SAMSUNG TECHWIN

12X SPEED DOME CAMERA

User Manual

SCP-3120/3120V/3120VH





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





The lightning flash with an arrowhead symbol, within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

INFORMATION-This equipment has been tested and found to comply with limits for a Class A digital device, pursuant to part 15 of the 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.

WARNING

- CHANGES OR MODIFICATIONS NOT EXPRESSLY APPROVED BY THE MANUFACTURER COULD VOID THE USER'S AUTHORITY TO OPERATE THE EQUIPMENT.
- TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

CAUTION : To prevent electric shock and risk of fire hazards:

- The installation for this apparatus should be by a qualified service person and should conform to all local codes.
- Do NOT use power sources other than Class 2 power source.
- REPLACE WITH SAME TYPE 250V T3.15AL FUSE(F1)
- REPLACE WITH SAME TYPE 250V T2AL FUSE(F2)



This installation should be made by a qualified service person and should conform to all local codes.

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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 12 camera image properities 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.



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.

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.



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



Samsung Techwin cares for the environment at all product manufacturing stages to preserve the environment, and is taking a number of steps to provide customers with more environment-friendly products. The Eco mark represents Samsung Techwin's will to create environment-friendly products, and indicates that the product satisfies the EU RoHS Directive.

Warnings & Cautions

This information is provided to ensure your safety and to prevent any losses, financial or otherwise. Please read it carefully and use the product accordingly.

- * For product inquiries, please contact the retail shop where you bought the camera. The use of equipment such as an aerial ladder while providing after-sales service shall be at your expense.
- * Unplug the power plug during a thunder storm to prevent fire and damage to the product.
- * This product is support equipment for a security system. Therefore, we can't compensate for material losses and/or personal injuries by robbery, fire, natural disaster, or anything of the sort.

Warning/Caution/Special Mark Messages





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

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

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it 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 this item for environmentally safe recycling.

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

Warnings & Cautions

▲ Warnings



Do not install on your own.

This installation should be made by a qualified service person. Installing this product on your own may result in fire or electric shock. For the installation service, contact the retail shop where you bought the product.

Do not install in high humidity or in a place that may be exposed to oil or gas.



May cause product malfunctions, electric shocks, and fire.

Do not handle the power plug with wet hands.



May cause electric shock.

Stop using the camera if smoke or abnormal heat is detected.



May cause fire.

Do not install on an unsubstantial wall that may be subject to vibrations.



May cause the product to fall.

Do not disassemble the camera or insert foreign subjects.



May cause fire and damage to the product.

▲ Cautions

Do not install under extreme temperature conditions.



Only use in the temperature range of between -10°C and +50°C to prevent low graphics quality and product malfunction. When using in high temperature conditions, provide good ventilation.

Do not drop the camera or subject it to physical shock.



May cause product malfunctions.

Avoid touching the camera lens.



The lens is the most important component of the camera. Be careful not to smear it with fingerprints.

Do not install under unstable lighting conditions.



Severe lighting changes or flickering may hinder normal camera operation.

Never keep the camera facing direct sunlight or any other strong lights.



May cause critical damage to the CCD.

Do not install in a place that may be exposed to rain, water, or radioactivity.



Water leakage into the camera may cause damage.

Warnings & Cautions

Detailed Warnings and Cautions

- Avoid operating the camera for long durations under high temperatures and in high humidity. Excessive heat can shorten the lifespan of the camera components.
- Do not install or place the camera near any heat sources.
- Subjecting the dome cover to physical shock may damage the camera.
- Do not place the camera facing direct sunlight or other intense light sources. Strong lights such as spotlights can
 cause distortions—blooming and smear—as well as discolorations on the screen by heating up the color filter of
 the camera. They also may cause internal reflections of the camera, leading to operational malfunctions.
- Do not drop the camera or subject it to physical shock or vibration; this can cause serious damage to the camera.
- When installing the camera near a power line, make sure to keep at least 1 meter distance from the power line, or earth an additional metal pipe to separate the camera from the power source.
- Install this camera on the ceiling. Installing it on the ground or a unleveled location may cause product malfunctions and shorten its lifespan.
- This product is designed to be used indoors. When installed outdoors, the camera is exposed to environmental stress, such as water and high or low temperatures, which may degrade video quality and/or cause product malfunctions.
- Avoid installing and operating the camera in the following places.
 - · Places whose temperature exceed the camera's recommended range.
 - · Places where drastic temperature changes occur: e.g. Near an air conditioner.
 - · Places that are exposed to steam, oil, and inflammable substances: e.g. Inside a kitchen.
 - · Places that are exposed to radioactivity, X-rays, strong electric waves, and electro-magnetic waves.
 - · Places that are exposed to outdoor air contaminants: e.g. Dust and car exhaust.
 - · Places in high humidity.
 - · Places that are exposed to corrosive gas
- Smeared and dusty dome covers decrease the picture and video quality. Clean the dome cover and camera lens on a regular basis.
- Remove the plastic wrap on the dome cover only after the camera installation is complete.
- This camera is not equipped with a power switch. Plug in the camera only after the installation is complete.
- Select an installation site (ceiling or wall) that can hold at least 5 times of the camera's weight.
- Stuck-in or peeled-off cables can cause damage to the product or a fire.
- For safety purposes, keep anyone else away from the installation site.
- And put aside personal belongings from the site, just in case.
- This product is designed for indoor use and outdoor use, separately. Take an appropriate one that suits your needs. (Indoor: SCP-3120, Outdoor: SCP-3120V/VH)
- If you install the indoor unit outside of the building, rain, high or low temperature will affect the video quality or may cause damage to the unit.
- Only SCP-3120V/VH
 - If you turn on the camera that you have left in a place at below -50°C with no power supplied, the camera will display the OSD menu after about 3 minutes.
 - · In a low-temp environment, the camera can't start operation right away so it takes some time to warm up and recover its normal operation.
 - If you install the camera at below 0[°]C or restart the camera after a power failure, the dome cover may be frosted. If the dome cover is frosted, you can defrost it within 3 hours after you turned on the camera.(However, it can be done only at higher than the minimum operation temperature of -50[°]C with no wind)



SCP-3120



Body



Mount Bracket



User Guide





7Pin Terminal Block

8Pin Terminal Block







Templet



Screw(M4x20, 4EA)

Components and Accessories

SCP-3120V



Body



User Guide



7Pin Terminal Block



8Pin Terminal Block







Screws/Plastic Anchor/Wrench

SCP-3120VH



Body



User Guide





7Pin Terminal Block

8Pin Terminal Block



BNC Cable



Wrench

Components and Accessories

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

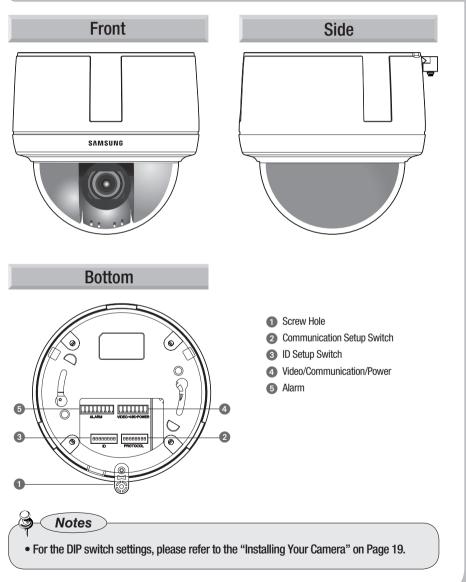
- This camera is designed to be mounted onto the ceiling, and you can use one of the following adaptors for installation purposes according to the installation site.

(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
- \cdot 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.

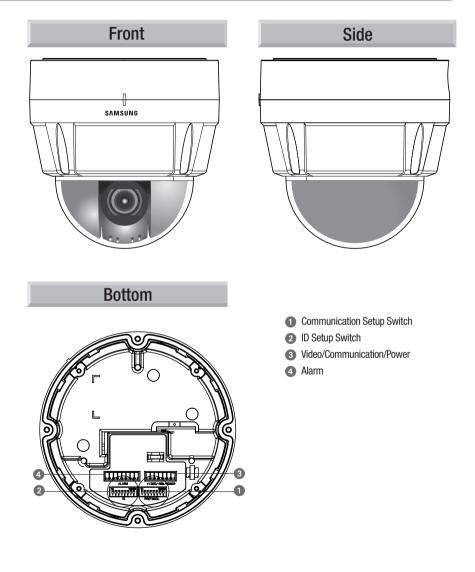
Component Names and Functions

SCP-3120

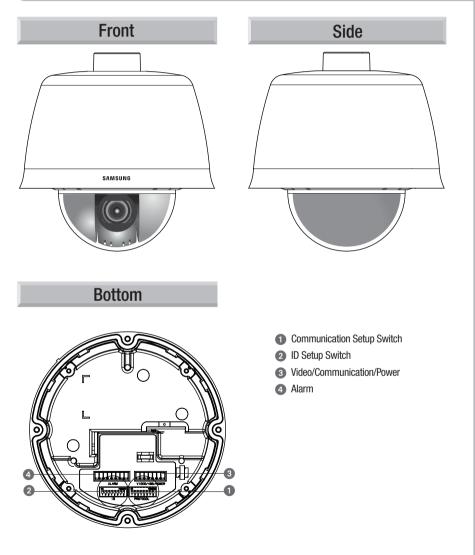


Component Names and Functions

SCP-3120V



SCP-3120VH

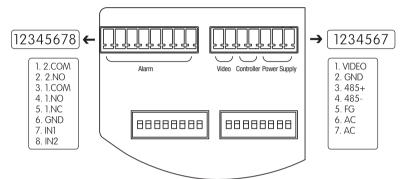


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Component Names and Functions

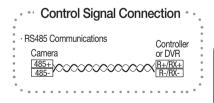
Camera Wiring Interface Board

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.)



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 Close) |
| 6 | GND | Ground |
| 7 | IN1 | Alarm Input Sensor Terminal 1 |
| 8 | IN2 | Alarm Input Sensor Terminal 2 |



Power, Video & Communication Signal Connection

| | v |
|-------|--|
| Name | Usage |
| VIDEO | Video Output |
| GND | Ground |
| 485+ | Controller Data Line |
| 485- | Controller Data Line |
| FG | Field Ground |
| AC | AC 24V |
| AC | AC 24V |
| | VIDEO GND 485+ 485- FG AC |

- * The provided BNC cable's blue line is Video Output, while the black line is the Ground.
- * Power supply adaptor (AC) has no polarities.

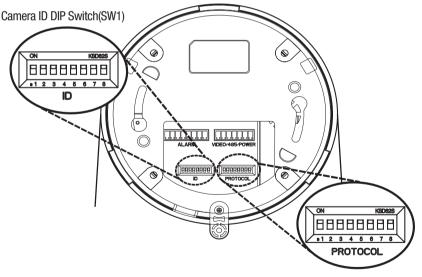
Notes

- The maximum power capacity of the builtin 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.

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.

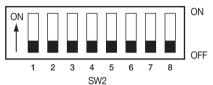
- 1. Detach the camera frame from the install base, and place the bottom of the frame toward you as shown in the picture below.
- 2. Set the switches according to your installation environment. For more detailed setup information, please refer to the chart on the next page.
- 3. The camera may malfunction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



Communication Protocol DIP Switch(SW2)

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 | Resetved | ON | OFF | ON | ON |
| 13 | Resetved | ON | ON | OFF | OFF |
| 14 | Resetved | ON | ON | OFF | ON |
| 15 | Resetved | ON | ON | ON | OFF |
| 16 | Resetved | 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 |

• For more information about the protocols, refer to our official website.

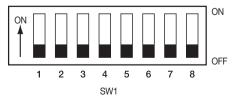
* Control with the SSC-5000 Controller

| 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.



Camera ID Chart

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

| ID | SW1-#1 | SW1-#2 | SW1-#3 | SW1-#4 | SW1-#5 | SW1-#6 | SW1-#7 | SW1-#8 |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|
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| 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 |
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| 110 | OFF | ON | ON | ON | OFF | ON | ON | OFF |
| 111 | ON | ON | ON | ON | OFF | ON | ON | OFF |
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| 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 |
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| 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 | OFF |

| 120 | UFF | UFF | UFF | OFF | OFF | UFF | UFF | UN |
|-----|-----|-----|-----|-----|-----|-----|-----|----|
| 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 |
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| 153 | ON | OFF | OFF | ON | ON | OFF | OFF | ON |
| 154 | OFF | ON | OFF | ON | ON | OFF | OFF | ON |
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| 157 | ON | OFF | ON | ON | ON | OFF | OFF | ON |
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| 159 | ON | ON | ON | ON | ON | OFF | OFF | ON |
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| 161 | ON | OFF | OFF | OFF | OFF | ON | OFF | ON |
| 162 | OFF | ON | OFF | OFF | OFF | ON | OFF | ON |
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| 165 | ON | OFF | ON | OFF | OFF | ON | OFF | ON |
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| 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

128

SW1-#1

OFF

SW1-#2

OFF

SW1-#3

OFF

SW1-#4

OFF

SW1-#5

OFF

SW1-#6

OFF

SW1-#7

OFF

SW1-#8

ON

| ID | SW1-#1 | SW1-#2 | SW1-#3 | SW1-#4 | SW1-#5 | SW1-#6 | SW1-#7 | SW1-#8 |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|
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| 176 | OFF | OFF | OFF | OFF | ON | ON | OFF | ON |
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| 178 | OFF | ON | OFF | OFF | ON | ON | OFF | ON |
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| 187 | ON | ON | OFF | ON | ON | ON | OFF | ON |
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| 208 | OFF | OFF | OFF | OFF | ON | OFF | ON | ON |
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| 210 | OFF | ON | OFF | OFF | ON | OFF | ON | ON |
| 211 | ON | ON | OFF | OFF | ON | OFF | ON | ON |
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| 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 |
|-----|--------|--------|--------|--------|--------|--------|--------|--------|
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| 215 | ON | ON | ON | OFF | ON | OFF | ON | ON |
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| 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 |
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| 232 | OFF | OFF | OFF | ON | OFF | ON | ON | ON |
| 233 | ON | OFF | OFF | ON | OFF | ON | ON | ON |
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| 238 | OFF | ON | ON | ON | OFF | ON | ON | ON |
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| 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 |
| 255 | ON |

Preparing Adapter and Cables (Sold Separately)

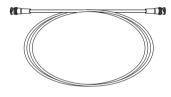
- Power Adapter

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.



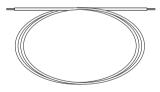
| Distance | Recommended Cable Specification |
|----------|--|
| 300m | 4C2V(RG-59/U) |
| 450m | 5C2V(RG-6/U) |
| 600m | 7C2V(RG-11/U) |

Notes

• 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.



* Caution!

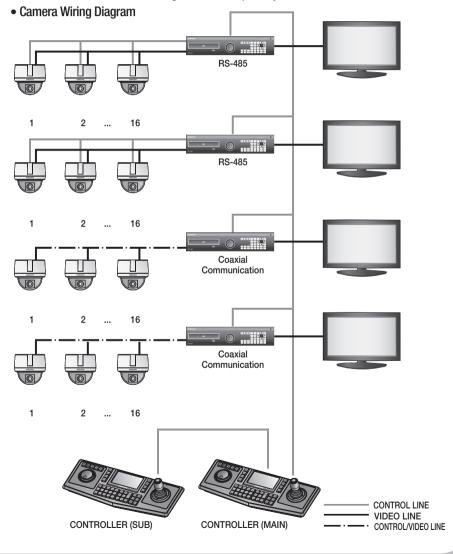
Depending on the camera's environment, the communications distance may vary.

Notes

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

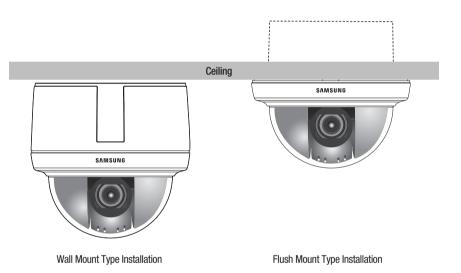
Preparing and Installing Camera Bracket

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.



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.



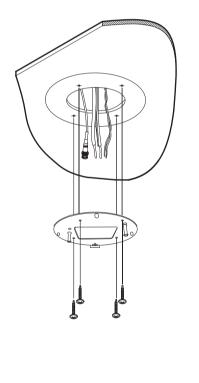
On-Ceiling Mount Type Installation Example

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.



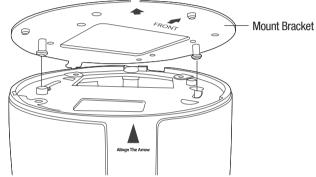
• Do not connect the camera to a power outlet until the installation is complete.

Notes

Supplying power in the middle of the installation may cause fire or damage the product.

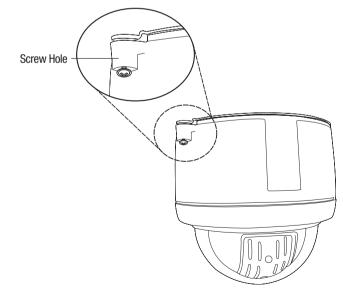
3. Assemble Camera & Bracket

- 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.



4. Secure the Camera

Match the screw holes in the camera and mount bracket, and then fasten with the screw.

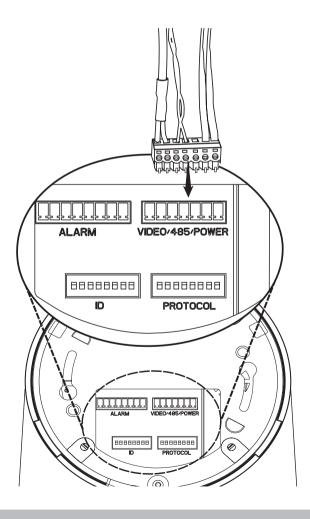


5. Connect Cables

Connect each camera cable to the proper terminals on the bottom of the camera. For more detailed instructions, please refer to Page 18: "Camera Wiring Interface Board".

6. Camera DIP Switch Setup

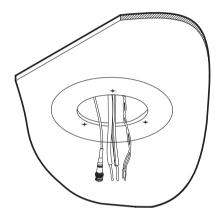
DIP switches for communication and ID setup are located on the bottom of the camera. For more instructions, please refer to Page 20.



Flush Mount Type Installation Example

1. Drill Hole on the Ceiling

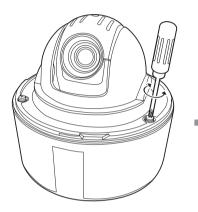
Attach the template, and then drill a hole according to the 120 mm diameter hole marked on the template. Drop down the camera cables through the hole. Drill another small hole for a screw to secure the camera.

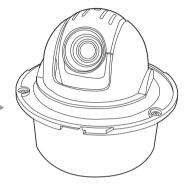




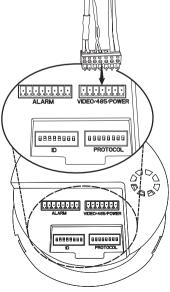
3. Detach the Mount Housing

Remove the 3 screws, and then detach the mount housing from the camera.



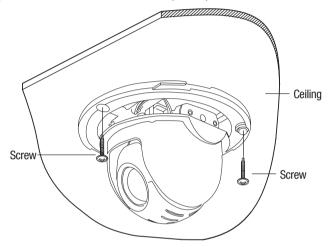


4. Connect Cables & Camera Setup Connect each camera cable to the proper terminals on the bottom of the camera (Refer to Page 18: "Camera Wiring Interface Board"). Configure the DIP switches on the bottom of the camera for communication and ID (Refer to Page 20).



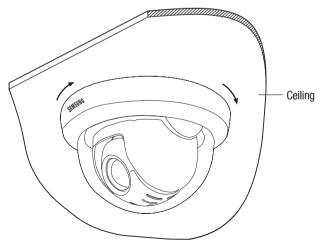
5. Install Camera

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



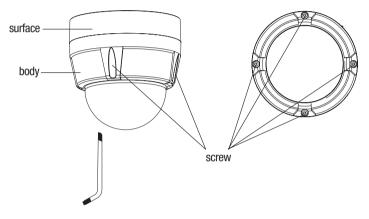
6. Assemble Dome Cover

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



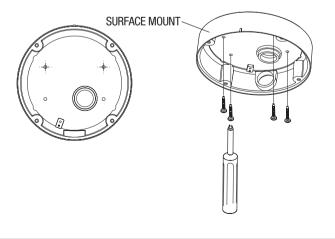
SCP-3120V (Ceiling Mount)

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



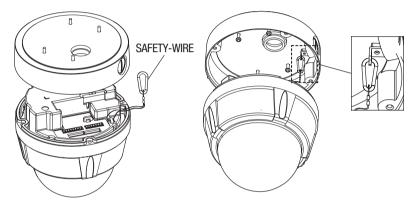
2. Drill holes (5 mm in diameter and at least 35 mm in depth for each) for the screws (x4) to be inserted in the bottom of the surface mount, and insert the provided plastic anchor (HUD5) to the end.

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)

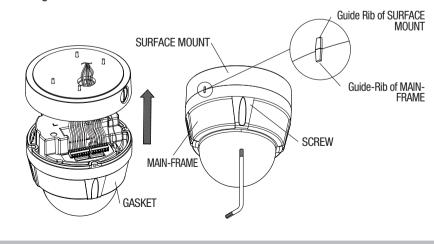


Installing Your Camera

 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(18 Page)".)

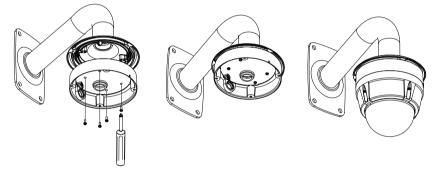


4. Arrange the cables inside the surface mount so that they should not be entangled or stuck in, and align the guide rib of the camera with that of the surface mount. Use the L-shaped wrench to tighten the screws (x4) so that the camera is secured to the mount. To ensure waterproofness, take caution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



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).

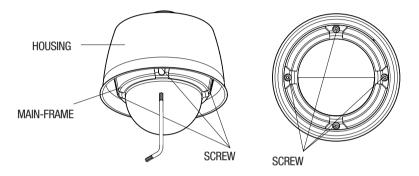


3. Repeat step 3 through step 4 in "Ceiling Mount" above to complete the installation.

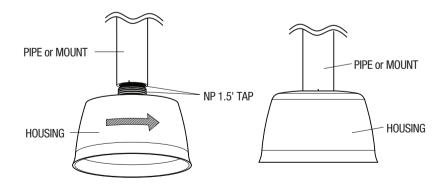
Installing Your Camera

SCP-3120VH

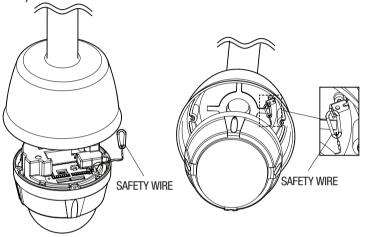
1. Use the provided L-shaped wrench to loosen 4 screws counter clockwise, which will help removing the housing.



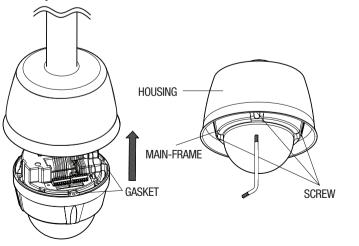
2. Fix the housing to the NP 1.5" tapped pipe, wall mount (SBP-300WM) or ceiling mount (SBP-300CM) by turning it clockwise. For waterproofness and lock between the two component parts, use the Teflon tape to wrap them around.



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.)

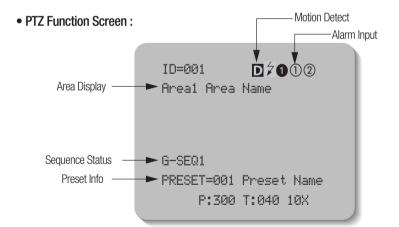


4. Arrange the cables inside the housing lest they be damaged or stuck in, and use the L-shaped wrench to tighten 4 screws to the housing. To ensure waterproofness, this step needs your special care. Otherwise, the gasket on the outer side of the product may be loose or just stuck in.

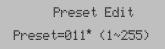


Interface Symbols

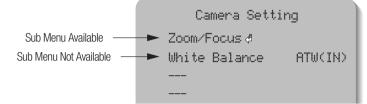
- Motion Detection Standby/Operation Display :
 - When in standby mode, the "D" in the upper right of the screen blinks and then changes to "A" if motion is detected.
- Alarm Input Port Status Display :
 - "①","②" in the upper right of the screen blink.
- Current Alarm Port Display According to Input Alarm Ports(Priority) :
 - Only one of " \$ 1"," \$ 2" 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.



• Preset Number Setting Screen :



• OSD Menu Screen :



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 | |
|----------------|----------------|---------------------|-----------------|-----------------------------|--|
| | Zoom/Focus | Focus Mode | AUTO/MANUAL | /ONESHOT | |
| | ZUUITI/FUCUS | Digital Zoom | 0FF/2X/3X/4X/5X | //16X | |
| | | ATW(IN)/ATW(C |)UT) | | |
| | White Balance | AWC | | | |
| | WHILE Dalahice | Manual | Red | 0~255 | |
| | | Ivialiual | Blue | 0~255 | |
| | | Brightness | 0~64 | | |
| | | Iris | AUTO | | |
| | | 1115 | MANUAL | Iris Value(0~64) | |
| | | | OFF | | |
| | Exposure | Shutter | A.FLK | | |
| | | | MANUAL | Shutter Speed | |
| | | | OFF | | |
| | | Sens-Up | Auto | Sens-up Limit 2X/4X 512X | |
| | | OFF | | | |
| Camera Setting | Back Light | WDR | Limit | LOW/MEDIUM/HIGH | |
| - | | | Level | 1~18 | |
| | | BLC | Up/Down/Left/R | ight/Increase/Decrease | |
| | AGC | OFF/LOW/MED | IUM/HIGH | | |
| | AGC | MANUAL | AGC Level | 1~16 | |
| | DNR | OFF/LOW/MEDIUM/HIGH | | | |
| | XDR | OFF/LOW/MEDIUM/HIGH | | | |
| | | | Auto | | |
| | Day/Night | Mode | Color | | |
| | Day/Night | | BW | Burst ON/OFF | |
| | | Dwell Time | 2/3/5/10/15/20 | /25/30 SEC | |
| | | Suno | INTERNAL | | |
| | | Sync | LINE LOCK | Line Lock Phase 0~359 | |
| | Others | Sharpness | 0~3 | · | |
| | UTIELS | Freeze | ON/OFF | | |
| | | Stabilizer | ON/OFF | | |
| | | VPS | ON/OFF | | |

| | Preset | Setting/Edit/Hor | me Position/Execute/C | Clear/Status | | |
|---------------|------------------------|--------------------------|------------------------|------------------------------|--|--|
| | | Pan Swing | | Setting/Execute/Clear | | |
| | Swing SEQ. | Tilt Swing | Setting/Execute/ | | | |
| | 5 | P/T Swing | Setting/Execute/ | | | |
| | Group SEQ. | Group1~6 | 0 0 | | | |
| | Tour SEQ. | Setting/Execute/Clear | | | | |
| | PTZ Trace | Trace1~4 | | | | |
| | | | OFF | | | |
| Contractor | | | SCHEDULE | Sunday~Saturday | | |
| Sequence | | | A.PAN | AutoPan Speed/Tilt Angle | | |
| Setting | | | TRACE | Trace(1~4) | | |
| | | N da ala | TOUR | | | |
| | Auto Run | Mode | GROUP | Group No(1~6) | | |
| | | | SWING | Swing Mode (PAN,TILT,P/T) | | |
| | | | PRESET | Preset No(1~128) | | |
| | | | HOME | 11000110(1-120) | | |
| | | Time | 5~30(SEC), 1~5(MIN) | | | |
| | Power On Resume | ON/OFF | | | | |
| | | Motion | OFF/DETECTION/TRACKING | | | |
| _ | Motion Det. | Advanced | OFF/ FIXED/MOV | | | |
| Sequence | | Display | OFF/ON | | | |
| Setting | | Sensitivity | 1~7 | | | |
| (Preset Edit) | | Resolution | 1~5 | 1~5 | | |
| | The rest of the instal | lation steps are th | ne same as in the can | nera setting section. | | |
| | | Position | | | | |
| | Pan Limit | Activation | ON/OFF | | | |
| | | Position | 010011 | | | |
| | Tilt Limit | Activation | ON/OFF | | | |
| | | | Area Name | | | |
| | Area Setting | Area1~8 | Position | | | |
| | | | Activation | ON/OFF | | |
| P/T Setting | | Mask Set | MASK1~12 | Activation(OFF/ON), Edit | | |
| | Area Masking | Position | I | | | |
| | | Style | MOSAIC1~4/GR | AY | | |
| | Prop.P/T | ON/OFF | 1.000,001 1/011 | | | |
| | Digital Flip | ON/OFF | | | | |
| | Image Hold | ON/OFF | | | | |
| | Jog Speed | Manual/10/20/30/40/50/60 | | | | |
| | Max Speed Level | 1/2/3/4/5/6/7 | 00/40/00/00 | | | |
| | IVIAN OPEEU LEVEI | 1/2/0/4/0/0/7 | | | | |

Operating Your Camera

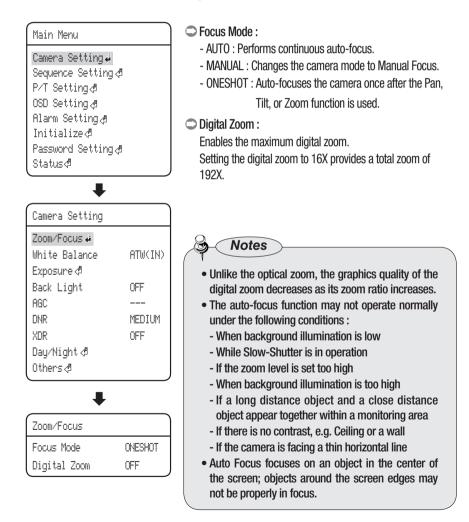
| | Camera ID | ON/OFF | | | |
|------------------|---------------------|--|----------------------|---------------------|--|
| | | ON/OFF | | | |
| | Camera Name | Edit | Camera Name | | |
| | Preset Number | ON/OFF | | | |
| | Preset Name | ON/OFF | | | |
| | | Edit | | | |
| | Seq. Status | ON/OFF | | | |
| | Area Name | ON/OFF | | | |
| | PTZ Position | ON/OFF | | | |
| OSD Setting | Language | ENGLISH/CHINESE/FRENCH/GERMAN/SPANISH/ITALIAN/ PORTUGUES/KOREAN | | | |
| | | | On/Off | ON/OFF | |
| | | Direction | Set North Dir. | Set North Direction | |
| | | | Display | ON/OFF | |
| | Others | | Date Format | | |
| | Others | Clask Catting | Set Date | | |
| | | Clock Setting | Time Format | | |
| | | | Set Time | | |
| | | | Calibration | (+/-)SEC/DAY | |
| | Alarm Enable | ON/OFF | | | |
| | | In1 | MOD:NC/NO/OFF, P:1~2 | | |
| | Alarm Input | 100 | SEQ:OFF/HOME/P | RESET/SWING/GROUP/ | |
| | | In2 | TOUR/TRACE/A.PA | AN | |
| Alarm Setting | | Setting 1~2 | 1,2,MD,AUX | | |
| Aldim Setung | Alarm Output | Timer 1~2 | OFF/MOMENTARY | / | |
| | Alami Oulpul | Inmer 1~2 | ON | 1~60(Sec), 1~60(Mir | |
| | | Out Off 1~2 | | | |
| | MD Dwell Time | OFF | | | |
| | IVID Dwell Time | ON | 1~60(Sec), 1~60(Min) | | |
| | Power On Reset | Cancel/Execute | | . , | |
| | Factory Default Set | Cancel/Execute | | | |
| Initialize | Camera Default Set | Cancel/Execute | | | |
| | | OFF | | | |
| | Auto Dofroob | | | | |
| | Auto Refresh | ON | 1~7Day(s) | | |
| | Auto Refresh | ON ON/OFF | 1~7Day(s) | | |
| Password Setting | | | | | |



Camera Setting

1. Zoom/Focus Settings

- 1.1 Focus Mode and Digital Zoom Setting Menu
 - Main Menu/Camera Setting/Zoom/Focus



2. White Balance

Main Menu/Camera Setting/White Balance

| Main Menu | |
|---|-------------------------------------|
| Camera Setting Sequence Setting P/T Setting OSD Setting Alarm Setting Initialize Password Setting Status | |
| • | |
| Camera Setting | |
| Zoom/Focus d White Balance Exposure d Back Light AGC DNR XDR Day/Night d Others d | ATW(IN) OFF MEDIUM OFF |

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 \sim 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.

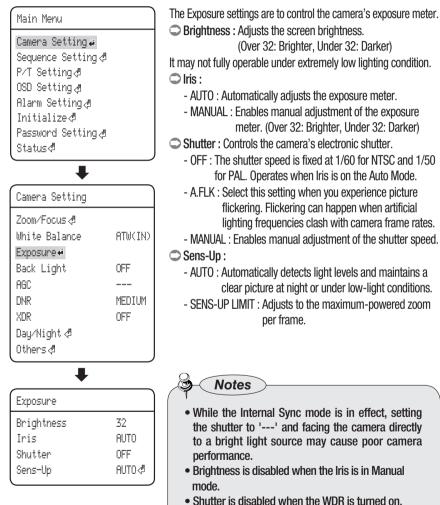
Notes

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.
- 2 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.

3. Exposure

Main Menu/Camera Setting/Exposure



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

4. Backlight

- 4.1 Backlight Mode Settings
 - Main Menu/Camera Setting/Back Light

| 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) |
| White Balance Exposure¢ | ATW(IN) |
| | ATW(IN) OFF |
| Exposure⊲ª | |
| Exposure⊄ Back Light | |
| Exposure¢ Back Light AGC | OFF |
| Exposure¢ Back Light AGC DNR | OFF MEDIUM |

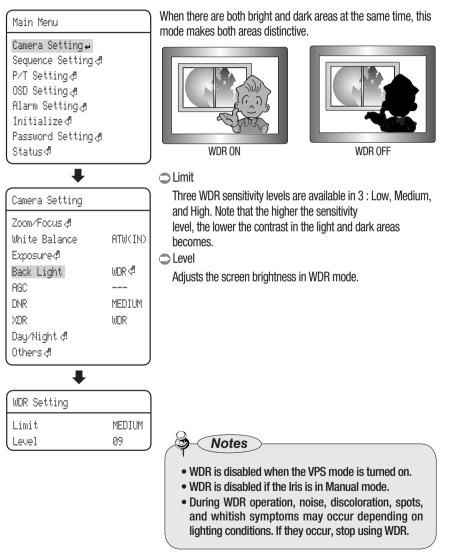
Unlike other cameras, Samsung Techwin's unique A1 DSP chip gives you a clear image of the subject even with bright backlight.

Back Light Mode :

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

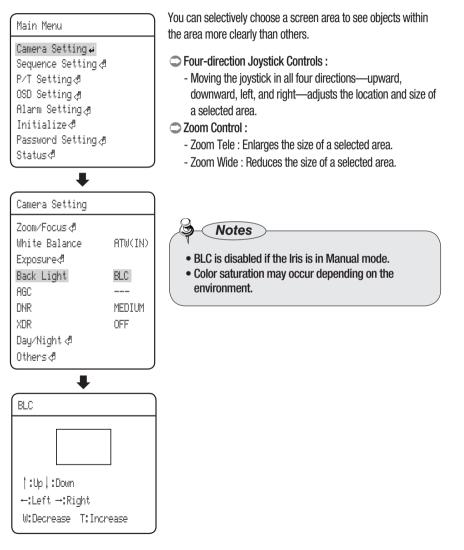
4.2 WDR

Main Menu/Camera Setting/Back Light/WDR



4.3 BLC Setting

Main Menu/Camera Setting/Back Light/BLC



5. AGC

Main Menu/Camera Setting/AGC

| Main Menu | |
|---|--------------------------|
| Camera Setting Sequence Setting P/T Setting OSD Setting Alarm Setting Initialize Password Setting Status | |
| • | |
| Camera Setting | |
| Zoom/Focus∮ White Balance Exposure¢ | ATW(IN) |
| Back Light AGC DNR XDR | OFF MEDIUM OFF |
| Day/Night đ Others đ | |

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

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

6. DNR (Dynamic Noise Reduction)

Main Menu/Camera Setting/DNR

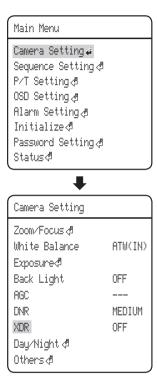
| Main Menu | |
|---|---------------|
| Camera Setting Sequence Setting P/T Setting OSD Setting Alarm Setting Initialize Password Setting Status | |
| • | |
| Camera Setting | |
| Zoom/Focus≮ White Balance Exposure≮ | ATW(IN) |
| Back Light AGC | 0FF |
| DNR XDR Day∕Nightđ | MEDIUM OFF |
| Others ¢ | |

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.

7. 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.





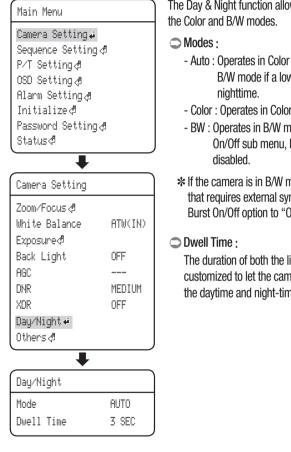
XDR ON

XDR OFF

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

8. Day/Night

Main Menu/Camera Setting/Day/Night



The Day & Night function allows the camera to switch between

- Auto : Operates in Color mode most times, and switches to B/W mode if a low light level is detected during
- 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
- * 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."

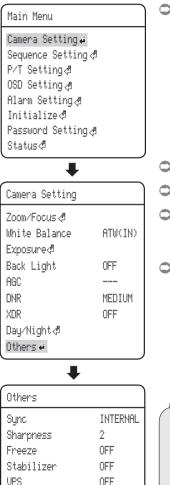
The duration of both the lighting conditions can be customized to let the camera delay the switching between the daytime and night-time settings.

Notes

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

9. 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.

- Notes

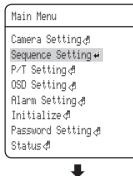
- The Stabilizer uses the digital zoom and may cause low picture quality.
- The Stabilizer is disabled if the ambient light is too low.
- The Stabilizer is disabled if the field of view has very low or no contrast, e.g. The sky or a white wall.
- VPS is disabled when the Freeze is turned on.

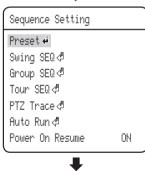
Sequence Setting

10. Preset

10.1 Preset Location Saving

Main Menu/Sequence Setting/Preset/Setting





Preset

Setting∉ Edit∢ª

Execute∢∄ Clear∢∄

Status 🖉

Home Position⊲∄

OFF

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 :

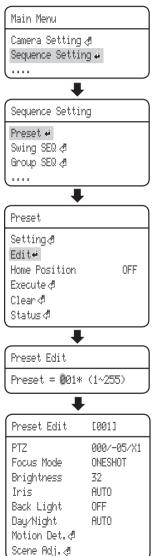
Selecting a preset number and pressing the Enter key redirects the menu to the screen shown below. Using the joystick, adjust the location of the Pan and Tilt functions and then set the Zoom and Focus command. In Preset Settings, the Zoom and Focus command is controllable only by the Zoom command. To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

Preset Setting

1+PST:ZOOM 2+PST:FOCUS

10.2 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.

OPTZ:

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.

C 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.

C Motion Det.

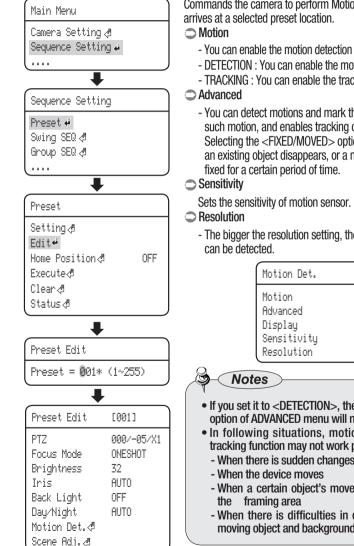
Refer to the '10.3 Motion Detection'.

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.

10.3 Motion Detection

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



Commands the camera to perform Motion Detection after it

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

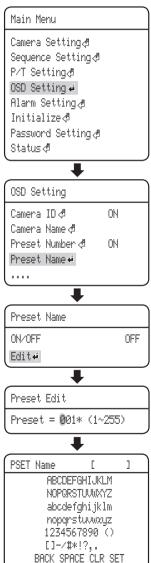
- The bigger the resolution setting, the smaller the object that

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

- 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 a certain object's movement fills most of
 - When there is difficulties in distinguishing the moving object and background

10.4 Preset Name Setting

Main Menu/OSD Setting/Preset Name/Edit

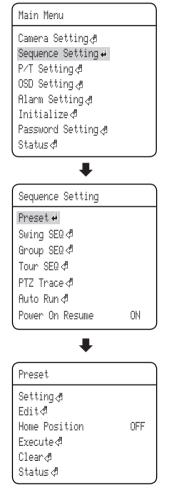


Using this function, you can add names to preset locations. up to 12 characters.

Once a name is entered, use the joystick and the Enter key to perform the Set command and save the name.

10.5 Preset Execution/Deletion/Memory Check

Main Menu/Sequence Setting/Preset



C Home Position :

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

C Execute :

Recalls a saved preset location.

Clear :

Deletes the selected preset location.

🗢 Status :

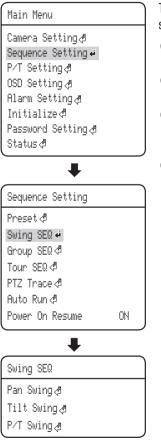
Opens a map of saved preset locations.

| | _ | | | | | - |
|------|-----|-------|-------|-------|-------|---|
| Pres | se' | t Sta | tus | | | |
| 001 | ÷ | 00000 | 00000 | 00000 | 0000 | |
| 021 | ÷ | 00000 | 00000 | 00000 | 0000 | |
| 041 | ÷ | 00000 | 00000 | 00000 | 00000 | |
| 061 | ŝ | 00000 | 00000 | 00000 | 00000 | |
| 081 | ÷ | 00000 | 00000 | 00000 | 0000 | |
| 101 | ÷ | 00000 | 00000 | 00000 | 0000 | |
| 121 | ; | 00000 | 00000 | 00000 | 00000 | |
| | | | ₽ | | | |
| Pres | se' | t Sta | tus | | | |
| 141 | ÷ | 00000 | 00000 | 00000 | 0000 | |
| 161 | ÷ | 00000 | 00000 | 00000 | 0000 | |
| 181 | ÷ | 00000 | 00000 | 00000 | 00000 | |
| 201 | ŝ | 00000 | 00000 | 00000 | 00000 | |
| | | | | | | |

241 : 00000 00000 00000 00000

11. 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.

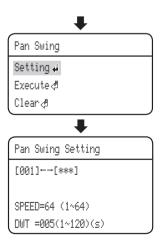
Tilt Swing :

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.



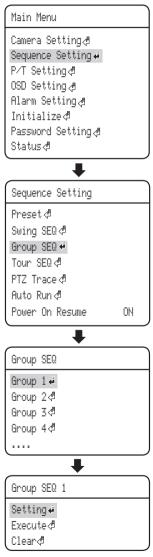
Select 2 preset locations by using the joystick.

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.

12. 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 | жж | 003 | 64 |
| 003 | *** | 003 | 64 |
| 004 | *** | 003 | 64 |
| 005 | *** | 003 | 64 |
| 006 | *** | 003 | 64 |
| 007 | *** | 003 | 64 |

C Execute :

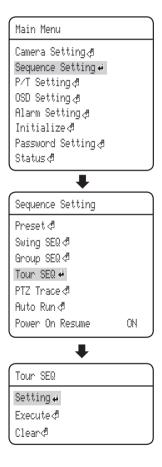
Executes the group operation.

Clear :

Deletes the selected group.

13. 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 S | SEQ | | |
|--------|-------|--------|--|
| NO | Group | DWT(s) | |
| 01 | * | 003 | |
| 02 | * | 003 | |
| 03 | * | 003 | |
| 04 | * | 003 | |
| 05 | * | 003 | |
| 06 | * | 003 | |

C Execute :

Executes the group operation.

Clear :

Deletes the selected group.

14. 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.

C Replay :

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

C 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

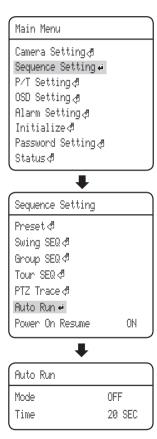
| Protocol | Product | Memorize Pause | |
|-----------|------------------------|-------------------|--|
| PELCO-D/P | KBD300A Ack, Iris Open | | |
| Samsung-E | SCC-5000 | OSD On, Iris Open | |
| PANASONIC | WV-CU161C | OSD ON | |
| VICON | V1300X-DVC | Iris Open | |
| HONEYWELL | HTX-3000 | Iris Open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

Clear :

Deletes a saved Trace route.

15. 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 $5 \sim 30$ seconds, or $1 \sim 5$ minutes.)

16. Schedule

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

| Auto Run | | |
|---|--|--|
| Mode | SCHEDULE 4 | |
| Time | 30 SEC | |
| + | | |
| Schedule Set | | |
| Sunday Monday Tuesday Wednesday Thursday Friday Saturday | ON 4 OFF OFF OFF OFF OFF OFF | |
| + | | |
| Schedule Set | | |
| No START SEQ 1 09:00 HOME 2 00:00 OFF 3 00:00 OFF 4 00:00 OFF 5 00:00 OFF 6 00:00 OFF | No | |
| Clear≮ | | |

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 :

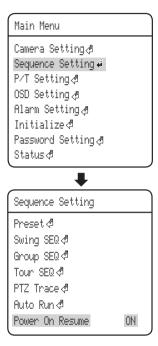
When turning ON a day, a timetable appears as shown on the side picture. (Up to 6 timelines can be selected for a day.) Select the beginning time and sequencing action to schedule the action.

Notes

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).

17. 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.

Notes

 '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.)

P/T Setting

18. Pan Limit

Main Menu/P/T Setting/Pan Limit

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

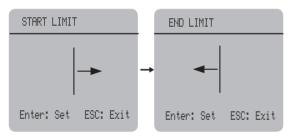
P/T Setting Pan Limit∉ Tilt Limit.⊄ Area Setting⊿ Area Masking∢∄ Prop. P/T ΩN Digital Flip ΟN Image Hold OFF Jog Speed MANUAL Max Speed Level 5 ┛

Pan Limit Position 4 Activation OFF

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.



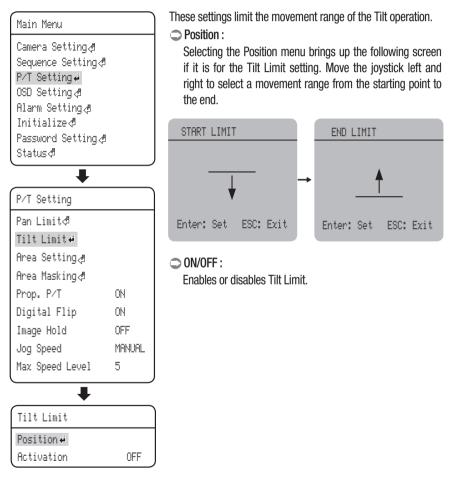
The following picture shows the Tilt Limit setting. Move the joystick left and right to select a movement range from the starting point to the end.

ON/OFF :

Cancels or activates the Pan/Tilt Limit functions.

19. Tilt Limit

Main Menu/P/T Setting/Tilt Limit



20. 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.

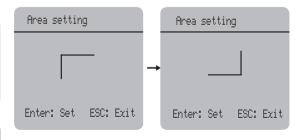
🗢 Area Name :

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 | Γ |] | |
|---------------|----------|------------|----|--|
| | ABCDE | FGHIJKLM | | |
| NOPQRSTUVWXYZ | | | | |
| abcdefghijklm | | | | |
| nopqrstuvwxyz | | | | |
| 1234567890 () | | | | |
| []-/#*!?,. | | | | |
| l | BACK SPI | RCE CLR SI | ET | |

Position :

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



🗢 0n/0ff :

Cancels or activates the display function of selected areas.

21. 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.

C 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.

Notes

- 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.

22. Prop. P/T

Main Menu/P/T Setting/Prop.P/T

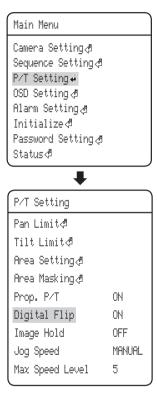
| Main Menu | |
|---|--------|
| Camera Setting∢ Sequence Setting↓ P/T Setting↓ OSD Setting↓ Alarm Setting↓ Initialize↓ Password Setting↓ Status↓ | |
| + | |
| P∕T Setting | |
| Pan Limit∢ | |
| Tilt Limit⊄ | |
| Area Setting∢¶ | |
| Area Masking∢∄ | |
| Prop. P/T | ON |
| Digital Flip | ON |
| Image Hold | OFF |
| Jog Speed | MANUAL |
| Max Speed Level | 5 |

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.

23. 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.

24. Image Hold

Main Menu/P/T Setting/Image Hold

| 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 |

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.

25. Jog Speed

Main Menu/P/T Setting/Jog Speed

| 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 |

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.

26. Max Speed Level

Main Menu/P/T Setting/Max Speed Level

| 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々 | |
| Prop. P/T | ON |
| Digital Flip | ON |
| Image Hold | OFF |
| Jog Speed | MANUAL |
| Max Speed Level | 5 |

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.

OSD Setting

27. OSD Setting

Main Menu/OSD Setting

| Main Menu | |
|---|---------|
| Camera Setting∜ Sequence Setting∜ P/T Setting∜ OSD Setting↓ Alarm Setting∜ Initialize∜ Password Setting∜ Status∜ | |
| + | |
| OSD Setting | |
| Camera ID Camera Name∢∄ | ON |
| Preset Number Preset Name∢Ø | ON |
| Seq. Status | ON |
| Area Name | OFF |
| PTZ Position | ON |
| Language | ENGLISH |
| Others ¢ª | |

- 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.

C 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 :

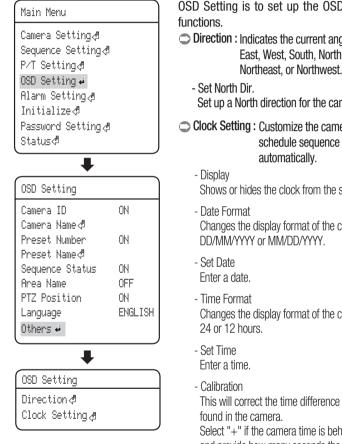
Enables changing the system language. This camera supports English, Chinese, French, German, Spanish, Portuguese, Korean and Italian.

| XXX | Name | Γ |] |
|-----|---------|----------|-----|
| | ABCDE | EFGHIJKL | M |
| | NOPQF | RSTUUWXY | Z |
| | abode | efghijkl | m |
| | nopqr | stuvwzy | ļΖ |
| | 12345 | 67890 | 0 |
| | []-/‡ | t*!?,. | |
| | BACK SP | ACE CLR | SET |

* 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.

28. OSD Setting(Others)

Main Menu/OSD Setting/Others



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

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

Set up a North direction for the camera.

Clock Setting : Customize the camera clock; you can schedule sequence actions to perform

Shows or hides the clock from the screen

Changes the display format of the camera date:

Changes the display format of the camera time:

This will correct the time difference or error that may be

Select "+" if the camera time is behind, select "-" if ahead, and provide how many seconds the time error occurs per day.

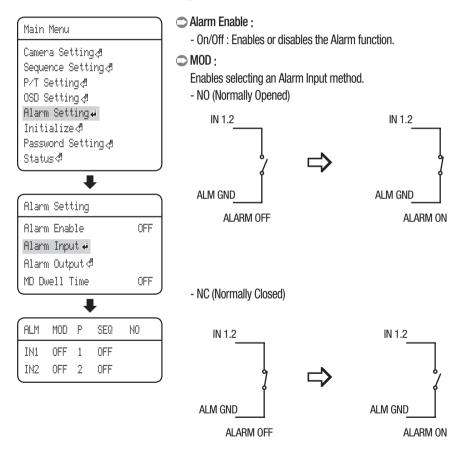
✤ If the error is one second for a day, enter "+1 SEC/DAY".

Alarm Setting

29. Alarm Setting

29.1. Setting Up Alarm Input

Main Menu/Alarm Setting/Alarm Input



Notes

 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 | Ρ | SEQ | NO | |
|--------------|----------|--------|----------------|----------------|--------------------------|
| IN 1 IN 2 | NO NC | 1 2 | a.pan A.pan | 20/20 20/20 | |
| | | | | Ŧ₽ | , Tilt Angle Speed |

MD Dwell Time :

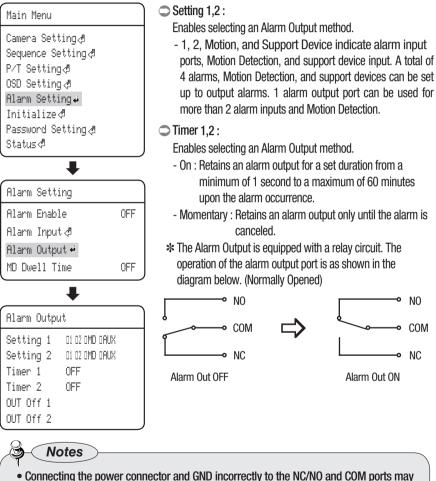
When Motion Detection under the Preset Edit menu is selected, MD Dwell Time performs the Tour or Group function.

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.

29.2. Alarm Output

Main Menu/Alarm Setting/Alarm Output



- 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.

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.



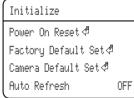
- Notes
- Connecting the power connector and GND incorrectly to the Aux terminal's NO and COM ports may cause a short circuit and fire, damaging the camera.
- The maximum power capacity of the built-in relay is 30VDC/2A, 125VAC/0.5A, and 250VAC/0.25A. Operating the camera beyond the capacity may decrease the camera's lifespan and damage it.

Initialize

30. Initialization Menu

Main Menu/Initialize

Main Menu Camera Setting,∄ Sequence Setting,∄ P/T Setting,∄ OSD Setting,∄ Alarm Setting,∄ Initialize. Password Setting,∄ Status,∄



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.)

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.

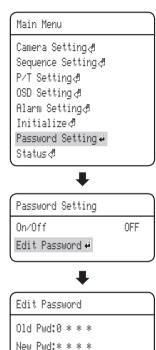
The default setting is Off.

- 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.

Password Setting

31. 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.

- C 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".

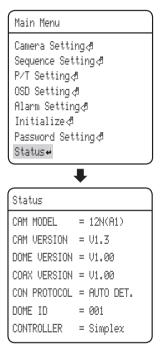
Notes

- 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

32. 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.

ODME ID :

Camera ID

CONTROLLER :

Indicates the settings of the current communications mode.

Troubleshooting

| Problem | Cause and Solution | PAGE |
|-------------------------------------|---|-------|
| Controller does not work. | Check if the camera and peripheral devices are properly connected. | 29 |
| Controller does not work. | 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. | 18~29 |
| | 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 |
| | Check if the dome cover or the camera lens is dirty or smudged. If it is, clean the dirt off. | - |
| Picture is out of focus. | 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 |

| | Check if the video cable is properly connected. | - |
|--|--|-------|
| Digital noise appears in picture. | 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 |
| | Check if the dome cover or the camera lens is dirty or smudged. If it is, clean the dirt off. | - |
| The picture is flickering. | 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. | 18~29 |
| | 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

| 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 |
| the camera dues not work. | 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 Specification

| | 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 : 81 | 1(H) × 508(V) / PAL: 795(H) | × 596(V) | | |
| Effective Pixels | NTSC : 76 | 68(H) × 494(V) / PAL: 752(H) | × 582(V) | | |
| Scanning System | | 2:1 Interlace | | | |
| Synchronization | | Internal/Line Lock | | | |
| Horizontal Scan Rate | NTSC | C : 15.734 KHz / PAL:15.625 | 5 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 : 0.07L | ux(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) | | | | |

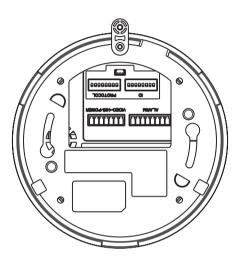
Product Specification

| 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°C ~+50°C | -50°C ~ +50°C | -50°C ~ +50°C |
| Operating Humidity | Less than 90% RH | | |
| Input Voltage | AC24V ± 10% | | |
| Power Consumption | Max. 12W | Max. 45W | Max. 45W |
| External Dimensions($\Phi \times D$) | ∉154×150mm | ∉165×165mm | @200×203mm |
| Weight | Approx. 1.0Kg | Approx. 1.8Kg | Approx. 2.4Kg |

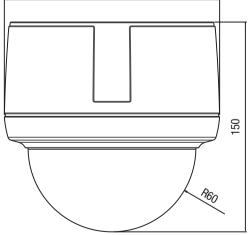


SCP-3120

(Unit : mm)

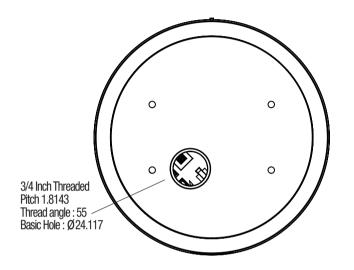


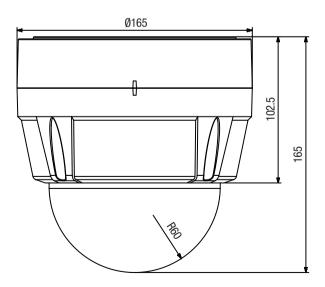
Ø154

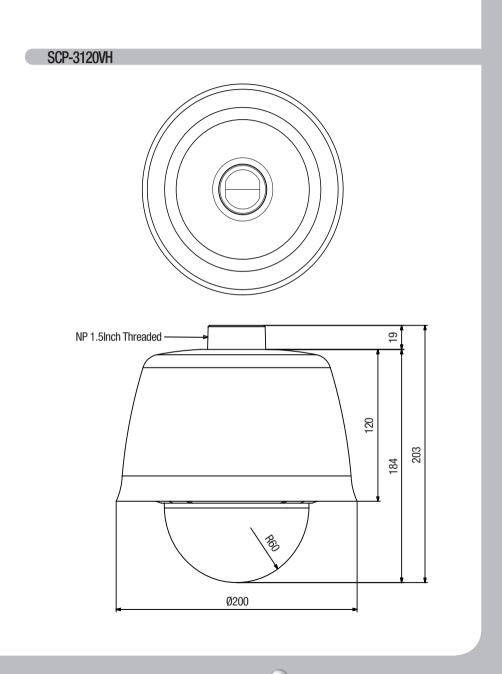


Dimension 0









DECLARATION OF CONFORMITY

Application of Council Directive(s) Manufacturer's Name Manufacturer's Address 2004/108/EC

SAMSUNG TECHWIN CO., LTD

SAMSUNG TECHWIN CO., LTD

42, SUNGJU-DONG CHANGWON-CITY,

KYUNGNAM, KOREA, 641-716

European Representative Name European Representative Address Equipment Type/Environment Model Name Beginning Serial NO. Conformance to

Speed Dome Camera

SCP-3120/3120V/3120VH

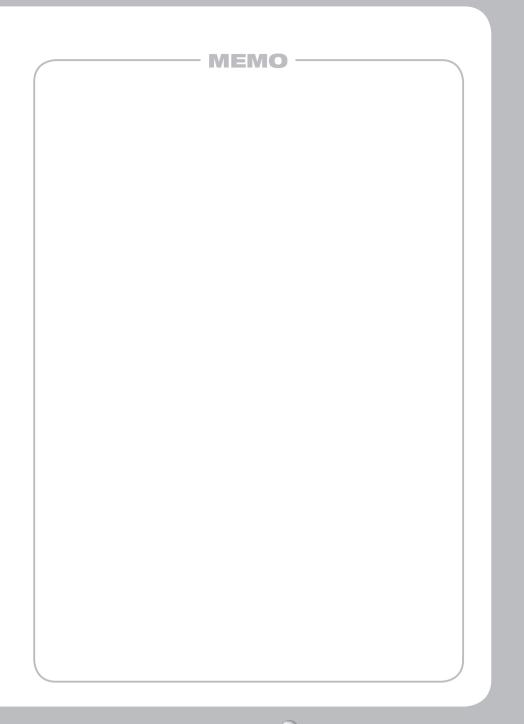
C59A

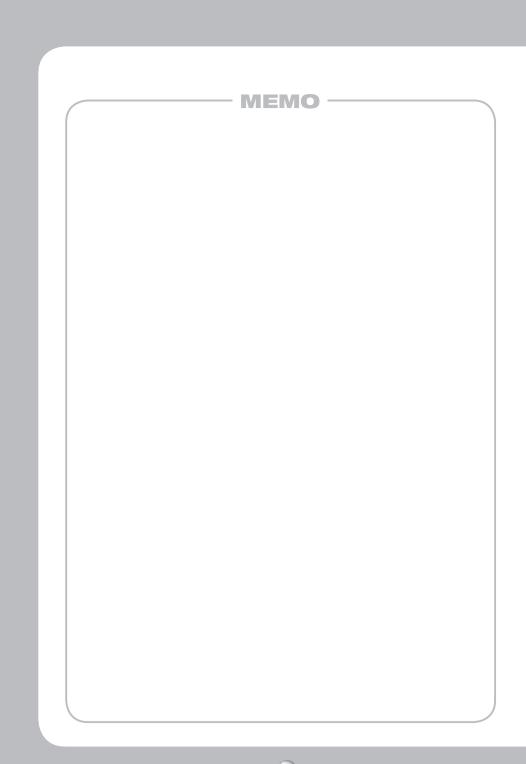
EN 55022 : 2006

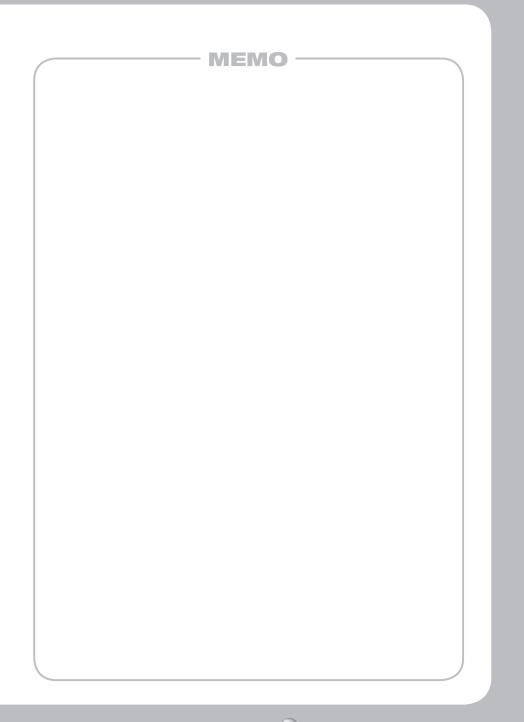
EN 50130-4 : 2003

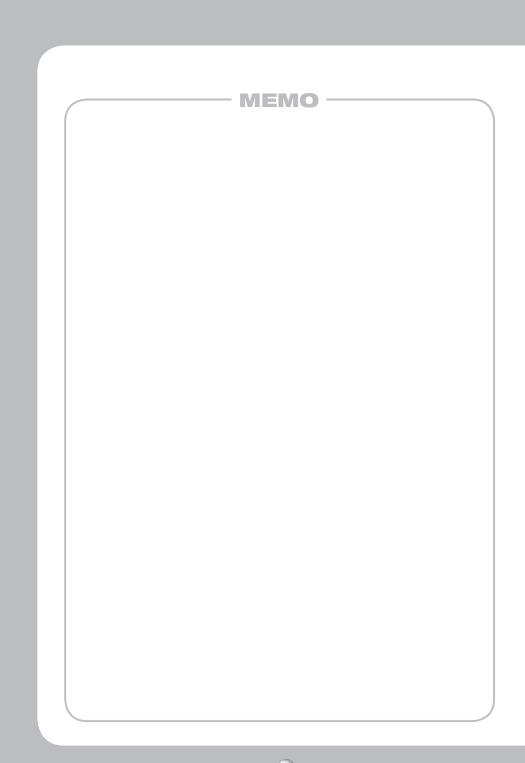
We, the undersigned, hereby declare that the equipment specified above conforms to the above Directive(s).

| Manufacturer | SAMSUNG TECHWIN CO., LTD | Legal Representative in Europe | |
|--------------|--------------------------|--------------------------------|--|
| Signature | 13 Gus | Signature | |
| Full Name | BONJENG GU | Full Name | |
| Position | QUALITY CONTROL MANAGER | Position | |
| Place | CHANGWON, KOREA | Place | |

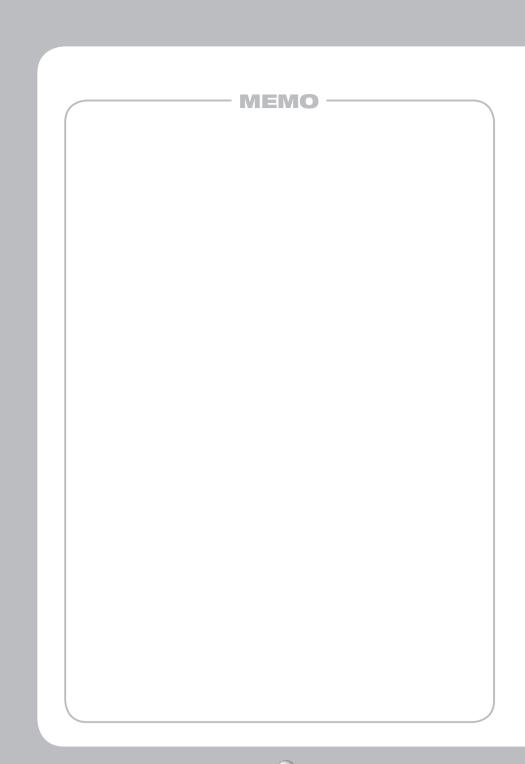
















SALES NETWORK

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