

GSD106

10x Optical High Speed PTZ Dome Camera

User Manual



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Chapter 1 - Product Overview

I. Performance Features

- 1. Dome Address from 1 255
- 2. Multiple protocols and auto protocol negotiation
- 3. Pan 360° continuous rotation
- 4. Tilt 90° action plus 2° angle adjustment
- 5. Pan manual operation speed ranging from 0.1° to 300°/S
- 6. Tilt manual operation speed ranging from 0.1°to 120°/S
- 7. 255 Preset positions
- 8. The maximum Preset running speed, when called, can reach 400°/S with an accuracy of ±0.1°
- 9. Power supply AC24V, 2A
- 10. Easy installation interface
- 11. IP66 environmental protection
- 12. RS-485 transmission
- 13. Transmission speed, baud rate selectable

II. Functions

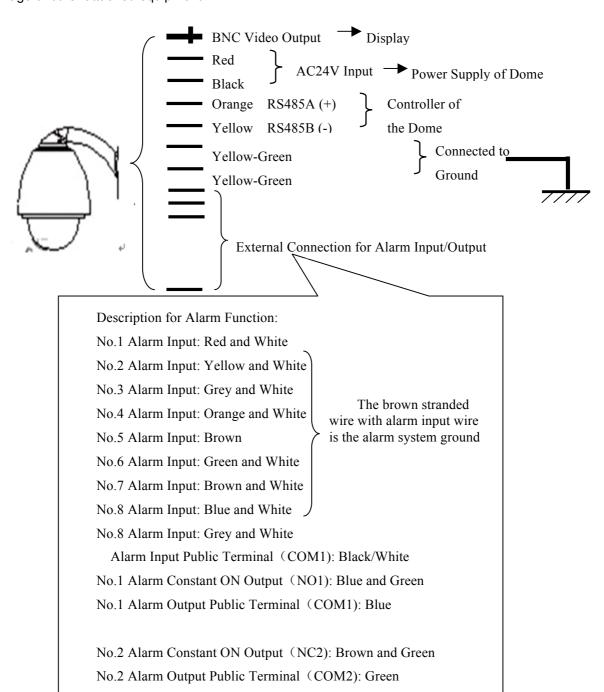
- 1. Multi-language OSD menu and display
- 2. Display for camera name, operating position and angle
- 3. Crosshair operating function
- 4. Six Tour operations with 2 minutes recording per Tour
- 5. Eight groups of programmable vector scans
- 6. Vertical auto flip with 10° automatic forward tracing
- 7. Eight programmable sectional mask zones
- 8. Eight programmable sectional display sectors
- 9. The dome returns to run mode after self-test, or no communication received
- 10. Image frame freeze
- 11. Operation resume function
- 12. Intelligent manual scan function
- 13. Intelligent power off. Data held in real time memory and resumes operation on power on
- 14. Highly efficient 3-dimensional scan
- 15. Proportional zoom
- 16. User management and operation authorisation
- 17. Time & Date Display
- 18. Assignment programming
- 19. Timer for startup and shutdown
- 20. Alarm and warning mechanism
- 21. Real-time operating temperature display
- 22. Temperature alarm and high temperature shutdown

Chapter 2 - Wiring and Setup of Dome System

I. Wiring the Dome

1. Basic System Connection

The basic system connections are shown below. When using this product for the first time, please read and carefully follow this electrical wiring schematic as incorrect wiring may lead to permanent damage of the dome or damage of other attached equipment.



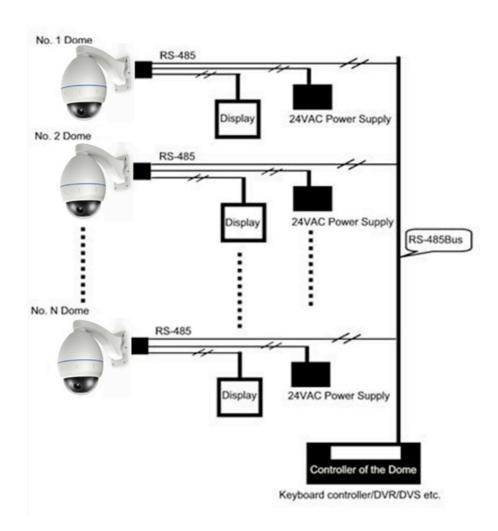
2. Multi Dome Connection

When connecting multiple domes together you can embed them in a multi-device system with auxiliary connection to devices, such as surge protectors, video matrixes, DVR's and alarm boxes.

AC24V: Power supply for the dome, which converts 220V/50Hz input to an AC24V output.

RS-485 Bus: Is for the control signal (RS-485 signal) output of a controller - connected to the communication input terminals of the control cable of each dome.

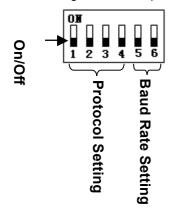
Video: Is for image signal output of each dome (can be directly output to video equipment, such as a monitor, DVR or video matrix.



II. Setting the Device Communications

Before installation and use, the settings for the communication protocol and transmission speed (baud rate) should match those used by the control system.

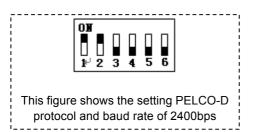
1. Setting the dome's protocol and baud rate.



On/Off Protocol	1 st digit	2 nd digit	3 rd digit	4 th digit	5 th digit	6 th digit
PELCO-D	ON	ON	OFF	OFF	**	**
PELCO-P	OFF	ON	OFF	OFF	**	**
DYNACOLOR	ON	OFF	OFF	OFF	**	**
ULTRACK	OFF	OFF	ON	OFF		
VICON	OFF	OFF	OFF	OFF	**	**

Note: The protocol and baud rate of dome should match with those

used by the controller. The dome needs to be restarted after revision.



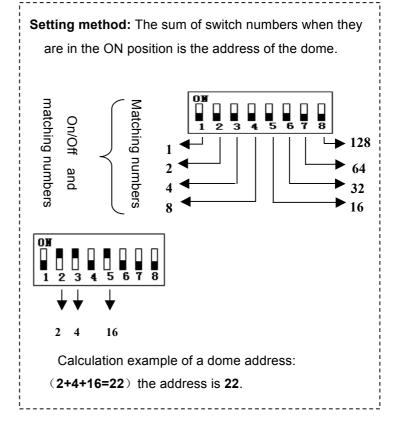
On/Off	5 th	6 th
Baud Rate	digit	digit
2400	OFF	OFF
4800	OFF	ON
9600	ON	OFF
19200	ON	ON

2. Address setting of dome device



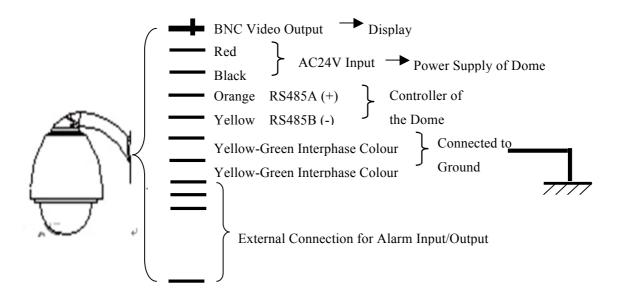
Address setting address for dome (this figure shows the dome address of dome as 1)

Dome device range: 1~255



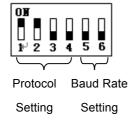
Chapter 3 - Quick Operating Guide

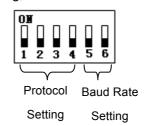
I. Wiring



II. Setting Protocol and Baud Rate

Turn the power Off when setting, and restart the dome after revision



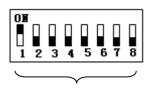


The figure shows: Protocol: **PELCO-D**The figure shows: Auto detection protocol.

Baud rate: 2400 bps Baud rate: 2400bps

(Refer to detailed parameters in the next chapter)

III. Setting Dome Address



The figure shows: A Dome Address of 1

Set address for Dome

(Refer to detailed parameters in the next chapter)

This dip switch is located on the PCB in the dome

IV. Install Camera

Note: 1. Do not connect the camera and dome with FFC in an incorrect manner.

2. The installation fixing holes of for different camera may differ.

V. Connect the Dome Power

When power is applied to the Dome the product enters a self-test routine which outputs the video image to an attached monitor.

Note: When the dome is self-testing it is normal to hear sounds made by the Dome's pan and tilt motors.

VI. Controller

Set the communication protocol, baud rate and address of the keyboard controller. These must be identical to those used for the Dome. Please refer to the Keyboard Controller instruction manual.

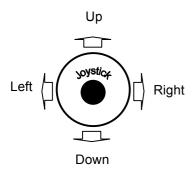
Note: If the protocol for the Dome is set to auto detection, the protocol for the Keyboard Controller can be set arbitrarily, but the baud rate must be set identical with that of the Dome.

VII. Start Testing

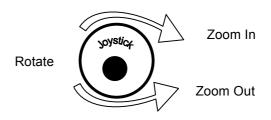
When the above are complete, the Dome testing can be started.

1. Direction Control Test

2. Zoom Control Test



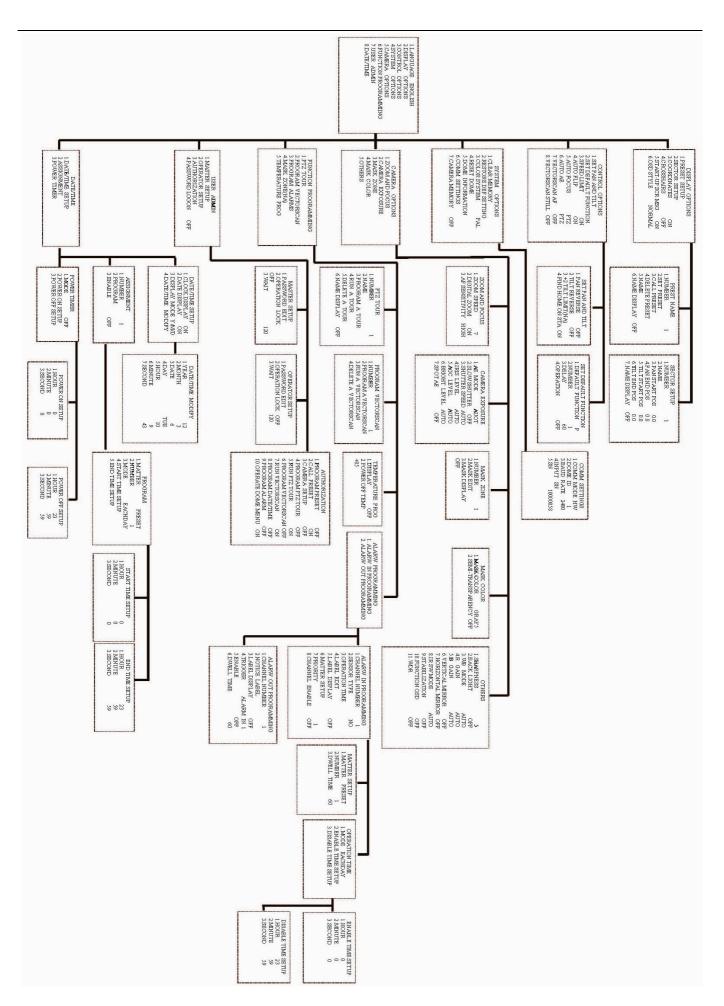
The up, down, left and right directions of the Dome can be controlled by using the Keyboard Controller, as indicated above.



The Camera Zoom can be controlled using the Joystick zoom function, or by the TELE (Zoom in) and WIDE (Zoom out) keyboard buttons.

VIII. Complete the Test

- 1. If the test performance is normal it indicates the system is operating normally. Please do not make any changes to the wiring and or settings. To do so may cause faults and/or unnecessary damage and loss.
- 2. If the test performance is abnormal, or only one test is performing normally, please check the wiring (items 1 and IV) and the settings (item II, III and VI).



Chapter 4 - Operation Menu

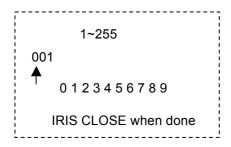
I. Operating Instructions

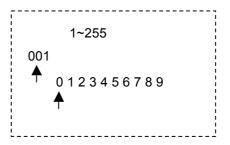
<1>. Menu Operation Instructions

- 1. Input a Tilt movement command for cursor movement and option selection, namely the controller moves the Joystick up and down; hereinafter called Joystick Up/Down
- 2. Input a Pan movement command for entering into an option or for changing a setting value, namely the controller moves the Joystick left and right; hereinafter called Joystick Left/Right
- 3. Input an Iris Open command for confirming setup or for changing value(s), namely the controller initiates an IRIS OPEN command; hereinafter called Press IRIS OPEN
- **4.** Input an Iris Close command to cancel a setting or to Exit, namely the controller initiates an IRIS CLOSE command; hereinafter called Press IRIS CLOSE

<2>. To Input a Numeric Value

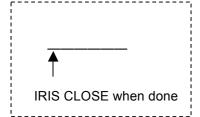
- 1. Move the Joystick Left/Right for the cursor to select the numeric value to be entered.
- 2. Press IRIS OPEN to confirm, and the number selected is displayed; as indicated in the pictures below.
- 3. Move the Joystick Left/Right to select the next number to be entered.
- 4. Press IRIS OPEN to confirm, the selected number is displayed in the corresponding data bit.
- 5. Press IRIS CLOSE to confirm and exit when complete.





<3>. To Input a Character

- 1. Move the Joystick Left/Right for the cursor to select the character to be entered.
- 2. Press IRIS OPEN to confirm, and the character selected is displayed; as indicted in the pictures below.
- 3. Move the Joystick Left/Right to select the next character to be entered.
- 4. Press IRIS OPEN to confirm, the character is displayed in the corresponding data bit.
- **5.** Input other characters, as required by repeating the above procedure.
- **6.** Press IRIS CLOSE to save and exit when complete.

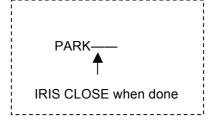


0 1 2 3 4 5 6 7 8 9 A B C D E F G H

I J K LM NOPQ R S T UV W X Y Z

RIS OPEN when done

IRIS CLOSE to exit



<4>. Logon

1. Invoke Preset 92 preset for the Administrator logon.

Invoke Preset 93 preset for the Operator logon.

Factory Set Password: Administrator: 000000 Operator: 111111

Note: The Administrator password should be changed and be kept secure.

2. Move the cursor after entering the *Please enter the Password* interface. Select the bit to be entered. Then press IRIS OPEN to enter the alphanumeric and press IRIS OPEN to confirm. Input the correct 6 digit passwords as shown above.

After the input is complete, press IRIS CLOSE. *Error* will be prompted on screen if the input is wrong. The screen goes directly into the window to be operated if the input is correct.

CAMERA OPTIONS
1.ZOOM AND FOCUS
2.CAMERA EXPOSURE
3.MASK ZONE
4.MASK COLOR
5.OTHERS

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 PLS enter the password

IRIS CLOSE when done

II. Menu Tree List

<1> Main Menu. Press 90+PRE to enter the Main Menu.

1.LANGUAGE ENGLISH

2.DISPLAY OPTIONS

3.CONTROL OPTIONS

4.SYSTEM OPTIONS

5.CAMERA OPTIONS

6.FUNCTION PROGRAMMIING

7.USER ADMIN

8.DATE/TIME

<2> All sub-menus can be seen in this tree list (English/Espanol/Polski) 1.Language Options <<Language Options Jovstick Left/Right to select 2. Display Options << Display Options Press IRIS OPEN or Jovstick Left/Right to enter 2.1.Preset Setup << Preset Setup Options 1 Number 1 << Preset Number Selection Press IRIS OPEN or Jovstick Left/Right to enter 1~255 <<The default number after entering is 001 (hundred bit/ten 001 bit/single bit). Joystick Left/Right to select the Preset position and press IRIS OPEN to confirm. Joystick Left/Right again to select numbers (0~~9). Press IRIS OPEN to confirm the selection. 0123456789 Press IRIS CLOSE to exit to the upper level menu when IRIS CLOSE when done programming is complete. 2 Set Preset Press IRIS OPEN or Jovstick Left/Right to enter << Set Preset Move the cursor to select the Preset position. Press IRIS CLOSE **STORED** to finalise your selection. The screen displays STORED and returns to the previous menu. IRIS CLOSE when done -----(3) Call Preset <<Call Preset Press IRIS OPEN or Joystick Left/Right to enter

Select the number to be called. Joystick Up/Down to select the Call Preset Menu. Joystick Left/Right or press IRIS OPEN and the camera moves to corresponding Preset number.

Delete Preset	
	Press IRIS OPEN or Joystick Left/Right to enter ed from the number options. Move the cursor to Delete Preset. N to enter into the Delete Preset menu. Press IRIS OPEN to confirm I the selection and exit.
Are you sure to do this? IRIS OPEN to confirm IRIS CLOSE to cancel	<reminder: are="" close="" confirm="" delete="" exit="" iris="" level="" menu.<="" open="" preset?="" press="" sure="" td="" the="" to="" upper="" want="" you=""></reminder:>
⑤ Name	
< <edit name<="" preset="" td="" the=""><td>Press IRIS OPEN or Joystick Left/Right to enter</td></edit>	Press IRIS OPEN or Joystick Left/Right to enter
 ↑ IRIS CLOSE when done	Press IRIS OPEN to enter
0 1 2 3 4 5 6 7 8 9 A B C D E F G H IJ K L M N O P Q R S TU V W X Y Z _ IRIS OPEN when done IRIS CLOSE to exit	< <joystick and="" confirm.<="" iris="" left="" open="" p="" preset="" press="" programming="" right="" select="" the="" to="" when=""> Joystick Left/Right to select (0~~9 or A~~Z). Press IRIS OPEN to confirm selection. Press IRIS CLOSE to exit to the upper level menu when programming is complete.</joystick>
Name Display ON	
< <name display="" off<="" on="" td=""><td>Joystick Left/Right to select</td></name>	Joystick Left/Right to select
	IRIS CLOSE to exit

Press IRIS OPEN or Joystick Left/Right to enter

2.2.Sector Setup

<<Sector Setup

① Number 1	
< <number (1="" 8)<="" selection="" td="" ~=""><td>Joystick Left/Right to select</td></number>	Joystick Left/Right to select
② Name	
< <name editing<="" td=""><td>Press IRIS OPEN or Joystick Left/Right to enter</td></name>	Press IRIS OPEN or Joystick Left/Right to enter
	Press IRIS OPEN to enter
IRIS CLOSE when done	
[<< Joystick Left/Right when programming to select the
0123456789ABCDE	Preset and press IRIS OPEN to confirm.
FGHIJKLMN	Joystick Left/Right to select (0~9 or A~Z). Press IRIS OPEN
1	to confirm selection.
OPQRSTUVWXYZ _	Press IRIS CLOSE to exit to upper level menu when
IRIS OPEN when done	programming is complete.
③ Pan Start Pos 0.0 IRIS CLOSE when done	<< Setup Pan start point. Press IRIS OPEN or Joystick Left/Right to enter. Use joystick to capture Pan start point. Press IRIS CLOSE to confirm and exit to upper level menu.
4 Pan End Pos 0.0	<< Setup Pan end point. Press IRIS OPEN or Joystick
IRIS CLOSE when done	Left/Right to enter. Use joystick to capture Pan end point.
	Press IRIS CLOSE to confirm and exit to upper level menu.
⑤ Tilt Start Pos 0.0	<< Setup Tilt start point. Press IRIS OPEN or Joystick Left/Right to
IRIS CLOSE when done	enter. Use joystick to capture Tilt start point. Press IRIS CLOSE to confirm and exit to upper level menu.
6 Tilt End Pos 0.0	<< Setup Tilt end point. Press IRIS OPEN or Joystick Left/Right to
IRIS CLOSE when done	enter. Use joystick to capture Tilt end point. Press IRIS CLOSE to confirm and exit to upper level menu.
`i	

Name Display ON	< <sector display="" name="" off<="" on="" td=""></sector>
	Joystick Left/Right to select
	IRIS CLOSE to exit
2.3. Co-ordinates ON	
< <co-ordinates display="" off<="" on="" td=""><td>Joystick Left/R ight to select</td></co-ordinates>	Joystick Left/R ight to select
2.4. Crosshairs OFF	
< <crosshairs off<="" on="" td=""><td>Joystick Left/Right to select</td></crosshairs>	Joystick Left/Right to select
2.5.Start-Up Scr Msg ON	
< <start-up display="" message="" off<="" on="" screen="" td=""><td>Joystick Left/Right to select</td></start-up>	Joystick Left/Right to select
2.6. OSD Style NORMAL	
< <the is="" menu="" nomal<="" of="" osd="" style="" td="" the=""><td>Joystick Left/Right to select</td></the>	Joystick Left/Right to select
2.7. Dome Name Setup	
< <setup dome<="" name="" of="" td="" the=""><td>Joystick Left/Right to select</td></setup>	Joystick Left/Right to select
1.DOME NAME	
2.NAME DISPLAY OFF	
 ↑	Press IRIS OPEN to enter
IRIS CLOSE when done	
	Press IRIS CLOSE to exit

3.Control Options

<< Control Options

Press IRIS OPEN or Joystick Left/Right to enter

3.1.Set Pan and Tilt

< <dome< th=""><th>Pan/Tilt</th><th>Setup</th></dome<>	Pan/Tilt	Setup
טוווטשיי	1 411/1111	OCIUD

Press IRIS OPEN or Joystick Left/Right to enter

Θ	Pan Reverse	OFF	<< Pan Reverse	ON/OFF	Joystick Left/Right to select
\Rightarrow	Tilt Reverse	OFF	<< Tilt Reverse	ON/OFF	Joystick Left/Right to select
*	+2 Tilt Limit	OFF	<<+2 Tilt Limit	ON/OFF	Joystick Left/Right to select
4	Find Home On Sta.	ON	<< Find Home on Start	ON/OFF	Joystick Left/Right to select
					1010 01 005 1 "

IRIS CLOSE to exit

3.2.Set Default Function

<< Set Home Position

Press IRIS OPEN or Joystick Left/Right to enter

- □ Default Function P/V/T
- <<Select default function (Preset/Tour/PTZ)

Press IRIS OPEN or Joystick Left/Right to enter

- << Function number selection

1~255 001 1 0123456789 IRIS CLOSE when done Press IRIS OPEN or Joystick Left/Right to enter

<< Joystick Left/Right when programming to select the Preset.

Press IRIS OPEN to confirm. Joystick Left/Right to select (0~~9).

Press IRIS OPEN to confirm selection. Press IRIS CLOSE to exit to upper level menu when programming is complete.

- ⊛ Delay 60
- <<Time delay setting (in seconds)

 Press IRIS OPEN or Joystick Left/Right to enter

<< Joystick Left/Right when programming to select the Preset. Press IRIS OPEN to confirm. Joystick Left/Right to select (0~9). Press IRIS OPEN to confirm. Press IRIS CLOSE to exit to upper level menu when programming is complete.

④ Operation OFF

<< Default function ON/OFF Joystick Left/Right to select

IRIS CLOSE to exit

3.3. Speed Limit ON

<<Operation speed limit ON/OFF Joystick Left/Right to select

3.4. Auto Flip ON

<<Auto flip ON/OFF Joystick Left/Right to select

3.5. Auto Focus PTZ

<<Auto focus options PTZ/OFF/Z

Joystick Left/Right to select

3.6. Auto AE PTZ

<<Auto AE option PTZ/OFF/Z

Joystick Left/Right to select

3.7. VectorScan AF OFF

<<VectorScan auto focus control ON/OFF Joystick Left/Right to select

3.8. VectorScan Still OFF

<< VectorScan Still ON/OFF Joystick Left/Right to select

IRIS CLOSE to exit

4. System Options

<< System Options

Press IRIS OPEN or Joystick Left/Right to enter

Function Description: This option is used for data information management of the dome. The operating authority on this option is limited to the Administrator (with the correct password).

4.1. Clear Memory

<<Clear data in the memory

Press IRIS OPEN or Joystick Left/Right to enter

Are you sure to do this?
IRIS OPEN to confirm
IRIS CLOSE to cancel

<<Reminder: Are you sure you want to do this?

Press IRIS OPEN to confirm.

Press IRIS CLOSE to exit and return to upper level menu.

4.2. Restore Default Settings

<< Restore default settings

Press IRIS OPEN or Joystick Left/Right to enter

Are you sure to do this?
IRIS OPEN to confirm
IRIS CLOSE to cancel

<< Reminder: Are you sure you want to do this?

Press IRIS OPEN to confirm.

Press IRIS CLOSE to exit and return to upper level menu.

4.3. Colour System PAL/NTSC

<< PAL/NTSC switch

Joystick Left/Right to select

4.4. Restart the Dome

<< Restart the Dome

Are you sure to do this?
IRIS OPEN to confirm
IRIS CLOSE to cancel

-----,

<< Reminder: Are you sure you want to do this?

Press IRIS OPEN to confirm.

Press IRIS CLOSE to exit and return to upper level menu.

4.5. Dome Information

<< Dome Information Press IRIS OPEN or Joystick Left/Right to enter

Camera: FCB-EX1020P << Type of Camera module

Protocol: Pelco-D < Control Protocol

Baud Rate: 2400 <<Baud Rate

Dome No.:1 <<Dome Number

COMM MODE: HW << Communication Mode

SN: 10000084 <Serial Number

IRIS CLOSE to exit < Press IRIS CLOSE to exit and return to upper level

menu.

Press IRIS CLOSE to exit

4.6. Communications Settings

<< Comm Setings Joystick Left/Right to select

1 COMM MODE HW/SW

② Dome ID 1

<< ID Adress of the Dome

Joystick Left/Right to select. Can only be set by the R/W mode

of the comm setting

(3) Baud Rate

<< Baud Rate of the Dome

Joystick Left/Right to select. Can only be set by the R/W mode

of the comm setting

(4) INPUT SN Joystick Left/Right to select

⑤ SN

<<Serial Number N/A

4.7 Camera Memory OFF/ON

<< Automatic defaults to the last model of the Camera module

Joystick Left/Right to select

5. Camera Options

<< Camera Options</p>
Press IRIS OPEN or Joystick Left/Right to enter

5.1. Zoom and Focus

<< Zoom and Focus Press IRIS OPEN or Joystick Left/Right to enter

<< Zoom Speed 1~8 Joystick Left/Right to select

⊜ Digital Zoom OFF

<<Digital Zoom ON/OFF Joystick Left/Right to select

<< AF Sensitivity High/Low Joystick Left/Right to select

Press IRIS CLOSE to exit

5.2. Camera Exposure

<< Camera Exposure</p>
Press IRIS OPEN or Joystick Left/Right to enter

1 AE Mode AUTO

<<AE Mode AUTO/Manual/Shutter/Iris/Bright Joystick Left/Right to select

(2) Slow Shutter ON

<< Slow Shutter ON/OFF Joystick Left/Right to select

③ Shutter Speed AUTO

<< Shutter Speed AUTO Joystick Left/Right to select

Is adjustable under AE mode Manual or Shutter.

4 Iris Level AUTO

<< Iris Level AUTO Joystick Left/Right to select

Is adjustable under AE mode Manual or Iris.

(5) AGC Level AUTO

<< AGC Level AUTO Joystick Left/Right to select

Is adjustable under AE mode Manual.

6 Brightness Level AUTO

<< Brightness Level AUTO Joystick Left/Right to select

Is adjustable under AE mode Bright.

(7) Spot AE OFF

Spot AE
ON/OFF
Joystick Left/Right to select

Press IRIS CLOSE to exit

5.3. Mask Zone

<< Mask Zone</p>
Press IRIS OPEN or Joystick Left/Right to enter

1 Number 1 << Number 1~24 Joystick Left/Right to select

Mask Edit
 Press IRIS OPEN or Joystick Left/Right to enter

IRIS OPEN to begin <<Pre><<Pre><<Pre>

WIDE/TELE to set the mask zone.

IRIS CLOSE when done

<- Press IRIS CLOSE to save

L____i

ON

<< Mask Display ON/OFF Joystick Left/Right to select

Press IRIS CLOSE to exit

5.4. Mask Colour

(3) Mask Display

Mask Colour
Press IRIS OPEN or Joystick Left/Right to enter

Mask Colour White

<< Mask Colour (Grey1~6, White, Red, Green, Blue, Cyan, Yellow, Magenta, Black)

Joystick Left/Right to select

(2) Semi-Transparency ON

<< Semi-Transparency ON/OFF Joystick Left/Right to select</p>

Press IRIS CLOSE to exit

5.5 Others

<< Others Press IRIS OPEN or Joystick left/right to enter

① Sharpness 5
<< Sharpness (0~15)

Joystick Left/Right to select

(2) Backlight OFF

<< Backlight ON/OFF Joystick Left/Right to select

(3) WB Mode AUTO

 (4) R Gain **AUTO** <<R Gain Is adjustable under WB mode manual Joystick Left/Right to select (5) B Gain **AUTO** <<B Gain Is adjustable under WB mode manual Joystick Left/Right to select (6) Vertical Mirror OFF << Vertical Mirror ON/OFF Joystick Left/Right to select (7) Horizontal Mirror OFF << Horizontal Mirror Joystick Left/Right to select ON/OFF (8) IR SW Mode **AUTO** << IR SW Mode AUTO/Colour/B/W Joystick Left/Right to select (9) Stabilisation OFF << Stabilisation ON/OFF Joystick Left/Right to select (10) Function OSD ON << Function OSD ON/OFF Joystick Left/Right to select Press IRIS CLOSE to exit

6.Camera Options

<< Camera Options Press IRIS OPEN or Joystick Left/Right to enter

6.1 CAM TITLE

<< The Title of the Camera Press IRIS OPEN or Joystick Left/Right to enter

Move the joystick to select the characters for the Camera name. Press IRIS OPEN to confirm each selection. Repeat the procees until all charactres have been entered.

Press IRIS CLOSE to exit

6.2 WHITE BAL

<< White Balance

Press IRIS OPEN or Joystick Left/Right to enter

(1) ATW <-Auto Trace White Balance adjusts the colour automatically, depending on the source of light.

WHITE BAL MODE
ATW MODE
OUTDOOR
END

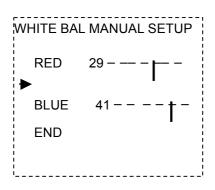
ATW-OUTDOOR: Use this mode for a broad range of colour temperatures.

ATW-INDOOR: Use this mode for a limited range of colour temperatures.

Choose "END", or Press IRIS CLOSE to Exit

2 MANUAL << Manual White Balance

Joystick Left/Right to select



Choose "END", or Press IRIS CLOSE to Exit

③ AWC→SET << Auto White Correct

Joystick Left/Right to select

Set up the lighting for the objects under surveillance with the colour temperature of a white object; such as a piece of paper. If the lighting source changes AWC will need to be carried out again.

6.3 BACKLIGHT Off/Low/Middle/High

<< Backlight Compensation

Joystick Left/Right to select

1) HIGH: Gain increased from 6dB up to 34dB

(2)MIDDLE: Gain increased from 6dB up to 30dB

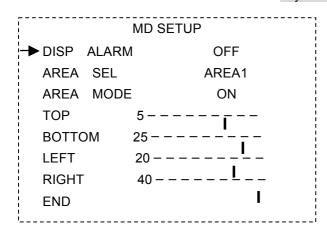
(3)LOW: Gain increased from 6dB up to 18dB

4)OFF: BLC function is disabled

6.4. MOTION DET OFF/ON

<< Mask Colour

Joystick Left/Right to select. Press IRIS OPEN to enter



① DISP ALARM	ON/OFF	Joystick Left/Right to select
② AREA SEL	AREA1/ AREA2/ AREA3/ AREA4	Joystick Left/Right to select
③ AREA MODE	ON/OFF	Joystick Left/Right to select
④ TOP	0~255	Joystick Left/Right to select
⑤ TOP	0~255	Joystick Left/Right to select
⑥ TOP	0~255	Joystick Left/Right to select
7 ТОР	0~255	Joystick Left/Right to select
		Select "END", Press IRIS OPEN to Ex

6.5. FOCUS

Press IRIS OPEN or Joystick Left/Right to enter

① MODE AUTO/ONE-PUSH/MANUAL Joystick Left/Right to select

AUTO The Camera focus is adjusted automatically while continuously monitoring the scene.

ONE-PUSH Only if the camera is not moving, it turns into manual mode. Same controls as manual.

MANUAL The user can manually adjust the focus.

(2) ZOOM TRK The Focus function is executed when the Zoom function is ON. The Zoom-In follows the zoom speed.

3 Zoom Speed FAST/SLOW Joystick Left/right to select D-ZOOM OFF/2X/10X Joystick Left/Right to select (5) DISP ZOOM MAG OFF/ON Display the Zoom In/Out magnification level.

6 ZOOM POS INIT OFF/ON Initiate the Zoom position Joystick Left/Right to select

(7) LENS INIT Initiate the Lens to the default setting Press IRIS OPEN to confirm

6.6. EXPOSURE

Press IRIS OPEN or Joystick Left/Right to enter

1 BRIGHTNESS 0~100 Joystick Left/Right to select

(2) IRIS Auto/Manual Joystick Left/Right to select

(3) SHUTTER Manual/A.FLK Joystick Left/Right to select

Manual: Shutter speed can be adjusted manually from 1/50 to 1/120000 of a second A.FLK: Use this mode when the screen flickers because of inconsistent lighting frequencies.

(4) AGC NORMAL/HIGH/OFF Joystick Left/Right to select

(5) SSNR OFF/LOW/MIDDLE/HIGH Joystick Left/Right to select

6 SENS-UP OFF/AUTO Joystick Left/Right to select

Manually adjustable, from x2-x128, when in AUTO mode

6.7. SPECIAL SETTING

Press IRIS OPEN or Joystick Left/Right to enter

SPECIAL SETUP

USER PRESET ON

PRIVACY ON

DAY/NIGHT

AUTO1

SYNC INT

COMM ADJ

IMAGE ADJ

Joystick Left/Right to select

6.8. RESET

Press IRIS OPEN to initiate the Camera reset.

6.9. EXIT

Press IRIS CLOSE to EXIT the Camera Menu

7.Function Programming	
< <special function="" programming<="" th=""><th>Press IRIS OPEN or Joystick Left/Right to enter</th></special>	Press IRIS OPEN or Joystick Left/Right to enter
7.1.PTZ Tour (Pattern)	
< <pan programming<="" td="" tilt="" tour="" zoom=""><td>Press IRIS OPEN or Joystick Left/Right to enter</td></pan>	Press IRIS OPEN or Joystick Left/Right to enter
① Number (1 ~3) < <ptz number<="" td="" tour=""><td>Joystick Left/Right to select</td></ptz>	Joystick Left/Right to select
② Name	
< <edit name<="" ptz="" td=""><td>Press IRIS OPEN or Joystick Left/Right to enter</td></edit>	Press IRIS OPEN or Joystick Left/Right to enter
 ↑ IRIS CLOSE when done	Press IRIS OPEN to enter
0123456789ABCDEFGHIJ KLMN OPQRSTUVWXYZ IRIS OPEN when done IRIS CLOSE to exit 3 Program a Tour	< <move (0~~9="" and="" a~~z).="" close="" complete.<="" confirm.="" exit="" iris="" is="" joystick="" left="" level="" menu="" open="" or="" preset="" press="" programming="" programming,="" right="" right,="" select="" td="" to="" upper="" when=""></move>
< <enter programming<="" ptz="" td="" tour=""><td>Press IRIS OPEN or Joystick Left/Right to enter</td></enter>	Press IRIS OPEN or Joystick Left/Right to enter
IRIS OPEN to begin	<< Press IRIS OPEN to confirm and start programming.
IRIS CLOSE when done	< <pre><<pre> IRIS CLOSE to exit programming and return to uppe level menu.</pre></pre>
④ Run a Tour	
< <run (pattern)<="" pan="" td="" tilt="" tour="" zoom=""><td>Press IRIS OPEN or Joystick Left/Right to enter</td></run>	Press IRIS OPEN or Joystick Left/Right to enter

Joystick Left/Right to select an already programmed tour; from the options. Joystick Up/Down to select the Run a Tour menu. Press IRIS OPEN or Joystick Left/Right to run the selected tour. Move the Joystick in any direction to cancel the tour and return to the previous menu.

(5) Delete a Tour

<< Delete PTZ Tour

Press IRIS OPEN or Joystick Left/Right to enter

Joystick Left/Right to select a tour from the options. Joystick Up/Down to select the Delete a Tour menu.

Press IRIS OPEN or Joystick Left/Right to enter

Are you sure you want to do this?

IRIS OPEN to confirm

IRIS CLOSE to cancel

<< Reminder: Are you sure you want to do this?

Press IRIS OPEN to confirm.

Press IRIS CLOSE to EXIT and return to upper level menu.

6Name Display ON/OFF
<<PTZ Tour name display ON/OFF</pre>

Joystick Left/Right to select

Press IRIS CLOSE to EXIT

7.2. Program Vector Scan

<< Program Vector Scan

Press IRIS OPEN or Joystick Left/Right to enter

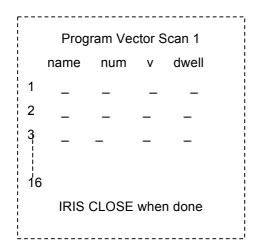
1 Number

<<Vector Scan Number (1 ~ 6)

Joystick Left/Right to select

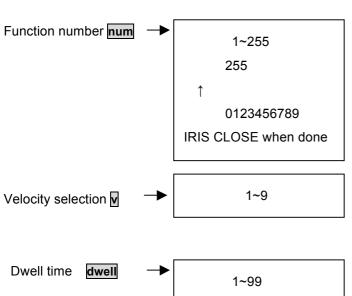
② Program a Vector Scan <<Vector Scan programming</p>

Press IRIS OPEN or Joystick Left/Right to enter



<<Move the Joystick arbitrarily, to move the cursor, and stop the cursor at the point of programming. Press IRIS OPEN to enter the selection.



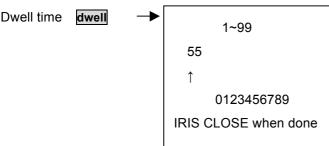


<<Joystick Left/Right when programming to select a Preset, and then press IRIS OPEN to confirm. Joystick Left/Right to select (0~9).

Press IRIS OPEN to confirm. Press IRIS

CLOSE to EXIT, or return to upper level menu when programming is complete.

<< Press IRIS OPEN continuously to select



<<Joystick Left/Right when programming to select a Preset and press IRIS OPEN to confirm. Joystick Left/Right to select (0~9). Press IRIS OPEN to confirm. Press IRIS CLOSE to exit or return to upper level menu when programming is complete.

(3) Run a Vector Scan

<<Run Vector Scan

Press IRIS OPEN or Joystick Left/Right to enter

Joystick Left/Right to select an existing Vector Scan from the menu. Joystick Up/Down to select the Run a Vector Scan. Press IRIS OPEN or Joystick Left/Right to run selected Vector Scan track. Move the Joystick in any direction to cancel it and display the Program Vector Scan menu again.

4 Delete a Vector Scan

<< Delete Vector Scan

Press IRIS OPEN or Joystick Left/Right to enter

Joystick Left/Right to select an existing Vector Scan track from the menu. Joystick Up/Down to select the Delete a Vector Scan menu. Press IRIS OPEN or Joystick Left/Right to make your selection. Press IRIS OPEN to confirm or IRIS CLOSE to cancel your selection and return to previous menu.

Are you sure you want to do this?
IRIS OPEN to confirm
IRIS CLOSE to cancel

<< Reminder: Are you sure you want to do this?

Press IRIS OPEN to confirm.

Press IRIS CLOSE to exit and return to upper level menu.

Press IRIS CLOSE to EXIT

7.3. Alarm Program

<< Alarm Programming Press IRIS OPEN or Joystick Left/Right to enter

Functional Description: The Dome has a total of 8 alarm input channels and 2 alarm output channels, with a flexible programming structure.

(1) Alarm In Programming Press IRIS OPEN or Joystick Left/Right to enter

A) Channel Number 1

<<Channel number $(1\sim8)$ Joystick Left/Right to select

B) Sensor Type NO

<< Sensor Type NO/NC Joystick Left/Right to select</p>

C) Operation Time

<< Operation Time</p>
Press IRIS OPEN or Joystick Left/Right to enter

a) Mode Eachday

< Mode Joystick Left/Right to select

Eachday / Workday / Weekend / Mon / Tue / Wed / Thurs / Fri/Sat / Sun

b) Enable Time Setup

<< Enable Time Setup</p>
Press IRIS OPEN or Joystick Left/Right to enter

Default Time: 00:00:00 Refer to Numeric Input Steps Instructions for details.

Enable Time Setup

▶1 Hour 0
2 Minute 0
3 Second 0
IRIS CLOSE to exit

Disable Time Setup

1 Hour 23
2 Minute 59
3 Second 59
IRIS CLOSE to exit

c) Disable Time Setup

<< Disable Time Setup</p>
Press IRIS OPEN or Joystick Left/Right to enter

Default time: 23:59:59 Refer to Numeric Input Steps Instructions for details.

Press IRIS CLOSE to EXIT

D) Label Edit ————

<< Edit Label Press IRIS OPEN or Joystick Left/Right to enter

Refer to Character Input Steps Instructions for details

E) Label Display OFF

<< Label Display ON/OFF Joystick Left/Right to select</p>

F) Properties Setup

Press IRIS OPEN or Joystick Left/Right to enter

a) Property Preset

<< Property Joystick Left/Right to select

Preset / Vector / Tour / PanScan / DayNight / PicStill

b) Number 1

<< Number (Default:1) Joystick Left/Right to select

Refer to Numeric Input Steps Instructions for details.

Note: Effective only for Preset / Vector Scan / PTZ Tour

c) Dwell Time 60

<<Dwell time Default: 60 Press IRIS OPEN or Joystick Left/Right to enter</p>

Refer to Numeric Input Steps Instructions for details.

Press IRIS CLOSE to EXIT

G) Priority 1

<< Priority (1 \sim 8) Joystick Left/Right to select

H) Channel Enable OFF

<< Channel Enable ON/OFF Joystick Left/Right to select

※ If set to ON, the dome will take the actions corresponding to the user settings of this channel when an
alarm situation occurs.

If set to OFF, this channel will make no response no matter if there's an alarm situation or not.

Note:

X Alarm has the top priority from all the non-functional setting status'.

(Including manual and automatically executed cruising or scanning functions)

※ User who have the operation authority can disable the alarm.

Situation 1. If an alarm occurs when user is manually scanning, the manual scan is stopped for the alarm execution. It enters the next alarmround only when the alarm is disabled.

Situation 2. It disables the alarm during non-operation time.

Situation 3. When alarm inputs of the same level of priority occur, the lowest numbered channel is executed first.

Press IRIS CLOSE to EXIT

2 Alarm Out Programming Press IRIS OPEN or Joystick Left/Right to enter

A) Channel Number 1

<< Channel Number (1~2) Joystick Left/Right to select

B) Edit Label ———

<< Label Edit

Press IRIS OPEN or Joystick Left/Right to enter

Refer to Character Input Steps Instructions for details

C) Label Display OFF

<< Label Display ON/OFF Joystick Left/Right to select

D) Trigger Alarm in 1

<< Trigger Alarm in 1-8 Joystick Left/Right to select

E) Enable OFF

<< Enable ON/OFF Joystick Left/Right to select

F) Dwell Time 60

Very Series of the series o

Refer to Numeric Input Steps Instructions for details.

Press IRIS CLOSE to EXIT

7.4. Mask Zone

<<Mask Setting Reserved

7.5. Temperature Programming Press IRIS OPEN or Joystick Left/Right to enter

① << Display ON/OFF Joystick Left/Right to select

2 << Power Off Temperature Press IRIS OPEN or Joystick Left/Right to enter</p>

+85 **▲** IRIS CLOSE when done

Press IRIS OPEN continuously to choose "+"or "-"

0∼99

85

0123456789

Refer to Numeric Input Steps Instructions for details

Press IRIS CLOSE to exit

7.6. << Mask Setting

Reserved

8. User Management

Press IRIS OPEN or Joystick Left/Right to enter

Note: This authority only belongs to the Administrator.

8.1 Master Setup

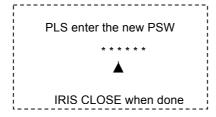
<<Master Setup

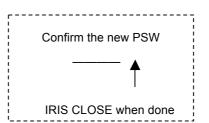
Press IRIS OPEN or Joystick Left/Right to enter

1 <<Edit Password

Press IRIS OPEN or Joystick Left/Right to enter

Refer to *Numeric Input Steps Instructions* to set a new password. If the setup is correct, the screen displays the message *Done!*. Otherwise, the message *Error!* is displayed.





- ② << Operation Lock ON/OFF Joystick Left/Right to select</p>
- 3 << Wait</p>
 Press IRIS OPEN or Joystick Left/Right to enter

Refer to Numeric Input Steps Instructions to set up time.

Note: a) If the operation Lock function is enabled and no control command is received within the specified waiting time, the dome will lock up the operation until a successful re-login.

b) Operational Lock of all-level users is only effective to its own level.

Press IRIS CLOSE to EXIT

8.2 Operator Setup

<< Operator Setup

Press IRIS OPEN or Joystick Left/Right to enter

Refer to Master Setup section for details.

8.3 Authorisation

<< Authorisation

Press IRIS OPEN or Joystick Left/Right to enter

Note: This option is for the configuring of general users' operating authorities by the administrator. If any functions are set as ON, it indicates the function is open to general users. Otherwise the screen shows "No Authorisation"

1 Program Preset OFF << Program Preset ON/OFF Joystick Left/Right to select

② Call Preset	ON	<< Call Preset	ON/OFF	Joystick Left/Right to select
③ Camera Setup	OFF	<< Camera Setup	ON/OFF	Joystick Left/Right to select
4 Program PTZ Tour	OFF	<< Program PTZ Tour	ON/OFF	Joystick Left/Right to select
⑤ Run PTZ Tour	ON	<< Run PTZ Tour	ON/OFF	Joystick Left/right to select
Program VectorScan	OFF	<< Program VectorScan	ON/OFF	Joystick Left/Right to select
7 Run VectorScan	ON	<< Run VectorScan	ON/OFF	Joystick Left/Right to select
® Program Date/Time	OFF	<< Program Date/Time	ON/OFF	Joystick Left/Right to select
9 Program Alarm	OFF	<< Program Alarm	ON/OFF	Joystick Left/Right to select
① Operate Dome Menu	ON	<< Operate Dome Menu	ON/OFF	Joystick Left/Right to select
				Press IRIS CLOSE to EXIT

8.4 Password Logon

<< Password Logon ON/OFF

Joystick Left/Right to select

9. Date/Time

<< Date/Time Setup

Press IRIS OPEN or Joystick Left/Right to enter

Note: This is used for management of the system date&time. You can program the assignment of the operating time of the dome via this option.

9.1 Date/Time Setup

<< Date/Time Setup

Press IRIS OPEN or Joystick Left/Right to enter

Note: This option is used by users to modify date and time, as well as to set the date and time displayed.

1 Clock Display ON << Clock Display ON/OFF Joystick Left/Right to select

(2) Date Display ON << Date Display ON/OFF Joystick Left/Right to select

③ Display Mode Y/M/D << Display Mode Y/M/D D/M/Y Joystick Left/Right to select

Refer to Numeric Input Steps Instructions to set date/time.

Date/Time Modify				
►1 Year	11			
2 Month	3			
3 Date	5			
4 Day	Sat			
5 Hour	17			
6 Minute	53			
7 Second	43			
IRIS CLOS	E to exit			

Note: Year: 2000~2099 (00~99)

Month: $1\sim12$

Date: 1~(28/29/30/31)

Day: Mon/Tue/Wed/Thurs/Fri/Sat/Sun

Hour: $0\sim23$ Minute: $0\sim59$ Second: $0\sim59$

Press IRIS CLOSE to EXIT

31

9.2 Assignment

<< Assignment

Press IRIS OPEN or Joystick Left/Right to enter

Note: You can perform 8 Assignment options, to be executed automatically for the dome system. Namely, to execute the dome or camera functions automatically at the programmed designated time.

If an executing task is terminated by manual operation, it restarts if a manual operation is not performed within 10 seconds after stopping.

① << Number 1∼8 Joystick Left/Right to select

Note: Assignment Priority: 1-8 (High-Low)

(2) << Program

Press IRIS OPEN or Joystick Left/Right to enter

A) << Property Preset/Vector/Tour/PanScan/DayNight Joystick Left/Right to select

B) << Number

Press IRIS OPEN or Joystick Left/Right to enter

Refer to Numeric Input Steps Instructions to set number

Note: Number is invalid for the PanScan and DayNight optional functions. It's used to select certain specific preset points and the track when the Preset/Vector/Tour is being selected by a specific assignment.

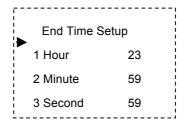
C) << Mode Eachday Joystick Left/Right to select
Eachday / Workday / Weekend / Mon / Tue / Wed / Thurs / Fri / Sat / Sun

D) << Start Time Setup

Press IRIS OPEN or Joystick Left/Right to enter

Refer to Numeric Input Steps Instructions to set start time





E) << End time Setup

Press IRIS OPEN or Joystick Left/Right to enter

Refer to Numeric Input Steps Instructions to set end time

Note: If the execution time for the assignment from start to end is less than 3 seconds, this task will always be executed.

Press IRIS CLOSE to EXIT

③ << Enable ON/OFF

Joystick Left/Right to select

Note: If set to ON, the assignment is executed at the designated time. Otherwise, this assignment is not executed, but all data is stored.

Press IRIS CLOSE to EXIT

9.3 Power Timer

<< Power Timer Setup

Press IRIS OPEN or Joystick Left/Right to enter

Note: A.You can perform a timed startup and shutdown for the dome.

- B.The interval period between startup and shutdown time is the System Startup Operating Status. While the shutdown time to startup time is the System Shutdown Status.
- C.Make sure that startup time is earlier than shutdown time, otherwise the system will remain in the System Shutdown status.
- D.The system will wake for startup once a control command is received. If no control command is received within 60 seconds (in non-menu status), it re-enters shutdown status.
- E.The priority of Assignment is higher than that of the Power Timer. Namely, assignment will be executed first no matter it is under startup or shutdown status, and the Power Timer can only be entered after the execution of Assignment has been completed, while other non-Assignment functional operations or executions will be automatically discontinued before Power Timer is executed.
- ① << Mode Off Joystick Left/Right to select
 Off / Eachday / Workday / Weekend / Mon / Tue / Wed / Thurs / Fri / Sat / Sun
- 2 << Power On Setup Press IRIS OPEN or Joystick Left/Right to enter Refer to *Numeric Input Steps Instructions* to set power on time.

·		
Power On Setup		
▶1 Hour	0	
2 Minute	0	
3 Second	0	
IRIS CLOSE to exit		
1		

[
Power Off Setup	
▶ 1 Hour	23
2 Minute	59
3 Second	59
IRIS CLOSE to exit	
1	

3 << Power Off Setup</p>

Press IRIS OPEN or Joystick Left/Right to enter

Refer to Numeric Input Steps Instructions to set power off time.

Press IRIS CLOSE to exit

Chapter 5 Shortcut Operation Table

1. System Preset Operation Table

System Preset Operation Table	
Preset 80 (Call 80)	Run PTZ Tour 1
Preset 81 (Call 81)	Run PTZ Tour 2
Preset 82 (Call 82)	Run PTZ Tour 3
Preset 83 (Call 83)	Start VectorScan 1
Preset 84 (Call 84)	Start VectorScan 2
Preset 85 (Call 85)	Start VectorScan 3
Preset 86 (Call 86)	Start VectorScan 4
Preset 87 (Call 87)	Start VectorScan 5
Preset 88 (Call 88)	Start VectorScan 6
Preset 89 (Call 89)	Joystick Freeze and Unfreeze Video
Preset 90/95 (Call 90/95)	Setup the Menus and Camera
Preset 91 (Call 91)	Invokes the Flashback Function
Preset 92 (Call 92)	Administrator Logon
Preset 93 (Call 93)	Operator Logon
Preset 94 (Call 94)	Restart Dome Power Supply (Set Preset 94 as the power supply for shutting down the dome)

Preset point setting: Method 1: First input "PRESET", and then input the number of the

preset point. Press "ENTER" to complete (PRESET + No. + ENTER). Method 2: First input the number of preset point. Then press "SHOT".

Press "ON" to complete (Preset No. + Shot + ON).

Call Preset point: Method 1: First input "CALL". Then Input the number of the preset point.

Press "ENTER" to complete (Call + Preset No. + ENTER).

Method 2: First input the number of preset point. Then press "SHOT".

Press "ACK" to complete (Preset No. + Shot + ACK).

Clear Preset point: Method 1: First input "PRESET". Then input the number of preset point.

Press "OFF" in the end (PRESET + Preset No. +OFF)

Method 2: First input the preset No. Then press "SHOT".

Press "OFF" to complete (Preset No. + SHOT + OFF).

2. User Logon Operation

Invoke Preset 92 for the Administrator logon.

Invoke Preset 93 for the Operator logon.

Factory Set Password: Administrator: 000000 Operator: 111111

Note: If the dome needs to be returned to the factory the Administrator password will be reset to default.

3. OSD Menu: Enter "90+PRE+Enter" to access the PTZ's OSD Menu.

4. Description of the Tour Function:

- a) When entering "PRESET+51+Enter" the device enables the system default Tour. The device automatically scans, point by point, from Preset No 1 to Preset No.16. If any of the positions have not been preset or been cleared Tour does not scan them.
- b) Dwell time at each preset position is 2 seconds.

5. Description of the Swing Function:

- a) The Dome automatically Swings between two specified Preset positions.
- b) Users can set the start point with "PRESET+52+Enter" and the end point with "PRESET+53+Enter".
- c) Swing speed set: The above sets a swing speed of three seconds, then "CALL+51+Enter" saves the Swing speed. Use "CALL+52+Enter" to enable the Swing.
- d) Dwell time of the swing at the "start" and "end point" is 2 seconds.

6. Intelligent Manually Pan Continuous Scan:

If you use the joystick to manually pan, for a minimum of 3 seconds, then press "CALL+101+Enter" the dome remembers the direction of the manual pan and automatically pans continuously 360-degrees in the same direction.

Chapter 6 Main Technical Parameters

Dome Address	1-255
Pan Rotate Range	360 degree continous rotation
Tilt Rotate Range	0-90 degrees continous rotation
Pan Manual Speed	0-300 degrees/second
Tilt Manual Speed	0-120 degrees/second
Call Preset Position	400 degrees/second
Accuracy	±0.1 degree
Preset Positions	255
Languages	English/Spanish etc.
Function Information Display	Dome Name, Preset Name, PTZ Name, Sector Name Camera Orientation, Alarm Note, Time / Temperature Display
Intelligent Magnification	Manual scanning speed changes along with automatic
Scanning Speed Match	regulation of change in magnification (by inverse ratio)
Automatic Flip	10-degree forward tracking after 180-degree automatic flip when the dome reaches vertical 90-degree point.
Intelligent 3D Curise	Adjustable speed; vertical track can be changed immediately
Vector Scan	8 groups
PTZ Tour	6 tours; each 120 seconds
Sector Operation Dispay	8 areas
Privacy Zones	8 zones (dependent on camera module)
Alarms	8 input channels and 2 output channels
Assignment Programming	8 options
User Account Management	Strong user management mechanism
Timed Startup / Shutdown	Random programming
Control Mode	RS-485 Bus
Communciation Baudrate	2400 / 4800 / 9600 / 19200bps
Power Supply	AC24V (+/-4V) @ 50Hz, 50W

MEMO



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