

WISENET

NETWORK CONTROLLER

User Manual

SPC-7000



Network Controller

User Manual

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❖ Design and specifications are subject to change without prior notice.

❖ The initial administrator ID is “admin” and the password should be set when logging in for the first time.

Please change your password every three months to safely protect personal information and to prevent the damage of the information theft.

Please, take note that it's a user's responsibility for the security and any other problems caused by mismanaging a password.

IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean the contaminated area on the product surface with a soft, dry cloth or a damp cloth. (Do not use a detergent or cosmetic products that contain alcohol, solvents or surfactants or oil constituents as they may deform or cause damage to the product.)
7. Do not block any ventilation openings, Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/ accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.
13. Unplug this apparatus during lighting storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

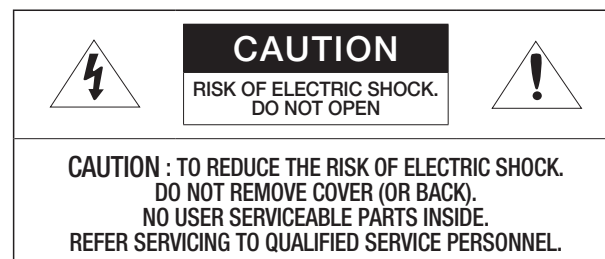


WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. DO NOT INSERT ANY METALLIC OBJECT THROUGH THE VENTILATION GRILLS OR OTHER OPENINGS ON THE EQUIPMENT.

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

CAUTION



EXPLANATION OF GRAPHICAL SYMBOLS



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of “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 product.

overview

Please read the following recommended safety precautions carefully.

- Do not place this apparatus on an uneven surface.
- Do not install on a surface where it is exposed to direct sunlight, near heating equipment or heavy cold area.
- Do not place this apparatus near conductive material.
- Do not attempt to service this apparatus yourself.
- Do not place a glass of water on the product.
- Do not install near any magnetic sources.
- Do not block any ventilation openings.
- Do not place heavy items on the product.
- Please wear protective gloves when installing/removing the camera.
The high temperature of the product surface may cause a burn.

User's Manual is a guidance book for how to use the products.

The meaning of the symbols are shown below.

- Reference : In case of providing information for helping of product's usages
 - Notice : If there's any possibility to occur any damages for the goods and human caused by not following the instruction
- ※ Please read this manual for the safety before using of goods and keep it in the safe place.

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KEY FEATURES

The SPC-7000 network controller controls network/analog cameras, DVR, and SSM program using a network.

It provides a user-friendly interface with onscreen menu, touch screen and joystick.

- Long-distance remote control
- Integrated system control
- A single network controller can control the camera (receiver unit), DVR, and the SSM program.
- You can control both the network camera and NVR via the SSM.
- Can be connected for use of multiple controllers.
- The system can be controlled from different locations, and up to 16 units can be connected simultaneously for use.
- For the user's convenience, the positions of the joystick and jog shuttle module can be switched between left and right.
- User-friendly interface
The operation status of the system control is displayed on the screen; the touch-screen enables you to select a menu with ease; the joystick makes your control simple and easy.

❖ List of controllable products and programs

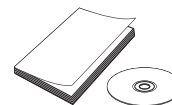
- Camera
- SSM
- DVR

WHAT'S INCLUDED

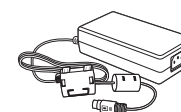
Unpack the product package and place the product on the floor or a flat surface.
Check if the following components are all included in the product package.



Main Unit



User Manual or User Manual CD



Power Adaptor



Power Cable



USB Cable



Touch Pen



Terminal block













- Connect the jog shuttle and the joystick to the main body to use them.




PART NAMES AND FUNCTIONS

Front Side

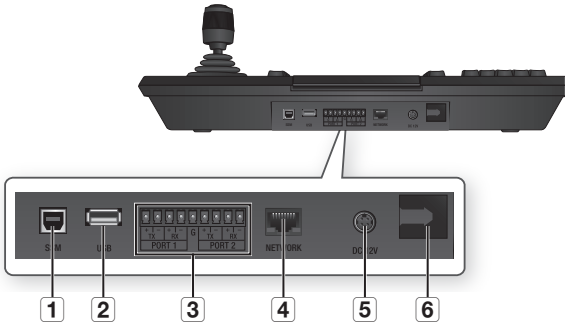



Name		Function
1	Joystick	Up/Down/Left/Right In PTZ mode, you can control the Pan and Tilt motion. In Screen mode, you can change the Up/Down/Left/Right tile selection. In Mouse mode, you can move the mouse cursor.
	Rotation	In PTZ mode, the screen zooms in when turning in the WIDE direction, and zooms out when turning in the TELE direction.
2	PTZ control	[FOCUS N/F] +  Runs the Focus Near/Far motion. - [FOCUS N/F] +  : Focus Near
		[FOCUS N/F] +  - [FOCUS N/F] +  : Focus Far ■ [FOCUS N/F] key is operated using the ON/OFF toggle key.
		[IRIS C/O] +  Runs the IRIS Open/Close operation. - [IRIS C/O] +  : IRIS Open - [IRIS C/O] +  : IRIS Close
		[IRIS C/O] +  ■ Only operates in analog camera, SSM, and DVR control mode. ■ [IRIS C/O] key is operated using the ON/OFF toggle key.

Name		Function
2	PTZ control	
	[PRESET]	When you click a [PRESET] + number + [PRESET] button, the preset corresponding to each button number is activated.
	[GROUP]	When you click a [GROUP] + number + [GROUP] button, Group/Scan corresponding to each button number is activated.
	[TOUR]	Start the tour by clicking the [SHIFT] + [GROUP/TOUR] + [SHIFT] + [GROUP/TOUR] buttons.
	[TRACE]	When you click a [TRACE] + number + [TRACE] button, Pattern/Trace corresponding to each button number is activated.
	[ZOOM] + 	Runs the zoom in motion.
[ZOOM] + 	Runs the zoom out motion. ■ [ZOOM] key is operated using the ON/OFF toggle key.	
3	Mouse control	
[L(T. LOCK)]/[R(TRACK)]	Uses the left/right button of the mouse in mouse mode.	
4	Screen control	
	[MON.(CON.)]	You can change the multi monitor selection by clicking a number + [MON.(CON.)] button in the screen mode (previous/next according to the monitor number).
	[LAYOUT(SEQ.)]	When you click a number + [LAYOUT (SEQ.)] button, the layout corresponding to each button number is activated.
	[CAM]	When you click a number + [CAM] button, the camera corresponding to each button number is activated.
	[ENTER]	Clicking once will display a single screen on the live viewer. Clicking once again will return to the original screen.
		When you click a number + [ENTER] button in the live viewer, the screen is split into the number input.
number + [TILE(VM)]	Moves to the tile corresponding to the number.	

Name		Function
5	Mode Change	[PTZ(MENU)] Changes the PTZ mode. Click the [PTZ (MENU)] button while in PTZ mode and the screen mode will be changed.
		[SHIFT] + [MENU(Mouse)] Changes the mouse mode. Click the [SHIFT] + [MENU (Mouse)] buttons while in mouse mode and the screen mode will be switched.
		[SHIFT] + [Mon.(Con.)] Changes the console mode.
		[SHIFT] + [TILE(VM)] Runs the VMD control.
6	Play screen control	[SEARCH] Outputs the video of the current tile through live/search.
		 The video will be stopped.
		 Plays and pauses the video.
		 Starts/Ends manual recording of the video.
		Shuttle wheel Fast plays in the forward direction when the wheel is turned clockwise, or fast plays in the reverse direction when the wheel is turned counter-clockwise.
		Jog wheel Performs frame search.
7	0 ~ 9 Button to input a number.	
	[ESC(SETUP)] Returns to the previous page.	

Rear Side




Item		Description
1	SSM	Terminal that is connected to the PC to control the SSM.
2	USB	Used for backup of the system controller settings or upgrading the firmware.
3	RS-485	PORT 1 Connected to a controller such as camera or DVR through RS-485 communications.
		PORT 2 Connect to other SPC-7000 system controller.
4	NETWORK	Network connection terminal.
5	DC 12V	DC 12V input port (— —⎓ —)
6	Cable Hook	To prevent the power cable from being loose.  ■ Be sure to use the cable hook when installing and using the controller.

PRECAUTIONS

Before you install the product, read through and comply with the following instructions.

- The product is designed for indoor use only.
- Keep it away from water or moisture.
- Do not put excessive force on it.
- Do not pull out the power cable forcibly.
- Do not dismantle it at your own.
- Use only the rated I/O range.
- Use only the provided power cable.
- Use the power plug containing the earth wire if available.
- Install the system controller on a flat table.
- The layout of the main unit and the wiring system are critical for a proper system operation.
- If the devices are too close with each other or in a poor-ventilating environment, the system may not work properly.
Inaccessibility to the system makes the repair difficult or even impossible.
- To prevent a system failure or to reduce the system shutdown, make enough room for ventilation and close the cover firmly.
- Do not dismantle the system controller at will as a high voltage runs inside the system controller.
- Operation Temperature : 0°C ~ 40°C
- Storage Temperature : -20°C ~ 60°C
- Operation Humidity : 20%~85% RH
- Power Consumption : DC 12V, Max 6.4W (— — — — — +)
 - Use the dedicated power adapter provided with the product.

BEFORE INSTALLATION

- You must turn off the product before installing it.
 - A severe impact or vibration may cause a system failure.
 - Keep it away from a strong magnetic field or electric interference, or wireless devices such as radio or TV set.
 - Keep the installation site clean and dust-free all the time while or after you have installed the product.
 - Place it on an unsealed, flat surface at an optimal temperature.
Install it at least 15cm away from the wall.
 - Do not close the ventilation hole or put a conductive object in it.
 - Do not expose it to the direct sunlight. Keep the accessories or tools out of people's reach in an attempt to prevent a risk of physical damage.
 - Leaving an abnormal smoke or smell as it is may lead to a fire or electric shock.
If this is the case, turn off the product immediately and contact us for a technical assistance.
 - Take an appropriate action if you find: damp floor, unearthed power extension cord, peeled-off power cable, or absence of safety grounding.
- 
 - Use a dry cloth to wipe it out. If badly dirty or stained, use a cloth soaked into neutral detergent to wipe it out.
Do not use volatile solvents such as alcohol, benzene or thinner that may damage the product surface.
 - Do not use at a high temperature, as this will shorten the useful life of the LCD monitor.

installation

ASSEMBLE JOG SHUTTLE/JOYSTICK

When assembling the jog shuttle or joystick, press it until you hear a clicking sound.



ADJUST LCD SCREEN ANGLE

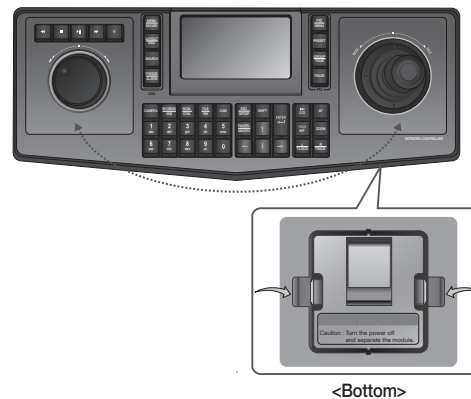
You can pull the screen forward for a better view.



SWITCHING THE LAYOUT OF JOYSTICK AND JOG SHUTTLE

For convenience you can switch the position of joystick and jog shuttle module.

- ! To switch between left and right, turn off the system controller and switch the modules manually. Or, press **<Change Module>** in the controller setup menu and switch the modules manually. (page 18)



1. Press the hook at the bottom of the controller body with two hands and the module will be detached from the main body.
2. Remove both joystick and jog shuttle modules from the controller and switch the position. When done, insert them until you hear a click.



connecting to an external device

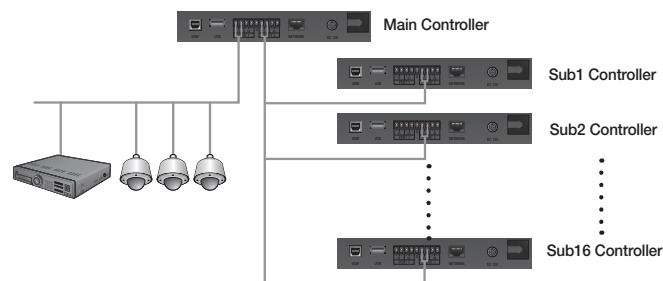
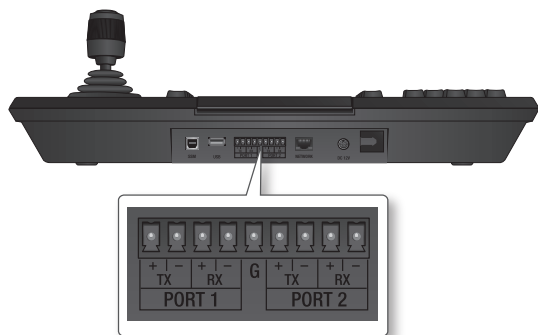
The SPC-7000 network controller can be used by connecting to cameras, DVR, and other external devices.

TO CONNECT A RS-485/422 DEVICE

You can control a PTZ camera and DVR that support RS-485/422 communication with the controller.

1. Connect the rear PORT 1 with RS-485 port of the PTZ camera or DVR.
2. According to the external device connected, select RS-485 (Half Duplex) or RS-422 (Full Duplex) connection.

- For the Half Duplex system, use TX +/- terminals.
- For RS-485/422 communications, pay special attention to the polarity (+/-).
- To reduce RS-485 communication noise, connect the camera/DVR device's G terminal with that of the SPC-7000.
- When grounding, make sure to turn the product's power off.
- Use the provided terminal block in the product package.
- Check if the RS-485/422 device is compatible with SPC-7000.



Connecting the PTZ Camera

By connecting RS-485 port on the rear of the PTZ camera with PORT 1 of SPC-7000, you can control the camera.

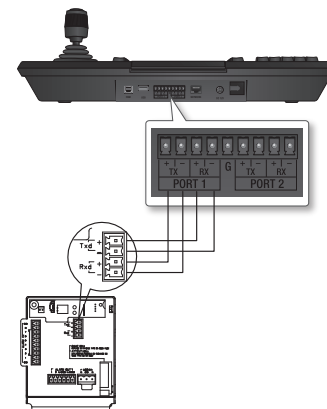
- Depending on the camera, the polarity may differ.
For more information, refer to the user manual of the PTZ camera.

For the half duplex system (RS-485)

- Connect RX (+) of RS-485 port of the PTZ camera with TX (+) of PORT 1 of SPC-7000.
- Connect RX (-) of RS-485 port of the PTZ camera with TX (-) of PORT 1 of SPC-7000.

For the full duplex system (RS-422)

- Connect RX (+) of RS-485 port of the PTZ camera with TX (+) of PORT 1 of SPC-7000.
- Connect RX (-) of RS-485 port of the PTZ camera with TX (-) of PORT 1 of SPC-7000.
- Connect TX (+) of RS-485 port of the PTZ camera with RX (+) of SPC-7000.
- Connect TX (-) of RS-485 port of the PTZ camera with RX (-) of SPC-7000.



connecting to an external device

Connecting SRD-16XX/8XX type DVR

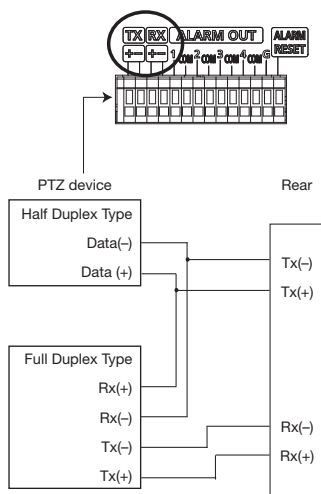
Connect between DVR and SPC-7000 using RS-485 port on the rear of the DVR.

For the half duplex system (RS-485)

- Connect TX (+) of RS-485 port of the DVR with TX (+) of PORT 1 of SPC-7000.
- Connect TX (-) of RS-485 port of the DVR with TX (-) of PORT 1 of SPC-7000.

For the full duplex system (RS-422)

- Connect TX (+) of RS-485 port of the DVR with RX (+) of PORT 1 of SPC-7000.
- Connect TX (-) of RS-485 port of the DVR with RX (-) of PORT 1 of SPC-7000.
- Connect RX (+) of RS-485 port of the DVR with TX (+) of PORT 1 of SPC-7000.
- Connect RX (-) of RS-485 port of the DVR with TX (-) of PORT 1 of SPC-7000.

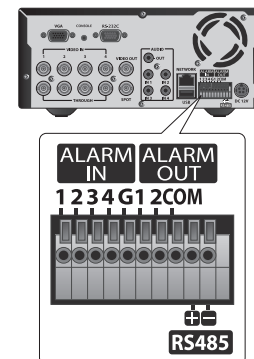


Connecting SRD-4XX type DVR

Connect the RS-485 socket on the back of SRD-4XX with SPC-7000.

❖ For the half duplex system (RS-485)

- Connect the TX (+) of SRD-4XX socket to the port 1 socket TX (+) of SPC-7000.
- Connect the TX (-) of SRD-4XX socket to the port 1 socket TX (-) of SPC-7000.

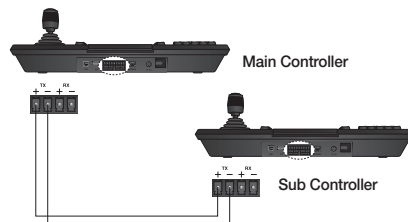


CONNECTING TO OTHER SYSTEM CONTROLLER

- You can connect up to 16 controllers simultaneously.
- For communication settings of the controller, refer to "Setting the controller ID" of "Menu Setting". (▶ page 17)

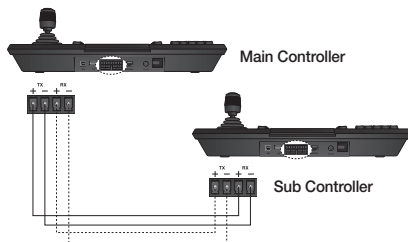
For the half duplex system (RS-485)

- Connect TX (+) of PORT 2 of SPC-7000 with TX (+) of PORT 2 of the other SPC-7000.
- Connect TX (-) of PORT 2 of SPC-7000 with TX (-) of PORT 2 of the other SPC-7000.



For the full duplex system (RS-422)

- Connect TX (+) of PORT 2 of the main controller SPC-7000 with RX (+) of PORT 2 of the sub controller SPC-7000.
- Connect TX (-) of PORT 2 of the main controller SPC-7000 with RX (-) of PORT 2 of the sub controller SPC-7000.
- Connect RX (+) of PORT 2 of the main controller SPC-7000 with TX (+) of PORT 2 of the sub controller SPC-7000.
- Connect RX (-) of PORT 2 of the main controller SPC-7000 with TX (-) of PORT 2 of the sub controller SPC-7000.



- You must use PORT 2 if you want to connect to other system controller.

configure settings

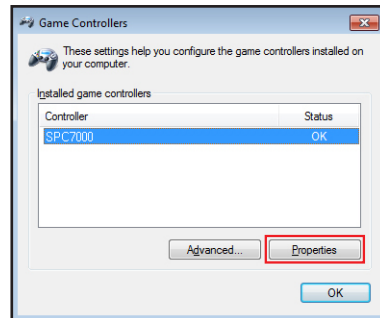
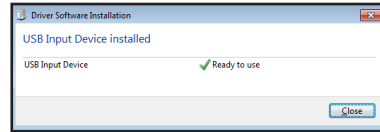
INSTALL

1. With the computer turned on, connect the SSM terminal of the controller to the USB port of the computer.
2. A window will open that says A new device has been detected.
3. Your computer will automatically recognize the device.
 - Install the device by following the instructions provided in the installation window, if necessary.
4. When the device is recognized, the controllers installed will be displayed on the game controller list in the Windows control panel.
[Start] > [Devices and Printers] > [Game Controllers]

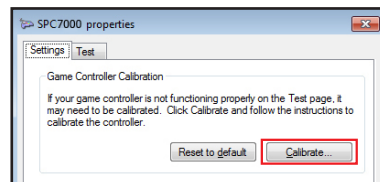
To correct the controller

- To use a controller properly, the axis needs to be corrected.

1. Move to [Start] > [Devices and Printers] > [Game Controllers], right-click on the controller installed and select [Properties].

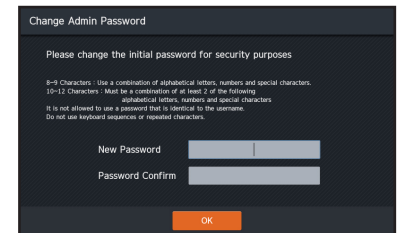


2. In the settings window, press the [Calibrate...] button to run the 'Device Correction Wizard'.
3. Proceed with the axis correction by following the instructions on the screen.



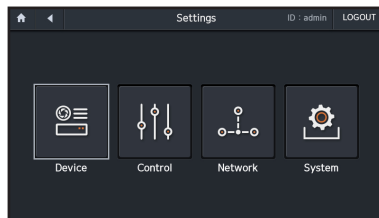
GETTING STARTED

1. Turn on all system component devices.
2. Connect the power adapter on the back of the controller and turn it on. A login window will open.
3. Using the numeric key or the touchscreen keyboard, enter the password. Click the <Login> button.
 - The default password is "4321".
4. When you first log in, a window will open, prompting you to set a password. Set your password and press the <OK> button.
 - New Password: Enter a new password, following the password setting rules.
 - Password Confirm: Enter the new password again.



CONFIGURE MENU

When the system settings screen appears, select your desired settings item.

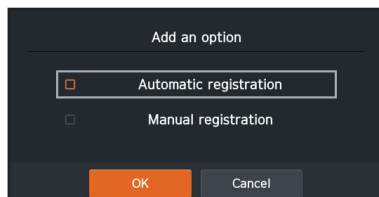


DEVICE

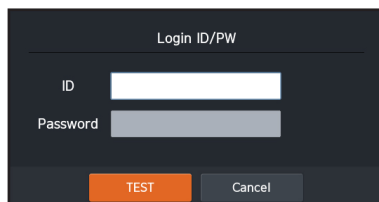
To register a device automatically

You can search for and register a network camera connected to the local network.

1. Select the **<Automatic registration>** check box and press the **<OK>** button.



2. From the list of cameras that your search returns, select a camera you want to register and press the **<TEST>** button.



3. Enter an **<ID>** and **<Password>** and press the **<TEST>** button to access the camera.

4. Press the **<OK>** button and the selected camera will be registered.

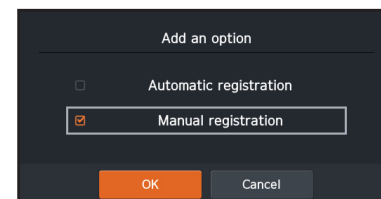
- Model: Shows the camera model name.
- IP address : Shows the IP address of a network camera.
- Status : Displays Success or error code guide information.



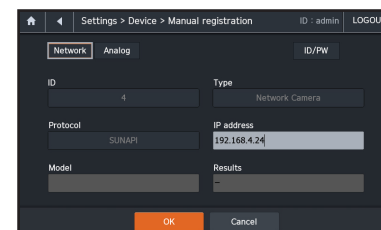
To register a device manually

- Adding a network device

1. Select the **<Manual registration>** check box and press the **<OK>** button.

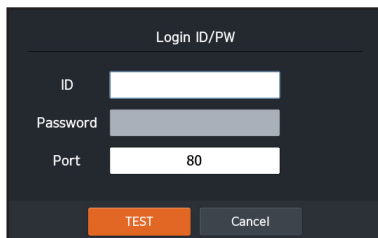


2. Enter the IP address information.



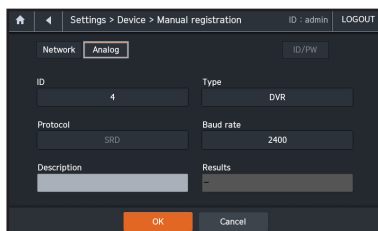
configure settings

3. Press the <ID/PW> button to enter an ID, password and port number.
4. Press the <TEST> button to access the camera.
5. Check the test results.
6. Press the <OK> button to complete the registration.

A screenshot of the 'Login ID/PW' screen. It has a dark background with white text. At the top, it says 'Login ID/PW'. Below that, there are three input fields: 'ID' (empty), 'Password' (empty), and 'Port' (containing '80'). At the bottom, there are two buttons: 'TEST' (orange) and 'Cancel' (grey).

- Adding an analog device

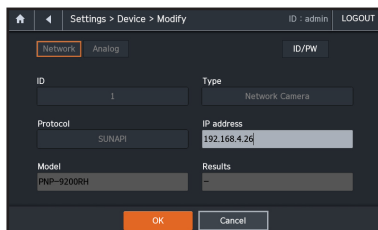
1. Select the <Manual registration> check box and press the <OK> button.
2. Select <Analog> as the device type.
3. Select each item to enter the ID, type, protocol, and transmission speed.
 - By selecting <Analog Camera> as the type, protocol can be selected.
4. Press the <OK> button to complete the registration.

A screenshot of the 'Settings > Device > Manual registration' screen. It has a dark background with white text. At the top, it says 'Settings > Device > Manual registration' and 'ID : admin LOGOUT'. Below that, there are several input fields: 'ID' (containing '4'), 'Type' (containing 'DVR'), 'Protocol' (containing 'SRD'), 'Baud rate' (containing '2400'), 'Description' (empty), and 'Results' (empty). At the bottom, there are two buttons: 'OK' (orange) and 'Cancel' (grey).

Modify Device Information

You can modify the information of a registered device.

1. Select a device to change the information.
2. In the device information section displayed at the bottom of the screen, modify the device information.
 - Depending on the type of device selected, the information to be modified will be displayed differently.
3. After you finish changing the device information, press the <OK> button.

A screenshot of the 'Settings > Device > Modify' screen. It has a dark background with white text. At the top, it says 'Settings > Device > Modify' and 'ID : admin LOGOUT'. Below that, there are several input fields: 'ID' (containing '1'), 'Type' (containing 'Network Camera'), 'Protocol' (containing 'SUNAPI'), 'IP address' (containing '192.168.4.26'), 'Model' (containing 'PHP-3200RH'), and 'Results' (empty). At the bottom, there are two buttons: 'OK' (orange) and 'Cancel' (grey).

Delete Devices

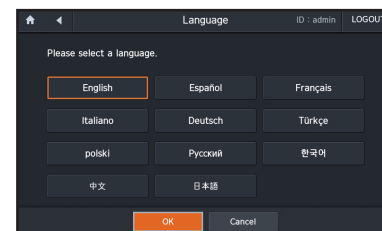
1. Select a device to delete and press the <Delete> button.
2. An initialization confirmation pop-up window will appear.
By pressing the <Initialize> button, the selected device will be deleted.
3. By pressing the <Delete All> button and the <Initialize All> button in the pop-up window, all registered devices will be deleted.

CONTROL

Language

You can select a preferred language for the user interface.

1. Press <Language>.
2. From the Language selection screen that appears, use the direction buttons or joystick to select a preferred language.
 - The language will be changed to the selected one immediately.
3. To exit the language selection screen, press <Cancel>.


A screenshot of the 'Language' selection screen. It has a dark background with white text. At the top, it says 'Language' and 'ID : admin LOGOUT'. Below that, it says 'Please select a language.' and there are several buttons for different languages: 'English' (highlighted with an orange border), 'Español', 'Français', 'Italiano', 'Deutsch', 'Türkçe', 'polski', 'Русский', '한국어', '中文', and '日本語'. At the bottom, there are two buttons: 'OK' (orange) and 'Cancel' (grey).

User & Password

You can change the administrator's password and grant a device ID.

To add a user

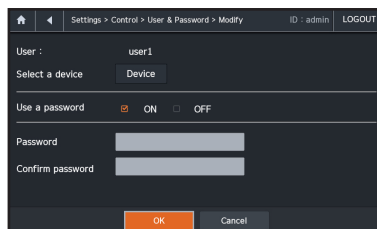
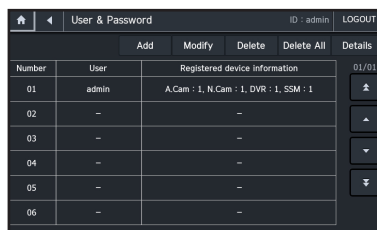
1. Select <User & Password> from the menu.
2. Click the <Add> button.
3. Select a device to assign to the user.
4. Select whether to use a password.
5. To use a password, press <ON> and set a password to use.
6. After setting a password, press the <OK> button.

-  ■ If the password does not conform to the password policy, you will need to select a password that meets the password requirements.

To modify user information

You can change the password on the user information page.

1. Select a user whose information you want to modify and press the <Modify> button.
2. Set the details to modify again.
 - Only an "admin" can change the password.
3. After setting the password, press the <OK> button.



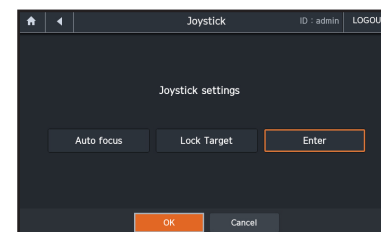
To delete a user

You can select and delete a registered user.

1. By selecting the user to delete and then pressing the <Delete> button, the pop-up window to confirm delete will appear.
2. Press the <OK> button and the user selected will be deleted.
3. By pressing the <Delete All> button and the <OK> button in the pop-up window, all registered devices will be deleted.
 - Since "admin" is the administrator, it cannot be deleted.

Joystick Button Operation

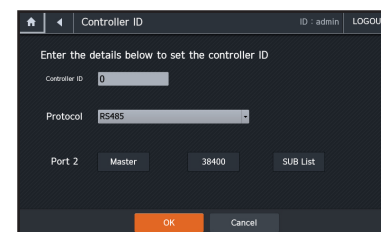
Select the items to use with the joystick button, and press the <OK> button.
The function operates according to how the joystick is selected.



Setting the controller ID

When connecting between controllers, you may set it as a main or sub controller, and the ID and protocol of the controller to be used can be selected.

1. Select the <Controller ID> menu.
2. Enter the controller ID to be used.
3. Select either RS-485 or RS-422 to set the communication method of the controller.
4. Select the main or sub controller and set the details.
 - When using while connected to multiple controllers, set the sub list.
5. When the setting is complete, click the <OK> button.

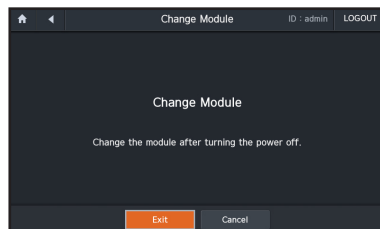


configure settings

Change Module

You can switch the position between jog shuttle and joystick from left to right or vice versa.

1. Select the **<Change Module>** menu.
2. You can check that the power is turned off and switch the jog shuttle position with the joy stick by pressing the **<Exit>** button.
3. Check the current setting, press **<Cancel>**.

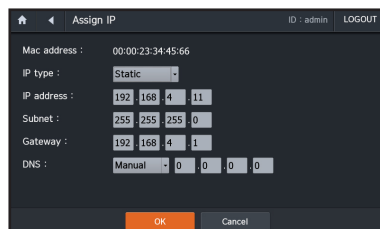


NETWORK

Configures the network connection type and environment.

- IP type : Selects the type of network connection.
- IP address : Subnet, Gateway, DNS
If connection is **<Static>** : You can enter the IP address, subnet, gateway and DNS directly.
If connection is **<DHCP>** : IP address, subnet and gateway are configured automatically.

- If you set the DNS mode manually, you can enter the DNS IP information directly.



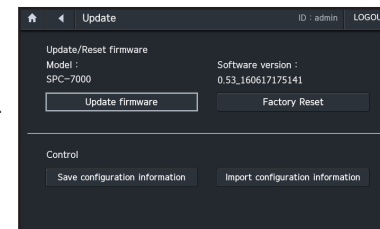
SYSTEM ENVIRONMENT

You can update the current firmware using the firmware files in the USB memory.

To update the controller firmware

You can download the latest firmware files and update the controller.

1. Connect a USB memory device on which new firmware is stored to the network controller.
2. From the menu setup screen, press **<System>**.
3. Press **<Update firmware>**.
4. In the Update window, press the **<OK>** button.
5. Wait until the system restarts after the update.

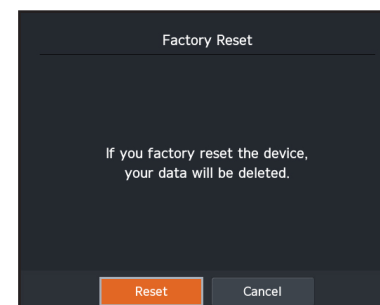


- Do not disconnect the USB memory or power cable during the update. Otherwise, it may fail to update the firmware or cause a system failure.

Factory Reset

You can return the current settings to the factory default.

1. Press **<Factory Reset>**.
2. Press **<Reset>**.
The current settings will return to the factory default.
3. To exit the menu, press **<Cancel>**.



To backup the controller settings

If you want to change the controller or replace the camera, you can save the settings of the controller as a file and load the controller settings into a new camera.

1. From the menu setup screen, press **<System>**.

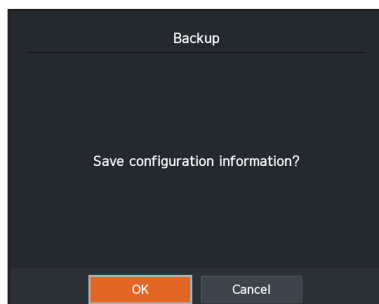
2. Press **<Save configuration information>**.

3. Press **<OK>**.

The backup process begins.



- Do not disconnect the USB memory or power cable during the backup. Otherwise, it may fail to backup the controller settings.



To restore the controller settings

If you have set the controller improperly or reset it, you can upload the current settings to a different controller.

1. From the menu setup screen, press **<System>**.

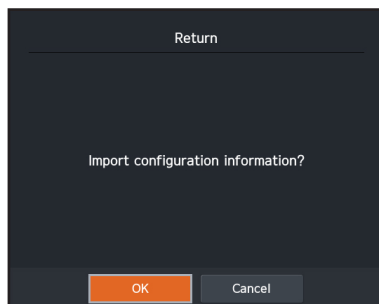
2. Press **<Import configuration information>**.

3. Press **<OK>**.

The restoration process begins.



- Do not disconnect the USB memory or power cable during the restoration. Otherwise, it may fail to restore the controller settings.



CONTROL CAMERAS

You can configure a camera, storage device and settings menu.

- If the version of SUNAPI of a network camera registered, a specific function may not work.

Enter Camera Control Mode

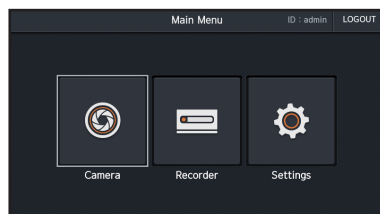
Select <Camera> on the main screen.

Select a Camera

Using the direction keys, move to your desired camera on the list of registered cameras, and press the [ENTER] key.

Using the direction keys, move to the <OK> button and press the [ENTER] key.

- You can activate a camera by clicking a number + [CAM] key.



PAN/TILT Control

In PTZ mode, you can control the PAN and TILT motion by moving the joystick of the controller up, down, left and right.

The farther from the center of the joystick is, the faster the moving speed becomes.

ZOOM

In PTZ mode, you can control the camera's Zoom IN/OUT motion using a controller.

FOCUS

Using a controller, you can control the Focus Near/Far motion.

IRIS

Using a controller, you can adjust the brightness of a camera video.

- Network cameras are not supported.

Control Cameras

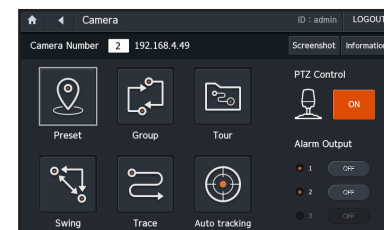
Press the [AF] key on the controller and the camera autofocus will be activated.

- For more information about the camera control, refer to the "Part Names And Functions" section. (page 7~8)

Preset

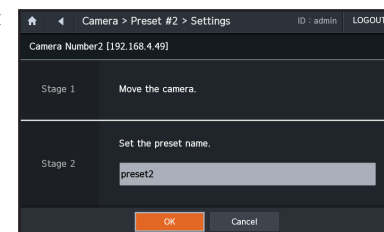
You can set a single designated point and move the camera to the designated position.

- You can designate up to 255 presets.
- You can also activate a preset by clicking a [Preset] + number + [Preset] button.



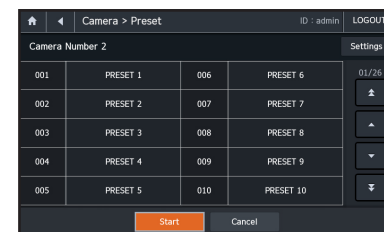
To set a preset

1. Select a camera that you want to set a preset for.
2. Use the joystick to move the camera to a desired point.
3. Set the preset name.
4. Press the <OK> button to save.



To execute the preset

1. Select a camera.
2. Press the [PRESET] button.
3. With the numeric keys, press a number to execute and press the [PRESET] button.
4. The preset will be executed.



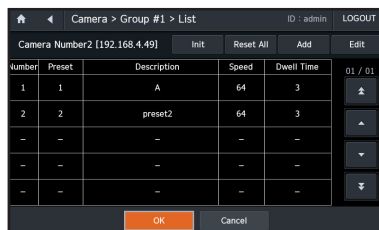
Group

You can make a group of multiple presets before calling them in sequence.

- You can designate up to 6 groups.
- A single group can contain up to 128 presets.

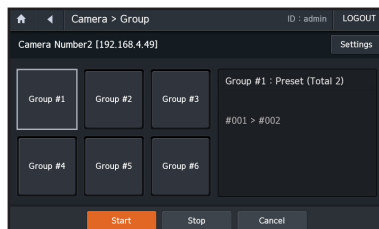
To set a group

1. Select the <Group> menu.
2. From the group list, select an individual list and press the <Settings> button to move to the settings page.
3. Press the <Add> button.
4. From the preset list, select a preset to add to the group.
5. Specify the speed and dwell time.
6. Press the <OK> button to save.



To execute the group function

1. Select the <Group> menu.
2. Select a group from the group list.
3. Select a group number and press Start.
4. The group function will be executed.

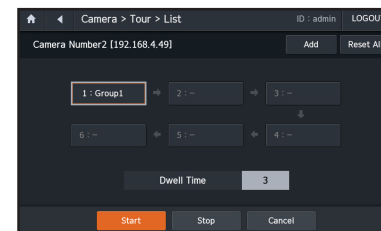


Tour

You can make a tour of at least one group before executing the groups in sequence.

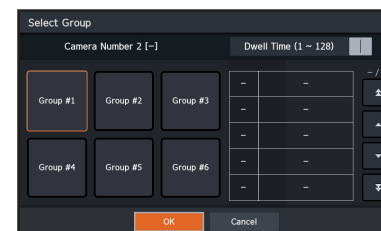
To set a tour

1. Select the <Tour> menu.
2. Press the <Add> button to move to the Select Group page.
 - You can add up to 6 groups.
3. Select a group from the group list.
4. Enter a time to stay.
5. Press the <OK> button to save.



To execute the tour function

1. Select the <Tour> menu.
2. Select a group number and press Start.
3. The tour function will be executed.



Reset

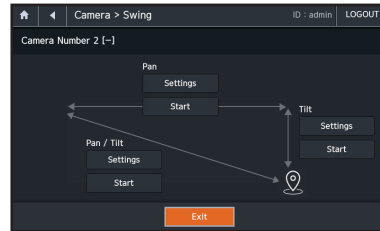
Press the <Reset All> button and the settings of entire tours will be reset.

Swing

You can move the camera between two preset points to monitor the course.

Swing setup

1. Select the <Swing> menu.
2. Select the [PRESET] button for a type to set (PAN, PAN/TILT or TILT).
3. Set a start preset and an end preset.
4. Set a speed and switch time.
5. Press the <OK> button to save.



To execute the swing

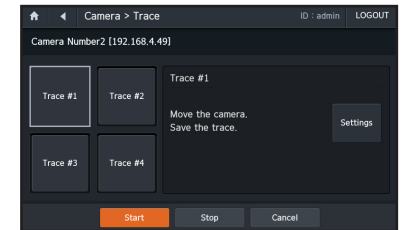
1. Select the <Swing> menu.
2. Press the <Start> button of a swing to execute (PAN, PAN/TILT or TILT).
3. The swing function will be executed.

Trace

With the joystick or camera buttons, you can instruct the controller to record the camera movement for a specific time and repeat the movement.

To set a trace

1. Select the <Trace> menu.
2. From the trace list, select an individual item and click the <Settings> button.
3. Using the joystick or camera control buttons, control the motion of a camera to save settings.
4. Press the <Stop> button and settings will be completed.

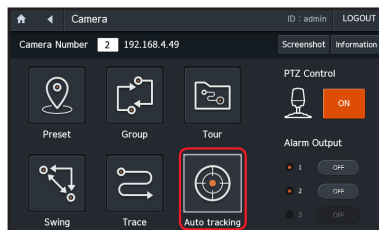


To execute a trace

1. Select the <Trace> menu.
2. Select the number of a trace to execute.
3. Press the <Start> button.
4. The trace function will be executed.

Auto Tracking

You can select whether to ON/OFF the auto tracking function of a camera that supports this function.



Alarm Output

You can turn the forced alarm output ON/OFF.

- If you don't have the proper user authority, synchronization with the camera may fail.

PTZ Control

If you want to control PTZ with the joystick, turn this function ON, otherwise, turn it OFF.

Camera Screen Capture

When you press the <Screenshot> button, a camera screenshot will be saved to the USB memory stick.

Detailed Camera Information

Press the <Information> button and detailed camera information will be displayed.

CONTROL STORAGE DEVICES

As functions vary depending on the device, please refer to the user manual for the device.

SSM

You can control the storage devices registered in the SSM by selecting the SSM.



- When you select the SSM, the camera will run in SSM mode.



Select a Mode







SSM Mode

Select the <SSM>.




You can control the SSM and devices registered in the SSM.

- Controls the SSM regardless of the GUI control.
- For detailed information about how to use the SSM program, please refer to the user manual.

Joystick	
Up/Down/Left/Right	In PTZ mode, you can control the Pan and Tilt motion. In Screen mode, you can change the Up/Down/Left/Right tile selection. In Mouse mode, you can move the mouse cursor.
Rotation	In PTZ mode, the screen zooms in when turning in the WIDE direction, and zooms out when turning in the TELE direction.

PTZ control	
[FOCUS N/F] + 	Runs the Focus Near/Far motion.
[FOCUS N/F] + 	Runs the Focus Near/Far motion.
[IRIS C/O] + 	Runs the IRIS Open/Close operation.
[IRIS C/O] + 	Runs the IRIS Open/Close operation.
[PRESET]	When you click a number + [PRESET] button, the preset corresponding to each button number is activated.
[GROUP]	When you click a number + [GROUP] button, Group/Scan corresponding to each button number is activated.
[TRACE]	When you click a number + [TRACE] button, Pattern/Trace corresponding to each button number is activated.
[ZOOM] + 	Runs the zoom in motion.
[ZOOM] + 	Runs the zoom out motion.
Mouse control	
[L(T. LOCK)]/[R(TRACK)]	Uses the left/right button of the mouse in mouse mode.

Screen control	
[MON.(CON.)]	You can change the multi monitor selection by clicking a number + [MON. (CON.)] button in the screen mode (previous/next according to the monitor number).
[LAYOUT(SEQ.)]	When you click a number + [LAYOUT (SEQ.)] button, the layout corresponding to each button number is activated.
[CAM]	When you click a number + [CAM] button, the camera corresponding to each button number is activated.
[ENTER]	Clicking once will display a single screen on the live viewer. Clicking once again will return to the original screen.
	When you click a number + [ENTER] button in the live viewer, the screen is split into the number input.
LCD SnapShot Button	Captures the video of the current tile.
LCD UI Alarm Off Button	Initializes the event.
number + [TILE(VM)]	Moves to the tile corresponding to the number.
Mode Change	
[PTZ(MENU)]	Changes the PTZ mode. Click the [PTZ (MENU)] button while in PTZ mode and the screen mode will be changed.
[SHIFT] + [MENU(Mouse)]	Changes the mouse mode. Click the [SHIFT] + [MENU (Mouse)] buttons while in mouse mode and the screen mode will be switched.
[SHIFT] + [Mon.(Con.)]	Changes the console mode.
[SHIFT] + [TILE(VM)]	Runs the VMD control.

Play screen control	
[SEARCH]	Outputs the video of the current tile through live/search.
	The video will be stopped.
	Plays and pauses the video.
	Starts/Ends manual recording of the video.
Shuttle wheel	Fast plays in the forward direction when the wheel is turned clockwise, or fast plays in the reverse direction when the wheel is turned counter-clockwise.
Jog wheel	Performs frame search.
0 ~ 9	Button to input a number.
[ESC(SETUP)]	Initializes the input number. <ul style="list-style-type: none"> The reset function is only available in SSM mode.

GUI Control Mode

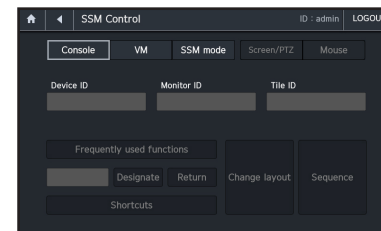
1. Press [SHIFT], [RECORDER/SSM].

2. Select <Console>, <VM>.

If you select either console or VM mode, configurable sub functions will be enabled.

- Device ID : Disabled when controlling the SSM
- Monitor ID : Press a number + [MON.CON.] key.
- Tile ID : Press a number + [TILE/VM] key.

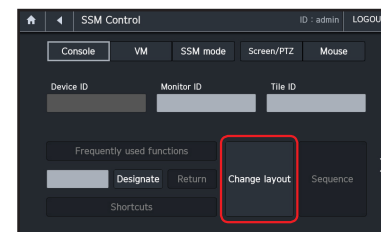
3. Select either <Screen/PTZ> or <Mouse> mode for a device to use.



Change Layout

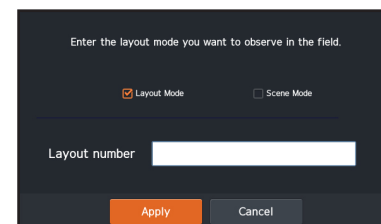
1. Press the <Change layout> button.

- When controlling the SSM, the screen mode will be disabled.



2. Enter the number of the layout to change.

3. Press the <Apply> button and the layout will be changed as configured.



Recording

Starts or stops recording.

Search

Displays a playback video.

Snapshot

Saves a captured image.

- The image will be saved on the PC where the SSM is installed.

Alarm OFF

Turns off an event alarm.

DVR

You can control by connecting to DVR.

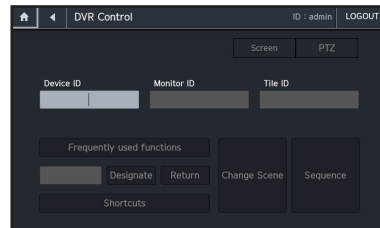
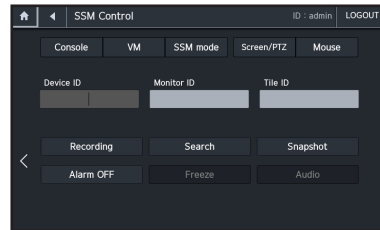
1. Select <DVR>.

Configurable sub functions will be enabled.

- In SRD protocol, depending on the connected DVR, only the menus that can be set are displayed on the screen.

- Device ID : Press DVR ID.
- Monitor ID : Disabled when controlling the DVR
- Tile ID : Press a number + [TILE/VM] key.

2. Select either <Screen> or <PTZ> mode for a device to be used.



Change Layout

1. Press the <Change Scene> button.
2. Enter the layout number to be changed.
3. Select the <Apply> button and the layout will be changed as configured.

Record

Starts or stops recording.

Search

Displays a playback video.

Turn Alarm Off

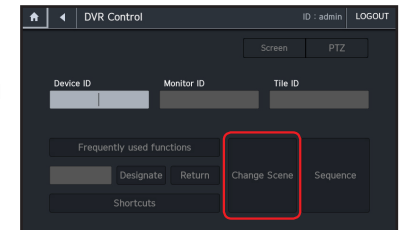
Turns off an event alarm.

Pause

Pauses a playback video.

Sound

Adjust the volume of the playback video.



SPECIFICATIONS

Item	Description
Communication System	SSM RJ-45(Ethernet) RS-485 / 422
Units to control	Max. 255
Compatibility	Network/analog camera, SSM, DVR
Protocol (Network Camera)	SUNAPI
Protocol (analog camera)	Samsung-T, Samsung-E, PELCO-D, PELCO-P, Panasonic, Honeywell, ELMO, Vicon, GE, AD, Bosch
Protocol (DVR)	SRD
Multilingual Support	English, Spanish, French, Italian, German, Polish, Turkish, Russian, Korean, Chinese, Japanese
LCD Display	5" TFT LCD + Touch LCD
USB Port	Backup / Restore, S/W Update
Joystick	PTZ control (3 axial twist zoom)
Jog Shuttle	SSM, DVR Play Control
Power	DC 12V, Max 6.4W
Operation Temperature	0°C ~ 40°C
Operation Humidity	20%~85%
Dimensions	459.1(W) x 59.1(H) x 177.9(D) mm
Weight	1.5 kg (adapter excluded)

Q & A

Problem	Action
Unable to communicate with the controller.	<ul style="list-style-type: none"> • Check if the RS-485 communication lines are connected normally. • Check the cable connection between SPC-7000 and the PC. • Confirm that the IP address of the network controller is correct.
The USB memory is not recognized properly.	<ul style="list-style-type: none"> • Check if the USB memory works properly.

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- OpenSSL License : OpenSSL 0.9.8
- Boost Software License : boost 1.57.0
- UNDER THE ZLIB : tinymd 2.6.2
- Curl License : curl 7.21.0

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