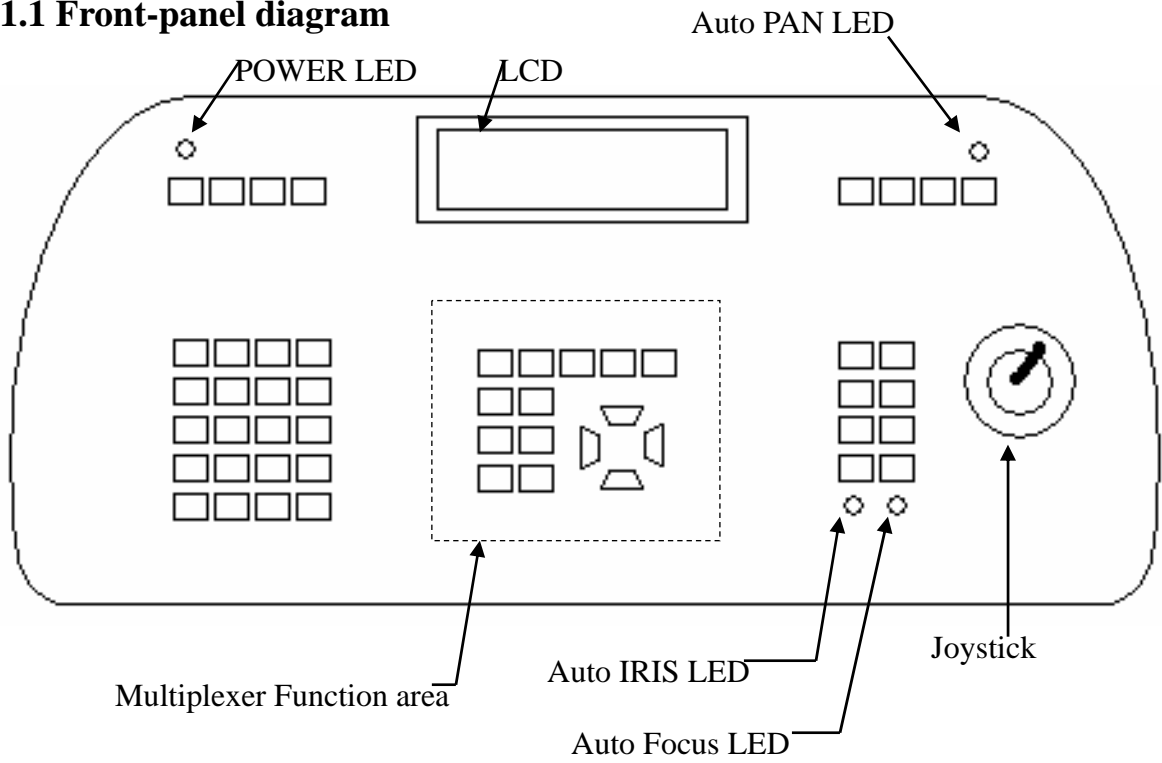
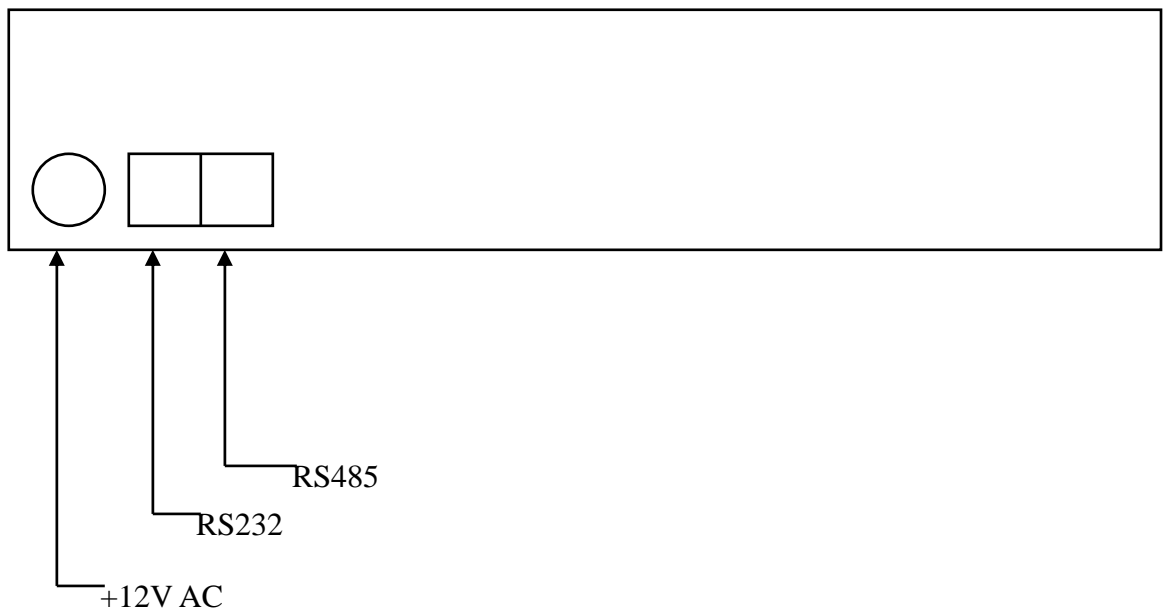


# 1. Front-panel and rear connects line

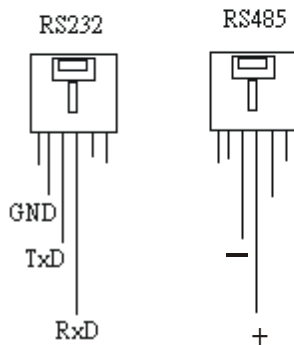
## 1.1 Front-panel diagram



## 1.2 Rear-panel connects diagram



## 1.3 Pins define



## 2. Function keys

### Joystick

-Control speed dome (Up/Down/Left/Right)

### CAM

-Speed dome selection (speed dome ID + CAM)

### MUX

-Multiplexer selection (multiplexer ID + MUX)

### DEV

-Others devices selection (ex. VCR, DVR)

-(Devices ID + DEV)

### Function key

F1 set up the speed of auto pan preset function

F2 set up the dwell time of auto pan preset function

F3 save the preset data

F4 set up the groups of auto pan preset

**0-9**

-Number keys

**ESC**

-Clear and exit

**ENT**

1. Enter key
2. Time display
3. Unlock (password + **ENT**)

**MAT** / **SHIFT** / **CTRL**

-Reserve (not use yet)

**FULL** / **4-P** / **9-P** / **13-P** / **16-P**

-The full screen and 4/9/13/16 partition screen of multiplexer display  
-DVR "REV", "FF", "STEP", "MUX" (Target on DV)

**LIVE/VCR**

-LIVE or PLAYBACK mode of the multiplexer  
-DVR "PLAY" (Target on DV)

**ZOOM**

-Enlarges mode of the multiplexer  
-DVR "ESC" (Target on DV)

**SEL**

-Control each screen of the multiplexer (select speed dome number)  
-DVR "REC" (Target on DV)

**FREEZE**

-The congeal mode of the multiplexer  
-DVR "STOP" (Target on DV)

**AUTO**

-The automatic sequence dwell mode of the multiplexer  
-DVR "ENT"

**MENU**

1. If the current target is a keyboard then into keyboard menu
2. If the current target is a MUX then into multiplexer menu
3. If current target is a DVR/VCR then into DVR/VCR menu

**UP** / **DOWN** / **LEFT** / **RIGHT**

-Controlling the MUX menu lists to up/ down/ left/ right direction

-Controlling the DVR menu lists to up/down/ left/ right direction (Target on DV)

**PRESET**

-Call preset

**MISC1**

-180 degree rotating (only for Hi Sharp, Pelco and Lilin speed dome)

**MISC2**

-Target device (Lock/Unlock)

-When on Multi Keyboard mode, master keyboard contain this function

**AUTO PAN**

-Preset auto pan

**IRIS**

**OPEN** / **CLOSE**

-Iris large/small

**FOCUS**

**FAR** / **NEAR**

-Focus far and focus near

**ZOOM**

**IN** / **OUT**

-Zoom in and zoom out

**AUTO**

**IRIS**

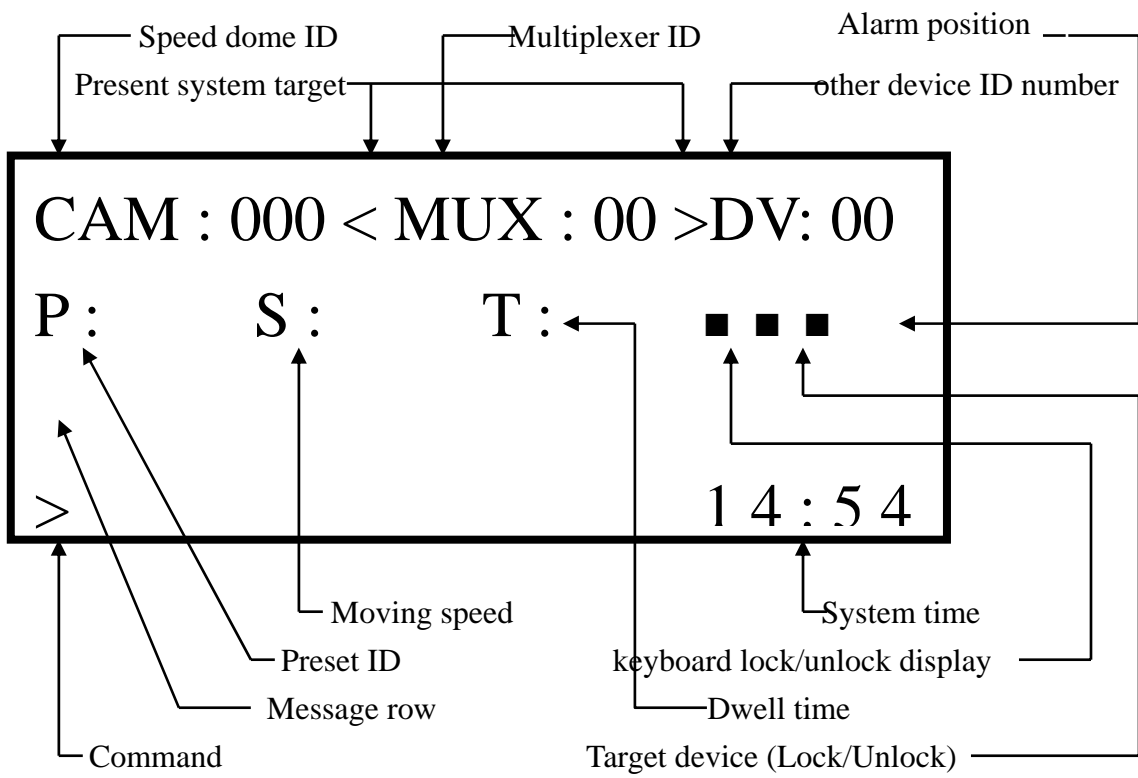
-Auto iris

**FOCUS**

-Auto focus

-PELCO, HISHARP are not supported this function.

### 3. LCD screen



## 4. Operating instructions.....For NICECAM

- Before you start, please make sure the following initial values are correct.

**(Using 1-2 way RS485 adapter) connects to speed dome and multiplexer directly**

Master = KB

CAM Type = NICECAM

**Through multiplexer, RS485 links to Port 1 and speed dome links to Port 2**

Master = MUX

CAM Type = NICECAM

Keyboard ID 1 is Master

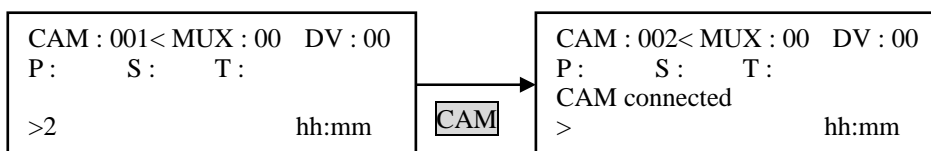
ID 2-4 is slave

If system only contains a Keyboard, then ID must be 1

- **(Please consult the Setup Menu chapter to operate the above)**

### 1. Speed dome ID define

Input speed dome ID (1-64), then press **CAM** button

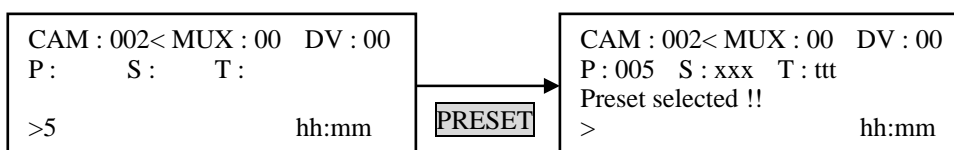


### 2. Moving around control function

To use the joystick control the speed dome to do moving around, the turning left/right/up/down speed is divided into 32 speeds

### 3. The preset positions function

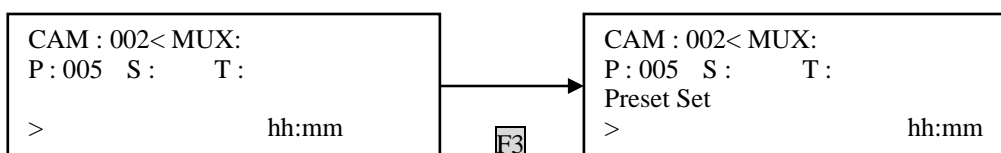
Input preset point number (1-64), then press **PRESET** button



### 4. The preset positions setup function

a. According to step 3, call preset

b. Use the joystick moving to the position that wants and press **F3**



5. The ZOOM in / out function

Press ZOOM **IN** or **OUT** button to get the size that wants then release

6. The FOCUS far / near function

Press FOCUS **FAR** or **NEAR** button until the focus that wants then release

**FOCUS** button is for auto focus

\* Auto focus would be closed because manual control

7. The IRIS open / close and auto IRIS function (No auto iris function for nicecam speed dome)

Press IRIS **OPEN** / **CLOSE** button until that wants then release

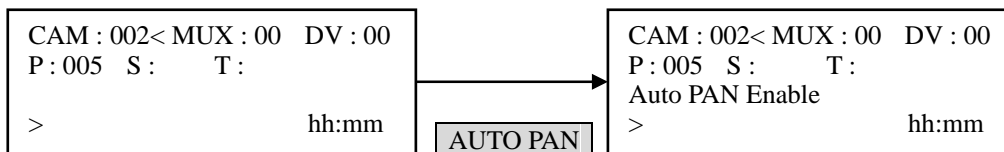
**IRIS** button is for auto IRIS

\* Auto iris would be closed because manual control

8. The Auto Pan function

Press number buttons to choice the group (1-6), then press **AUTO PAN** button runs the auto pan mode, press **AUTO PAN** button again, then auto pan mode will be closed.

Confirm the preset and preset groups, before running the auto pan mode.

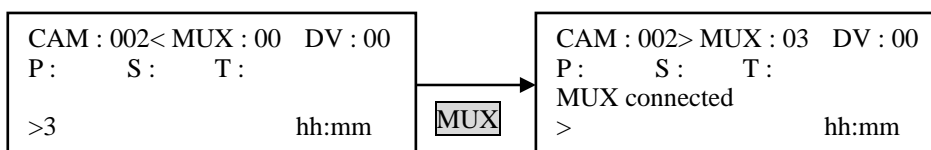


9. Target device lock function

When Multi Keyboard mode is on, if you want to control the speed dome for a long time and do not want to be interrupted by the other controllers. Please press **MISC2** to lock the current target device. If the target device changed, the previous device will be release. The current device is locked. If press **MISC2** again, the all devices will be release. This function is working only on the master keyboard.

10. Multiplexer ID define function

Input multiplexer ID (1-16), then press **MUX** button



11. Key Lock and Unlock

0101 + **ENT** for Key Lock

On Key Lock mode: Pass Word + **ENT** is for unlock

## 5. Setup Menu Operation

Press the **MENU** button to enter setup menu. (Using the top and bottom buttons to move the form and list, **ENT** for entering, **ESC** for exiting)

```
CAM : 002< MUX : 00 DV : 00
Setup Menu
>. System Menu
CAM Menu
```

Four major items: System Menu, CAM Menu, MUX Menu, and System Information

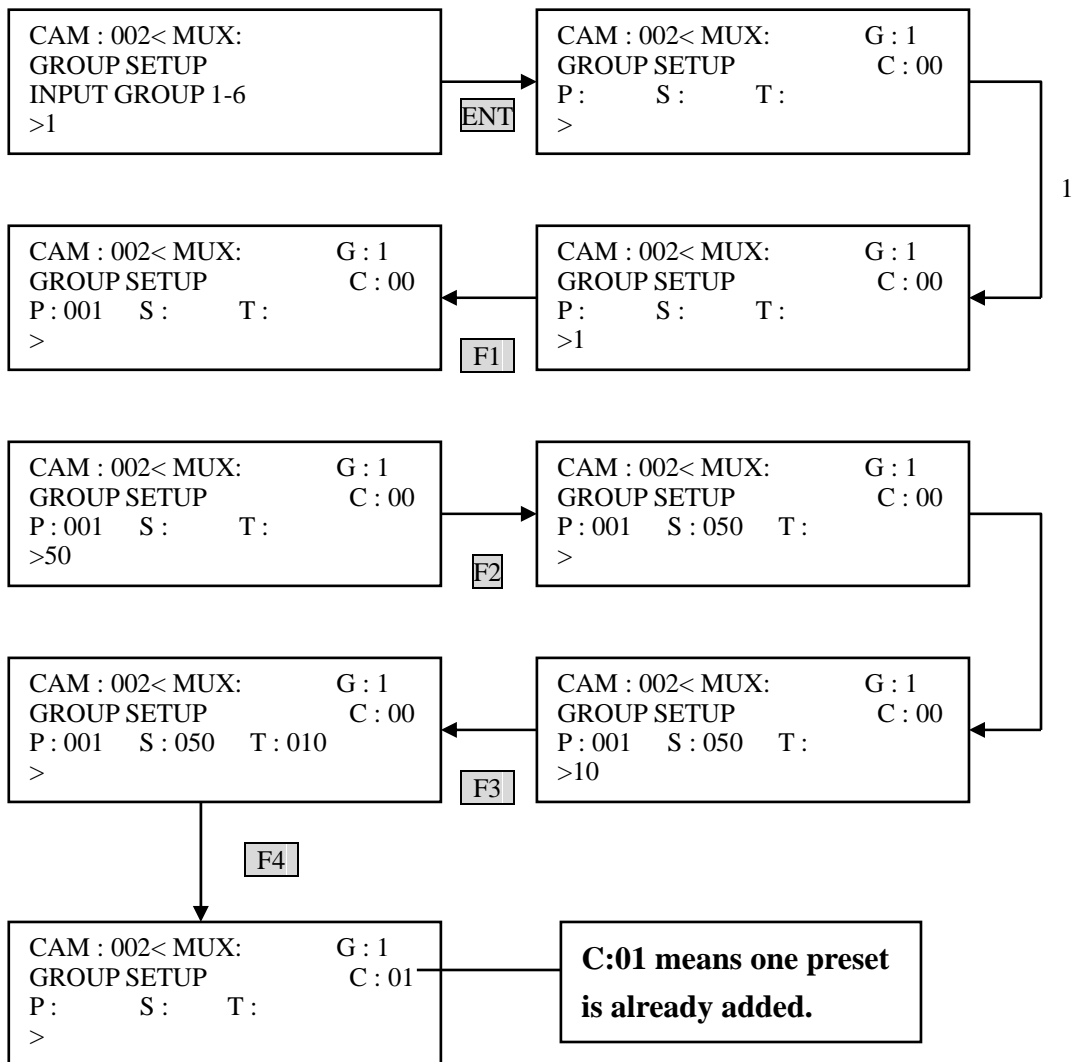
### 5.1 System Menu (The system set up)

1. Keyboard ID Setup –Set up the keyboard ID, Input 1-16 then press **ENT**
2. Master Setup –Master/Slave controller select
  - KB - This initial value links speed dome and multiplexer by port 2. (single keyboard mode)
  - MUX – Multi Keyboard
3. CAM Type Choice  
The brand of the speed dome:  
Lilin, Fine, Hisharp, Pelco-P, Pelco-D
4. Baud Rate Setup
  1. 9600 2. 4800 3. 2400 4. 1200 (usually is 9600)
5. Date and Time Setup –Date time format is for 20YY/ MM/ DD hh/mm  
Use the **←** and **→** for changing position to modify then **ENT**
6. LCD Back Light On/Off –turn on/off LCD background light
7. Voice On/Off –turn on/off buzzer (1. On 2.Off)
8. Load Default - Default KB ID = 1 , Master = KB, CAM Type = Lilin, Baud Rate = 9600, Voice = On , Backlight = On, Master MUX ID =1
9. Pass Word Setup –Before set up the new password, the old password must be confirmed then input a new password. Default password is 0000.



## 5.2 CAM Menu (The speed dome set up)

1. Zoom Speed Setup – set up the speed of zoom in and out function
  - There are eight speeds can be provided as choice, default value is 4
2. Focus Speed Setup – set up the speed of focus far and near function
  - There are eight speeds can be provided as choice, default value is 4
3. Group Setup – set up the auto pan preset groups
  - a. Choice groups (1 – 6)
  - b. Input the preset ID (1-64) then **F1**
  - c. Input the speed of pan preset moving values (1-64), and then **F2**
  - d. Input the elapsed time of preset (0-127), and then **F3**
  - i. Save, press **F4** (furthermore, the C on the right-up corner of screen will increase 1, means already set up one Preset)
  - e. Repeat step b- e set up other preset, total is 16 data can be saved
  - f. Press **ENT** after done a-f. Confirm save or abort then press **ENT** to exit menu



4. Symbol Display –Set up the screen shows the status of the speed dome
  - Choosing this item opens the status show function; choose this item again to close this function

### **5.3 MUX Menu (The Multiplexer set up)**

1. Master MUX ID Set – Set up the Master Multiplexer ID  
On Multi Keyboard mode, must set up the Master Multiplexer ID

### **5.4 System Information**

Search system information – Keyboard Software edition, Keyboard ID, System time search

## 6. Operating Instructions.....For Lilin

- Before you start, please make sure the initial values are correct.

**(Using 1-2 way RS485 adapter) connects to speed dome and multiplexer directly**

Master = KB

CAM Type = Lilin

**Through multiplexer, (RS485) links to Port 1 and speed dome links to Port2**

Master = MUX

CAM Type = Lilin

Keyboard ID 1 is Master

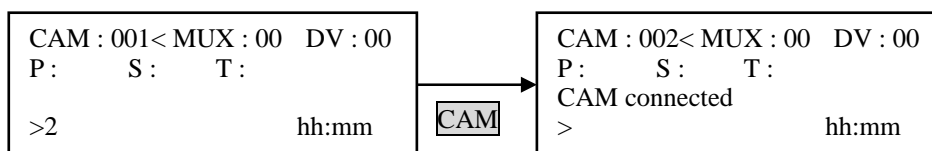
ID 2-4 is slave

If system only contains a Keyboard, then ID must be 1

- **(Please consult the Setup Menu chapter to operate the above)**

### 1. Speed dome ID define

Input speed dome ID (1-64), then press **CAM** button

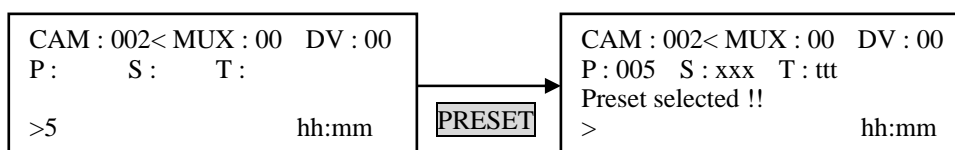


### 2. Moving around control function

To use the joystick control the speed dome to do moving around, the turning left/right/up/down speed is divided into 8 speeds

### 3. The preset positions function

Input the preset (1-128), then presses **PRESET** button



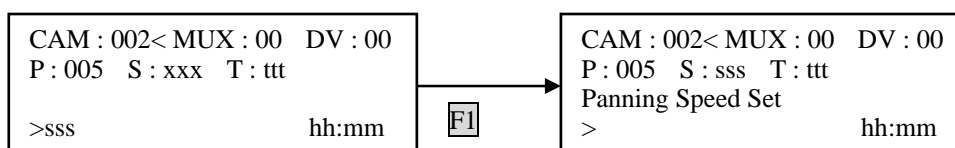
\* ttt = preset dwell time      \* xxx = the speed of the previous preset to current preset

### 4. The preset positions set-up function

A. According to step 3, call the preset

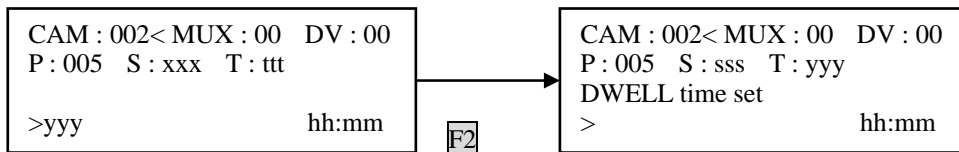
B. To use joystick movies to the position that wants and presses **F3**

C. Input the speed of the previous preset to this preset (1-255) then press **F1**

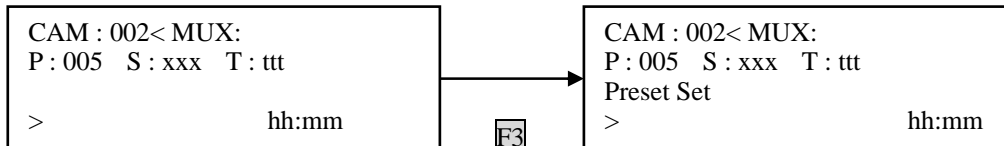


D. Input preset dwell time (0-255, if enter 0, the preset position will not stay when Auto PAN is enable)

Then press **F2**



E. Press **F3** to save all set data



5. Set up the groups of auto pan preset

Auto pan can sep up 1  preset, every 4 preset for one group. So there are 4 groups can set up. When you set up, input the group ID, first. Then press **F4** to save.

Examples:

- + F4 auto pan preset
- 12+ F4 auto pan preset
- 123+ F4 auto pan preset 2
- 1234+ F4 auto pan preset 6

6. The ZOOM in / out function

Press ZOOM **IN** or ZOOM **OUT** button to get the size that wants then release

7. The FOCUS far / near function

Press **FAR** or **NEAR** button until the focus that wants then release

**FOCUS** button is for auto focus

\* Auto focus would be closed because manual control

\*After to do Pan/Tilt or ZOOM IN/OUT operation, the auto-focus will be on

8. The Iris open /close and auto iris function (No auto iris for nicecam speed dome)

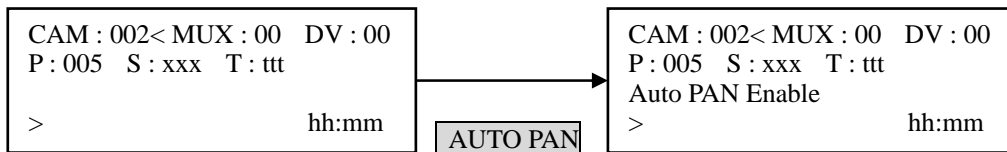
Press IRIS **OPEN** / **CLOSE** button until that wants

AUTO **IRIS** is for auto iris

\*Auto IRIS would be closed because manual control

9. **AUTO PAN** function

Press **AUTO PAN** button runs the auto pan mode, press **AUTO PAN** button again, the auto pan mode is going to close. Confirm the preset and preset groups, before running the auto pan mode.



10. 180 degree rotating function

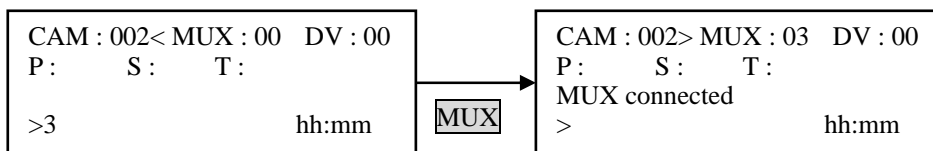
Press **MISC1** button to rotate 180-degree turning back, with 360-degree/sec speeds

11. Target device lock function

When Multi Keyboard mode is on, if you want to control the speed dome for a long time and do not want to be interrupted by the other controllers. Please press **MISC2** to lock the current target device. If the target device changed, the previous device will be release. The current device is locked. If press **MISC2** again, the all devices will be release. This function is working only on the master keyboard.

12. Multiplexer ID define function

Input multiplexer ID (1-16), then press **MUX** button



13. Key Lock and Unlock

0101 + **ENT** for Key Lock

On Key Lock mode: Pass Word + **ENT** is for unlock

## 7. Setup Menu Operation

Press the **MENU** key to enter setup menu. (Using the top and bottom key moves the form and list, **ENT** for entering, **ESC** for exiting)

```
CAM : 002< MUX : 00 DV : 00
Setup Menu
>. System Menu
CAM Menu
```

Four major items: System Menu, CAM Menu, MUX Menu, and System Information

### 7.1 System Menu (System set up)

1. Keyboard ID Setup –Set up the keyboard ID, Input 1-16 then press **ENT**
2. Master Setup –Master/Slave controller select  
KB - This initial value links speed dome and multiplexer by port 2. (single keyboard mode)  
MUX – Multi Keyboard
3. CAM Type Choice  
The brand of the speed dome:  
Lilin, NICECAM, Fine, Hisharp, Pelco-P, Pelco-D
4. Baud Rate Setup  
1. 9600 2. 4800 3. 2400 4. 1200(usually is 9600)
5. Date and Time Setup –Date time format is for 20 YY/ MM/ DD hh/ mm  
Use the **←** and **→** for changing position to modify then **ENT**
6. LCD Back Light On/Off –turn on/off LCD background light
7. Voice On/Off –turn on/off buzzer (1. On 2.Off)
8. Load Default - Default KB ID = 1, Master = KB, CAM Type = Lilin,  
Baud Rate = 9600, Voice = On, Backlight = On, Master MUX ID =1
9. Pass Word Setup –Before set up the new password, the old password must be confirmed then input a new password. Default password is 0000.

## **7.2 CAM Menu (Speed dome set up)**

1. Clear All preset point – clear all preset data
2. Alarm Buzzer Set – (On / Off)
3. Reset Alarm – Alarm clear

When alarm is appear, the alarm beeper and preset are on until alarm clear.

## **7.3 MUX Menu (Multiplexer set up)**

1. Master MUX ID Set – to set up Master multiplexer ID  
On Multi Key mode, must set up the Master multiplexer ID

## **7.4 System Information**

1. Search system information – Keyboard Software edition, Keyboard ID, System time search

## 8. Operating Instructions For.....Pelco-P / FINE

- Before you start, please make sure the initial values are correct.

**(Using 1-2 way RS485 adapter) connects to speed dome and multiplexer directly**

Master = KB

CAM Type = Pelco-P or FINE

**Through multiplexer, (RS485) links to Port 1 and speed dome links to Port 2**

Master = MUX

CAM Type = Pelco-P or FINE

Keyboard ID 1 is Master

ID 2-4 is slave

If system only contains a Keyboard, then ID must be 1

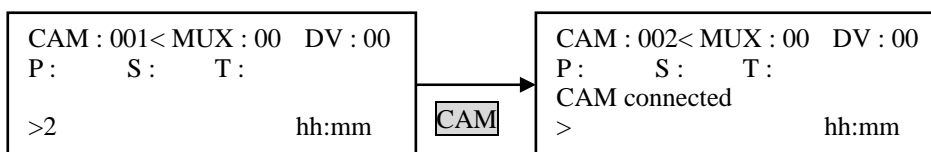
- **(Please consult the Setup Menu chapter to operate the above)**

### 1. Speed dome ID define

Input speed dome ID (1-32), then press **CAM** button

After calling the speed dome, Auto **Focus** and **IRIS** is on

**Auto PAN** will close

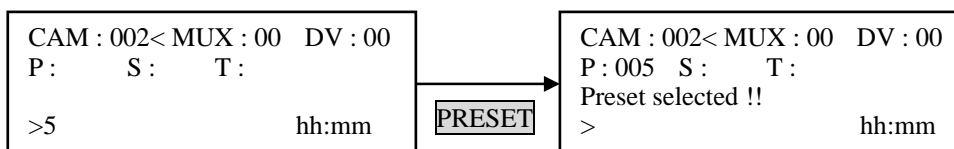


### 2. Moving around control function

To use the joystick control the speed dome to do moving around, the turning, left/right/up/down speed is divided into 32 speeds

### 3. The preset positions function

Input preset number (1-32), then press **PRESET** button



If preset point ID is not 1-32, the corresponding function will be on.

Example: Preset 68 is background light on.

Set up the corresponding function please enter an ID then press **PRESET** button count to 2/secs.

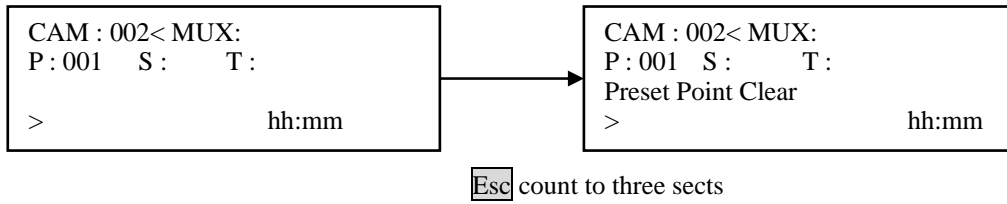
- Function ID please see the page 21. (Function ID table)



#### 4. Clear preset positions

a. According to step 3, call the preset

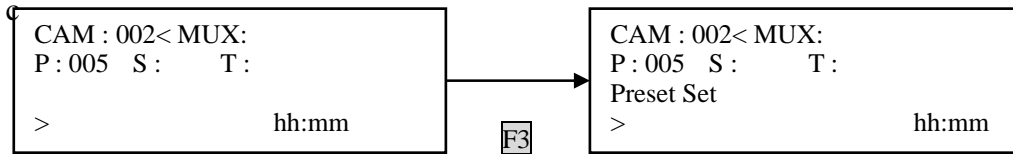
b. Press **ESC** button count to 2/secs can clear.



#### 5. The preset positions setup function

c. According to step 3, call the preset

d. Move to the position you want by joystick then press **F3**



#### 6. The ZOOM in / out function

Press ZOOM **IN** or ZOOM **OUT** button to get the size that wants then release  
After, Auto Focus/ IRIS function will be on

#### 7. The FOCUS far / near function

Press **FAR** or **NEAR** button until the focus that wants  
**FOCUS** button is for auto focus

\* Auto focus would be closed because manual control

#### 8. The IRIS open / close and auto iris function (No auto iris for nicecam speed dome)

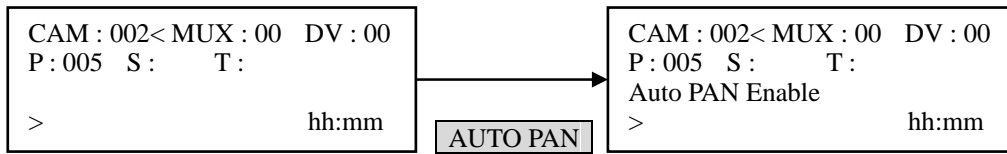
Press IRIS **OPEN** / **CLOSE** button until that wants  
**IRIS** button is for auto IRIS

\* Auto iris would be closed because manual control

9. The Auto Pan function

Press **AUTO PAN** button is the mode on for auto pan preset, to press **AUTO PAN** button again is for mode off.

If line scan mode is on, **AUTO PAN** is for line scan mode off.



10. Target device lock

When Multi Keyboard mode is on, if you want to control the speed dome for a long time and do not want to be interrupted by the other controllers. Please press **MISC2** to lock the current target device. If the target device changed, the previous device will be release. The current device is locked. If press **MISC2** again, the all devices will be release. This function is working only on the master keyboard.

11. Line scanning set up function, Start/End

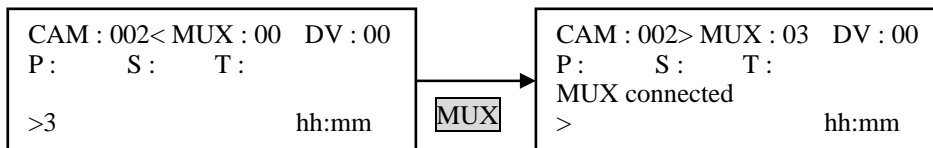
1. To use joystick to the place that wants then press **F1** button for starting
2. Move to the place that wants then press **F2** button for ending

12. Start the line scan function

To press **F4** button for starting line scan, to press **F4** button again is for ending.

13. Multiplexer ID define function

Input multiplexer ID (1-16), then press **MUX** button



14. Key Lock and Unlock

0101 + **ENT** for Key Lock

On Key Lock mode: Pass Word + **ENT** is for unlock

**Table 1: Preset Function ID**

<b>Preset ID</b>	<b>Preset ID + <u>Preset</u></b>	<b>Preset ID + <u>Preset</u> count to 3 sec</b>
<b>71</b>	<b>Background light on</b>	
<b>72</b>	<b>Background light off</b>	
<b>73</b>	<b>One push WB</b>	
<b>74</b>	<b>One push trigger AF</b>	
<b>75</b>	<b>Software Version Display</b>	
<b>76</b>	<b>P/T initialize</b>	
<b>88</b>	<b>IR Cut filter ON</b>	
<b>89</b>	<b>IR Cut filter OFF</b>	
<b>90</b>		<b>Set manual left limit stop</b>
<b>91</b>		<b>Set manual right limit stop</b>
<b>96</b>	<b>Stop Scan</b>	
<b>97</b>	<b>Begin Random Scan</b>	
<b>98</b>	<b>Begin Frame Scan</b>	
<b>99</b>	<b>Begin Auto-Scan</b>	

**Preset ID + Preset = Call Preset Function**

**Preset ID + Preset count to 2 sec = Set Preset Function**

## 9. Setup Menu Operation

Pressing the **MENU** button to enter setup menu. (Using the top and bottom key moves the form and list, **ENT** for entering, **ESC** for exiting.)

```
CAM : 002< MUX : 00 DV : 00
Setup Menu
>. System Menu
CAM Menu
```

Four major items: System Menu, CAM Menu, MUX Menu, and System Information

### 9.1 System Menu (The system set up)

1. Keyboard ID Setup –Set up the keyboard ID, Input 1-16 then press **ENT**
2. Master Setup –Master/Slave controller select
  - KB - This initial value links speed dome and multiplexer by port 2. (single keyboard mode)
  - MUX – Multi Keyboard
3. CAM Type Choice
  - The brand of the speed dome:  
Lilin, NICECAM, Fine, Hisharp, Pelco-P, Pelco-D
4. Baud Rate Setup
  - 1. 9600 2. 4800 3. 2400 4. 1200(usually 9600)
5. Date and Time Setup –Date time format is for 20 YY/ MM/ DD hh/mm  
Use the **←** and **→** for changing position to modify then **ENT**
6. LCD Back Light On/Off –turn on/off LCD background light
7. Voice On/Off –turn on/off buzzer (1. On 2.Off)
8. Load Default- Default KB ID = 1 , Master = KB, CAM Type = Lilin,  
Baud Rate = 9600, Voice = On , Backlight = On, Master MUX ID =1
9. Pass Word Setup - Before set up the new password, the old password must be confirmed then input a new password. Default password is 0000.

## **9.2 CAM Menu (The speed dome set up)**

1. Zoom Speed Setup –Set up the control speed of zoom in and out. Total is four segments
2. Focus Speed Setup –Set up the control speed of focus far and near. Total is four segments

## **9.3 MUX Menu (The Multiplexer set up)**

1. Master MUX ID Set – Set up the Master multiplexer ID  
On Multi Key mode, must set up the Master multiplexer ID

## **9.4 System Information**

Search system information – Keyboard Software edition, Keyboard ID, System time search

## 10. Operating Instructions For.....Pelco-D

- Before you start, please make sure the initial values are correct.

**(Using 1-2 way RS485 adapter) connects to speed dome and multiplexer directly**

Master = KB  
CAM Type = Pelco-D  
Baud Rate = 2400

**Through multiplexer, (RS485) links to Port 1 and speed dome links to Port2**

Master = MUX  
CAM Type = Pelco-D  
Baud Rate = 2400  
Keyboard ID 1 is Master  
ID 2-4 is slave

System only contains one Keyboard if links to Pelco-D speed dome, ID must be 1

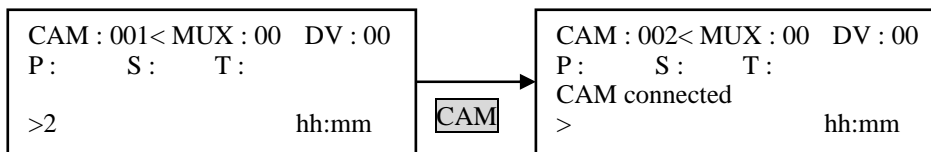
- **(Please consult the Setup Menu chapter to operate the above)**

### 1. Speed dome ID define

Input speed dome ID (1-32), then press **CAM** button

After calling the speed dome, Auto **Focus** and **IRIS** is on

**Auto PAN** will close

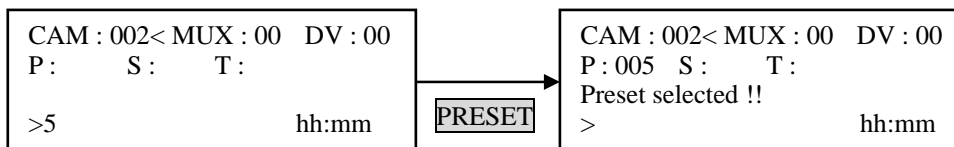


### 2. Moving around control function

To use the joystick control the speed dome to do moving around, the turning, left/right/up/down speed is divided into 64 speeds

### 3. The preset positions function

Input preset number (1-32), then press **PRESET** button



If preset point ID is not 1-32, the corresponding function will be on.

Example: Preset 68 is background light on.

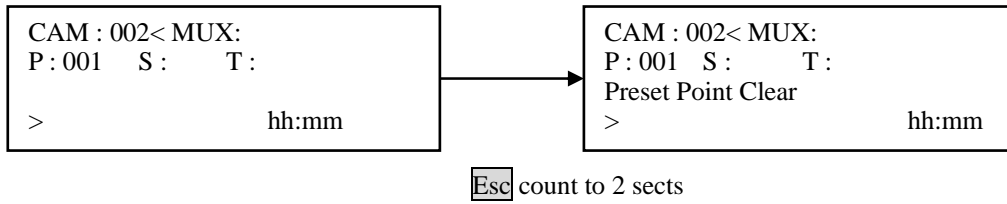
Set up the corresponding function please enter an ID then press **PRESET** button count to 2/secs.

- Function ID please see the page 25. (Function ID table)

4. Clear preset positions

a. According to step 3, call the preset

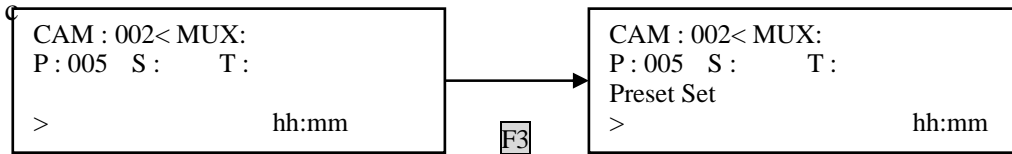
b. Press **ESC** button count to 2/secs can clear.



5. The preset positions set-up function

c. According to step 3, call the preset

d. Move to the position you want by joystick then press **F3**



6. The ZOOM in / out function

Press ZOOM **IN** or ZOOM **OUT** button to get the size that wants then release  
After, Auto Focus/ IRIS function will be on

7. The FOCUS far / near function

Press **FAR** or **NEAR** button until the focus that wants  
**FOCUS** button is for auto focus

\* Auto focus would be closed because manual control

8. The IRIS open / close and auto iris function (No auto iris for nicecam speed dome)

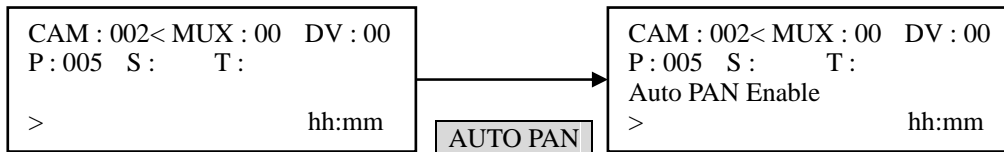
Press IRIS **OPEN** / **CLOSE** button until that wants  
**IRIS** button is for auto IRIS

\* Auto iris would be closed because manual control

9. The Auto Pan function

Press **AUTO PAN** button is the mode on for auto pan preset, to press **AUTO PAN** button again is for mode off.

If line scan mode is on, **AUTO PAN** is for line scan mode off.



10. Target device lock

When Multi Keyboard mode is on, if you want to control the speed dome for a long time and do not want to be interrupted by the other controllers. Please press **MISC2** to lock the current target device. If the target device changed, the previous device will be release. The current device is locked. If press **MISC2** again, the all devices will be release. This function is working only on the master keyboard.

11. Line scanning set up function, Start/End

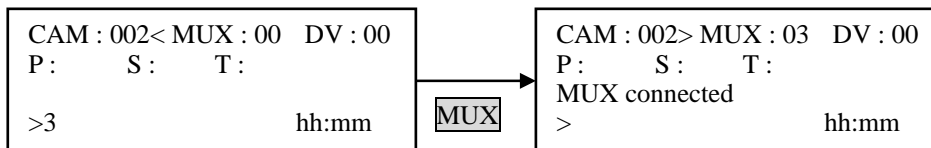
1. To use joystick to the place that wants then press **F1** button for starting
2. Move to the place that wants then press **F2** button for ending

12. Start the line scan function

To press **F4** button for starting line scan, to press **F4** button again is for ending.

13. Multiplexer ID define function

Input multiplexer ID (1-16), then press **MUX** button



14. Key Lock and Unlock

0101 + **ENT** for Key Lock

On Key Lock mode: Pass Word + **ENT** is for unlock



## Table 1: Preset Function ID

**Please see the Pelco speed dome operating book**

**Preset ID + Preset = Call Preset Function**

**Preset ID + Preset count to 2 sec = Set Preset Function**

## 11. Setup Menu Operation

Pressing the **MENU** button to enter setup menu. (Using the top and bottom key moves the form and list, **ENT** for entering, **ESC** for exiting.)

```
CAM : 002< MUX : 00 DV : 00
Setup Menu
>. System Menu
CAM Menu
```

Four major items: System Menu, CAM Menu, MUX Menu, and System Information

### 11.1 System Menu (The system set up)

1. Keyboard ID Setup –Set up the keyboard ID, Input 1-16 then press **ENT**
2. Master Setup –Master/Slave controller select
  - KB - This initial value links speed dome and multiplexer by port 2. (single keyboard mode)
  - MUX – Multi Keyboard
3. CAM Type Choice
  - The brand of the speed dome:
  - Lilin, NICECAM, Fine, Hisharp, Pelco-P, Pelco-D
4. Baud Rate Setup
  - 1. 9600 2. 4800 3. 2400 4. 1200(usually 9600)
5. Date and Time Setup –Date time format is for 20 YY/ MM/ DD hh/mm
  - Use the **←** and **→** for changing position to modify then **ENT**
6. LCD Back Light On/Off –turn on/off LCD background light
7. Voice On/Off –turn on/off button buzzer (1. On 2.Off)
8. Load Default- Default KB ID = 1 , Master = KB, CAM Type = Lilin,
  - Baud Rate = 9600, Voice = On , Backlight = On, Master MUX ID =1
9. Pass Word Setup - Before set up the new password, the old password must be confirmed then input a new password. Default password is 0000.

## **11.2 CAM Menu (The speed dome set up)**

3. Zoom Speed Setup –Set up the control speed of zoom in and out. Total is four segments
4. Focus Speed Setup –Set up the control speed of focus far and near. Total is four segments

## **11.3 MUX Menu (The Multiplexer set up)**

10. Master MUX ID Set – Set up the Master multiplexer ID

On Multi Keyboard mode, must set up the Master multiplexer ID

## **11.4 System Information**

Search system information – Keyboard Software edition, Keyboard ID, System time search

## 12. Operating Instructions For.....HISHARP

- Before you start, please make sure the initial values are correct.

**(Using 1-2 way RS485 adapter) connects to speed dome and multiplexer directly**

Master = KB

CAM Type = HISHARP

**Through multiplexer, CK 101(RS485) links to Port 1 and speed dome links to Port2**

Master = MUX

CAM Type = HISHARP

Keyboard ID 1 is Master

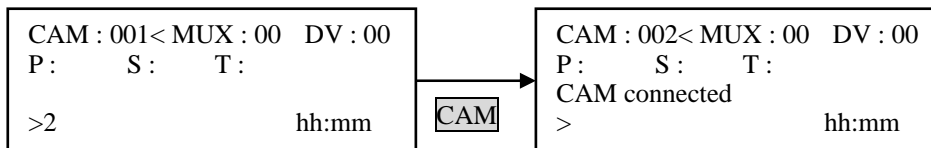
ID 2-4 is slave

If system only contains a Keyboard, then ID must be 1

**(Please consult the Setup Menu chapter to operate the above)**

### 1. Speed dome ID define

Input speed dome ID (1-64), then press **CAM** button



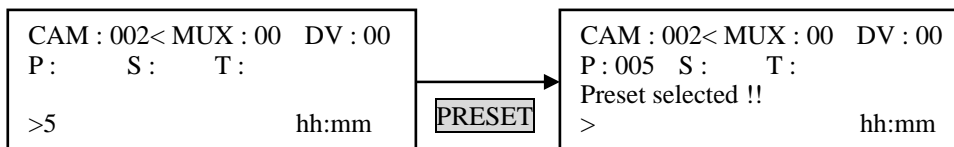
**HISHARP speed dome, Auto IRIS / Focus LED and functions are off**

### 2. Moving around control function

To use the joystick control the speed dome to do moving around, the turning, left/right/up/down speed is divided into 32 speeds

### 3. The preset positions function

Input preset number (1-32), then press **PRESET** button

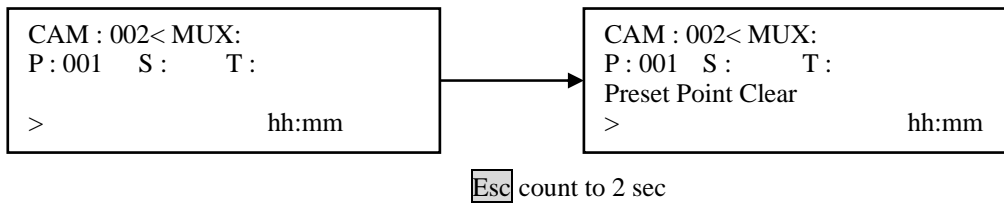


Preset positions ID 33 is for 180 degree rotating

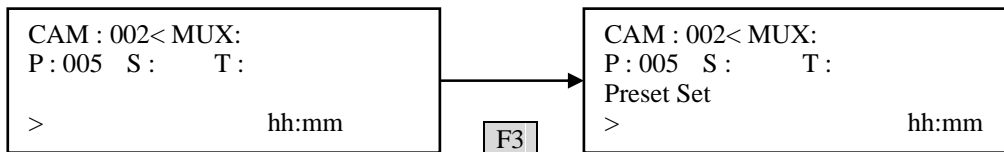
Preset positions ID 34 is for speed dome return to zero

So the preset positions ID is 1-32

4. Clear preset positions
  - a. According to step 2, call the preset
  - b. Press **ESC** button count to 2 sec can cancel.



5. The preset positions set-up function
  - a. According to step 3, call the preset
  - b. Move to the position you want by joystick then press **F3**

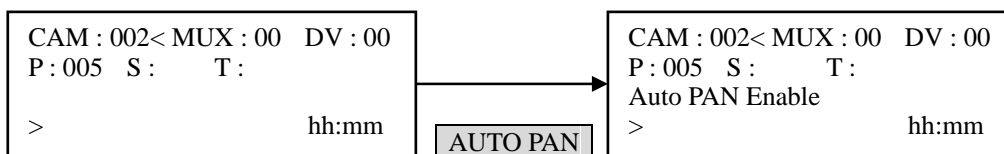


6. The ZOOM in / out function  
Press ZOOM **IN** or ZOOM **OUT** button to get the size that wants then release

7. The FOCUS far / near function  
Press **FAR** or **NEAR** button until the focus that wants then release

8. The IRIS open / close and auto iris function  
Press IRIS **OPEN** / **CLOSE** button until that wants

9. The Auto Pan function  
Press **AUTO PAN** button to run preset point 1-16, press **AUTO PAN** again is for off mode When the line scan mode is on, press **AUTO PAN** is for line scan off.



10. Target device lock  
When Multi Keyboard mode is on, if you want to control the speed dome for a long time and do not want to be interrupted by the other controllers. Please press **MISC2** to lock the current target device. If the target device changed, the previous device will be release. The current device is locked. If press **MISC2** again, the all devices will be release. This function is working only on the master keyboard.

11. Line scan set up function, Start/End

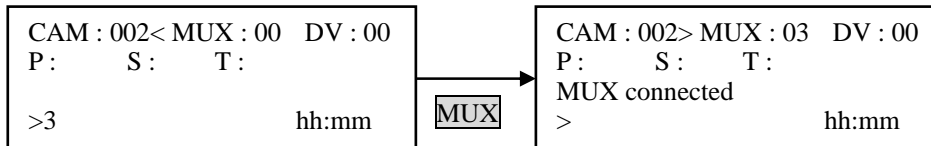
1. To use joystick to the place that wants then press **F1** button for starting
2. Move to the place that wants then press **F2** button for ending

12. Start the line scan function

To press **F4** button for starting line scan, to press **F4** button again is for ending.

13. Multiplexer ID define function

Input multiplexer ID (1-16), then press **MUX** button



14. Key Lock and Unlock

0101 + **ENT** for Key Lock

On Key Lock mode: Pass Word + **ENT** is for unlock

**Table 1: Preset Function ID**

Preset ID	Preset ID + <b>Pres</b>	Preset ID + <b>Pres</b> count to 3 sec
<b>33</b>	<b>180 degree rotating</b>	
<b>34</b>	<b>Speed dome return to zero</b>	
<b>70</b>		<b>Set up every preset point dwell time to 5 Sec</b>
<b>71</b>		<b>Set up every preset point dwell time to 10 Sec</b>
<b>72</b>		<b>Set up every preset point dwell time to 30 Sec</b>
<b>73</b>		<b>Set up auto pan speed to 5 /Sec</b>
<b>74</b>		<b>Set up auto pan speed to 60 /Sec</b>
<b>75</b>	<b>OSD Icon display On/Off</b>	<b>Set up auto pan speed to 120 /Sec</b>
<b>76</b>	<b>Start auto pan</b>	
<b>92</b>		<b>Set line scan left stop</b>
<b>93</b>		<b>Set line scan right stop</b>
<b>95</b>		<b>Speed dome OSD Menu</b>
<b>96</b>	<b>Stop line scan</b>	
<b>99</b>	<b>Start line scan</b>	
<b>77</b>		<b>Clear all preset point</b>

Preset ID + **Pres** button = Call Preset Function

Preset ID + **Pres** button (count to 2 sec) = Set Preset Function

### Speed dome OSD Menu

Press ZOOM **OUT** to next item

Press ZOOM **IN** back to previous item

Press Focus **Far** to change values

Press IRIS **CLOSE** / **OPEN** to items values

## 13. Setup Menu Operation

Pressing the **MENU** button to enter setup menu. (Using the top and bottom key moves the form and list, **ENT** for entering, **ESC** for exiting.)

```
CAM : 002< MUX : 00 DV : 00
Setup Menu
>. System Menu
CAM Menu
```

Four major items: System Menu, CAM Menu, MUX Menu, and System Information

### 13.1 System Menu (The system set up)

1. Keyboard ID Setup –Set up the keyboard ID, Input 1-16 then press **ENT**
2. Master Setup –Master/Slave controller select
  - KB - This initial value links speed dome and multiplexer by port 2. (single keyboard mode)
  - MUX – Multi Keyboard
3. CAM Type Choice  
The brand of the speed dome:  
Lilin, NICECAM, Fine, Hisharp, Pelco-P, Pelco-D
4. Baud Rate Setup
  1. 9600
  2. 4800
  3. 2400
  4. 1200(usually 9600)
5. Date and Time Setup –Date time format is for 20 YY/ MM/ DD hh/mm  
Use the **←** and **→** for changing position to modify then **ENT**
6. LCD Back Light On/Off –turn on/off LCD background light
7. Voice On/Off –turn on/off buzzer (1. On 2.Off)
8. Load Default- Default KB ID = 1 , Master = KB, CAM Type = Lilin,  
Baud Rate = 9600, Voice = On , Backlight = On, Master MUX ID =1
9. Pass Word Setup - Before set up the new password, the old password must be confirmed then input a new password. Default password is 0000.



## **13.2 CAM Menu (The speed dome set up)**

1. Zoom Speed Setup –Set up the control speed of zoom in and out. Total is four segments
2. Focus Speed Setup –Set up the control speed of focus far and near. Total is four segments

## **13.3 MUX Menu (The Multiplexer set up)**

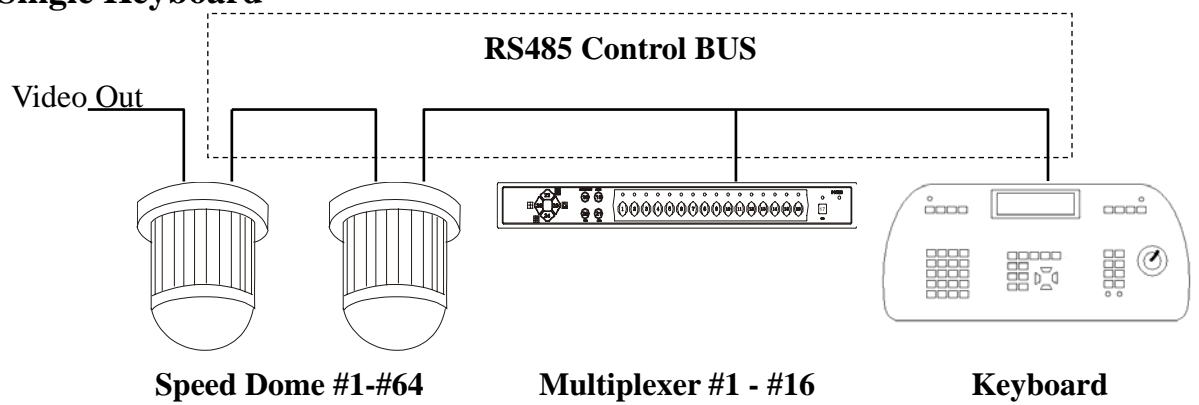
1. Master MUX ID Set – Set up the Master multiplexer ID  
On Multi Key mode, must set up the Master multiplexer ID

## **13.4 System Information**

Search system information – Keyboard Software edition, Keyboard ID, System time search

## A. The system matches reference

### A-1. Single Keyboard



\* This system structure only allows to link a keyboard controller , ID ranges are 1-16

Keyboard Initial values:

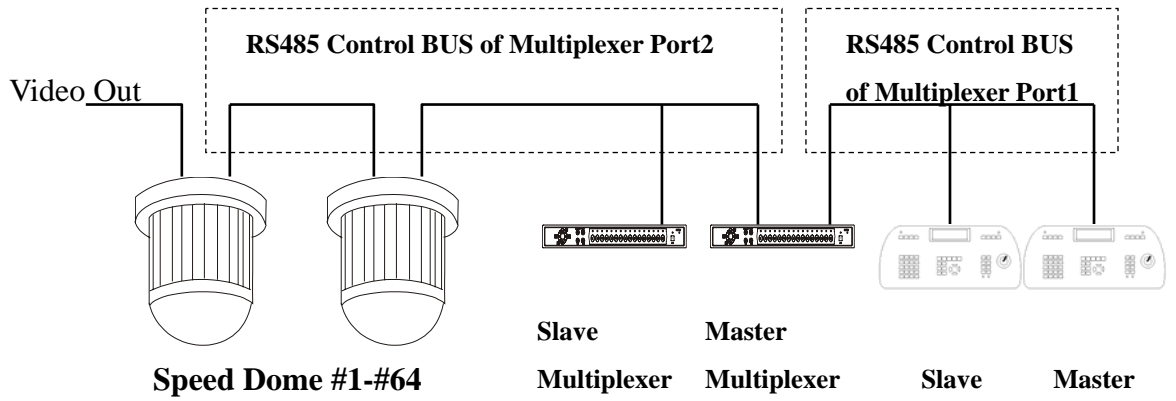
ID = 1 - 16

Master = KB

\* This system structure allows to link at most 16 Multiplexers , ID ranges are 1-16

\* This system structure allows to link the maximum speed dome amounts is up to the company's function provide

## A-2. Multi Keyboards



\* This system structure allows to link four keyboard controllers ,one is master keyboard controller (ID must be 1) , Three vice- keyboard controller (The ID can be #2--#4)

The master keyboard controller must exist

Master Keyboard Set up

ID = 1

Master = MUX

Master MUX ID = Master Multiplexer ID

Slave Keyboard Set up

ID = 2 – 4

Master = MUX

\* This system structure allows to link at most 16 Multiplexers , one Master Multiplexer has to set

\* This system structure allows to link the maximum speed dome amounts is up to the speed dome munufature function provide

