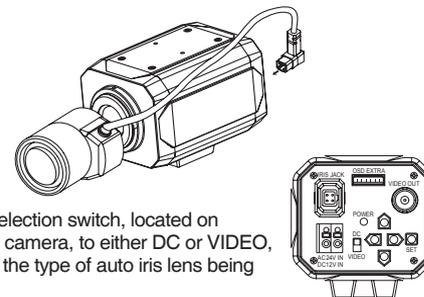
## Installation

3. Remove the cover of the auto iris lens connection plug and solder the wires to the connector pins inside the plug, as shown below.

Pin No.	LENS	
	DC	VIDEO
Pin No.1	Damping Coil-	Red (power)
Pin No.2	Damping Coil+	NC
Pin No.3	Drive+	White (video signal)
Pin No.4	Dreve-	Black (GND)



4. Replace the auto iris lens connection plug cover. Remove the lens protection cap and then attach the auto iris lens to the camera by screwing it in clockwise.
5. Insert the connection plug connected to the auto iris lens cable into the auto lens connector jack, which is located on the rear of the camera.

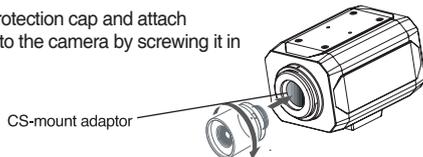


6. Set the lens selection switch, located on the rear of the camera, to either DC or VIDEO, depending on the type of auto iris lens being used.

## ■ Installation

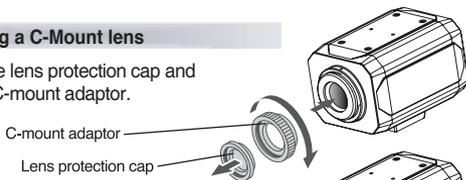
### When using a CS-Mount lens

Remove the lens protection cap and attach the CS-Mount lens to the camera by screwing it in clockwise.

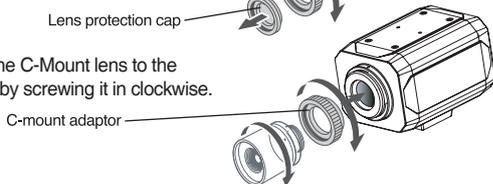


### When using a C-Mount lens

1. Remove the lens protection cap and attach the C-mount adaptor.

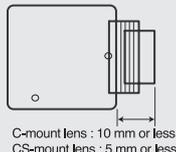


2. Attach the C-Mount lens to the camera by screwing it in clockwise.



### Note

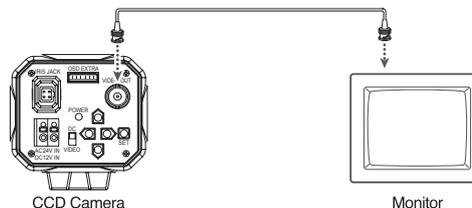
- Use the specified lens connection parts as shown in the picture below. Using of the wrong sized parts may cause damage to the inside of the camera or result in poor fitting.
- Using a lens which is too heavy affects the balance of the camera and may cause a malfunction. Please use a lens that weighs less than 450g.
- Select Av mode, if possible, when adjusting the automatic light control (ALC) of an auto lens. Use of PK mode may cause hunting.



C-mount lens : 10 mm or less  
CS-mount lens : 5 mm or less

## ■ Connecting to a monitor

Connect the video output terminal located on the rear of the camera to the monitor.

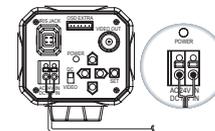


- The connection method varies depending on the type of monitor and accessories. Please refer to the monitor user manual.
- Turn off the power when connecting.

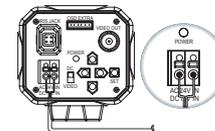
## ■ Connecting to power

Check the standard power requirement before connecting to power.

### Dual Power Type (AC 24V/DC 12V, AC 24V Class2)



### DC Power Type (DC 12V, 500mA)



## ■ Camera Operation

### ■ Menu (English)

SETUP menu	
<b>LENS (selection)</b>	· MANUAL · DC/VIDEO
<b>EXPOSURE</b>	· SHUTTER · BRIGHTNESS · AGC · SENSE-UP · BLC · D-WDR · RETURN
<b>WHITE BAL</b>	· ATW · AWB · AWC→SET · MANUAL · INDOOR · OUTDOOR
<b>DAY/NIGHT</b>	· COLOR · AUTO · EXT · B/W
<b>3DNR</b>	· ON · OFF
<b>SPECIAL</b>	· CAMTITLE · D-EFFECT · MOTION · PRIVACY · LANGUAGE · RETURN · SYNC
<b>ADJUST</b>	· SHARPNESS · BLUE · RED
<b>RESET</b>	· FACTORY RESET · RETURN
<b>EXIT</b>	

### ■ Menu (French)

SET UP menu	
<b>LENS</b>	· MANUEL · DC/VIDEO
<b>EXPOSITION</b>	· OBTURATEUR · LUMINOSITE · AGC · DETECTEUR · BLC · D-WDR · RETOUR
<b>BAL BLANC</b>	· ATW · AWB · AWC→SET · MANUEL · INTERIEUR · EXTERIEUR
<b>JOUR/NUIT</b>	· COULEUR · AUTO · EXT · N/B
<b>3DNR</b>	· ON · OFF
<b>SPECIAL</b>	· TITRE CAM · EFFET-D · MOUVEMENT · PRIVATIF · LANGAGE · RETOUR · SYNC
<b>AJUST.</b>	· CONTOUR · BLEU · ROUGE
<b>RESET</b>	· RESET USINE · RETOUR
<b>SORTIE</b>	

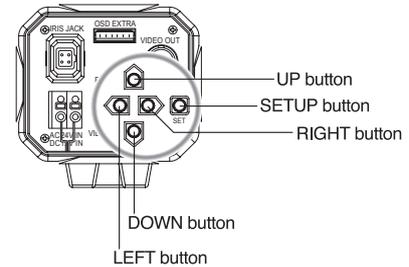
## ■ Camera Operation

### ■ Menu (Spanish)

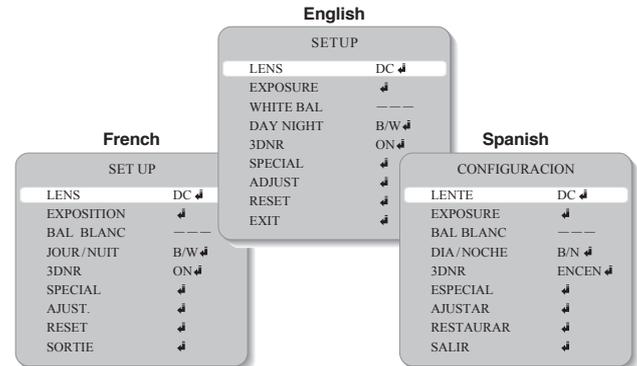
CONFIGURACION	
<b>LENTE</b>	· MANUAL · DC/VIDEO
<b>EXPOSURE</b>	· OBTURADOR · BRILLO · CAG · SENSE-UP · CLT · D-WDR · REGRESAR
<b>BAL BLANC</b>	· ATW · AWB · FIJAR→AWC · MANUAL · INTERIOR · EXTERIOR
<b>DIA/NOCHE</b>	· COLOR · AUTO · EXT · B/N
<b>3DNR</b>	· ENCEN · APAG
<b>ESPECIAL</b>	· TITULO CAM · EFECTO-D · MOVIMEN · PRIVACIDAD · LENGUAJE · REGRESAR · SINC
<b>AJUSTAR</b>	· DETALLE · AZUL · ROJO
<b>RESTAURAR</b>	· RESTAURAR VALORES FABRICA · REGRESAR
<b>SALIR</b>	

### ■ Settings

Settings can be made using the 5 buttons located on the rear of the camera

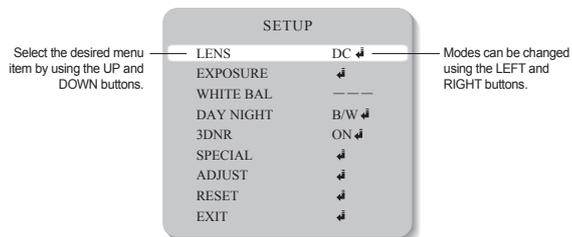


1. Press the SET button
  - The Setup menu is displayed on the monitor screen.



2. Select a menu item using the Up and Down buttons.
  - Place the cursor over a desired item.

## How to Use the Camera



- Set up a selected item by using the Left and Right buttons.
- To finish and save the settings, select 'EXIT' and press the SET button.

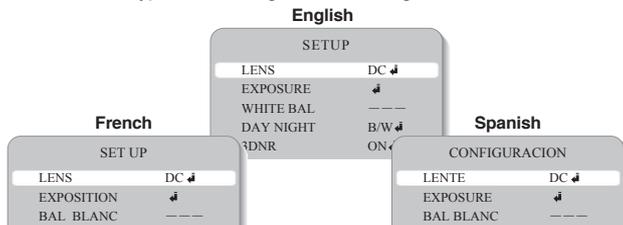
### Note

- An item with the icon also has sub-menus. To select a sub-menu, press the SET button.
- An item with the --- icon has no sub-menus available for selection.

## LENS

This function is used to adjust the brightness of the screen.

- When the SETUP menu screen is displayed on the screen, position the cursor to point to LENS using the Up and Down buttons.
- Select the type of lens using the Left and Right buttons.



### DC/VIDEO : Auto Iris Lens selection.

- When using an auto iris lens, the setting of the auto iris lens selection switch, located on the back of the camera, must be on DC or VIDEO depending on the type of the lens which being used. (Refer to the picture on page 13)
- The brightness of the screen can be adjusted in DC mode. The brightness can be adjusted within the range of 0 ~100. The optimum level of brightness can be achieved using this adjustment.



### MANUAL : Manual Lens selection.

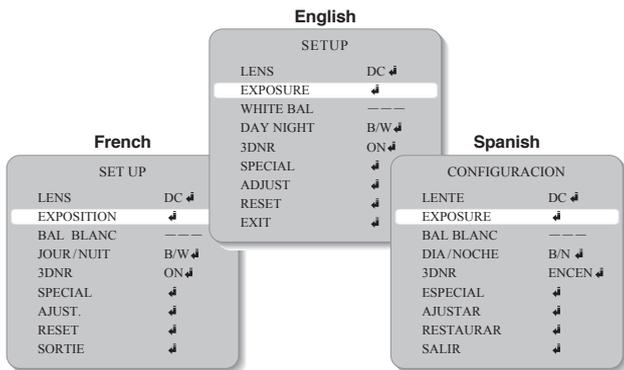
- Press the SET button to return to the previous menu.

### Note

- If you press the Set button in "MANUAL LENS", You can Adjust brightness in EXPOSURE.
- If you press the Set button in "DC/VIDEO", You can't adjust brightness in EXPOSURE, Return to "LENS" and adjust brightness.

## How to Use the Camera

### EXPOSURE



1. When the SETUP menu screen is displayed select EXPOSURE using the Up and Down buttons.
2. Select the desired mode using the Left and Right buttons.



### SHUTTER

1. The shutter speed is controlled manually.
2. Select 'FLK' mode when flickering occurs on the screen due to an imbalance between illumination and frequency.  
NTSC Model: 1/100, PAL Model: 1/120

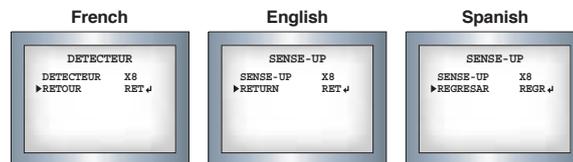
### AGC (AUTO GAIN CONTROL)

The higher the gain level, the brighter the screen - but the higher the noise.  
- OFF, LOW, MIDDLE, HIGH can be selected

### SENS-UP

When it is night or dark, the camera automatically detects the light level and maintains a clear picture if this mode is activated.

- OFF : Deactivates the SENS-UP function.
- AUTO : Activates the SENS-UP function.

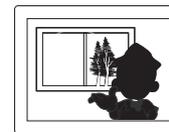


### BLC (Back Light Compensation)

When there is a strong backlight behind the object, clear images of the background as well as the object can still be obtained by using the BACKLIGHT function.



BLC ON



BLC OFF

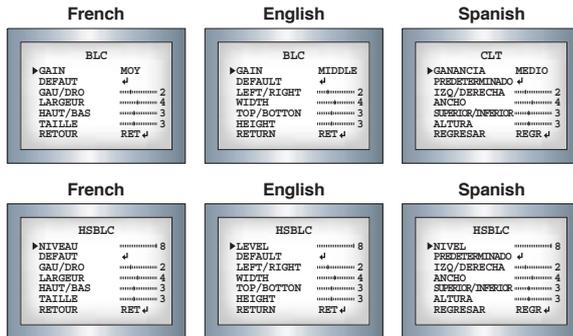
## How to Use the Camera

### ● HSBLC (Highlight Suppress Back Light Compensation)

If there is a high light installed in a limited environment such as an apartment parking garage or gas station entrance, removing the high light makes it possible to view car license plates efficiently.



3. Select the desired mode using the Left and Right buttons and press the SET button.

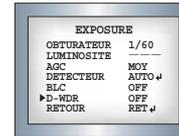


### ● Xtended Dynamic Range (XDR / D-WDR)

XDR (shown as D-WDR in OSD menu) enhances details in images which feature dark or strong background areas. This is accomplished by changing backlight settings in certain areas of the picture instead of the complete picture.

(Please select INDOOR and OUTDOOR to fit the individual environments.)

#### French



#### English



#### Spanish

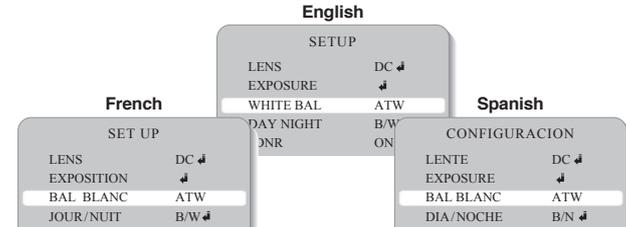


- RETURN : Saves the FUNCTION menu and returns to the SETUP menu.

## WHITE BALANCE

Use the White Balance function to adjust the screen colors.

1. Position the cursor to point to WHITE BAL on the SETUP menu screen, select using the Up and Down buttons.
2. Select the desired mode using the Left and Right buttons.



- ATW(Auto Tracking White Balance) : This mode can be used within the color temperature range 2,000°K ~ 9500°K
- AWB(Automatic White Balance) : This mode can be used within the color temperature range 1,800°K ~ 11,000°K
- AWC → SET : To obtain the optimum state under the current luminance levels, direct the camera to point toward a sheet of white paper and press the SET button. If the environment changes, including the light source, the white balance will require re-adjustment.
- MANUAL : The manual adjustment mode enables finer adjustment. Select ATW or AWB first then change to manual adjustment mode and press the SET button. Set the appropriate color temperature then increase / decrease the red and blue colour values and monitor the color changes of the object.

## How to Use the Camera

- **INDOOR** : Select this when the color temperature is between 4,500°K and 8,500°K.
- **OUTDOOR** : Select this when the color temperature is between 1,700°K and 11,000°K. (sodium light inclusion)



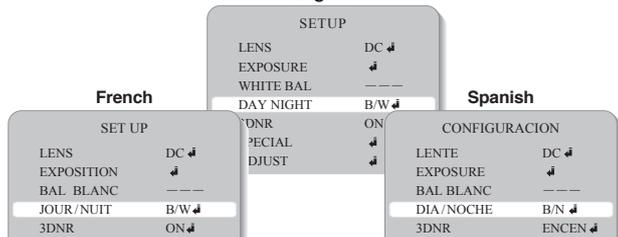
### Note

- Under the following conditions White Balance may not work properly. In such cases, select the AWC mode.
  - ① When the color temperature of the subject environment has a very high temperature range (e.g. clear sky, or sunset)
  - ② When the ambient illumination of the subject is low.
  - ③ If the camera is directed toward a fluorescent light, or is installed in a place where illumination changes dramatically, the White Balance operation may become unstable.

## DAY/NIGHT

Pictures can be displayed in either color or black and white.

1. When the SETUP menu screen is displayed, select 'DAY/NIGHT' using the Up and Down buttons.



2. Select the desired mode using the Left and Right buttons.

- **COLOR** : The color mode is selected as the default, and the camera does not change automatically.
- **AUTO** : This camera has a function which automatically changes to the appropriate mode dependant on lighting levels. COLOR mode is selected during daylight and B/W mode at night time. (Set START LEVEL and END LEVEL manually, as appropriate environment.)



- **EXTERN** : This mode allows the application of a filter to external signals.
- **B/W** : Discards the color information and displays in black and white.

### Note

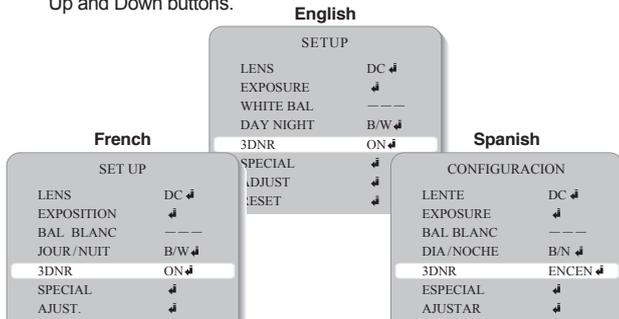
- When using a Video Auto Iris Lens, if the lens level is too low, automatic switching between Color and Black & White may not occur.
- If you press the Set button in "AUTO", AGC is disabled.
- The camera focus will "shift" marginally under infrared illumination at night. Always use an IR Corrective extra-low dispersion lens to obtain sharp pictures in color and monochrome.

## How to Use the Camera

### DNR

This function reduces the background noise in a low luminance environment.

- When the SETUP menu screen is displayed, select 'DNR' using the Up and Down buttons.



- Select a desired mode using the Left and Right buttons.
  - OFF : Deactivates DNR. Noise is not reduced.
  - ON : Activates DNR so that noise is reduced.
- Set the DNR mode to 'ON' and press the SET button. The noise reduction level can now be adjusted.

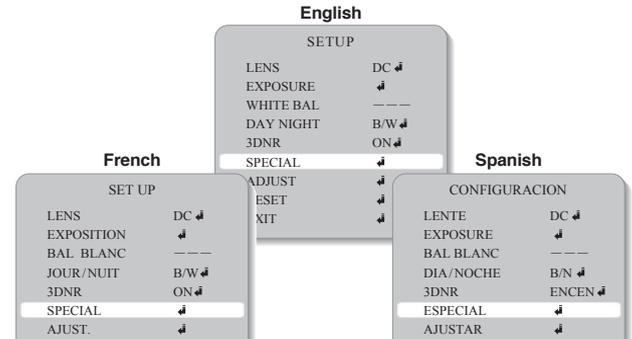


#### Note

- When adjusting the noise reduction level in DNR mode, remember that the higher the level is set, the greater the reduction in noise level, but it also increases the possibility of ghosting.

### SPECIAL

- When the SETUP menu screen is displayed, select 'SPECIAL' using the Up and Down buttons.



- Select the desired mode using the Left and Right buttons.



- CAM TITLE: If a title is entered, the title appears on the monitor.

- When the SPECIAL menu screen is displayed, use the Up and Down buttons to point the cursor to 'CAM TITLE'.
- Set to 'ON' using the Left and Right buttons.

#### Note

- When the CAM TITLE menu is 'OFF', no title will be displayed on the monitor screen even if one has been entered.

## How to Use the Camera

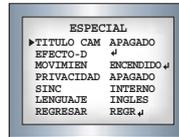
### French



### English



### Spanish



③ Press the SET button.

### French



### English



### Spanish



④ Use the 4 directional buttons to move to a character, and select it by pressing the SET button. Repeat this action to enter multiple characters. Up to 15 alphanumeric characters can be used.



### Note

- If the cursor is moved to CLR and the SET button pressed, all letters are deleted. To edit a letter, change the cursor to the bottom left arrow and press the SET button. Move the cursor over the letter to be edited, move the cursor to the letter to be inserted and then press the SET button.

## D-EFFECT

### French



### English



### Spanish



- FREEZE : View still pictures.
- MIRROR : MIRROR,V-FLIP,ROTATE can be selected.
- D-ZOOM : OFF(X1), ON(X2 to X32) can be selected.
- GAMMA : Users can change the gamma setting in 0.5 steps, between 0 and 1.0
- NEG.IMAGE : NEGATIVE IMAGE or POSITIVE IMAGE can be selected.

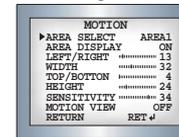
## MOTION DETECTION:

This product has a feature that allows you to observe movements of objects in 4 different areas on the screen, and the green shape appear on the screen when movement is detected; hence a single individual can conduct supervision efficiently. The camera detects an object's movement by sensing disparity of outline, and level of brightness and color.

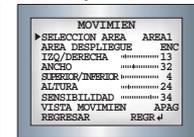
### French



### English



### Spanish



## How to Use the Camera

- Please select the area you wish to observe from the 4 areas in AREA SELECT mode.
  - Please select ON mode for the chosen area.
  - Please adjust the size of the area to be observed by using the LEFT/RIGHT, WIDTH, TOP/BOTTOM, HEIGHT button.
  - Please adjust the level of observation by using SENSITIVITY mode.
  - Please press the RETURN button to save the changes and complete the setting.
- **PRIVACY** : Hide an area so that it is not displayed on the monitor. Set up using the 4 directional buttons.
- AREA SELECT : Up to 8 areas are selectable.
  - AREA DISPLAY : Determines whether to use the area selected in the AREA SEL, and the size and position of the area.



- COLOR : Determine area color. Select any colors of 16.
  - RETURN : Select this to save the PRIVACY menu settings and return to the SPECIAL menu.
- **SYNC** : In areas where the supply is 60Hz, synchronisation function (Line-Lock), multiple cameras using the power synchronisation function (Line-Lock), without using a synchronisation signal generator.
- INT : Internal Synchronisation Type
  - L/L : Power Synchronisation Type, Line-lock
    - Press the SET button.
    - Select a phase between 0 and 359.



### LANGUAGE

Users can select their preferred language for the OSD menu from either, English, Korean, Chinese (Big5), Chinese (Simplified) or Japanese.

- **RETURN** : Select this to save the SPECIAL menu settings and return to the SET UP menu.

### ADJUST



- **Sharpness** : The sharpness of the image can be adjusted using the left and right buttons. (32 steps)
- **BLUE** : The blue color can be increased/decreased using the left and right buttons. (100 steps)
- **RED** : The red color can be increased/decreased using the left and right buttons. (100 steps)

### RESET

RESET : Resets the camera settings to the factory defaults.

### EXIT

Press the SET button in the EXIT menu to save the current settings and exit the SET menu.

## ■ Troubleshooting

If you have trouble operating your camera, refer to the following table. If the guidelines do not enable you to solve the problem, contact an authorized technician.

Problem	Solution
<b>Nothing appears on the screen.</b>	<ul style="list-style-type: none"> <li>• Check the power connections.</li> <li>• Check the VIDEO signal line connection.</li> </ul>
<b>The image on the screen is dim.</b>	<ul style="list-style-type: none"> <li>• Make sure the lens is clean. Clean the lens with a soft clean lint free cloth.</li> <li>• Adjust the monitor contrast &amp; brightness controls.</li> <li>• Re-position the camera if necessary.</li> </ul>
<b>The image on the screen is dark.</b>	<ul style="list-style-type: none"> <li>• Adjust the contrast control of the monitor.</li> <li>• If you have an intermediate device, set the 75Ω/ Hi-z properly.</li> </ul>
<b>The camera is not working properly, and the surface of the camera is hot.</b>	<ul style="list-style-type: none"> <li>• Check that an appropriate power source is connected to the camera.</li> </ul>
<b>The DAY/NIGHT menu does not work.</b>	<ul style="list-style-type: none"> <li>• Check that AGC in the EXPOSURE menu is set to 'OFF'.</li> </ul>
<b>The SENS-UP function does not work.</b>	<ul style="list-style-type: none"> <li>• Check that AGC in the EXPOSURE menu is not set to 'OFF'.</li> <li>• Check that SHUTTER in the EXPOSURE menu is not set to 'FLK' or 'MANUAL'.</li> </ul>

Problem	Solution
<b>The Motion Detection function does not work.</b>	<ul style="list-style-type: none"> <li>• Check that MOTION DEF of SPECIAL SETUP menu is 'OFF'.</li> </ul>
<b>Color is not correct.</b>	<ul style="list-style-type: none"> <li>• Check the setting of WHITE BAL SETUP menu .</li> </ul>
<b>The screen flickers continually.</b>	<ul style="list-style-type: none"> <li>• Check that direction of camera turns toward the Sun.</li> </ul>

## Specifications

		NTSC
Power Source		AC24V / DC12V 170mA(AC24V) / 260mA(DC12V)
CCD	Size	SONY 1/3" Super HAD™ II High Sensitivity Color CCD
	Total Pixels	811(H) x 508(V)
	Effective Pixels	768(H) x 494(V)
Scanning System		2:1 Interlace
Sync	Synchronisation	Internal / Line Lock
	Frequency	Horizontal : 15.734 KHz, Vertical:59.94 Hz
O.S.D		English, French, Spanish
E L E C T R I C A L	XDR (D-WDR)	ON (Indoor/Outdoor) / OFF
	Back-light Comp.	OFF / BLC / HSBLCL
	Resolution	560 TV Lines
	S/N (Y signal)	52 dB (AGC Off, Weight ON)
	Min. Illumination	0.25Lux Color / 0.01Lux B/W (50IRE, F1.2) 0.001Lux Color / 0.00004Lux B/W (@ x256 Sens-up)
	White Balance	ATW / AWB / AWC / Manual
	Electronic Shutter Speed	1/60 ~ 1/120,000 sec
	Sens-up	AUTO / OFF (Selectable x2 ~ x256)
	Gain Control	LOW / MIDDLE / HIGH / OFF
	3D-DNR	ON / OFF
	Motion Detection	ON / OFF (4 Zone, ALARM Output)
	PRIVACY	ON / OFF (8 Zones)
	V-REV	ON / OFF
	H-REV	ON / OFF
	FREEZE	ON / OFF
	SHARPNESS	ON / OFF (Level Adjustable)
	IRIS Control	DC / Video
Day & Night	COLOR / Black& White / AUTO / EXT	
Digital Zoom	ON(x32) / OFF	
Lens Mount		CS Mount (Easy Focus type) (C Mount is mountable by using adaptor)
Operating Temperature / Humidity		-14°F to + 122°F / 30% to 80% RH
Storing Temperature / Humidity		-4°F to + 140°F / 20% to 90% RH
Dimension		63.7(W) × 55.7(H) × 87.4(D)mm
Weight		220gr (without lens)

## Limited Warranty

### Digimerge "Pinnacle Series" Cameras . 5 year Limited Hardware Warranty

Warranty: Subject to the exclusions, limitations and exceptions, Digimerge warrants to the initial end-user purchaser that this hardware product is free from manufacturing defects in material and workmanship under normal use for a period of five (5) years from the date of purchase.

#### Warranty Details :

The five (5) year warranty period consists of:

- One (1) year over-the-counter replacement warranty covering parts and labor
- Four (4) additional years of repair depot warranty covering parts and labor with proof of RA issued by Digimerge tech support

Exceptions to the above warranty are :

- Camera components including, but not limited to, moving parts, motors, fans, heaters, camera image sensors, IR Cut Filters, DC iris and lens assemblies are warranted for a one (1) year period
- Pan Tilt Zoom (PTZ) Cameras and related components including electrical slip ring contacts, and pan/tilt/lens motors are warranted for a one (1) year period.

**NOTE :** Products are subject to continuous improvement. DIGIMERGE Technologies Inc. and its subsidiaries reserve the right to modify product design, specifications and prices, without notice and without incurring any obligation.

For valid warranty claims made during the warranty period, upon proper proof of purchase (which is defined as a "valid form of a bill of sale or receipt from an authorized retailer or distributor showing the original date of purchase"), defective products will, at the sole discretion of Digimerge, be repaired or replaced with equal or better product in terms of hardware features without charge if all the conditions set forth in this document are met. Any products repaired or replaced within the warranty period, shall be warranted by Digimerge to the initial end-user purchaser for 90 days from the return shipment date, or the remainder of the warranty term, whichever is longer. Products and parts, at Digimerge's sole discretion, may be replaced with new or refurbished items, and the products and parts replaced become the property of Digimerge. Product returned to Digimerge must be in its original packaging or in packaging which provides the product with protection equivalent to the original packaging, and sent with the postage charges prepaid via a shipping method that provides for tracking of your package, to the address provided at the time the RA (Return Authorization) was requested (see "Warranty Service" for explanation of how to obtain an RA). The customer is responsible for all shipping costs associated with the return of the defective products for warranty service to Digimerge warranty/repair depot facilities. Products will be returned to the end-user freight prepaid.

Exclusions and Limitations: Any of the following will void this warranty:

1. Installation or use of the product other than strictly in accordance with the instructions contained in the product's instruction manual;
2. If the product is subjected to operating conditions (including atmospheric, moisture and humidity conditions) outside of the acceptable conditions specified in the product's instruction manual;
3. If the product is subjected to misuse (not adhering to instructions supplied with the product), negligence, modification (of hardware, firmware or software) or abuse;
4. If the product is subjected to electrical short circuits or transients, accident, fire, flood or Acts of God;
5. Adjustment, maintenance or repair of the product other than in accordance with Digimerge approved procedures; and
6. Use of replacement parts other than those specified by Digimerge.
7. If the products original identification (trademark, serial number, model number) markings have been removed, defaced or altered

DIGIMERGE MAKES NO CLAIMS OR WARRANTIES OF ANY KIND WHATSOEVER REGARDING THE PRODUCT'S ABILITY OR EFFECTIVENESS IN PREVENTING OR REDUCING THE RISK OF, OR DAMAGES RESULTING FROM, LOSS OR THEFT OF PROPERTY OR PERSONAL INJURY. THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS LIMITED WARRANTY IS THE EXCLUSIVE REMEDY OF THE PURCHASER. DIGIMERGE SHALL IN NO EVENT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CHARACTER, INCLUDING, WITHOUT LIMITATION, PERSONAL INJURY, LOSS OF REVENUE OR PROFITS, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, OR CLAIMS AGAINST THE PURCHASER BY ANY THIRD PERSON, EVEN IF DIGIMERGE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

No claims or statements regarding the product, whether written or verbal, by salespeople, retailers, dealers or distributors, that are not contained in this limited warranty or in the owner's manual are authorized by Digimerge and do not modify or expand this warranty. Some countries, states, or provinces do not allow the exclusion or limitation of implied warranties or the limitation of incidental or consequential damages for certain products supplied to consumers or the limitation of liability for personal injury. To the extent that such restrictions or limitations apply to the products, the above limitations and exclusions may be limited in their application. In that case, when the implied warranties are not allowed to be excluded in their entirety, they will be limited to the duration of the applicable written warranty, and if damages may not be limited then the above limitations on damages apply, but only to the greatest extent permitted by local law.

### **Warranty Service :**

Warranty service can be received by contacting your Digimerge dealer (during the warranty period). The dealer is required to first contact Digimerge Technical Support for assistance. In the event the problem cannot be resolved over the phone or via email, Digimerge will advise to return the product, at customer's expense, for repair or replacement. Upon receipt of the defective camera, Digimerge will send a repaired or replacement camera at Digimerge's expense to the customer. Dealer should send product to :

### **In United States:**

Digimerge Returns  
C/O Russell A. Farrow  
15 Lawrence Bell Drive  
Amherst, NY  
14221

### **In Canada:**

Digimerge Technologies Inc.,  
Attention: Repair Department  
250 Royal Crest Court  
Markham, Ontario, Canada  
L3R 3S1

**Out of warranty service :** Please visit our web site ([www.digimerge.com](http://www.digimerge.com)) for the name and location of the Digimerge authorized service centers.

■ MEMO

A large rectangular area defined by a dotted line, intended for writing a memo.