

# IR PTZ DOME CAMERA



※ Read this manual before using the camera

## **safety announcements**

### **1. Careful transportation**

Transport, storage and installation process, we need to prevent stress, severe vibration and damage to the product immersion.

### **2. Be careful installation of dome camera modules**

To be especially careful, light up-light down, do not force squeezing movement and the structural components, so as to avoid the dome camera trouble. For security reason, do not cover the housing is not installed electricity.

### **3. Power, video cables and control cables**

Power cables, video cables and control cables preferable to use shielded cable and is independent of routing, can not blend together with other cables.

### **4. Electrical Safety**

In use must comply with all electrical safety standards, the PTZ Dome Camera or signal transmission line should work with high-voltage equipment or cables to maintain a sufficient distance (at least 50 meters), if necessary, do a good job against lightning, surge and other safeguard procedures.

### **5. Cleaning**

When cleaning the camera housing, please use the dry soft cloth. such as severe dirt, please use neutral cleaner gently wipe. Do not use strong or with abrasive cleaner, so as not to scratch jacket, affecting image quality.

**6. Please strictly sealed to prevent liquid splashing into the PTZ Dome Camera, otherwise it will result in permanent damage to the device.**

**7. Do not use the camera when exceed the limits of temperature, humidity. Dome camera use temperature of -10 °C to 50 °C, humidity less than 90%.**

**8. Do not install the camera near the air-conditioned outlet.**

Under such conditions, the lens would be fogging following the state of hydrometer.

- By the opening and closing air-conditioner frequently caused the high and low temperature changed.
- By the opening and closing door frequently caused the high and low temperature changed.

- Make the glasses fogging environment.
- In a room filled with smoke or dust .

**9. Do not use the camera toward strong light for long time, such as the sun..**

Spotlight and other light will cause screen aging. Use the camera toward to strong light for a long time, may be raised CCD of the color filter damage and loss the true color images.

**Specification**

Model Number	XYSD723IR
Image sensor	1/3"SONY CCD
Signal mode	PAL/NTSC
Horizontal resolution	700TVLine
Effective pixel	PAL:976(H) x 582(V) NTSC:976(H) x 494(V)
Minimum illumination	Color to B/W, Color 0.05LUX,B/W 0.001LUX
S/N ratio	>50dB(Enhanced)
Backligh compensation	ON/OFF
White balance	Auto
Electronic shutter	1/50~1/12000s
Focus length	3.2~83mm
Focal Distance/Speed Match control	Auto match
Automatic cruise	9group, dwell time Adjustable
Auto Scan	16group, dwell time Adjustable
Optical focus	26X/27X
Focus	manual/Auto, take high-performance DSP to realize complete digital and ultra-high speed focus function
IR distance	IR 100M
Zone Shown	Adjustable 8 zone
Presets	256
Guard Tours	4groups,each can record 500 actions
Rotation Range	Horizontal 360°unlimited rotation, Vertical 180°, auto reversal
Rotation speed	PAN/tilt Speed: 0.1 ~ 200°/Sec
Communications	PELCO-D and PELCO-P
Communication mode:	RS485
OSD	Full screen menu
Lightning protection	Three level surge protection
Power protection	Automatically run memory function
Power supply	DC12V--4A
Compass function	Show position
Power Consumption	Max 50W
Dimension	7 inch
Material	Aluminum shell, waterproof IP66
Wrok Environment	-10°C ~ +50°C (select temperature control accessories), < 95%RH

## Function Description

IR 7-inch brief intelligent high speed dome camera integration, the main function

### 1. Set address ID, baud rate, control protocol

Any operation commands the camera has its own Dome ID, baud rate, communication protocol, a single camera only to respond with its own Dome ID, baud rate, communication protocol, under the operation of the command. Camera address ID, baud rate, communication protocol specific settings please refer to the dial-setting methods.

### 2. Tracking

Users can use the controls on the keyboard joystick control of the upper and lower turning left and right cameras can be used to track moving targets or moving horizon, while the focal length can be adjusted to change the perspective of the size or the target image size. In the auto-focus of the state, with the lens rotation, the camera will automatically adjust according to a rapid scene changes, instantly get a clear picture.

### 3. Focal length / speed automatic matching technique

Manual adjustment, the longer the focal length of the case, a reflection of high-speed PTZ Dome Camera makes a slight touch screen joystick may move back, resulting in data loss. Based on user-friendly design, intelligent ball according to the proximity of the focal length of the camera automatically adjusts the horizontal and vertical speed, so that manual operation is more simple and easy to track targets.

### 4. Settings and call preset position

Preset function is the current state of the ball under the PTZ function of the horizontal angle, tilt angle and camera lens focal length, etc. position parameters stored in memory, you need to call these parameters can be quickly and PTZ cameras will be adjusted to that location. The operator can quickly and easily by controlling the keyboard, infrared controller, control equipment such as storage and call the preset point, the PTZ Dome Camera to support 256 preset points.

### 5. Lens Control

#### (1) Zoom control

Users can control the keyboard or through the PTZ DOME to adjust the focus of the distance matrix of the host, receive the necessary panoramic images, or is a fine view.

#### (2) Focus Control

System default auto-focus, zoom, the camera lens will be the center of the screen features auto-focus, to maintain a clear picture; in exceptional circumstances, the user can manually focus, achieve the desired image effect.

When in manual focus state, to restore the auto-focus, as long as the sway bar can be restored remotely auto-focus. There is also a dedicated control commands can be issued or to call an arbitrary way of restoring a preset bit auto-focus.

The camera lens in the following situations will not autofocus on the camera objectives:

- a. Target is not to screen center;
- b. Targets the same time in the far and near the place;
- c. Target light objects, such as neon lighting, spotlights and other luminous objects;
- d. Target with droplets or dust behind the glass;
- e. Targets moving too fast;
- f. Large area targets, such as walls;
- g. Objectives are too dark or inherently ambiguous.

### 6. Night vision function (color / monochrome conversion)

Cameras with night vision function, automatic color / monochrome conversion mode, in accordance with changes in ambient light automatic conversion CCD illumination. Such as: adequate lighting during the day due to the use of general

illumination to ensure colorful images. In the night illumination can be automatically changed to black and white images show a clear interest.

## **7. Cruise**

Can be pre-set cruise preset point, certain preset points, organized in the order required to auto-cruise in the queue, only an external command can be in an indoor speed ball set automatically according to preset points in order to provide the time interval constant movement back and forth.

## **8. Pattern scanning**

Pattern scanning machines to run the ball through the menu, the trajectory is stored down by power-on action, free movement, alarm linkage, etc. to call the stored scan line.

## **9. Continuous scan**

Just an external command or through a power-on action, free movement, alarm linkage, etc. to call, can make the PTZ Dome Camera horizontal direction to a certain speed the cycle of continuous scanning.

## **10. Batch Scanning**

Just an external command or through a power-on action, free movement, alarm linkage, etc. to call, can make the horizontal direction the PTZ Dome Camera cycle of a certain speed intermittent scan.

## **11. Area scan**

Just an external command or through a power-on action, free movement, alarm linkage, etc. to call, can make the PTZ Dome Camera horizontal direction to a certain speed, within the limits set by the community and from scanning.  
Equipment installation

## **Operation**

### **Communication**

#### **Baud Rate**

Setup Baud Rate based on DIP witch(see Appendix 1), When DIP did not Switch ,Automatic identification Baud rate.

Data bits: 8 .

Parity: None.

Stop bit: 1 .

#### **communication protocol**

PECOL-D, PECOL-P,etc, Setup communication protocol (see Appendix 2),

PTZ Control: Up Down Left Right

Zoom Camera Control : TELE WIDE NEAR FAR OPEN CLOSE

Camera's focus near (NEAR), focus far (FAR) function must focus feature of the camera is configured for "Manual " Focus mode is being used.

Preset Point Control : Set , call , delete.

Running function operation

#### **Preset function**

PTZ Dome supports 220 preset points, including 65 to 99 preset for special presets, these presets to complete predefined functions. Detailed reference to specific preset " ( 6 ) special preset list of features ."

#### **Preset operation process:**

##### **Setup Preset**

Shake the joystick or other device that enables pan tilt to reach a certain area . On the keyboard , or other device input preset number , press "Settings " or "SET" button. Set the current preset , then head sets the current position of the camera becomes a multiple saved to a specific preset number .

### **Call presets**

On the keyboard , or other device input preset number , press that button , " call " or "CALL". PTZ preset point will jump to change the previously set position. If the preset number has not been previously set . Then the screen will display " do not set ."

### **Delete preset**

On the keyboard or other input control software preset number , press the button "Delete ." Change the preset point is removed .

### **Preset cruise function**

Dome supports 9 preset cruise , cruise track of each preset can be edited 16 preset points . Complete cruise cruise function which corresponds to the preset cycle in order to jump one by one . 16 preset preset function must be set

individually . If you find the cruise preset number is not set , it will jump to the next set of preset point . Preset cruise function on the configuration menu to configure detailed scan settings inside the cruise .

### **Line scan function**

PTZ Dome supports 16 line scan . PTZ finish line scan function to scan between two points in the action . Line scan starting position, need to terminate the pre-set position , starting with the line scan direction . Line scan function of the camera zoom based on the starting point set by multiple camera zoom , camera zoom end position is invalid. **See the menu configuration line scan function configuration.**

### **Full- scan function (360 ° scan )**

PTZ Dome supports 8 full scan . Full scan is complete 360 ° rotation scans. Full scan need to pre- set the scan start position of the scanning direction ( clockwise or counterclockwise reverse ) see the detailed menu setting.

### **Pattern scan function**

Dome supports 4 pattern scan, pattern scan can not record 450 commands 10 minutes . Pattern scan is divided into two phases, the first phase of the recording phase, which will record all incoming ball machine control commands . The second stage is the playback phase, which will execute the loop the PTZ recorded commands. Detailed reference pattern scan configuration menu .

### **Timing function**

PTZ Dome supports 4- timing functions. Timing function can be specified to reach a ptz cam is scheduled to perform the specified action. Timing function must be configured start time , end time, and the timing cycle ( which specifies one week , one day this feature is enabled ) . When the dome system clock reaches the start time , when the ptz camera will perform the specified action . When the dome system clock reaches the end time , the ball machine will end the specified action . Detailed configuration reference timing function timer function menu configuration.

Note: When the system time end time is reached , the system first determines whether the current implementation of the action initiated by a timer , if the current implementation of the action non- timer starts , then the implementation of actions will not be canceled .

### **Power-on action**

When PTZ Camera restarts, perform a certain action specified by the user . You can specify actions include : ( 1 ) call preset points . ( 2 ) perform line scan . ( 3 ) perform pattern scan . ( 4 ) perform full scans. ( 5 ) perform preset cruise . ( 6 ) implementation of mobile tracking .

### **dwell operation and dwell time**

dwell definition: no dome control. PTZ Camera does not perform some kind of continuous motion operation.

dwell Action: When the ptz is in dwell, in case reached the dwell time, then the ptz camera perform user-specified dwell action . You can specify actions include : ( 1 ) preset adjustments. ( 2 ) perform line scan . ( 3 ) perform pattern scan . ( 4 ) perform full scans. ( 5 ) perform preset cruise ..

### **Menu configuration operations**

Enter the menu

Recall or set preset 95 ( system-specific preset points ) to enter the menu .

The basic format of the menu

The menu includes four basic formats :

" [ \*\*\*\*\* ] "

This type of menu item indicates that the menu item has a submenu .

" < \*\*\*\*\* > "

The types of menu items that " < > " the value of which is changed number . Can be down about modifying "<>" value inside .

"\*\*\*\*\* > "

This type of menu item indicates press OPEN ( iris open + ) to enter configuration.

"\*\*\*\*\* : \*\*\*\*\*"

This type of menu item consists of two parts , the configuration of the items before the colon , the colon is the current configuration values. Press the OPEN ( iris open + ) can be changed : "\*\*\*\*\* : < \*\*\*\*\* > " format. Where " < \*\*\*\*\* > " Reference (ii).

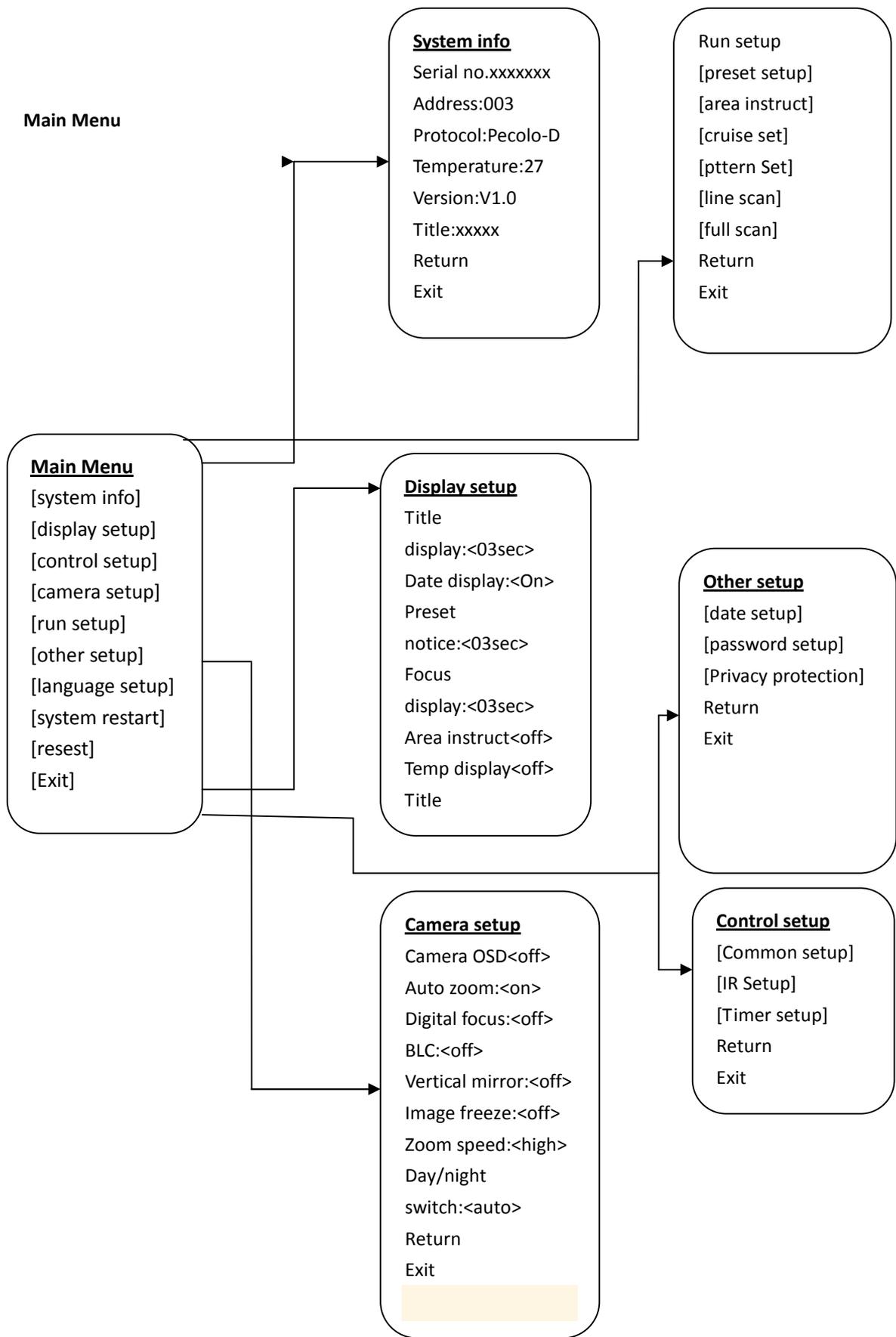
Basic operation of the menu

Menu Basic Operations as follows: up and down , OPEN ( iris open +), CLOSE ( aperture Off - ) .

Down about : used to traverse a menu item , or menu item value changes.

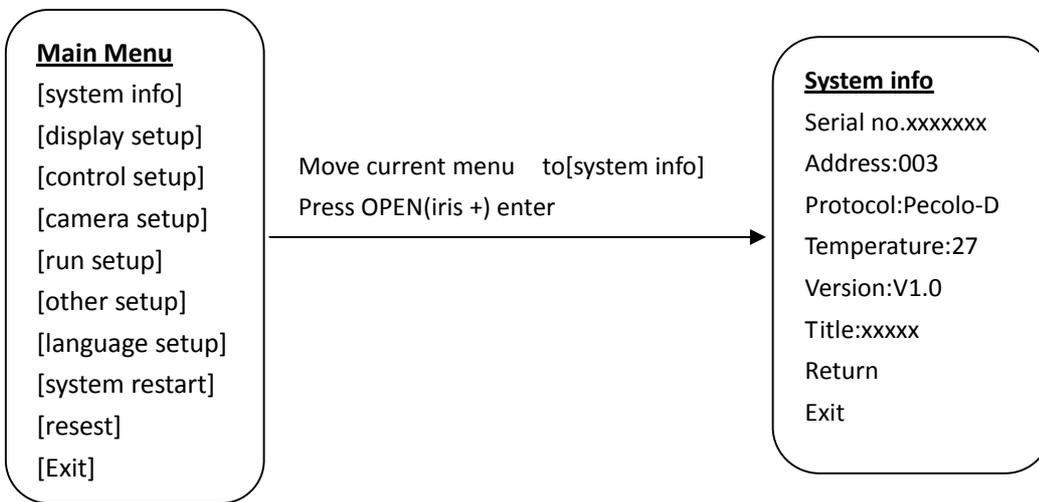
OPEN ( iris open + ) : Enter the sub-menu , start menu, or to determine the value to modify and save the menu values.

CLOSE ( aperture off - ) : Returns to the previous menu or cancel the menu values changes.

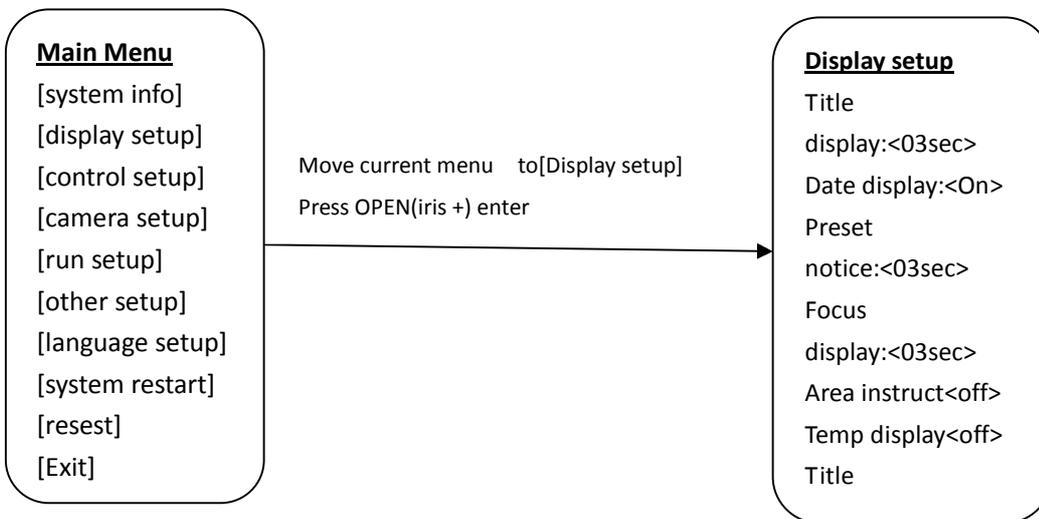


**configuration menu**

System Information : Users can view system information dome menu . Menu system information including : ball machine serial number, ball machine address , baud rate , communication protocol , the ball machine temperature , software version number, the ptz camera heading.



Menu Display settings : Users can define various headings are displayed on the monitor . The following are displayable title : Dome title, date display , preset point tips , angle zoom display , zone indication , temperature display .



(A) various configurations descriptio

Continue: When the display settings for that type, it will always show.

ON: When the display settings for that type, it will always show.

OFF: Do not display the type of screen.

<N Second>: After activating the display, N seconds, the display automatically clears the project, N: 1 ~ 60 seconds.

<N Minutes>: After activating the display, N points automatically remove the items are displayed, N: 1 ~ 60 minutes.

(2) Show time setting procedure

Move the current menu item to "[Display Settings]" press OPEN (iris open +) into the display settings submenu. Move to display the menu item that will be modified, press OPEN to enter the value of the current menu item to modify, joystick up and down the value of the menu item selected, press OPEN (iris open +) confirm the settings and exit, press CLOSE (Iris Off -) unset and return.

(3) set the title of the ptz camera during operation

**Display setup**

Title display:<03sec>  
Date display:<On>  
Preset notice:<03sec>  
Focus display:<03sec>  
Area instruct<off>  
Temp display<off>  
Title  
Display setup  
Return  
Exit



**Title setup**

Title:  
Input type:<digit>  
/<Uppercase letters>  
/<Lower case letters  
ABCDEFGHIJKLMN  
OPQRSTUVWXYZ  
←--→  
Confirm  
Return  
exit

Enter [title setting] sub menu -> moved to the "Dome Title" column -> joystick left and right to select the set the first few characters -> moved to the "input type" select the current type->ove the character to the character list line press the OPEN (iris open +) to enter the character selection->lect the character (the currently selected character will continue to blink) ◇ press OPEN (iris open +) select the character.

When all the characters entered, move the cursor to "Confirm input>" items "OPEN (iris open +)" Save ball machine and return to the previous menu title, or move to the "Cancel back>" item and press "OPEN (iris open +) "Exit dome Title setting and return to the previous menu.

**Display position during operation**

**Display setup**

Title display:<03sec>  
Date display:<On>  
Preset notice:<03sec>  
Focus display:<03sec>  
Area instruct<off>  
Temp display<off>  
Title  
Display setup  
Return  
Exit



**Display position setup**

Display position type:  
<date>  
<title/address>  
<preset title>  
<zone title>  
Setup  
Return  
exit

Go to "[display position setup]" submenu ◇ moved to the "Display Position Type" menu bar press OPEN (iris open +) -> joystick left and right selection will set the display position of the type, press OPEN (iris open +) OK ◇ move to "Start settings>" menu bar press OPEN (iris open +) to begin setting -> joystick up and down, the configuration item location will move the control to the appropriate location -> press OPEN (iris open +) OK to save the position and returns, according CLOSE (iris off -) will cancel the settings and return.

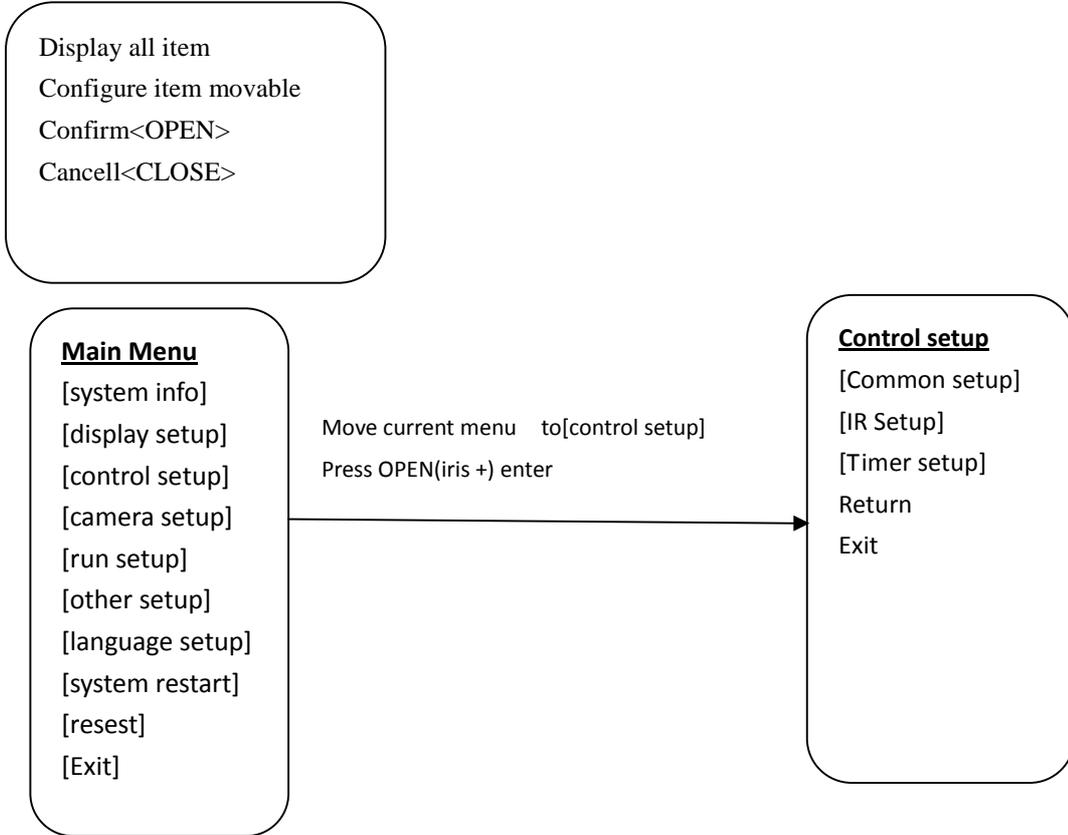
**Control Settings: Control settings include the following sub-menu items:**

"[General Settings]": This sub-menu contains some basic ball machine control properties, see the description of the sub-menu.

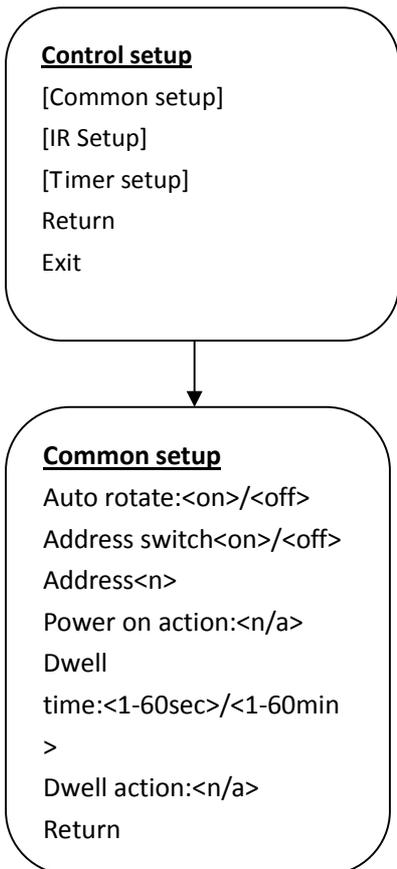
"[Alarm Settings]": This sub-menu contains dome alarm function attribute settings, see the description of the sub-menu.

"[Infrared Settings]": This sub-menu setting control properties of infrared light, infrared ball only support this menu, Ordinary ball is displayed as "[-----]."

"[Timer Settings]": This sub-menu to set timer function attributes, see the description of the sub-menu.



[ General Settings ] " : Control settings include the following sub- menu items:



Press the OPEN (iris open +) into the general settings. Move to the menu item, press OPEN (iris open +) configuration values for the corresponding menu item changes -> joystick up and down the menu item to modify the configuration values -> press OPEN (iris open +) confirm and save, press CLOSE (aperture off -) cancel the setting.

Auto flip: the lens is automatically run to the bottom of a vertical 180 ° horizontal rotation.

Gear ratio: variable depending on the camera's manual to determine the maximum speed multiples.

Jump Freeze: call preset, first send commands to the camera freezes the video, reaches the preset point, thawed video.

Soft address switch: Turn the switch to enable the soft address, soft address is "soft address number" menu item of value, turn the feature off when the ball machine address is the address of the DIP switch settings.

Soft Address Number: soft ball machine address number.

Power Action: Dome normal power operation performed after completion.

Standby time: joystick left and right selection <N ec<N min, joystick

## " [ IR Infrared Settings ]

### **Control setup**

[Common setup]  
[IR Setup]  
[Timer setup]  
Return  
Exit

### **IR control setup**

Turn on mode<auto>/<manual  
on>/<manual  
off>/<time>/<camera>  
Light: 010  
Turn on:00:00  
Turn off:00:00  
Near light compensation:mid  
Scan time:<1-60sec>/<1-60min>  
Turn on data:<n level>  
Return  
Exit

Press the OPEN ( iris open + ) into the infrared setting. Move to the menu item, press OPEN ( iris open + ) configuration values for the corresponding menu item changes - > joystick up and down the menu item to modify the configuration values - > press OPEN ( iris open + ) confirm and save , press CLOSE ( aperture off - ) cancel the setting . \

On mode : Define the infrared lamp on mode . Auto - infrared light in accordance with the "Scan Time " time to read the value set state of the environment , if it reaches a " turn-on threshold " level set , the ball will automatically turn on or off infrared light . Manual open - infrared light will remain in the open state . Manual Off - Infrared light has been turned off. Camera - When the camera automatically switches infrared , infrared will automatically switch to the appropriate mode. Time - in the "open time " , " off time " the time period between automatically open infrared light .  
BRIGHTNESS: Specify the brightness level of infrared light , if it is < Auto > mode , then the infrared lamp brightness will be based on the current zoom camera automatically adjusts .  
Opening time: When the " Open Mode" to < time > , the menu value defines the infrared light turn-on time .  
Closed: When the " Open Mode" to < time > , the menu value defines the infrared light off time.

**[ Timer Settings ]**

**Control setup**  
 [Common setup]  
 [IR Setup]  
 [Timer setup]  
 Return  
 Exit

**Timer setup**  
 Timer function no.<n>  
 Timer action:<off>  
 Turn on time:00:00  
 Turn off time:00:00  
 [timer cycle]  
 Return  
 exit

**Timer cycle**  
 Mon:<on>/<off>  
 Tue:<on>/<off>  
 Wed:<on>/<off>  
 Thu:<on>/<off>  
 Fri:<on>/<off>  
 Sat:<on>/<off>  
 Sun:<on>/<off>  
 Return  
 exit

Press the OPEN (iris open +) into the timer settings. Move to the menu item, press OPEN (iris open +) configuration values for the corresponding menu item changes -> joystick up and down the menu item to modify the configuration values -> press OPEN (iris open +) confirm and save, press CLOSE (aperture off -) cancel the setting.

Timer Function Number: Total Support 4 timing functions.  
 Timing Action: When the system clock reaches timer function "start time" is the implementation of the action.  
 Start Time: Perform "timed action" point in time.  
 Close Time: End "time movement" point in time. The system will determine whether the action currently being executed by the timer function is activated, it is then end the execution specify the action, whether it will do nothing.  
 [Timing cycle]: This sub-menu configuration current timer, day in a week which is enabled.

**Camera settings:** Camera settings include the following sub-menu items:

Note: When the camera itself supports OSD menu, it will enter the camera comes with menus.

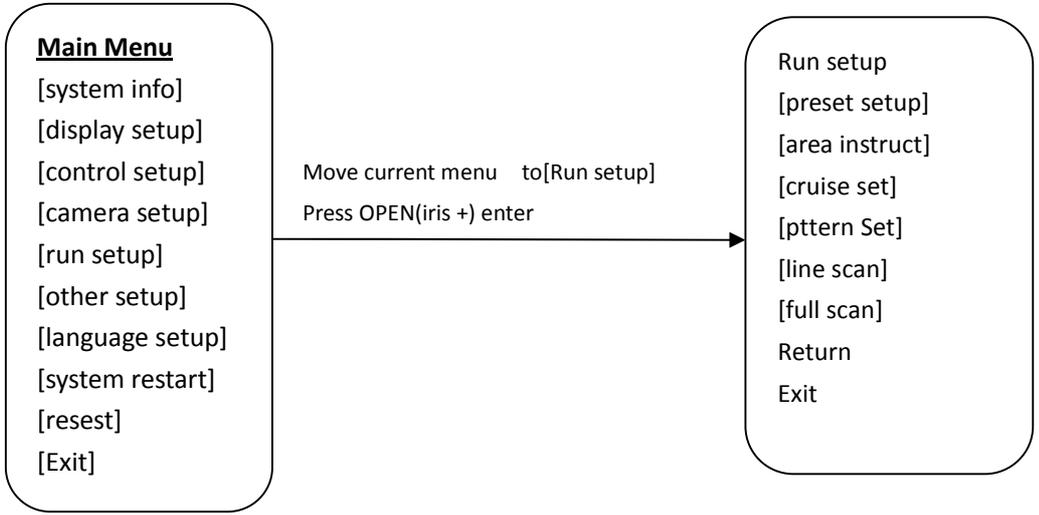
**Main Menu**  
 [system info]  
 [display setup]  
 [control setup]  
 [camera setup]  
 [run setup]  
 [other setup]  
 [language setup]  
 [system restart]  
 [reseat]  
 [Exit]

Move current menu to [camera setup]  
 Press OPEN(iris +) enter

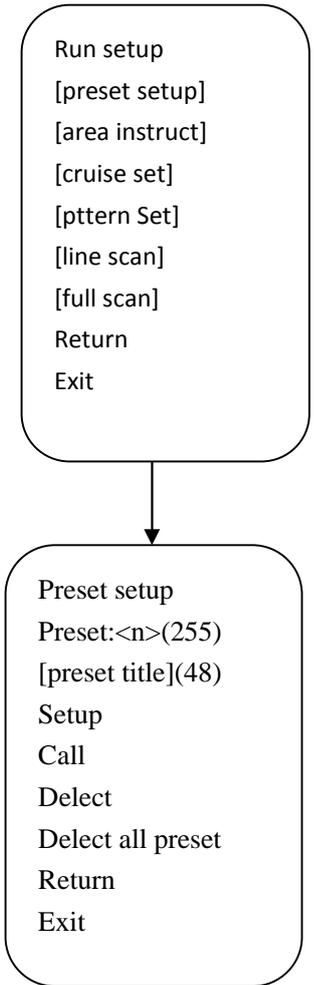
**Camera setup**  
 Camera OSD<off>  
 Auto zoom:<on>  
 Digital focus:<off>  
 BLC:<off>  
 Vertical mirror:<off>  
 Image freeze:<off>  
 Zoom speed:<high>  
 Day/night switch:<auto>  
 Return  
 Exit

**Setup: Run setup includes the following sub-menu items:**

- "[Preset Settings]": Set the preset point.
- "[Regional Settings]": to set the regional indicative.
- "[Cruise Settings]": Set the preset cruise scanning.
- "[Pattern]": Mode Path recording starts.
- "[Line Scan]": Set between two scans.
- "[Full Scan]": Set 360 ° scanning.



**" [ Preset Settings ] "**



Press the OPEN (iris open +) to enter the preset point setting. Move to the menu item, press OPEN (iris open +) configuration values for the corresponding menu item changes -> joystick up and down the menu item to modify the configuration values -> press OPEN (iris open +) confirm and save, press CLOSE (aperture off -) cancel the setting.

Preset Number: preset number.  
 [Preset Title]: enter the sub-menu to edit the title of preset point. Title only supports preset number from 1 to 48 preset points. Other non-title of the preset settings. Setting method refer Dome Title setup process.  
 Settings>: Set the preset point.  
 Call>: call preset points.  
 Delete>: delete the current preset number saved preset point information.  
 Delete all presets>: delete all saved dome presets.

**" [ Regional Settings ] "** : to set the regional directions to set the ball machine in a range of titles. Being installed , the lens by  
 Clockwise direction according to the "right" direction . Flip , the lens counterclockwise as the "right" direction.

**Run setup**  
 [preset setup]  
 [region setup]  
 [cruise set]  
 [pttern Set]  
 [line scan]  
 [full scan]  
 Return  
 Exit



Region setup  
 Region no.<n>/8  
 Region title  
 Setup left side  
 Setup right side  
 Delete  
 Return  
 exit

Press the OPEN (iris open +) into the regional settings. Move to the menu item, press OPEN (iris open +) configuration values for the corresponding menu item changes -> joystick up and down the menu item to modify the configuration values -> press OPEN (iris open +) confirm and save, press CLOSE (aperture off -) cancel the setting.

Area No.: A total of eight areas can be set.  
 [Section title]: enter the sub-menu to edit the title of the region. Setting method to set the reference Dome Title  
 Set the left margin>: Set the left margin area.  
 Set the right margin>: Set the right border area.  
 Delete>: delete the current area of the region title.

**" [ Cruise Settings ] ": Set the preset cruise scanning**

**Run setup**  
 [preset setup]  
 [region setup]  
 [cruise set]  
 [pttern Set]  
 [line scan]  
 [full scan]  
 Return  
 Exit



**Cruise setup**  
 Cruise no.<n>  
 Edit no.  
 Reset default  
 Return  
 exit

Press the OPEN (iris open +) into the regional settings. Move to the menu item, press OPEN (iris open +) configuration values for the corresponding menu item changes -> joystick up and down the menu item to modify the configuration values -> press OPEN (iris open +) confirm and save, press CLOSE (aperture off -) cancel the setting.

Area No.: A total of eight areas can be set.  
 [Section title]: enter the sub-menu to edit the title of the region. Setting method to set the reference Dome Title  
 Set the left margin>: Set the left margin area.  
 Set the right margin>: Set the right border area.  
 Delete>: delete the current area of the region title.



**Edit no.**  
 Item/preset/dwelltime/speed  
 01 / 001<1-255>sec/64level  
 02 / 002<1-255>sec/64level  
 03 / 003<1-255>sec/64level  
 04 / 004<1-255>sec/64level  
 Last page  
 Next page  
 Return  
 exit

Press the OPEN ( iris open + ) into the sequence editor . Move to the menu item, press OPEN ( iris open + ) configuration values for the corresponding menu item changes - > joystick left and right , respectively, select " Preset " , " duration " , " speed" , joystick up or down selection value - > press oPEN ( iris open + ) confirm and save , press CLOSE ( iris off - ) cancel the setting .

Preset : cruise preset point number.

Duration: ball machine after the jump to the preset dwell time .

Speed: jump to the preset speed.

" [ Pattern ] " : recording user actions , executed playback the user's actions .

**Run setup**  
 [preset setup]  
 [region setup]  
 [cruise set]  
 [pttern Set]  
 [line scan]  
 [full scan]  
 Return  
 Exit

Press the OPEN ( iris open + ) into the pattern scan settings. Move to the menu item, press OPEN ( iris open + ) configuration values for the corresponding menu item changes - > joystick up and down the menu item to modify the configuration values - > press OPEN ( iris open + ) confirm and save , press CLOSE ( aperture off - ) cancel the setting .

Scan number: pattern scan number.

Recording > : Enter the pattern scan recording process , the user shakes the joystick , the system will record the incoming commands. Press the CLOSE ( Iris Off - ) will stop recording, press the CLOSE ( Aperture Off - ) will exit the Recording menu .  
 Start > : Start implementation of this Article pattern scan . Starts automatically exit the menu.

Delete> : delete the clause pattern scan .

**Pattern setup**  
 Scan no.<n>(4 pattern)  
 Record  
 Start  
 Delete  
 Return  
 exit

**Rest space**  
 [||||||||||||||||||||||||||||||||]100%  
 Confirm--<OPEN>  
 Exit--<CLOSE>

**" [ Line Scan ] ": Set between two scans.**

**Run setup**  
 [preset setup]  
 [region setup]  
 [cruise set]  
 [pttern Set]  
 [line scan]  
 [full scan]  
 Return  
 Exit

**Line scan**  
 Line scan no.<n>(16)  
 Speed:<n>(1-6level)  
 Direction:<  
 Clockwise>/Countercl  
 ockwise  
 Setup start point  
 Setup end point  
 Start  
 Delete  
 Return  
 exit

Press the OPEN ( iris open + ) into the line scan . Move to the menu item, press OPEN ( iris open + ) configuration values for the corresponding menu item changes - > joystick up and down the menu item to modify the configuration values - > press OPEN ( iris open + ) confirm and save , press CLOSE ( aperture off - ) cancel the setting .

Line scan number : Supports 16 -line scan .  
 Speed: the starting point , end point between two scanning speed grades.  
 Duration: Turn the starting point or ending point after time spent on this point .  
 Direction : Starting scanning direction .  
 Delete> : Delete section line scan .

**" [ Full Scan ] ": Set 360 ° scanning.**

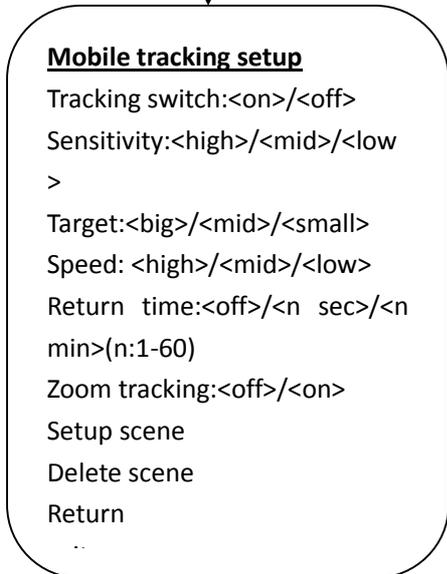
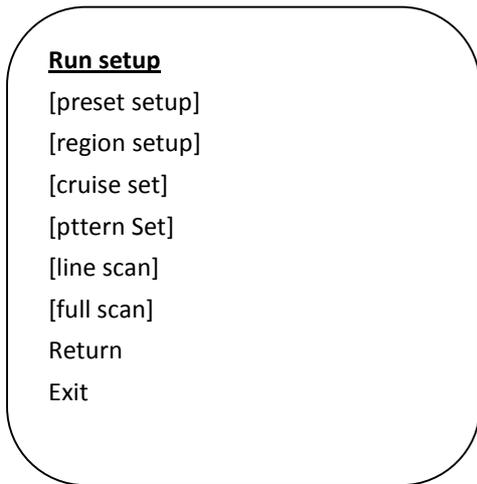
**Run setup**  
 [preset setup]  
 [region setup]  
 [cruise set]  
 [pttern Set]  
 [line scan]  
 [full scan]  
 Return  
 Exit

Full scan  
 Scan no.<n>(8)  
 Scan speed:<n level>(64 level)  
 Scan  
 direction:<clockwise>/<counterclockwise>  
 Setup start point  
 Start  
 Delete  
 Return  
 exit

Press the OPEN (iris open +) into the full scan. Move to the menu item, press OPEN (iris open +) configuration values for the corresponding menu item changes -> joystick up and down the menu item to modify the configuration values -> press OPEN (iris open +) confirm and save, press CLOSE (aperture off -) cancel the setting.

Scan number: total support for 8-round sweep.  
 Scan speed: Set 360 ° scan speed grade, a total of 64.  
 Scanning direction: the direction of scanning, clockwise, or counterclockwise.  
 Set start point>: Set full scan start position, OPEN enter the configuration starting point, joystick, so that camera movement to the starting point, press OPEN (iris open +) to save the starting point.  
 Start>: Start section full scan will start from  
 Automatically exit the menu.  
 Delete>: Delete section line scan.

" [ Mobile Tracking ] " : moving object tracking property setting.



Press the OPEN (iris open +) into mobile tracking submenu item. Move to the menu item, press OPEN (iris open +) configuration values for the corresponding menu item changes -> joystick up and down the menu item to modify the configuration values -> press OPEN (iris open +) confirm and save, press CLOSE (aperture off -) cancel the setting.

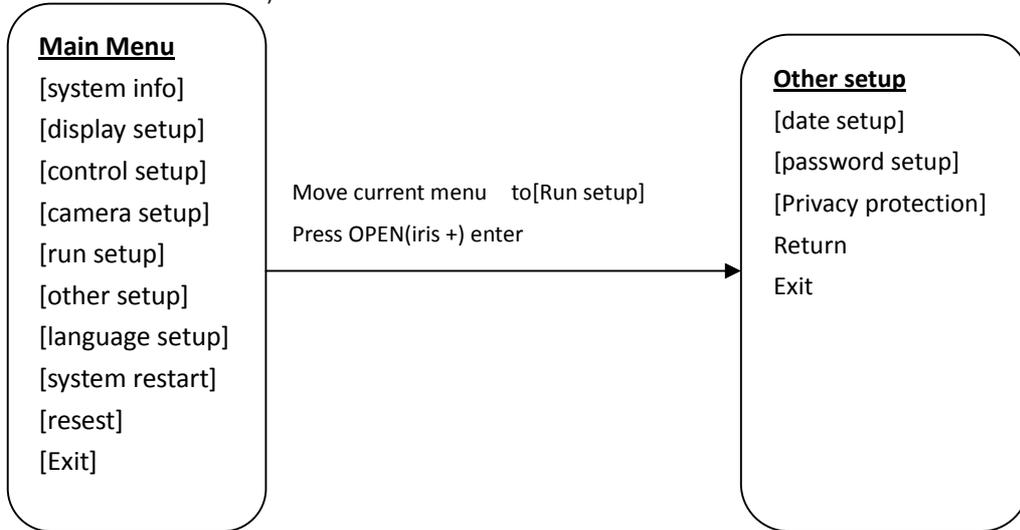
- Trace switch: whether to start mobile tracking feature.
- Tracking Sensitivity: Set the trigger tracking sensitivity.
- Target size: Set the trigger tracking moving objects size.
- Target speed: Set the speed of a moving target.
- Return time: When moving target is lost, time to return to the default scene.
- Zoom follow: Set the lens zoom tracking.
- Setting the Scene>: Set lost object, return to the scene.
- Deleted scenes>: delete return to the scene.

**Other settings:** Control settings include the following sub-menu items:

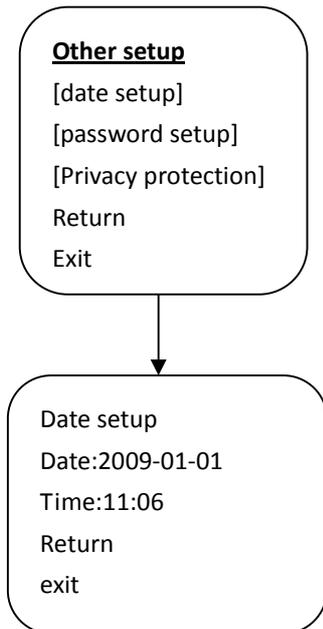
"[Date Settings]": to set the date.

"[Password Protection]": enter the dome menu password.

"[Privacy]": Set the privacy zone. (Need camera support, currently only supports SONY, NEWLG cameras privacy protection features. SONY camcorder supports inside the dome menu settings, NEWLG cameras need to set up inside the camera comes with menus.)



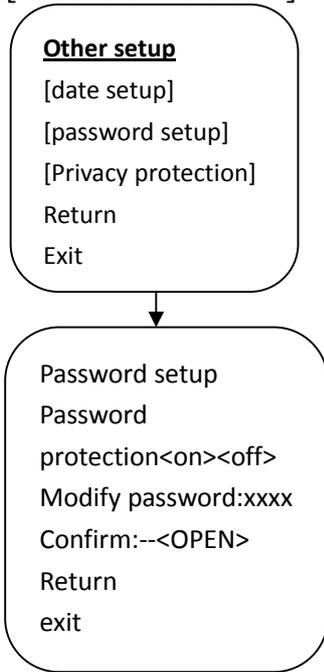
"[Date Settings]": to set the date.



Press the OPEN (iris open +) to enter date setting. Move to the menu item, press OPEN (iris open +) configuration values for the corresponding menu item changes -> joystick left and right to modify the configuration menu items -> joystick up and down select values -> press OPEN (iris open +) to determine and save, press CLOSE (iris off -) cancel the setting.

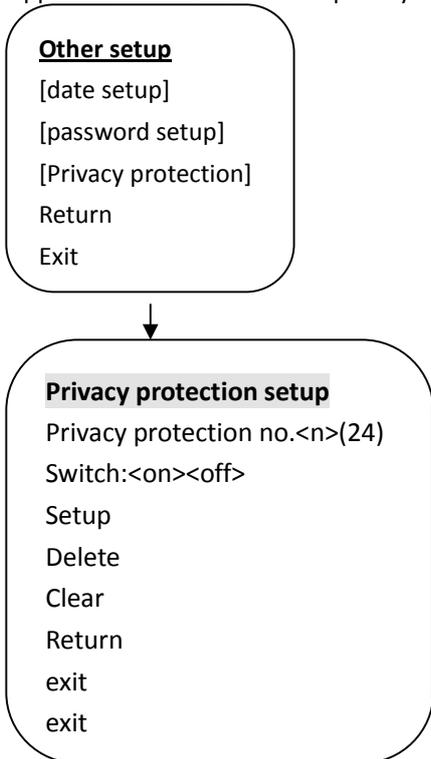
Date: dome system date.  
Time: dome system current time.

" [ Password Protection ] " : enter the dome menu password.



Press the OPEN ( iris open + ) to enter the password setting. Move to the menu item, press OPEN ( iris open + ) configuration values for the corresponding menu item changes -> joystick left and right to modify the configuration menu item -> select values joystick up or down "X" ( the password value is 0 ~ 9 ) -> press OPEN ( iris open + ) confirm and save , moves to "OK◇press CLOSE ( iris off - ) cancel the setting . > - <OPEN>" menu item , point OPEN ( iris open + ) to save the password.

" [ Privacy ] " : Set the privacy mask area , privacy protection requires camcorder supports privacy function. Currently supported with NEW LG SONY privacy .



Press the OPEN (iris open +) into the privacy protection. Move to the menu item, press OPEN (iris open +) configuration values for the corresponding menu item changes -> joystick left and right to modify the configuration menu items -> joystick up and down select values -> press OPEN (iris open +) to determine and save, press CLOSE (iris off -) cancel the setting.

Privacy number: 24 Privacy Protection (depending on the number of different cameras privacy).  
Protection switch: turn on or off the corresponding numbers to protect privacy.  
Settings>: Press OPEN (iris open +) to enter the setting joystick Privacy ◇ move the lens a region -> press OPEN (iris open +) to enter the area size of the configuration (the middle of the screen will appear black area) ◇ down about Move joystick configuration the size of the black area. ◇ Press OPEN (iris open +) confirm the entry.  
Delete>: delete the privacy zone.  
Clear>: delete all 24 privacy zones.

## Special preset feature list

### Summary Table

System 65 ~ 99 special preset for the system .

Preset number (calling)	Description
65	system configuration
66	camera type configuration
67	infrared control configuration
68	Start full scan
69	start line scan
70	start preset cruise
71	start pattern scan
72~73	Reserved
74	soft address set
75	set camera parameters
76	Reserved
77	cancel the mirror image
78	Mirror image
79	reset
80~94	Reserved
95	enter the menu
96~99	Reserved

### PTZ system configuration

Preset number entry	Sub preset number	Function
65		Enter system configuration
After calling 65 preset , then call the sub presets within 15 seconds , can achieve the functionality described in the described functionality .	1	Open depth of field scale deceleration function
	2	Close depth ratio deceleration function
	3	Turn on automatic rotate
	4	Turn off automatic rotate
	5	Turn on language configuration
	6	Turn off language configuration
	9	Reserved
	10	Reserved
	11	Turn on soft address enable switch
	12	Turn off soft address enable switch
	13	Turn on PECOL-P preset offset enable switch
	14	Turn off PECOL-P preset offset enable switch
	15	Turn On the level of control reverse
	16	Turn Off the level of control reverse
	17	Turn On the vertical control reverse
	18	Turn Off the vertical control reverse
	19	Open the OSD menu function
	20	Close the OSD menu function
	21	Reset
	22	Restore the system clock settings

	23~255	Reserved
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#### Zoom Camera Configuration Operation

Preset number entry	Sub preset number	Function
75		Enter system configuration
After calling 75 preset , then call the sub presets within 15 seconds , can achieve the functionality described in the described functionality .	1	Into the camera menu (camera need with OSD Function )
	2	Turn on the camera screen
	3	Turn Off the camera screen
	4	Turn on the camera digital zoom
	5	Turn off the camera digital zoom
	6	Turn on Camera BLC
	7	Turn off Camera BLC
	8	Set the camera to Auto Focus mode
	9	Set the camera to manual focus mode
	10~255	Reserved

#### Camera type configuration operations

Preset number entry	Sub preset number	Function
66		Enter system configuration
After calling 66 preset , then call the sub presets within 15 seconds , can achieve the functionality described in the described functionality .	1	Auto recognize camera
	2	SONY18X
	3	CNB22X
	4	SAMSUNG231
	5	HITACHI454
	6	SANYO400
	7	SAMSUNG330
	8	CHITACHI
	9	LGX
	10	SANYO600
	11	SANYO800
	12	SONY26X
	13	SONY36X
	14	HITACHI654
	15	NEWLG23X
	16	NEWCHITACHI
	17	HAITUO
	18	HITACHI214
	19	CNB2260X
	20	Reserved
	24	SCM_2251
	28	CNBZCN_21Z22F
	29	CNB_SS_803LD
	33	LG22X
	34	Reserved
35	Reserved	

	36	Reserved
	37~255	Reserved

### IR(Infrared operation

Preset number entry	Sub preset number	Function
67		Enter IR Infraredconfiguration
After calling 67 preset , then call the sub presets within 15 seconds , can achieve the functionality described in the described functionality .	1	Infrared detection sensitivity set to 1
	2	Infrared detection sensitivity set to 2
	3	Infrared detection sensitivity set to 3
	4	Infrared detection sensitivity set to 4
	5	Infrared detection sensitivity set to 5
	6	Infrared detection sensitivity set to 6
	7	set to automatic mode IR
	8	Turn on manual mode IR
	9	Turn off manual mode IR
	10	Set the timer mode IR
	11	Set the camera mode IR
	12	Set up an infrared lamp brightness to automatic adjustment mode
	13	Reserved
	14	Reserved

	15	Reserved
	16	Reserved
	17	Initialization infrared light
	18	Set up an infrared brightness is low
	19	Set up an infrared brightness is mid
	20	Set up an infrared brightness is high
	21	Turn on infrared synchronization
	22	Turn off infrared synchronization
	23	Set into the infrared synchronization time

Running function operation

Preset number entry	Sub preset number	Function
68		Entrance into the start full scan
After calling 68 preset , then call the sub presets within 15 seconds , can achieve the functionality described in the described functionality .	1	Turn on 1 full scan
	2	Turn on 2 full scan
	3	Turn on 3 full scan
	4	Turn on 4 full scan
	5	Turn on 5 full scan
	6	Turn on 6 full scan
	7	Turn on 7 full scan
	8	Turn on 8 full scan

Preset number entry	Sub preset number	Function
69		Entrance into the line scan
After calling 69 preset , then call the sub presets within 15 seconds , can achieve the functionality described in the described functionality .	1	1 line scan
	2	2 line scan
	3	3 line scan
	4	4 line scan
	5	5 line scan
	6	6 line scan
	7	7 line scan
	8	8 line scan
	9	9 line scan
	10	10 line scan
	11	11 line scan
	12	12 line scan
	13	13line scan
	14	1 4line scan
	15	1 5line scan
	16	1 6line scan
17~255	Reserved	

Preset number entry	Sub preset number	Function
70		Entrance into the start preset cruise
After calling 70 preset ,	1	Start 1 preset cruise

then call the sub presets within 15 seconds , can achieve the functionality described in the described functionality .	2	Start 2 preset cruise
	3	Start 3 preset cruise
	4	Start 4 preset cruise
	5	Start 5 preset cruise
	6	Start 6 preset cruise
	7	Start 7 preset cruise
	8	Start 8 preset cruise
	9	Start 9 preset cruise
	10~255	Reserved

Preset number entry	Sub preset number	Function
71		Entrance into the start pattern scan
After calling 71 preset , then call the sub presets within 15 seconds , can achieve the functionality described in the described functionality .	1	Turn on 1 pattern scan
	2	Turn on 2 pattern scan
	3	Turn on 3 pattern scan
	4	Turn on 4 pattern scan
	5~255	Reserved

#### DIP switch list

##### Protocol DIP Switch

Protocol	SW1-1	SW1-2	SW1-3
PECOL-D	0	0	0
PECOL-P	1	0	0
B01	0	1	1
HKV	1	1	0
DAIWA	1	0	1
SAMSUNG	1	1	1

##### Baud rate DIP Switch

Protocol	SW1-4	SW1-5
1200B	0	0
2400B	1	0
4800B	0	1
9600B	1	1

#### DIP switch address code

The encoded bit DIP switch toggle "ON" place, the corresponding bit is "1" , otherwise "0" ."

Add	SW2-1	SW2-2	SW2-3	SW2-4	SW25	SW2-6	SW2-7	SW2-8
1	1	0	0	0	0	0	0	0
2	0	1	0	0	0	0	0	0
3	1	1	0	0	0	0	0	0
4	0	0	1	0	0	0	0	0

5	1	0	1	0	0	0	0	0
6	0	1	1	0	0	0	0	0
7	1	1	1	0	0	0	0	0
8	0	0	0	1	0	0	0	0
9	1	0	0	1	0	0	0	0
10	0	1	0	1	0	0	0	0
11	1	1	0	1	0	0	0	0
12	0	0	1	1	0	0	0	0
13	1	0	1	1	0	0	0	0
14	0	1	1	1	0	0	0	0
15	1	1	1	1	0	0	0	0
16	0	0	0	0	1	0	0	0
17	1	0	0	0	1	0	0	0
18	0	1	0	0	1	0	0	0
19	1	1	0	0	1	0	0	0
20	0	0	1	0	1	0	0	0
21	1	0	1	0	1	0	0	0
22	0	1	1	0	1	0	0	0
23	1	1	1	0	1	0	0	0
24	0	0	0	1	1	0	0	0
25	1	0	0	1	1	0	0	0
26	0	1	0	1	1	0	0	0
27	1	1	0	1	1	0	0	0
28	0	0	1	1	1	0	0	0
29	1	0	1	1	1	0	0	0
30	0	1	1	1	1	0	0	0
31	1	1	1	1	1	0	0	0
32	0	0	0	0	0	1	0	0
...	...	...	...	...	...	...	...	...
254	0	1	1	1	1	1	1	1
255	1	1	1	1	1	1	1	1