

Safety information



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE REAR COVER. NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED SERVICE PERSONNEL.



This lightning flash with arrowhead symbol is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This exclamation point symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING

To prevent damage which may result in fire or electric shock hazard, do not expose this appliance to rain or moisture.

WARNING

1. Be sure to use only the standard adapter that is specification sheet. Using any other adapter could cause fire, electrical shock, or damage to the product.
2. Incorrectly connect or damage to the power supply or replacing battery may cause explosion, fire, electric shock, or damage to the product.
3. Securely plug the power cord into the power receptacle. Insecure connection may cause fire.
4. When installing the camera, fasten it securely and firmly. A falling camera may cause personal fire.
5. Do not place conductive objects or containers filled with water on top of the camera. Doing so may cause personal injury due to fire, electric shock, or falling object.
6. If any unusual smells or smoke come from the unit, stop using the product. In such case, immediately disconnect the power source and contact the service center. Continued use in such a condition may cause fire or electric shock.
7. If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way. (XINJITE is not liable for problems caused by unauthorized modifications or attempted repair.)
8. When cleaning, do not spray water directly onto parts of the product. Doing so may cause fire or electric shock.
9. If the camera is installed or rebooted after power failure when ambient temperature is below the freezing point, the dome cover is frosted. In this case, the frost will be disappeared after 3 hours after turning on the power.

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Introduction

FEATURES

□ Camera Specifications

- CCD Sensor : 1/4Interline Transfer CCD
- Zoom Magnification: x10Optical Zoom, x10 Digital Zoom (Max X 100 Zoom)
- Day & Night Function
- Various Focus Mode: Auto-Focus / Manual Focus / Semi-Auto Focus.
- Independent or General Camera Characteristic Setup in Preset operation

□ Powerful Pan/Tilt Functions

- Max.360/sec high speed Pan/Tilt Motion
- Using Vector Drive Technology, Pan/Tilt motions are accomplished in a shortest path. As a result, time to target view is reduced dramatically and the video on the monitor is very natural to watch.
- For jog operation using a controller, since ultra slow speed 0.05°/sec can be reached, it is very easy to locate camera to desired target view. Additionally it is easy to move camera to a desired position with zoom-proportional pan/tilt movement.

□ Preset, Pattern, Swing, Group, Privacy

- MAX. 127 Presets are assignable and characteristics of each preset can be set up independently, such as White Balance, Auto Exposure, Label and so on.
- Max. 8 Swing can be stored. This enables to move camera repetitively between two preset positions with designated speed.
- Max. 4 of Patterns can be recorded and executed. This enables for camera to track a surveillance trajectory as closely as possible which are recorded from operators motion of joystick.
- Max. 8 Group can be stored. To compose a surveillance trajectory, the Group can have max. 20 entities of Preset/Pattern/Group functions. This enables for camera to move a combinations of those functions repetitively.
- Max. 4 Masks are settable independently to protect privacy zone. The mask is arbitrary-sized rectangular and locate any location in view space.

□ PTZ(Pan/Tilt/Zoom) Control

- With RS-485 communication, max. 255 of cameras can be controlled at the same time.
- Pelco-D/ Pelco-P, protocol can be selected as a control protocol in the current version of firmware.

□ OSD(On Screen Display) Menu

- OSD menu is provided to display the status of camera and to configure the functions interactively.
- The information such as Camera ID, Pan/Tilt/Zoom/Direction, Alarm Input & Output, date/time,current temperature and Preset can be displayed on screen.
- Each display item can be turned On or Off independently.

□ Alarm I/O Functions

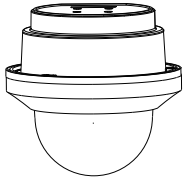
- 4 alarm sensor Inputs are available.
- To reject external electric noise and shock perfectly, alarm sensor Input is decoupled with photo coupler.
- If an external sensor is activated, camera can be set to move to the corresponding Preset position.
- Relay output can be assigned to work with a certain preset.

□ Reserved Presets for Special Purpose

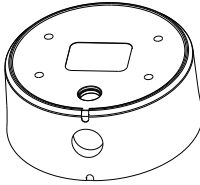
- Most camera characteristics can be set up easily and directly with reserved preset, not entering into OSD menu.For more information ,refer to "Reserved Preset "in this manual.

Introduction

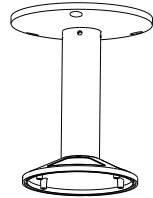
PRODUCT & ACCESSORIES



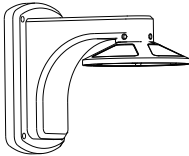
Camera



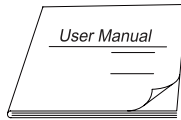
Shell



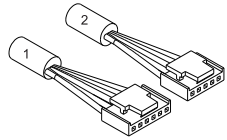
Pendant Mount Bracket



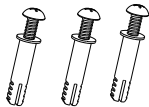
Wall Mount Bracket



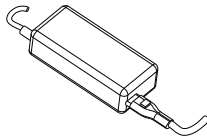
Manual



1: Video Cable 2: Alarm Cable



Screw Pack



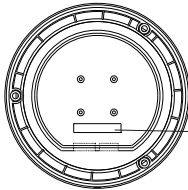
Adapter

Installation

DIP SWITCH SETUP

Before you install the camera, you should set the DIP switches to configure the camera ID, baud rate, and communication protocol.

□ Dip Switch mode



The Underside of Main Body

□ Camera ID Setup



- ID number of camera is set using binary number. The example is shown below.

Address	SW pin#							
	1	2	3	4	5	6	7	8
1	on	off	off	off	off	off	off	off
2	off	on	off	off	off	off	off	off
3	on	on	off	off	off	off	off	off
4	off	off	on	off	off	off	off	off
5	on	off	on	off	off	off	off	off
6	off	on	on	off	off	off	off	off
7	on	on	on	off	off	off	off	off
8	off	off	off	on	off	off	off	off
9	on	off	off	on	off	off	off	off
10	off	on	off	on	off	off	off	off
11	on	on	off	on	off	off	off	off
12	off	off	on	on	off	off	off	off
13	on	off	on	on	off	off	off	off
14	off	on	on	on	off	off	off	off
15	on	on	on	on	off	off	off	off
16	off	off	off	off	on	off	off	off
17	on	off	off	off	on	off	off	off
18	off	on	off	off	on	off	off	off
19	on	on	off	off	on	off	off	off
20	off	off	on	off	on	off	off	off
21	on	off	on	off	on	off	off	off
22	off	on	on	off	on	off	off	off
23	on	on	on	off	on	off	off	off
24	off	off	off	on	on	off	off	off
25	on	off	off	on	on	off	off	off
26	off	on	off	on	on	off	off	off
27	on	on	off	on	on	off	off	off
28	off	off	on	on	on	off	off	off
29	on	off	on	on	on	off	off	off

Installation

Address	SW pin#							
	1	2	3	4	5	6	7	8
30	off	on	on	on	on	on	off	off
31	on	on	on	on	on	off	off	off
32	off	off	off	off	off	on	off	off
33	on	off	off	off	off	on	off	off
34	off	on	off	off	off	on	off	off
35	on	on	off	off	off	on	off	off
36	off	off	on	off	off	on	off	off
37	on	off	on	off	off	on	off	off
38	off	on	on	off	off	on	off	off
39	on	on	on	off	off	on	off	off
40	off	off	off	on	off	on	off	off
41	on	off	off	on	off	on	off	off
42	off	on	off	on	off	on	off	off
43	on	on	off	on	off	on	off	off
44	off	off	on	on	off	on	off	off
45	on	off	on	on	off	on	off	off
46	off	on	on	on	off	on	off	off
47	on	on	on	on	off	on	off	off
48	off	off	off	off	on	on	off	off
49	on	off	off	off	on	on	off	off
50	off	on	off	off	on	on	off	off
51	on	on	on	off	on	on	off	off
52	off	off	on	off	on	on	off	off
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72	off	off	off	on	off	off	on	off
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74	off	on	off	on	off	off	on	off
75	on	on	off	on	off	off	on	off

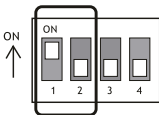
Address	SW pin#							
	1	2	3	4	5	6	7	8
76	off	off	on	on	off	off	on	off
77	on	off	on	on	off	off	on	off
78	off	on	on	on	off	off	on	off
79	on	on	on	on	off	off	on	off
80	off	off	off	off	on	off	on	off
81	on	off	off	off	on	off	on	off
82	off	on	off	off	on	off	on	off
83	on	on	off	off	on	off	on	off
84	off	off	on	off	on	off	on	off
85	on	off	on	off	on	off	on	off
86	off	on	on	off	on	off	on	off
87	on	on	on	off	on	off	on	off
88	off	off	off	on	on	off	on	off
89	on	off	off	on	on	off	on	off
90	off	on	off	on	on	off	on	off
91	on	on	off	on	on	off	on	off
92	off	off	on	on	on	off	on	off
93	on	off	on	on	on	off	on	off
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97	on	off	off	off	off	on	on	off
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102	off	on	on	off	off	on	on	off
103	on	on	on	off	off	on	on	off
104	off	off	off	on	off	on	on	off
105	on	off	off	on	off	on	on	off
106	off	on	off	on	off	on	on	off
107	on	on	off	on	off	on	on	off
108	off	off	on	on	off	on	on	off
109	on	off	on	on	off	on	on	off
110	off	on	on	on	off	on	on	off
111	on	on	on	on	off	on	on	off
112	off	off	off	off	on	on	on	off
113	on	off	off	off	on	on	on	off
114	off	on	off	off	on	on	on	off
115	on	on	off	off	on	on	on	off
116	off	off	on	off	on	on	on	off
117	on	off	on	off	on	on	on	off
118	off	on	on	off	on	on	on	off
119	on	on	on	off	on	on	on	off
120	off	off	off	on	on	on	on	off
121	on	off	off	on	on	on	on	off

Installation

Address	SW pin#							
	1	2	3	4	5	6	7	8
122	off	on	off	on	on	on	on	off
123	on	on	off	on	on	on	on	off
124	off	off	on	on	on	on	on	off
125	on	off	on	on	on	on	on	off
126	off	on	on	on	on	on	on	off
127	on	on	on	on	on	on	on	off
128	off	off	off	off	off	off	off	on

- The range of ID is 0-255. Do not use 0 as camera ID. Factory default of Camera ID is 1.
- If you want to control a certain camera, you must match the camera ID with Cam ID setting of DVR or Controller

□ Communication Protocol Setup

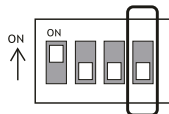


- Select the appropriate Protocol with DIP switch combination.

Switch State		Protocol
P0 (Pin 1)	P1 (Pin 2)	
OFF	OFF	PELCO-D,2400 bps
ON	OFF	PELCO-D,9600 bps
OFF	ON	PELCO-P ,4800 bps
ON	ON	PELCO-P ,9600 bps

- If you want to control using DVR or P/T controller, their protocol must be identical to camera. Otherwise, you can not control the camera.
- If you changed camera protocol by changing DIP S/W,the change will be effective after you reboot the camera.
- Factory default of protocol is" Pelco-D , 2400 bps". Factory default of protocol is" Auto protocol" .

□ Communication Baud rate Setup

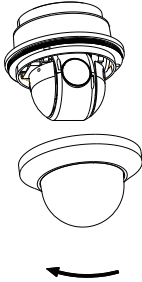


- Since Pin 3-Pin 4 is only for supplier ,DO NOT CHANGE THESE ITS ORIGINAL STATE. If you change one of these, proper operation can not be achieve.
- Pin3 PAL / NTSC system selection of camera
DO NOT CHANGE THIS PIN.
- Pin 4 Factory default is OFF state. This pin is used for system firmware upgrade. DO NOT CHANGE THIS PIN.

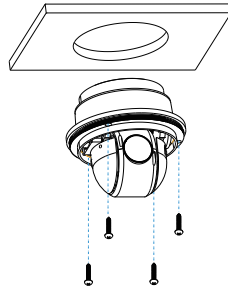
Installation

□ Flush Type Install

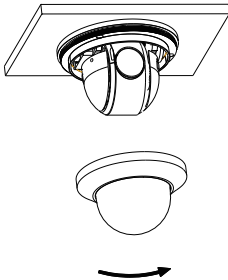
- Rotate the main dome removed.



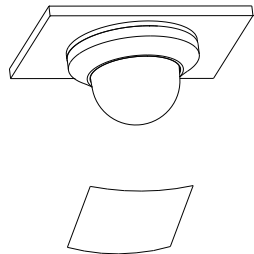
- Flush mounting with screws fixed to the ceiling of the main subject and connected to the cable.



- Clockwise to lock the main subject of the dome.



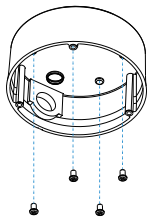
- Detach protection vinyl from dome cover.



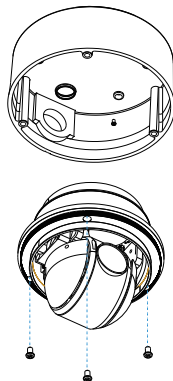
Installation

□ Ceiling-type Install

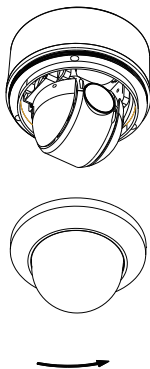
- Fix Shell with screws to the ceiling.



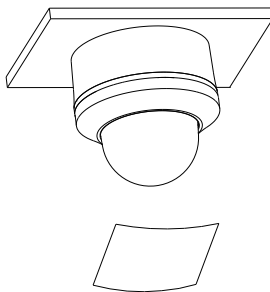
- Rotate the main dome removed. Chosen the cable hole and connect the cable. Fixed the main body with screws to the shell.



- Clockwise to lock the main subject of the dome.



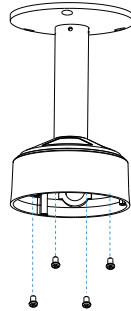
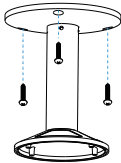
- Detach protection vinyl from dome cover.



Installation

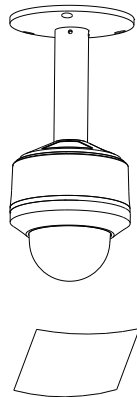
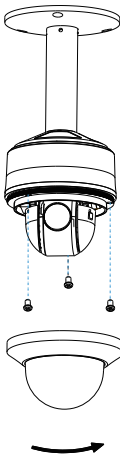
□ Hoisting Install(Indoor/Outdoor)

- Install bracket mount plate to the ceiling with screws
- Use screws to install the ceiling bracket shell, and cable penetration.



- Rotate remove the main dome, link cable well, Fixed with screws to the body shell, and finally replace the dome.

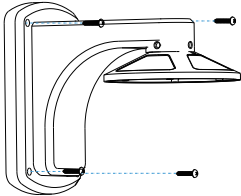
- Detach protection vinyl from dome cover.



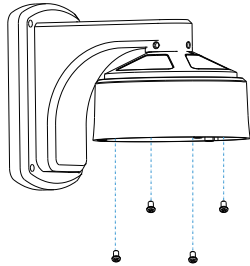
Installation

□ Wall Install(Indoor/Outdoor)

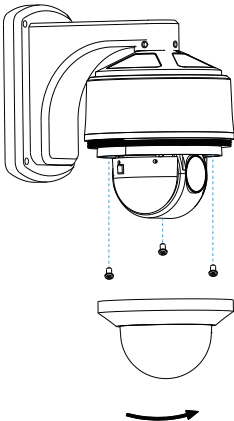
- Use the screws (provided) to secure the wall mount bracket to the wall.



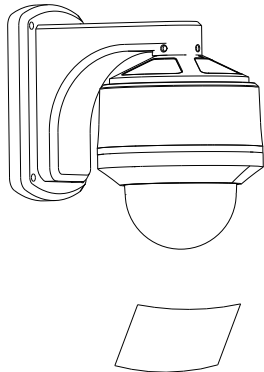
- Connect the shell of mount bracket to the head of wall mount bracket with screws and penetration the cable.



- Rotate remove the main dome, link cable well, Fixed with screws to the body shell, and finally replace the dome.



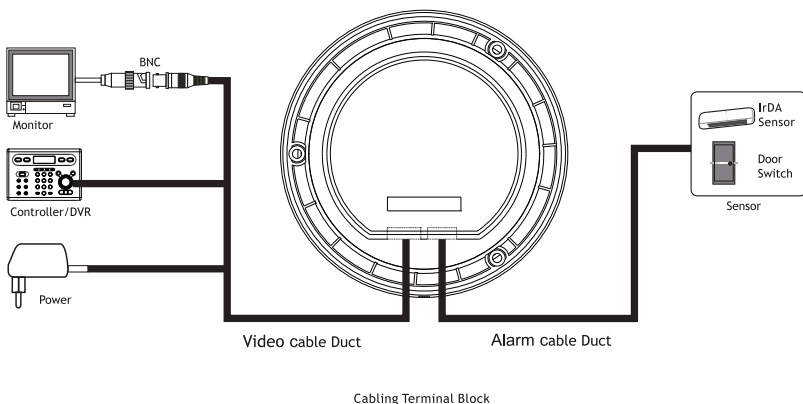
- Detach protection vinyl from dome cover.



Installation

CABLING

□ Cabling



□ Power Connection

- Please, check the voltage and current capacity of rated power carefully. Rated power is indicated in the back of main unit.

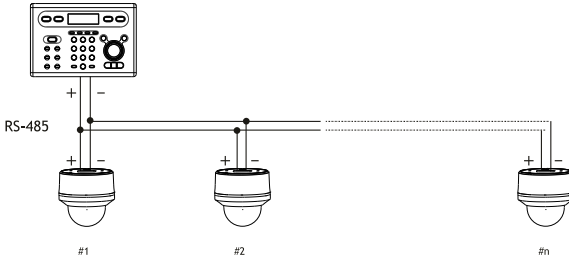
Power Mode	Input Voltage Range	Current Consumption
DC 12V	DC 10 ~ 12V	Max:1.5A

Installation

□ RS-485 Communication

- For PTZ control, connect this line to keyboard and DVR. To control multiple cameras at the same time, RS-485 communication lines of them is connected in parallel as shown below.

Keyboard Controller/DVR

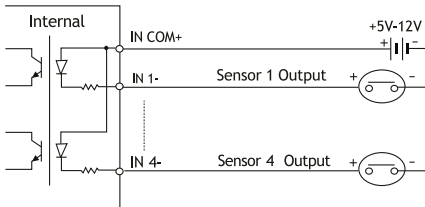


□ Video Connection

- Connect with BNC coaxial cable.

□ Alarm Input Connection

- Sensor Input



Before connecting sensors, check driving voltage and output signal type of the sensor. Since output signal types of the sensors are divided into Open Collector and Voltage Output type in general, the cabling must be done properly after considering these types.

If you want to use Alarm Input, the types of sensor must be selected in OSD menu. The sensor types are Normal Open and Normal close. If sensor type is not selected properly, the alarm can be activated reversely.

Signal	Description
IN COM+	Connect (+) cable of electric power source for Sensors to this port as shown in the circuit above.
IN1-, IN2-, IN3-, IN4-	Connect output of sensors for each port as shown in the circuit above.

Normal Open (N.O)	Output Voltage is high state when sensor is activated
Normal Close (N.C)	Output Voltage is low state when sensor is activated

Operation

CHECK POINTS BEFORE OPERATION

- Before power is applied, please check the cables carefully.
- The camera ID of the controller must be identical to that of the camera to be controlled. The camera ID can be checked in the System Information of OSD Menu.
- If your controller supports multi-protocols, the protocol must be changed to match to that of the camera.
- If you changed camera protocol by changing DIP switch, the change will be effective after you reboot the camera.
- Since the operation method can be different for each controller available, refer to the manual for your controller if camera can not be controlled properly. The operation of this manual is based on the standard Pelco Controller.

PRESET AND PATTERN FUNCTION PRE-CHECK

- Check how to operate Preset, Group, Swing and Pattern function with controller or DVR in advance to operate camera fully when using controller or DVD. (Refer to your system keyboard Manual)
- If controller or DVR has no pattern button or function, use shortcut keys with preset numbers. For more information, refer to "Reserved Preset" in this manual.
- Refer to the following table when using standard Pelco® protocol controller.

<Go Preset>	Input [Preset Number] and press [Preset] button shortly.
<Set Preset>	Input [Preset Number] and press [Preset] button for more than 2 seconds.
<Run Pattern>	Input [Pattern Number] and press [Preset] button shortly.
<Set Pattern>	Input [Pattern Number] and press [Preset] button for more than 2 seconds.

STARTING OSD MENU

- Function
Using the OSD menu, Preset, Pattern, Swing, Group and Alarm Input function can be configured for each application.
- Enter Menu
<Go Preset> [95]

RESERVED PRESET

- Description
Some Preset numbers are reserved for direct access to specific functions in OSD menu. These direct commands via preset provide quick execution of various functions using keyboard controller as well as simplify the interface with DVR and IP equipments.
- Function
<Go Preset> [95] : Enters into OSD menu
<Go Preset> [131-134] : Runs Pattern Function 1 ~ 4
<Go Preset> [141-148] : Runs Swing Function 1 ~ 8
<Go Preset> [151-158] : Runs Group Function 1 ~ 8

<Go Preset> [170] : Sets Camera BLC Mode to OFF
<Go Preset> [171] : Sets Camera BLC Mode to ON
<Go Preset> [174] : Sets Camera Focus Mode to AUTO
<Go Preset> [175] : Sets Camera Focus Mode to Manual
<Go Preset> [176] : Sets Camera Focus Mode to SEMI AUTO
<Go Preset> [177] : Sets Day & Night Mode to AUTO
<Go Preset> [178] : Sets Day & Night Mode to NIGHT

Operation

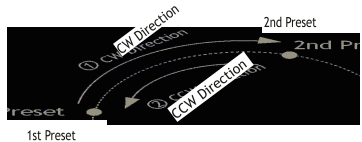
- <Go Preset> [179] : Sets Day & Night Mode to DAY
- <Go Preset> [190] : Sets OSD Display Mode to AUTO(Except Privacy Mask)
- <Go Preset> [191] : Sets OSD Display Mode to OFF (Except Privacy Mask)
- <Go Preset> [192] : Setting OSD Display Mode to ON (Except Privacy Mask)
- <Go Preset> [193] : Sets all Privacy Mask Display to OFF
- <Go Preset> [194] : Sets all Privacy Mask Display to ON

PRESET

- Function
Max. 127 positions can be stored as Preset position. The Preset number can be assigned from 1 to 128. It is noted that preset "95" is reserved for starting OSD menu.
- Set Preset
Camera characteristics (i.e. White Balance, Auto Exposure) can be set up independently for each preset and they are adjusted by using OSD menu. Label should be blank and "Camera Adujust" should be set to "GLOBAL" as default .All characters can be set up in OSD menu.
- Set Preset
<Set Preset> [1-128]
- Run Preset
<Go Preset> [1-128]
- Delete Preset
To delete Preset, use OSD menu.

SWING

- Function
By using Swing function, you can make camera to move between 2 Preset positions repeatedly. When Swing function runs, camera moves from the preset assigned as the 1st point to the preset assigned as the 2nd point in CW(Clockwise) direction. Then camera moves from the preset assigned as the 2nd point to the preset assigned as the 1st point in CCW(Counterclockwise) direction.



In case that the preset assigned as the 1st point is same as the preset assigned as the 2nd point, camera turns on its axis by 360° in CW(Clockwise) direction and then it turns on its axis by 360° in CCW(Counterclockwise) direction.

Speed can be set up from 1° / sec to 180° / sec.

- Set Swing
To set Swing, use OSD menu.
- Run Swing
Method1) <Run Swing> [Swing NO.+10]
ex) Run Swing 2 : <Go Preset> [12]]
Method2) <Go Preset> [Swing NO.+140]
ex) Run Swing 2 : <Go Preset> [142]]
- Delete Swing
To delete Swing, use OSD menu.

Operation

PATTERN

- Function

Pattern Function enables to memorize the path (mostly curve path) created by keyboard controller. By running the pattern, the memorized path can be reconstructed exactly as it memorized whenever required.

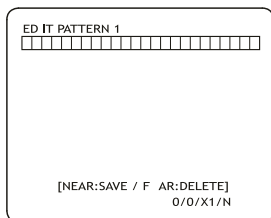
4 Patterns are available and Maximum 1200 communication commands can be stored in a pattern.

- Set Pattern

Pattern can be created by one of following two methods.

Method 1) <Set Pattern> [Pattern NO.]

Pattern editing screen is displayed as below.



- Movement by Joystick and preset movement can be memorized in a pattern.
- The rest memory size is displayed in progress bar.
- To save the recording, press NEAR key and to cancel, press FAR key.

Method 2) OSD Using OSD Menu:

See the section "How to use OSD Menu".

- Run Pattern

Method 1) <Run Pattern> [Pattern NO.]

ex) Run Pattern 2 : <Run Pattern> [2]

Method 2) <Go Preset> [Pattern NO.+130]

ex) Run Pattern 2: <Go Preset> [132]

- Delete Pattern

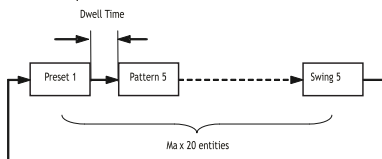
Use OSD menu to delete a Pattern.

When the pattern is saved or executed, the PAN/TILT is operated with Auto Flip OFF mode.

GROUP

- Function

The Group function allows running sequence of Presets, Patterns and/or Swings. Max 8 Group be stored. Each Group can have max 20 action entities which can be preset, pattern or Swing. Dwell time means the time interval between actions and is adjustable in the menu. Besides, there is an option number with which Preset speed as well as the repetition number of pattern and Swing can be set up.



- Set Group

Use OSD Menu to create a Group.

- Run Group

Method1) <Run Group> [Group No.+20]

ex) Run Group 2 : <Run Group> [22]

Method2) <Run Preset> [Group No.+150]

ex) Run Group 2 : <Run Preset> [152]

- Delete Group

Use OSD Menu to delete.

OTHER FUNCTIONS

- Power Up Action

This function enables to resume the last action executed before power down. Most of actions such as Preset, Pattern, Swing and Group are available for this function but Jog actions are not available to resume.

- Auto Flip

In case that tilt angle arrives at the top of tilt orbit (90°), zoom module camera keep moving to opposite tilt direction (180°) to keep tracing targets. As soon as zoom module camera passes through the top of tilt direction (90°), image should be reversed automatically and [F] appears in screen. If this function is set to OFF, tilt movement range is 0-90°

- Parking Action

This function enables to locate the camera to specific position automatically if operator doesn't

Operation

operate the controller for a while. The Park Time can be defined as an interval from 1 minute to 4 hours.

- Alarm Input
4 Alarm Inputs are used. If an external sensor is activated, camera can be set to move to corresponding preset position. It is noted that the latest alarm input is effective if multiple sensors are activated.
- Privacy Zone Mask
To protect privacy, MAX. 4 Privacy Masks can be created on the arbitrary position to hide objects such as windows, shops or private house. With Spherical Coordinates system, powerful Privacy Zone Mask function is possible.
- GENERAL/SPECIAL Image Setup
WB(White Balance) and AE(Auto Exposure) can be set up independently for each preset. There are 2 modes" General mode" &" Special mode". The General mode means that WB or AE can be set up totally and simultaneously for all presets in "ZOOM CAMERA SETUP"menu. The Special mode means that WB or AE can be set up independently or separately for each preset in each preset setup menu. Each Special WB/AE value should activate correspondingly when camera arrives at each preset location.
During jog operation, General WB/AE value should be applied. All Special WB/AE value will not be changed regardless of General WB/AE value change.
- Semi Auto Focus
This mode enables to switch focus mode automatically operation by operation. Manual focus mode is selected during preset operation and Auto focus mode is recovered if jog operation is started. During Preset action, instead of auto focusing, manual focus data stored when it is created will be applied as soon as camera arrives to the preset. This is helpful to get well-focused image in a short time.

- P/T/Z INFORMATION

Current Pan/Tilt angle in degree, zoom magnification and a compass direction.

- Camera ID

Current Camera ID(Address).

- Action Title

Followings are possible Action Titles and their Meaning.

"SET PRESET x x x"	When Preset x x x is stored
"PRESET x x x"	When camera reach to Preset x x x
"PATTERN x"	When Pattern x is in action
"SWG X/PRESET XXX"	When Swing x is in action
"UNDEFINED"	When undefined function is called to run

- PresetLabel

The Label stored for specific Preset.

- Alarm Information

This information shows current state of Alarm Input.The "I" means Input and "O" is output. If an Input is ON state it will show the number of input. If an Input is OFF state, '-' will be displayed. In the same way "0 : 1" means output 1 is ON "0:-" is OFF.

Ex) When Point 2 of inputs are ON, and Output 1 is ON, OSD will show as below

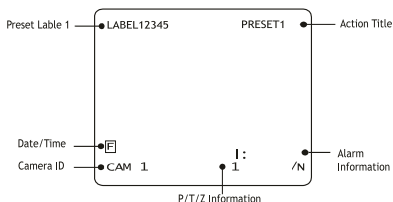


I:-2 0:1

- Image Flip

Shows that images are currently reversed by Auto Flip Function.

OSD DISPLAY OF MAIN SCREEN

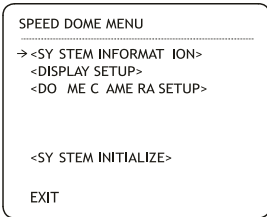


How to use OSD Menu

GENERAL RULES OF KEY OPERATION FOR MENU

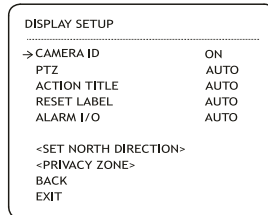
- The menu item surrounded with < > always means it has its sub menu.
- For all menu level, to go into sub menu, press NEAR or ENTER key.
- To go to up-one-level menu, press FAR key.
- To move from items to item in the menu, use joystick in the Up/Down or Left/Right.
- To change a value of an item, use Up/Down of the joystick in the controller.
- Press NEAR or ENTER key to save values and Press FAR key to cancel values.

MAIN MENU



- **SYSTEM INFORMATION**
Shows System information such as current version and communication settings.
- **DISPLAY SETUP**
Enable/Disable of OSD display on Main Screen.
- **DOME CAMERA SETUP**
Configure various function of this camera.
- **SYSTEM INITIALIZE**
Initializes system configuration and sets all data to factory default configuration.

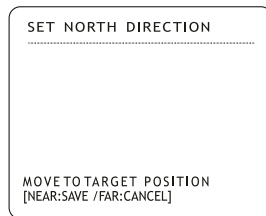
DISPLAY SETUP



This menu defines Enable/Disable of OSD display on Main Screen. If an item is set to be AUTO, the item is displayed only when the value of it is changed.

CAMERA ID	[ON/OFF]
PTZ	[ON/OFF/AUTO]
ACTION TITLE	[ON/OFF/AUTO]
PRESET LABEL	[ON/OFF/AUTO]
ALARM I/O	[ON/OFF/AUTO]

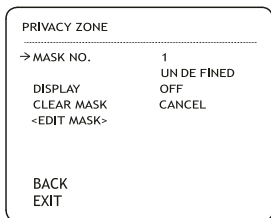
□ Compass Direction Setup



Set North to assign compass direction as criteria. move camera and press NEAR button to save.

How to use OSD Menu

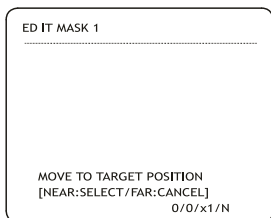
PRIVACY ZONE MASK SETUP



Select area in image to mask.

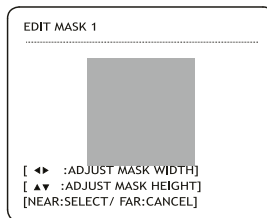
- MASK NO. [1-4]
Select Mask number. If the selected mask has already data, camera moves as it was set. Otherwise, "UNDEFINED" will be displayed under "Mask No".
- DISPLAY [ON/OFF]
Sets if camera makes mask shows or not on images.
- CLEAR MASK [CANCEL/OK]
Deletes data in the selected MASK NO.

□ Privacy Zone Area Setup



Move camera to area to mask. Then the menu to adjust mask size will be displayed.

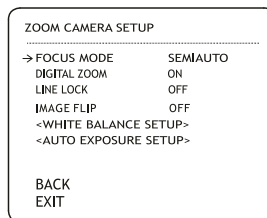
□ Privacy Zone Size Adjustment



Adjust mask size. Use joystick or arrow buttons to adjust mask size.

- ◀ ▶ (Left/Right) Adjusts mask width.
- ▲ ▼ (Up/Down) Adjusts mask height.
- It is noted that during PAN/TILT control like jog action, the object behind the privacy mask can be disclosed in a short period of time.
- To hide a certain zone completely regardless of high speed PT motions, it is recommended that the size of make must be 20% bigger than original target size.

CAMERA SETUP



Setup the general functions of zoom camera module.

- FOCUS MODE [AUTO/MANUAL/SEMAUTO]
Sets camera focus mode.
- SEMIAUTO Mode

This mode exchanges focus mode automatically between Manual Focus mode and Auto Focus mode. Manual Focus mode activates in preset operation and Auto Focus mode activates when jog operation starts.

How to use OSD Menu

With Manual mode at presets, Focus data is memorized in each preset in advance and camera calls focus data in correspondence with presets as soon as camera arrives at a preset.

● DIGITAL ZOOM [ON/OFF]

Sets digital zoom function to ON/OFF. If this is set to OFF, optical zoom function runs but zoom function stops at the end of optical zoom magnification.

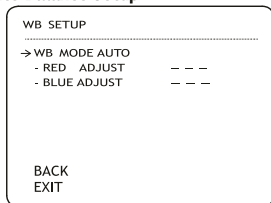
● LINE LOCK [ON/OFF]

If line lock is On state, the audio signal and AC power is Synchronization. When set to change after the video can be up and down movements.

● IMAGE FLIP [ON/OFF]

To display Upside down image.

□ White Balance Setup



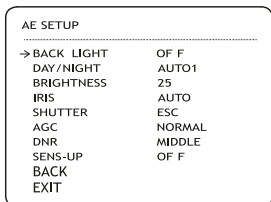
● WB MODE [AUTO/MANUAL]

In Manual mode, Red and Blue level can be set up manually.

● RED ADJUST [10-60]

● BLUE ADJUST [10-60]

□ Auto Exposure Setup



● BACKLIGHT [ON/OFF]

Sets Backlight Compensation

● DAY/NIGHT [AUTO1/AUTO2/DAY/NIGHT]

AUTO1 exchanges Day/Night mode faster than AUTO2.

● BRIGHTNESS [0-100]

Adjusts brightness of images. Iris, Shutter Speed and Gain are adjusted automatically in correspondence with this value.

● IRIS [AUTO/MANUAL(0-100)]

If Iris is set to Auto, Iris should have highest priority in adjusting AE and Shutter Speed should be fixed.

If Iris is set to Manual, Iris should be fixed. Iris has lower priority in adjusting AE, in comparison with others.

● SHUTTER SPEED

[ESC/A. Flicker/Manual(x128-1/120000 sec.)]

If Iris is set to Manual and Shutter Speed is set to ESC, Shutter Speed should have highest priority.

If Shutter Speed is set to A. Flicker, to remove Flicker, Shutter Speed should be set to 1/100 sec. for NTSC and 1/120 for PAL.

● AGC [OFF/NORMAL/HIGH]

Enhances image brightness automatically in case that luminance level of image signal is too low.

● DNR [OFF/LOW/MIDDLE/HIGH]

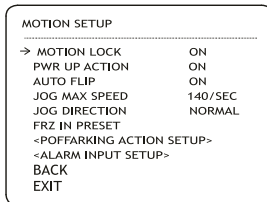
Enhances images by deducting noises when gain level of images is too high.

● SENS-UP [AUTO(2-128)/OFF]

Activates Slow Shutter function when luminance of image (signal) is too dark.

It is possible to set up the maximum number of frames piled up one on another by Slow Shutter function.

MOTION SETUP



Setup the general functions of Pan/Tilt motions.

● MOTION LOCK [ON/OFF]

This function is made to protect preset data from unauthorized overwriting. If Preset Lock is ON, it is impossible to create and delete Preset, Auto Pan, Pattern and Group. It is only possible to run those functions. To create and delete those functions, use OSD menu.

● POWER UP ACTION [ON/OFF]

Refer to "Other Functions" section.

How to use OSD Menu

- AUTO FLIP [ON/OFF]
Refer to "Other Functions" section.

- JOG MAX SPEED [ON/OFF]
Sets maximum jog speed. Jog speed is inversely proportional to zoom magnification. As zoom magnification goes up, pan/tilt speed goes down.

- JOG DIRECTION [INVERSE/NORMAL]
If you set this to 'Normal', the view in the screen is moving same direction with jogtilting. If 'Inverse' is inselected, the view in the screen is moving reversely.

- FREEZE IN PRESET [ON/OFF]
At start point of preset movement, camera starts freezing the image of start point. Camera keeps displaying the image of start point during preset movement and does not display the images which camera gets during preset movement. As soon as camera stops at preset end point, camera starts displaying live images which it gets at preset end point.

This function availability should be different by models.

□ Parking Action Setup

PARKING ACTION SETUP	
→ PARK ENABLE	OF F
WATT TIME	00:10:00
PARK ACTION	HOME
BACK	
EXIT	

If Park Enable is set to ON, camera runs assigned function automatically if there is no PTZ command during assigned "Wait Time"

- PARK ENABLE [ON/OFF]
- WAIT TIME [1 minutes - 4 hour]
The time is displayed with "hh:mm:ss" format and you can change this by 1 min unit.
- PARK ACTION [HOME / PRESET / PATTERN / Swing / GROUP]

Ex) If HOME is selected for Park Action, camera will move to home position when there is no PTZ command during assigned "Wait Time".

□ Alarm Input Setup

ALARM INPUT SETUP		
ALARM1	TYPE	N.OPEN
ALARM2	TYPE	N.OPEN
ALARM3	TYPE	N.OPEN
ALARM4	TYPE	N.OPEN
ALARM1	ACT	NOT USED
ALARM2	ACT	NOT USED
ALARM3	ACT	NOT USED
ALARM4	ACT	NOT USED
BACK		
EXIT		

Match the Alarm sensor input to one of Preset positions. If an external sensor is activated, camera will move to corresponding preset position when this item is predefined.

- ALARM TYPE
[Normal OPEN(N.O) / Normal CLOSE](N.C.)
Sets sensor input type.
- ALARM ACTION
[NOT USED/HOME/PRESET 1-128/GROUP 1-8, PATTERN1-4, GROUP 1-4]

For each Alarm input, you can assign counteraction functions (Preset, Swing, Pattern and Group).

PRESET SETUP

PRESET SETUP	
→ PRESET NO.	1
CLR PRESET	CANCEL
<EDIT SCENE>	
<EDIT LABEL>	LABEL123
CAM ADJUST	GE NE RAL
BACK	
EXIT	

- PRESET Number [1-128]
If a selected preset is already defined, camera moves to pre-defined position and preset characteristics such as Label and Relay Outputs show on monitor. If a selected preset is not defined, "UNDEFINED" shows on monitor.

How to use OSD Menu

● EDIT PRESET SCENE

Redefine current Preset scene position (i.e. PTZ).

● EDIT PRESET LABEL

Edits Label to show on monitor when preset runs. MAX. 10 alphabets are allowed.

● CLEAR PRESET [CANCEL/OK]

Delete current Preset data.

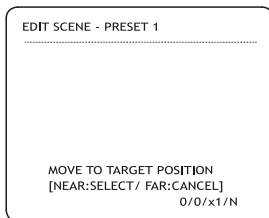
● CAM ADJUST [GENERAL/SPECIAL]

WB(White Balance) and AE(Auto Exposure) can be set up independently for each preset. There are 2 modes, Global mode & Local mode. The Global General mode means that WB or AE can be set up globally for all presets in CAMERA SETUP menu.

The Special mode means that WB or AE can be set up independently or separately for each preset in each preset setup menu. Each Special WB/AE value will be applied when camera arrives to the preset location. During jog operation, General WB/AE value should be applied.

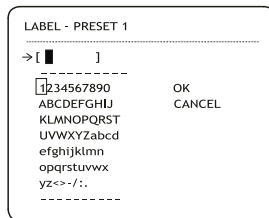
All Special WB/AE value will not be affected by General WB/AE value changes. If "Special" is selected, Menu to set WB/AE shows on monitor. Its default is GENERAL.

□ Edit Preset Scene

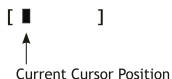


- ① Using Joystick, move camera to desired position.
- ② By pressing NEAR or ENTER key, save current PTZ data.
- ③ Press FAR key to cancel.

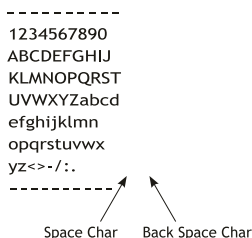
□ Edit Preset Label



- ① Edits label to show on monitor when camera arrives at presets. In Edit Label menu, a reverse rectangular is cursor. As soon as finishing selecting alphabet, cursor moves to the next digit.



- ② Using Left / Right / Up / Down of joystick, move to an appropriate character from the Character set. To choose that character, press the NEAR or ENTER key.



If you want to use blank, choose Space character (" "). If you want to delete a character before, use back space character("␣").

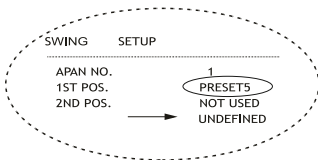
- ③ If you complete the Label editing, move cursor move cursor to "OK" and press NEAR key to save completed label. To abort current change, move cursor to Cancel and press NEAR key.

How to use OSD Menu

SWING SETUP

SWING	SETUP
→ SWING NO.	1
1ST POS.	NOT USED
2ND POS.	NOT USED
SWING SPEED	30/SEC
CLEAR APAN	CANCEL
BACK	
EXIT	

- **SWING NUMBER** [1-8]
Selects Swing number to edit. If a selected Swing has not defined, "NOT USED" is displayed 1st Position and 2nd Position.
- **1ST POSITION** [PRESET 1-128]
2ND POSITION
Set up the 2 position for Swing function. If a selected preset is not defined, "UNDEFINED" will be displayed as shown below.



When Swing function runs, camera moves from the preset assigned as the 1st point to the preset assigned as the 2nd point in CW (Clockwise) direction. Then camera moves from the preset assigned as the 2nd point to the preset assigned as the 1st point in CCW (Counterclockwise) direction. In case that the preset assigned as the 1st point is same as the preset assigned as the 2nd point, camera turns on its axis by 360 in CW direction and then it turns on its axis by 360 in CCW direction.

- **APAN SPEED** [1°/sec-180°/sec]
Sets Swing speed from 1°/sec to 180°/sec.
- **CLEAR APAN** [CANCEL/OK]
Deletes current Swing data.

PATTERN SETUP

PATTERN SETUP	
→ PATTERN NO.	1
CLR PATTERN	UNDEFINED
<EDIT PATTERN>	CANCEL
BACK	
EXIT	

- **PATTERN NUMBER** [1-4]
Selects Pattern number to edit.
If a selected pattern number is not defined "UNDEFINED" will be displayed under selected pattern number.
- **CLEAR PATTERN** [CANCEL/OK]
Deletes data in current pattern
- **EDIT PATTERN** Starts editing pattern.

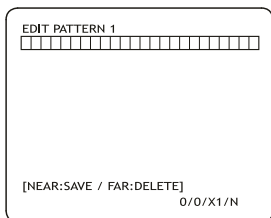
□ Edit Pattern

- ① By using Joystick, move to start position with appropriate zoom. To start pattern recording, press NEAR or ENTER key. To exit this menu, press FAR key.

EDIT PATTERN 1
MOVE TO START POSITION [NEAR:START / FAR:CANCEL] 0/0/x1/N

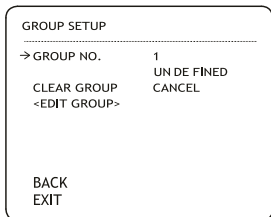
- ② Move camera with joystick of controller or run preset function to memorize the path (mostly curve path) in a selected pattern. The total memory size and the rest memory size is displayed in the form of bar. Maximum 1200 communication commands can be stored in a pattern.

How to use OSD Menu



- ③ To save data and exit, press NEAR or ENTER key. To cancel recording and delete record data, press FAR key.

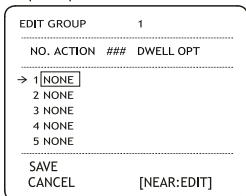
GROUP SETUP



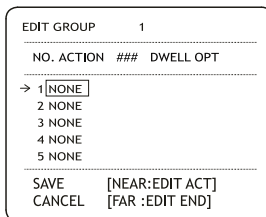
- **GROUP NUMBER** [1-8]
Selects Group number to edit.
If a selected Group number is not defined, "UNDEFINED" will be displayed under selected Group number.
- **CLEAR GROUP** [CANCEL/OK]
Deletes data in current Group
- **EDIT GROUP** Starts editing Group.

□ Edit Group

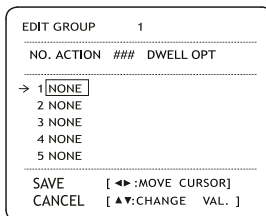
- ① Press NEAR or ENTER in NO list to Group setup.



- ② Note that MAX. 20 Functions are allowed in a Group. Move cursor up/down and press NEAR or ENTER key to set up.



- ③ Set up Action, Dwell time and Option. Note that selected item is displayed in reverse. Move cursor Left/Right to select items and move cursor Up/Down to change each value.



- **ACTION NO.**
[NONE/PRESET/SWING/PATTERN]
- **DWELL** [1 second ~ 4 minutes]
Sets Dwell Time between functions.
- **OPT**
Option. It represents preset speed (2-360) when preset is selected. It should be the number of repetition (1-255) when Pattern or Swing is selected for Action.

How to use OSD Menu

- ④ Set up items such as Action, ###, Dwell and OPT.

EDIT GROUP 1		
NO. ACTION	###	DWELL OPT
1	PRESET	[]00:03 360
2	NONE	
3	NONE	
4	NONE	
5	NONE	

SAVE	[←]	:MOVE CURSOR
CANCEL	[▲]	:CHANGE VAL.]

- ⑤ After finishing setting up an Action, press NEAR or ENTER key to one-upper-level menu (Step ②). Move cursor Up/Down to select Action number and repeat Step ↑ - Step ↓ to edit selected Group.

EDIT GROUP 1		
NO. ACTION	###	DWELL OPT
→ 1	PRESET	1 00:03 360
2	NONE	
3	NONE	
4	NONE	
5	NONE	

SAVE	[NEAR]	:EDIT ACT
CANCEL	[FAR]	:EDIT END

- ⑥ After finishing setting up all Action, Press FAR key to exit. Then cursor should be moved to "SAVE", Press NEAR or ENTER key to save data.

EDIT GROUP 1		
NO. ACTION	###	DWELL OPT
1	PRESET	1 00:03 360
2	NONE	
3	NONE	
4	NONE	
5	NONE	

→ SAVE		
CANCEL		

SYSTEM INITIALIZE

SYSTEM INITIALIZE	
→ CLEAR ALL DATA	NO
CLR DISPLAY SET	NO
CLR CAMERA SET	NO
CLR MOTION SET	NO
CLR EDIT DATA	NO
REBOOT CAMERA	NO
REBOOT SYSTEM	NO

SAVE	
EXIT	

- CLEAR ALL DATA
Deletes all configuration data such as display, camera and motion setup and so on.
- CLEAR DISPLAY SET
Initializes Display Configuration.
- CLEAR CAMERA SET
Initializes Camera Configuration.
- CLEAR MOTION SET
Initializes Motion Configuration.
- CLEAR EDIT DATA
Deletes Preset Data, Swing Data, Pattern Data, Group Data and Schedule Data.
- REBOOT CAMERA
Reboots Zoom Camera module.
- REBOOT SYSTEM
Reboots Smart Dome Camera.

How to use OSD Menu

□ Initial Configuration Table

Display Configuration	
Camera ID	ON
PTZ	AUTO
Action Title	AUTO
Preset Label	AUTO
Alarm I/O	AUTO
Set North Direction	Pan 0°
Privacy Zone	Undefined

Motion Configuration	
Preset Lock	OFF
Power Up Action	ON
Auto Flip	ON
Jog Max Speed	120°/sec
Jog Direction	NORMAL
Freeze In Preset	OFF
Park Action	OFF
Alarm I/O Action	OFF

Communication Setup	
Protocol	AUTO
Baud Rate	9600

Camera Configuration	
Focus Mode	SEMAUTO
Digital Zoom	ON
Image Flip	OFF
White Balance	AUTO
Back Light	OFF
Day/Night	AUTO1
Brightness	25
IRIS	AUTO
Shutter	ESC
AGC	NORMAL
DNR	MIDDLE
SENS-UP	OFF

Function Data	
Preset 1-128	Undefined
Swing 1-8	Undefined
Pattern 1-4	Undefined
Group 1-8	Undefined

Specifications

SPECIFICATIONS

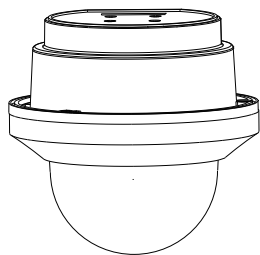
Model			
Video Signal System		NTSC	PAL
Camera	CCD	1/4"Interline Transfer CCD	
	Max. Pixels	811(H) x 508(V)410K	795(H) x 596(V)470K
	Effective Pixels	768(H) x 494(V)380K	752(H) x 582(V)440K
	Horizontal Res	500 TV Line(Color), 570 TV Line(B/W)	
	S/N Ratio	50 dB (AGC Off)	
	Zoom	X 10 Optical zoom, x 10 Digital zoom	
	Focal length	F1.8, f=3.8-38mm	
	Min. illumination	0.7 Lux(Color) / 0.02 Lux (B/W), 50 IRE	
	Day & Night	Auto / Day / Night(ICR)	
	Focus	Auto / Manual / SemiAuto	
	Iris	Auto / Manual	
	Shutter Speed	x128 - 1/120000 sec, Anti Flicker less	
	AGC	Normal / High / Off	
	White Balance	Auto / Manual(Red, Blue Gain Adjustable)	
	BLC	Low / Middle / High / Off	
DNR	Low / Middle / High / Off		
Pan/Tilt	Range	Pan : 360° (Endless) Tilt :180°(Auto-Flip), 95° (Normal)	
	Pan/Tilt Speed	Preset : 360°/sec	
		Manual : 0.05-360°/sec(proportional to zoom)	
	Preset	Swing : 1-180°/sec	
	Pattern	127 Preset (Label, Camera Image Setting)	
	Swing	4 Pattern, 1200commands(about 5 minute)/Pattern	
	Group	8 Swing	
	Other Functions	8 Group (20 action entities per Group)	
General	Communication	Auto Flip, Auto Parking, Power Up Action etc.	
	Protocol	RS-485	
	Privacy Zone	Pelco-D, Pelco-P	
	Alarm Input	4 Zone	
	OSD	4 Input	
	Rated Power**	Menu / PTZ information etc	
	Dimension	DC 12V / 1.5A(MAX)	
		Dome: Ø83.88mm	
	Weight	Housing: Ø125(L) x 124.71(H)mm	
Operating Temperature	about 1.0Kg		
	Indoor/Outdoor: -10C° ~ +50C°		

* Specifications of this product can be subjected to change without notice.

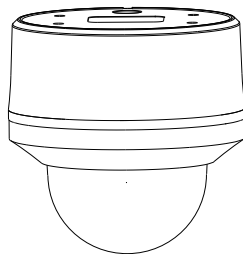
** Check the voltage and current capacity of rated power carefully.

Specifications

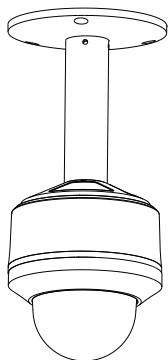
- Flush type Installation



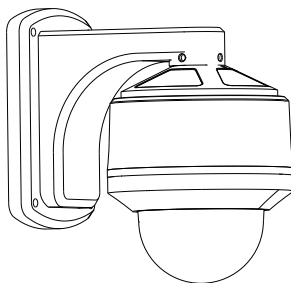
- Ceiling type Installation



- Hoisting Installation



- Wall Installation

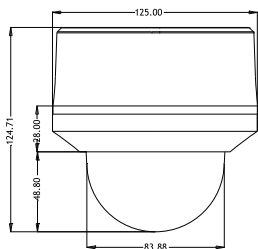


Specifications

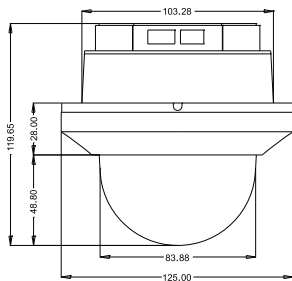
DIMENSION

Unit (mm)

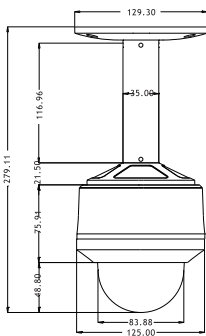
- Ceiling type installation dimensions



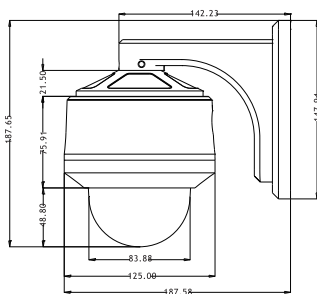
- Flush type installation dimensions



- Hoisting installation dimensions



- Wall installation dimensions





警告

触电危险
请勿打开



警告： 为了减少触电危险，请勿自行拆卸，用户不得擅自维修本产品，相关服务请咨询合格的服务人员。



带箭头的闪电标志意在提醒用户，产品的机箱内存有未绝缘的“危险电压”，它可能产生强大的电流对人体构成电击危险。



在正三角形中的注意号，用以提醒用户参考有关该机的重要的操作及保修服务说明。

警告：

- 为防止火灾的风险或触电危险，请不要使产品打开并暴露在雨中或潮湿的空气中。

注意：

1. 请务必使用标准的适配器，使用其他的适配器可能会引起火灾或者损坏该产品。
2. 不正确的连接电源可能会引起火灾或者损坏该产品。
3. 电源插头应牢固的插入电源插座，不牢固的连接可能会引起火灾。
4. 当安装摄像机时，应安全牢固的固定，摄像机掉落可能会引起人身伤害。
5. 请勿将导体放在摄像机上面，这样做可能会引起人身伤害。
6. 如果装备中发出不寻常的气味或者烟雾，请停止使用本产品。此时应立即切断电源同时联系服务中心。如果继续使用可能会造成火灾。
7. 如果本产品不正常工作，请与最近的服务中心或经销商联系，切勿以任何手段拆开或者更改本产品。（因未授权用户拆解或维修造成的问题不在保修范围之内）
8. 清洁时，请不要把水滴溅在产品的部件上，否则可能会引起火灾。
9. 当环境温度低于冻结点时，且在停电后，如果摄像机安装或者重新启动，摄像机的圆顶将被霜覆盖，在这种情况下，霜冻将在开机3小时后消失。

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功能介绍

特征

□ 摄像机参数

- CCD 芯片 : 1/4" Interline Transfer CCD
- 变焦倍率 : x10 倍光学变焦; x10 倍数码变焦 (最大x100倍变焦)
- 彩转黑功能
- 各种对焦模式: 自动对焦/手动对焦/半自动对焦
- 在预置位操作中可以单独或者同步设置摄像机功能

□ 强大的云台旋转功能

- 最大360°/秒高速旋转
- 采用矢量驱动技术, 水平/垂直运转将选择最短路径, 使选取目标景物的时间大大缩短, 在监视器上看到的图像更加逼真。
- 使用键盘控制器的操纵杆操作, 可达到最低转速 0.05°/秒, 因此在选取目标景物时, 云台的水平/垂直运动和摄像机的变焦操作更加容易。

□ 预置位, 花样巡航, 点间巡航, 群组巡航, 隐私区域

- 最多127个预置位, 每个预置位可独立个性化设置, 例如白平衡、自动曝光等等。
- 最多可存储8组点间巡航动作, 这使得球机能在两个预置位间以指定的速度运动。
- 最多可记录和执行4组花样巡航, 使摄像机在键盘操纵杆操作下沿任何路径移动。
- 最多可存储8组群组巡航, 使摄像机能在预置位、点间巡航、花样巡航的组合下运行。每个群组可支持20组预置位/点间巡航/花样巡航。
- 可指定隐私区域, 每个隐私防护区都不受其他隐私区域干扰(可设置4个隐私区域)。

□ PTZ(水行/垂直/变焦)控制

- RS-485通讯协议, 最多可同时控制255个摄像机。
- 在当前的版本中可选择Pelco-D或者Pelco-P协议作为控制协议。

□ OSD菜单

- OSD 显示摄像机状态和功能设置。
- 球机地址码(Camera ID), 平行/垂直角度(Pan/Tilt Angle), 报警输入(Alarm Input)和预置位(Preset)信息可在屏幕上显示。

□ Alarm I/O (报警输入功能设置)

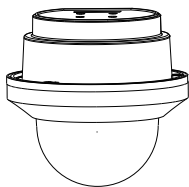
- 4路报警传感器输入。
- 为更好的抵制干扰, 报警感应器输入端采用光电耦合电路隔离。
- 信号感应器输入范围为DC 5.0~12.0V, 适应多种应用。
- 如果外部感应器被激活, 可设置摄像机移动到相应的预置点。

□ 保留预置位

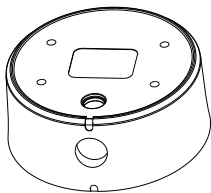
- 大多数功能可简易直接设置, 不需要调用OSD菜单, 更多信息, 参考本说明书中“保留预置位”操作部分。

功能介绍

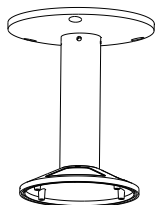
产品及配件



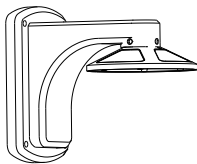
主体



外壳



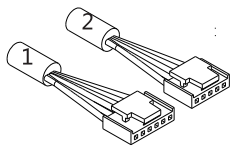
吊装支架



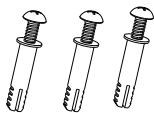
壁装支架



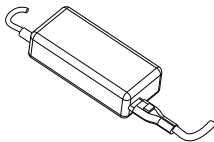
说明书



1:视频线 2:报警线



螺丝包



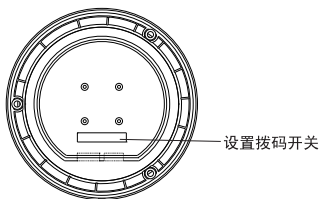
电源适配器

安装说明

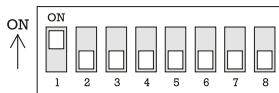
拨码开关设置

在安装摄像机之前,请设置DIP开关与摄像机地址码和通讯协议匹配。

□ 拨码开关调式



□ Camera ID 球机地址码设置



- 摄像机地址码为一套二进制数字,例如以下:

Address	SW pin#							
	1	2	3	4	5	6	7	8
1	on	off	off	off	off	off	off	off
2	off	on	off	off	off	off	off	off
3	on	on	off	off	off	off	off	off
4	off	off	on	off	off	off	off	off
5	on	off	on	off	off	off	off	off
6	off	on	on	off	off	off	off	off
7	on	on	on	off	off	off	off	off
8	off	off	off	on	off	off	off	off
9	on	off	off	on	off	off	off	off
10	off	on	off	on	off	off	off	off
11	on	on	off	on	off	off	off	off
12	off	off	on	on	off	off	off	off
13	on	off	on	on	off	off	off	off
14	off	on	on	on	off	off	off	off
15	on	on	on	on	off	off	off	off
16	off	off	off	off	on	off	off	off
17	on	off	off	off	on	off	off	off
18	off	on	off	off	on	off	off	off
19	on	on	off	off	on	off	off	off
20	off	off	on	off	on	off	off	off
21	on	off	on	off	on	off	off	off
22	off	on	on	off	on	off	off	off
23	on	on	on	off	on	off	off	off
24	off	off	off	on	on	off	off	off
25	on	off	off	on	on	off	off	off
26	off	on	off	on	on	off	off	off
27	on	on	off	on	on	off	off	off
28	off	off	on	on	on	off	off	off
29	on	off	on	on	on	off	off	off

安装说明

Address	SW pin#							
	1	2	3	4	5	6	7	8
30	off	on	on	on	on	off	off	off
31	on	on	on	on	on	off	off	off
32	off	off	off	off	off	on	off	off
33	on	off	off	off	off	on	off	off
34	off	on	off	off	off	on	off	off
35	on	on	off	off	off	on	off	off
36	off	off	on	off	off	on	off	off
37	on	on	off	on	off	on	off	off
38	off	on	on	off	off	on	off	off
39	on	on	on	off	off	on	off	off
40	off	off	off	on	off	on	off	off
41	on	off	off	on	off	on	off	off
42	off	on	off	on	off	on	off	off
43	on	on	off	on	off	on	off	off
44	off	off	on	on	off	on	off	off
45	on	off	on	on	off	on	off	off
46	off	on	on	on	off	on	off	off
47	on	on	on	on	on	on	off	off
48	off	off	off	off	on	on	off	off
49	on	off	off	off	on	on	off	off
50	off	on	off	off	on	on	off	off
51	on	on	off	off	on	on	off	off
52	off	off	off	off	on	on	off	off
53	on	off	on	off	on	on	off	off
54	off	on	on	off	on	on	off	off
55	on	on	on	off	on	on	off	off
56	off	off	off	on	on	on	off	off
57	on	off	off	on	on	on	off	off
58	off	on	off	on	on	on	off	off
59	on	on	off	on	on	on	off	off
60	off	off	on	on	on	on	off	off
61	on	off	on	on	on	on	off	off
62	off	on	on	on	on	on	off	off
63	on	on	on	on	on	on	off	off
64	off	off	off	off	off	off	on	off
65	on	off	off	off	off	off	on	off
66	off	on	off	off	off	off	on	off
67	on	on	off	off	off	off	on	off
68	off	off	on	off	off	off	on	off
69	on	off	on	off	off	off	on	off
70	off	on	on	off	off	off	on	off
71	on	on	on	off	off	off	on	off
72	off	off	off	on	off	off	on	off
73	on	off	off	on	off	off	on	off
74	off	on	off	on	off	off	on	off
75	on	on	off	on	off	off	on	off

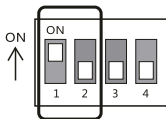
Address	SW pin#							
	1	2	3	4	5	6	7	8
76	off	off	on	on	off	off	on	off
77	on	off	on	on	off	off	on	off
78	off	on	on	on	off	off	on	off
79	on	on	on	on	off	off	on	off
80	off	off	off	off	on	off	on	off
81	on	off	off	off	on	off	on	off
82	off	on	off	off	on	off	on	off
83	on	on	off	off	on	off	on	off
84	off	off	on	off	on	off	on	off
85	on	off	on	off	on	off	on	off
86	off	on	on	off	on	off	on	off
87	on	on	on	off	on	off	on	off
88	off	off	off	on	on	off	on	off
89	on	off	off	on	on	off	on	off
90	off	on	off	on	on	off	on	off
91	on	on	off	on	on	off	on	off
92	off	off	on	on	on	off	on	off
93	on	off	on	on	on	off	on	off
94	off	on	on	on	on	off	on	off
95	on	on	on	on	on	off	on	off
96	off	off	off	off	off	on	on	off
97	on	off	off	off	off	on	on	off
98	off	on	on	off	off	on	on	off
99	on	on	off	off	off	on	on	off
100	off	off	on	off	off	on	on	off
101	on	off	on	off	off	on	on	off
102	off	on	on	off	off	on	on	off
103	on	on	on	off	off	on	on	off
104	off	off	off	on	off	on	on	off
105	on	off	off	on	off	on	on	off
106	off	on	off	on	off	on	on	off
107	on	on	off	on	off	on	on	off
108	off	off	on	on	off	on	on	off
109	on	off	on	on	off	on	on	off
110	off	on	on	on	off	on	on	off
111	on	on	on	on	off	on	on	off
112	off	off	off	off	on	on	on	off
113	on	off	off	off	on	on	on	off
114	off	on	off	off	on	on	on	off
115	on	on	off	off	on	on	on	off
116	off	off	on	off	on	on	on	off
117	on	off	on	off	on	on	on	off
118	off	on	on	off	on	on	on	off
119	on	on	on	off	on	on	on	off
120	off	off	off	on	on	on	on	off
121	on	off	off	on	on	on	on	off

安装说明

Address	SW pin#							
	1	2	3	4	5	6	7	8
122	off	on	off	on	on	on	on	off
123	on	on	off	on	on	on	on	off
124	off	off	on	on	on	on	on	off
125	on	off	on	on	on	on	on	off
126	off	on	on	on	on	on	on	off
127	on	on	on	on	on	on	on	off
128	off	off	off	off	off	off	off	on

- 地址码范围是 1~255。不要用“0”作为球机地址码,出厂默认值为“1”。
- 如果控制摄像机,球机地址码必须与硬盘录像机或键盘设置匹配。

□ 通讯协议设置

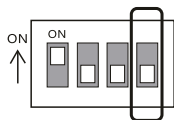


- 用拨码开关组合选择合适的协议。

拨码开关状态		Protocol 协议
P0 (Pin 1)	P1 (Pin 2)	
OFF	OFF	PELCO-D,2400 bps
ON	OFF	PELCO-D,9600 bps
OFF	ON	PELCO-P,4800 bps
ON	ON	PELCO-P,9600 bps

- 如果用硬盘录像机或者云台控制摄像机,其协议设置必须与球机一致,否则不能控制球机。
- 如果通过拨码S/W改变了摄像机协议,重启摄像机后设置才会生效。
- 出厂协议默认值为Pelco-D, 2400 bps。

□ 厂家提醒

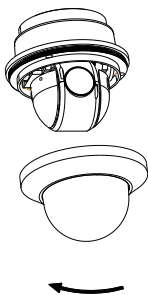


- 因为Pin 3和Pin 4只用于工厂纠错调试,——
——请不要改变其原始值。如果改变了其中任何一个默认值,将导致某些操作不能完成。
- Pin 3 PAL / NTSC 摄像头匹配选择,请不要改变这个拨码端子的默认值。
- Pin 4 工厂默认值为OFF状态,此拨码端子用于系统固件升级,请不要随意改变这个拨码开关。

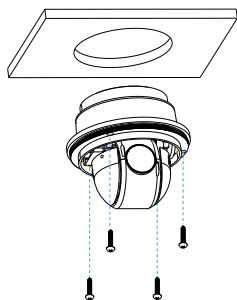
安装说明

□ 嵌入式安装

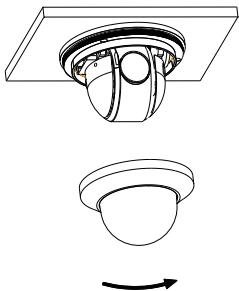
① 逆时针旋转拆下主体球罩，



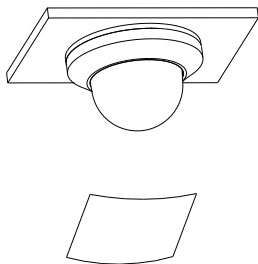
② 使用螺丝将主体嵌入安装固定到天花板内并链接好电缆线。



③ 顺时针旋转球罩锁紧到主体上。



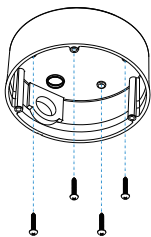
④ 拆开球罩的保护膜。



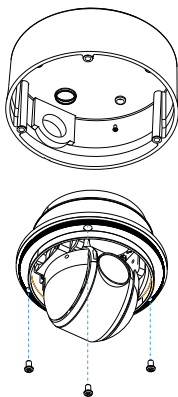
安装说明

□ 吸顶安装

① 使用螺丝将外壳固定到天花板上。



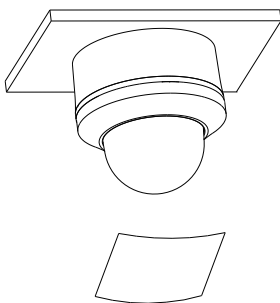
② 逆时针旋转拆下主体球罩,选择过孔链接好电缆线,并用螺丝将主体固定到外壳上。



③ 顺时针旋转球罩锁紧到主体上。



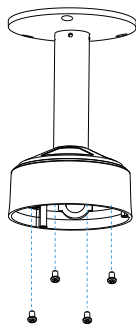
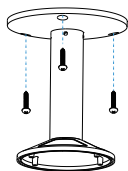
④ 拆开球罩的保护膜。



安装说明

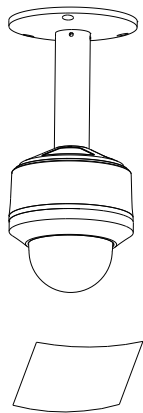
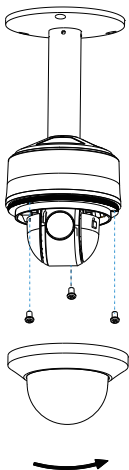
□ 吊装安装(室内/室外)

- ① 使用螺丝将吊装支架固定到天花板上。
- ② 使用螺丝将外壳安装在吊装支架上,并穿入电缆线。



- ③ 逆时针旋转拆下主体球罩,链接好电缆线,用螺丝将主体固定到外壳上,最后装回球罩。

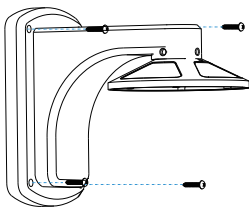
- ④ 拆开球罩的保护膜。



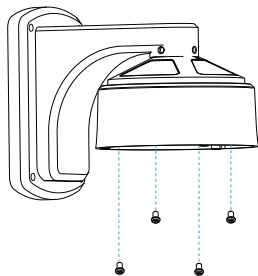
安装说明

□ 壁装安装(室内/室外)

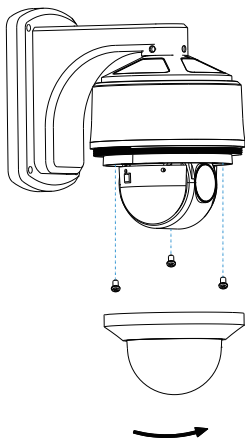
① 使用螺丝壁装支架固定到墙体上。



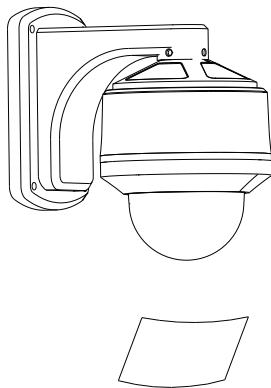
② 使用螺丝将外壳安装到壁装支架上,并穿入电缆线。



③ 逆时针旋转拆下主体球罩,链接好电缆线,用螺丝将主体固定到外壳上,最后装回球罩。



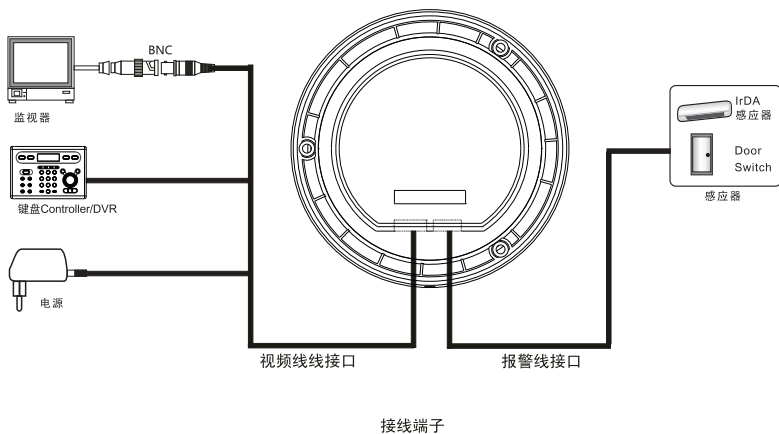
④ 拆开球罩的保护膜。



安装说明

接线

□ 接线



□ 电源连接

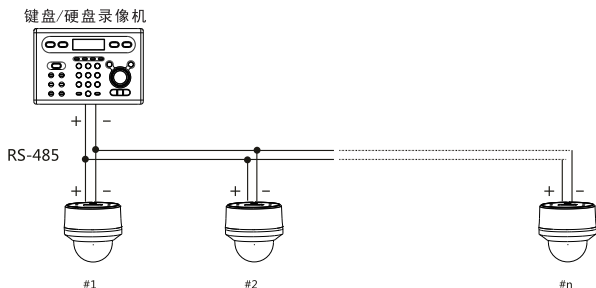
- 请仔细检查额定电压和电流, 额定电压和电流可见球机下方所标示。

额定电压	输入电压范围	电流
DC 12V	DC 10V ~ 12 V	最大: 1.5 A

安装说明

□ RS-485 通讯协议

- PTZ 控制, 连接与主板和DVR的线路, 为实现同时控制多个摄像机。
RS-485 通讯线设置成如图所示的平行线状态。

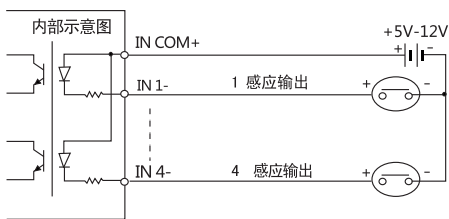


□ 视频连接

- 与BNC同轴电缆连接。

□ 报警输入连接

- 传感器输入



连接感应器之前, 请检查驱动电压和输出信号模式。
因为感应器输出模式通常被分成开放模式和电压输出模式, 因此, 电缆线路必须正确连接。

如果想使用报警输入, 在OSD菜单中选择传感器模式。传感器模式为常开和常闭, 如果传感器模式选择不当, 报警可能会起反作用。

信号	描述
IN COM+	如上图所示连接电源线正极 (+) 到此端口
IN 1-, IN 2-, IN 3-, IN 4-	每个端口连接传感器输出, 如上图所示

⊙ Normal Open 常开	当传感器被激活时, 输出电压为高电平状态
⊙ Normal Close 常闭	当传感器被激活时, 输出电压为低电平状态

操作说明

使用前检查

- 通电前请仔细检查线缆的连接。
- 控制器或键盘的地址码必须与目标摄像机的地址码一致，球机地址码可通过阅读摄像机拨码图核实。
- 如果你的控制器支持多种协议，确保其协议与本摄像机相匹配。
- 如果通过改变拨码而改变了摄像机协议，此设置需球机重启后方能生效。
- 因为每个控制器操作的方法可能会不同，如果球机不能被有效的控制，请参考你的控制器说明书。本说明书内的操作基于标准Pelco®控制器编制。

预置位和巡航扫描功能检查

- 当使用键盘控制器或者硬盘录像机控制球机时，及时检查如何用控制器和硬盘录像机操作使用预置位和巡航扫描功能。
- 使用标准Pelco®控制器，请参考下表：

<Go preset>运行预置位	输入预置位号码后马上按 [Preset]
<Set Preset>设置预置位	输入预置位号码后，按 [Preset] 约2秒
<Run Pattern>运行巡航	输入巡航号码后马上按 [Pattern]
<Set Pattern>设置巡航	输入巡航号码后，按 [Pattern] 约2秒

- 如果控制器或硬盘录像机没有专门的按钮或此项功能，可用快捷键+预置位号码来完成设置。更多信息请参考本说明书中的保留预置位设置部分。

开始OSD菜单

- 功能
使用OSD菜单，预置位，花样巡航，点间巡航，组巡航和报警输入功能皆可个性化设置
- 进入菜单
<Go Preset>[95]运行预置位

预置位保留

- 描述
一些预置位号码被保留用作特殊的用途。
- 功能
<Go Preset> [95] :进入OSD菜单
<Go Preset> [131~134] :运行花样巡航 功能1~4
<Go Preset> [141~148] :运行点间巡航 功能1~8
<Go Preset> [151~158] :运行组巡航 功能1~8
<Go Preset> [170] :设置白平衡(BLC 模式成OFF)
<Go Preset> [171] :设置白平衡(BLC 模式成ON)
<Go Preset> [174] :设置摄像机聚焦 模式成自动 AUTO
<Go Preset> [175] :设置摄像机聚焦模式成手动 Manual
<Go Preset> [176] :设置摄像机聚焦 模式成半自动 AUTO---SEMI
<Go Preset> [177] :设置彩转黑模式 成自动 AUTO

操作说明

<Go Preset> [178] : 设置彩转黑模式成晚上 NIGHT

<Go Preset> [179] : 设置彩转黑模式成白天 DAY

<Go Preset> [190] : 设置OSD菜单显示模式成自动AUTO,除了隐私区域

<Go Preset> [191] : 设置OSD菜单显示模式成自动关,除了隐私区域

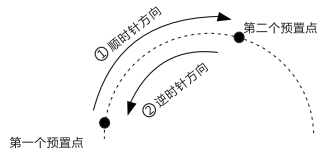
<Go Preset> [192] : 设置OSD菜单显示模式成自动开,除了隐私区域

<Go Preset> [193] : 设置所有隐私区域显示成关

<Go Preset> [194] : 设置所有隐私区域显示成开

点间巡航 SWING

- 功能
通过点间巡航功能,可以使摄像机在两个预置位间循环移动,当运行点间巡航功能,摄像机按顺时针方向从指定的第一个预置点移动到第二个预置点。然后从指定的第二个点以逆时针方向返回到第一个点。



预置位 PRESET

- 功能

最大可设置127个预置位,预置位号码可设置成从1到128.但是95被保留为“开始OSD菜单。摄像机特征,(白平衡,自动曝光)可针对每一个预置位独立设置。标签应该是空白的,摄像机调节应该设置成GLOBAL作为纠错值。所有特征可在OSD菜单中操作。

- 设置预置位

<Set Preset> [1~128]

- 运行预置位

<Go Preset> [1~128]

- 删除预置位

使用OSD菜单删除预置位。

如果第一个预置点与第二个预置点是同一点,摄像机将沿轴顺时针旋转360度,然后逆时针旋转360度。速度可设置成从1°/sec 到 180°/sec。

- 设置点间巡航:共8组

使用OSD菜单设置点间巡航

- 运行点间巡航:共8组

调用预置位<Go Preset>:[141~148]

- 删除点间巡航

使用OSD菜单删除点间巡航。

操作说明

花样巡航 PATTERN

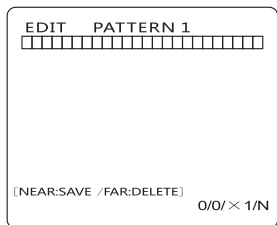
- 功能

花样巡航即摄像机按照键盘控制器分配的既定时间和路径运行轨迹。可设置4组花样巡航,每组花样巡航最大可包含1200个点。

- 设置花样巡航:共4组

使用OSD菜单设置花样巡航:

- 花样巡航编辑屏幕显示如下:



- 键盘动作和预置位动作可被存储在花样巡航中。
- 剩下的存储记忆尺寸在程序中显示。
- 存储修改记录,请按NEAR键,取消修改,按FAR键

- 运行花样巡航:共4组

调用预置位<Go Preset>:[131~134]

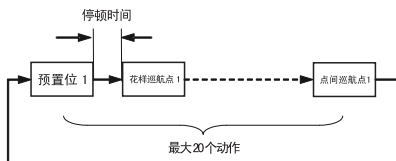
- 删除花样巡航

使用 OSD 菜单删除花样巡航。

组巡航 GROUP

- 功能

组巡航功能运行预置位,花样巡航和点间巡航次序有所调整,最大可存储8组组巡航,每组可支持20个动作,花样巡航,点间巡航,预置位速度可被设置和重复预置位号码动作间的停顿速度也可被设置。



- 设置组巡航:共8组

使用OSD菜单设置组巡航

- 运行组巡航:共8组

调用预置位<Go Preset>:[151~158]

- 删除组巡航

使用OSD菜单来删除

其他功能

- 恢复动作 PWR UP ACTION

此功能用于恢复正在运行的操作。(重启后直接运行之前的动作)。只对预置位、点间巡航、花样巡航和组巡航有效。

- 自动翻转 AUTO FLIP

如果垂直角度到达了垂直轨道顶部(90°),变倍模块球机保持移动到相反的垂直方向(180°)以保持追踪目标。一旦变倍摄像机经过了垂直方向顶部90°,图像将会自动倒转。“F”出现在屏幕上,如果此功能设置成OFF,垂直移动范围为0-95°。

- 停顿动作 PARKING ACTION SETUP

此功能能使摄像机自动置于具体的位置下,如果操作器暂时不能操作控制器的時候,停顿时间可被定义,间隔可设置从1分钟到4小时。

操作说明

● 报警输入 ALARM INPUT SETUP

可用4组报警输入。如果外部感应器被激活,摄像机可被设置移动到相应的预置点。注意如果多个传感器被激活,最新的报警输入是有效的。

● 隐私区域 PRIVACY ZONE

为保护隐私,最大可设置4个隐私区域。在任意的位置隐藏目标例如窗口,商店或者私人住所。

● 整体/局部图像设置

WB(白平衡)和AE(自动曝光) 可针对每个预置点独立设置。有两种模式,“整体”模式和“局部”模式。整体模式指在变倍摄像机设置菜单中,白平衡和自动曝光可整体和同时针对所有预置点设置。局部模式指在变倍摄像机设置菜单中,白平衡和自动曝光可独立单独的针对每个预置点设置,当摄像机到达每个预置点位置时,每个当地白平衡和自动曝光值应当被相应的激活,当微调或者整体操作时,白平衡和自动曝光值应当被申请。所有白平衡和自动曝光值不应当被改变,即使整体值改变了。如果已经选择了局部值,菜单被设置成白平衡/自动曝光显示在监视器上。

● 半自动聚焦 SEMIAUTO

此模式用于在手自动变焦和自动变焦之间,通过操作自动改变聚焦模式。手动变焦模式在预置位操作中激活,自动模式在预置位上以手动模式在微调操作中被激活。聚焦数据马上在每个预置点上被激活。一旦摄像机到达一个预置点,即可相应的获得变焦数据。应该缩短时间以获得变焦。当微调操作开始时聚焦模式自动改变到自动聚焦模式。

● P/T/Z 信息

当前的平行垂直转动角度,变倍和指示方向。

● 球机地址

当前球机地址码。

● 动作标签

当前可能的动作,和动作的意思。

“SET PRESET XXX” 当预置位xxx被存储

“PRESET XXX” 当云台到达预置位xxx

“PATTERN X” 当花样巡航x在运行

“SWG X/PRESET XXX” 当点间巡航xxx在运行

“UNDEFINED ” 当未被定义动作被运行

● 预置位标签

此标签存储具体的预置位设置。

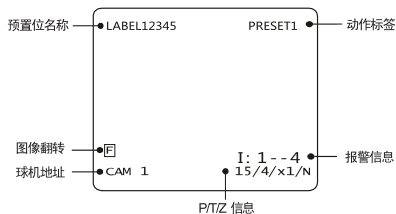
● 报警输入

此信息表明当前报警输入状态。如果报警输入设置为“ON”状态,若触发报警,将显示对应的号码,如果输入点为“OFF”状态,它将不显示。

例:报警输入端IN2,IN3设置为ON,触发报警后,OSD菜单将如下显示:

I: -23-

主屏幕OSD菜单显示



● 图像翻转

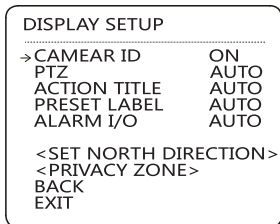
展示当前的图像翻转功能。

怎样使用OSD菜单

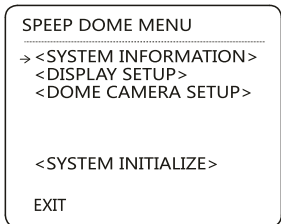
菜单操作总规则

- 菜单条目有此 < > 符号表明有下拉菜单。
- 对所有菜单级别, 进入子菜单, 按 NEAR 键。
- 返回上一级菜单, 按 FAR 键。
- 在菜单功能级别中移动, 使用键盘 UP/DOWN 或者 LEFT/RIGHT 键。
- 要改变某些功能的设置值, 使用键盘上的 UP/DOWN。
- 按 NEAR 保存设置值; 按 FAR 取消设置值。

显示设置 DISPLAY SETUP



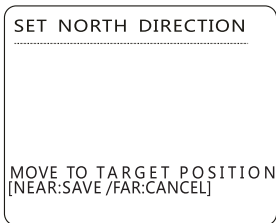
主菜单 SPEEP DOME MENU



- SYSTEM INFORMATION 系统信息
显示系统信息和配置。
- DISPLAY SETUP 显示设置
设置是否使 OSD 菜单显示在主屏幕。
- DOME CAMERA SETUP 球机设置
设置不同的球机功能。
- SYSTEM INITIALIZE 系统初始化
初始化系统配置, 设置所有的工厂默认值配置数据。
- EXIT 退出菜单

- CAMEAR ID 球机地址码 [ON/OFF]
- PTZ 平行/垂直、变倍信息 [ON/OFF/AUTO]
- ACTION TITLE 动作标签 [ON/OFF/AUTO]
- PRESET LABEL 预置位标签 [ON/OFF/AUTO]
- ALARM INPUT 报警输入 [ON/OFF/AUTO]

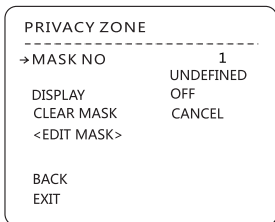
□ SET NORTH DIRECTION 指示方向设置



设置北方向作为标准, 移动摄像机, 然后按 NEAR 键进行保存。

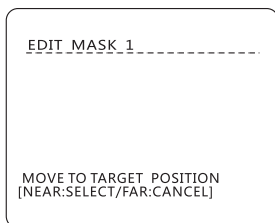
怎样使用OSD菜单

□ PRIVACY ZONE 隐私区域



- MASK NO 掩盖号码 [1~4]
最多可以选择4个掩盖区域。
- DISPLAY 显示 [ON/OFF]
设置后所掩盖区域不显示图像。
- CANCEL 取消掩盖区域 [CANCEL/OK]
取消所选掩盖区域。

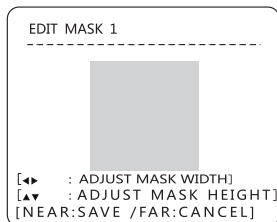
□ EDIT MASK 编辑掩盖区域



NEAR: 选择 FAR: 取消

移动球机到所掩盖区域，然后用菜单调整显示掩盖区域尺寸。

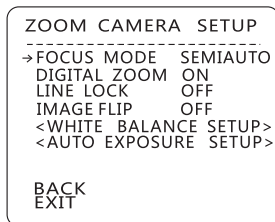
□ 隐私区域尺寸调整



调节尺寸,用键盘或者小按钮调节尺寸。

- ◀ ▶ (Left/Right) 左右键调节掩盖区域宽度。
- ▲ ▼ (Up/Down) 上下键调节掩盖区域高度。
- NEAR:SAVE 保存/FAR:CANCEL 取消

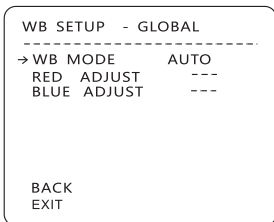
摄像机设置 ZOOM CAMERA SETUP



- FOCUS MODE 聚焦模式
AUTO/MANUAL/SEMAUTO 自动/手动/半自动
设置摄像机聚焦模式
- DIGITAL ZOOM ON 数字变倍 [ON/OFF]
数字变倍功能设置,如果设置成OFF,光学变倍功能运行,电子放大在光学变倍后停止。
- LINE LOCK 行同步 [ON/OFF]
电源同步锁定。注:交流供电下调节有效,直流供电此项无效。
- IMAGE FLIP 图像垂直镜像 [ON/OFF]
图像上下翻转设定。

怎样使用OSD菜单

□ WHITE BALANCE SETUP 白平衡设置

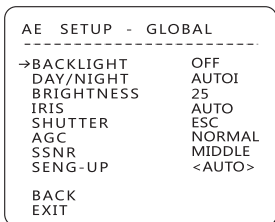


- WB MODE 白平衡模式
[AUTO/MANUAL] 自动/手动

在手动模式下, 红色和蓝色可以被手动设置。

- 红色调整 [10~60]
- 蓝色调整 [10~60]

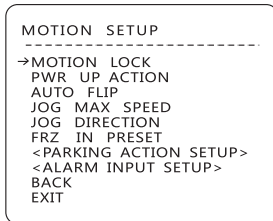
□ AUTO EXPOSURE SETUP 自动曝光设置



- BACKLIGHT 背光补偿
[OFF/LOW/MIDDLE/HIGH]
设置背光补偿功能。
- DAY/NIGHT 日夜/彩转黑
[AUTO1/AUT02DAY/NIGHT]
彩色转黑白模式AUT02。
- BRIGHTNESS 亮度 [0~100]
调整图像亮度。亮度参数改变时, 光圈、快门和增益自动调节。

- IRIS 光圈
[AUTO/MANUAL(0~100)]自动/手动
光圈参数设置及调节选项。
- SHUTTER 快门速度
[ESC/A.Flicker/Manua] [闪烁/手动1 (x128~1/120000 sec)]
快门参数设置及调节选项。
- AGC 自动增益
[OFF/NORMAL/HIGH]关闭/正常/高
在图像信号亮度水平低的情况下, 自动增强图像亮度。
- SSNR 数字降噪
[OFF/LOW/MIDDLE/HIGH]关/低/中/高
通过降低噪点来增强图像质量。
- SENS-UP [AUTO(2~128)/OFF]
当图像太暗时, 运行低快门功能。
通过低快门功能可设置最大积累帧数。

云台设置 MOTION SETUP



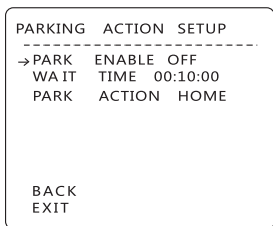
设置云台平行/垂直转动功能

- 动作锁定 [ON/OFF] 开/关
此功能是为了保护预设数据名受未经授权覆盖, 如预设数据锁定时, 它不能重新设置和删除如: 预置位、点间巡航、花样巡航或组巡航等预置, 如需设置和删除这些功能, 进入OSD菜单设置。

怎样使用OSD菜单

- PWR UP ACTION 恢复动作
[ON/OFF] 开/关
参考第7页：“其他功能”部分。
- AUTO FLIP 自动翻转
[ON/OFF]开/关
参考第7页：“其他功能”部分。
- JOG MAX SPEED 速度调节
[1°/sec ~ 360°/sec]
云台旋转速度调节。云台速度与镜头变焦倍数成反比，变焦倍数变大，云台速度下降。
- JOG DIRECTION 方向调节
[INVERSE/NORMAL]倒转/正常
用来调节云台水平旋转方向。
- FRZ IN PRESET 预置位冻结
[ON/OFF]开/关
此项无效,依据型号不同而不同。

□ PARKING ACTION SETUP 停顿动作设置

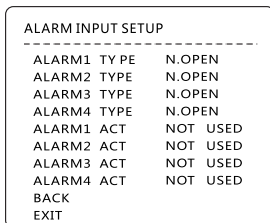


在没有操作键盘的情况下，如已设置“等待时间”，当时间到时，云台会按照已分配指定的功能自动运行。

- PARK ENABLE 停顿设置 [ON/OFF]
- WAIT TIME 等待时间
[1 minute~4 hour]1分钟到4小时
时间格式：小时：分：秒
- PARK ACTION HOM 停顿动作
[HOME/PRESET/PATTERN/SWING /GROUP]主页/预置位/花样巡航/点间巡航/组巡航

如果在设置“等待时间”的时候没有 PTZ 命令,摄像机机会移动到主页位置。

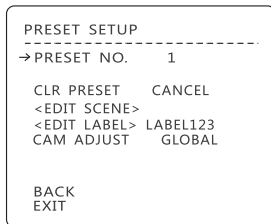
□ ALARM INPUT SETUP 报警输入设置



如果外部传感器被触发时，云台会移动到相应的预置点位置。

- ALARM TYPE 报警类别
[Normal OPEN/Normal CLOSE] 常开/常闭
设置传感器输入状态
- ALARM ACT 报警动作
[NOT USED/预置位 1~128]
可以为每个报警输入，指定不同的预置位。

预置位设置 PRESET SETUP



- PRESET NO. 预置位号码 [1~128]
如果所选预置点已经被设置，云台会移动到预先设置的点，预置位动作标签在监视器上显示出：PRESET。如果所选预置点没有被定义，监视器上会显示“UNDEFINED”。
- CLR PRESET 清除预置位
[CANCEL/OK] 取消/确定
删除当前预置位数据。
- EDIT SCENE 编辑预置位
重新定义当前预置位

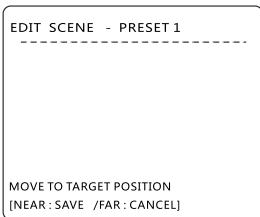
怎样使用OSD菜单

- EDIT LABEL 编辑预置位名称
预置位名称最大为10个字母

- CAM ADJUST 摄像机调节
[GLOBAL/LOCAL]整体/局部

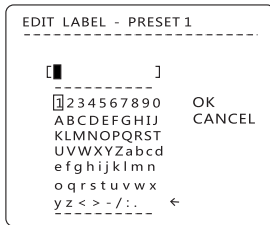
有两种模式，分为：“GLOBAL”模式和“LOCAL”。“GLOBAL”在此项不可设置。“LOCAL”在当前预置点可单独设置“WB”白平衡和“AE”自动曝光参数。只有当操作到当前预置点时，此模式设置参数才被激活。

- EDIT SCENE - PRESET 编辑预置位



- ① 用操纵杆移动摄像机到想要的位置。
- ② 按NEAR键, 保存当前的PTZ 数据。
- ③ 按FAR 键取消。

- EDIT LABEL - PRESET 编辑预置位名称



- ① 编辑标签,当摄像机到达预置点时显示在监视器上。编辑标签菜单，一旦完成选择字母和数字，一个反方向的指针即显示在屏幕上，然后进入下一个数字。



- ② 使用键盘上下左右键在字符集里移动到合适的字符。选择这个字符，按NEAR键。



如果你想用空格键,选择(“ ”);如果你想删除字符,用退格键(“←”)。

- ③ 如果你完成编辑标签了，移动“OK”，按“NEAR”键保存完整的标签设置,要终止当前的改变，移动指针到“Cancel”取消或者按“NEAR”键。

怎样使用OSD菜单

点间巡航设置 SWING SETUP

```
SWING SETUP
-----
-> SWING NO.      1
   1ST POS.      NOT USED
   2ND POS.      NOT USED

SWING SPEED      30/SEC
CLEAR SWING      CANCEL

BACK
EXIT
```

- SWING NO. 点间巡航号码 [1~8]
选择要编辑的点间巡航号码。如果所选的点间巡航号码没有被定义，“NOT USED”被显示在第一个点和第二个点上。
- 1ST POS. 第一个点 [PRESET 1~128]
2ND POS. 第二个点 [PRESET 1~128]
如果所选预置点没有被定义，设置第二个点，“UNDEFINED”（未定义）如下图所示。

```
SWING SETUP
-----
SWING NO.      1
1ST POS.      PRESETS
2ND POS.      NOT USED
               UNDEFINED
```

通过点间巡航功能，可以使摄像机在两个预置位间循环移动。当运行点间巡航功能，摄像机按顺时针方向从指定的第一个预置点移动到第二个预置点。然后从指定的第二个点以逆时针方向返回到第一个点。如果第一个预置点与第二个预置点是同一个点，摄像机将沿轴顺时针旋转360度，然后逆时针旋转360度。

- SWING SPEED 点间巡航速度 [1/sec~180°/sec]
设置点间巡航速度从1°/sec~180°/sec。
- CLEAR SWING 清除点间巡航 [CANCEL/OK] 取消/确认
删除当前点间巡航数据。

花样巡航设置 PATTERN SETUP

```
PATTERN SETUP
-----
-> PATTERNB NO.  1
   UNDEFINED
CLR PATTERN      CANCEL
<EDIT PATTERN>

BACK
EXIT
```

- PATTERNB NO. 花样巡航号码 [1~4]
选择要编辑的花样巡航号码，如果所选巡航号码没有被定义，“UNDEFINED”将会在所选巡航号码下显示。
- CLR PATTERN 清除数据 [CANCEL/OK] 取消/确认
删除当前巡航设置。
- EDIT PATTERN 编辑花样巡航
开始编辑巡航。

□ EDIT PATTERN 编辑花样巡航

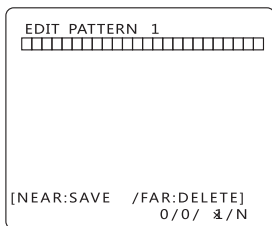
- ① 按下键盘NEAR键，开始花样巡航记录；要退出菜单，按FAR键。

```
EDIT PATTERN 1
-----

MOVE TO START POSITION
[NEAR:START /FAR:CANCEL]
   开始           取消
```

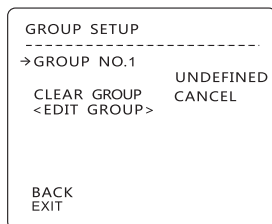
- ② 用键盘移动摄像机以记忆路径，在所选巡航中，总的记忆尺寸和剩下的记忆尺寸以空格的格式显示。

怎样使用OSD菜单



- ③ 要保存数据并退出,按NEAR键。要取消并删除修改记录,按FAR键。

组巡航设置 GROUP SETUP



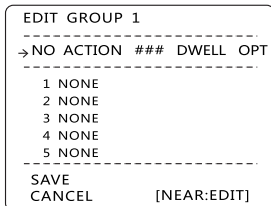
- GROUP NO. 组巡航号码 [1~8]
选择要编辑的组巡航号码。如果所选巡航号码没有被定义,“UNDEFINED”将会在所选巡航号码下显示。

- CLEAR GROUP删除组巡航
[CANCEL/OK]取消/确认
删除当前巡航设置。

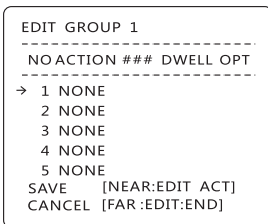
- EDIT GROUP编辑组巡航
开始编辑巡航。

□ EDIT GROUP 编辑组巡航

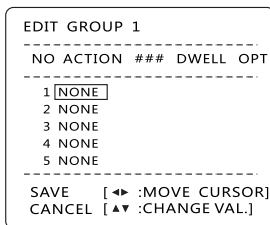
- ① 在“NO”菜单中按“Near”键开始组巡航设置。



- ② 注意在组巡航中最大允许20个动作。上下移动指针,按住NEAR键进行设置。



- ③ 设置动作,停顿时间和速度。左右移动指针选择项目,上下移动指针改变项目值。



- Action 动作###
[NONE/PRESET/SWING/PATTERN]
[无/预置位/点间巡航/花样巡航]
- DWELL [0 second~4 minutes][0秒~4分]
在功能间设置停顿时间
- OPT
选择,当预置位被选择时,为预置位速度(2~360)。当花样巡航和点间巡航被选择时,为重复数(1~255)。

怎样使用OSD菜单

④ 设置项目如动作、停顿时间、号码和选择。

EDIT SCAN	1

NO ACTION	### DWELL OPT

1 PRESET	[1]00:03 360
2	NONE
3	NONE
4	NONE
5	NONE

SAVE	[◀▶]:MOVE CURSOR]
CANCEL	[▲▼]:CHANGE VAL.]

系统初始化SYSTEM INITIALIZE

SYSTEM INITIAL IZE	系统初始化

→ CLEAR ALL DATA	NO
● CLR DISPLAY SET	NO
● CLR CAMERA SET	NO
● CLR MOTION SET	NO
● CLR EDIT DATA	NO
REBOOT CAMERA	NO
REBOOT SYSTEM	NO

SAVE	
CANCEL	

⑤ 完成设置动作时，按NEAR键回到上一级菜单(第二步)，上下移动指针选择动作号，和重复第四步动作编辑所选组巡航。

EDIT SCAN	1

NO ACTION	### DWELL OPT

→ 1 PRESET	1 00:03 360
2	NONE
3	NONE
4	NONE
5	NONE

SAVE	[NEAR:EDIT ACT]
CANCEL	[FAR:EDIT END]

⑥ 完成所有动作设置后，按FAR键退出。然后指针应该移动到“SAVE”保存，按NEAR键保存数据。

EDIT SCAN	1

NO ACTION	### DWELL OPT

1 PRESET	1 00:03 360
2	NO NE
3	NO NE
4	NO NE
5	NO NE

→ SAVE	
CANCEL	

- CLEAR ALL DATA 清除所有的数据删除所有配置数据例如显示摄像机，动作设置等等。
- CLR DISPLAY SET 清除显示设置初始化显示配置。
- CLR CAMERA SET 清除摄像机设置初始化摄像机配置。
- CLR MOTION SET清除动作设置初始化动作配置。
- CLR EDIT DATA 清除编辑数据删除预置位数据，点间巡航设置，花样巡航设置和组巡航数据。
- REBOOT CAMERA 重启摄像机重启摄像机模块。
- REBOOT SYSTEM 重启系统重启高速球。

怎样使用OSD菜单

□ 初始系统配置表格

Display Configuration 配置显示		
Camera ID	ON	球机地址码
PTZ	AUTO	PTZ 信息
Action Title	AUTO	动作标签
Preset Label	AUTO	预置位名称
Alarm I/O	AUTO	报警输入
Set North Direction	Pan 0°	北方向
Privacy Zone	Undefined	隐私区域

Motion Configuration 动作配置		
Preset Lock	OFF	动作锁定
Power Up Action	ON	恢复动作
Auto Flip	ON	自动翻转
Jog Max Speed	120°/sec	速度调节
Jog Direction	NORMAL	方向调节
Freeze In Preset	OFF	预置位冻结
Park Action	OFF	停顿动作
Alarm I/O Action	OFF	报警动作

Communication Setup 通讯设置		
Protocol	AUTO	协议
Baud Rate	9600	波特率

Camera Configuration 摄像机设置		
Focus Mode	SEMI-AUTO	聚焦模式
Digital ZOOM	ON	数码变倍
Image Flip	OFF	行同步
White Balance	AUTO	白平衡
Back Light	OFF	背光补偿
Day/Night	AUTO1	彩转黑
Brightness	25	亮度
IRIS	AUTO	光圈
Shutter	ESC	电子快门
AGC	NORMAL	自动增益控制
DNR	MIDDLE	数字降噪
SENS-UP	OFF	

Function Data 用户可以编辑的数据范围			
Preset 1~8	Undefined	预置位1-128	未定义
Swing 1~8	Undefined	点间巡航1-8	未定义
Pattern 1~8	Undefined	花样巡航1-4	未定义
Group 1~8	Undefined	组巡航1-8	未定义

参数

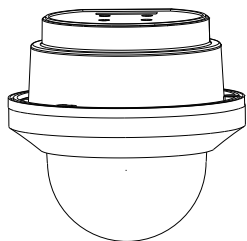
视频模式		NTSC	PAL
摄像机	CCD	1/4"Interline Transfer CCD	
	最大像素	811(H) x 508(V)410K	795(H) x 596(V)470K
	有效像素	768(H) x 494(V)380K	752(H) x 582(V)440K
	水平清晰度	500 TV Line(彩色),570 TV Line(黑白)	
	信噪比	50 dB (AGC Off)	
	变倍	x10 倍光学变焦, x10倍电子放大	
	焦距范围	F1.8, f= 3.8 ~ 38mm	
	最低照度	0.7 Lux(彩色) / 0.02 Lux (黑白), 50 IRE	
	日夜转换	自动/彩色/黑白(滤光片切换)	
	聚焦	自动/手动/半自动	
	光圈	自动/手动	
	电子快门	X128 ~ 1/120000 秒	
	自动增益	正常/高/关	
	白平衡	自动/手动(红,蓝调节)	
	水平/垂直	旋转范围	平行: 360°(无限位)
垂直: 180°(自动翻转), 95°(正常)			
旋转速度		预置位: 360°/秒	
		手动: 0.05~360°/秒 (比例缩放)	
		点间巡航: 1~180°/秒	
预置位		127 预置位(标记, 摄像机图像设置)	
花样巡航		4 花样巡航,1200 个点(大约5分钟)/组	
点间巡航		8 组点间巡航	
组巡航	8 个组巡航(每组可支持20个动作)		
其他功能	自动翻转, 空闲动作, 上电动作等		
其他	通讯	RS-485	
	协议	Pelco-D, Pelco-P 可选	
	隐私巡航	4 个区域	
	报警输入	4 个输入	
	OSD菜单	菜单/云台信息等	
	额定电压	DC 12V 电流: 1.5A(最大)	
	尺寸	半球: Φ 83.88mm	
		主体: Φ 125(L) x 124.71(H)mm	
重量	大约 1.0 Kg		
工作温度	室内/外: -10°C ~ +50°C		

* 产品参数如有改变, 不另行通知。

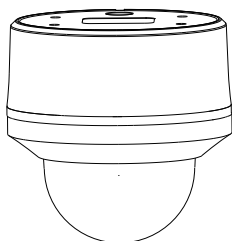
规格

效果图

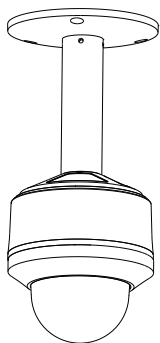
- 嵌入式安装



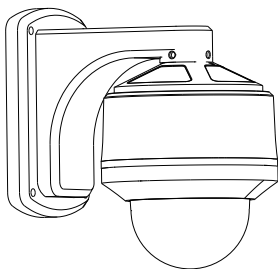
- 吸顶安装



- 吊装



- 壁装

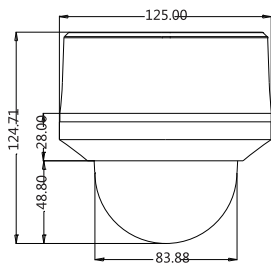


规格

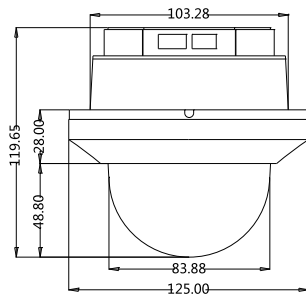
尺寸图

单位(毫米)

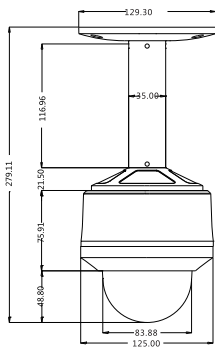
● 吸顶式安装平面图



● 嵌入式安装平面图



● 吊装支架平面图(室内/室外)



● 壁装支架平面图(室内/室外)

