SAMSUNG TECHWIN

12X SPEED DOME CAMERA
User Manual

SCP-3120/3120V/3120VH

SAMSUNG

12X SPEED DOME CAMERA
User Manual

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Warranty
If the product does not operate properly in normal conditions, please let us know. Samsung
Techwin will resolve the problem for free of charge. The warranty period is 3 years. However, the
followings are excluded:
- If the system behaves abnormally because you run a program irrelevant to the system
  operation.
- Deteriorated performance or natural worn-out in process of time

safety information

⚡	**CAUTION** RISK OF ELECTRIC SHOCK. DO NOT OPEN	⚠
CAUTION:	TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK) NO USER SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	

⚡ This symbol indicates that dangerous voltage consisting a risk of electric shock is present within this unit.

⚠ This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.

WARNING

- To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.
- To prevent injury, this apparatus must be securely attached to the floor/wall in accordance with the installation instructions.
- Use only the 24V, 60Hz AC adaptor for power supply.

WARNING

1. Be sure to use only the standard adapter that is specified in the specification sheet. Using any other adapter could cause fire, electrical shock, or damage to the product.
2. Incorrectly connecting the power supply or replacing battery may cause explosion, fire, electric shock, or damage to the product.
3. Do not connect multiple cameras to a single adapter. Exceeding the capacity may cause abnormal heat generation or fire.
4. Securely plug the power cord into the power receptacle. Insecure connection may cause fire.
5. When installing the camera, fasten it securely and firmly. The fall of camera may cause personal injury.
6. Do not place conductive objects (e.g. screwdrivers, coins, metal parts, etc.) or containers filled with water on top of the camera. Doing so may cause personal injury due to fire, electric shock, or falling objects.

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safety information

7. Do not install the unit in humid, dusty, or sooty locations. Doing so may cause fire or electric shock.
8. 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.
9. If this product fails to operate normally, contact the nearest service center. Never disassemble or modify this product in any way. (SAMSUNG is not liable for problems caused by unauthorized modifications or attempted repair.)
10. When cleaning, do not spray water directly onto parts of the product. Doing so may cause fire or electric shock
11. Do not expose the product to the direct airflow from an air conditioner. Otherwise, it may cause moisture condensation inside the Clear Dome due to temperature difference between internal and external of the dome camera.
12. If you install this product in a low-temp area such as inside a cold store, you must seal up the wiring pipe with silicon, so that the external air can not flow inside the housing. Otherwise, external high, humid air may flow inside the housing, pooling moisture or vapor inside the product due to a difference between internal and external temperature.

CAUTION

1. Do not drop objects on the product or apply strong blows to it. Keep away from a location subject to excessive vibration or magnetic interference.
2. Do not install in a location subject to high temperature (over 50°C), low temperature (below -10°F), or high humidity. Doing so may cause fire or electric shock.
3. If you want to relocate the already installed product, be sure to turn off the power and then move or reinstall it.
4. Remove the power plug from the outlet when there is a lighting storm. Neglecting to do so may cause fire or damage to the product.
5. Keep out of direct sunlight and heat radiation sources. It may cause fire.
6. Install it in a place with good ventilation.
7. Avoid aiming the camera directly towards extremely bright objects such as sun, as this may damage the CCD image sensor.
8. Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus.
9. The Mains plug is used as a disconnect device and shall stay readily operable at any time.
10. When using the camera outdoors, moisture may occur inside the camera due to temperature difference between indoors and outdoors. For this reason, it is recommended to install the camera indoors. For outdoor use, use the camera with built-in fan and heater.

FCC STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions :

1) This device may not cause harmful interference, and
2) This device must accept any interference received including interference that may cause undesired operation.

CAUTION

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

IC Compliance Notice

This Class A digital apparatus meets all requirements of the Canadian Interference.-Causing Equipment Regulations of ICES-003.

Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking on the product, accessories or literature indicates that the product and its electronic accessories (e.g. charger, headset, USB cable) should not be disposed of with other household waste at the end of their working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate these items from other types of waste and recycle them responsibly to promote the sustainable reuse of material resources.

Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take these items for environmentally safe recycling.

Business users should contact their supplier and check the terms and conditions of the purchase contract. This product and its electronic accessories should not be mixed with other commercial wastes for disposal.

Correct disposal of batteries in this product

(Applicable in the European Union and other European countries with separate battery return systems.)

This marking on the battery, manual or packaging indicates that the batteries in this product should not be disposed of with other household waste at the end of their working life. Where marked, the chemical symbols Hg, Cd or Pb indicate that the battery contains mercury, cadmium or lead above the reference levels in EC Directive 2006/66. If batteries are not properly disposed of, these substances can cause harm to human health or the environment.

To protect natural resources and to promote material reuse, please separate batteries from other types of waste and recycle them through your local, free battery return system.

important safety instructions

1. Read these instructions.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Do not use this apparatus near water.

6. Clean only with dry cloth.

7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.

8. Do not install near any heat sources such as radiators, heat registers, or other apparatus (including amplifiers) that produce heat.

9. Do not defeat the safety purpose of the polarized or grounding-type plug.
   A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

11. Only use attachments/accessories specified by the manufacturer.

12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.

14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as powersupply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on the apparatus

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FEATURES

- **A/F 12X Optical Zoom**
  The built-in 12X optical zoom lens with auto-focus is combined with a 16x digital zoom, providing a maximum of 192x zoom.

- **Versatile protocols and coaxial communication**
  RS-485, Coaxial communication methods are supported.
  - RS-485 (10 protocols) : Samsung-T, Pelco (D / P), Samsung-E, Panasonic, Honeywell, AD, Vicon, GE, BOCSH
  - Coaxial Communications: Pelco Coaxitron (automatic detection)

- **Wide Range Auto Security Functions**
  - Multiple Preset Function Saving : Up to 13 camera image properties can be saved individually to provide high quality pictures.
  - Image Holding : When moving between presets in Group and Tour functions, using this Preset Freeze function holds the image status and helps reduce visual fatigue.
  - PTZ Trace : Patterns operated with the joystick can be saved and replayed by users.
  - Swing : Using the Swing function commands the camera to move between 2 selected locations, monitoring the route.
  - Group Search : Maximum 128 Preset positions are toured in order.
  - Tour Search : Maximum 6 Group Search functions are toured in order.

- **Digital Flip**
  The Digital Flip function is useful to monitor moving objects or people passing directly under the camera. When an object or a person passes directly under the camera, its tilt motor follows the object or person over 100 degrees to the other side of the tilt area without panning. The screen inversion starts to occur at 100 degrees or higher is digitally adjusted.

- **Smart P/T**
  The Smart P/T function automatically adjusts the control speed of the Pan and Tilt functions according to the current zoom ratio. It is useful to adjust the functions manually for detailed controls when monitoring at high zoom ratios.

- **Day & Night**
  With its daytime & nighttime switch and Sens-Up functions based on the ICR (Infrared Cut filter Removal) method, the camera provides high quality pictures regardless of whether it is day or night.
  * Sens-Up increases the CCD sensitivity by electrically extending the camera's exposure time.
  * Day & Night enables you to select between color and B/W modes depending on the lighting conditions.

introduction

- **OSD (On Screen Display)**
  The camera IDs, camera preset numbers, preset names, area names, and camera operation status are displayed on the monitor, allowing set up of various camera functions through the OSD menu screen.

- **Preset Position Saving and Loading**
  Up to 255 preset positions can be set. Using this function saves and brings up the camera feed of a selected monitoring location.

- **XDR (eXtended Dynamic Range)**
  For images with high contrast between bright and dark Areas from difficult lighting conditions such as backlighting, this camera selectively illuminates darker Areas while retaining the same light level for brighter Areas to even out the overall brightness.

- **Area Masking**
  If a monitoring location includes a highly private area, the area can be selectively masked on the screen.

COMPONENTS AND ACCESSORIES

❖ SCP-3120
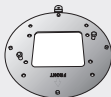
Body	User Guide	Mount Braket
7Pin Terminal Block	8Pin Terminal Block	BNC Cable
Screw(M4x20, 4ea)	Template	

introduction

❖ SCP-3120V

Body

User Guide

7Pin Terminal Block

8Pin Terminal Block

BNC Cable

Screws/Plastic Anchor/Wrench

❖ SCP-3120VH

Body

User Guide
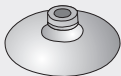

7Pin Terminal Block

8Pin Terminal Block

BNC Cable

Wrench

Accessories

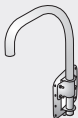The following items are sold separately from the camera.

SBP-300HM Hanging Mount	SBP-300CM Ceiling Mount	SBP-300WM Wall Mount
SBP-300LM Parapet Mount	SBP-300KM Corner Mount	SBP-300PM Pole Mount
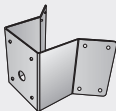
- This camera is designed to be mounted onto the ceiling, and you can use one of the following adaptors for installation purposes according to the installation site.
  (Note that you should follow the applicable instructions for each mounting adaptor.)
  - Used to Mount the Camera(SCP-3120/3120V) onto the ceiling : Hanging Mount + Ceiling Mount
  - Used to Mount the Camera(SCP-3120VH) onto the ceiling : Ceiling Mount
  - Used to Mount the Camera(SCP-3120/3120V) onto the wall : Hanging Mount + Wall Mount
  - Used to Mount the Camera(SCP-3120VH) onto the wall : Wall Mount
  - Used to Mount "the Wall Mount" onto a cylindrical pillar : Pole Mount
  - Used to Mount "the Wall Mount" onto a corner of the wall : Corner Mount

※ For SCP-3120/3120V, above products are available only if the hanging mount is attached to the camera.

introduction

COMPONENT NAMES AND FUNCTIONS

SCP-3120
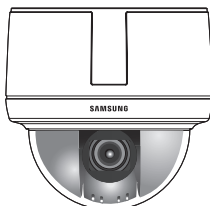
❖ Front   ❖ Side
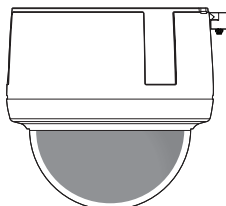
❖ Bottom
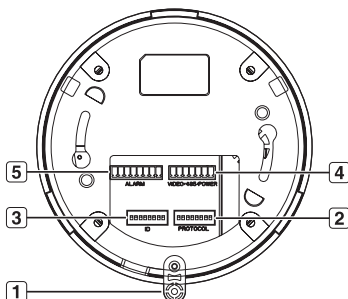
1	Screw Hole
2	Communication Setup Switch
3	ID Setup Switch
4	Video/Communication/Power
5	Alarm

📝 ▪ For the DIP switch settings, please refer to the "Installing Your Camera" on Page 19.

SCP-3120V

❖ Front   ❖ Side
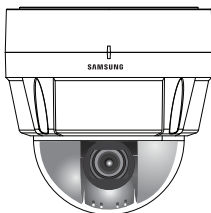
❖ Bottom

1	Communication Setup Switch
2	ID Setup Switch
3	Video/Communication/ Power
4	Alarm

introduction

COMPONENT NAMES AND FUNCTIONS

SCP-3120VH
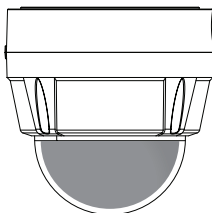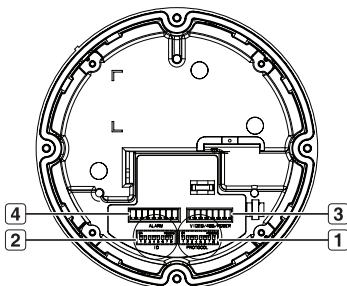
❖ Front   ❖ Side
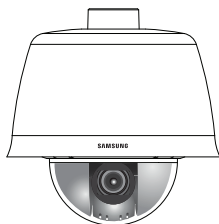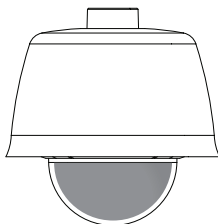
❖ Bottom
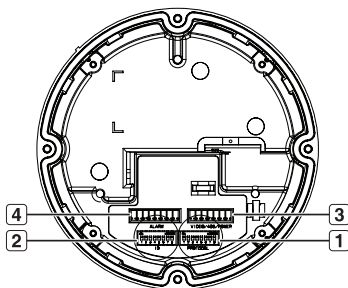
1	Communication Setup Switch
2	ID Setup Switch
3	Video/Communication/ Power
4	Alarm

Camera Wiring Interface Board

For the camera wiring, please refer to the picture below. The camera's wiring interface board is fitted to the housing, this is sold separately. (When using coaxial communication, a separate control signal connection is not required.)

```
12345678 ←              Alarm      Video  Controller  Power Supply      → 1234567

  1. 2.COM                                                                1. VIDEO
  2. 2.NO                                                                 2. GND
  3. 1.COM                                                                3. 485+
  4. 1.NO                                                                 4. 485-
  5. 1.NC                                                                 5. FG
  6. GND                                                                  6. AC+
  7. IN1                                                                  7. AC-
  8. IN2
```
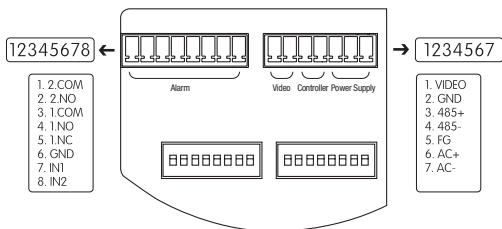
Controller & Auxiliary Signal Connection

No.	Name	Usage
1	2.COM	Alarm Output 2 (Common)
2	2.NO	Alarm Output 2 (Normal Open)
3	1.COM	Alarm Output 1 (Common)
4	1.NO	Alarm Output 1 (Normal Open)
5	1.NC	Alarm Output 1 (Normal Open)
6	GND	Ground
7	IN1	Alarm Input Sensor Terminal 1
8	IN2	Alarm Input Sensor Terminal 2

Power, Video & Communication Signal Connection

No.	Name	Usage
1	VIDEO	Video Output
2	GND	Ground
3	485+	Controller Data Line
4	485-	Controller Data Line
5	FG	Field Ground
6	AC	AC 24V
7	AC	AC 24V

* The provided BNC cable's blue line is Video Output, while the black line is the Ground.

* Power supply adaptor (AC) has no polarities.

Camera Wiring Interface Board

Control Signal Connection

· RS485 Communications

Camera

Controller or DVR

485+
485-

R+/RX+
R-/RX-
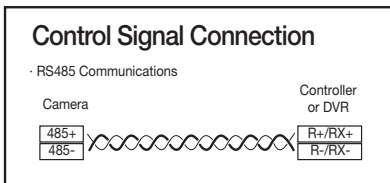
📝 ■ The maximum power capacity of the built-in relay is 30V DC/2A, 125V AC/0.5A, and 250V AC/0.25A.

■ Connecting the power connector and GND incorrectly to the NC/NO and COM ports may cause a short circuit and fire, damaging the camera.

installing your camera

HOW TO SET UP PROTOCOLS AND ID DIP SWITCHES

You can control various settings of the camera system using the Communication and ID DIP switches. Before installing the product, please set up the DIP switches according to the installation environment.

1. Detach the camera frame from the install base, and place the bottom of the frame toward you as shown in the picture below.
2. Set the switches according to your installation environment. For more detailed setup information, please refer to the chart on the next page.
3. The camera may malfunction if the switches are not fully turned On/Off; please double check the switches before finishing setup.

Camera ID DIP Switch(SW1)
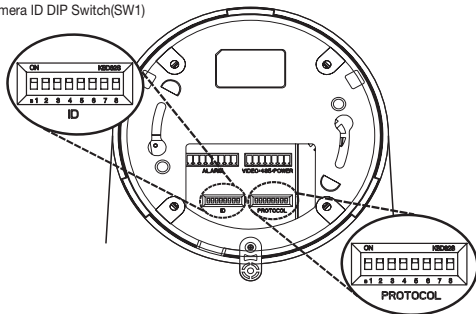
Communication Protocol DIP Switch(SW2)

installing your camera

COMMUNICATION PROTOCOL DIP SWITCH SETTINGS (SW2)

> * Coaxial communication automatically detects signals, and so does not require a separate communication setup process.
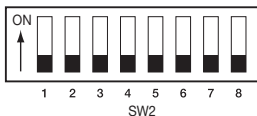
SW2 Pin No.	Purpose
1~4	Protocol Settings
5~6	Baud Rate Settings
7	Response Mode Settings
8	Termination Settings

❖ Protocol Settings

Select a communication protocol for the camera

No	Protocol	SW2-#1	SW2-#2	SW2-#3	SW2-#4
1	AUTO DETECT	OFF	OFF	OFF	OFF
2	Samsung-T	OFF	OFF	OFF	ON
3	Pelco-D	OFF	OFF	ON	OFF
4	Pelco-P	OFF	OFF	ON	ON
5	Samsung-E	OFF	ON	OFF	OFF
6	Panasonic	OFF	ON	OFF	ON
7	Vicon	OFF	ON	ON	OFF
8	Honeywell	OFF	ON	ON	ON
9	AD	ON	OFF	OFF	OFF
10	GE	ON	OFF	OFF	ON
11	BOSCH	ON	OFF	ON	OFF
12	Reserved	ON	OFF	ON	ON
13	Reserved	ON	ON	OFF	OFF
14	Reserved	ON	ON	OFF	ON
15	Reserved	ON	ON	ON	OFF
16	Reserved	ON	ON	ON	ON

❖ Baud Rate Settings

Select the transfer speed of a selected communication protocol.

No.	Baud Rate(BPS)	SW2-#5	SW2-#6
1	2,400	ON	ON
2	4,800	ON	OFF
3	9,600	OFF	OFF
4	19,200	OFF	ON

❖ **Communication Response Settings**

Select a communication response method for the camera and controller: Response or No Response.

	Function	ON	OFF
SW2- #7	Response Mode Switch	Response	No Response

❖ **Termination Settings**

To prevent the attenuation of communication signals between the camera and controller, the items at the end of line must be set up with the termination settings.

Camera Input Position	SW2- #8
Termination of Longest Path	ON
On the Path	OFF

* This model is provided with factory defaults of all DIP switches set to OFF. The default settings are shaded in the table.

📝 ▪ To use a third party controller with this product, please contact our After-Sales Service or Technology Department.
▪ Controls Using Different Protocols

	AD Protocol	VICON Protocol	GE Protocol
Entering Camera OSD	3+Auxilary ON	IRIS OPEN	IRIS OPEN
Exiting Camera OSD	3+Auxilary OFF	IRIS CLOSE	IRIS CLOSE
ENTER	IRIS OPEN	IRIS OPEN	IRIS OPEN
ESC	IRIS CLOSE	IRIS CLOSE	IRIS CLOSE

※ Control with the SSC-5000 Controller

Protocol	Enter	Esc
Samsung-T	Focus Far	Focus Near
Samsung-E	Iris Open/Focus Far	Iris Open/Focus Near

▪ Note that LCD monitor does not switch to OSD mode and the Joystick will not provide Enter operation, when using the OSD menu with Samsung-E protocol.

CAMERA ID DIP SWITCH SETTINGS (SW1)

To set up camera IDs, refer to the "Camera ID Chart" next.

English _ **21**
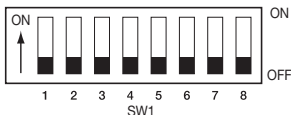
installing your camera

❖ **Camera ID Chart**

ID	SW1-#1	SW1-#2	SW1-#3	SW1-#4	SW1-#5	SW1-#6	SW1-#7	SW1-#8
1	ON/OFF	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
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	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

ID	SW1-#1	SW1-#2	SW1-#3	SW1-#4	SW1-#5	SW1-#6	SW1-#7	SW1-#8
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	OFF	OFF	ON	ON	OFF	OFF
52	OFF	OFF	ON	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
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

installing your camera

ID	SW1-#1	SW1-#2	SW1-#3	SW1-#4	SW1-#5	SW1-#6	SW1-#7	SW1-#8
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	OFF	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
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

ID	SW1-#1	SW1-#2	SW1-#3	SW1-#4	SW1-#5	SW1-#6	SW1-#7	SW1-#8
128	OFF	OFF	OFF	OFF	OFF	OFF	OFF	ON
129	ON	OFF	OFF	OFF	OFF	OFF	OFF	ON
130	OFF	ON	OFF	OFF	OFF	OFF	OFF	ON
131	ON	ON	OFF	OFF	OFF	OFF	OFF	ON
132	OFF	OFF	ON	OFF	OFF	OFF	OFF	ON
133	ON	OFF	ON	OFF	OFF	OFF	OFF	ON
134	OFF	ON	ON	OFF	OFF	OFF	OFF	ON
135	ON	ON	ON	OFF	OFF	OFF	OFF	ON
136	OFF	OFF	OFF	ON	OFF	OFF	OFF	ON
137	ON	OFF	OFF	ON	OFF	OFF	OFF	ON
138	OFF	ON	OFF	ON	OFF	OFF	OFF	ON
139	ON	ON	OFF	ON	OFF	OFF	OFF	ON
140	OFF	OFF	ON	ON	OFF	OFF	OFF	ON
141	ON	OFF	ON	ON	OFF	OFF	OFF	ON
142	OFF	ON	ON	ON	OFF	OFF	OFF	ON
143	ON	ON	ON	ON	OFF	OFF	OFF	ON
144	OFF	OFF	OFF	OFF	ON	OFF	OFF	ON
145	ON	OFF	OFF	OFF	ON	OFF	OFF	ON
146	OFF	ON	OFF	OFF	ON	OFF	OFF	ON
147	ON	ON	OFF	OFF	ON	OFF	OFF	ON
148	OFF	OFF	ON	OFF	ON	OFF	OFF	ON
149	ON	OFF	ON	OFF	ON	OFF	OFF	ON
150	OFF	ON	ON	OFF	ON	OFF	OFF	ON
151	ON	ON	ON	OFF	ON	OFF	OFF	ON
152	OFF	OFF	OFF	ON	ON	OFF	OFF	ON
153	ON	OFF	OFF	ON	ON	OFF	OFF	ON
154	OFF	ON	OFF	ON	ON	OFF	OFF	ON
155	ON	ON	OFF	ON	ON	OFF	OFF	ON
156	OFF	OFF	ON	ON	ON	OFF	OFF	ON
157	ON	OFF	ON	ON	ON	OFF	OFF	ON
158	OFF	ON	ON	ON	ON	OFF	OFF	ON
159	ON	ON	ON	ON	ON	OFF	OFF	ON
160	OFF	OFF	OFF	OFF	OFF	ON	OFF	ON
161	ON	OFF	OFF	OFF	OFF	ON	OFF	ON
162	OFF	ON	OFF	OFF	OFF	ON	OFF	ON
163	ON	ON	OFF	OFF	OFF	ON	OFF	ON
164	OFF	OFF	ON	OFF	OFF	ON	OFF	ON
165	ON	OFF	ON	OFF	OFF	ON	OFF	ON
166	OFF	ON	ON	OFF	OFF	ON	OFF	ON
167	ON	ON	ON	OFF	OFF	ON	OFF	ON
168	OFF	OFF	OFF	ON	OFF	ON	OFF	ON
169	ON	OFF	OFF	ON	OFF	ON	OFF	ON
170	OFF	ON	OFF	ON	OFF	ON	OFF	ON

ID	SW1-#1	SW1-#2	SW1-#3	SW1-#4	SW1-#5	SW1-#6	SW1-#7	SW1-#8
171	ON	ON	OFF	ON	OFF	ON	OFF	ON
172	OFF	OFF	ON	ON	OFF	ON	OFF	ON
173	ON	OFF	ON	ON	OFF	ON	OFF	ON
174	OFF	ON	ON	ON	OFF	ON	OFF	ON
175	ON	ON	ON	ON	OFF	ON	OFF	ON
176	OFF	OFF	OFF	OFF	ON	ON	OFF	ON
177	ON	OFF	OFF	OFF	ON	ON	OFF	ON
178	OFF	ON	OFF	OFF	ON	ON	OFF	ON
179	ON	ON	OFF	OFF	ON	ON	OFF	ON
180	OFF	OFF	ON	OFF	ON	ON	OFF	ON
181	ON	OFF	ON	OFF	ON	ON	OFF	ON
182	OFF	ON	ON	OFF	ON	ON	OFF	ON
183	ON	ON	ON	OFF	ON	ON	OFF	ON
184	OFF	OFF	OFF	ON	ON	ON	OFF	ON
185	ON	OFF	OFF	ON	ON	ON	OFF	ON
186	OFF	ON	OFF	ON	ON	ON	OFF	ON
187	ON	ON	OFF	ON	ON	ON	OFF	ON
188	OFF	OFF	ON	ON	ON	ON	OFF	ON
189	ON	OFF	ON	ON	ON	ON	OFF	ON
190	OFF	ON	ON	ON	ON	ON	OFF	ON
191	ON	ON	ON	ON	ON	ON	OFF	ON
192	OFF	OFF	OFF	OFF	OFF	OFF	ON	ON
193	ON	OFF	OFF	OFF	OFF	OFF	ON	ON
194	OFF	ON	OFF	OFF	OFF	OFF	ON	ON
195	ON	ON	OFF	OFF	OFF	OFF	ON	ON
196	OFF	OFF	ON	OFF	OFF	OFF	ON	ON
197	ON	OFF	ON	OFF	OFF	OFF	ON	ON
198	OFF	ON	ON	OFF	OFF	OFF	ON	ON
199	ON	ON	ON	OFF	OFF	OFF	ON	ON
200	OFF	OFF	OFF	ON	OFF	OFF	ON	ON
201	ON	OFF	OFF	ON	OFF	OFF	ON	ON
202	OFF	ON	OFF	ON	OFF	OFF	ON	ON
203	ON	ON	OFF	ON	OFF	OFF	ON	ON
204	OFF	OFF	ON	ON	OFF	OFF	ON	ON
205	ON	OFF	ON	ON	OFF	OFF	ON	ON
206	OFF	ON	ON	ON	OFF	OFF	ON	ON
207	ON	ON	ON	ON	OFF	OFF	ON	ON
208	OFF	OFF	OFF	OFF	ON	OFF	ON	ON
209	ON	OFF	OFF	OFF	ON	OFF	ON	ON
210	OFF	ON	OFF	OFF	ON	OFF	ON	ON
211	ON	ON	OFF	OFF	ON	OFF	ON	ON
212	OFF	OFF	ON	OFF	ON	OFF	ON	ON
213	ON	OFF	ON	OFF	ON	OFF	ON	ON

ID	SW1-#1	SW1-#2	SW1-#3	SW1-#4	SW1-#5	SW1-#6	SW1-#7	SW1-#8
214	OFF	ON	ON	OFF	ON	OFF	ON	ON
215	ON	ON	ON	OFF	ON	OFF	ON	ON
216	OFF	OFF	OFF	ON	ON	OFF	ON	ON
217	ON	OFF	OFF	ON	ON	OFF	ON	ON
218	OFF	ON	OFF	ON	ON	OFF	ON	ON
219	ON	ON	OFF	ON	ON	OFF	ON	ON
220	OFF	OFF	ON	ON	ON	OFF	ON	ON
221	ON	OFF	ON	ON	ON	OFF	ON	ON
222	OFF	ON	ON	ON	ON	OFF	ON	ON
223	ON	ON	ON	ON	ON	OFF	ON	ON
224	OFF	OFF	OFF	OFF	OFF	ON	ON	ON
225	ON	OFF	OFF	OFF	OFF	ON	ON	ON
226	OFF	ON	OFF	OFF	OFF	ON	ON	ON
227	ON	ON	OFF	OFF	OFF	ON	ON	ON
228	OFF	OFF	ON	OFF	OFF	ON	ON	ON
229	ON	OFF	ON	OFF	OFF	ON	ON	ON
230	OFF	ON	ON	OFF	OFF	ON	ON	ON
231	ON	ON	ON	OFF	OFF	ON	ON	ON
232	OFF	OFF	OFF	ON	OFF	ON	ON	ON
233	ON	OFF	OFF	ON	OFF	ON	ON	ON
234	OFF	ON	OFF	ON	OFF	ON	ON	ON
235	ON	ON	OFF	ON	OFF	ON	ON	ON
236	OFF	OFF	ON	ON	OFF	ON	ON	ON
237	ON	OFF	ON	ON	OFF	ON	ON	ON
238	OFF	ON	ON	ON	OFF	ON	ON	ON
239	ON	ON	ON	ON	OFF	ON	ON	ON
240	OFF	OFF	OFF	OFF	ON	ON	ON	ON
241	ON	OFF	OFF	OFF	ON	ON	ON	ON
242	OFF	ON	OFF	OFF	ON	ON	ON	ON
243	ON	ON	OFF	OFF	ON	ON	ON	ON
244	OFF	OFF	ON	OFF	ON	ON	ON	ON
245	ON	OFF	ON	OFF	ON	ON	ON	ON
246	OFF	ON	ON	OFF	ON	ON	ON	ON
247	ON	ON	ON	OFF	ON	ON	ON	ON
248	OFF	OFF	OFF	ON	ON	ON	ON	ON
249	ON	OFF	OFF	ON	ON	ON	ON	ON
250	OFF	ON	OFF	ON	ON	ON	ON	ON
251	ON	ON	OFF	ON	ON	ON	ON	ON
252	OFF	OFF	ON	ON	ON	ON	ON	ON
253	ON	OFF	ON	ON	ON	ON	ON	ON
254	OFF	ON	ON	ON	ON	ON	ON	ON
255	ON	ON	ON	ON	ON	ON	ON	ON

installing your camera

PREPARING ADAPTER AND CABLES (SOLD SEPARATELY)

- Power Adapter
  Power adapter has the capacity AC24V 1.0A(SCP-3120)/2.5A(SCP-3120V/VH).

- Video Cable
  The camera's video output port is connected to the monitor with a BNC coaxial cable,
  shown below : If the distance between the camera and the monitor exceeds the
  recommended maximum, please use an auxiliary video amp.
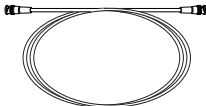
Distance	Recommended Cable Specification
300m	4C2V(RG-59/U)
450m	5C2V(RG-6/U)
600m	7C2V(RG-11/U)

> ✎ ▪ If the camera is controlled through coaxial communication, please use a video amp
> intended for coaxial communications. Regular video amps do not transfer coaxial
> signals.

- Communications Cable
  For the camera to communicate with the controller,
  a RS-485 communications line is required. To
  ensure the quality of long distance communication
  and the accuracy of the overall communication it is
  recommended using a twisted pair cable such as
  UTP.
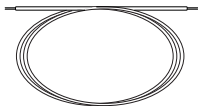
> ❗ ▪ Depending on the camera's environment, the communications distance may vary.

> ✎ ▪ Power Adapter, Video cable and communications cable are not provided in this
> product's package.

PREPARING AND INSTALLING CAMERA BRACKET

For the installation guidelines for the brackets and housings, refer to the user's manual enclosed with the bracket or housing that is sold separately.

· Camera Wiring Diagram

RS-485

RS-485

Coaxial
Communication

Coaxial
Communication

1   2   ...   16

CONTROLLER (SUB)   CONTROLLER (MAIN)

CONTROL LINE
VIDEO LINE
CONTROL/VIDEO
LINE

installing your camera
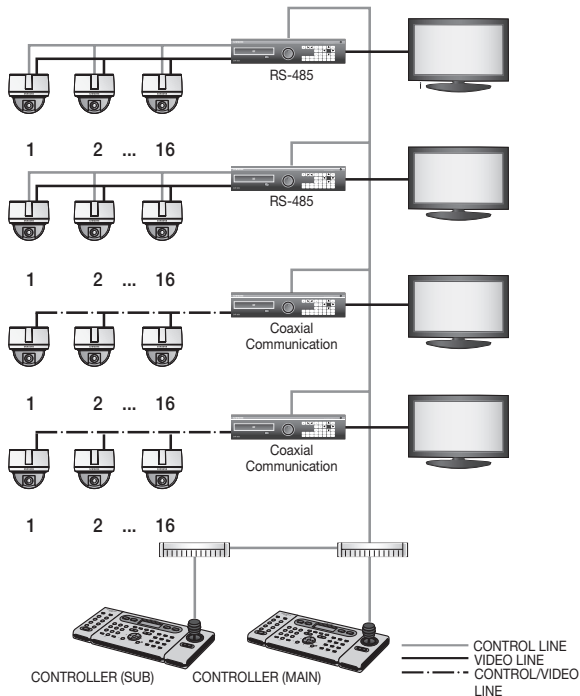
INSTALLATION EXAMPLES

- The pictures below show the front view of the camera installed with a wall or flush
  bracket. For more instructions on installing the camera, please refer to the following
  guidelines.

Wall Mount Type Installation   Flush Mount Type Installation
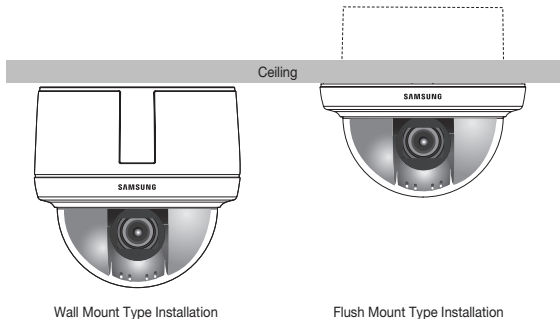
ON-CEILING MOUNT TYPE INSTALLATION EXAMPLE

1. Attach Template
   Attach the template on the ceiling, facing the "Front" mark to the main monitoring direction. Drill a hole in the ceiling according to the 60 mm diameter hole marked on the template, and then drop the camera cables down through the hole.

2. Mount Bracket
   Using the 4 screws, install the mount brackets on the ceiling, matching its directional guides with those of the template.
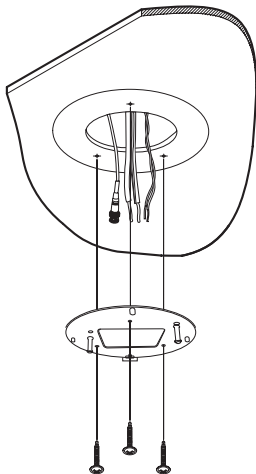
![Ⓜ] ■ Do not connect the camera to a power outlet until the installation is complete. Supplying power in the middle of the installation may cause fire or damage the product.

installing your camera

3. Assemble Camera & Bracket
   - Cameras on the sides 'Align The Arrow' triangle corner mount bracket and the arrow shows a match to match.
   - Insert the mount bracket to the matching holes in the camera, and then turn the camera clockwise.

Mount Bracket

Align The Arrow
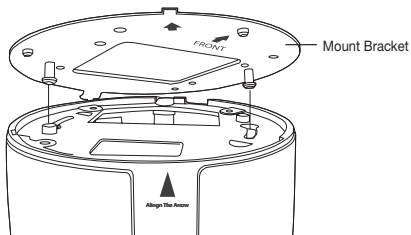
4. Secure the Camera
   Match the screw holes in the camera and mount bracket, and then fasten with the screw.

Screw Hole
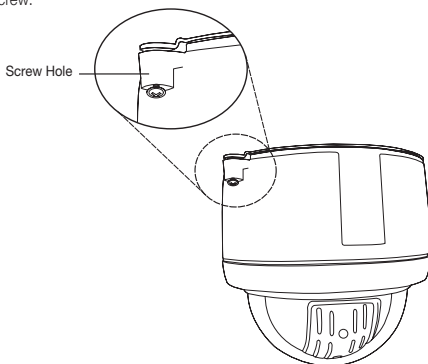
5. Connect Cables
   Connect each camera cable to the proper terminals on the bottom of the camera. For more detailed instructions, please refer to Page 17:"Camera Wiring Interface Board".
6. Camera DIP Switch Setup
   DIP switches for communication and ID setup are located on the bottom of the camera. For more instructions, please refer to Page 20.

installing your camera
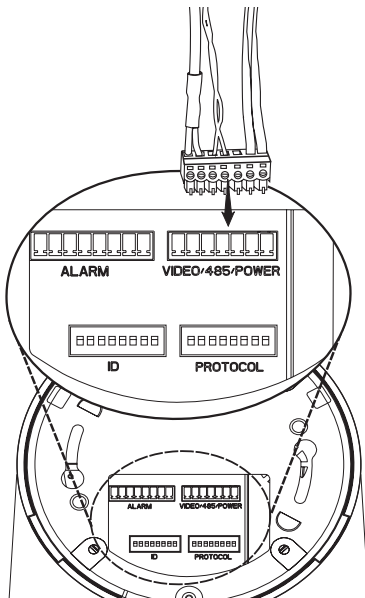
FLUSH MOUNT TYPE INSTALLATION EXAMPLE

1. Drill Hole on the Ceiling
   Attach the template, and then drill a hole according to the 120 mm diameter hole marked on the template. Drop down the camera cables through the hole. Drill another small hole for a screw to secure the camera.
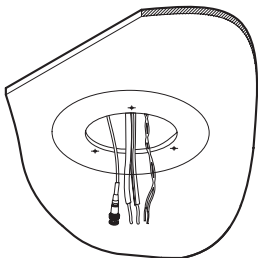
2. Exiting Camera OSD
   Rotate the dome cover counterclockwise to detach it from the camera.
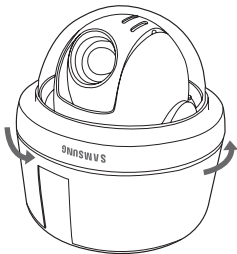
3. Detach the Mount Housing
   Remove the 3 screws, and then detach the mount housing from the camera.
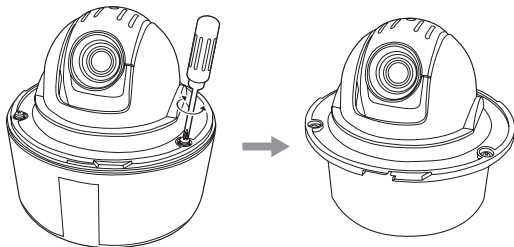
4. Connect Cables & Camera Setup
   Connect each camera cable to the proper terminals on the bottom of the camera (Refer to Page 17: "Camera Wiring Interface Board"). Configure the DIP switches on the bottom of the camera for communication and ID (Refer to Page 20).
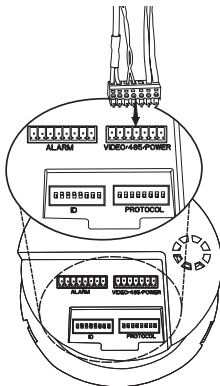
installing your camera

5. Install Camera
   Install Camera Fit the camera to the hole on the ceiling, and then secure the camera
   using 3 Product-enclosed Fixture Screws (M4x20).

Ceiling
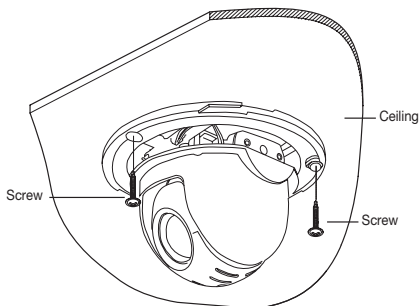
Screw

Screw

6. Assemble Dome Cover
   Assemble Dome Cover Insert the grooves on the dome cover into ones on the camera,
   and then turn clockwise to fasten.

Ceiling

SAMSUNG
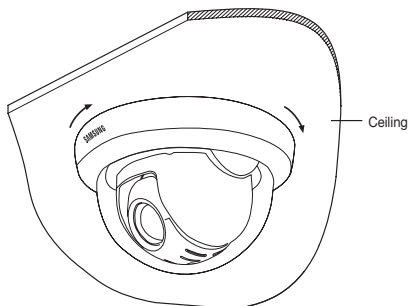
SCP-3120V (CEILING MOUNT)

1. Use the provided L-shaped wrench to remove the surface mount by loosening 4 screws counter clockwise.

surface

body
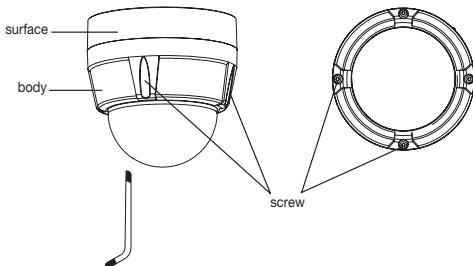
screw

2. Drill holes (5 mm in diameter and at least 35 mm in depth for each) for the screws (x4) to be inserted in the bottom of the surface mount, and insert the provided plastic anchor (HUD5) to the end.
   Insert the cables into the cable hole, and fix the SCREW-TAPPING (TH M4xL30) to the plastic anchor that was inserted in the hole for fixing the surface mount. (x4)
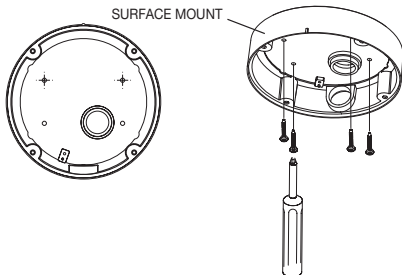
SURFACE MOUNT

installing your camera

3. Connect the safety wire (attached to the camera) to the surface mount as shown. Then, arrange the cables. (For more information about the wiring, refer to "Camera Wiring Interface Board(17 Page)".)

SAFETY-WIRE
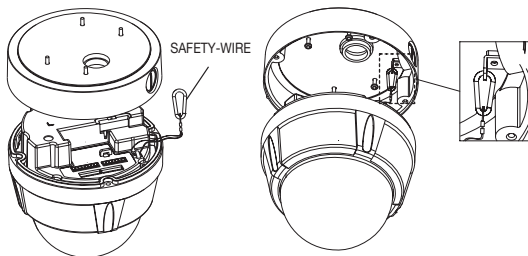
4. Arrange the cables inside the surface mount so that they should not be entangled or stuck in, and align the guide rib of the camera with that of the surface mount. Use the L-shaped wrench to tighten the screws (x4) so that the camera is secured to the mount. To ensure waterproofness, take caution lest that the outer gasket should get loose or be stuck in.

Guide Rib of SURFACE MOUNT

SURFACE MOUNT

Guide-Rib of MAIN-FRAME

SCREW

MAIN-FRAME

GASKET
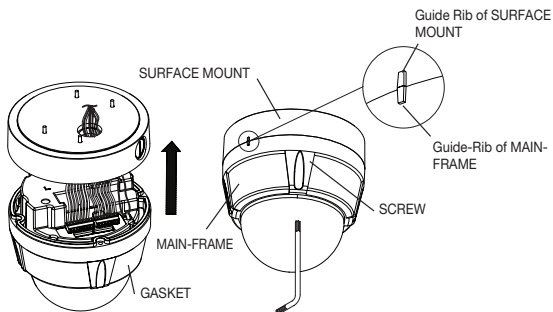
SCP-3120V (MOUNT ONTO THE OPTIMAL ADAPTOR)

1. Follow step 1 in "Ceiling Mount" above and remove the surface mount.
2. Insert the cables into the cable hole on the surface mount and fix them to SBP-300HM (HANGING MOUNT) using SCREW-MACHINE (BH, M4xL10, x4).
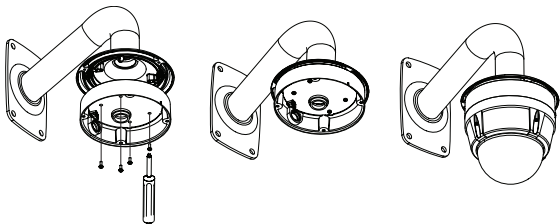
3. Repeat step 3 through step 4 in "Ceiling Mount" above to complete the installation.

installing your camera

SCP-3120VH

1. Use the provided L-shaped wrench to loosen 4 screws counter clockwise, which will help removing the housing.

HOUSING

MAIN-FRAME

SCREW SCREW
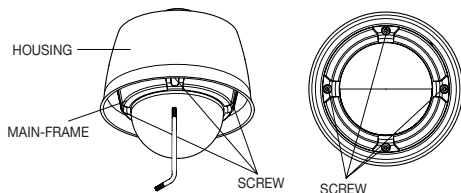
2. Fix the housing to the NP 1.5" tapped pipe, wall mount (SBP-300WM) or ceiling mount (SBP-300CM) by turning it clockwise. For waterproofness and lock between the two component parts, use the Teflon tape to wrap them around.

PIPE or MOUNT

NP 1.5' TAP

HOUSING

PIPE or MOUNT
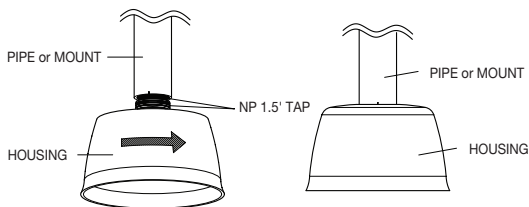
HOUSING

3. Secure the safety wire (attached to the product) to the housing as shown. (For details about the cable connection, refer to the "Camera Wiring Interface Board" section in this manual.)

SAFETY WIRE   SAFETY WIRE
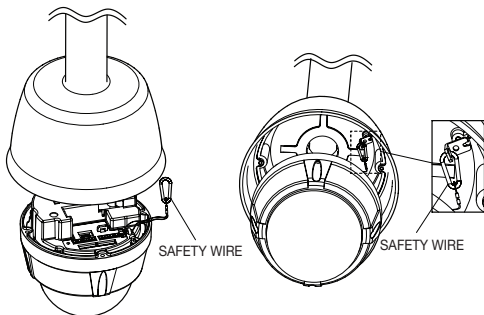
4. Arrange the cables inside the housing lest they be damaged or stuck in, and use the L-shaped wrench to tighten 4 screws to the housing. To ensure waterproofness, this step needs your special care. Otherwise, the gasket on the outer side of the product may be loose or just stuck in.

HOUSING

MAIN-FRAME

GASKET

SCREW

English _ **41**
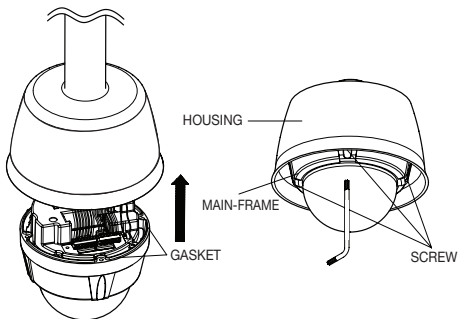
interface symbols

- Motion Detection Standby/Operation Display :
  - When in standby mode, the "D" in the upper right of the screen blinks and then changes to "🏃" if motion is detected.
- Alarm Input Port Status Display :
  - "①","②" in the upper right of the screen blink.
- Current Alarm Port Display According to Input Alarm Ports(Priority) :
  - Only one of " ⚡❶," ⚡❷" in the upper right of the screen blinks.
- Preset Number Display Settings :
  - '*' : If a preset number is already available
  - 'H' : If a preset location is the camera's home position
- If an OSD Menu has Sub Menus :
  - "⌒" displays at the end of the menu.
- If an OSD Menu Does Not Have Sub Menus :
  - No symbol appears at the end of the menu.
- PTZ Function Screen :

```
                                        Motion Detect
                                          Alarm Input


            ID=001      D ⚡❶①②
Area Display ──▶ Area1 Area Name



Sequence Status ──▶ G-SEQ1
Preset Info ──▶ PRESET=001 Preset Name
                 P:300 T:040 10X
```
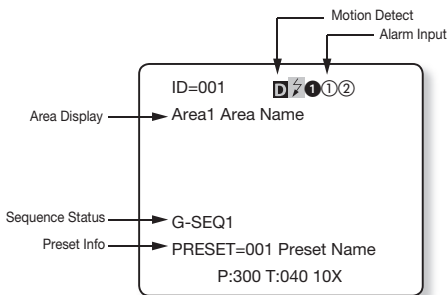
- Preset Number Setting Screen :

```
                Preset Edit
            Preset=011* (1~255)
```

• OSD Menu Screen :
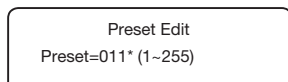
```
                    Camera Setting

Sub Menu Available ──→ Zoom/Focus

Sub Menu Not Available ──→ White Balance      ATW(IN)

                    ---

                    ---
```
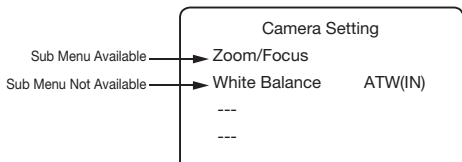
OPERATING YOUR CAMERA

• Panning and Tilting
  - Use the joystick of the controller or its direction buttons.
• Controlling Zoom
  - Move the joystick clockwise (Tele) or counterclockwise (Wide), or use the zoom buttons.
• Accessing Screen Menus
  - Press the Menu or OSD button on the controller.

✽ For more detailed information about controls using a third party controller or a DVR, refer to the user's manual of the product.

OSD COMMANDS, FUNCTION CHART, AND MENU CONTROLS

This dome camera can be operated using two methods: Using hot keys on its dedicated controller, or accessing the OSD (On Screen Display) on the video output. The OSD menu commands are as follows:

Command	Function
Move the joystick up/down/left/right	Moves the OSD menus up/down/left/right, respectively.
Enter/Focus Far	Selects a menu and allows access to the sub menus.
ESC/Focus Near	Cancels a command and moves back to an upper-level menu.

operating your camera

OSD MENU CHART

P1	P2	P3	P4	P5
Camera Setting	Zoom/Focus	Focus Mode	AUTO/MANUAL/ONESHOT	
		Digital Zoom	OFF/2X/3X/4X/5X/…/16X	
	White Balance	ATW(IN)/ATW(OUT)		
		AWC		
		Manual	Red	0~255
			Blue	0~255
	Exposure	Brightness	0~64	
		Iris	AUTO	
			MANUAL	Iris Value(0~64)
		Shutter	OFF	
			A.FLK	
			MANUAL	Shutter Speed
		Sens-Up	OFF	
			Auto	Sens-up Limit 2X/4X…512X
	Back Light	OFF		
		WDR	Limit	LOW/MEDIUM/HIGH
			Level	1~18
		BLC	Up/Down/Left/Right/Increase/Decrease	
	AGC	OFF/LOW/MEDIUM/HIGH		
		MANUAL	AGC Level	1~16
	DNR	OFF/LOW/MEDIUM/HIGH		
	XDR	OFF/LOW/MEDIUM/HIGH		
	Day/Night	Mode	Auto	
			Color	
			BW	Burst ON/OFF
		Dwell Time	2/3/5/10/15/20/25/30 SEC	
	Others	Sync	INTERNAL	
			LINE LOCK	Line Lock Phase 0~359
		Sharpness	0~3	
		Freeze	ON/OFF	
		Stabilizer	ON/OFF	
		VPS	ON/OFF	

P1	P2	P3	P4	P5
Sequence Setting	Preset	Setting/Edit/Home Position/Execute/Clear/Status		
	Swing SEQ.	Pan Swing	Setting/Execute/Clear	
		Tilt Swing	Setting/Execute/Clear	
		P&T Swing	Setting/Execute/Clear	
	Group SEQ.	Group1~6	Setting/Execute/Clear	
	Tour SEQ.	Setting/Execute/Clear		
	PTZ Trace	Trace1~4	Replay/Replay Once/Memorize/Clear	
	Auto Run	Mode	OFF	
			SCHEDULE	Sunday~Saturday
			A.PAN	AutoPan Speed/Tilt Angle
			TRACE	Trace(1~4)
			TOUR	
			GROUP	Group No(1~6)
			SWING	Swing Mode (PAN,TILT,P/T)
			PRESET	Preset No(1~128)
			HOME	
		Time	5~30(SEC), 1~5(MIN)	
	Power On Resume	ON/OFF		
Sequence Setting (Preset Edit)	Motion Det.	Motion	OFF/DETECTION/TRACKING	
		Advanced	OFF/ FIXED/MOVED	
		Display	OFF/ON	
		Sensitivity	1~7	
		Resolution	1~5	
	The rest of the installation steps are the same as in the camera setting section.			
P/T Setting	Pan Limit	Position		
		Activation	ON/OFF	
	Tilt Limit	Position		
		Activation	ON/OFF	
	Area Setting	Area1~8	Area Name	
			Position	
			Activation	ON/OFF
	Area Masking	Mask Set	MASK1~12	Activation(OFF/ON), Edit
		Position		
		Style	MOSAIC1~4/GRAY	
	Prop.P/T	ON/OFF		
	Digital Flip	ON/OFF		

operating your camera

P1	P2	P3	P4	P5
	Image Hold	ON/OFF		
	Jog Speed	Manual/10/20/30/40/50/60		
	Max Speed Level	1/2/3/4/5/6/7		
OSD Setting	Camera ID	ON/OFF		
	Camera Name	ON/OFF		
		Edit	Camera Name	
	Preset Number	ON/OFF		
	Preset Name	ON/OFF		
		Edit		
	Seq. Status	ON/OFF		
	Area Name	ON/OFF		
	PTZ Position	ON/OFF		
	Language	ENGLISH/CHINESE/FRENCH/GERMAN/SPANISH/ITALIAN/PORTUGUES/KOREAN		
	Others	Direction	On/Off	ON/OFF
			Set North Dir.	Set North Direction
		Clock Setting	Display	ON/OFF
			Date Format	
			Set Date	
			Time Format	
			Set Time	
			Calibration	(+/-)SEC/DAY
Alarm Setting	Alarm Enable	ON/OFF		
	Alarm Input	In1	MOD:NC/NO/OFF, P:1~2	
		In2	SEQ:OFF/HOME/PRESET/SWING/GROUP/TOUR/TRACE/A.PAN	
	Alarm Output	Setting 1~2	1,2,MD,AUX	
		Timer 1~2	OFF/MOMENTARY	
			ON	1~60(Sec), 1~60(Min)
		Out Off 1~2		
	MD Dwell Time	OFF		
		ON	1~60(Sec), 1~60(Min)	
Initialize	Power On Reset	Cancel/Execute		
	Factory Default Set	Cancel/Execute		
	Camera Default Set	Cancel/Execute		
	Auto Refresh	OFF		
		ON	1~7Day(s)	
Password Setting	On/Off	ON/OFF		
	Edit Password	Old Pwd/New Pwd		
Status				

functional description

CAMERA SETTING

Zoom/Focus Settings

Focus Mode and Digital Zoom Setting Menu
► Main Menu/Camera Setting/Zoom/Focus

- **Focus Mode :**
  - AUTO : Performs continuous auto-focus.
  - MANUAL : Changes the camera mode to Manual Focus.
  - ONESHOT : Auto-focuses the camera once after the Pan, Tilt, or Zoom function is used.

- **Digital Zoom :**
  Enables the maximum digital zoom.
  Setting the digital zoom to 16X provides a total zoom of 192X.

```
Main Menu
Camera Setting ↵
Sequence Setting ⏎
P/T Setting ⏎
OSD Setting ⏎
Alarm Setting ⏎
Initialize ⏎
Password Setting ⏎
Status ⏎
```

📝 ▪ Unlike the optical zoom, the graphics quality of the digital zoom decreases as its zoom ratio increases.
 ▪ The auto-focus function may not operate normally under the following conditions :
  - When background illumination is low
  - While Slow-Shutter is in operation
  - If the zoom level is set too high
  - When background illumination is too high
  - If a long distance object and a close distance object appear together within a monitoring area
  - If there is no contrast, e.g. Ceiling or a wall
  - If the camera is facing a thin horizontal line
 ▪ Auto Focus focuses on an object in the center of the screen; objects around the screen edges may not be properly in focus.

```
Camera Setting
Zoom/Focus ↵
White Balance        ATW(IN)
Exposure ⏎
Back Light           OFF
AGC                  ---
DNR                  MEDIUM
XDR                  OFF
Day/Night ⏎
Others ⏎
```

```
Zoom/Focus
Focus Mode           ONESHOT
Digital Zoom         OFF
```

functional description

White Balance

► Main Menu/Camera Setting/White Balance

The White Balance menu adjusts the balance of the screen colors under different lighting conditions.

- **ATW(IN)** : Adjusts the screen color to be optimal in an indoor environment. (Operating Temperature: about 2,500°K ~ about 9,300°K)
- **ATW(OUT)** : Automatically adjusts the screen color to be optimal in bright outdoors environments. (Operating Temperature: about 2,000°K ~ about 10,000°K)
- **AWC** : Adjusts the screen color to be optimized to the current lighting and monitor conditions. Using this setting may require an readjustment if the lighting conditions changes.
- **MANUAL** : Enables customization of the Red and Blue gains.

Main Menu	
Camera Setting ↵	
Sequence Setting ⏎	
P/T Setting ⏎	
OSD Setting ⏎	
Alarm Setting ⏎	
Initialize ⏎	
Password Setting ⏎	
Status ⏎	

Camera Setting	
Zoom/Focus ⏎	
White Balance	ATW(IN)
Exposure ⏎	
Back Light ⏎	OFF
AGC	---
DNR	MEDIUM
XDR	OFF
Day/Night ⏎	
Others ⏎	

📝 White Balance may not work properly under the following conditions.

- When the color temperature of the environment surrounding the subject is out of the control range.
- When the ambient illumination of the subject is dim.
- If the camera is directed towards a fluorescent light or is installed in a place where illumination changes dramatically, White Balance adjustments may not deliver consistent results.

Exposure

► Main Menu/Camera Setting/Exposure

The Exposure settings are to control the camera's exposure meter.

- **Brightness :**
  Adjusts the screen brightness.
  (Over 32: Brighter, Under 32: Darker)

It may not fully operable under extremely low lighting condition.

- **Iris :**
  - AUTO : Automatically adjusts the exposure meter.
  - MANUAL : Enables manual adjustment of the exposure meter. (Over 32: Brighter, Under 32: Darker)

- **Shutter :** Controls the camera's electronic shutter.
  - OFF : The shutter speed is fixed at 1/60 for NTSC and 1/50 for PAL. Operates when Iris is on the Auto Mode.
  - A.FLK : Select this setting when you experience picture flickering. Flickering can happen when artificial lighting frequencies clash with camera frame rates.
  - MANUAL : Enables manual adjustment of the shutter speed.

- **Sens-Up :**
  - AUTO : Automatically detects light levels and maintains a clear picture at night or under low-light conditions.
  - SENS-UP LIMIT : Adjusts to the maximum-powered zoom per frame.

Main Menu	
Camera Setting	↵
Sequence Setting	⏎
P/T Setting	⏎
OSD Setting	⏎
Alarm Setting	⏎
Initialize	⏎
Password Setting	⏎
Status	⏎

Camera Setting	
Zoom/Focus	⏎
White Balance	ATW(IN)
Exposure	↵
Back Light	OFF
AGC	---
DNR	MEDIUM
XDR	OFF
Day/Night	⏎
Others	⏎

Exposure	
Brightness	32
Iris	AUTO
Shutter	OFF
Sens-Up	AUTO ⏎

✏ ▪ While the Internal Sync mode is in effect, setting the shutter to '---' and facing the camera directly to a bright light source may cause poor camera performance.

▪ Brightness is disabled when the Iris is in Manual mode.

▪ Shutter is disabled when the WDR is turned on.

▪ Sens-Up is disabled when the shutter is in Manual mode.

English _ **49**

functional description

Backlight

Backlight Mode Settings
► Main Menu/Camera Setting/Back Light

Unlike other cameras, Samsung Techwin's unique A1 DSP chip gives you a clear image of the subject even with bright backlight.

- **Back Light Mode :**
  - OFF : Disables the Backlight mode.
  - WDR : Activates the Wide Dynamic Range mode.
  - BLC : Activates a user defined backlight compensation mode.

```
Main Menu

Camera Setting ↵
Sequence Setting ⏎
P/T Setting ⏎
OSD Setting ⏎
Alarm Setting ⏎
Initialize ⏎
Password Setting ⏎
Status ⏎
```

```
Camera Setting

Zoom/Focus ⏎
White Balance        ATW(IN)
Exposure ⏎
Back Light           OFF
AGC                  ---
DNR                  MEDIUM
XDR                  OFF
Day/Night ⏎
Others ⏎
```

WDR

► Main Menu/Camera Setting/Back Light/WDR

When there are both bright and dark areas at the same time, this mode makes both areas distinctive.

WDR ON   WDR OFF

• **Limit :**

Three WDR sensitivity levels are available in 3 : Low, Medium, and High. Note that the higher the sensitivity level, the lower the contrast in the light and dark areas becomes.

• **Level :**

Adjusts the screen brightness in WDR mode.

Main Menu	
Camera Setting ↵	
Sequence Setting ⏎	
P/T Setting ⏎	
OSD Setting ⏎	
Alarm Setting ⏎	
Initialize ⏎	
Password Setting ⏎	
Status ⏎	

Camera Setting	
Zoom/Focus ⏎	
White Balance	ATW(IN)
Exposure ⏎	
Back Light	WDR ⏎
AGC	---
DNR	MEDIUM
XDR	OFF
Day/Night ⏎	
Others ⏎	

WDR Setting	
Limit	MEDIUM
Level	09

- WDR is disabled when the VPS mode is turned on.
- WDR is disabled if the Iris is in Manual mode.
- During WDR operation, noise, discoloration, spots, and whitish symptoms may occur depending on lighting conditions. If they occur, stop using WDR.

functional description

BLC Setting
► Main Menu/Camera Setting/Back Light/BLC

You can selectively choose a screen area to see objects within the area more clearly than others.

- **Four-direction Joystick Controls :**
  - Moving the joystick in all four directions—upward, downward, left, and right—adjusts the location and size of a selected area.

- **Zoom Control :**
  - Zoom Tele : Enlarges the size of a selected area.
  - Zoom Wide : Reduces the size of a selected area.

📝 ▪ BLC is disabled if the Iris is in Manual mode.
▪ Color saturation may occur depending on the environment.

```
Main Menu

Camera Setting ↵
Sequence Setting ⤶
P/T Setting ⤶
OSD Setting ⤶
Alarm Setting ⤶
Initialize ⤶
Password Setting ⤶
Status ⤶
```

```
Camera Setting

Zoom/Focus ⤶
White Balance        ATW(IN)
Exposure ⤶
Back Light           BLC
AGC                  ---
DNR                  MEDIUM
XDR                  OFF
Day/Night ⤶
Others ⤶
```

```
BLC

↑:Up ↓:Down
←:Left →:Right
W:Decrease  T:Increase
```

AGC

AGC (Automatic Gain Control) adjusts the camera's gain control and the screen brightness if the camera has captured an object under low-light conditions.

The OFF, LOW, MEDIUM, HIGH, and MANUAL modes are available.

```
Main Menu
Camera Setting ↵
Sequence Setting ⏎
P/T Setting ⏎
OSD Setting ⏎
Alarm Setting ⏎
Initialize ⏎
Password Setting ⏎
Status ⏎
```

```
Camera Setting
Zoom/Focus ⏎
White Balance        ATW(IN)
Exposure ⏎
Back Light           OFF
AGC                  ---
DNR                  MEDIUM
XDR                  OFF
Day/Night ⏎
Others ⏎
```

functional description

DNR (Dynamic Noise Reduction)

► Main Menu/Camera Setting/DNR

DNR significantly reduces the amount of low luminance noise.

- **OFF** : Disables the noise reduction function.
- **LOW** : Reduces only a small amount of noise, but generates almost no afterimage.
- **MEDIUM** : The most commonly used mode. Reduces a suitable amount of noise while generating a subtle afterimage.
- **HIGH** : Reduces noise significantly, but generates obvious afterimages.

Main Menu
Camera Setting ↵
Sequence Setting ⏎
P/T Setting ⏎
OSD Setting ⏎
Alarm Setting ⏎
Initialize ⏎
Password Setting ⏎
Status ⏎

Camera Setting	
Zoom/Focus ⏎	
White Balance	ATW(IN)
Exposure ⏎	
Back Light	OFF
AGC	---
DNR	MEDIUM
XDR	OFF
Day/Night ⏎	
Others ⏎	

XDR(eXtended Dynamic Range)

► Main Menu/Camera Setting/XDR

XDR illuminates darker spots of an image while retaining the same light level for brighter spots to even out the overall brightness of the image with high contrast between bright and dark spots.

XDR ON   XDR OFF

The OFF, LOW, MEDIUM and HIGH modes are available.

Main Menu	
Camera Setting ↵	
Sequence Setting ⏎	
P/T Setting ⏎	
OSD Setting ⏎	
Alarm Setting ⏎	
Initialize ⏎	
Password Setting ⏎	
Status ⏎	

Camera Setting	
Zoom/Focus ⏎	
White Balance	ATW(IN)
Exposure ⏎	
Back Light ⏎	OFF
AGC	---
DNR	MEDIUM
XDR	OFF
Day/Night ⏎	
Others ⏎	

functional description

Day/Night

► Main Menu/Camera Setting/Day/Night

The Day & Night function allows the camera to switch between the Color and B/W modes.

- **Modes :**
  - Auto : Operates in Color mode most times, and switches to B/W mode if a low light level is detected during nighttime.
  - Color : Operates in Color mode at all times.
  - BW : Operates in B/W mode at all times. By using the Burst On/Off sub menu, burst signals can be retained or disabled.

✼ If the camera is in B/W mode and connected to equipment that requires external sync through burst signals, set the Burst On/Off option to "On."

- **Dwell Time :**
  The duration of both the lighting conditions can be customized to let the camera delay the switching between the daytime and night-time settings.

Main Menu	
Camera Setting ↵	
Sequence Setting ⏎	
P/T Setting ⏎	
OSD Setting ⏎	
Alarm Setting ⏎	
Initialize ⏎	
Password Setting ⏎	
Status ⏎	

Camera Setting	
Zoom/Focus ⏎	
White Balance	ATW(IN)
Exposure ⏎	
Back Light	OFF
AGC	---
DNR	MEDIUM
XDR	OFF
Day/Night ↵	
Others ⏎	

Day/Night	
Mode	AUTO
Dwell Time	3 SEC

> ▧ ▪ Using B/W mode under sunlight or a halogen lamp may decrease the focusing performance.

Others

▶ Main Menu/Camera Setting/Others

• **Sync :**
   - INTERNAL : Synchronizes the camera's output timing to the internal crystal.
   - LINE LOCK: Synchronizes the camera's output timing to the AC adapter power to synchronize multiple cameras. This option is useful when using a switch such as Matrix Switcher.
   - LINE LOCK PHASE : Enables setting the adapter's synchronization phase between 0 and 359°.

• **Sharpness :**

   Sharpens outlines of an image.

• **Freeze :**

   Stops or reanimates an image.

• **Stabilizer :**

   The Stabilizer compensates for any small movements of the camera caused by due to the wind and other reasonable causes.

• **VPS :**

   This function enhances the outline of moving subject, which improves the sharpness of a captured image as fine as a still image.

📖 ▪ The Stabilizer uses the digital zoom and may cause low picture quality.

   ▪ The Stabilizer is disabled if the ambient light is too low.

   ▪ The Stabilizer is disabled if the field of view has very low or no contrast, e.g. The sky or a white wall.

   ▪ VPS is disabled when the Freeze is turned on.

Main Menu	
Camera Setting ↵	
Sequence Setting ◁	
P/T Setting ◁	
OSD Setting ◁	
Alarm Setting ◁	
Initialize ◁	
Password Setting ◁	
Status ◁	

Camera Setting	
Zoom/Focus ◁	
White Balance	ATW(IN)
Exposure ◁	
Back Light	OFF
AGC	---
DNR	MEDIUM
XDR	OFF
Day/Night ◁	
Others ↵	

Others	
Sync	INTERNAL
Sharpness	2
Freeze	OFF
Stabilizer	OFF
VPS	OFF

functional description

SEQUENCE SETTING

Preset

Preset Location Saving
► Main Menu/Sequence Setting/Preset/Setting

This function enables the memorization of a selected location and activates the Pan, Tilt, and Zoom functions at that location. Saved locations can be recalled using the Preset Execute command.

• **Setting Up Preset Numbers :**

Selecting the Preset Setting menu brings up a screen as shown below. Move the joystick in all four directions to select the desired number. (Only SCC-3100A, SCC-1000)

```
        Preset Setting

Preset = 001 (255)
```
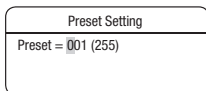
• **Saving Preset Locations :**

Selecting a preset number and pressing the Enter key redirects the menu to the screen shown below.
Using the joystick, adjust the location of the Pan and Tilt functions and then set the Zoom and Focus command.
In Preset Settings, the Zoom and Focus command is controllable only by the Zoom command. To switch between Zoom and Focus, use the Preset 1 and 2 commands as shown below.

```
Preset Setting




1+PST:ZOOM  2+PST:FOCUS
```

```
Main Menu

Camera Setting⏎
Sequence Setting↩
P/T Setting⏎
OSD Setting⏎
Alarm Setting⏎
Initialize⏎
Password Setting⏎
Status⏎
```

```
Sequence Setting

Preset↩
Swing SEQ⏎
Group SEQ⏎
Tour SEQ⏎
PTZ Trace⏎
Auto Run⏎
Power On Resume       ON
```

```
Preset

Setting↩
Edit⏎
Home Position⏎       OFF
Execute⏎
Clear⏎
Status⏎
```
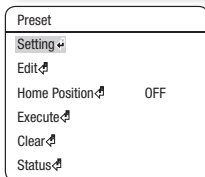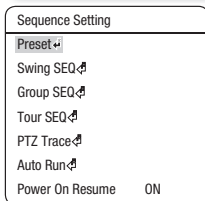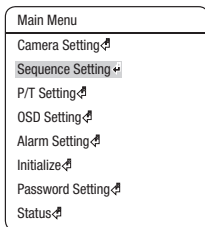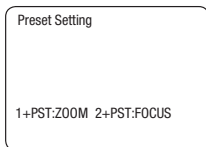
Preset Edit

► Main Menu/Sequence Setting/Preset/Edit

You can edit the 13 preset items such as Pan/Tilt location, Zoom and Focus, which are selected among camera functions.

- **PTZ :**

  Recalls saved locations using the Preset Settings command.

- **Focus Mode :**

  Refer to the section entitled Setting Up Your Camera.

- **Brightness :**

  Refer to the section entitled Setting Up Your Camera.

- **Iris :**

  Refer to the section entitled Setting Up Your Camera.

- **Back Light :**

  Refer to the section entitled Setting Up Your Camera.

- **Day/Night :**

  Refer to the section entitled Setting Up Your Camera.

- **Motion Det. :**

  Refer to the 'Motion Detection'.

- **Scene Adj :**

  Enables setting the Shutter, AGC, DNR, XDR, Sens-Up, White Balance, Stabilizer and for more information about interface terminology, please refer to the section entitled Setting Up Your Camera.

```
Main Menu
Camera Setting⏎
Sequence Setting ⏎
....
```

```
Sequence Setting
Preset ⏎
Swing SEQ⏎
Group SEQ⏎
....
```

```
Preset
Setting⏎
Edit ⏎
Home Position      OFF
Execute⏎
Clear⏎
Status⏎
```

```
Preset Edit
Preset = 001* (1~255)
```

```
Preset Edit            [001]
PTZ                 000/-05/X1
Focus Mode          ONESHOT
Brightness          32
Iris                AUTO
Back Light          OFF
Day/Night           AUTO
Motion Det.⏎
Scene Adj.⏎
```

functional description

Motion Detection

► Main Menu/Sequence Setting/Preset/Edit/Motion Det.

Commands the camera to perform Motion Detection after it arrives at a selected preset location.

- **Motion :**
  - You can enable the motion detection and tracking functions.
  - DETECTION : You can enable the motion detection function.
  - TRACKING : You can enable the tracking function.

- **Advanced :**
  - You can detect motions and mark the video that contains such motion, and enables tracking of the movement. Selecting the <FIXED/MOVED> option will mark a region if an existing object disappears, or a new object appears and fixed for a certain period of time.

- **Sensitivity :** Sets the sensitivity of motion sensor.

- **Resolution :** The bigger the resolution setting, the smaller the object that can be detected.

Main Menu	
Camera Setting 🗗	
Sequence Setting ↵	
....	

Sequence Setting	
Preset ↵	
Swing SEQ 🗗	
Group SEQ 🗗	
....	

Preset	
Setting 🗗	
Edit ↵	
Home Position	OFF
Execute 🗗	
Clear 🗗	
Status 🗗	

Preset Edit	
Preset = 001* (1~255)	

Preset Edit	[001]
PTZ	000/-05/X1
Focus Mode	ONESHOT
Brightness	32
Iris	AUTO
Back Light	OFF
Day/Night	AUTO
Motion Det. 🗗	
Scene Adj. 🗗	

Motion Det.	
Motion	OFF
Advanced	---
Display	---
Sensitivity	1
Resolution	1

> ▨
> - If you set it to <DETECTION>, the <FIXED/MOVED> option of ADVANCED menu will not be available.
>
> - In following situations, motion detection and tracking function may not work properly.
>   - When there is sudden changes of brightness
>   - When the device moves
>   - When a certain object's movement fills most of the framing area
>   - When there is difficulties in distinguishing the moving object and background

Preset Name Setting

► Main Menu/OSD Setting/Preset Name/Edit

Using this function, you can add names to preset locations.
up to 12 characters.
Once a name is entered, use the joystick and the Enter key to perform the Set command and save the name.

Main Menu
Camera Setting⏎
Sequence Setting⏎
P/T Setting⏎
OSD Setting ⏎
Alarm Setting⏎
Initialize⏎
Password Setting⏎
Status⏎

OSD Setting	
Camera ID	ON
Camera Name⏎	
Preset Number	ON
Preset Name ⏎	
....	

Preset Name	
ON/OFF	OFF
Edit ⏎	

Preset Edit
Preset = 001* (1~255)

Preset Name[   ]
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ()
[ ]-/#*!?,.
BACK SPACE CLR SET

English _ **61**

functional description

Preset Execution/Deletion/Memory Check

► Main Menu/Sequence Setting/Preset

- **Home Position :**

  Sets one of the currently configured preset positions as the home position.

- **Execute :**

  Recalls a saved preset location.

- **Clear :**

  Deletes the selected preset location.

- **Status :**

  Opens a map of saved preset locations. An area saved as a preset location is displayed with the '☑' icon.

Preset Status
001 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
021 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
041 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
061 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
081 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
101 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
121 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐

Preset Status
001 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
021 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
041 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
061 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
081 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
101 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐
121 : ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐ ☐☐☐☐☐

Main Menu	
Camera Setting⏎	
Sequence Setting ↵	
P/T Setting⏎	
OSD Setting⏎	
Alarm Setting⏎	
Initialize⏎	
Password Setting⏎	
Status⏎	

Sequence Setting	
Preset ↵	
Swing SEQ⏎	
Group SEQ⏎	
Tour SEQ⏎	
PTZ Trace⏎	
Auto Run⏎	
Power On Resume	ON

Preset	
Setting⏎	
Edit⏎	
Home Position	OFF
Execute⏎	
Clear⏎	
Status⏎	

Swing SEQ

► Main Menu/Sequence Setting/Swing SEQ

The Swing function commands the camera to move between 2 selected locations, monitoring the route.

- **Pan Swing :**

  Activates the Pan function for the Swing operation.

- **Tilt Swing :**

  Activates the Tilt function for the Swing operation.

- **P/T Swing :**

  Activates both the Pan and Tilt functions for the Swing operation.

- **Swing Settings/Execute/Clear :**

  - Settings : Each of the Swing menus have sub menus with the settings.

```
Pan Swing
Setting ↵
Execute↵
Clear↵
```

```
Pan Swing Setting
[001] ← → [***]

SPEED=64 (1~64)
DWT =005(1~120)(s)
```

Select 2 preset locations by using the joystick. Speed indicates the camera's movement speed. DWT indicates the camera's duration of stay at a preset location.

- Execute: Executes the Swing operation.
- Clear: Deletes data in the Swing memory.

Group SEQ

► Main Menu/Sequence Setting/Group SEQ

Selecting Group SEQ recalls a group of multiple preset locations in a consecutive manner. A group can contain up to 128 preset locations.

• **Setting :**

   Using the joystick, enter desired preset numbers into the PSET section. DWT indicates the camera's duration of stay at a preset location. SPD shows the camera's movement speed by 64 different levels.

Group SEQ 1			
NO	PSET	DWT(s)	SPD
001	***	003	64
002	***	003	64
003	***	003	64
004	***	003	64
005	***	003	64
006	***	003	64
007	***	003	64

• **Execute :**

   Executes the group operation.

• **Clear :**

   Deletes the selected group.

Main Menu
Camera Setting⤸
Sequence Setting ↵
P/T Setting⤸
OSD Setting⤸
Alarm Setting⤸
Initialize⤸
Password Setting⤸
Status⤸

Sequence Setting
Preset⤸
Swing SEQ⤸
Group SEQ ↵
Tour SEQ⤸
PTZ Trace⤸
Auto Run⤸
Power On Resume   ON

Group SEQ
Group 1 ↵
Group 2⤸
Group 3⤸
Group 4⤸
....

Group SEQ 1
Setting ↵
Execute⤸
Clear⤸

Tour SEQ

► Main Menu/Sequence Setting/Tour SEQ

Selecting Tour SEQ recalls groups of preset locations in a consecutive manner. Up to 6 groups can be listed for this function.

• **Settings :**

Selecting the Settings menu brings up the following screen.
Using the joystick, you can enter desired group numbers to the Group section. DWT indicates the camera's standby time before a new group is recalled.

Tour SEQ		
NO	Group	DWT(s)
01	*	003
02	*	003
03	*	003
04	*	003
05	*	003
06	*	003

• **Execute :**

Executes the group operation.

• **Clear :**

Deletes the selected group.

Main Menu
Camera Setting◁
Sequence Setting ↵
P/T Setting◁
OSD Setting◁
Alarm Setting◁
Initialize◁
Password Setting◁
Status◁

Sequence Setting	
Preset◁	
Swing SEQ◁	
Group SEQ◁	
Tour SEQ ↵	
PTZ Trace◁	
Auto Run◁	
Power On Resume	ON

Tour SEQ
Setting ↵
Execute◁
Clear◁

functional description

PTZ Trace

► Main Menu/Sequence Setting/PTZ Trace

Maximum 4 patterns of the manual operation paths (for Pan, Tilt, Zoom and Focus) are memorized and replayed.

- **Replay :**

  Replays a route saved by the Trace function. Use the OSD button to stop the replay.

- **Replay Once :**

  Replays a saved Trace route once.

- **Memorize :**

  Up to 120 seconds of a memory can be saved. The memory duration varies depending on the difficulty level of the PTZ Trace action. As a trace is saved, the remaining capacity of the memory card is displayed. When the memory card is full, it turns off with a message, "Mem. Left: 000%", on the screen.

  * Use the OSD On button to pause while saving a trace. (When using the SCC-3100A/SCC-1000 controller)
  * When Using Different Protocols

Protocol	Product	Memorize Pause
PELCO-D/P	KBD300A	Ack, Iris Open
SEC	SCC-5000	OSD On, Iris Open
PANASONIC	WV-CU161C	OSD ON
VICON	V1300X-DVC	Iris Open
HONEYWELL	HTX-3000	Iris Open
AD	.	OSD On, Iris Open
GE	KTD-405	Iris Open
BOSCH	.	Iris Open

- **Clear :**

  Deletes a saved Trace route.

Main Menu

Camera Setting⏎
Sequence Setting ↵
P/T Setting⏎
OSD Setting⏎
Alarm Setting⏎
Initialize⏎
Password Setting⏎
Status⏎

Sequence Setting

Preset⏎
Swing SEQ⏎
Group SEQ⏎
Tour SEQ⏎
PTZ Trace ↵
Auto Run⏎
Power On Resume   ON

PTZ Trace

Trace 1 ↵
Trace 2⏎
Trace 3⏎
Trace 4⏎

PTZ Trace 1

Replay
Replay Once
Memorize
Clear

Auto Run

► Main Menu/Sequence Setting/Auto Run

If there is no controller operation by the user for a certain time, the sequence operation designated by the user will be executed.

• **Mode :**
  - HOME : Auto run Home Position (Refet to the Preset Menu.)
  - PRESET : Auto run a selected preset number.
  - SWING : Auto run a selected Swing mode.
  - GROUP : Auto run a selected Group mode.
  - TOUR : Auto run a selected Tour mode.
  - TRACE : Auto run a selected trace mode.
  - A.PAN : Auto run a 360-degree pan. To activate the panning command, you need to set up the camera's tilt angle and auto pan speed manually.
  - SCHEDULE : Schedule a sequencing action by day and time. Refer to the next page.

• **Time :**

  Enables setting up an Auto Run duration. (The duration can be 5~30 seconds, or 1~5 minutes.)

Main Menu
Camera Setting⏎
Sequence Setting ↵
P/T Setting⏎
OSD Setting⏎
Alarm Setting⏎
Initialize⏎
Password Setting⏎
Status⏎

Sequence Setting
Preset⏎
Swing SEQ⏎
Group SEQ⏎
Tour SEQ⏎
PTZ Trace⏎
Auto Run ↵
Power On Resume   ON

Auto Run	
Mode	OFF
Time	20 SEC

functional description

Schedule

Schedule enables you to schedule a sequencing action by day and time.

- **Select Day :**

  At Auto Run, select SCHEDULE to set up each day of the week, as shown on the side picture. Select a day, change to ON, and then press Enter.

- **Select Time :**

  When turning ON a day, a timetable appears as shown on the side picture. (Up to 6 timelines can be selected for a day.) Select the beginning time and sequencing action to schedule the action.

Auto Run	
Mode	SCHEDULE ↵
Time	30 SEC

Schedule Set	
Sunday	ON ↵
Monday	OFF
Tuesday	OFF
Wednesday	OFF
Thursday	OFF
Friday	OFF
Saturday	OFF

Schedule Set			
No	START	SEQ	No
1	09:00	HOME	
2	00:00	OFF	
3	00:00	OFF	
4	00:00	OFF	
5	00:00	OFF	
6	00:00	OFF	
Clear ↵			

> ✎ ▪ Auto mode is disabled when AGC is turned OFF. This function is only available when Color or B/W mode is selected. The camera time must be setup properly prior to using this option. If the camera does not perform a scheduled sequencing action, please reconfigure the camera time under OSD Setting > Others > Clock Setting (Refer to Page 80).

Power On Resume

▶ Main Menu/Sequence Setting/Power On Resume

• **Power On Resume :**

This is useful when the power is disconnected and reconnected due to power failures or other power interruptions.

If the camera was performing a sequence action prior to a power disconnection, the camera automatically resumes the action when the power is reconnected.

```
Main Menu
Camera Setting◁
Sequence Setting ↵
P/T Setting◁
OSD Setting◁
Alarm Setting◁
Initialize◁
Password Setting◁
Status◁
```

```
Sequence Setting
Preset◁
Swing SEQ◁
Group SEQ◁
Tour SEQ◁
PTZ Trace◁
Auto Run◁
Power On Resume        ON
```
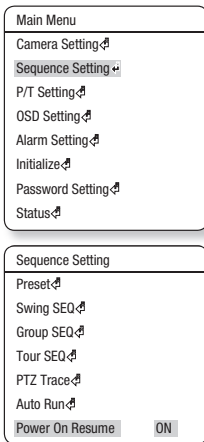
> ✎ ▪ 'Power On Resume' cannot resume a sequence action if the camera's internal battery is completely discharged after the camera was left without power supply for a long time. (The data of the sequence action, however, remains safe even if the internal battery is completely discharged.)

English _ **69**

functional description

P/T SETTING

Pan Limit

► Main Menu/P/T Setting/Pan Limit

The moving ranges in the Pan directions can be limited.

• **Position :**

Selecting the Position menu brings up the following screen if it is for the Pan Limit setting. Move the joystick left and right to select a movement range from the starting point to the end.

```
┌─────────────────────┐   ┌─────────────────────┐
│ START LIMIT         │   │ END LIMIT           │
│                     │   │                     │
│        │            │   │           │         │
│        │──▶         │   │        ◀──│         │
│        │            │   │           │         │
│ Enter: Set  ESC: Exit│  │ Enter: Set  ESC: Exit│
└─────────────────────┘   └─────────────────────┘
```
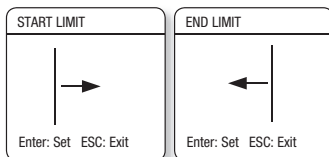
The following picture shows the Tilt Limit setting. Move the joystick left and right to select a movement range from the starting point to the end.

• **ON/OFF :**

Cancels or activates the Pan/Tilt Limit functions.

Main Menu	
Camera Setting◁	
Sequence Setting◁	
P/T Setting ↵	
OSD Setting◁	
Alarm Setting◁	
Initialize◁	
Password Setting◁	
Status◁	

P/T Setting	
Pan Limit ↵	
Tilt Limit◁	
Area Setting◁	
Area Masking◁	
Prop. P/T	ON
Digital Flip	ON
Image Hold	OFF
Jog Speed	MANUAL
Max Speed Level	5

Pan Limit	
Position ↵	
Activation	OFF

Tilt Limit

▶ Main Menu/P/T Setting/Tilt Limit

These settings limit the movement range of the Tilt operation.

• **Position :**

  Selecting the Position menu brings up the
  following screen if it is for the Tilt Limit setting.
  Move the joystick left and right to select a
  movement range from the starting point to the
  end.

START LIMIT	END LIMIT
↓	↑
Enter: Set ESC: Exit	Enter: Set ESC: Exit
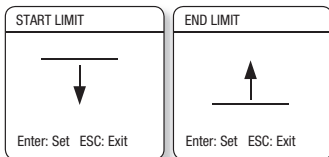
• **ON/OFF :**

  Enables or disables Tilt Limit.

Main Menu	
Camera Setting⏎	
Sequence Setting⏎	
P/T Setting ⏎	
OSD Setting⏎	
Alarm Setting⏎	
Initialize⏎	
Password Setting⏎	
Status⏎	

P/T Setting	
Pan Limit⏎	
Tilt Limit ⏎	
Area Setting⏎	
Area Masking⏎	
Prop. P/T	ON
Digital Flip	ON
Image Hold	OFF
Jog Speed	MANUAL
Max Speed Level	5

Tilt Limit	
Position ⏎	
Activation	OFF

English _ **71**

functional description

Area Setting

► Main Menu/P/T Setting/Area Setting

The Area Setting menu enables selecting certain locations in the course of the Pan and Tilt operation, and then display the areas with the OSD (On Screen Display) texts when the camera passes through them. Up to 8 areas can be selected.

- **Area Name :**

    You can add names to selected areas. Names can be up to 12 characters and can be entered via the joystick and the Enter key. Once a name is entered, use the joystick and the Enter key to perform the Set command and save the name.

```
Area Name[    ]
ABCDEFGHIJKLMNOPQRSTUVWXYZ
abcdefghijklmnopqrstuvwxyz
1234567890 ()
[ ]-/#*!?,.
BACK  SPACE  CLR  SET
```

- **Position :**

    As shown in the picture below, move the joystick to select the upper left corner and lower right corner of an area.

```
Area setting                  Area setting




Enter: Set  ESC: Exit         Enter: Set  ESC: Exit
```

- **ON/OFF :**

    Cancels or activates the display function of selected areas.

Main Menu	
Camera Setting	
Sequence Setting	
P/T Setting	↵
OSD Setting	
Alarm Setting	
Initialize	
Password Setting	
Status	

P/T Setting	
Pan Limit	
Tilt Limit	
Area Setting	↵
Area Masking	
Prop. P/T	ON
Digital Flip	ON
Image Hold	OFF
Jog Speed	MANUAL
Max Speed Level	5

Area Setting	
Area 1	↵
Area 2	
Area 3	
....	

Area 1	
Area Name	↵
Position	
Activation	OFF

Area Masking

▶ Main Menu/P/T Setting/Area Masking

If a monitoring location includes a highly private area, the area can be selectively excluded from monitoring.

- **Mask Set :**
  You can set up to 12 privacy zones that will be hided for privacy of the subject when recording.

```
Area Masking
Activation        OFF
Edit◪
```

- **Position :**
  For the new mask setup, you can set the camera position by using pan, tilt and zoom functions.

- **Style :**
  You can set the four kinds mosaic.

 ▨ ■ For better privacy protection, make your privacy zone bigger than the required, bigger by about 30%.

■ Video portion of mosaic pattern or colored by the privacy zone setup is not recoverable.

```
Main Menu
Camera Setting◪
Sequence Setting◪
P/T Setting ↵
OSD Setting◪
Alarm Setting◪
Initialize◪
Password Setting◪
Status◪
```

```
P/T Setting
Pan Limit◪
Tilt Limit◪
Area Setting◪
Area Masking ↵
Prop. P/T          ON
Digital Flip       ON
Image Hold         OFF
Jog Speed          MANUAL
Max Speed Level    5
```

```
Area Masking
Mask Set           MASK1◪
Position◪
Style              MOSAIC1
1:▫   2:▫   3:▫   4:▫   5:▫
6:▫   7:▫   8:▫   9:▫   10:▫
11:▫  12:▫
```

functional description

Prop. P/T

► Main Menu/P/T Setting/Prop.P/T

This commands the camera to change the Pan and Tilt speed automatically according to the current zoom ratio. Moving the joystick clockwise (Tele) slows down and counterclockwise (Wide) accelerates the Pan and Tilt speed, allowing detailed adjustments.

Turning this "Off" executes the function the optical 1x zoom speed regardless of how far the lens is zoomed in.

```
Main Menu
Camera Setting⏎
Sequence Setting⏎
P/T Setting ↵
OSD Setting⏎
Alarm Setting⏎
Initialize⏎
Password Setting⏎
Status⏎
```

```
P/T Setting
Pan Limit⏎
Tilt Limit⏎
Area Setting⏎
Area Masking⏎
Prop. P/T          ON
Digital Flip       ON
Image Hold         OFF
Jog Speed          MANUAL
Max Speed Level    5
```

Digital Flip

► Main Menu/P/T Setting/Digital Flip

Digital Flip is useful to monitor a moving object or a person passing directly under the camera.

When an object or a person passes directly under the camera, the camera tilt monitor follows the object or person over 100 degrees to the other side of the tilt area without panning. The screen inversion occurs at 100 degrees or higher and is digitally adjusted.

Main Menu	
Camera Setting◢	
Sequence Setting◢	
P/T Setting↵	
OSD Setting◢	
Alarm Setting◢	
Initialize◢	
Password Setting◢	
Status◢	

P/T Setting	
Pan Limit◢	
Tilt Limit◢	
Area Setting◢	
Area Masking◢	
Prop. P/T	ON
Digital Flip	ON
Image Hold	OFF
Jog Speed	MANUAL
Max Speed Level	5

English _ **75**

functional description

Image Hold

► Main Menu/P/T Setting/Image Hold

When the camera is moving between presets locations, this function freezes the cameras image until the camera reached the next location. This is useful to help the screen observer keep sharp eyes and to monitor multiple locations within a network.

Main Menu
Camera Setting⏎
Sequence Setting⏎
P/T Setting ↵
OSD Setting⏎
Alarm Setting⏎
Initialize⏎
Password Setting⏎
Status⏎

P/T Setting	
Pan Limit⏎	
Tilt Limit⏎	
Area Setting⏎	
Area Masking⏎	
Prop. P/T	ON
Digital Flip	ON
Image Hold	OFF
Jog Speed	MANUAL
Max Speed Level	5

Jog Speed

► Main Menu/P/T Setting/Jog Speed

If the speed of your controller or DVR's Pant/Tilt command protocol is fixed and causes slow panning and tilting, you can use Manual mode.

- MANUAL : The angle of the controller handle determines the speed of Pan and Tilt; the more you tilt the controller, the faster the camera spins.
- 10/20/30/40/50/60 : Maintains speed regardless of the angle of the controller handle.

Main Menu	
Camera Setting⏎	
Sequence Setting⏎	
P/T Setting ↩	
OSD Setting⏎	
Alarm Setting⏎	
Initialize⏎	
Password Setting⏎	
Status⏎	

P/T Setting	
Pan Limit⏎	
Tilt Limit⏎	
Area Setting⏎	
Area Masking⏎	
Prop. P/T	ON
Digital Flip	ON
Image Hold	OFF
Jog Speed	MANUAL
Max Speed Level	5

functional description

Max Speed Level

▶ Main Menu/P/T Setting/Max Speed Level

Adjusts the maximum speed of Pan and Tilt while performing the Preset and Sequencing actions.

- 1~7: Pan and Tilt operations can be set up to 650°/ sec.

```
Main Menu
Camera Setting⏎
Sequence Setting⏎
P/T Setting ↵
OSD Setting⏎
Alarm Setting⏎
Initialize⏎
Password Setting⏎
Status⏎
```

```
P/T Setting
Pan Limit⏎
Tilt Limit⏎
Area Setting⏎
Area Masking⏎
Prop. P/T          ON
Digital Flip       ON
Image Hold         OFF
Jog Speed          MANUAL
Max Speed Level    5
```

OSD SETTING

OSD Setting

▶ Main Menu/OSD Setting

- **Camera ID :**
  Displays or hides Camera ID in the upper left of the screen.

- **Camera Name :**
  Add a name to the camera. (First check the Note.)

- **Preset Number :**
  Displays or hides Preset Numbers on the screen.

- **Preset Name :**
  Add names to preset locations. (First check the Note.)

- **Seq. Status :**
  Displays or hides the status of a sequence action that is in progress.

- **Area Name :**
  Displays or hides the Area Name for the Area Settings on the screen.

- **PTZ Position :**
  Displays or hides the status of the Pan, Tilt, and Zoom operation that is in progress.

- **Language :**
  Enables changing the system language. This camera supports English, Chinese, French, German, Spanish, Portuguese, Korean and Italian.

✽ When selecting the Camera Name and Preset Name, the screen displays the Left keypad. Names can be up to 12 characters and can be entered via the joystick and the Enter key. Once a name is entered, use the joystick and the Enter key to perform the Set command and save the name.

Main Menu	
Camera Setting↵	
Sequence Setting↵	
P/T Setting↵	
OSD Setting↵	
Alarm Setting↵	
Initialize↵	
Password Setting↵	
Status↵	

OSD Setting	
Camera ID	ON
Camera Name↵	
Preset Number	ON
Preset Name↵	
Seq. Status	ON
Area Name	OFF
PTZ Position	ON
Language	ENGLISH
Others↵	

XXX Name[   ]

ABCDEFGHIJKLMNOPQRSTUVWXYZ

abcdefghijklmnopqrstuvwxyz

1234567890 ()

[ ]-/#*!?,.

BACK   SPACE   CLR   SET

functional description

OSD Setting(Others)

► Main Menu/OSD Setting/Others

OSD Setting is to set up the OSD (On Screen Display) functions.

- **Direction :**

  Indicates the current angle of the camera:
  East, West, South, North, Southeast, Southwest,
  Northeast, or Northwest.

  - Set North Dir.
    Set up a North direction for the camera.

- **Clock Setting :**

  Customize the camera clock; you can schedule
  sequence actions to perform automatically.

  - Display
    Shows or hides the clock from the screen.
  - Date Format
    Changes the display format of the camera date:
    DD/MM/YYYY or MM/DD/YYYY.
  - Set Date
    Enter a date.
  - Time Format
    Changes the display format of the camera time:
    24 or 12 hours.
  - Set Time
    Enter a time.
  - Calibration
    This will correct the time difference or error that
    may be found in the camera.
    Select "+" if the camera time is behind, select
    "-" if ahead, and provide how many seconds the
    time error occurs per day.

    ❊ If the error is one second for a day, enter "+1
    SEC/DAY".

Main Menu	
Camera Setting⏎	
Sequence Setting⏎	
P/T Setting⏎	
OSD Setting ↵	
Alarm Setting⏎	
Initialize⏎	
Password Setting⏎	
Status⏎	

OSD Setting	
Camera ID	ON
Camera Name⏎	
Preset Number	ON
Preset Name⏎	
Seq. Status	ON
Area Name	OFF
PTZ Position	ON
Language	ENGLISH
Others ↵	

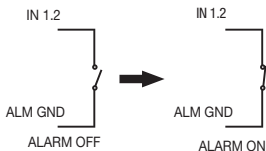| OSD Setting	
Direction⏎	
Clock Setting⏎	

ALARM SETTING

Alarm Setting

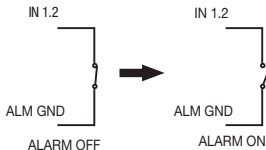### Setting Up Alarm Input
► Main Menu/Alarm Setting/Alarm Input

- **Alarm Enable :**
  - On/Off : Enables or disables the Alarm function.

- **MOD :**
  Enables selecting an Alarm Input method.
  - NO (Normally Open)

```
IN 1.2                    IN 1.2


ALM GND                   ALM GND

    ALARM OFF                 ALARM ON
```

- NC (Normally Closed)

```
IN 1.2                    IN 1.2


ALM GND                   ALM GND

    ALARM OFF                 ALARM ON
```

Main Menu
Camera Setting↵
Sequence Setting↵
P/T Setting↵
OSD Setting↵
Alarm Setting ↵
Initialize↵
Password Setting↵
Status↵

Alarm Setting	
Alarm Enable	OFF
Alarm Input ↵	
Alarm Output↵	
MD Dwell Time	OFF

ALM	MOD	P	SEQ	NO
IN1	OFF	1	OFF	
IN2	OFF	2	OFF	

functional description

📝 ▪ As shown in the picture above, the Alarm Input must be entered with the Open or Closed switch signals. Supplying power without entering the signals may damage the product.

- **P (Priority) :**
  Set the priority of Alarm Inputs. If more than one alarm is simultaneously activated, the alarm with the highest priority activates before the others. Once the alarm is canceled, the next highest priority alarm activates.

- **SEQ :**
  Enables setting up a sequence action for the camera in response to an alarm. Available sequence actions are Home, Preset, Swing, Group, Tour, Trace and A.Pan.

❋ For the Auto Pan settings, the first number under the Number menu indicates the speed while the second is the Tilt angle. (Refer below.)

ALM	MOD	P	SEQ	NO
IN 1	NO	1	A.PAN	20/20
IN 2	NC	2	A.PAN	20/20

Tilt Angle

Speed

- **MD Dwell Time :**
  When Motion Detection under the Preset Edit menu is selected, MD Dwell Time performs the Tour or Group function.
  While the camera is performing a sequence action, if motion is detected from a selected preset location, the camera pauses the sequence action operation and starts monitoring the location instead for a duration that is set under the MD Dwell Time menu.
  If the motion is no longer detectable or the duration expires, the camera aborts the monitoring operation and then resumes the sequence action.

Alrm Output

► Main Menu/Alarm Setting/Alarm Output
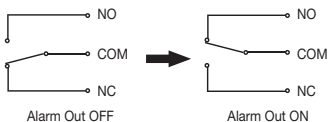
- **Setting 1,2 :**

    1, 2, Motion, and Support Device indicate
    alarm input ports, Motion Detection, and
    support device input. A total of 4 alarms,
    Motion Detection, and support devices can be
    set up to output alarms. 1 alarm output port
    can be used for more than 2 alarm inputs and
    Motion Detection.

- **Timer 1,2 :**

    Enables selecting an Alarm Output method.
    - On : Retains an alarm output for a set
           duration from a minimum of 1 second
           to a maximum of 60 minutes upon the
           alarm occurrence.
    - Momentary : Retains an alarm output only
           until the alarm is canceled.

✽ The Alarm Output is equipped with a relay
  circuit. The operation of the alarm output port
  is as shown in the diagram below.

Main Menu
Camera Setting ⏎
Sequence Setting ⏎
P/T Setting ⏎
OSD Setting ⏎
Alarm Setting ↵
Initialize ⏎
Password Setting ⏎
Status ⏎

Alarm Setting	
Alarm Enable	OFF
Alarm Input ⏎	
Alarm Output ↵	
MD Dwell Time	OFF

Alarm Output	
Setting 1	□1 □2 □MD □AUX
Setting 2	□1 □2 □MD □AUX
Timer 1	OFF
Timer 2	OFF
OUT Off 1	
OUT Off 2	

Alarm Out OFF   Alarm Out ON

📖 ■ Connecting the power connector and GND incorrectly to the NC/NO and COM ports
      may cause a short circuit and fire, damaging the camera.

  ■ The maximum power capacity of the built-in relay is 30VDC/2A, 125VAC/0.5A, and
    250VAC/0.25A. Operating the camera beyond the capacity may decrease the
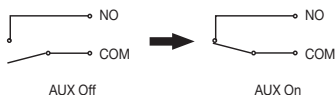   camera's lifespan and damage it.

functional description

AUX Output menu is to operate the camera's peripheral devices such as lamps and sirens through the controller and switches as well as through network communications.

- **OUT Off 1,2 :**
  - When an alarm event occurs, the output force can be terminated.

AUX Off   AUX On

▨ ■ Connecting the power connector and GND incorrectly to the Aux terminal's NO and COM ports may cause a short circuit and fire, damaging the camera.

■ The maximum power capacity of the built-in relay is 30VDC/2A, 125VAC/0.5A, and 250VAC/0.25A. Operating the camera beyond the capacity may decrease the camera's lifespan and damage it.

INITIALIZE

Initialization Menu

▶ Main Menu/Initialize

• **Power On Reset :**

Restarts the camera.

• **Factory Default Set :**

Enables resetting the camera to its factory default settings. When the mode is selected, all custom data such as preset locations is deleted from the camera.

Use this function if it is necessary to reset the settings of the camera.

• **Camera Default Set :**

Resets the camera zoom module to the Factory Default mode; use if you want to reset all camera settings including Exposure and Backlight.

• **Auto Refresh :**

Enables optimizing the status of the camera's built-in electric circuits and components on a regular basis. (A regular operation can be scheduled.)

Main Menu
Camera Setting⏎
Sequence Setting⏎
P/T Setting⏎
OSD Setting⏎
Alarm Setting⏎
Initialize ↵
Password Setting⏎
Status⏎

Initialize	
Power On Reset⏎	
Factory Default Set⏎	
Camera Default Set⏎	
Auto Refresh	OFF

This mode can be used to maintain and repair the current settings of the camera when anomalous operations occur: e.g. The camera happened to directly face a light source, or the settings have been canceled after the camera repeatedly rotated in all four directions for a long time to monitor a specific location.

The default setting is Off.

- OFF, 1~7 Days : Selecting Off disables Auto Refresh and selecting 1~7 Days automatically executes it after 1~7 days has passed.

✽ Auto Refresh takes approximately 10 seconds to finish. If Auto Refresh activates in the middle of a sequence action, the camera pauses the sequence action and performs an Auto Refresh, then resumes the sequence action once the refresh is complete.

functional description
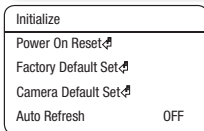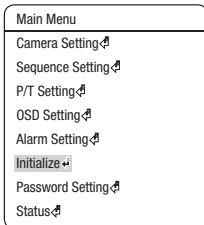
PASSWORD SETTING

Password Setting

► Main Menu/Password Setting

The Password feature enables you to configure a password for rebooting the camera and accessing the OSD and preventing unauthorized modification of existing camera settings.
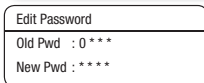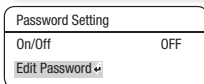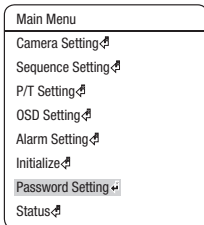
• **On/Off :**

Enables or disables Password protection.

• **Edit Password :**

- Change the password; enter the current password and then a new one, consisting of 4 hexadecimal characters (0~F).
- * The default password is "0000".

```
Main Menu
Camera Setting↵
Sequence Setting↵
P/T Setting↵
OSD Setting↵
Alarm Setting↵
Initialize↵
Password Setting ↵
Status↵
```

```
Password Setting
On/Off              OFF
Edit Password ↵
```

```
Edit Password
Old Pwd   : 0 * * *
New Pwd : * * * *
```

> ∅ ■ In case you have forgotten the current password, use the controller and perform Preset 255 to access the OSD without the password.
>
> ■ Upon using "Factory Default Set" at "Main Menu > Initialize," the password is reset to the default, "0000".

STATUS

Status

▶ Main Menu/Status

Displays the settings and version of the dome camera.

- **CAM MODEL :**

  Indicates the model name of the camera.

- **CAM VERSION :**

  Indicates the software version of the camera.

- **DOME VERSION :**

  Indicates the version of the camera control board.

- **COAX VERSION :**

  Indicates the software version of the Coax communication.

- **CON PROTOCOL :**

  Indicates the status of the current protocol.

- **DOME ID :**

  Camera ID

- **CONTROLLER :**

  Indicates the settings of the current communications mode.

```
Main Menu
Camera Setting ⏎
Sequence Setting ⏎
P/T Setting ⏎
OSD Setting ⏎
Alarm Setting ⏎
Initialize ⏎
Password Setting ⏎
Status ↵
```

```
Status
CAM MODEL      = 12N(A1)
CAM VERSION    = V1.3
DOME VERSION   = V1.00
COAX VERSION   = V1.00
CON PROTOCOL   = AUTO DET.
DOME ID        = 001
CONTROLLER     = Simplex
```

troubleshooting

TROUBLESHOOTING

Problem	Cause and Solution	PAGE
Controller does not work.	Check if the camera and peripheral devices are properly connected.	29
	Verify the setups of ID, protocol, and baud rates.	20~27
No picture is displayed on monitor.	Check if power cable is securely connected to the camera and the monitor. Check if the video cable is properly connected. Consult the operation manual of the system controller connected to the camera.	17~29
	Check if the iris of the lens is closed. Adjust the menu for the iris of the lens.	49
	Check the camera's fixed shutter speed. Adjust the camera's shutter menu.	49
The picture is too dark/bright.	Check the camera's Brightness menu. Adjust the camera's Brightness menu.	49
The monitor displays a white image.	Check if the iris of the lens is open. Adjust the menu for the iris of the lens.	49
Picture is out of focus.	Check if the dome cover or the camera lens is dirty or smudged. If it is, clean the dirt off.	-
	Verify the distance between the camera and the subject, as well as the subject's surroundings. Camera may have difficulty focusing on a subject against a white background.	-
	If Auto Focusing is having difficulty focusing on a particular subject, set Focus Mode to Manual and adjust the focus by yourself.	47
	Use the camera's reset menu to restore the camera settings in order to default.	85
	Adjust Sharpness level.	57

Problem	Cause and Solution	PAGE
Digital noise appears in picture.	Check if the video cable is properly connected.	-
	Make sure that the power cable and video cable do not exceed the recommended maximum lengths.	28
	Adjust Sharpness level.	57
Picture's colors are not good.	Check the White Balance.	48
The picture is flickering.	Check if the dome cover or the camera lens is dirty or smudged. If it is, clean the dirt off.	-
	Check if the camera is pointing directly at a fluorescent light or sunlight. If so, change the camera's direction to remove the flickering.	-
Afterimages appear in picture.	Check Sens-Up settings.	49
Camera switches between color and B&W modes frequently.	Adjust Dwell Time in Day & Night menu.	56
A circular object appears on screen when the camera is pointing straight down.	You are seeing a pinpoint-like injection artifact on the dome cover. The camera is functioning normally.	-
Pan, tilt, zoom, and/or focus do not work.	Check if power cable is securely connected to the camera and the monitor. Check if the video cable is properly connected. Consult the operation manual of the system controller connected to the camera.	17~29
	Check if Pan Limit and/or Tilt Limit are set. If so, remove the limit(s).	70~71
	A motor or the lens may be overheated. If so, contact your service personnel or system provider for assistance.	-

troubleshooting

Problem	Cause and Solution	PAGE
The camera's position differs from the position defined in a preset.	This phenomenon may happen, since the motors have a margin error of ±0.1˚.	-
Sequence configuration of the camera does not work.	Check if Preset or another operation mode has been set.	58~62
	Check the Auto Refresh settings.	85
The upper side of the picture is dark when the camera is on the horizontal reference point.	You are seeing the camera's internal cover. The camera is functioning normally.	-
Camera suddenly turns on or moves to a preset position by itself.	Check the Auto Run settings. Auto Run puts a camera through a predefined action sequence if the user does not use the Controller to operate the camera for a certain period of time.	67
• The Power cord's coating has been damaged. • The power cord is hot to touch when the product is in operation. • The power cord gets hot after being folded or pulled on.	Continuing to use the product when its power cord is damaged constitutes an electrical and fire hazard. The power plug must be removed from the outlet immediately, and a qualified service personnel or your system provider should be contacted for assistance.	-

product specifications

PRODUCT SPECIFICATIONS

	SCP-3120	SCP-3120V	SCP-3120VH
Imaging Device	SONY 1/4inch, ExView-HAD PS CCD(ICX-448/449)		
TV Standard	NTSC / PAL		
Total Pixel	NTSC : 811(H) × 508(V) / PAL: 795(H) × 596(V)		
Effective Pixels	NTSC : 768(H) × 494(V) / PAL: 752(H) × 582(V)		
Scanning System	2:1 Interlace		
Synchronization	Internal/Line Lock		
Horizontal Scan Rate	NTSC : 15.734 KHz / PAL:15.625 KHz		
Vertical Scan Rate	NTSC : 59.94 Hz / PAL:50Hz		
Horizontal Resolution	600 TV Line(Color) / 700 TV Line(B/W)		
Min. Illumination	COLOR : 0.7Lux(50IRE@F1.65), B/W : 0.07Lux(50IRE@F1.65)		
S/N(Y Signal)	Over 50dB(AGC OFF)		
Video Output	VBS 1.0Vp-p/75Ω		
Zoom Ratio	12X (Optical), 16X (Digital)		
Focal Length	3.6~44.3mm (F1.6~F2.0)		
Min. Object Distance	Wide:0.2m, Tele:0.8m		
Angular Field of View	H: 54.44 °(Wide) ~ 4.64 °(Tele)		
	V: 41.42 °(Wide) ~ 3.52 °(Tele)		
Focus	AUTO / MANUAL / ONE-SHOT		
Zoom Speed	1.9Sec(Wide~Tele)		
IRIS	AUTO / MANUAL		
Lens Initialization	Built-In		
Horizontal Rotation Angle	360°Endless		
Horizontal Rotation Speed	Manual : 0.05~120°/Sec(Turbo: 200°/Sec), Preset : Max. 650°/Sec		
Vertical Rotation Angle	-5°~ 185°		
Vertical Rotation Speed	Manual : 0.05~120°/Sec, Preset : Max. 650°/Sec		
Preset Position	255		
Preset Accuracy	±0.1°		
Camera ID	1~255		
Day & Night	AUTO / COLOR / BW		
Backlight	BLC / WDR / OFF		
Motion Detection	ON / OFF		
Privacy Mask	ON / OFF (12 Areas)		
DNR	LOW / MEDIUM / HIGH / OFF		
Sens-up	Auto / Off (Selectable limit X2~ 512X)		

product specifications

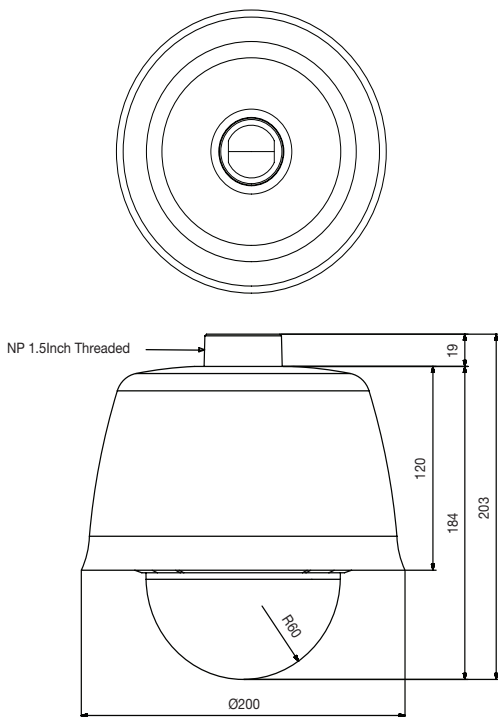|	SCP-3120	SCP-3120V	SCP-3120VH
Gain Control	OFF / LOW / MEDIUM / HIGH / MANUAL		
White Balance	ATW(IN) / ATW(OUT) / AWC / MANUAL		
Electronic Shutter	NTSC:1/60~10,000sec, PAL:1/50~10,000sec		
Serial Communication	RS485, Coaxial Communication		
Protocol	SAMSUNG-T, SAMSUNG-E, Pelco-D, Pelco-P, Pelco Coaxitron, Panasonic, Honeywell, AD, Vicon, BOSCH, GE		
Alarm	2 In, 2 Out		
Digital Flip	ON/OFF		
Waterproof Standards	·	IP66(IEC-60529)	IP66(IEC-60529)
Operating Place	Indoor	Indoor/Outdoor	Indoor/Outdoor
Operating Temperature	-10℃ ~ +50℃	-50℃ ~ +50℃	-50℃ ~ +50℃
Operating Humidity	Less than 90% RH		
Input Voltage	AC24V ± 10%		
Power Consumption	Max. 12W	Max. 45W	Max. 45W
External Dimensions(Φ×D)	Φ154×150mm	Φ165×165mm	Φ200×203mm
Weight	Approx. 1.0Kg	Approx. 1.8Kg	Approx. 2.4Kg

dimensions

DIMENSIONS

SCP-3120

(Unit : mm)

154mm

150mm

R60

dimensions

SCP-3120V

3/4 Inch Threaded
Pitch 1.8143
Thread angle : 55
Basic Hole : Ø24.117

Ø165

102.5

165

R60

SCP-3120VH

NP 1.5Inch Threaded

19

120

184

203

R60

Ø200
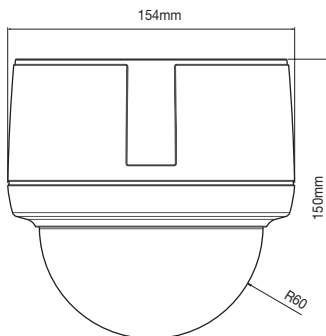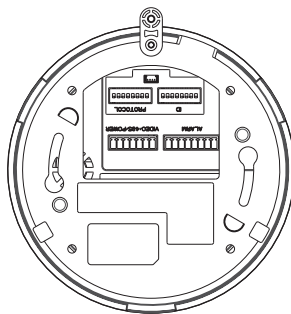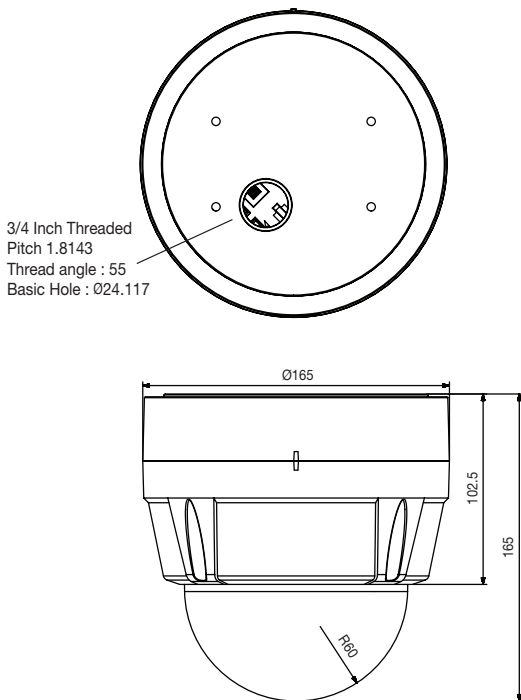
DECLARATION OF CONFORMITY

Application of Council Directive(s)	2004/108/EC
Manufacturer's Name	SAMSUNG TECHWIN CO., LTD
Manufacturer's Address	SAMSUNG TECHWIN CO., LTD
	42, SUNGJU-DONG CHANGWON-CITY,
	KYUNGNAM, KOREA, 641-716
European Representative Name	
European Representative Address	
Equipment Type/Environment	Speed Dome Camera
Model Name	SCP-3120/3120V/3120VH
Beginning Serial NO.	C59A
Conformance to	EN 55022 : 2006
	EN 50130-4 : 2003

We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

Manufacturer	SAMSUNG TECHWIN CO., LTD	Legal Representative in Europe	
Signature	*BJ Gu*	Signature	
Full Name	BONJENG GU	Full Name	
Position	QUALITY CONTROL MANAGER	Position	
Place	CHANGWON, KOREA	Place	

memo

memo

memo

SAMSUNG