



**CS27X - 27X Day/Night  
Constant Speed Camera  
Manual**

**Installation Requirements**

Please read the following security notices carefully before using the product. In order to prevent this product or any other products connected to it from being damaged and avoid the possible danger, this product can only be used in the regulated scope.

1. Only the qualified technician can conduct the installation and repair.
2. Don't disassemble the speed dome camera type camera to avoid electric shock. There is no part which can be repaired by the user and only the standby part introduced by our company can be used.
3. The indoor type can not be installed in the wet place. Do use the camera in the regulated temperature, humidity or power specification.
4. Please use clean soft cloth to clean the outer casing and machine body of the camera. If there is too much dirt, use neutral cleanser to wipe gently. Don't use strong or polishing cleanser so as to prevent the outer casing or lens from scoring thus influencing the image quality.
5. Pay attention to gentle handling so as to avoid shock or vibration or pressing of structural pieces in the core and speed dome camera damage.
6. Whether in the use course or non-use course, don't aim it at the sun or other bright substances and the substances in the aforementioned environment for a long time, otherwise, the image may be dim or there may be halation, the facula may be generated on the display screen, meanwhile, the color filter of camera CCD will be discolored.
7. Don't aim the camera at the same objective for a long time, otherwise, there will the shadow of this substance on the phosphor screen of cathode ray tube.
8. The supporting frame of installation should be able to support the total weight four times more than the speed dome camera type camera. Before installing and using this product, please read this manual carefully.

**Camera Data Sheet**

Len Function	18x (CW)	18x (B&W)	22x-G (B&W)	22x	23x-H (B&W)	23x-S (B&W)	26x (B&W)	27x (B&W)
	752 (H) × 582 (V)		798 (H) × 596 (V)		752 (H) × 582 (V)		752 (H) × 582 (V)	
Effective Pixels	3.6mm(H) × 2.71mm(V); 1/4inch CCD							
Image Sensor	1.0V[pp]/75Ω (BNC Port)							
Video Out	1.0V[pp]/75Ω (BNC Port)		1.0±0.2V[pp]/75Ω (BNC Port)		1.0V[pp]/75Ω (BNC Port)			
Resolution	480TVL							
S/N Ratio	≥ 50dB							
Min Illumination	1Lux	0.7Lux/10Lux	1Lux/0.1Lux	1Lux	0.1Lux/0.02Lux	0.6Lux/0.1Lux	1Lux/0.01Lux	0.3Lux/0.01Lux
Focal Length	f4.1-75.8mm		f3.9-85.8mm	f4-88mm	f3.6-82.8mm	f3.84-88.4mm	f3.5-91mm	f3.6-97.2mm
Zoom Rate	18×12		22×10	22×12	23×10	23×10	26×12	27×
Focus	Auto/Manual							
Iris	Auto/Manual							
White Balance	Auto							
Back-light Compensation	Auto							

Camera Data

**Main Characteristics**

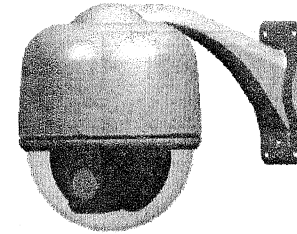
1. The protocol, address and camera are setup by switches. There is no need to switch off the power to confirm.
2. The camera adopts independent fan cooling design, the outdoor application is more stable and reliable.
3. Use common order to delete the preset position.
4. Rapid installation design, make the installation and repair easier.
5. 128 preset positions (2 lines) cruising track, display preset position No. in the cruising course.
6. After powered up, the speed dome camera will conduct a Self-check. The monitor will display.
7. P2P Auto scan track
8. 360° continuous automatic scan track
9. 180° automatic turn follow objective
10. Home Position(5s)
11. Power-cut protection memory function
12. Proportional pan (Long focus speed limit function)

**Performance Indexes**

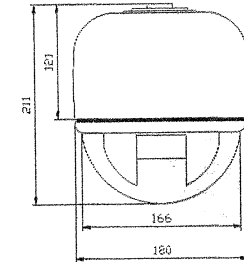
Panning Range	360° endless
Pan Speed	0.5°~80°/s
Tilt Range	0°~90°
Tilt Speed	0.5°~40°/s
Preset Position	128 preset position
P2P Scan	1 line on/off
Auto Flip	90° auto flip
Endless Scan	1 line on/off
Cruising track	2 lines on/off
Communication	RS485
Power Input	DC12V, 50Hz
Power Consumption	12W
Work Temperature	Indoor: 0°C~+50°C outdoor: -30°C~+50°C
Weight	Indoor: about 1.4kg outdoor: about 3.0kg

**Outdoor Speed Dome (GH-S352XXXX)**

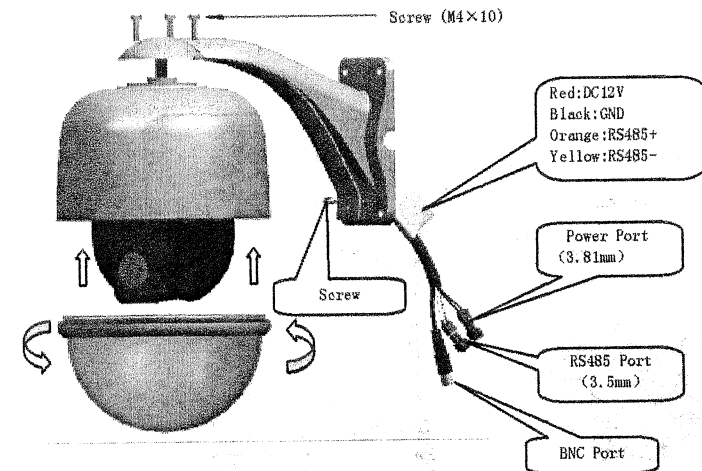
a. Outline Structure



b. Outline Dimension

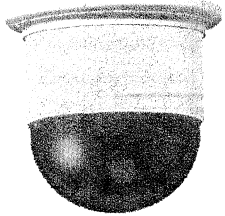


c. Connection

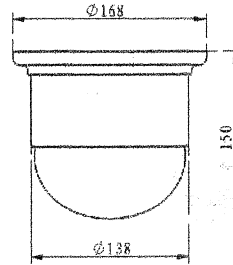


**Indoor Mini Speed Dome (GH-S354XXXX)**

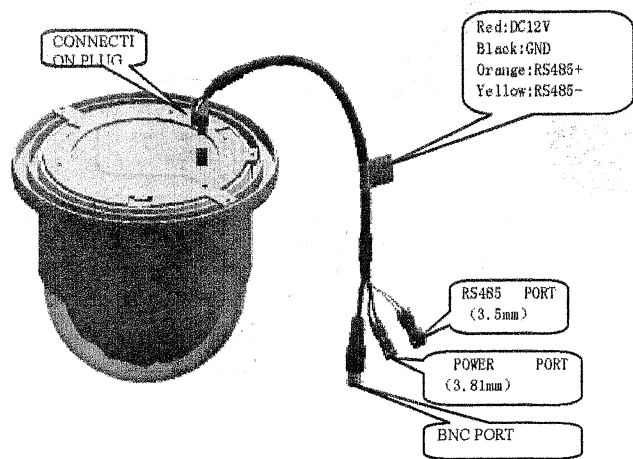
a. Outline Structure



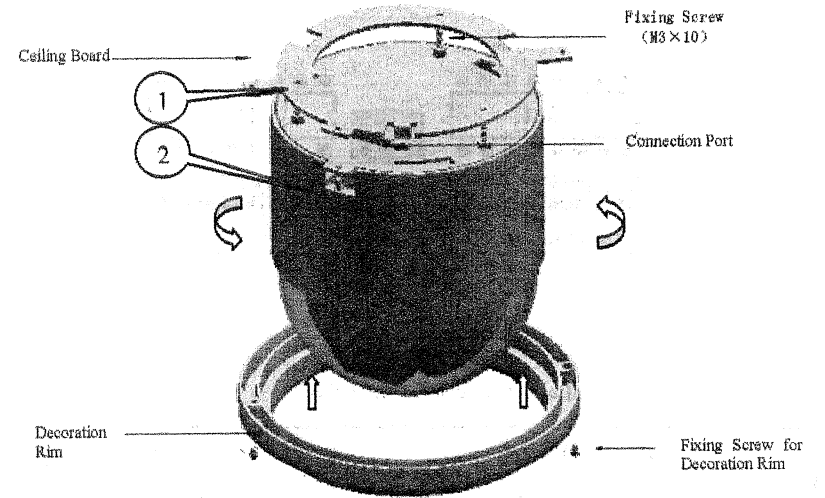
b. Outline Dimension



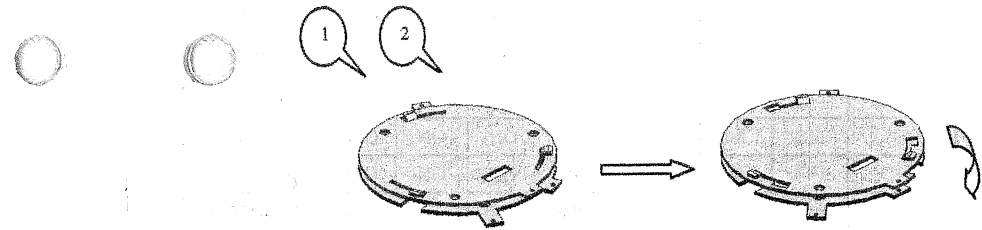
c. Connection



d.

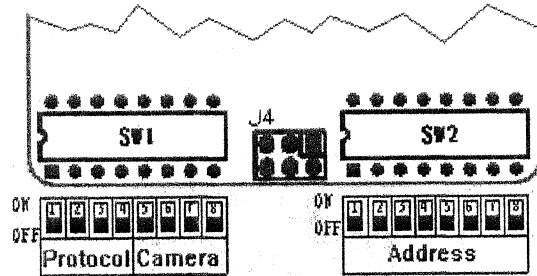


e. Ceiling Board Setup:



**Address, Protocol and Camera Setup**

a. Position of SW1 and SW2 on Board

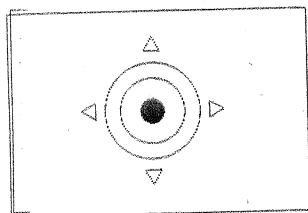


b. Diagram 1: Protocol and Camera Setup (SW1)

Protocol Setup					Camera Setup					
Status		Protocol	Status		Baud Rate	Status				Camera
DIP1	DIP2		DIP3	DIP4		DIP5	DIP6	DIP7	DIP8	
OFF	OFF	PELCO-D	OFF	OFF	2400	OFF	OFF	OFF	OFF	CNB
ON	OFF	PELCO-P	ON	OFF	4800	ON	OFF	OFF	OFF	LG16x
			OFF	ON	9600	OFF	ON	OFF	OFF	OFF
						ON	ON	OFF	OFF	Sony18x
						OFF	OFF	ON	OFF	SAMSU
						ON	OFF	ON	OFF	GP22x
						OFF	ON	ON	OFF	Hitachi23x
						ON	ON	ON	OFF	Sanyo30x
						OFF	OFF	OFF	ON	Hitachi 22x
						ON	OFF	OFF	ON	Hitachi30x
						ON	ON	ON	ON	Sony26x

c. Diagram 2: Address Setup (SW2)

Address	SW1 Status							
	DIP1	DIP2	DIP3	DIP4	DIP5	DIP6	DIP7	DIP8
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
...	...	...	...	...	...	...	...	...
127	ON	ON	ON	ON	ON	ON	ON	OFF

**Operation Instruction of Common Functions****1. Pan/Tilt Control**

As shown in the left fig., by the control terminal equipment joystick, control the up and down, left and right speed-change rotation of the speed dome camera directly. The interface can be control by DVR too, use mouse cursor to click the up, down, left and right in the interface to control the rotation of the speed dome camera.

**2. Lens Control****a. Zoom Function**

Digi. Zoom (ON): [CALL + 58 + ENTER]

Digi. Zoom (OFF): [PRESET + 58 + ENTER]

[TELE] MANU, [WIDE] MANU

**b. Focus Function: AUTO(default ), MANU( optional )**

MANU mode (ON): [PRESET + 59 + ENTER]

[NEAR] MANU, [FAR] MANU

**e. IRIS Function: AUTO(default ), MANU( optional )**

MANU mode (ON): [PRESET + 60 + ENTER]

[OPEN] MANU, [CLOSE] MANU

**3. Preset Control**

Setting: [PRESET + N + ENTER]

Call: [CALL + N + ENTER]

Note: "N" means preset position number(1~128)

**4. P2P Scan**

Set Scan Start: [PRESET + 51 + ENTER]

Set Scan End: [PRESET + 52 + ENTER]

Run P2P scan: [CALL + 51 + ENTER]

Note: ① Scan direction route is from the start to the end point clockwise

② Scan speed is 40°/s.

③ The up and down angle of scan is accordant with the angle when setting the start point.

④ After executing the scan, it will rest in the start and end point for 2s respectively.

**5. Cruising Track**

NO.1 SEQ (run first SEQ): [CALL + 53 + ENTER]

NO.1 SEQ setting preset position: No.1~16.

NO.2 SEQ (run second SEQ): [CALL + 52 + ENTER]

NO.2 SEQ setting preset position: No.17~128.

Note: in the Pelco-D-2400 protocol. The monitor will display as 4s.

**6. 360° Continuous Rotation**

Run: [CALL + 96 + ENTER]

**Note:** ① the scan up and down angle is accordant with the angle before running.

② The scan speed is 40° /s.

**7. Preset Position/ Auxiliary Function Switch (OFF default)**

Preset Position/ Auxiliary Function Switch (ON): [CALL + 97 + ENTER]

**Note:** No.51~64 can be used as preset position. (Details see sheet 1)

Preset Position/ Auxiliary Function Switch (OFF): [PRESET + 97 + ENTER]

**Note:** No.51~64 can be used as auxiliary function. (Details see sheet 1)**8. HOME POSITION 5s (OFF default)**

HOME POSITION 5s (ON): [CALL + 98 + ENTER]

**Note:** Home Position 5s (No.1 preset position)

HOME POSITION 5s (OFF): [PRESET + 98 + ENTER]

**9. Delete Preset Position****For example:** delete preset position No.8.

The operation is as follows:

Setting Preset Position (first): [PRESET + 8 + ENTER]

Setting Preset Position (second): [PRESET + 8 + ENTER]

Then No.8 preset position is deleted.

**Note:** In the cruising of preset position, the preset position deleted will be jumped and the machine will go to next preset position.**Sheet I: Complementary Function Instruction of Preset Positions**

Preset Position [N]	Control Part	[PRESET]+[N]+[ENTER]	[CALL]+[N]+[ENTER]
51	Pan Unit	Set Scan Start	P2P Scan Running
52		Set Scan End	Second track
53			First track
54	Camera Unit	* Camera Reset	
55		Back Light: OFF	Back Light: ON
56		*Day/Night: OFF	*Day/Night: ON
57		* OSD: OFF	* OSD:ON
58		Digi. Zoom: OFF	Digi. Zoom: ON
59		Focus Mode: MANU	Focus Mode: AUTO
60		*IRIS Adjust: MANU	*IRIS Adjust: AUTO
61		* White Balance: MANU	* White Balance: AUTO
62		* Image Freeze: OFF	* Image Freeze: ON
63		* Image Mirror: OFF	* Image Mirror: ON
64		Color Video: B/W	Color Video: Color
96	Special Function	REALIZE AUXILIARY	360° continuous rotation
97		Realize Auxiliary Function: OFF	Realize Auxiliary Function: ON
98		HOME POSITION(5s): OFF	HOME POSITION(5s): ON

\* means that certain cameras have this function.