

# User Manual

***TeleEye***

DM597/DM599  
High Speed Dome



Before attempting to install or operate on this produce,  
Please read this manual carefully and keep it for future use.



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## Chapter One Product Overview

### I. Performance instruction:

- 1. 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.
- 2. Integrate multi-protocol and auto protocol differentiation. Note: The dome device only auto differentiate controller of the first communication.**
- 3. Pan 360 degree continuous rotation.**
- 4. Tilt 90 degree action plus 2 degree angle adjustment.**  
Plus the 2 degree adjustment, the view angle can be 90 or 92 degree.
- 5. Pan manual operation speed can be 0.1 to 280 degree per second**
- 6. Tilt manual operation speed can be 0.1 to 120 degree per second**
- 7. 128 peshot positions.** (A fixed position that aimed by the dome camera, which can be set and revised by user arbitrarily)
- 8. The maximum running speed when peshot is being called can reach 360 degree per second with accuracy of  $\pm 0.1$  degree.**
- 9. Easy installation interface.**
- 10. Pass environmental protection grade IP66 (outdoor type)**
- 11. Adopts long distance RS-485 transmission mode**
- 12. Transmission speed, i.e. Baud rate is selectable.** (Set by the fifth and sixth bit of the on and off switch of the dome device. 2400bps~19200bps)

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Version 1.1

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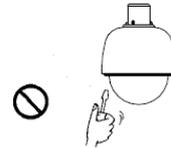
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Features and specifications are subject to change without prior notice.

- 
1. Before installing the full-view High-Speed Dome Video Camera, please read this user's manual first.
  2. This unit should be operated only from the type of power source indicated on the marking label found at the power adapter. If you are not sure of the type of power supply you plan to use, consult your appliance dealer or local power company. For units intended to operate from battery power or other sources, refer to operating instructions.
  3. Inside the Dome device are precise optical and electrical instruments. Heavy pressure, shock and other incorrect operations should be prevented during the processes of delivery, storage and installation. Otherwise, it may cause damage on the product.

4. Please do not remove and disassemble any internal components from the Dome video camera by yourself in order to avoid normal usage being impacted. There is no parts inside the device which can be repaired by the user himself.



5. Always conform to national and local safety codes during installation. Adopt the special power provided with the Dome video camera. During transmission, RS-485 and video signal should be retained enough distance with high-voltage equipments or cables. When necessary, thunder-proof, surge-proof and other protecting measures should be carried out.

6. Please avoid exposing the Dome video camera to rain or the humidity, etc. Please do not use the product in humid place. If the video camera is installed in outdoor area, please ensure the device being protected by a weather-proof, sealed shield. Exposure to open area should be avoided.

7. Do not install this dome camera in a place exceeding the required environment conditions such as temperature, humidity and power supply specifications.

8. Whether the high-speed Dome video camera is powered on or not, avoid the video camera aiming at the sun or glary object. Lengthy exposure to static bright object is also not recommended.

9. Please do not use strong or caustic washing lotion to clean the main body of the high-speed Dome video camera. After dirt is cleaned up, please use cotton fabric to clean the product. Stubborn dirt should be cleaned up with neutral washing lotion, and then dried gently with soft cotton fabric.

10. Shall use the high-speed Dome video camera carefully and avoid being stroked or shocked. If operating is improper, the product may be damaged.

11. Install the High-Speed Dome Video Camera in a place with enough holding force.

12. If camera lens adheres with dust, please use special lens paper to clean up.

13. When disassemble the Acrylic DOME shield,

please wear cotton gloves to process in order to avoid surface of the product being scraped.



### III. Installation steps of shield dome.

Figure III.1 indicates the fixing holes of acrylic shield, i.e. four M3 screw holes.

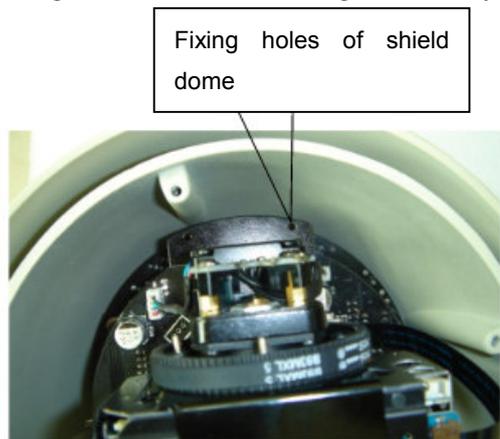


Fig. III.1

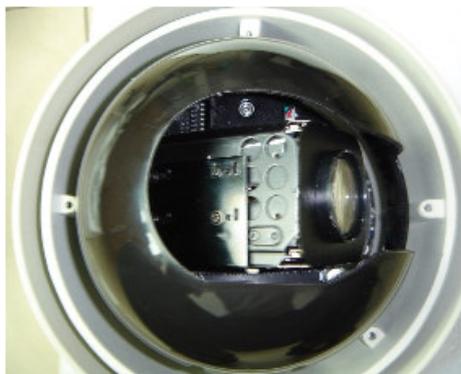


Fig. III.2

Step one: Aim the open end of shield dome at the lens of camera. Aim the 4 holes on the shield to the 4 M3 screw holes on the dome device, as indicated in figure III.2.

Step two: screw the four M3 bolt up, as indicated in figure III.3.

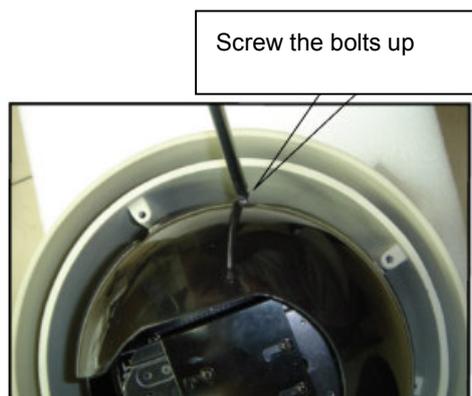
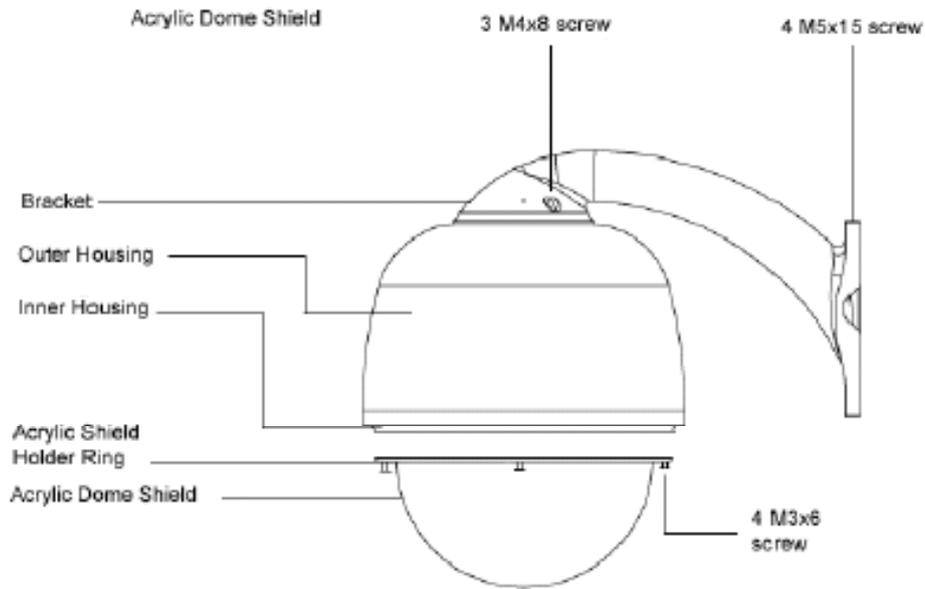


Fig. III.3

#### IV. Installation Instruction of the Acrylic Dome Shield

1. Remove Acrylic DOME shield (Please do not scrape the Acrylic shield. It is recommended to wear cotton gloves when operate).
2. As shown in the figure below, first take the flexible flat cable through connector above the base plate and buckle it on the connector. Then buckle the cable on the connection below the CAMERA.
3. Lock the CAMERA up and fix the screws.
4. Install Acrylic shield

**Fig IV.1 Installation of the Acrylic Dome Shield**



## V. Install Bend-Tube-Style Bracket

Fig V.1 Connecting the dome to the wall mount with the bracket.

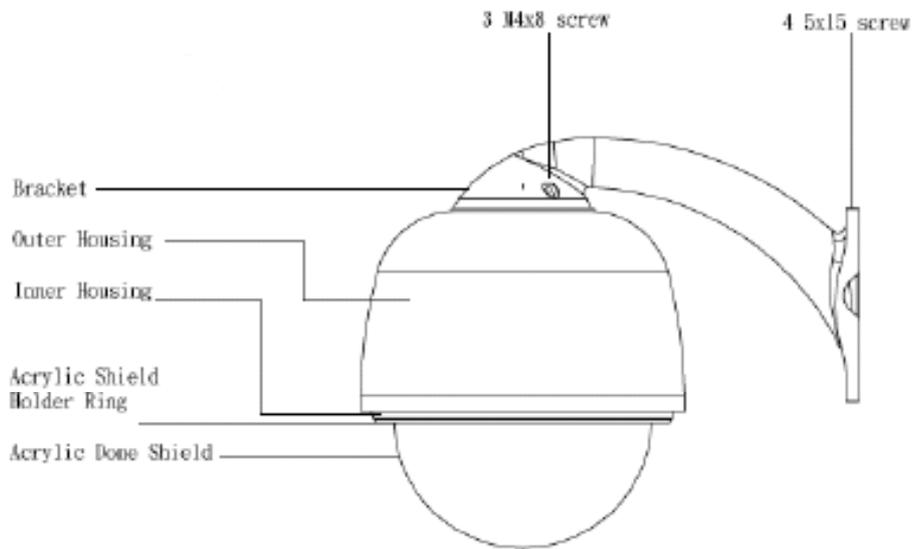
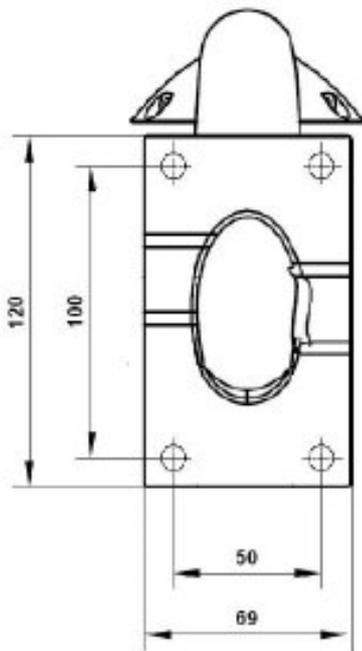


Fig V.2 Wall mount bracket installation

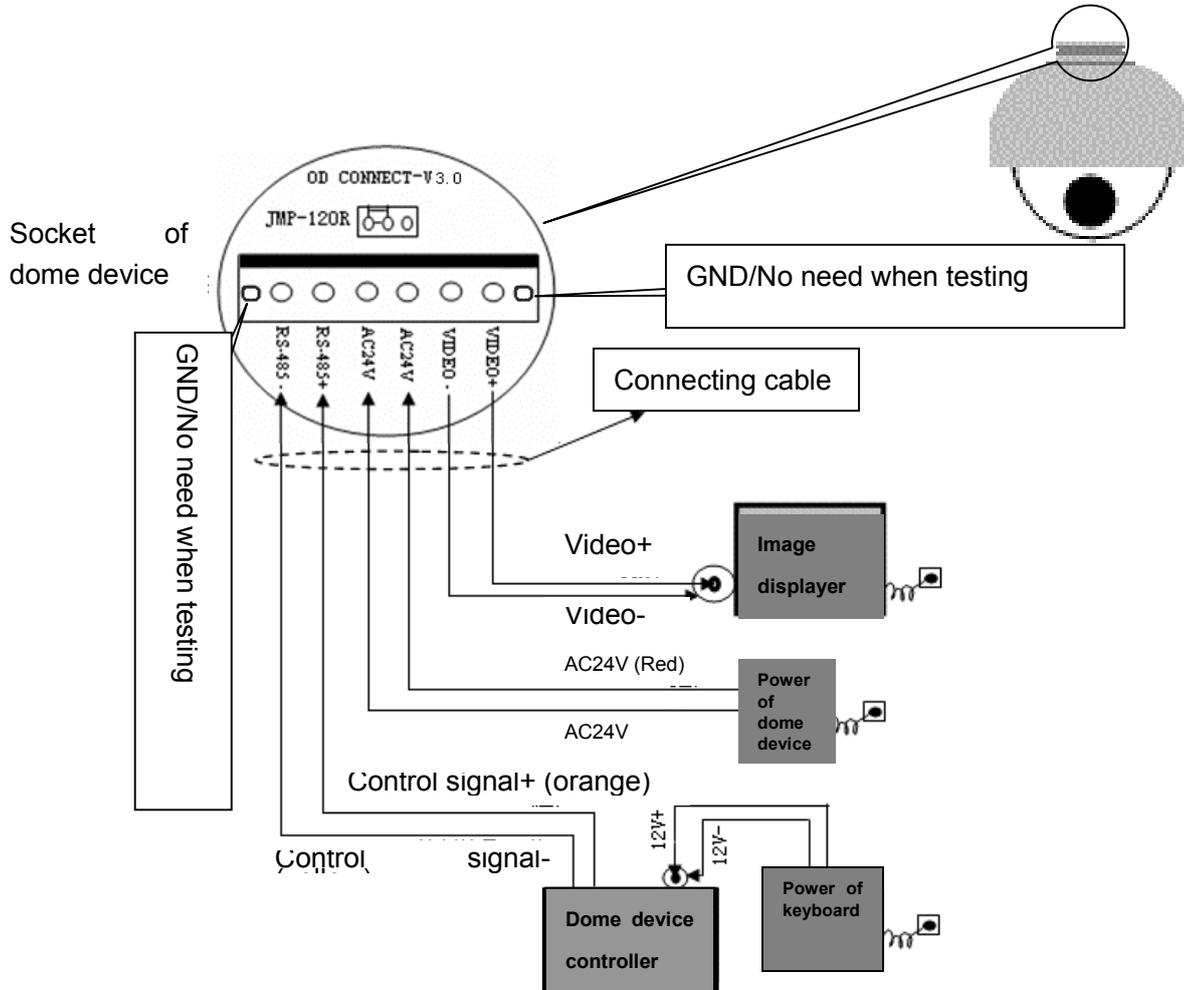


## Chapter Two Wiring and Setup of Dome System

### I. Wiring of Dome System

#### 1. Basic system connection. (One dome device)

From the basic system connection, user can understand the electric wiring attribute of the dome device and bring great operation convenience of installation, testing and demo. When using this product for the first time, please read carefully and follow this electric wiring drawing as any wrong wiring may lead to permanent damage of the dome device or damage of other equipment.



In the drawing, JMP-120R is the impedance matching selection of control signal and noise restrain of RS-485, when there is long distance transmission or noise-control, it can short jumper

**!Attention: No operation when the dome device is power on.**

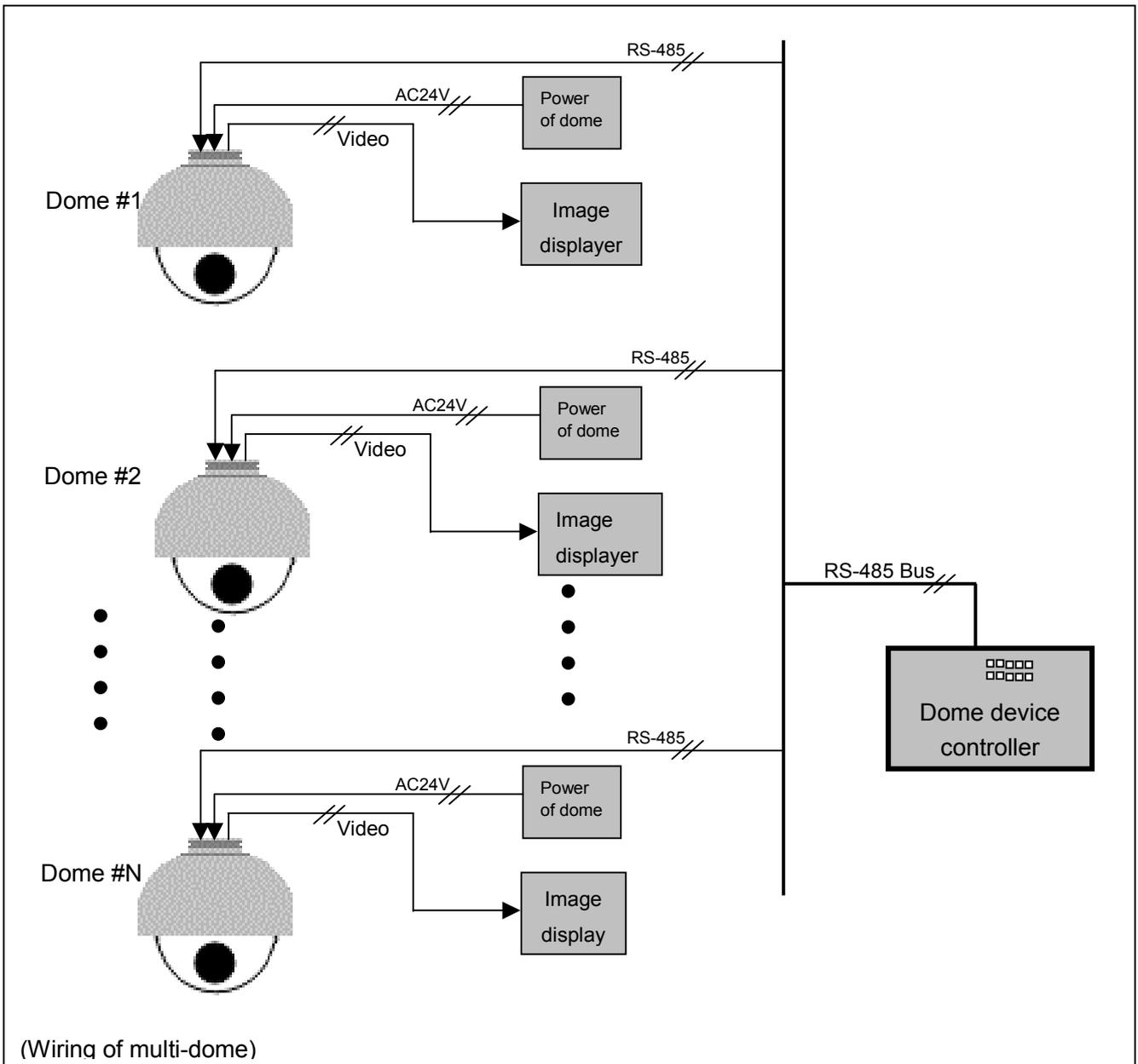
#### 2. Multi-dome device connection.

When connecting many dome devices together, the user can embed multi-device system with auxiliaries such as arrester device, video matrix, DVR and alarm box for system integration.

**AC24V:** Power supply of dome device, which will convert 110V/60Hz or 220V/50Hz input to AC 24V output and supply to the dome device.

**RS-485 Bus:** It is for the control signal (RS-485 signal) output of controller, connecting to the communication input terminals of control cable of each dome device.

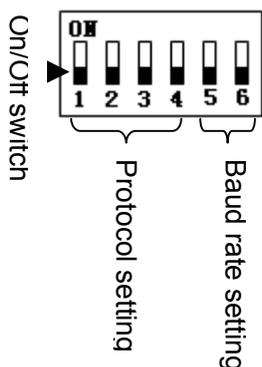
**Video:** It is for image signal output of dome device, (can directly output to video equipment such as monitor or video matrix. Take care of the match up of impedance.)



## II. Setting of Dome Device communication

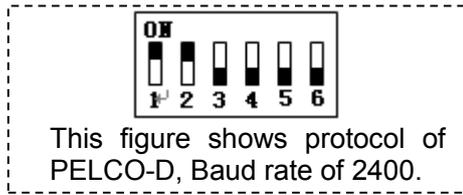
Before installation and use, the setting of communication protocol and transmission speed (baud rate) should comply with the control system.

1. Setting protocol and baud rate of dome device.



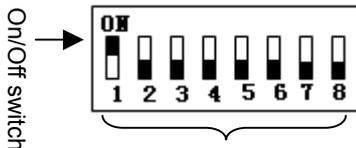
On/Off status	1 <sup>st</sup> digit	2 <sup>nd</sup> digit	3 <sup>rd</sup> digit	4 <sup>th</sup> digit	5 <sup>th</sup> digit	6 <sup>th</sup> digit
Protocol type						
<b>PELCO-D</b>	ON	ON	OFF	OFF	**	**
<b>PELCO-P</b>	OFF	OFF	ON	OFF	**	**
<b>TeleEye DM2</b>	ON	ON	ON	OFF	**	**

**Attention:** the protocol and baud rate of dome device should comply with those of controller, which need to be restarted after revision.

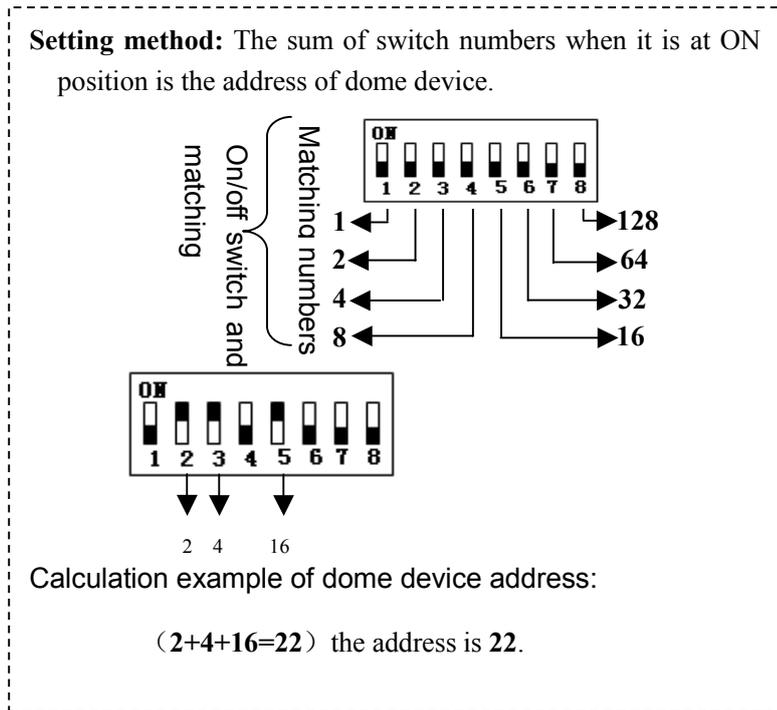


On/Off status Baud rate	5 <sup>th</sup> digit	6 <sup>th</sup> digit
<b>2400</b>	OFF	OFF
<b>4800</b>	OFF	ON
<b>9600</b>	ON	OFF
<b>19200</b>	ON	ON

2. Address setting of dome device.



Setting address for dome device (this figure shows the address of dome device No 1).



Dome device range: 0~255.

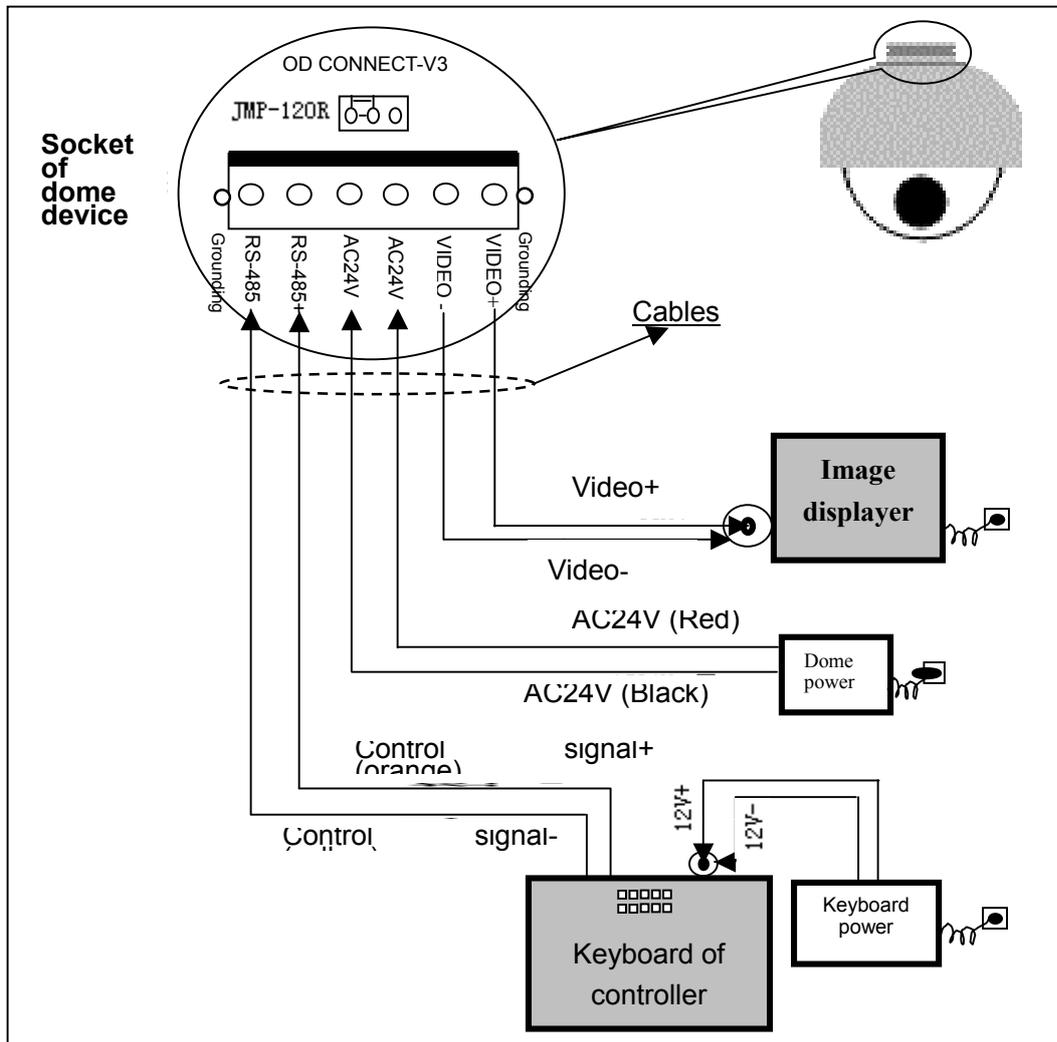
Setting of Dome Device ID

["O" represents ON]

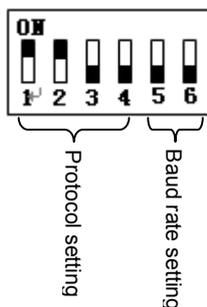
Dome Address (ID Number)	switch state	1	2	3	4	5	6	7	8
		ON  OFF	ON  OFF	ON  OFF	ON  OFF	ON  OFF	ON  OFF	ON  OFF	ON  OFF
0									
1		O							
2			O						
3		O	O						
4				O					
5		O		O					
6			O	O					
7		O	O	O					
8					O				
9		O			O				
10			O		O				
11		O	O		O				
12				O	O				
13		O		O	O				
14			O	O	O				
15		O	O	O	O				
16						O			
17		O				O			
18			O			O			
19		O	O			O			
20				O		O			
...		...	...	...	...	...	...	...	...
255		O	O	O	O	O	O	O	O

## Chapter Three Fast Operation Guide of Dome Device

### I. Wiring (Please do not turn the power on).



### II. Setting protocol and baud rate. (Turn the power off when setting, and restart the device after revision).



The figure shows: Protocol: **PELCO-D**

Baud rate: **2400 bps**

(Please refer to detailed parameter in next chapter)

*This dip switch located on PCB in the dome device*

**III. Setting dome device address.** (Turn the power off when setting, and restart the device after revision).



The figure shows: Address of the dome device: No. 1

(Please refer to detailed parameter in next chapter)

Set address for dome

*This dip switch located on PCB in the dome device*

**IV. Install camera.** (Please refer to camera installation for details).

- Attention: 1. Do not connect the camera and dome device with FFC in a wrong way.  
 2. The installation holes of different camera differ.

**V. Connect the power of dome device.**

At this moment, the self-test (rotation) of dome device and self-test (there will be image on the monitor) of camera can be seen.

Attention: When the dome device is self-testing, it is normal when sound is issued caused by the block of dome device after 2~5 seconds of vertical movement, which is the tilt orientation of the dome itself.

**VI. Controller setting.**

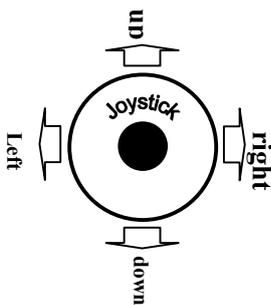
**Set the protocol, baud rate and address of the keyboard controller identical with those of dome device.** (Please refer to keyboard controller instruction manual).

**Attention:** If the setting of protocol of dome device is auto detection, the protocol of keyboard controller can be set arbitrarily. But its baud rate should be set identical with that of the dome device.

**VII. Start testing.**

When all the above are ready, the testing to dome device can be started.

1. Direction control test of dome device

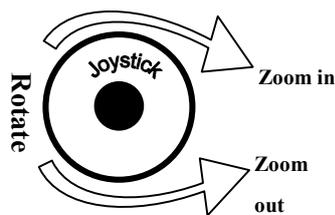


The directions (up, down, left and right) of the dome device can be controlled by using the keyboard controller, as indicated in the figure.

**Note:** the working of dome device is normal

(Please refer to the next section for demonstration of menu operation and control of dome device.)

2. Zooming control test of camera



Zooming of the camera can be controlled by zooming function Joystick or by using TELE (zoom in) and WIDE (zoon out) on the keyboard button.

**Note:** The camera and dome device are normal

**VIII. Complete the test.** (Summary).

1. If the performance of item 7 is normal, it indicates the system is basically normal. Please do not change the wiring and various setting to avoid fault and unnecessary damage and loss.
2. If the performance of item 7 is abnormal, or only one item works normally, please check the wiring (item 1 and 4) and setting (item 2, 3 and 6) carefully.

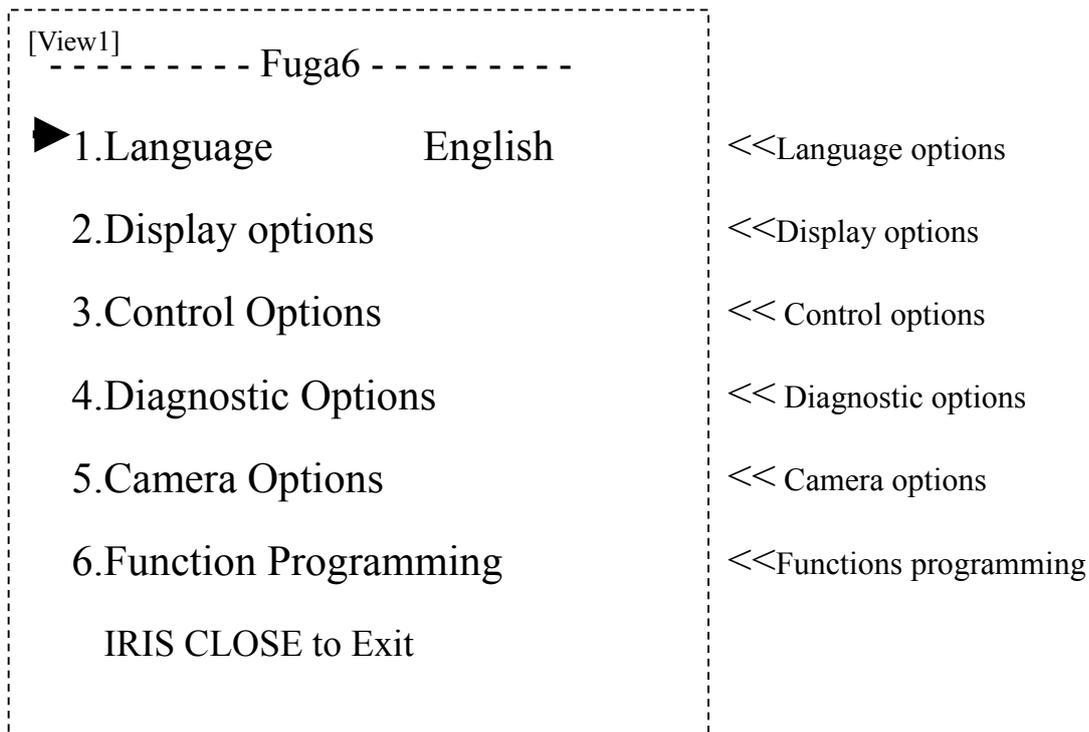
# Chapter Four -English Operation Menu of Dome Device

## I. Main menu

<1>. Press **CALL+90+ENTER** on the keyboard to enter the main menu of dome device (fig.1).

<2>. Select options Joy stick only between **up and down**, the arrow points to the current selected option. Press **OPEN** or **left or right of Joystick** to command entering the submenu of that option or change the value or setting of that option.

<3>. Press **CLOSE** to exit menu or return to upper stage menu.



## II. Tree Menu List.

<1>.All sub-menus can be seen clearly in this tree list.

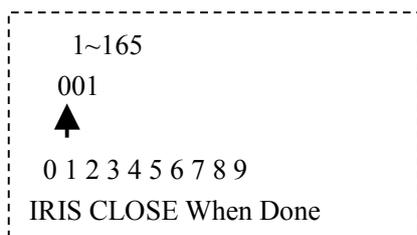
1.Language English <<Language options **Joystick left or right to select**

2.Display options <<Display options

1.Preshot setup <<Preshot setup options

1.Numder 1 <<Preshot number selection **Press OPEN or Joy stick left or right to**

**enter**



<<The default number after entering is 001. (hundred bit/ten bit/single bit). Joy stick left or right to select preshot position and press **OPEN** to confirm, and Joy stick left or right again to select numbers (0~~9). Press **OPEN** to confirm the selection.

Press **CLOSE** to exit or return to upper stage menu when programming is done. **Press OPEN or Joy stick left or right to enter**

2.Set Preshot

IRIS CLOSE When Done

<<Set preshot

Select preshot and press **CLOSE** to confirm the programming when done and auto exit and return to the upper stage menu.

3.Call Preshot

Call out

<<Call preshot. **Press OPEN or joystick left or right to enter**

The action of the dome device can be seen and return to corresponding preshot point.

4.Delete preshot

Are you sure to do this?  
IRIS OPEN to Confirm  
IRIS CLOSE to Cancel

<<Delete preshot. **Press OPEN or Joystick left or right to enter**

<<Reminder: Are you sure to delete preshot?

Press OPEN to confirm

Press **CLOSE** to exit and return to upper stage menu.

5.Name \_\_\_\_\_

<<Edit the name of preshot. **Press OPEN or Joy stick left or right to enter**

↑  
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 \_  
IRIS CLOSE When Done

<<Joystick left or right when programming to select preshot and press **OPEN** to confirm.

Joystick left or right to select (0~~9 or A~~Z).

Press **OPEN** to confirm selection.

Press **CLOSE** to exit or return to upper stage menu when programming is done.

6.Name Display ON/OFF

IRIS CLOSE to Exit

<<Name display On/Off

**Joystick left or right to select**

2.Sector Setup

<<Sector setup **Press OPEN or Joy stick left or right to enter**

1.Number ( 1 ~ 9 )

<<Number selection

2.Name \_\_\_\_\_

<<Name editing

**Press OPEN or Joy stick left or right to**

↑  
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 \_  
IRIS CLOSE When Done

<< Joy stick left or right when programming to select preshot and press **OPEN** to confirm.

Joy stick left or right to select (0~9 or A~Z). Press

**OPEN** to confirm selection.

Press **CLOSE** to exit or return to upper stage menu when programming is done.

3.Pan Start pos 0.0

IRIS CLOSE When Done

<<Setup pan start point. **Press OPEN or Joy stick left or right to enter**

Capture the start point and press **CLOSE** to exit and return to upper stage menu.

4.Pan End pos 0.0

IRIS CLOSE When Done

<< Setup pan end point. **Press OPEN or Joy stick left or right to enter**

Capture the end point and press **CLOSE** to exit and return to upper stage menu.

5. Tilt Start pos 0.0 << Setup tilt start point. **Press OPEN or Joy stick left or right to enter**  
 Capture the start point and press **CLOSE** to exit and return to upper stage menu.

IRIS CLOSE When Done

6. Tilt End pos 0.0 << Setup tilt end point. **Press OPEN or Joy stick left or right to enter**  
 Capture the end point and press **CLOSE** to exit and return to upper stage menu.

IRIS CLOSE When Done

7. Name display ON/OFF <<Sector name display On/Off **Joy stick left or right to select**  
**IRIS CLOSE to Exit**

3. Coordinates ON/OFF <<Coordinates display On/Off **Joy stick left or right to select**

4. Crosshairs ON/OFF <<Crosshairs On/Off **Joy stick left or right to select**

5. Start-UP scr msg ON/OFF <<Start-up screen message display On/Off  
**Joy stick left or right to select**

**IRIS CLOSE to Exit**

### 3. Control options <<Control options **Press OPEN or Joy stick left or right to enter**

1. Set pan and Tilt <<Pan/Tilt setup of dome device **Press OPEN or Joy stick left or right to enter**

1. Pan Reverse ON/OFF << Pan Reverse ON/OFF **Joy stick left or right to select**

2. Tilt Reverse ON/OFF << Tilt Reverse ON/OFF **Joy stick left or right to select**

3. +2 Tilt Limit ON/OFF <<+2 Tilt Limit ON/OFF **Joy stick left or right to select**

4. Find Home on STA ON/OFF << Find Home on start ON/OFF **Joy stick left or right to select**

**IRIS CLOSE to Exit**

2. Set Default Function <<Set default function **Press OPEN or Joy stick left or right to enter**

1. Default Function P/V/T <<Select default function (Preshot/Tour/PTZ) **Press OPEN or Joy stick left or right to enter**

2. Number 1 << Function number selection **Press OPEN or Joy stick left or right to enter**

1~128  
 001  
 ▲  
 0 1 2 3 4 5 6 7 8 9  
 IRIS CLOSE When Done

<< Joy stick left or right when programming to select preshot and press **OPEN** to confirm.

Joy stick left or right to select (0~9). Press **OPEN** to confirm selection.

Press **CLOSE** to exit or return to upper stage menu when programming is done.

3. Delay 001 <<Time delay setting (second) **Press OPEN or Joy stick left or right to enter**

1~999  
 001  
 ▲  
 0 1 2 3 4 5 6 7 8 9  
 IRIS CLOSE When Done

<< Joy stick left or right when programming to select preshot and press **OPEN** to confirm.

Joy stick left or right to select (0~9). Press **OPEN** to confirm selection.

Press **CLOSE** to exit or return to upper stage menu when programming is done.

4.Operation	ON/OFF	<<Default function	On/Off	Joy stick left or right to select
<b>IRIS CLOSE Exit</b>				
3.Speed Limit	ON/OFF	<<Operation speed limit	On/Off	Joy stick left or right to select
4.Auto Flip	ON/OFF	<<Auto flip	On/Off	Joy stick left or right to select
5.Auto Focus	PTZ/OFF/Z	<<Auto focus options		Joy stick left or right to select
6.Auto AE	PTZ/OFF/Z	<<Auto AE option		Joy stick left or right to select
7.Vector scan AF	ON/OFF	<<Vector scan auto focus control		Joy stick left or right to select

IRIS CLOSE to Exit

- 4.Diagnostic Options <<Diagnostic options **Press OPEN or Joy stick left or right to enter**
- 1.Clear Memory <<Clear data in the memory **Press OPEN or Joy stick left or right to enter**
- Are you sure to do this?  
 IRIS OPEN to Confirm  
 IRIS CLOSE to Cancel
- <<Reminder: are you sure to do this.  
 Press OPEN to confirm.  
 Press **CLOSE** to exit and return to upper stage menu.
- 2.Restore Def Setting <<Restore default setting **Press OPEN or Joy stick left or right to enter**
- Are you sure to do this?  
 IRIS OPEN to Confirm  
 IRIS CLOSE to Cancel
- << Reminder: are you sure to do this.  
 Press OPEN to confirm.  
 Press **CLOSE** to exit and return to upper stage menu.
- 3.Color system PAL/NTSC << PAL/NTSC switch **Joy stick left or right to select**
- 4.Scan & Camera Reset(Null) <<Restart dome camera. **Press OPEN or Joy stick left or right to enter**
- 5.Dome Information <<Dome information. **Press OPEN or Joy stick left or right to enter**
- FuGa6-----  
 Camera:x x x x x x x x  
 Protocol:x x x x x x x x  
 Baud rate: x x x x  
 Dome No.:x x x  
 IRIS CLOSE to Exit
- <<Name of dome  
 <<Type of camera  
 <<Control protocol  
 <<Baud rate  
 <<Dome number  
 << Press **CLOSE** to exit and return to upper stage menu.
- IRIS CLOSE to Exit

5.Camera Options << Camera options **Press OPEN or Joy stick left or right to enter**

1.Zoom and Focus << Zoom and focus setting **Press OPEN or Joy stick left or right to enter**

- 1.Zoom Speed (0~8) <<Zoom speed setting. **Joystick left or right to select**
- 2.Digital Zoom ON/OFF <<Digital zoom in On/Off **Joystick left or right to select**
- 3.AF Sensitivity High/Low <<Auto focus sensitivity setting. High/Low **Joystick left or right to select**

**IRIS CLOSE to Exit**

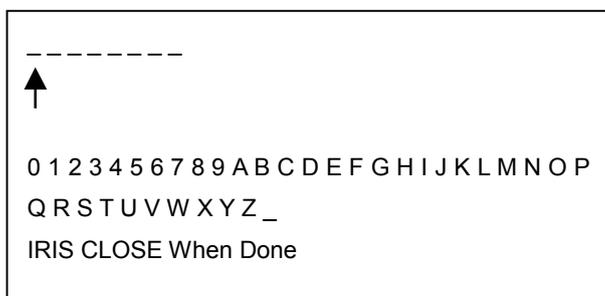
2.Auto Exposure << Auto exposure setting. **Press OPEN or Joy stick left or right to enter**

- 1.AE Mode Auto/Manual/shutter/Iris <<Auto exposure mode selection. **Joystick left or right to select**
- 2.shutter Speed xx <<Shutter speed setting. **Joystick left or right to select**
- 3.Iris Fxx <<Iris setting. **Joystick left or right to select**
- 4.Gain x <<Gain setting. **Joystick left or right to select**

**IRIS CLOSE to Exit**

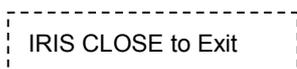
3.Camera Name <<Camera name setting **Press OPEN or Joystick left or right to enter**

- 1.Name \_\_\_\_\_ <<Edit camera name **Press OPEN or Joystick left or right to enter**



<< Joy stick left or right when programming to select preshot and press **OPEN** to confirm.  
Joy stick left or right to select (0~~9 or A~~Z).  
Press **OPEN** to confirm selection.  
Press **CLOSE** to exit or return to upper stage menu when programming is done.

- 2.Change Name Loc <<Change display location of name. **Press OPEN or Joystick left or right to enter**



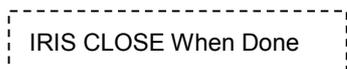
<<Joy stick arbitrarily and the display will be changed on the screen.

- 3.Name Display ON/OFF <<Name display On/Off **Joystick left or right to select**

**IRIS CLOSE to Exit**

4.Mask Setting <<Mask sector setting **Press OPEN or Joy stick left or right to enter**

- 1.Nunder (1 ~ 8) <<Mask sector number selection. **Joystick left or right to select**
- 2.Mask Edit <<Mask editing **Press OPEN or Joystick left or right to enter**



<<Capture the masking point, press CLOSE to confirm. The system will auto exit and return to upper stage menu.

- 3.Mask Display ON/OFF << Mask Display ON/OFF **Joystick left or right to select**

**IRIS CLOSE to Exit**

5.WB Mode Auto/Manual/Indoor/Outdoor/Onepush/Taw <<White balance mode options

**Press OPEN or Joystick left or right to**

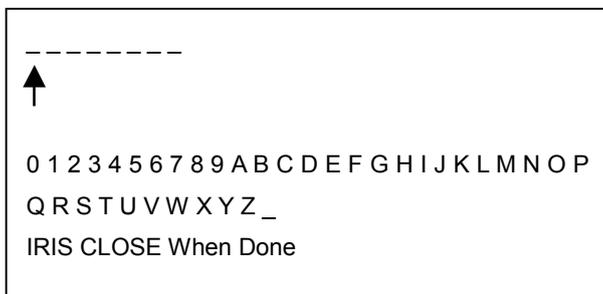
6.Back Light	ON/OFF	<<Back light	On/Off	<b>Joystick left or right to select</b>
7.Picture Flip	ON/OFF	<<Picture flip	On/Off	<b>Joystick left or right to select</b>
8.Picture LR Rev	ON/OFF	<<Picture left and right reverse	On/Off	<b>Joystick left or right to select</b>
9.Picture Stable	ON/OFF	<<Picture stabilized	On/Off	<b>Joystick left or right to select</b>
10. Day/Night	ON/OFF	<<Black/white and color switch	On/Off	<b>Joystick left or right to select</b>
11. F-OSD	ON/OFF	<<Camera function display	On/Off	<b>Joystick left or right to select</b>

IRIS CLOSE to Exit

## 6.Function Programming <<Special function programming **Press OPEN or Joystick left or right to enter**

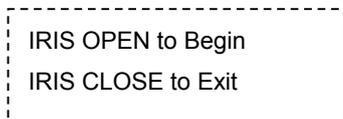
### 1.PTZ Tour (Pattern) <<Pan/Tilt/Zoom tour programming **Press OPEN or Joystick left or right to enter**

- 1.Number ( 1 ~ 3 ) <<PTZ tour number **Joystick left or right to select**
- 2.Name ----- <<Edit PTZ name **Press OPEN or Joy stick left or right to enter**



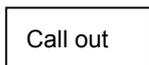
<<Joystick left or right when programming to select preshot and press **OPEN** to confirm.  
 Joystick left or right to select (0~~9 or A~~Z).  
 Press **OPEN** to confirm selection.  
 Press **CLOSE** to exit or return to upper stage menu when programming is done.

### 3.Program a Tour <<Enter PTZ tour programming **Press OPEN or Joy stick left or right to enter**

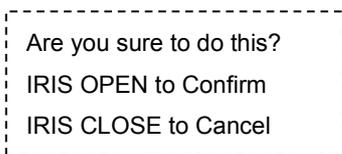


<<Press OPEN to confirm and start programming.  
 <<Press CLOSE to exit the programming and return to upper stage menu.

### 4.Run a Tour <<Run Pan/Tilt/Zoom tour (pattern) **Press OPEN or Joy stick left or right to enter**



### 5.Delete a Tour <<Delete PTZ tour. **Press OPEN or Joy stick left or right to enter**



<< Reminder: are you sure to do this.Press OPEN to confirm.  
 Press **CLOSE** to exit and return to upper stage menu.

### 6. Name Display ON/OFF <<PTZ tour name display On/Off **Joy stick left or right to select** IRIS CLOSE to Exit

2.Program Vector Scan << Program vector scan. **Press OPEN or Joy stick left or right to enter**

- 1.Number ( 1 ~ 6 ) <<Vector scan number **Joy stick left or right to select**
- 2.Program a Vector scan <<Vector scan programming **Press OPEN or Joy stick left or right to enter**

	Name	Num	V	Dwell
1	▶	-	-	-
2	-	-	-	-
3	-	-	-	-
...				
16				

IRIS CLOSE When Done

<<Joystick arbitrarily to move the cursor, and stop the cursor at place of programming. Press **OPEN** to enter the selection.

Function name

**Name** → P/T/V

<<Press OPEN continuously to select P: Preshot, T: self-study, V: vector scan

Function number

**Num** →

1~128

001

▲

0 1 2 3 4 5 6 7 8 9

IRIS CLOSE When Done

<< Joy stick left or right when programming to select preshot and press **OPEN** to confirm.

Joy stick left or right to select (0~9). Press **OPEN** to confirm selection.

Press **CLOSE** to exit or return to upper stage

Velocity selection

**M** → 1~9

<< Press OPEN continuously to select

Dwell time

**Dwell** →

1~99

001

▲

0 1 2 3 4 5 6 7 8 9

IRIS CLOSE When Done

<< Joy stick left or right when programming to select preshot and press **OPEN** to confirm.

Joy stick left or right to select (0~9). Press **OPEN** to confirm selection.

Press **CLOSE** to exit or return to upper stage menu when programming is done.

3.Run a Vector Scan <<Run vector scan. **Press OPEN or Joy stick left or right to enter**

Call out

4.Delete a Vector Scan <<Delete vector scan **Press OPEN or Joy stick left or right to enter**

Are you sure to do this?

IRIS OPEN to Confirm

IRIS CLOSE to Cancel

<< Reminder: are you sure to do this.

Press OPEN to confirm.

Press **CLOSE** to exit and return to upper stage

**IRIS CLOSE to Exit**

### 3.Program Alarms

<<Program alarms. **Press OPEN or Joystick left or right to enter**

	Name	Num	E/N
1	-	-	-
2	-	-	-
3	-	-	-
4	-	-	-

IRIS CLOSE to Exit

<<This function is not available at the moment.

Name →

Num →   
0  
↑  
0 1 2 3 4 5 6 7 8 9  
IRIS CLOSE When Done

E/N →

## Chapter Five Coding description of protocol and serial transmission rate

When setting communication protocol of the Dome device (first 4 bits of SW2) and default serial transmission rate of the protocol (last 2 bits of SW2), if default serial transmission rate of the protocol does not match with serial transmission rate of host, please set the default serial transmission rate of the protocol consistent with the default serial transmission rate of host according to Chapter two II.

Operation	Key
Set Preset Point	<b>PRESET(hold 2 sec) + N + ENTER(+N+Enter+N+Enter+...)+SET</b> 1) Press and hold PRESET key for 2 seconds. 2) Adjust the camera to the desired direction and focus. 3) Input the preset number. 4) Press ENTER. 5) Repeat step 2 to step 4 if you want to set more preset point. 6) Press set key to exit
Call Preset	<b>N + PRESET</b> 1) Input the preset number 2) Press ENTER
Set Home Position	<b>T + DWELL + N + PRESET</b> 1) Input a number T(a value between 1 and 255). T represents the time between stoping operation to the camera and the camera's automatically turning back to the home position. 2) Press DWELL. 3) Input a preset number which you want to be your home position. 4) Press PRESET.
Delete Home Position	<b>0 + DWELL + 0 + PRESET</b>
Set Preset Tour Sequence	<b>TOUR(hold 2 sec) + S + Enter + N + Enter(+N+Enter+N+Enter+... )+ Set</b> 1) Press and hold TOUR for 2 seconds. 2) Input the sequence number(from 1 to 4) 3) Press ENTER. 4) Input the preset number representing the first tour point. 5) Press ENTER. 6) Repeat step 2 and step 3 for other tour point. 7) Press SET to exit.

Activate Preset Tour	<p><b>T + DWELL + S + TOUR</b></p> <p>1) Input a number T, where T represent how much second the camera rest on one tour point before it move to another tour point.</p> <p>2) Press DWELL.</p> <p>3) Input S where S is the tour sequence number</p> <p>4) Press TOUR.</p>
Delete Preset Tour	<p><b>TOUR + S + DEL</b></p> <p>1) Press TOUR.</p> <p>2) Input the number S where S represents the tour sequence number.</p> <p>3) Press DELETE.</p>
Auto Pan	<p><b>SCAN + 0 + ENTER</b> : Set auto pan left limit</p> <p><b>SCAN + 1 + ENTER</b> : Set auto pan right limit</p> <p><b>S + SCAN</b> : Activate auto pan.</p> <p>If S is within 1 – 80, the scan rate is slow.</p> <p>If S is within 81-160, the scan rate is medium.</p> <p>If S is within 161-250, the scan rate is high.</p>
Focus Control	<p>Generally the camera will automatically adjust the focus to get clearer image based on the distance of the camera.</p> <p>But you can manually adjust the focus by pressing FAR, NEAR as you wish.</p> <p>The camera will switch back to automatically when you conduct other operations such as moving the joystick.</p>
Iris Control	<p>Generally the camera will automatically adjust the iris to get clearer image based on the illumination.</p> <p>But you can manually adjust the iris by pressing OPEN, CLOSE as you wish.</p> <p>The camera will switch back to automatically when you conduct other operations such as moving the joystick.</p>

## Chapter Six Trouble Shooting of Dome Device

S.N.	Problem Description	Possible Reason	Troubleshooting	Remarks
1	After power on, no motion and no image.	Power cable is connected improperly.	Check if the power cable is connected to power of AC24V	Please follow the above basic system wiring strictly
		Fault of power PCB of dome device	Change the power PCB	
		slip ring power wires disconnected	Change slip ring	
		Fault of main control board	Change main control board	
2	After power on, the dome device rotate normally, but no character nor image display	Character monitor switch is off	Switch on the character monitor according to the menu instruction	About 45 second after the dome device is power on.
		Improper connection between camera and dome device	Replace a FFC cable or a camera	
3	After self-test of the dome device, menu cannot be displayed	wrong operation	CALL+90+ENTER open	After self-test, the menu can only be displayed when there is image display of the dome device
		Fault of OSD control board	Change OSD board	
4	Distorted character or image	Interfered by exterior electronic signal (noise) or the camera is directed to the monitor screen	Grounding the dome device or shut off the surrounding big electronic devices(electric, HF, signal generating) equipment, or rotate the camera	Shielded cable should be adopted for video cable
		System wrong function	Restart the dome device	
5	After power on, no self-test and motor is locked	The system setting is start self-test after receiving command and you can see the video on the screen	Connect the controller and set correct transmission protocol and baud rate as well as dome device address	There is character display in normal circumstance
6	Cannot stop pan rotation (rotate and stop alternatively)	OSD board is not properly connected with main control board or the photoelectric switch is broken	fix OSD board again, if the problem still exists, then replace the OSD board	Pan interrupter should be at 2/3 of the central slot within photoelectric switch
		Pan interrupter is not in due position	Adjust the pan interrupter	
7	After normal working, it will rotate one circle when being controlled	The system is checking the data again	It is normal event	If this happens frequently, please adjust the pan interrupter or check if the connection is too tight.

8	Vertical range is not within 90 ± 2 degree with large deviation	Fault occurs when the dome device is in tilt movement. It may be caused by obstacle of camera or other object, which lead to early tilt movement	Check and adjust the mechanical installation	
9	Self-test is normal, but cannot control	Wrong setting	Set the protocol, baud rate and address of dome device	
		Improper connection of control cable	Check the circuit	
10	Insensitive control of dome device	Overload or too long distance transmission	Add driver	Mostly happen in the connection
		Improper contact of control cable	Check the circuit	
		slip ring is damage	Replace slip ring	
		RS-485 protective discharge arresters broken	Change 485 protective discharge arresters	
11	Call out function fails	System failure caused by noise interference	Restart the dome device	
12	Auto action of dome device periodically	No transmission auto "call back" function is set to the dome device	Called this setting	
13	One dome working well while the other does not under identical operation	Something wrong with the setting or wiring	check the setting and wiring again	