

# IR PTZ Dome Camera



Read this Manual carefully before installation and keep it for future reference.

## Notice:



### Precautions:

1. Non-technician is forbidden to operate this dome device before reading this manual thoroughly.
2. Cut the power supply off before operating the dome device to avoid damage caused by improper operation.
3. Interior of the Dome device are precision optical and electrical device. Heavy pressure, shock and other incorrect operations should be prevented. Otherwise, may cause damage on product.
4. Please do not remove and disassemble any internal parts of Dome video camera by self in order to avoid normal usage being impacted. There is no part inside the device, which can be repaired by users themselves.
5. All the wiring of the dome device should be conducted strictly according to the wiring instruction. When necessary, thunder-proof, surge-proof and other protecting measures should be carried out.
6. Please do not use the product under the situations of exceeding specified temperature, humidity or power supply specifications.

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## Chapter 1 Product Overview

### 1.1 Performance Instructions

- Address of Dome device is from 0~255. The number (address) of dome device in the control system is setup by the hardware (8-digit on and off switch) of dome device.
- Integrated multi-protocol and auto protocol differentiation. Note: The dome device only auto differentiate controller of the first communication.
- Pan 360 degree continuous scanning.
- Tilt 90 degree action plus 2 degree angle adjustment. Plus the 2 degree adjustment, the view angle can be 90 or 92 degree.
- Pan manual operation speed can be 0.1 to 150 degree per second.
- Tilt manual operation speed can be 0.1 to 55 degree per second.
- 128 preset positions.(A fixed position that aimed by the dome camera, which can be set and revised by user arbitrarily)
- The maximum running speed when preset position is being called can reach 240 degree per second with accuracy of  $\pm 0.1$  degree.
- Compatible with many kinds of Module Camera.(Sony, Hitachi, Sanyo, Yoke, CNB, LG, Haitron, Samsung, Dahua)
- Power supply: AC 24V/3A.
- Easy installation interface.
- Pass environmental protection grade IP66 (outdoor type).
- Adopts long distance RS-485 transmission mode.  
Transmission speed, i.e. Baud rate is selectable. (2400bps/4800bps/9600bps /19200bps).

### 1.2 Feature Functions Instruction

- English operation menu and function display.
- Camera name and operation position and angle display.(The name of the camera can be edited and the coordinate angle of the dome device can be displayed on the

screen.)

- Operation crosshair function.(Enable this option, the target can be captured more effectively with crosshair on the screen.)
- Three PTZ tours operation with 8 minutes record of each tour.(Can real-time monitor and record the action of manual operation)
- Six group of programmable vector scans.(including scan speed, dwell time, preshot and interruption between tours)
- Auto flip function with 10 degree move up.
- 24 sectors of programmable sectional mask.(Can mask part of the sectors of camera, which differs depending on different types of camera)
- 8 sectors of programmable sectional display.(Can display the name and nature of concrete position shooting by the camera)
- Auto enter function running after self-test of the dome device and auto enter function running when there is no transmission.(Dwell time can be set from 5 to 999 seconds)
- Freeze video picture function.(frozen picture function)
- Operation return function.(after executing operation return, the dome device will return to the previous operation)
- Intelligent manual scan function.(execute this function in manual pan operation, you can adjust the manual pan operation)
- Intelligent power off real time memory.(If power is cut off when a certain function is in operation, the dome device can resume working at where the power is cut off.)
- High efficient 3-dimension scan.
- Camera zoom in speed limit function.(When it is zooming in, the speed of the dome device will auto slow down.)
- Remote setting of dome address.
- The world's most advanced high-power infrared lamp technology:
  - a. Infrared light power conversion efficiency, heat small, long life, low power, less

than 5 watts, Subversion of the traditional infrared lighting quick decline fatal shortcoming

**b.** Use its power can be considered as a single point of light source characteristics, developed a variable angle infrared light With the perspective of the size of the change in one machine simultaneously follow the changes to ensure the infrared light is neither wasted nor flashlight effect, to maximize the use of infrared light, the subversion of the traditional large volume of long-range needs of the practice of tens of watts

## Chapter 2 Menu setting

### 2.1 Operation instructions

Menu operation instruction

To make a selection, move the joystick in the Up or Down direction. The on-screen arrow points to the selected option. Using the joystick to the Left or Right position you can change the value of your selection or enter the submenu for the selected option. Press the button CLOSE on the keyboard controller to exit the menu or return to the previous menu(one layer up)

Number setup.

- Joystick Left or Right when programming to select preset.
- Press OPEN to confirm, open and display the number selection cursor
- Joystick Left or Right to select the number to be entered
- Press OPEN to confirm selection. The selected number is displayed on the corresponding data bit.
- Number of respective data bits are input as above.
- Press CLOSE to exit or return to the previous menu level when programming is done.

### 2.2 Main menu

95+SHOT+ACK to enter the main menu of the dome as illustrated down.

TITLE	
1 LANGUAGE	ENGLISH
2 DOME INFORMATION	
3 DISPLAY OPTIONS	
4 CONTROL OPTIONS	
5 CAMERA OPTIONS	
6 FUNCTION PROGRAMMING	
7 SYSTEM SETUP	

#### TITLE

The title may be different with different type of dome.

#### 1. Language Setup

Language: English.

#### 2. Dome Information

Joystick down to move the cursor to press OPEN or joystick left or right to move the joystick to enter the menu.

#### 3. Display Options

Display dome info or function.



#### 4. Control Options

Set the pan or tilt and camera of the dome manually or auto compatible with the entire control system. User individualized operation setting.

#### 5.Camera Options

Set camera function.

#### 6. Function Programming

Program and execute PTZ and VectorScan etc.

#### 7. SYSTEM SETUP

System setup, Including, restore default setup clear memory, color system, dome reset.

### 2.3 Dome information

Joystick down to move the cursor to press OPEN or joystick left or right to move the joystick to enter the menu.

TITLE	
CAMERA	: xxxx
PROTOCOL	: xxxx
BAUDRATE	: xxxx
DOME ID	: xxx
VERSION	: xxx
IRIS CLOSE TO EXIT	

#### TITLE

The title may be different with different type of dome.

Display camera type\ protocol\  
baundrate\dome ID\ software version

### 2.4 Display Options

Set the display of dome info or function.

DISPLAY OPTIONS	
➤ 1 CAMERA NAME SETUP	
2 COORDINATES	ON
3 START_UP SCR MSG	ON
4 CROSSHAIRS	ON

#### Operation steps

- [1].Joystick up/down to move the cursor to select Display Options
- [2].Joystick left/right to enter Display Option
- [3].Joystick up/down to select either one of the sub-menu
- [4].Joystick left/right to select ON/OFF

## 2.4.1 Camera Name Setup

Set the camera name

CAMERA NAME SETUP

→ 1 NAME \_\_\_\_\_

2 NAME DISPLAY      OFF

---

PLEASE ENTER:

WELCOME\_\_\_\_\_

↑

ABCDEFGHIJKLMN

OPQRSTUVWXYZ

0123456789\_

IRIS OPEN WHEN DONE

IRIS CLOSE TO EXIT

### 1.NAME

- [1].Move the joystick up/down to move the cursor to select the Name.
- [2].Move the joystick left/right or press OPEN to enter name editing menu.
- [3].Joystick left/right to select programming position and press OPEN to confirm, joystick left/right again to select( 0~9 or A~Z ). Press OPEN to confirm selection. Press CLOSE to exit or return to the previous menu level when programming is done.

## 2.5 Control Options

Set Auto Flip、Auto Focus、Auto AE, etc Move the joystick left/right or press OPEN to enter control options

CONTROL OPTIONS

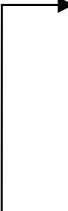
→ 1 DOME ADDR STETUP

2 AUTO FLIP              ON

3 PROPORTIONAL SPD    ON

4 PAN REVERSE           OFF

5 TILT REVERSE          OFF



6 VECTORSCAN STILL    OFF

7 AUTO FOCUS            OFF

8 AUTO AE                OFF

9 VECTORSCAN AF        OFF

10 -2 TILT LIMIT        OFF

11 SPEED LIMIT          OFF

### 2.5.1 Dome Addr Setup

DOME ADDR SETUP

→ 1 ADDR TYPE          PHYSIC

2 DOME ID                1

3 BROADCAST ID        OFF

1. Joystick left/right to setup the addr type. addr type through Physic/Logic.
- 2.Joystick left/right to change the dome ID(only when addr type selects logic).
- 3.Joystick left/right to setup the broadcast ID ON/OFF.

## 2.5.2 Control Option Operation

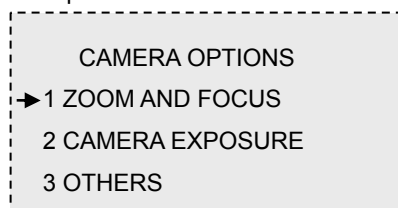
Move the cursor to select Auto Flip/Proportional Speed/Pan Reverse/ Tilt Reverse/VectorScan Still/VectorScan AF/-2 Tilt Limit/Speed Limit.

Move the joystick left/right or press OPEN to Display on/off/PTZ/Z/OFF

- Auto Flip: If the camera lens auto rotates pan 180° then tilt 10° to auto track forward when the lens goes down tilt 90°.
- Auto AE: If the camera is AE when the dome device changes its pan or tilt or zoom.
- VectorScan AF: If the camera AF when vector scan is running.
- Speed Limit: the moving speed of dome device matching the video ratio to lower the speed.

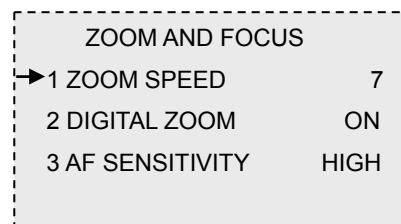
## 2.6 Camera Options

As the dome can support many type of cameras, so the camera menu will be different with different cameras, the following camera menu take Sony camera menu as an example.



Move the joystick left/right or press OPEN to enter Camera options.

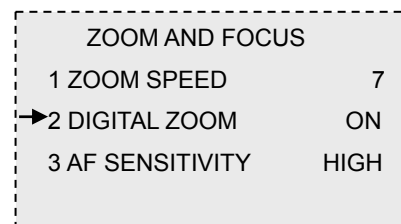
### 2.6.1 Zoom and Focus



#### 1. Zoom Speed

Steps:

- [1]. Move the joystick up/down to select ZOOM SPEED.
- [2]. Joystick left/right to setup the camera ratio speed.



#### 2. Digital Zoom

Steps:

- [1]. Move the joystick up/down to move the cursor to select DIGITAL ZOOM.
- [2]. Joystick left/right to setup the camera digital zoom ON or OFF.

ZOOM AND FOCUS		
1 ZOOM SPEED		7
2 DIGITAL ZOOM		ON
→ 3 AF SENSITIVITY		HIGH

## 2.6.2 Camera Exposure

CAMERA EXPOSURE		
→ 1 AE MODE		AUTO
2 SLOW SHUTTER		OFF
3 SHUTTER SPEED		AUTO
4 IRIS LEVEL		AUTO
5 AGC LEVEL		AUTO
6 BRIGHT LEVEL		AUTO
7 SPOT AE		OFF
8 WDR		OFF

CAMERA EXPOSURE		
1 AE MODE		AUTO
→ 2 SLOW SHUTTER		OFF
3 SHUTTER SPEED		AUTO
4 IRIS LEVEL		AUTO
5 AGC LEVEL		AUTO
6 BRIGHT LEVEL		AUTO
7 SPOT AE		OFF
8 WDR		OFF

## 3.AF Sensitivity

Steps:

- [1].Move the joystick up/down to move the cursor to select AF Sensitivity.
- [2].Joystick left/right to setup AF Sensitivity function of the camera

## 1.AE Mode

Steps:

- [1].Move the joystick up/down to move the cursor to select AE Mode.
- [2].Joystick left/right to set up camera in command of different switchover (AUTO/MANUAL/IRIS etc.)

## 2. Slow Speed

Steps:

- [1].Joystick up/down to move the cursor to select SLOW SHUTTER.
- [2].Joystick left/right to set up SLOW SPEED ON or OFF.

### 3. Shutter Speed(Shutter Speed works under Manuel/Shutter MD)

Steps:

- [1].Joystick up/down to move the cursor to select Shutter MD
- [2].Joystick left/right to set up Shutter Speed

CAMERA EXPOSURE	
1 AE MODE	AUTO
2 SLOW SHUTTER	OFF
→ 3 SHUTTER SPEED	AUTO
4 IRIS LEVEL	AUTO
5 AGC LEVEL	AUTO
6 BRIGHT LEVEL	AUTO
7 SPOT AE	OFF
8 WDR	OFF

### 5. AGC Level(AGC Level works under Manual MD)

Steps:

- [1].Joystick Up/Down to move the cursor to select AGC Level.
- [2].Joystick Left/right to set up the value of AGC Level.

CAMERA EXPOSURE	
1 AE MODE	AUTO
2 SLOW SHUTTER	OFF
3 SHUTTER SPEED	AUTO
4 IRIS LEVEL	AUTO
→ 5 AGC LEVEL	AUTO
6 BRIGHT LEVEL	AUTO
7 SPOT AE	OFF
8 WDR	OFF

### 4. Iris (IRIS works under Manual/IRIS MD)

Steps:

- [1].Joystick Up/Down to move the cursor to select IRIS LEVEL
- [2].Joystick Left/right to set up the size of IRIS

CAMERA EXPOSURE	
1 AE MODE	AUTO
2 SLOW SHUTTER	OFF
3 SHUTTER SPEED	AUTO
→ 4 IRIS LEVEL	AUTO
5 AGC LEVEL	AUTO
6 BRIGHT LEVEL	AUTO
7 SPOT AE	OFF
8 WDR	OFF

### 6. Bright level (It works under AUTO/MANUALMD)

Steps:

- [1].Joystick up/down to move the cursor to select Bright level.
- [2].Joystick left/right to set up Bright level.

CAMERA EXPOSURE	
1 AE MODE	AUTO
2 SLOW SHUTTER	OFF
3 SHUTTER SPEED	AUTO
4 IRIS LEVEL	AUTO
5 AGC LEVEL	AUTO
→ 6 BRIGHT LEVEL	AUTO
7 SPOT AE	OFF
8 WDR	OFF

CAMERA EXPOSURE

1 AE MODE	AUTO
2 SLOW SHUTTER	OFF
3 SHUTTER SPEED	AUTO
4 IRIS LEVEL	AUTO
5 AGC LEVEL	AUTO
6 BRIGHT LEVEL	AUTO
→ 7 SPOT AE	OFF
8 WDR	OFF

**7.Spot AE(OFF/ON)**

Steps:

- [1].Joystick Up/Down to move the cursor to select Spot AE.
- [2].Joystick Left/right to set up the Spot AE

CAMERA EXPOSURE

1 AE MODE	AUTO
2 SLOW SHUTTER	OFF
3 SHUTTER SPEED	AUTO
4 IRIS LEVEL	AUTO
5 AGC LEVEL	AUTO
6 BRIGHT LEVEL	AUTO
7 SPOT AE	OFF
→ 8 WDR	OFF

**8.WDR(OFF/ON)**

Needs support from camera:

Steps:

- [1].Joystick up/down to move the cursor to select WDR.
- [2].Joystick left/right to set up the status pattern of WDR.

### 2.6.3 Others

OTHERS

→ 1 SHARPNESS	5
2 BACK LIGHT	OFF
3 WB MODE	AUTO
4 R GAIN	AUTO
5 B GAIN	AUTO
6 VERTICAL MIRROR	OFF
7 HORIZONTAL MIRROR	OFF
8 IR SW MODE	AUTO
9 STABILIZATION	OFF
10 FUNCTION OSD	ON

1. Move the joystick up/down to move the cursor to select the options.
2. Move the joystick Left/Right to set up the options.

## 2.7 Function Programming

### FUNCTION PROGRAMMING

- ➔ 1 PRESET
- 2 VECTORSCAN
- 3 PATTERN
- 4 SECTOR SETUP
- 5 MASK ZONE
- 6 MASK COLOR
- 7 MOTION

### Preset option

1. Move the joystick left/right or press OPEN to enter Function Programming options.
2. Move the joystick up/down to move the cursor to select the preset options.
3. Move the joystick Left/Right or press OPEN to enter preset options.

### 2.7.1 Preset

#### 1.Number

[1].Move the joystick left/right or press OPEN to enter the number editing programming.

PS: Program the number of preset position.

[2].Move the joystick left/right to select the number editing (numeral line 0~9),press OPEN to confirm the selection. Press CLOSE to exit when your selection done.

#### PRESET

- ➔ 1 NUMBER 1
- 2 SET PRESET
- 3 CALL PRESET
- 4 DELETE PRESET
- 5 NAME \_\_\_\_\_
- 6 NAME DISPLAY OFF

#### INPUT RANGE:

1~50 64~77 102~165

001



0123456789

IRIS CLOSE WHEN DONE

#### 2.Set Preset

[1].Move the cursor to select preset position.

[2].Move the joystick left/right or OPEN to enter the setting(ensure the preset position data you desire to save)

[3].Press OPEN to finalize your selection, then the screen displays STORED and return to the previous menu level. Or press CLOSE to return to the previous menu

level. without save your selection.

PRESET		
1 NUMBER		1
→ 2 SET PRESET		
3 CALL PRESET		
4 DELETE PRESET		
5 NAME	_____	
6 NAME DISPLAY		OFF



### 3.Call Preset

PRESET		
1 NUMBER		1
2 SET PRESET		
→ 3 CALL PRESET		
4 DELETE PRESET		
5 NAME	_____	
6 NAME DISPLAY		OFF

#### Call Preset

[1].Move the joystick left/right or press

OPEN. The lens auto switch to current preset position corresponding to the edited No.

### 4. Delete Preset

PRESET		
1 NUMBER		1
2 SET PRESET		
3 CALL PRESET		
→ 4 DELETE PRESET		
5 NAME	_____	
6 NAME DISPLAY		OFF

#### Delete preset

[1].Program the desired deleting number referring to Number Setup Section so as to select the preset position to be deleted.

[2].Move the cursor to select Delete Preset Move the joystick left/right or press OPEN to enter the Delete Preset.

[3].Press OPEN to confirm the selection and exit. Press CLOSE to cancel the selection and exit.

ARE YOU SURE TO DO THIS?		
IRIS OPEN TO CONFIRM		
IRIS CLOSE TO CANCEL		



## 5. Name

PRESET		
1	NUMBER	1
2	SET PRESET	
3	CALL PRESET	
4	DELETE PRESET	
→ 5	NAME	
6	NAME DISPLAY	OFF

### Name

- [1].Move the joystick up/down to move the cursor to select the Name.
- [2].Move the joystick left/right or press OPEN to enter name editing menu.  
(Please refer to name setting section of Camera Name Setup)

## 6. NameDisplay

PRESET		
1	NUMBER	1
2	SET PRESET	
3	CALL PRESET	
4	DELETE PRESET	
5	NAME	
→ 6	NAME DISPLAY	OFF

### NameDisplay

Setup On/Off display on the direction name preset.

- [1].Move the cursor to select name display.
- [2].Move the joystick left/right to set ON or OFF of the name display.

## 2.7.2 Program VectorScan

Function: User can make different auto scan according to various inspection.

FUNCTION PROGRAMMING	
1	PRESET
→ 2	VECTORSCAN
3	PATTERN
4	SECTOR SETUP
5	MASK ZONE
6	MASK COLOR
7	MOTION

### Programming VectorScan instruction

- [1].Joystick Up/Down to select Program VectorScan.
- [2].Joystick Left/Right or press OPEN to enter the programming.
- [3].Joystick Up/Down to select pending programming serial number(number range:1~6).
- [4].Move the Joystick to select and enter the items of Program a VectorScan (items include:name/number/SP/dwell).

VECTORSCAN	
1 NUMBER	1
→ 2 PROGRAM A VECTORSCAN	
3 RUN A VECTORSCAN	
4 DELETE A VECTORSCAN	

PROGRAM VECTORSCAN 1				
	NAME	NUM	SP	DWELL
1.	—	—	—	—
2.	↑	—	—	—
3.	—	—	—	—
4.	—	—	—	—
	... ..			
16.	—	—	—	—
IRIS CLOSE WHEN DONE				

#### I:Name

Pr:stands for Preset Position.

Vs:stands for VectorScan.

Pt: stands for PTZ Tour.

II:Number Programming-selection based on the name.

III:SP-Set up the speed of Preset.

#### IV:Dwell

Vectorscan running operation steps:

I:Select pending Vectorscan track in Number menu

II:Joystick Up/Down to select Vectorscan

III:Joystick Left/Right or press OPEN to run the selected Vectorscan track

### DELETE A VECTORSCAN

Vectorscan track deletion steps:

[1]:Select pending deleting vectorscan track in Number menu.

[2]:Joystick Up/Down to select Delete a VectorScan.

[3]:Joystick Left/Right or press OPEN to delete the selected vectorscan track.

## 2.7.3 Pattern

Function: User can program three traces simulating manual operation.

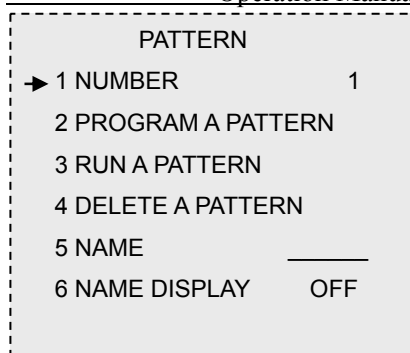
FUNCTION PROGRAMMING	
1 PRESET	
2 VECTORSCAN	
→ 3 PATTERN	
4 SECTOR SETUP	
5 MASK ZONE	
6 MASK COLOR	
7 MOTION	

### PATTERN

Pattern Operation Steps:

[1].Joystick Up/Down to move the cursor to select Pattern.

[2].Joystick Left/Right or press OPEN to enter the menu.



IRIS OPEN TO BEGIN

Fig 1

IRIS CLOSE WHEN DONE

Fig 2

- [3]. Joystick Up/Down to select pending operating or programming Pattern(number range:1~3).
- [4]. Joystick Up/Down to move the cursor to select Program a Pattern.
- [5]. Press OPEN to enter recording of the manual running trace.as left Fig 1.
- [6]. Press CLOSE to finalize the selection. as left Fig 2.
- [7]. Joystick Up/Down to move the cursor to select NAME.
- [8]. Edit name (Please refer to name setting section of preset position)

[9]. Joystick Up/Down to move the cursor to select Name Display.

### **RUN A PATTERN**

Running Pattern Tracking Operation Steps:

- [1]. Select pending running Pattern trace from NUMBER.
- [2]. Joystick Up/Down to select Run a Pattern.
- [3]. Joystick Left/Right or press OPEN to run the trace of selected Pattern.

### **DELETE A PATTERN**

Delete Pattern Operation Steps:

- [1]. Select pending Delete Pattern trace from NUMBER.
- [2]. Joystick Up/Down to select Delete a Pattern.
- [3]. Joystick Left/Right or press OPEN to enter and Click OPEN to delete the trace of selected Pattern as below Fig 3~Fig 4

## 2.7.4 Sector Setup

Function: To display the sector name when dome in the setted area

FUNCTION PROGRAMMING	
1	PRESET
2	VECTORSCAN
3	PATTERN
→ 4	SECTOR SETUP
5	MASK ZONE
6	MASK COLOR
7	MOTION

Sector Setup:

- [1]. Move the joystick up/down to move the cursor to select sector setup.
- [2]. Move the joystick left/right or press OPEN to enter the setting.

SECTOR SETUP	
→ 1	NUMBER 1
2	PAN START POS 0.0
3	PAN END POS 0.0
4	TILT START POS 0.0
5	TILT END POS 0.0
6	NAME _____
7	NAME DISPLAY OFF

[1]. Number

Joystick left/right or press OPEN to select the sector number(number range:1~8).

[2]. Pan Start POS \Pan End POS\Tilt Start POS\ Tilt End POS

- (1). Move the joystick left/right or press OPEN to select a Pan Start Point \Pan End Point\ Tilt Start Point\ Tilt End Point.
- (2). IRIS OPEN when done or press CLOSE to exit but not save.

[3]. Name

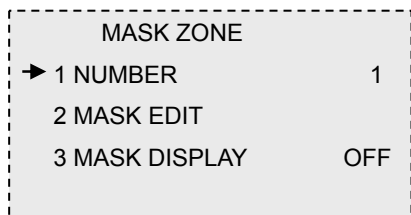
- (1). Select the sector name and press OPEN to enter name editing.
- (2). Edit the name referring to preset setup instruction.

[4]. Name Display

Joystick Up/Down to move the cursor to select Name Display of ON or OFF.

## 2.7.5 Mask Zone

Function: User can protect the partial area by mask setting from the whole monitoring area according to the situation.



### MASK ZONE

#### [1].Number

- (1). Joystick Up/Down to move the cursor to select NUMBER.
- (2). Joystick Left/Right to select pending editing mask areas(from area1-24).

#### [2].Mask Edit

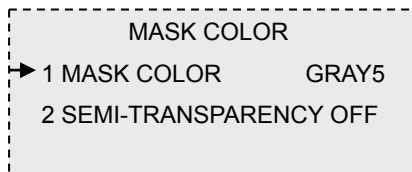
- (1). Joystick Up/Down to move the cursor to select Mask Zone.
- (2). Joystick Left/Right or press OPEN to enter editing.
- (3). Press OPEN to edit the mask zone, capture the mask point. Press NEAR, FAR (set the mask area in pan action), WIDE, TELE (set the mask area in tilt action) to adjust the area of mask zone. Press CLOSE to exit when done and return to upper stage menu.

#### [3].Mask Display

Joystick Left/Right to set up the display name of ON/OFF.

## 2.7.6 Mask Color

Function: set the mask color.



### [1]. Mask color

- (1). Joystick Up/Down to move the cursor to select MASK COLOR.
- (2). Joystick Left/Right to move the cursor to select the Mask color.

#### [2]. Semi-transparency

- (1). Joystick Up/Down to move the cursor to select SEMI-TRANSPAREN.
- (2). Joystick Left/Right to set up the Semi-transparency of ON/OFF.

## 2.7.7 Motion

MOTION	
➔ 1 PARK ACTION	
2 POWER ON ACTION	
3 LIMIT OPERATION	
4 AUTO TRACK SETUP <NA>	

### MOTION

[1]. Move the joystick left/right or press OPEN to enter sub-menu.

[2]. The menu of "AUTO TRACK SETUP" is invalid.

PARK ACTION	
➔ 1 ACTION	NONE
2 NUMBER	1
3 PARK TIME	120SEC

### Park action function

The lens will auto return to the assigned preset position or perform certain motion using command set by user when the camera does not receive orders from controlling device.

[1]. Move the joystick left/right or press OPEN to enter the PARK ACTION.

(1). Action

I . Move the joystick left/right or press OPEN to enter the Action panel.

II . Joystick left/right to select Action. Action by None/Preset/VectorScan/Pattern/PanScan/AutoScan.

(2). Number

I . Select the Number and press OPEN or move the joystick left/right to enter Number editing.

II . Setup method: referring to preset setup instruction.

(3). Park Time

I . Select the Park Time and press OPEN or move the joystick left/right to enter Park Time (time range: 1-999).

II . Setup method: referring to preset setup instruction.

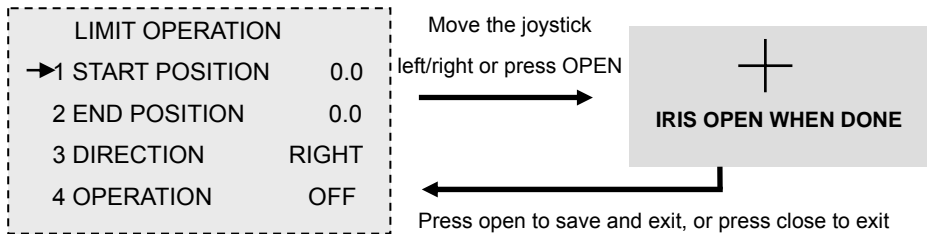
POWER ON ACTION	
➔ 1 ACTION	VECTORSCAN
2 NUMBER	1

[2]. Select the Power on Action and move the joystick left/right or press OPEN to enter the Power on Action.

- (1). Select the Action and move the joystick left/right or press OPEN to enter Action. Action includes: None/Preset/VectorScan/Pattern/PanScan/AutoScan
- (2). Select the Number and move the joystick left/right or press OPEN to enter. Setup method: refer to preset setup instruction.

[3]. Move the joystick left/right or press OPEN to enter the Limit Operation.

(1). Start Position



(2). End Position

Refer to Start Position setting section.

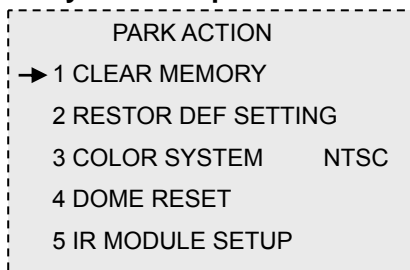
(3). Direction

Move the joystick left/right to select the Direction(left or right).

(4). Operation

Select the OPERATION and move the joystick left/right set up the Operation of ON/OFF.

## 2.8 System setup

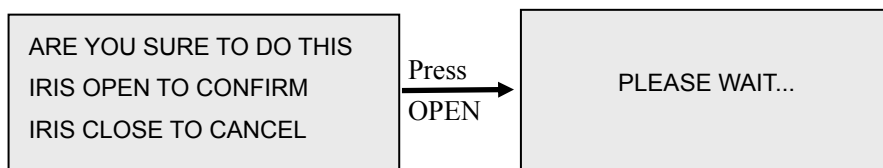


[1]. Move the joystick left/right or press OPEN to enter submenu.

[2]. Move Joystick left/right to setup the options.

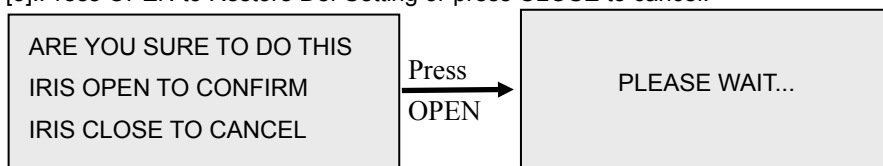
### 2.8.1 Clear Memory

- [1].Joystick Up/Down to move the cursor to select Clear Memory.
- [2].Joystick Left/Right or press OPEN to enter.
- [3].Press OPEN to Clear Memory or press CLOSE to cancel.



### 2.8.2 Restore Def Setting

- [1].Joystick Up/Down to move the cursor to select Restore Def Setting.
- [2].Joystick Left/Right or press OPEN to enter.
- [3].Press OPEN to Restore Def Setting or press CLOSE to cancel.



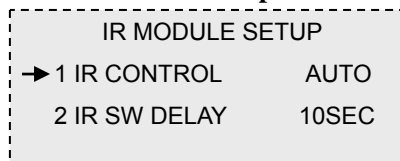
### 2.8.3 Color System

- [1].Joystick Up/Down to move the cursor to select Color System.
- [2].Joystick Left/Right to select the PAL or NTSC.

### 2.8.4 Dome Reset

- [1].Joystick Up/Down to move the cursor to select Dome Reset.
- [2].Joystick Left/Right or press OPEN to reset the dome.

### 2.8.5 IR Module Setup



- [1].Joystick Up/Down to move the cursor to IR CONTROL.
- [2].Joystick Left/Right to select the IR control AUTO/ON/OFF.
- [3].Joystick Up/Down to move the cursor to IR SW DELAY.
- [4].Joystick Left/Right to select the IR Switch delay 5SEC/10SEC/15SEC/30SEC/45SEC.



## Chapter 3 Short-cut Operations and Specification of Dome Device

### 1. Short-cut operation table

Number of preset position	Control Object	Call preset position	Save preset position
51	Pan-Tilt Control	Record line scanning speed	Run cruise track
52		Start line scanning	Set line scanning starting point
53			Set line scanning ending point
55	Background light compensation*	On	Off
56	Day/Night*	Auto	Color
57	Camera related OSD*	Camera menu On\Off	Camera function OSD On\Off
58	Digital zoom*	On	Off
59	Focus*	Auto	Manual
60	Iris*	Auto	Manual
61	White balance*	Auto	Manual
62		Indoor	Outdoor
63		ATW	One push WB
79	Set line scanning mode	Long distance	Short distance
80	Run pattern	Run pattern 1	
81		Run pattern 2	
82		Run pattern 3	
83	Run vector	Run vectorscan 1	
84		Run vectorscan 2	
85		Run vectorscan 3	
86		Run vectorscan 4	

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87		Run vectorscan 5	
88		Run vectorscan 6	
89	Picture freeze*	On	Off
91	Dynamic preset point	Call dynamic preset point	
94	Dome reset	Reset dome	
95	Main menu	Call main menu	
96	Set the auto flip	On	Off
101	Pan continuous scanning	On	

Notes:

1. These functions differs depending on different types of camera.

### Description of the preset point:

Preset point of the position: 1~50, 64~77, 102~165 (totally 128)

Function short-cut preset point: 51~63, 78~101

**Note: Dome operation will be different due to controller's different specs.**

Preset point setting:

Press "No." + "Shot" + "ON" .

Call Preset point:

Press "No." + "Shot" + "ACK" .

Clear Preset point:

Press "No." + "Shot" + "OFF" .

### 2. Description of "cruise track" function:

- When enter "51+SHOT+ON", the device is enabled system default cruise track. The device will auto scan point by point from No.1 preset position to No.16 preset position. If certain position has not been preset or been cleared after preset, "cruise track" will not scan them.
- Dwell time of the preset position is 2 seconds.
- About other 6 cruise tracks operation, please refer operation manual of the keyboard controller. Different controller is with different operation.

### **3. Description of “Line-Scanning” function:**

- Dome device will auto line-scan between two specified points.
- User can set the start point by “52+SHOT+ON” and end point by “53+SHOT+ON”.
- Line scanning speed set: user keep a manual line scan speed three seconds above, then through “51+SHOT+ACK” to save the speed as line scan speed, use “52+SHOT+ACK” to enable the line scan.
- Dwell time of line-scanning between “starting point” and “ending point” is 2 seconds.

### **4. Intelligent manually pan continuous scan:**

- When user use joystick for pan scan monitoring, keep manually 3 seconds, then press “101+SHOT+ACK”, the dome can go on with the scan speed and monitor position automatically .

## Chapter 4 Trouble Shooting of Dome Device

- 1.Problem description:** After power on without any response, not lock motor nor images.

**Possible reason:** The power circuit maybe have some problem

**Solution:** Check the power cable is connected to power of AC24V.
- 2. Problem description:** After power on, the dome device rotate normally, but no character nor image display

**Possible reason:** The character monitor switch is off

**Solution:** Switch on the character monitor according to the menu instruction
- 3. Problem description:** After self-test of the dome device, menu cannot be displayed

**Possible reason:** Wrong operation

**Slution:**Call+95+ACK to open
- 4. Problem description:** Distorted character or image

**Possible reason:** Interfered by exterior electronic signal (noise) or the camera is directed to the monitor screen

**Solution:** Grounding the dome device or shut off the surrounding big electronic devices(electric, HF, signal generating) equipment, or rotate the camera
- 5. Problem description:** Self-test is normal, but can not control the device.

**Possible reason:** Wrong setting

**Solution:** Set the protocol, baud rate and address of dome device Check the circuit
- 6. Problem description:** Insensitive control of dome device

**Possible reason:** Line contact undesirable or faulty

**Solution:** Check the control circuit
- 7. Problem description:** Auto action of dome device periodically

**Possible reason:** No transmission auto “call back” function is set to the dome device

**Solution:** Called this setting