

**MICROSEVEN**®

# OSD Manual version 3.x.x

Microseven® High Speed Dome Network Camera



**Microseven Systems, LLC**

Walnut, California, USA

## First Edition (September, 2009)

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## 1. Open OSD Main Menu

Please find the following snapshot and steps of preset and alert sound from computer.



**Step1** Enter '51' to the field which is on the top of the slider.

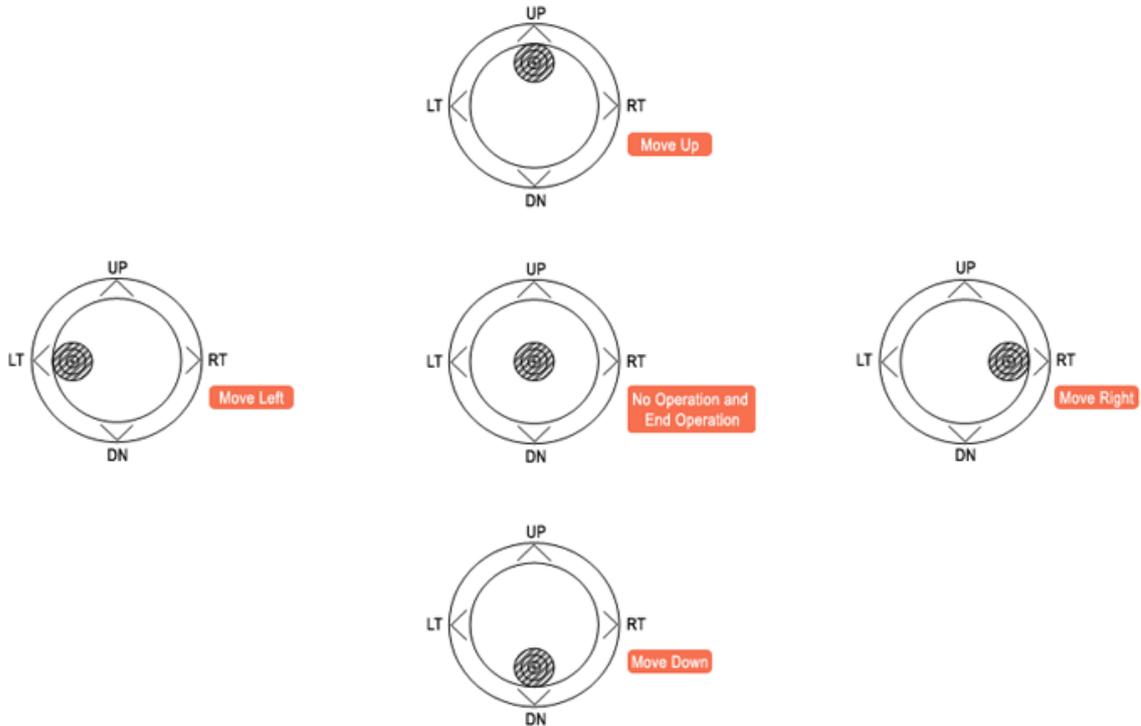
**Step2** Click on "Preset" button.

**Step3** Click on "Recall" button, then you will find a menu on the OSD.

**Step4** To move  and  key to select menu you want.

**Step5** Click on  to select.

## 2. The Definition of Joystick Controller Movement



- **In the fixed menu, the definition of Joystick Controller movements are:**

- |            |  |
|------------|--|
| Move Up    | the cursor moves up a menu item. If the cursor stays at the first menu item, then the cursor moves to the last menu item.  |
| Move Down  | the cursor moves down a menu item. If the cursor stays at the last menu item, then the cursor moves to the first menu item.  |
| Move Right | enters the next operation of the current fixed menu (If the current fixed menu item has submenu, enters the submenu; if the current fixed menu has the active menu, enters the active menu; if the current fixed menu item is "Exit", then exits the current menu operation and back to the menu of upper level. |
| Move Left  | no definition.   |

- **In the active menu, the definition of Joystick Controller movement is:**

- |           |   |
|-----------|---|
| Move up   | selects the previous active menu setup. |
| Move down | selects the next active menu setup.     |

- Move right      cancels the selected active menu setup, and go back to the setup before the edit of the active menu.
- Move left      saves the setup of current selected active menu and back to the edit of active menu.

### 3 Operation Notice

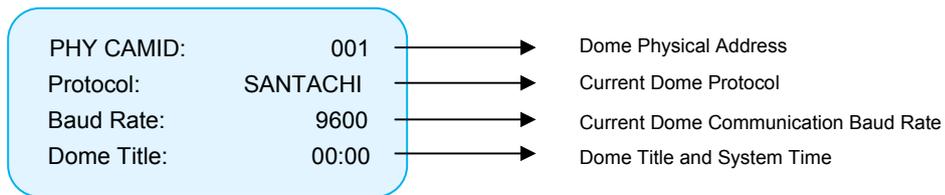
- 3.1 Please read the instruction carefully before operation.
- 3.2 Please pay attention to the bold characters in the instruction.

### 4 Menu Entry & Exit Methods

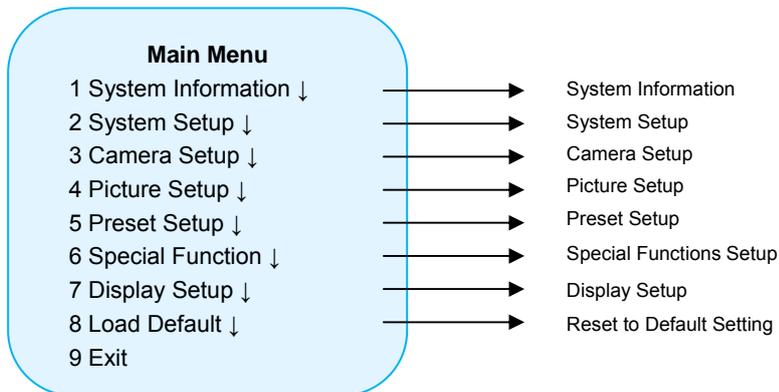
- 4.1 Menu entry  
Use shortcutkey ("51 + PRESET") can enter the menu for setup.
- 4.2 Direct menu exit  
Use shortcutkey ("52 + PRESET") can exit the menu setup directly. Or by selecting EXIT item in the menu can exit the menu step by step.

### 5 Menu Display

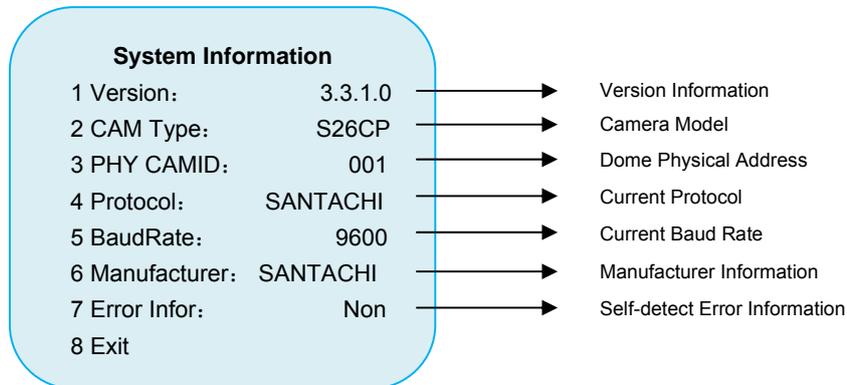
#### 5.1 Login Interface Display:



#### 5.2 Main Menu Display:



### 5.3 System Information Setup

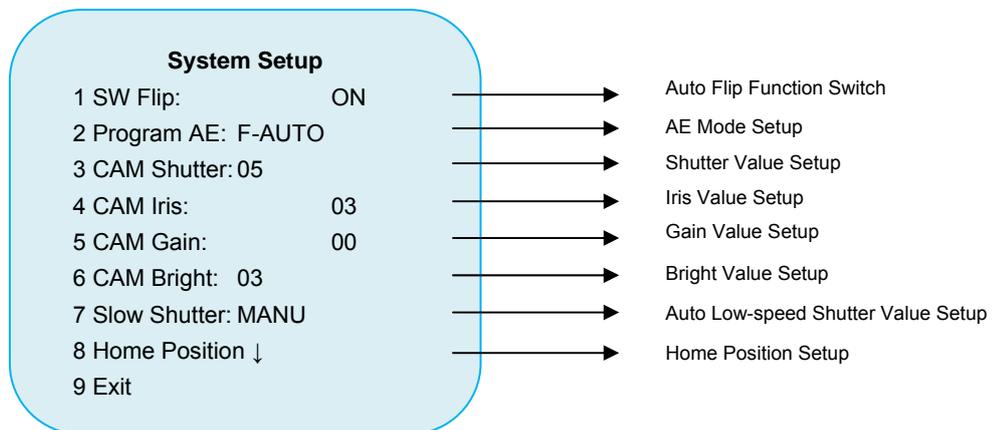


- If we supply power to the dome, and the initialization of pan/tilt fails(the Item 7 of System Information is “Non”, the setup and operation of preset setup, apply, patrol, home position, auto scan and group tasks can not be executed. The screen information shows as “PT Init Fail”.

- **The error information shows as**

- Pan The detection of original pan position fails;
- Tilt The detection of utmost tilt point position fails;
- P/T The detection of original pan position and utmost tilt position fails

### 5.4 System Setup Interface



- **Auto Flip:** move the Joystick Controller downwards until the tilt moves to the lowest point, and keep the Joystick Controller downwards, the dome executes automatically: ① the pan move 180°leftwards; ② the tilt moves to the highest point from the lowest point with the same speed of previous downward movement of tilt, which guarantee the traced object passing under the dome is always in the monitor scope.

- **AE Mode Setup:** camera auto exposure mode selection. User can select different AE mode according to different installation environment to get the best picture. Exposure modes that can be selected include:

#### **F-AUTO - Full Auto Mode**

Auto iris, auto gain, fixed shutter speed (1/50 sec), auto/manual switch between day/night mode.

#### **BRIGHT -Bright Mode**

Variable iris and gain value (32 combinations that can be selected, please refer to Table 4), manual switch between day/night mode.

#### **SHUT-P - Shutter Priority Mode**

Auto iris, auto gain, variable shutter speed (22 shutter values that can be selected: 16 standard shutters, 6 low-speed shutters, please refer to Table-1), manual switch between day/night mode.

#### **IRIS-P - Iris Priority Mode**

Auto shutter speed, auto gain, variable iris value (18 combinations from F1.6 - Close, please refer to Table 2), manual switch between day/night mode.

#### **MANUAL - Manual Mode**

Variable shutter speed, iris value and gain value, auto switch between day/night mode.

- **Shutter Speed Setup (Table-1)**

Setup Data	Shutter Speed(Sec)	Setup Data	Shutter Speed(Sec)
00 *	1	11	1/215
01 *	1/2	12	1/300
02 *	1/3	13	1/425
03 *	1/6	14	1/600
04 *	1/12	15	1/1000
05 *	1/25	16	1/1250
06	1/50	17	1/1750
07	1/75	18	1/2500
08	1/100	19	1/3500

09	1/120	20	1/6000
10	1/150	21	1/10000

**Only when the AE mode is selected as SHT-P or MANUAL, the setup in Table-1 can be valid:**

The slower the speed of shutter, the lightness of output image by camera is higher, otherwise the lightness of image is lower.

The slower the speed of shutter, the worse the fluency of image (which means smear phenomenon exists).

Suggested application environment of this mode: environments that are high-demanding to the fluency of the image with many quickly moving objects.

#### ■ Iris Value Setup (Table-2)

Setup Value	Iris Size	Setup Value	Iris Size
00	CLOSE	09	F6.8
01	F28	10	F5.6
02	F22	11	F4.8
03	F19	12	F4
04	F16	13	F3.4
05	F14	14	F2.8
06	F11	15	F2.4
07	F9.8	16	F2
08	F8	17	F1.6

**Only when the AE mode is selected as IRIS-P or MANUAL, the setup in Table-2 can be valid:**

The bigger the iris value, the bigger the iris. Therefore the lightness of output image by camera is higher, otherwise the lightness of image is lower. Users should select the suitable environments according to the local environments to get the best images.

When the AE mode is selected as IRIS-P and MANUAL modes, Iris Open and Iris Close can be used by keyboard to adjust the iris value.

Suggested application environment: environments that are high demanding to the depth of field.

### ■ Gain Value Setup(Table-3)

Setup Value	Gain Value(dB)	Setup Value	Gain Value(dB)
00	-3	08	14
01	0	09	16
02	2	10	18
03	4	11	20
04	6	12	22
05	8	13	24
06	10	14	26
07	12	15	28

**The setup in Table-3 can be valid when the AE mode is MANUAL:**

The bigger gain value, the lighter the image, and the more the noise. Otherwise the darker the image, and the less the noise.

**Suggested application environment: environments with big signal noise.**

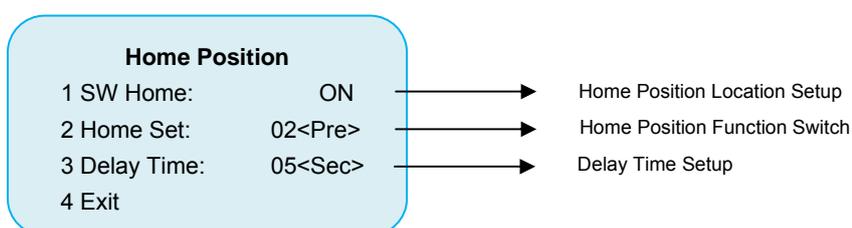
### ■ Brightness Setup (Table-4)

Setup Value	Gain Value	Iris Value	Setup Value	Gain Value	Iris Value
00	0dB	CLOSE	16	0dB	F2
01	0dB	F28	17	0dB	F1.6
02	0dB	F22	18	2dB	F1.6
03	0dB	F19	19	4dB	F1.6
04	0dB	F16	20	6dB	F1.6
05	0dB	F14	21	8dB	F1.6
06	0dB	F11	22	10dB	F1.6
07	0dB	F9.8	23	12dB	F1.6
08	0dB	F8	24	14dB	F1.6
09	0dB	F6.8	25	16dB	F1.6
10	0dB	F5.6	26	18dB	F1.6
11	0dB	F4.8	27	20dB	F1.6

12	0dB	F4	28	22dB	F1.6
13	0dB	F3.4	29	24dB	F1.6
14	0dB	F2.8	30	26dB	F1.6
15	0dB	F2.4	31	28dB	F1.6

The setup in Table-4 can be valid when the AE setup is BRIGHT.

## 5.5 Home Position Setup Interface (Submenu of System Setup)



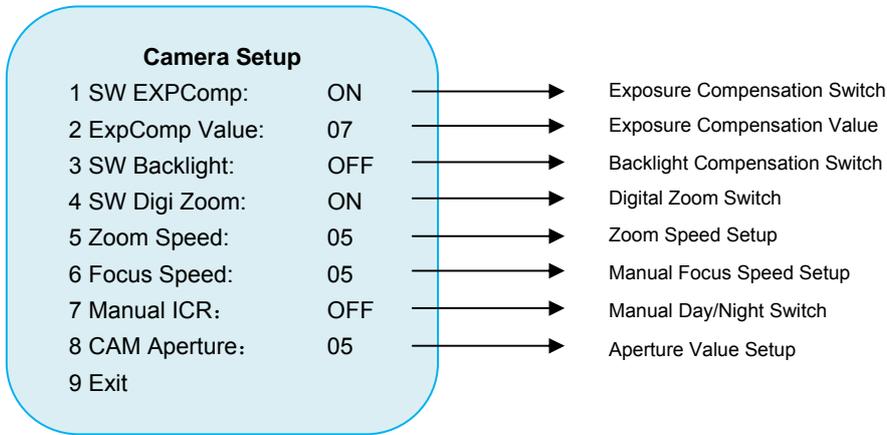
### ■ Home Position Location Setup

- A. Home position location: key monitoring position preset by users (preset).
- B. The home position location can be set as any set preset from 01~255 preset.

### ■ Home Position Delay

- A. When the dome camera stays in the standby status for a longer time than the set time of the “Delay Time”, the dome camera automatically runs home position function. It transfers to the set preset of the “Home Set”, which guarantees that the dome camera can monitor key positions automatically while nobody operates it for a long time.
- B. Setup Value of Home Position: 3~99 Seconds.
- C. When setup the preset number and delay time, the parameter value where the cursor stays at increases by 10 by pressing IRIS OPEN once, and the parameter value where the cursor stays at decreases by 10 by pressing IRIS CLOSE once.

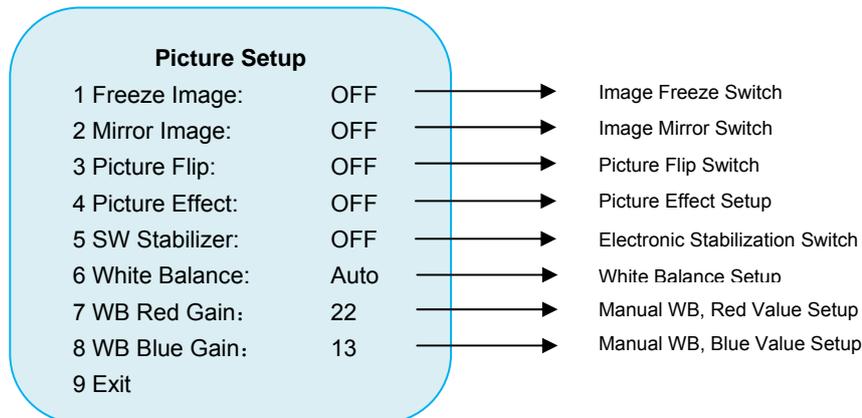
### 5.6 Camera Setup



- The backlight compensation setup can be valid when the AE mode is F-AUTO.
- Manual day/night switch can be realized through the Auxiliary 1 Open/Close button on the keyboard (please refer to the keyboard operation instruction for detailed instruction).
- Camera aperture value setup: adjust the sharpness of the image.
- Exposure compensation value setup (Table-5).

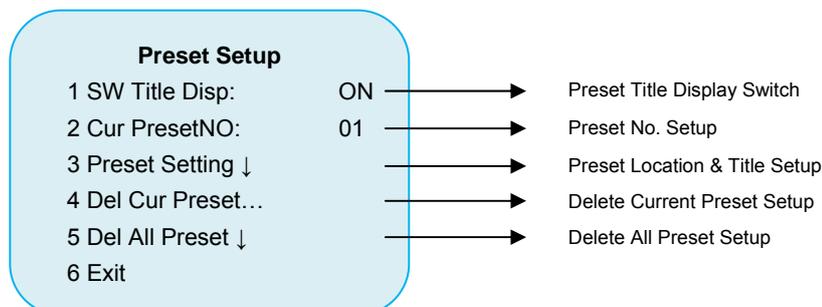
Setup Data	Exposure Compensation Value	Setup Data	Exposure Compensation Value
00	-10.5dB	08	1.5dB
01	-9 dB	09	3 dB
02	-7.5dB	10	4.5dB
03	-6 dB	11	6 dB
04	-4.5dB	12	7.5dB
05	-3 dB	13	9 dB
06	-1.5dB	14	10.5dB
07	0 dB	—	—

## 5.7 Picture Setup



- Image freeze: when this function is ON status, when resupply power to it, this function will be set as OFF status automatically.
- Picture effect setup: can set negative effect, and balck&white effects.
- Electronic Stabilizaiton function: when the function is ON, it can adjsut the image dithering caused by shaking of the speed dome. When the shaking frequencey is close to 10Hz, this function can adjust about 90% of the dome shaking. For example, when wind blows, the outdorr speed dome can open this function to avoid image shaking effectively.

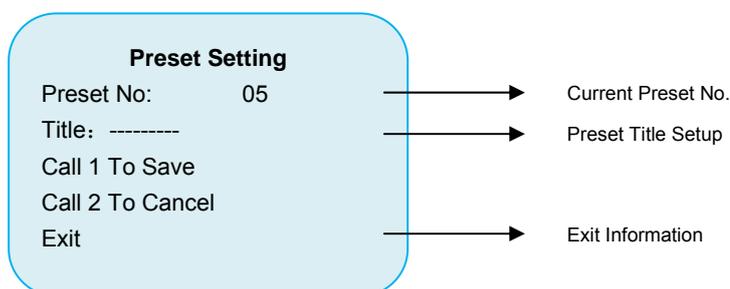
## 5.8 Preset Setup



- Preset Function: record the current pan position, tilt position and camera lens position of the dome camera, which makes it easy for users to transfer back to the position in their later operation. The preset supports NO.01-255. All together there are 255 presets.
- When setting the preset NO., the current preset number increases by 10 by pressing “Iris + Open”; the current preset number decreases by 10 by pressing “Iris + Close” .
- Preset 51-52, 62-69 are shortcutkeys, which do not allow setup from users.

- Preset 61 is the beginning position of user task auto scan, which does not set the title and only allows setup by shortcut keyboard setup. When the client transfers to Preset 61 manually, it is the shortcutkey to run the NO.1 patrol function, rather than Preset 61.
- Preset Setup adopts:
  - Shortcut keyboard: input “preset NO.+ Setup”(The detailed operation please refer to the operation instruction of the keyboard). This setup method cannot set the preset title.
  - Enter the menu, and select the “Preset Setting” menu item.
- Delete all preset setup:
  - Move the Joystick Controller to enter the menu, apply Preset 1 can delete all preset setup, and apply Preset 2 to cancel the deletion operation and back to the preset setup menu.
- When the camera stays at electronic zoom status, the error of presets reaches to some extent.

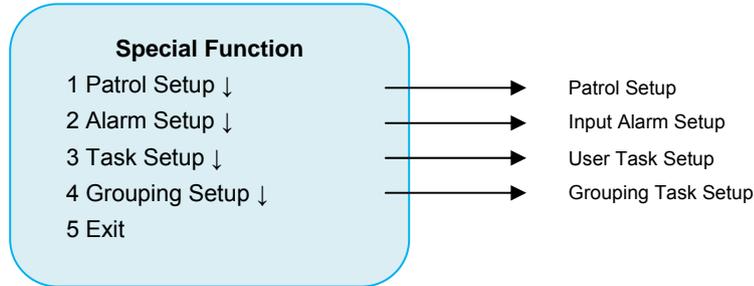
### 5.9 Menu Preset Position Setup Operation:



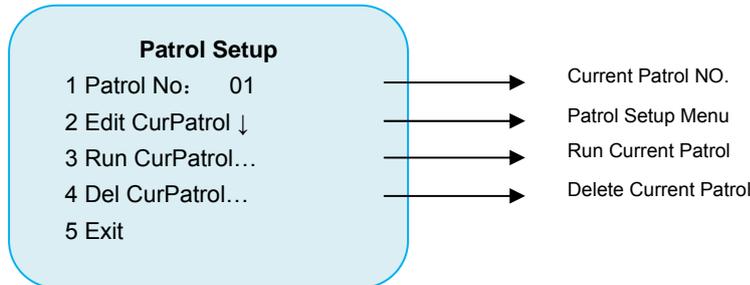
- When entering the preset setup menu, the system default is setup of preset title first. At this moment, the cursor stays at the preset title setup.
- When entering the preset setup menu, the switch between title setup and preset location setup by pressing the “Iris Close” key.
- Under the title setup status, moving the Joystick Controller leftwards and rightwards to control the cursor move forwards and backwards; moving the Joystick Controller upwards and downwards, the character where the cursor stays at can be edited.
- Under the title setup status, the switch among capital letter, small letter and Arabic numerals by pressing the “Iris Open”.
- Under the preset location setup status, the pan/tilt can be moved, and camera zoom and focus operation can be achieved by keyboard.

- After completion of preset setup, transfer to Preset 1 to save the current preset setup, and transfer Preset 2 to quit the current preset setup.

### 5.10 Special Functions



### 5.11 Patrol Setup:

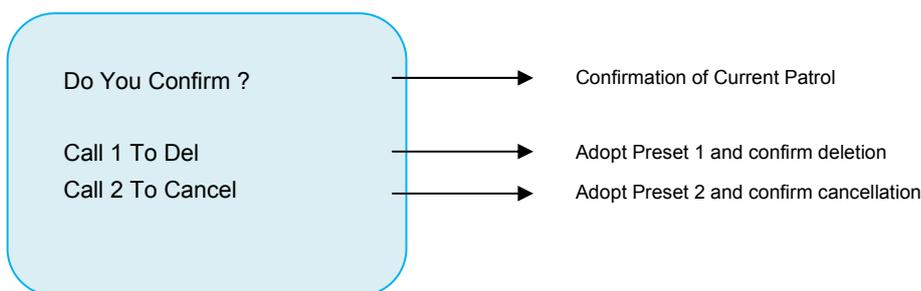


- Patrol: Through program in advance, users arrange some presets to the patrol queue according to specific order. When users run the function, they just need to adopt the patrol, the system will transfer to these presets successively according to the time interval and order set by users. In this way, it can achieve the objective that the dome camera monitor among several important positions successively according to the preset order.
- Set the current patrol: enter the corresponding patrol of the set value of "Patrol No". This dome camera has 8 patrols all together, and each patrol can set 16 presets.
- Run the current patrol: after finishing the corresponding patrol setup of the set value, execute the "Patrol Run...", the dome camera begins to run automatically and successively according to the patrol setup until any new control instruction input.
- Input the shortcutkey through keyboard to run the patrol. The setup of shortcutkey is as follows:

Keyboard Input	Corresponding Patrol
61 + Preset (Adopt Preset 61)	Patrol 1
62 + Preset (Adopt Preset 62)	Patrol 2

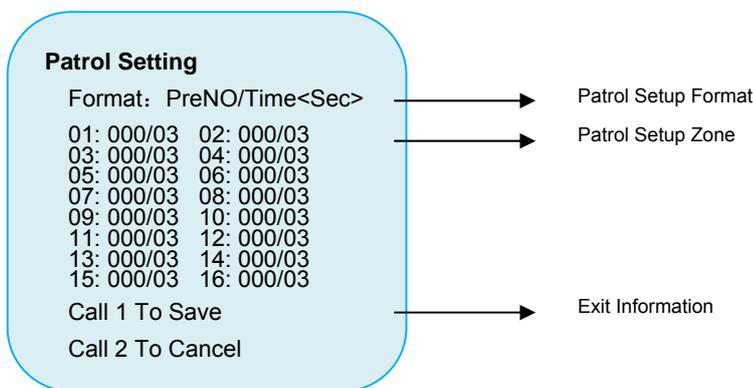
63 + Preset (Adopt Preset 63)	Patrol 3
64 + Preset (Adopt Preset 64)	Patrol 4
65 + Preset (Adopt Preset 65)	Patrol 5
66 + Preset (Adopt Preset 66)	Patrol 6
67 + Preset (Adopt Preset 67)	Patrol 7
68 + Preset (Adopt Preset 68)	Patrol 8

### 5.12 Delete Current Patrol Setup:



- After adopting the Preset 1, the corresponding patrol setup of “Patrol No.” will be deleted.

### 5.13 Setup Current Patrol



- Patrol setup format: “PreNo/Time<Sec>”: preset No./defer time (unit: second), preset No. range: NO.1-255, defer time range: No.3-99.
- Patrol setup: when setting the patrol, move the Joystick Controller leftwards and rightwards to control cursor move forwards and backwards, and select the parameter where the cursors stays at by moving Joystick Controller upwards and downwards.
- When setting the patrol, the parameter value where the cursor stays at increase by

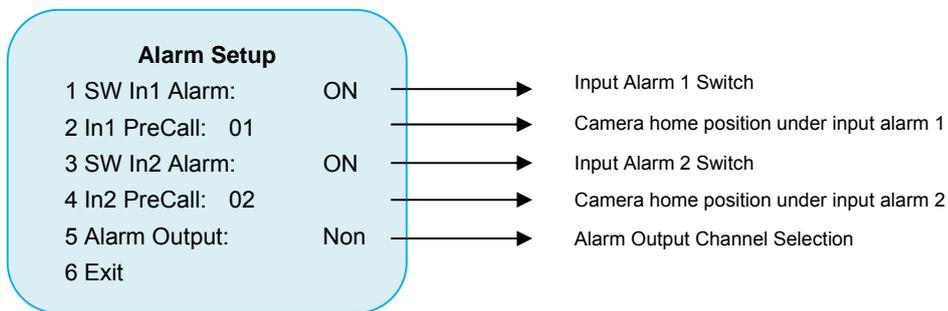
10 by pressing “Iris Open” once, and the parameter value where the cursor stays at decrease by 10 by pressing “Iris Close” once.

■ Exit Information:

“Call 1 To Save”—— Adopts Preset 1, save the current setup and exit to the “Patrol Setup” menu.

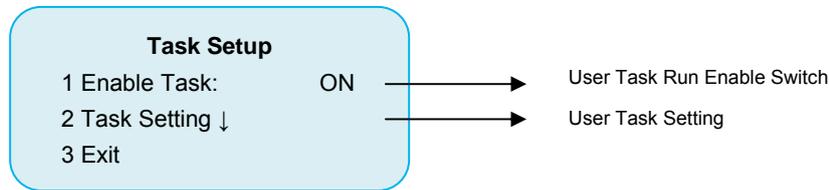
“Call 2 To Cancel”—— Adopts Preset 2, does not save the current setup and exit to “Patrol Setup” menu.

5.14 Alarm Setup:



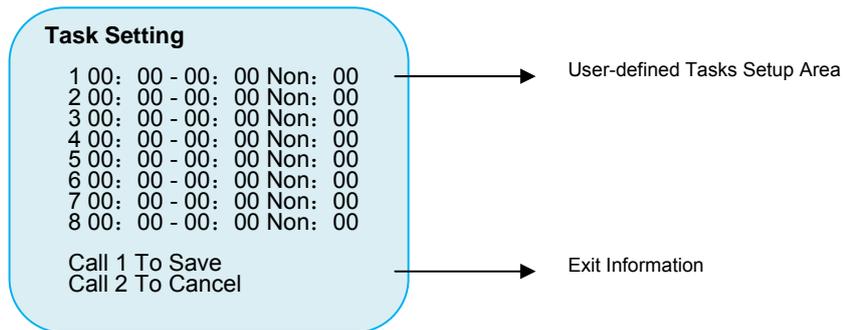
- Input Alarm 1 Switch: when it is “on” , the input alarm 1 is allowed, otherwise the input alarm 1 is prohibited.
- Alarm Home Position 1: When the input alarm 1 happens, the dome camera monitors the prest position of the “In1 PreCall”. The setup range is NO. 01-99 (Iris Open:+10, Iris Close: -10)
- Input Alarm 2 Switch: when it is “on” , the input alarm2 is allowed, otherwise the input alarm 2 is prohibited.
- Alarm Home Position 2: When the input alarm 2 happens, the dome camera monitors the prest position of the “In1 PreCall”. The setup range is NO. 01-99 (Iris Open:+10, Iris Close: -10)
- Alarm Output Channel Setup: when the set channel of “Alarm Output” exists alarm, the dome camera will output the alarm signal to control the local alarm equipments. The default setup is “In1”.
- Alarm Priority: input alarm 1 (high) → input alarm 2 (low).

### 5.15. User-defined Tasks Setup:



- User-defined Tasks: Users divide the 24 hours into several time segments through programming, and specify tasks for each time segment. In this way, dome cameras can execute the tasks of the time segment according to the set time segment though nobody operates them.
- User-defined Tasks Switch: can open (setup: “ON”) and close (setup: OFF) the operations of user-defined tasks.

### 5.16 User-defined Tasks Setup Menu:

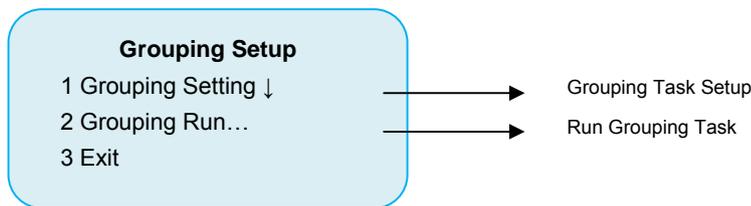


- User-defined Tasks Setup Format:  
Beginning Time — End Time Task: task parameter.
- User tasks that can be selected include: ASC (auto line scan), RSC(random line scan), PAT (patrol), PRE (preset adoption), GRP (grouping task).
- If the task time overlaps, the first task of the overlapped time is executed. For example, if the Task 1 setup is: “12:10 -15:30 Pat:1”, and the Task 2 setup is: “15:10 – 17:30 Pat:0”, then during the period from 15:10 -15:30, the Task 1 is executed.
- While the user-defined tasks run, if any user command is input, the task terminates runnin. Ten seconds after the user command terminates, the task will be run again;
- If the priority level of the user-defined tasks are higher than those of patrol and home position adopted by users by instruction, the adopted patrol and home position by users will quit during the operation of user-defined tasks. It is suggested that the user-defined tasks should be exited while there is someone who operates

the dome camera. And the user-defined tasks can be run when nobody runs the dome camera.

- When the user-defined tasks run, the system quits the home position function.
- The preset application range is 01-99 (Iris Open: +10; Iris Close:-10).
- When users setup the user-defined tasks, if RSC is selected, the pan/tilt location and lens zoom location should be set as Preset 61, otherwise the location of RSC is not certain.

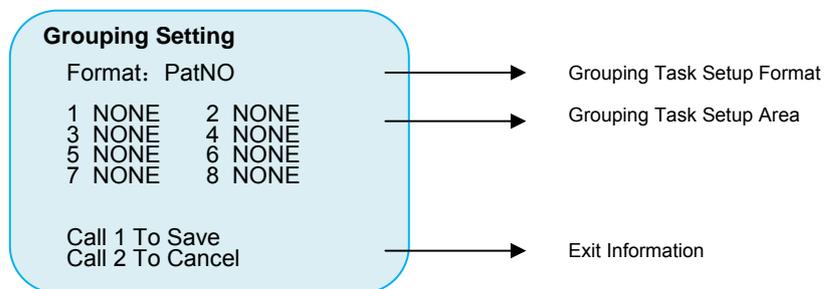
### 5.17 Grouping Task Setup:



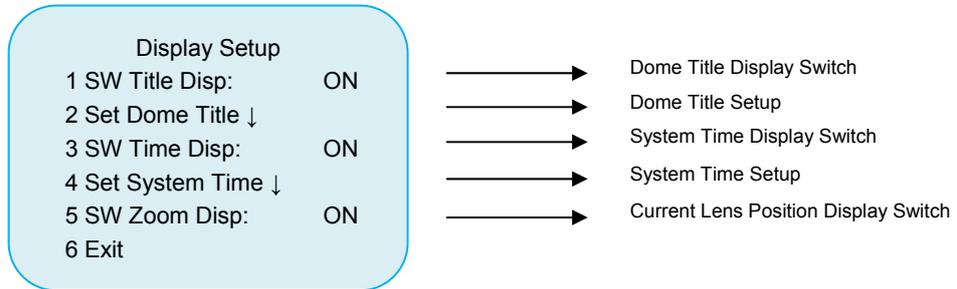
- Grouping Task: Users arrange the 8 patrols into grouping task queue according to specific orders by programming. In this way, users need only adopt grouping task, and the dome camera can run various patrols according to set orders successively.
- When running group task, the system run the group task according to the order set by users, and apply various patrols according to set orders successively.
- Bt adopting Preset 69, the grouping task can be run shortcutly.
- Group task is relevant to a super patrol that can set 128 presets.

### 5.18 Grouping Task Setup Menu

- The grouping task can set 8 patrols at most (128 presets).
- After finish of setup, apply Preset 1 to save the current setup and exit to upper menu, and apply Preset 2 not to save the current setup and exit to upper menu.

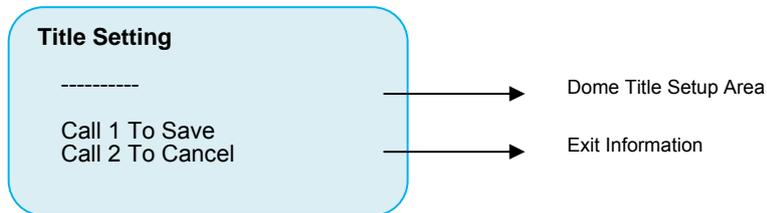


### 5.19 Dome Current Lens Location, System Time and Title Information Display Setup



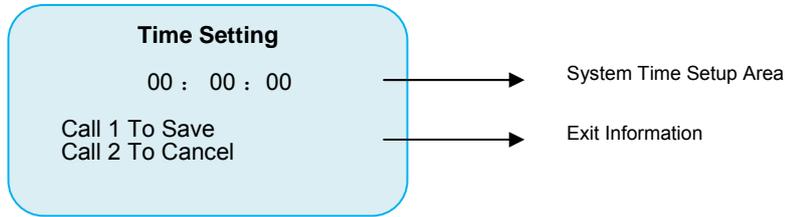
- Set Dome Title
  - A. Dome title with 10 characters can be set.
  - B. Through setting the dome title, it is easy to distinguish the positions of current domes while operating more than one dome.
  - C. Through dome title display switch, the dome title display can be ON or OFF.
- Set System Time
  - A. Through system time display switch, the system time display can be ON or OFF.
  - B. Through system time setup menu, users can reset the dome system time.

### 5.20 Dome Title Setup



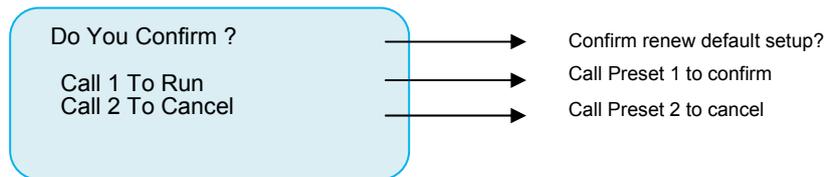
- When setting the dome camera, the cursor can be moved forwards and backwards by moving the Joystick Controller leftwards and rightwards. And by moving the Joystick Controller upwards and downwards, the character where the cursor stays at can be edited.
- During the setup of dome title, the switch among capital letter, small letter and Arabic numerals can be achieved by pressing “Iris Open” key.
- After completion of dome title setup, adopt the Preset 1 to save and exit the dome title setup, and adopt Preset 2 to quit setup and exit dome title setup.

### 5.21 System Time Setup



- When setting system, the cursor can be moved forwards and backwards by moving the Joystick Controller leftwards and rightwards. And by moving the Joystick Controller upwards and downwards, the character where the cursor stays at can be edited.
- After completion of system time setup, adopt the Preset 1 to save and exit the system time setup, and adopt Preset 2 to quit setup and exit system time setup.

### 5.22 Renew Default Setup;



- When renew the default setup, the camera address, current dome protocol, communication baud rate, preset, patrol, user-defined tasks and grouping tasks setup will not be recovered.

# Appendix

## Menu Index (V3.33)

