Day/ Night High-definition WDR ICR Color Camera

USER'S MANUAL

Version 2.0.0

Thank you for purchasing our product. If there is any question or request, please do not hesitate to contact dealer.

This manual is applicable to DS-2CC197P-A, DS-2CC577P-A color cameras.

This manual may contain several technically incorrect places or printing errors, and the content is subject to change without notice. The updates will be added into the new version of this manual. We will readily improve or update the products or procedures described in the manual.

⚠️Safety Instruction

These instructions are intended to ensure that user can use the product correctly to avoid danger or property loss.

The precaution measure is divided into "Warnings" and "Cautions"

Warnings: Serious injury or death may cause if any of the warnings is neglected.

Cautions: Injury or equipment damage may cause if any of the cautions is neglected.

⚡	⚠️
Warnings Follow these safeguards to prevent serious injury or death.	**Cautions** Follow these precautions to prevent potential injury or material damage.

⚡ **Warnings**

1. In the use of the product, you must be strict compliance with the electrical safety regulations of the nation and region.

2. Input voltage should meet both the SELV(Safety Extra Low Voltage) and the Limited Power Source with AC 24V or DC 12V according to the IEC60950－1 standard. Please refer to technical specifications for detail information.

3. Do not connect several devices to one power adapter as adapter overload may cause over-heat or fire hazard.

4. Please make sure that the plug is firmly connected on the power socket.

5. When the product is mounted on wall or ceiling, the device shall be firmly fixed.

6. If smoke, odor or noise rise from the device, turn off the power at once and unplug the power cable, and then please contact the service center.

7. If the product does not work properly, please contact your dealer or the nearest service center. Never attempt to disassemble the camera yourself. (We shall not assume any responsibility for problems caused by unauthorized repair or maintenance.)

Cautions：

Make sure the power supply voltage is correct before using the camera.

Do not drop the camera or subject it to physical shock.

Do not touch CCD (Charge Coupled Device) modules with fingers. If cleaning is necessary, use clean cloth with a bit of ethanol and wipe it gently. If the camera will not be used for an extended period, please turn on the lens cap to protect the CCD from dirt.

Do not aim the camera at the sun or extra bright places. A blooming or smear may occur otherwise (which is not a malfunction however), and affecting the endurance of CCD at the same time.

The CCD may be burned out by a laser beam, so when any laser equipment is on using, make sure that the surface of CCD will not be exposed to the laser beam.

Do not place the camera in extremely hot, cold(the operating temperature shall be$-10℃\sim+60℃$), dusty or damp locations, and do not expose it to high electromagnetism radiation.

To avoid heat accumulation, good ventilation is required for operating environment.

Keep the camera away from liquid while on using.

While on a delivery, the camera shall be packed in its original packing, or packing of the same texture.

Regular part replacement: a few parts (e.g. electrolytic capacitor) of the equipment shall be replaced regularly according to their average enduring time. The average time varies because of differences between operating environment and using history, so regular checking is recommended for all the users. Please contact with your dealer for more details.

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C H A P T E R 1
Introduction

1.1 Product Features

This camera adopts high performance CCD and advanced print circuit board design technology, and possesses of high resolution, low distortion, low noise features etc, which extremely suitable for supervisory system and image process system.

- Adopt high performance SONY CCD, and supply high definition and clear image, color 540TVL, and B/W 600TVL
- Low illumination, Color: 0.1Lux@F1.2, B/W: 0.01Lux@F1.2.
- Support ICR filter auto switch
- Support OSD menu controlling, enable user to configure the detail parameters. (DS-2CC577P-A support remote control)
- Adopt advanced stepping motor and sleep mode to avoid ICR oscillation.
- Support BLC with programmable BLC area.
- Support auto white balance with high color rendition.
- High SNR give rise to clear and pleased image.
- Support auto electronic shutter control to adapt to different environments.
- Support auto gain control, adaptive brightness.
- Support auto iris.
- Support Privacy mask with 8 optional colors and 8 configurable areas.
- Advanced design technology with high reliability.
- Advanced 3-axis mechanism design meet different mounting requirement by flexibly adjusting the lens into the required angle (Only Dome camera support).
- Convenient back focus adjustment.
- Adopt advanced double-plate design to guarantee the CCD's heat dissipation and image's quality.
- Support RS485 remote control (Invalid for DS-2CC577P-A)

1.2 Chief Introduction about Function

Motion Detection: In the surveillance area, the appearing motion object will trigger alarm. User can select suitable sensitivity level with corresponding environment.

Privacy Mask: In the surveillance area, user can cover some place to protect other's privacy. The number of privacy mask area is up to 8.
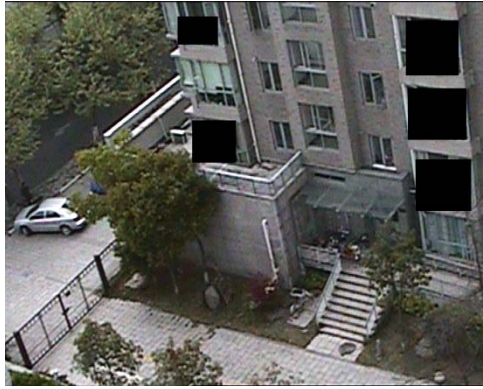
Color B/W auto switch: The camera will display color image and become monochrome automatically at night.

AGC: When object being shot look dim, please turn on AGC. It is propitious to enhance brightness. To output standard video under different illumination, the range of auto gain control must be large enough. When under low illumination, AGC will increase camera's sensitivity, and output bright and clear video.

S/N ratio: It is the ratio of Signal voltage and noise voltage. The ratio is larger, the effect of noise is less, and the image is more spotless.

OSD (On Screen Display): The camera supports friendly menu interface on the screen, and it's convenient for user selecting expected function.

3-axis adjustment: Adopt advanced 3-axis mechanism design meet different mounting requirement by flexibly adjusting the lens into the required angle.

Synchronous System: Synchronization usually contains power synchronization and internal synchronization. Internal synchronization uses synchronous signal which is generated by camera's crystal oscillator to complete synchronous scan. Power synchronization uses synchronous signal which is generated by camera's adaptor to complete synchronous scan.

White Balance: Because the camera could not adjust the color temperature according to the light alteration as the eyes, that will cause color deviation. White balance is the white rendition ability of the camera to adjust the problem according to the environment automatically.

ICR Auto Switch: The filter will filter infrared light during the daytime and change to normal filter at night to ensure a high sensitivity and clear image.

BLC: If there is glaring light in the background of the object being shot, the object will look very dim. In this situation, turning on BLC function will make the object look bright and clear, but the background scene will be overexposure.

BLC OFF   BLC ON

Super Wide Dynamic Range: Super wide dynamic range function is intended to provide vivid images even under back light circumstances where intensity of illumination can vary excessively. Super WDR allows camera to filter the intense back light surrounding a subject and thus enhances the ability to distinguish the features and shapes on the subject.

1.3 Introduction of Box Camera Side Plate and Rear plate
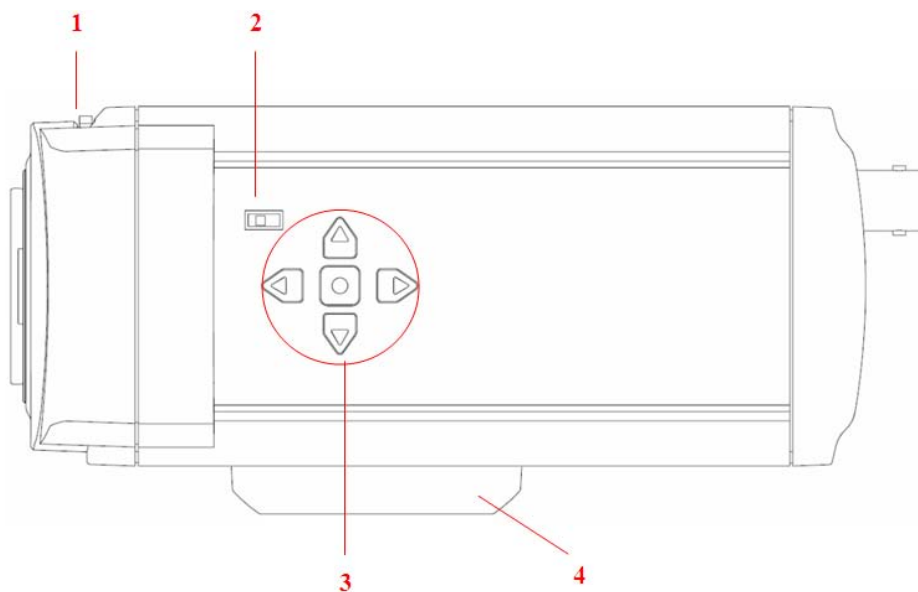
1.3.1 Introduction of Box Camera Side Plate

Figure 1.1 Box camera side plate

1. Back Focus Ring: When confirm the lens mounting, still don't focalize, then need adjust the back focus ring.

    Adjusting Method: The back focus is adjusted on the optimal position, but for compatible with different lens, should adjust back focus ring.

    The steps are as below: firstly, tighten the lens, then loose the fixed back focus ring, and rotate the lens till get clear image, lastly lock the back focus ring.

2. DD, VD Optional Switch

    Auto Iris Video Drive: The camera inputs the video signal level into lens interior, and internal drive circuit outputs control voltage to adjust lens aperture through electronic motor;

    Auto IRIS Direct Current Drive: The camera interior adds lens aperture electronic motor's drive circuit, and can directly output DC control voltage to control lens electronic motor.

3. Menu Button: Press the middle menu button to call out menu, then press the up and down to move the items, and left and right button to select items.

4. Fixed Bracket Fastness: Used for mounting bracket.

## 1.3.2 Introduction of Box Camera Auto IRIS Port

	Video	DC
1	Power	Damp-
2	NC	Damp+
3	Video	Driver+
4	GND	Driver-
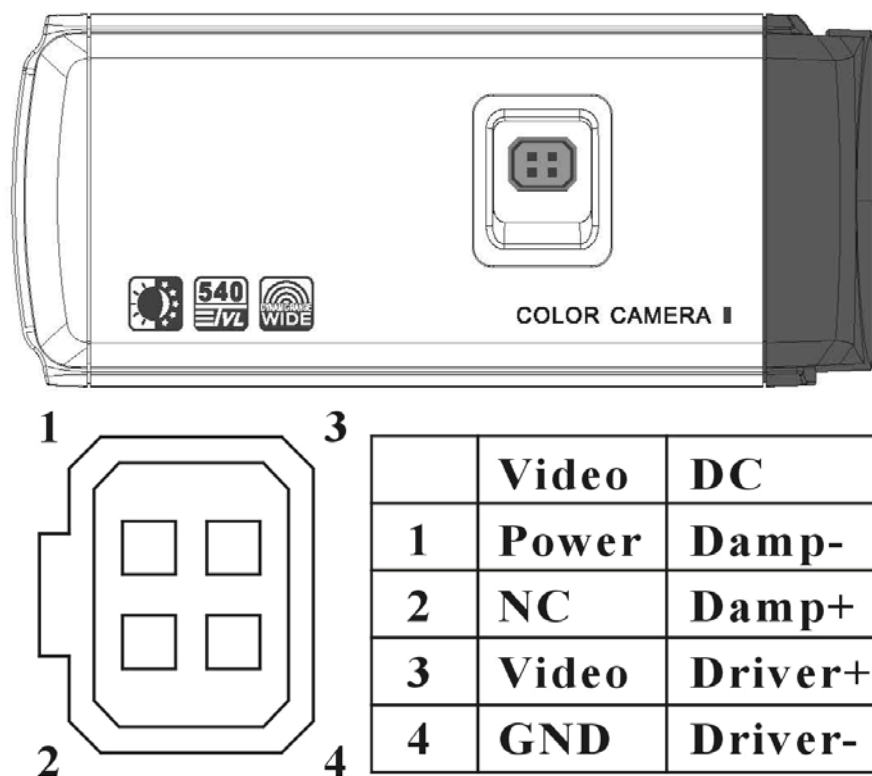
Figure 1.2 Definition of Auto IRIS Port

On the other side of the camera, there is an interface for auto iris, the type is negative pattern four square holes, and the definition of pins is shown in the figure above. The interface of video drive auto iris is using three pins, i.e. Power +, Video, GND; the interface of direct drive auto iris is using four pins, i.e. damp+, damp-, drive+, drive-.

The description of box camera rear panel:
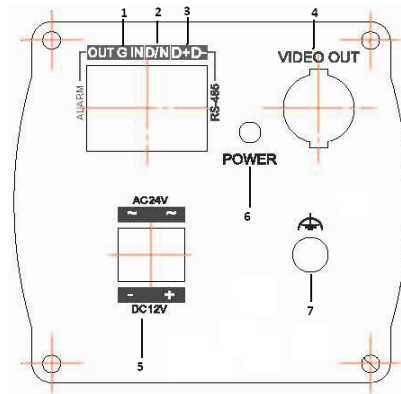
Fig 1.3 The rear panel of box camera

1. Alarm OUT, IN, GND: support alarm in and out

2. D/N: The switch of D/N mode via external trigger command;

3. RS-485: support RS-485 control, support connecting DVR, keyboard and etc to realize remote control.

4. Video Output: output 540TVL super high resolution analog video;

5. Double power supply design: support 12VDC and 24VAC;

6. POWER: Power supply indicator, the LED light will turn on as the power supply is proper;

7. GND;

1.4 Dome Camera Appearance
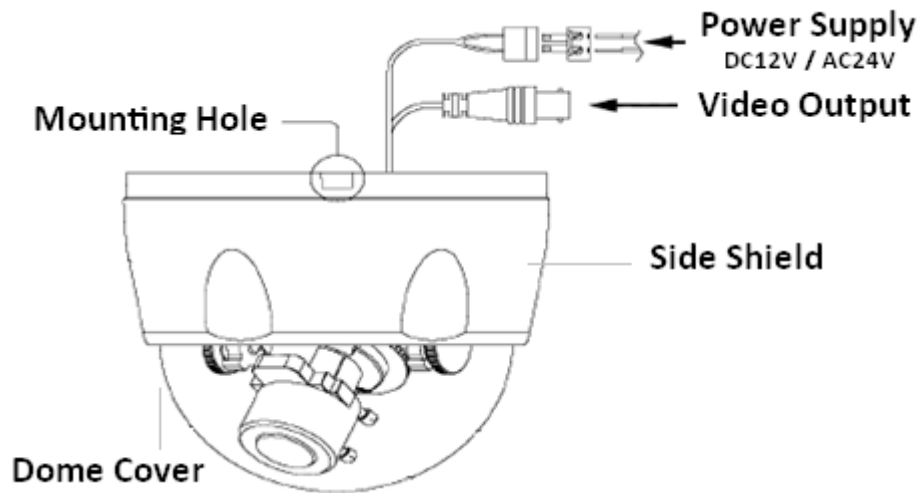
Fig 1.4 Dome Camera Appearance

3-axis adjust: Pan Rotation Range: 0~355°, Tilt Rotation Range: 0~90°, support installation at different angles.

1.5 IR Control

Note: This function is only valid for DS-2CC577P-A.
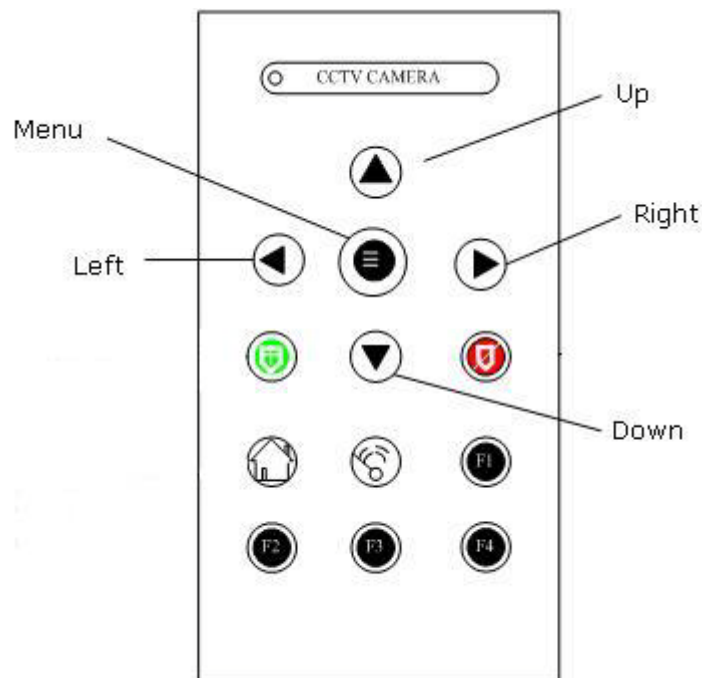
Fig 1.5.1 IR Remote

Menu: Press this button for 3 seconds to enter the camera main menu, and press "Menu" in camera main menu to

enter the sub menu interface.

Up: Move cursor upward.

Down: Move cursor downward.

Left: Move cursor leftward.

Right: Move cursor rightward.

Note: The other function keys are not available by now.

C H A P T E R 2
Installation

Before mounting, please make sure that the device in the package is in good condition and all the assembly parts are complete.

Note: The lens weight must be less than the 1kg CS assembly. After installation the plane the outshoot must be less than 5mm. When using the C assembly lens, please adopt C to assemble the adapter.

2.1 Mounting

There are two mounting methods for camera (box and dome): wall mounting, ceiling mounting, which depends on the demand of the customers. Please stick to the following steps (take ceiling mounting for example, wall mounting steps are the same).

1.   Select the mounting method, and mount camera bracket according to the mounting method. For cement wall, first you need to mount expansion screw (the mounting holes of it needs to be the same with bracket), then mount the bracket, shown as figure 2.1. For the woodiness wall, then skip the first step, and mount the bracket with self-tapping screw. Please note that the mounting wall needs to sustain the weight 3 times heavier than the sum weight of camera and bracket.

2.   Mounting the camera. Screw the camera in the bracket by using the mount base at the top of camera.
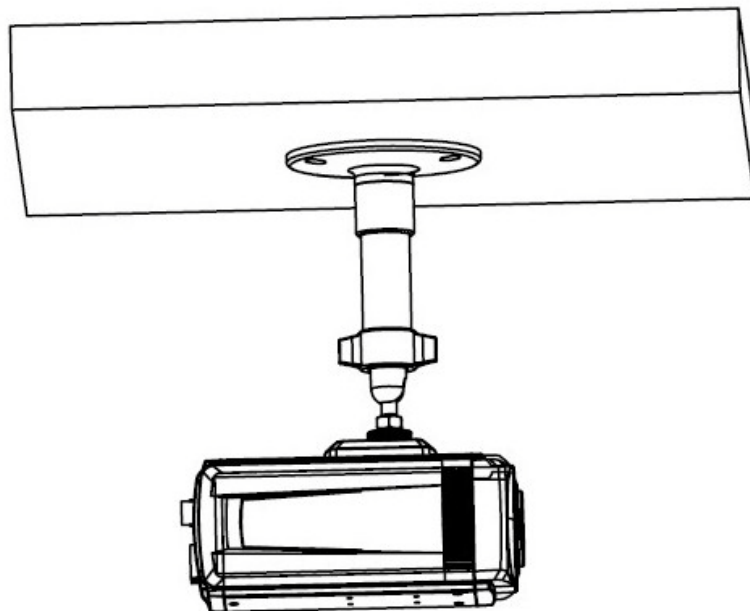
Fig. 2.1 Install the camera

3.   Adjust the camera and move it to the monitoring point, and screw down the knob in the bracket, fix the

camera.

4.   Screw the lens into the head of the camera, adjust the focus, and fasten the lens.
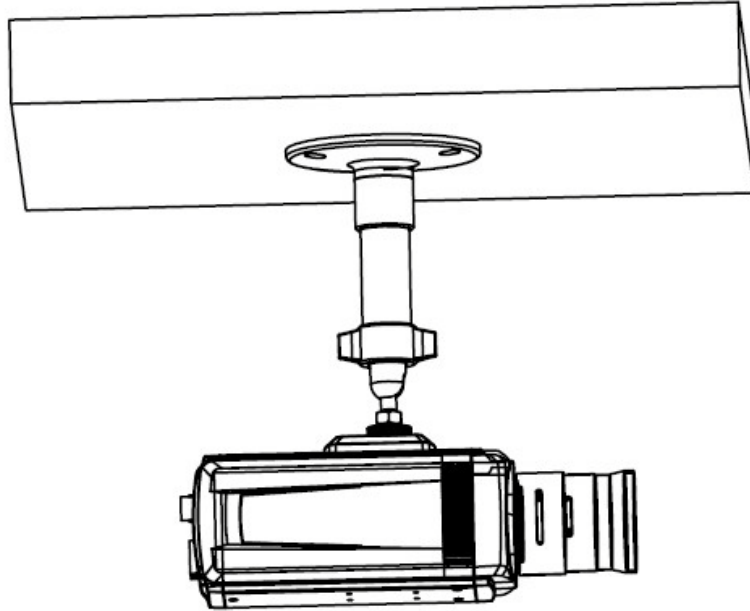
Fig. 2.2 Install the lens

2.2 Hardware Installation

Note: Take box camera for example.

Rear Panel Linkage of Box Camera:
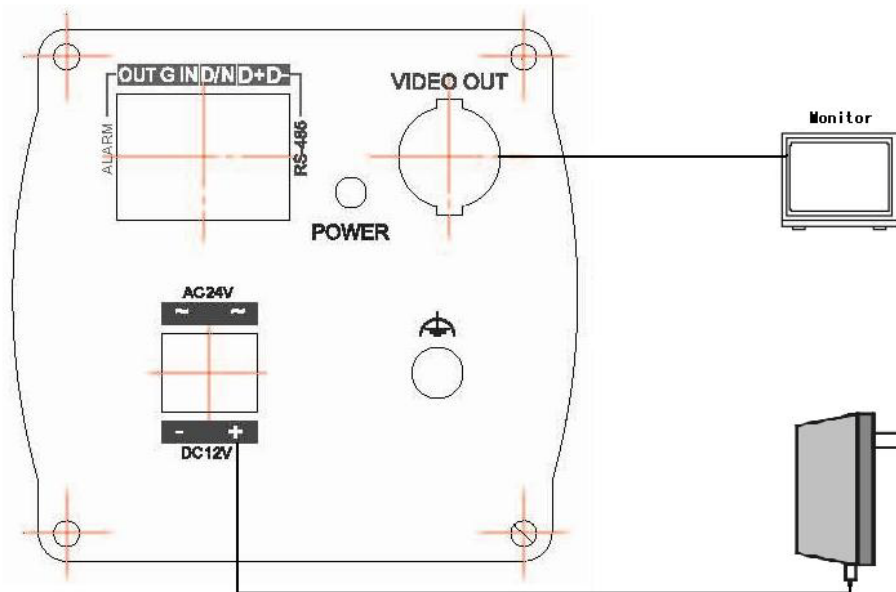
Figure 2.3 Rear panel Linkage

Note: Please confirm that if the power supply matches camera's before connecting to power supply, the power supply that's commonly used is 12VDC or 24VAC (Please refer to the specifications of the corresponding camera model for details).

C H A P T E R 3
Menu Description

BLC SETUP

AREA   SET---
VALUE   （3）- -| -
RETURN

BLC AREA

AREA   OK
RETURN

Camera ID

- - - - - - - - - - - - - -

ABCDEFGHIJKLM
NOPQRSTUVWXYZ
0 1 2 34 56 7 8 9
: ! - + * ( ) /
<Cursor>
LOC- - -
RETURN

ALARM 1

TYPE   1
AREA   1*2*3*4
SENSIT （0）|- - - -
RETURN

ALARM 2

ON——>OFF 2
OFF——>ON 5
RETURN

SYS INFO

SOFT
HARD
DSP
RETURN

Specil Func

DETECT   OFF
FLC   OFF
BLEMISH DETECT
VIDEO   - - -
PRIVACY   - - -
RS485   - - -
SYS INFO   - - -
RETURN

Privacy Mask

ZONE   （1）- -
ON/OFF
OFF
SET   OK
COLOR   （7）- -
MOSAIC   OFF
RETURN

Menu

CAM ID   OFF
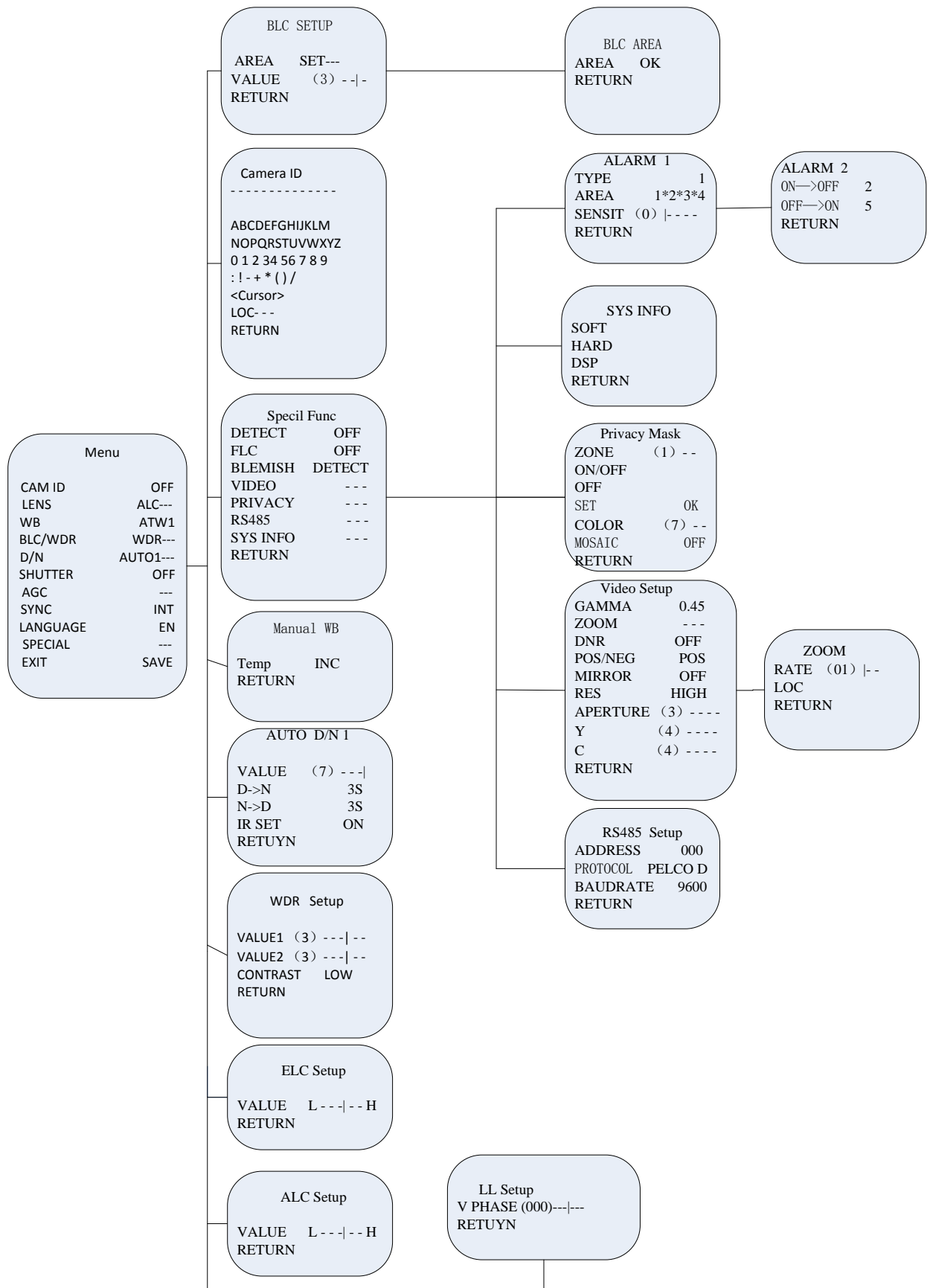LENS   ALC---
WB   ATW1
BLC/WDR   WDR---
D/N   AUTO1---
SHUTTER   OFF
AGC   ---
SYNC   INT
LANGUAGE   EN
SPECIAL   ---
EXIT   SAVE

Video Setup

GAMMA   0.45
ZOOM   - - -
DNR   OFF
POS/NEG   POS
MIRROR   OFF
RES   HIGH
APERTURE （3）- - - -
Y   （4）- - - -
C   （4）- - - -
RETURN

ZOOM

RATE （01）|- -
LOC
RETURN

Manual WB

Temp   INC
RETURN

AUTO D/N 1

VALUE   （7）- - -|
D->N   3S
N->D   3S
IR SET   ON
RETUYN

RS485 Setup

ADDRESS   000
PROTOCOL PELCO D
BAUDRATE 9600
RETURN

WDR Setup

VALUE1 （3）- - -| - -
VALUE2 （3）- - -| - -
CONTRAST   LOW
RETURN

ELC Setup

VALUE   L - - -| - - H
RETURN

ALC Setup

VALUE   L - - -| - - H
RETURN

LL Setup

V PHASE (000)---|---
RETUYN

3.1 Menu Interface

Press menu button for about 2s, the OSD menu will show on the screen.

```
            Menu

 CAM ID              OFF
  LENS            ALC---
 WB                 ATW1
 BLC/WDR          WDR---
 D/N            AUTO1---
 SHUTTER            OFF
  AGC                ---
 SYNC               INT
  LANGUAGE            EN
  SPECIAL            ---
 EXIT              SAVE
```
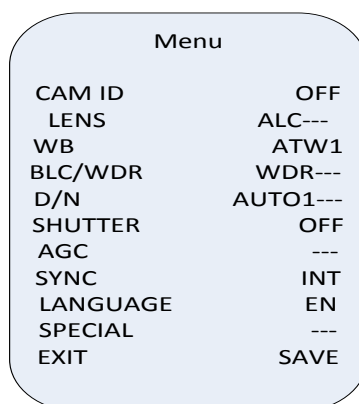
Press up/down button to move up/down cursor, left/right button to select the different options;
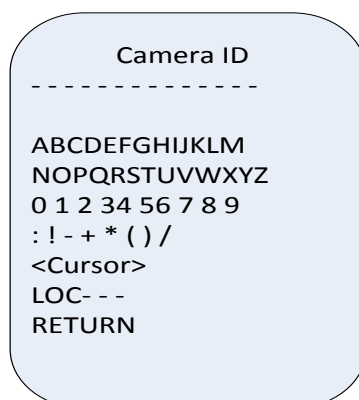
3.2 Menu Details

3.2.1   Camera ID Settings

Press up/down to move cursor to "Camera ID", press left/right to enable or disable this setting.

Off: The camera ID will not display after exiting;

On: The camera ID will display after exiting;

Select On, and press confirm button to enter "Camera ID " menu.

```
          Camera ID
 - - - - - - - - - - - - -

 ABCDEFGHIJKLM
 NOPQRSTUVWXYZ
 0 1 2 34 56 7 8 9
 : ! - + * ( ) /
 <Cursor>
 LOC- - -
 RETURN
```

Press up/down to move the cursor to characters, numbers, symbols, and press confirm button to modify the camera

ID; move the cursor to <CURSOR>, press left/right to move it to the characters of camera ID that needs modifying,

press confirm button to change the characters of camera ID to the blank; move the cursor to position setting, and

press confirm button to enter the camera ID position setting menu, then press up/down to change the position of

camera ID, press confirm button to exit the camera ID position setting menu, and return to the camera ID menu;

move the cursor to "Back" and press confirm button to return to the previous menu.

3.2.2 Lens Type Settings

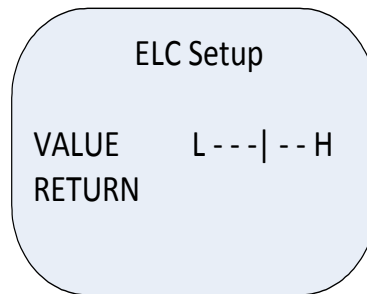Press up/down to move the cursor to "LENS", and press left/right to select the lens type as ELC or ALC.

ELC adopts auto electronic shutter to adjust the brightness;

ALC adopts auto iris to control lens of camera adjustable;

*Note:* ELC: auto shutter, fixed iris;

ALC: auto iris, fixed shutter.

Select ELC and press confirm then the "ELC Setup" menu will show on the screen of the monitor.

```
ELC Setup

VALUE        L - - -| - - H
RETURN
```

Press up/down to move the cursor to the "VALUE", press left/right to adjust brightness, move the cursor to

"RETURN" and press confirm button to return to the previous menu.

Note: Different values indicate the different brightnesses.

Select ALC and press confirm then "ALC Setup" menu will show on the monitor:

```
ALC Setup

VALUE        L - - -| - - H
RETURN
```
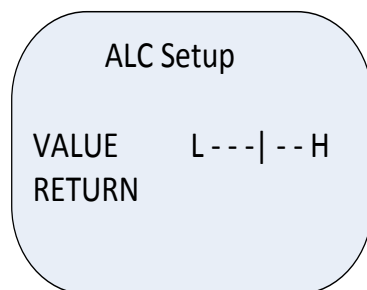
Move the cursor to "VALUE", press up/down to adjust the menu. After settings, move the cursor to "RETUEN"

and press confirm button to return to the previous menu.

3.2.3　　WB Settings

Press the cursor to "WB", then press left / right to select the item from ATW1, ATW2, Auto or Manual.

ATW1: Camera recover color automatically according to the environment color temperature, temperature range is

approximate from 2500K to 6500K.

ATW2: Temperature range is approximate from 2500K to 15000K.

ATC: Adjust under steady color temperature environment. After selecting ATC, the white balance will take effect

to the current scene.

Manual: Adjust red and blue values to setup white balance.

Manual WB setting is as below:

Select "Manual…" and the menu will display on the screen:

```
    Manual WB


Temp        INC
RETURN
```
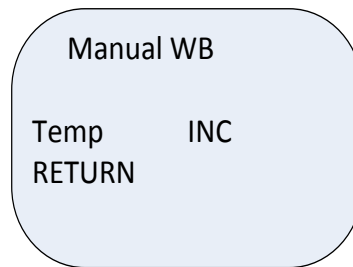
Press up / down to "Temp", and press left / right to adjust the value of temperature. After settings, move the cursor

to "RETURN" and press confirm button to return to the previous menu.

3.2.4　　BLC Settings

Press up / down to "BLC/WDR", and press left / right to select "BLC---" and the menu will display on the screen:

```
    BLC  Setup

AREA   SET- - -
VALUE （3） - - -| - -
RETURN
```
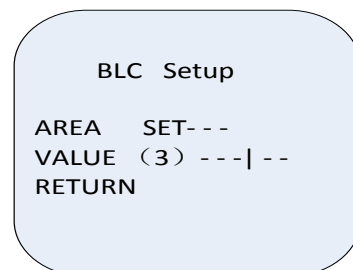
Move cursor to "AREA", and press left / right to set the BLC area as up, down, left, right, middle or manual, then

the BLC area is on the screen:

BLC area's setting step is as following:

Move cursor to "SET…", and press "enter" to confirm and go to the submenu:

```
        BLC Area
AREA        OK
RETURN
```
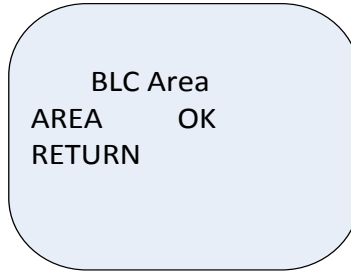
Move cursor to "AREA", and press "enter" to select "OFF", "LOC" or area size;

Press enter to confirm the location, and press up / down to set the area's location;

Press enter to confirm the area size, and press up / down to set BLC area's size.

After settings, move the cursor to "RETURN" and press confirm button to return to the previous menu.

Note: When "AREA" is not "OK", press up / down/ left / right not to move cursor.

3.2.5   Super WDR Settings

Move cursor to BLC / WDR, and press left / right to select "WDR…", then press "enter" to go to WDR operation menu.

```
        WDR  Setup

VALUE1 （3）- - -| - -
VALUE2 （3）- - -| - -
CONTRAST    LOW
RETURN
```

WDR Value setting:

Press left / right to adjust the value1 from 0 to 7. Value1 means the intensity of back scene.

Press left / right to adjust the value1 from 0 to 7; Value2 means intensity of front light.

WDR Contrast:

Press left / right to adjust the WDR contrast.

After settings, move the cursor to "RETURN" and press confirm button to return to the previous menu.
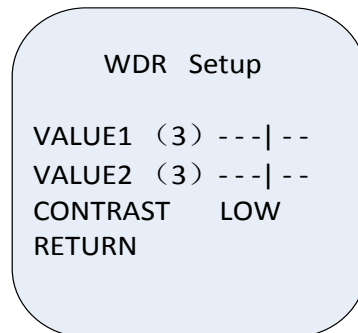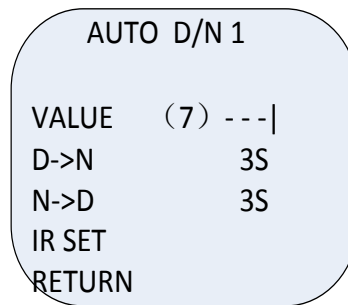
3.2.6   D / N Settings

Press up /down to move the cursor to "D / N", and press left / right to select item from Day, Night, Auto1, Auto2.

Auto1 Setting:

Select Auto1 and press "enter" to go into the submenu:

```
       AUTO  D/N 1

VALUE      （7）- - -|
D->N              3S
N->D              3S
IR SET
RETURN
```

Press up / down to move the cursor to "VALUE", and press left / right to select value from 0 to 7;

Move cursor to D->N, and press left / right to select the switch time including 3S, 5S, 10S, 15S, 20S, 25S or 30S.

Move cursor to N->D, and press left / right to select the switch time including 3S, 5S, 10S, 15S, 20S, 25S or 30S.

After settings, move the cursor to "RETURN" and press confirm button to return to the previous menu.

Press up / down to move the cursor to "IR SET", and press left / right to select ON or OFF;

Note: When "IR SET" is "ON", the camera turns on the ICR stabilization function. If the camera turns to Night mode twice in 10 minutes, the camera will go to protection mode. In this mode, camera will keep Black/White for at least 1 hour until the environment is bright enough.

Note: Auto1 means auto switch from Day to Night. And value from 0 to 7 means switching threshold, the value is more, the corresponding environment is darker. And "D->N 3s" means when the light condition is up to the switching threshold, and 3s later the camera turns Day to Night. And "N->D 3s" is the same as "D->N 3s".

Auto2 Setting: It is the same as the Auto1 except lack of VALUE.

Note: Auto2 means external trigger switch. There is a D / N port which is once grounding and will trigger switch from Day to Night.

Note: DS-2CC577P-A D/N settings are: "Auto…", "Day" and "Night". The menu is as follow, and the operations are the same as above.

```
       AUTO  D/N

VALUE      （7）- - -|
D->N              3S
N->D              3S
IR SET           ON
RETURN
```
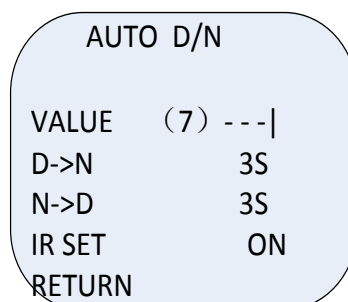
3.2.7   Shutter Settings

Move cursor to "Shutter" through pressing up / down.

When lens is ALC, press "enter" to select shutter speed: OFF, 1/120, 1/250, 1/500, 1/750, 1/1K, 1/2K, 1/4K, 1/10K, 1/100K, Auto × 2, Auto × 4, Auto × 6, Auto × 8, Auto × 12, Auto × 16, Auto × 24, Auto × 32, Auto × 48, Auto × 64, Auto × 96, Auto × 128, Auto×160, Auto × 256.

When lens is ALC and WDR is on, press "enter" to select shutter speed: Auto, Auto × 2, Auto × 4, Auto × 6, Auto × 8, Auto × 12, Auto × 16, Auto × 24, Auto × 32, Auto × 48, Auto × 64, Auto × 96, Auto × 128, Auto × 160, Auto × 256.

When lens is ELC, press "enter" to select shutter speed: Auto, Auto × 2, Auto × 4, Auto × 6, Auto × 8, Auto × 12, Auto × 16, Auto × 24, Auto × 32, Auto × 48, Auto × 64, Auto × 96, Auto × 128, Auto × 160, Auto × 256.

Note: Auto × 2, Auto × 4 and so on mean sense up function realized through adding exposure time.

3.2.8   AGC Settings

When selecting Day or Night mode, "AGC" enables including HIGH, MID, LOW and OFF items; while selecting Auto1 mode, "AGC" disables.

When "sense up" enables, "AGC" becomes "MOTION" which includes five modes: SLOWER, SLOW, STD, FAST, FASTER. The camera will automatic calculate to select sense up or AGC to promote brightness of image according to the speed of object.
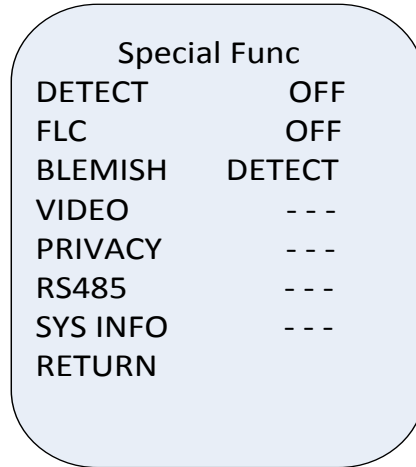
3.2.9   Synchronization

Support internal and line lock synchronization. When using DC12V power supply, it displays internal synchronization and is not adjustable. When using AC24V, user can select internal or line lock synchronization.

3.2.10   Language

Move cursor to "CN / EN" through up / down, and press left / right to select CN or EN.

3.2.11   Special Function

Move cursor to "Special Function", press "enter" and the menu will appear on the screen.

```
        Special Func
DETECT          OFF
FLC             OFF
BLEMISH     DETECT
VIDEO           - - -
PRIVACY         - - -
RS485           - - -
SYS INFO        - - -
RETURN
```

Motion Detection

Note: MODE1 has twinkled motion detection pane, and can trigger alarm output;

MODE2 can only trigger alarm output without twinkled motion detection pane.

Move cursor to "Motion Detection", and press left / right to select motion detection mode: OFF, MODE1 or MODE2.

MODE1 Setting:

Move cursor to MODE1, press "enter" and the menu will appear on the screen:

```
     ALARM  1
TYPE            1
AREA      1*2*3*4
SENSIT  （0）|----
RETURN
```
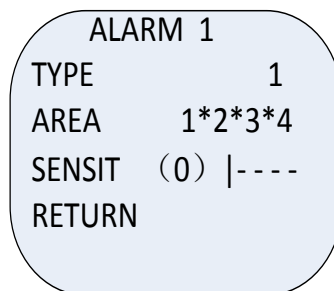
Press up/down to select "Type 1", and move cursor to "AREA", and press left / right to select from 4 areas; move cursor to "SENSIT", and press left / right to select sensitivity value from 0 to 7. After settings, move the cursor to "RETURN" and press confirm button to return to the previous menu.

Press up/down to select "Type 2", the area setting is not available now. Move cursor to "SENSIT", and press left/right to select sensitivity value from 0 to 7. After settings, move the cursor to "RETURN" and press confirm button to return to the previous menu.

Press up/down to select "Type 3", and move cursor to "AREA". Press left/right to select "Default" or "SET…". If "Default" is selected, press "Enter" to display the default areas and press "Enter" again to exit. If "SET…" is selected, press "Enter" and up/down/right/left to select areas, and then press "Enter" on the selected area to choose or hide the area. Move the cursor to "RETURN" and press confirm button to exit.
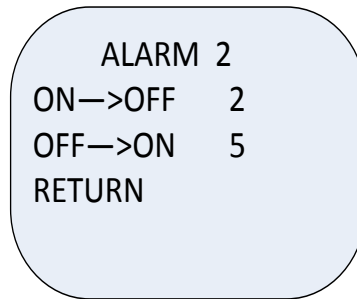
Note: Type 1: Has 4 adjustable windows;

       Type 2: Full screen;

       Type 3: Default 12×8 windows on full screen, pressing "enter" button can cancel a window.

MODE2 Setting:

Move cursor to MODE2, press "enter" and the menu will appear on the screen:

```
        ALARM  2
ON—>OFF      2
OFF—>ON      5
RETURN
```

Move cursor to ON->OFF, press left / right to set the responding time from ON to OFF :0, 2, 5, 10, 15, 20, 25, 30 (unit: s); And press left / right to set the responding time from OFF to ON; After settings, move the cursor to "Return" and press confirm button to return to the previous menu.

Note: ON->OFF means the alarm will be triggered when motion detection duration is longer than 2s;

       OFF->ON means the alarm will continue for 5s when motion detection stops.

Fig 3.2.1

Alarm Input

Fig 3.2.2

Alarm Output
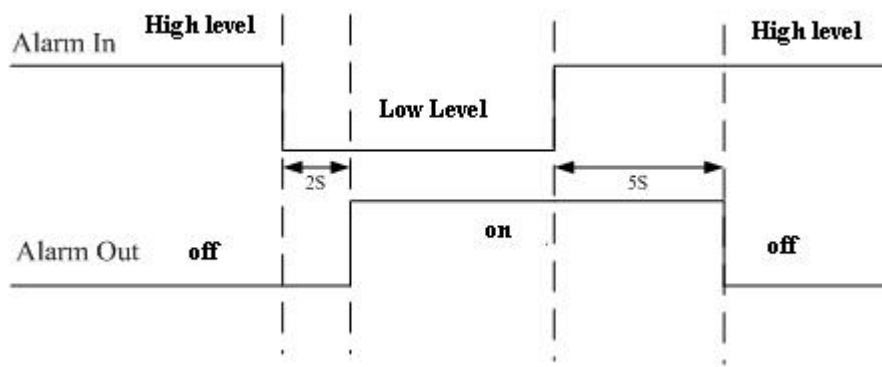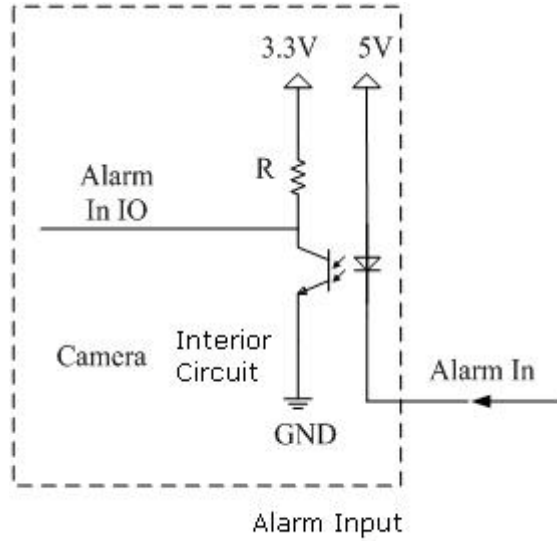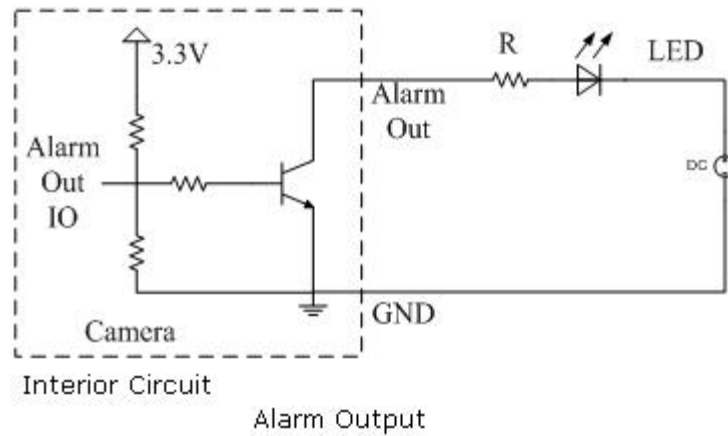
Fig 3.2.3

Note: DS-2CC577P-A motion detection settings are: On and Off; select "On" to enter motion detection interface as follow, the operations are the same as "ALARM 1" above.

```
         ALARM
TYPE              1
AREA        1*2*3*4
SENSIT（0）|----
RETURN
```

FLC

Move cursor to flicker proof function, and press "enter" to set on or off. This function is used for PAL standard

camera under 60Hz light source, and NTSC standard camera under 50Hz.

BLEMISH

After used a long time, Charge Coupled Device(CCD) will appear blemish, and this camera possess Blemish Detection Function to solve this problem. Move cursor to "BLEMISH", press "enter", and the "DETECT" will become "WAIT" while this camera enables blemish detection function. When "WAIT" becomes "DETECT", the auto modification is completed.

Note: This function will be more active in the absolutely dark environment. Make sure that close the lens's IRIS before using this function.

VIDEO Setting

```
         Video Setup
GAMMA          0.45
ZOOM            - - -
DNR            OFF
POS/NEG        POS
MIRROR         OFF
RES            HIGH
APERTURE    （3） - - - -
Y           （4） - - - -
C           （4） - - - -
RETURN
```

GAMMA

Move cursor to "GAMMA", and press left / right to set GAMMA value 0.45 or 1.

Digital Zoom

Move cursor to "ZOOM", press "enter", and the menu will appear on the screen:

```
        Zoom Setup

RATE （03） - - -| - -
LOC
RETURN
```

The zoom rate is selectable from 01 to 16.Ater zoom, selecting "LOC", press up / down / left / right to control the image moving. After setting, press "RETURN" to back previous menu.

DNR

User can set turn on or off the digital noise reduction.

POS/ NEG

Move cursor to "POS / NEG", and press left / right to select POS or NEG. Selecting POS, the video will be normal,

while selecting NEG, the video will be negative.

MIRROR

There are horizontal, vertical, middle and OFF in this function.

RESOLUTION

Move cursor to"RESOLUTION", presss left / right to select high, middle or low to adjust video's resolution.

APERTURE

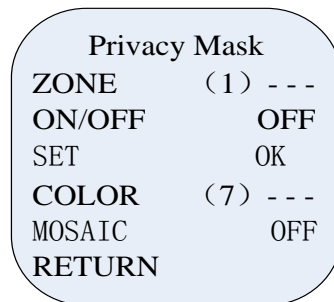Move cursor to "APERTURE", and press left / right to set the aperture value from 0 to 7.

Y

Means brightness is adjustable from 0 to 7.

C

Means saturation is adjustable from 0 to 7.

PRIVACY

Move cursor to "PRIVACY", press "enter" and the menu will appear on the screen:

```
         Privacy Mask
ZONE        （1）- - -
ON/OFF          OFF
SET             OK
COLOR       （7）- - -
MOSAIC          OFF
RETURN
```

Move cursor to "ZONE" to select the number of privacy mask. And there are 8 zones in total. Move cursor to "ON

/ OFF", and press left / right to select ON. Move cursor to "SET", and press "enter" to edit mask and size as a->c

order:

a.   Select "LOC", and move the gray (optional color) quadrate area to expected position, then press "enter".

b.   Select "AREA", and press up / down / left / right to control the size of mask area.

c.   Repeat above operation to set other mask area.

Move the cursor to "COLOR", there are 8 colors can be selected.

After settings, move the cursor to "Return" and press confirm button to return to the previous menu.

RS485

Set protocol, baud rate and address before use RS-485 to control camera. Move cursor to "RS485", press "enter",

and the menu will appear on the screen.

```
╭─────────────────────────────╮
│      RS485  Setup           │
│   ADDRESS        000        │
│   PROTOCOL   PELCO D        │
│   BAUDRATE      9600        │
│   RETURN                    │
╰─────────────────────────────╯
```
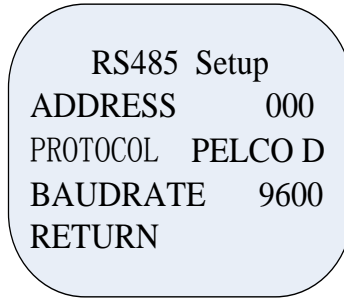
Note: This function is invalid for DS-2CC577P-A.

Address

Move cursor to "Address", press left/ right to set the number (optional from 0 to 254).

Protocol

Move cursor to "PROTOCOL", and press "enter" to select PELCO-P or PELCO-D.

Note: Controller must set corresponding protocol and baud rate with camera to control the camera.

Baud Rate

Move cursor to "BAUDRATE", and press "enter" to select baud rate from 1200, 4800, 9600, 19200 (bps).

SYSTERM INFORMATION

Press "enter" to check the hardware, software and DSP information. And this information is established for maintenance or modification in the future. After settings, move the cursor to "Return" and press confirm button to return to the previous menu.

3.2.12   Exit Setting

Move cursor to "EXIT", and press left / right to select the way of exit from SAVE, CANCEL and DEFAULT. Then press "enter"to exit the menu.

CANCEL: Press "enter" to cancel the setting parameter and exit the menu.

SAVE: Press "enter" to save the setting parameter and exit the menu.

DEFAULT: Press "enter" to restore the factory default value and exit the menu.

Appendix Specification

Table 1 DS-2CC197P-A

Parameter Model		DS-2CC197P-A*
Image Sensor		1/3 inch SONY vertical double density interline CCD
Signal System		PAL
Effective Pixels		PAL:752 (H) × 582 (V)
Min. Illumination	Color	0.1Lux @ F1.2, 0.0003Lux @ (F1.2, sensitivity × 256)
	B&W	0.01Lux @ F1.2, 0.00003Lux @ (F1.2, sensitivity × 256)
Electronic Shutter Speed		1/50s to 1/100,000s
Lens Mount		C / CS mount
Auto Iris Lens		DC / Video Drive
Day / Night		IR Cut Filter Auto Switch
Horizontal Resolution (TVL)		540 (Color), 600 (B/W)
Wide Dynamic Range		160X
Synchronization		Internal / Power synchronization
Video Output		1Vp-p Composite Output (75Ω/BNC)
S/N Ratio		More than 50dB
Menu	Camera ID	On / Off (15 letters, adjusted position)
	Auto Gain	Low / Middle / High / Off
	D / N Mode	Auto1 / Auto2 / Day / Night
	Auto White Balance	Auto trace WB1/ Auto trace WB2 / Manual / Auto
	Private Mask	On / Off, Maximum 8 Zones
	Motion Detection	Mode 1 / Mode 2 / Off
	Flicker Proof	On / Off
	RS-485	Address / Protocol / Baud Rate
	Language	English / Chinese
	Video	Gamma Amendment, Digital Zoom, Digital Noise Reduction, POS/NEG ,Mirror, Resolution, Aperture, Y, C, Blemish Detection
Power Supply		24VAC / 20VA ±10%, 12VDC / 300Ma ±10%
Working Temperature		-10℃ ～ 60℃ (14℉ ～ 140℉)
Power Consumption		4W (10W MAX With ICR Working)
Dimension (mm)		68 × 57 × 144.8 (2.7" × 2.2" × 5.7")
Weight		500g (1.1lbs)

*: "-C" support AC100V~AC240V

Table 2 DS-2CC577P-A

Parameter / Model		DS-2CC577P-A
Image Sensor		1/3 inch SONY vertical double density interline CCD
Signal System		PAL
Effective Pixels		PAL:752 (H) × 582 (V)
Min. Illumination	Color	0.1Lux @ F1.2, 0.0003Lux @ (F1.2, sensitivity × 256)
	B&W	0.01Lux @ F1.2, 0.00003Lux @ (F1.2, sensitivity × 256)
Electronic Shutter Speed		1/50s to 1/100,000s
Lens		2.8~11mm (2.5~6mm optional)
Auto IRIS		DC
Day / Night		IR Cut Filter Auto Switch
Horizontal Adjustment Range		0°~ 355°
Vertical Adjustment Range		0°~ 90°
Horizontal Resolution (TVL)		540 (Color), 600 (B/W)
Wide Dynamic Range		160X
Synchronization		Internal / Power synchronization
Video Output		1Vp-p Composite Output (75Ω/BNC); Test Monitor OUT [1Vp-p Composite Output (75Ω/BNC), Device Line]
S/N Ratio		More than 50dB
Menu	Camera ID	On / Off (15 letters, adjusted position)
	Auto Gain	Low / Middle / High / Off
	D / N Mode	Auto / Day / Night
	Auto White Balance	Auto trace AWB1/ Auto trace AWB2 / Manual / Auto
	Privacy	On / Off, Maximum 8 Zones
	Motion Detection	ON / Off
	Flicker Proof	On / Off
	Language	English / Chinese
	Video	Gamma Amendment, Digital Zoom, Digital Noise Reduction, POS/NEG ,Mirror, Resolution, Aperture, Y, C, Blemish Detection
Power Supply		24VAC / 20VA ±10%, 12VDC / 300Ma ±10%
Working Temperature		-10℃ ~ 60℃ (14℉ ~ 140℉)
Power Consumption		4W (10W MAX With ICR Working)
Dimension		φ110.99mm × 105.5mm (φ4.4" × 4.2")
Weight		400g (0.88lbs)