

Installation & Operation Guide

RTI Intelligent Surfaces

IST-5-B - 5" Intelligent Surface Touchpanel - Black

IST-5-W - 5" Intelligent Surface Touchpanel - White

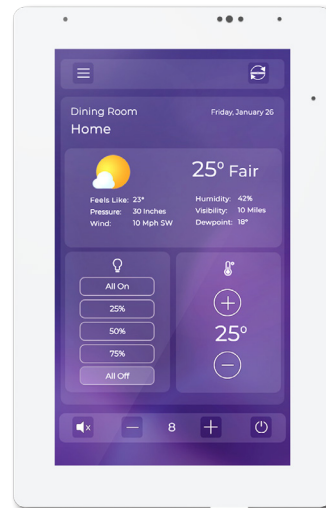
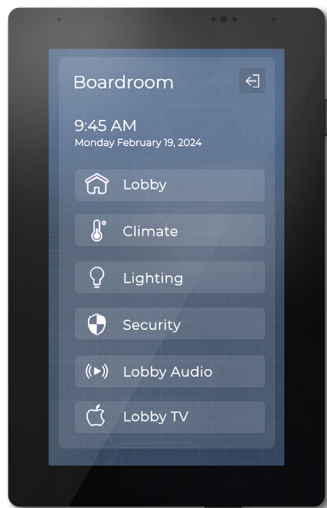


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Introduction

The IST-5 touchpanel elevates system control in all commercial and residential settings. It starts with a hi-resolution 5" capacitive-touch screen with a 854x480 resolution with true-black display filter for exceptional clarity. With an ultra-thin bezel, near-flush mount (just 0.47"/12mm off the wall), and elegantly compact form-factor, the IST-5 makes an elegant statement in landscape or portrait mount. Built-in 10/100 Base-T Ethernet with PoE enables seamless two-way system control, video, and remote programming.

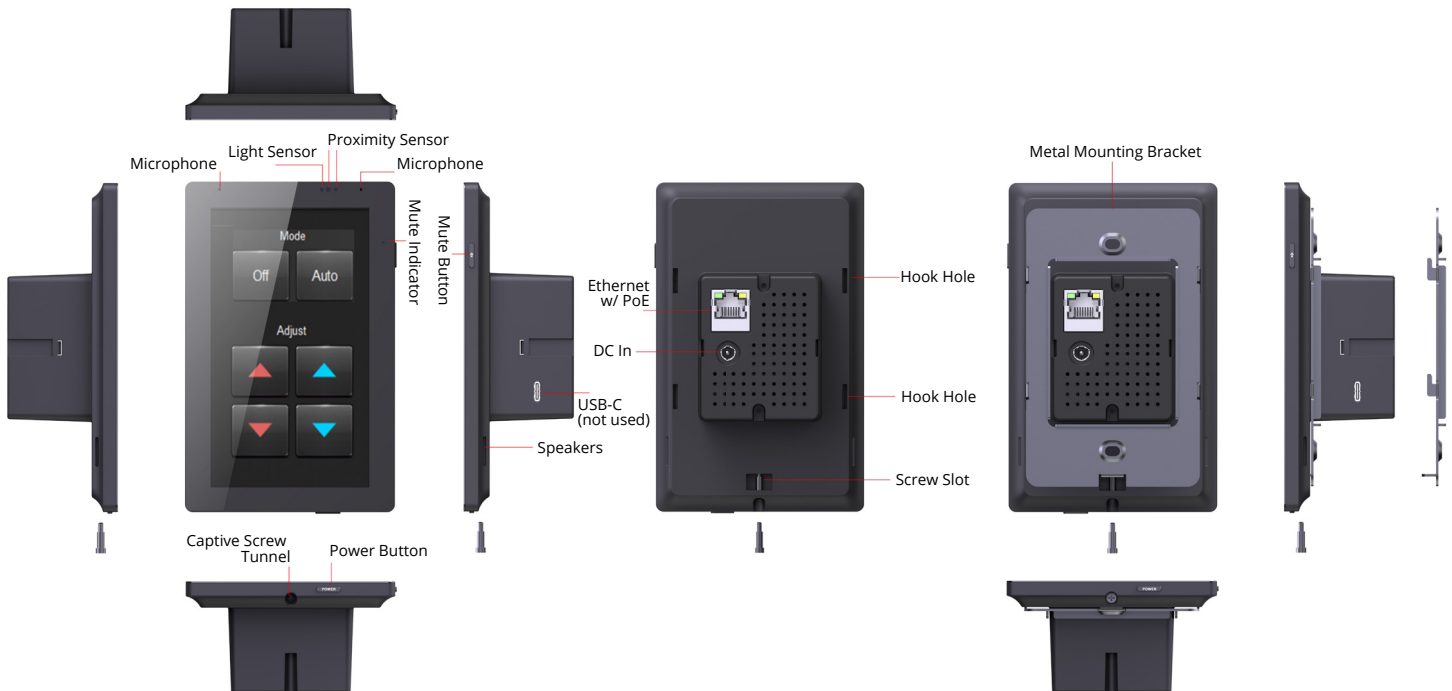
Key Features

- Hi-resolution 5" capacitive-touch screen (854x480) with ultra-thin bezel.
- Near-flush mount (just 0.47"/12mm off the wall).
- Ethernet and Wi-Fi options for control and communication.
- PoE or 12V DC power options.
- Exceptional video streaming and two-way intercom at H.264 or H.265 format.
- Dual speakers and far-field microphone array (with mute button).
- Proximity and ambient light sensors.
- Portrait or landscape.

Product Contents

- IST-5
- Metal Wall Mounting Bracket (1)
- Metal Wall Bracket British Standard 4662 (1)
- Mounting Bracket Screws (2)
- Single Gang Low Voltage Mounting Bracket (1)

Overview



Mounting Bracket Installation

The IST-5 is designed to be wall mounted in either Portrait or Landscape orientation.

Mounting Depth

The IST-5 requires a minimum mounting depth of 1.34" (34mm) from the wall surface. Leave space to account for the RJ-45 or 12V barrel connector.

Mounting Height

The recommended mounting height for the IST-5 is 57"- 65" (145 cm -165 cm) from the finished floor to the center of the unit.

Mounting Bracket

The IST-5 is designed to be mounted to a US standard single gang wall box or a single gang low voltage bracket (included in the box).

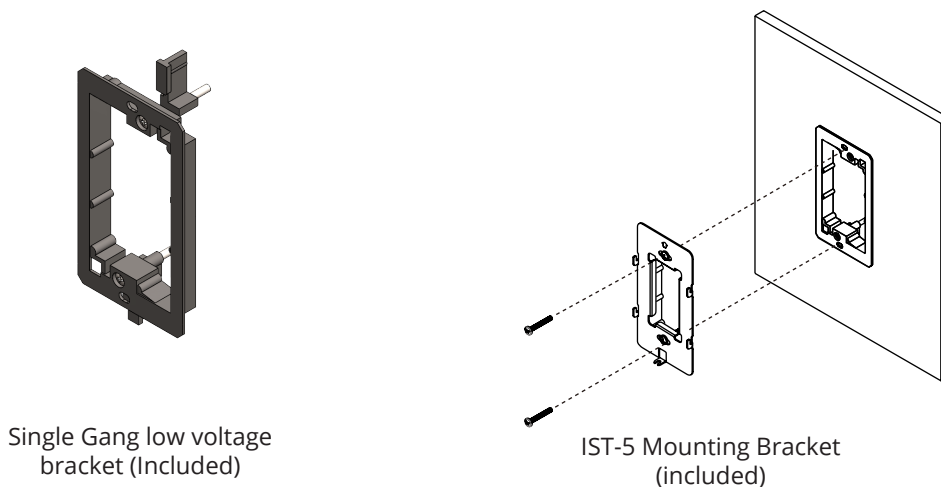
The IST-5 mounting bracket, included in the box, should be attached to the single gang low voltage bracket with the supplied screws, then the IST-5 unit is secured on the metal rear mounting bracket with a captive screw located at the bottom of the IST-5.

Portrait/ Landscape Mounting

- Portrait orientation: Install the single gang low-voltage bracket on a wall in its normal position
- Landscape orientation: Install the single gang low-voltage bracket on wall after rotating it 90 degrees in a clockwise direction.

Install the IST-5 Mounting Bracket

- The IST-5 package includes a mounting bracket that **MUST** be used for installation.
- Use the included screws to mount the bracket onto a single gang low-voltage bracket.
- Verify that the bracket is level before tightening the captive screw on the IST-5.



Power the IST-5

The IST-5 is designed to be powered over an Ethernet connection with PoE or by connecting a 12VDC power supply (not included), but not both.

PoE Connection

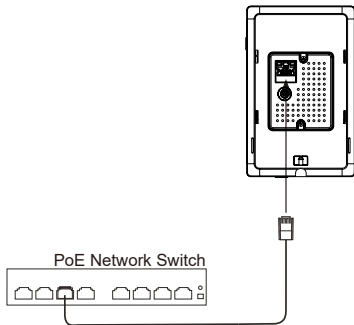
- PoE connection requires IEEE 802.3at standard. Utilize a network switch or PoE injector that meets this standard.
- Connect the IST-5 using a standard T568A or T568B Ethernet cable from the network switch to the LAN/ PoE jack on the rear enclosure of the IST-5.

12VDC Power Supply

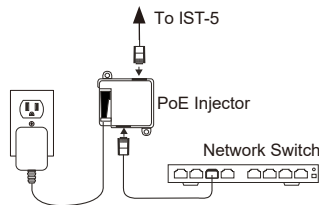
- You can provide power to the IST-5 by utilizing a 12VDC/2A power supply (available separately).
- Plug the connector into the DC jack on the rear enclosure of the IST-5.

Power Up The IST-5

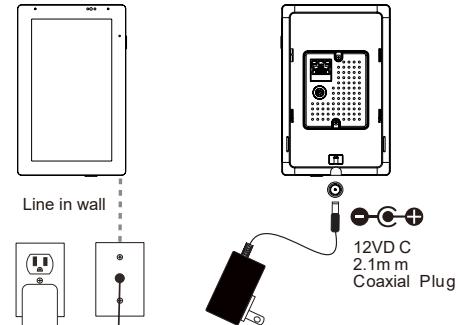
- The IST-5 will automatically power on when power is applied.



PoE Network Switch Cabling



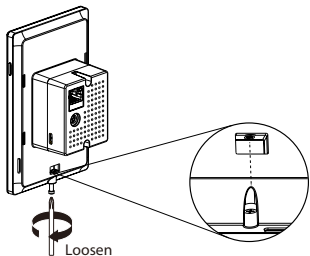
PoE Injector Cabling



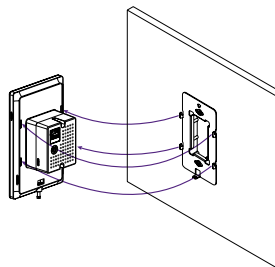
12VDC Power Supply Cabling

Install the IST-5

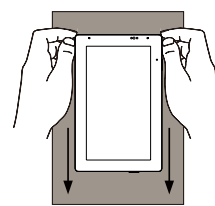
- Use a Philips #1 head screw driver to loosen the captive screw of the unit to the level indicated below in the diagram. Screw should not be removed from the unit.
- Align the mounting frame hooks with the IST-5 mounting slots and gently pull the IST-5 unit down the mounting bracket. Make sure the mounting hooks are properly engaged.
- To complete the installation, tighten the captive screw on the bottom part of unit, to secure the IST-5 on the mounting bracket.
- For Landscape orientation, rotate mounting bracket and IST-5 90 degrees in clockwise direction before installation.



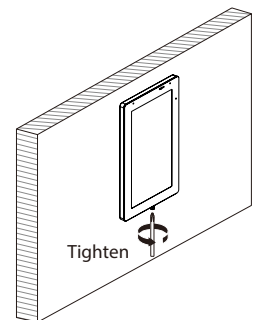
Loosen captive screw



Align mounting frame hooks



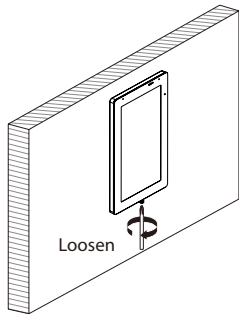
Gently pull IST-5 down



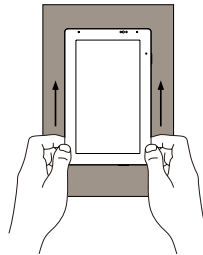
Tighten the captive screw to secure the IST-5 to the mounting bracket.

Remove the IST-5

- Use a Philips #1 head screw driver to loosen the captive screw of the IST-5, then gently pull straight up from the mounting frame to disengage the unit.

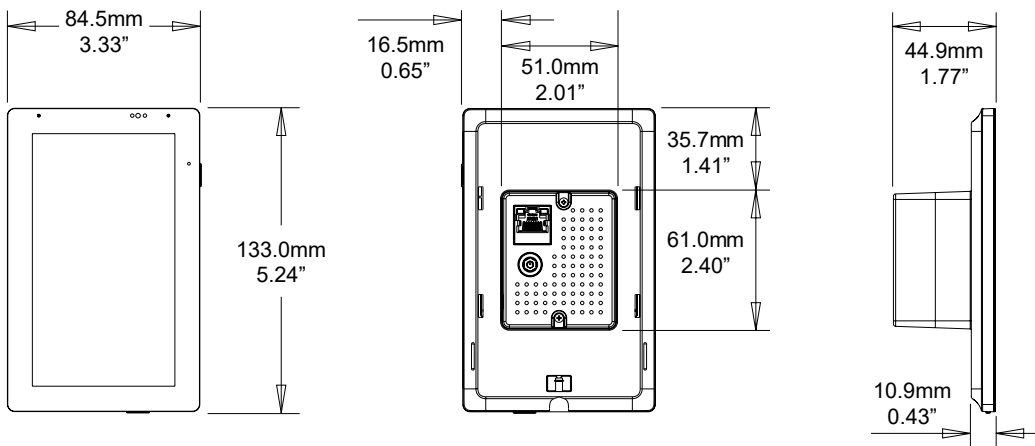


Loosen captive screw



Gently push IST-5 upwards

Dimensions



Ethernet Communication

- When the IST-5 is connected to a network switch by Ethernet cable, the unit will acquire a network address via DHCP and automatically connect to the LAN.

Programming

Touchscreen Display

The IST-5 touchscreen display is programmed using the RTI Integration Designer Programming Software. Normally, it is organized into a series of pages containing objects (buttons, text, graphics, etc.) that are related to each other.

Updating the Software

RTI's Integration Designer data files can be downloaded to the IST-5 via Ethernet network.

Hard Buttons

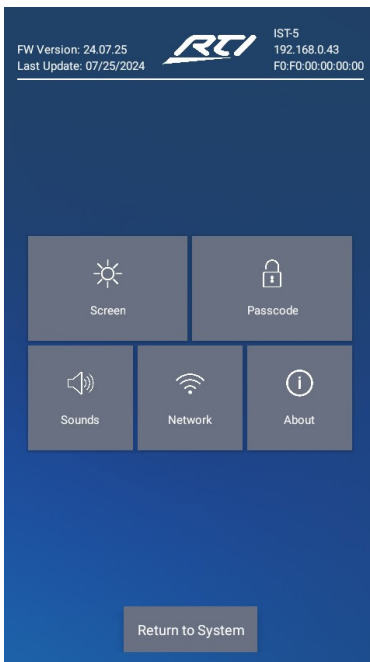
- Power Button: Short press turns off/on display
- Mute Button: Short press disables/enables microphone
- Full Reboot: Short press of power button + mute button simultaneously
- Network IP/Wi-Fi reset: Hold power + mute button for 4 seconds, then release
- Factory Reset: Hold power + mute button for 8 seconds then release

Settings

Main Settings Information

To adjust settings on initial power up and for the user during normal operation, the IST-5 provides an easy to navigate menu with six categories. Clicking on any of these menu blocks will access a specific area of adjustment or information on your IST-5 device.

If the settings screen is accessed on startup, then it will remain in this menu system until an Integration Designer file is loaded. To access the screen after an ID program is running, simply swipe right from the left side of the screen (in any orientation) using two fingers.

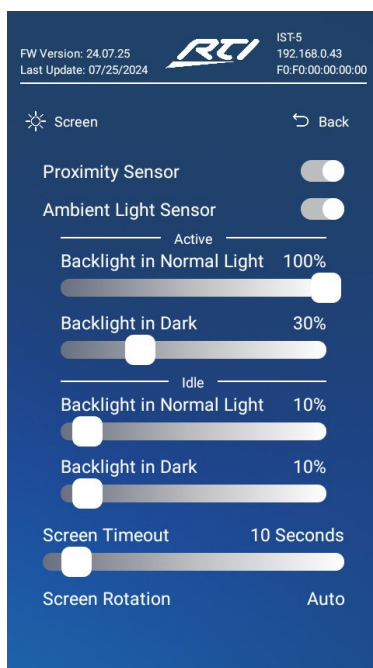


Note: If there is an ID program running when accessing the settings menu, any changes to the settings on the settings menu will overwrite the currently running ID file settings. However, these settings do not update the original ID file so downloading an ID file again will return the settings to those programmed in the ID file.

A convenient feature throughout all the setting screens is the upper header remains which will give information regarding the current firmware version, the last time anything was updated on the IST-5, the name of the device, and the current IP address and MAC address of the device whether operating on wired Ethernet or Wi-Fi.

Screen Settings

This handles all the configurations that control how the screen performs such as the proximity control, ambient light sense, timeout, and rotation.



Proximity Sensor

This determines if the built-in sensor is activated to detect the presence of a person or object in the vicinity of the IST-5. Depending on the light level around where the IST-5 is located, the proximity sensor can adjust the screen intensity to the desired levels. This helps to ensure minimal distraction in dark areas when not required for operation. To turn the proximity detection on or off, simply swipe or tap the toggle switch. Right will indicate it is enabled and left will indicate it is disabled.

Ambient Light Sensor

With an accurate method of measuring light levels, the sensor in the IST-5 can give feedback to the device to then control the brightness of the screen in various environments.

There are two categories of operation for ambient light control, active and idle, which refer to the conditions of the IST-5 when it is actively being used, or when it has had a period of inactivity. These

conditions are controlled by the Screen Timeout covered later in this document. To turn the ambient light sensor on or off, simply swipe or tap the toggle switch. Right will indicate it is enabled and left will indicate it is disabled.

ALS activated

--- Active ---

Backlight in Normal Light – level of illumination in brighter environments when IST-5 in use

Backlight in Dark – level of illumination in darker situations that require lower intensity but still visible enough for use

--- Idle ---

Backlight in Normal Light – regular level of illumination when IST-5 not in use

Backlight in Dark – level of illumination in dark, nighttime situations that require lower intensity to reduce distraction during inactivity

ALS deactivated

Backlight Active – level of illumination whenever the IST-5 is in use

Backlight Idle – level of illumination when IST-5 not in use

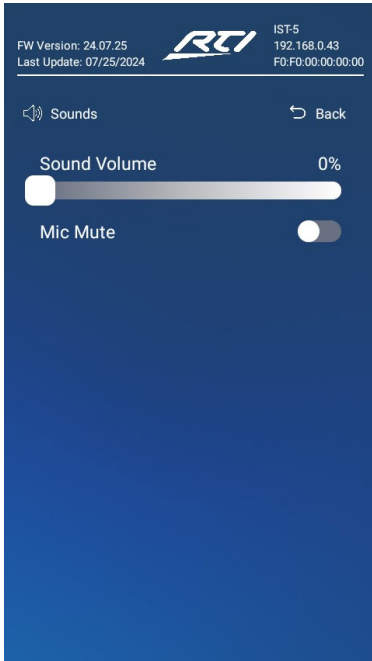
Screen Timeout

This indicates the amount of time before IST-5 transitions into the idle state. The IST-5 is woken up by touching the screen, pressing the power button on the bottom of the unit twice, or moving close to the IST-5 if the proximity sensor is enabled.

If the user does not want the IST-5 to transition to an idle state (such as in a high traffic commercial environment), then setting the timeout slider to the far left will enable “Never/Off” mode. Note that in this mode, the backlight idle settings will not be implemented, although they still appear as a variable option.

Sounds Settings

These settings relate to the configuration of how the IST-5 responds with sound input and output.



Sound Volume

This slider controls the volume of all sounds on the IST-5, including VoIP and SIP intercom calls.

Mic Mute

This toggle switch will disable the microphone operation for privacy concerns. It has the same function as the physical mute button on the right side of the IST-5 and will illuminate the mute LED on the IST-5 when enabled.

Network Settings

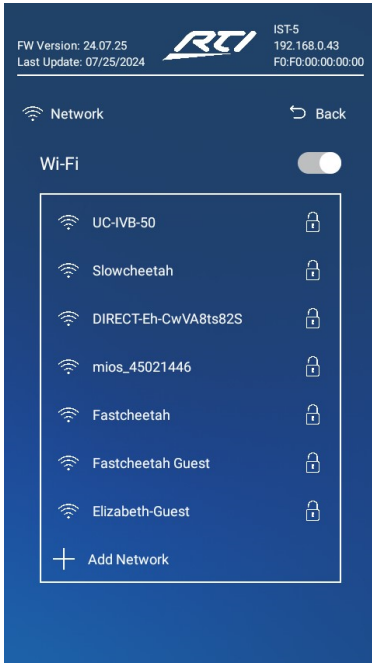
This is used to enable and setup the Wi-Fi network.

Initially, the Wi-Fi is disabled (unless already set by an ID file) so the Wi-Fi toggle on the right across from the "Wi-Fi" word will be set to off.

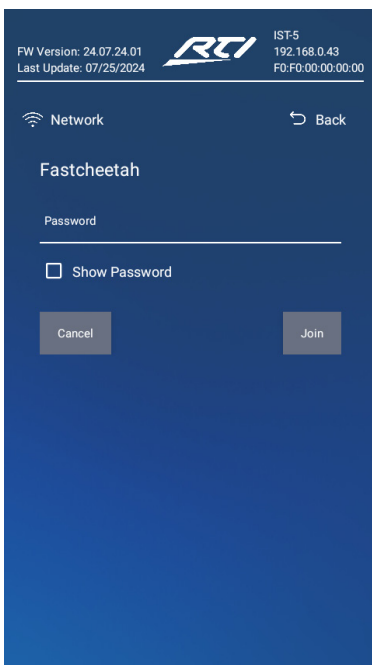
There are two methods to set up a Wi-Fi network.

Option 1 – Scan for Available Wi-Fi Connections

Enabling the toggle switch for the Wi-Fi will start a search of the access points in your area with a good signal strength and list them with their SSIDs and their security level shown by the lock symbol.



Choose any of these access points by clicking on the name which, depending on security requirements, will then open up a dialog box to enter the password.



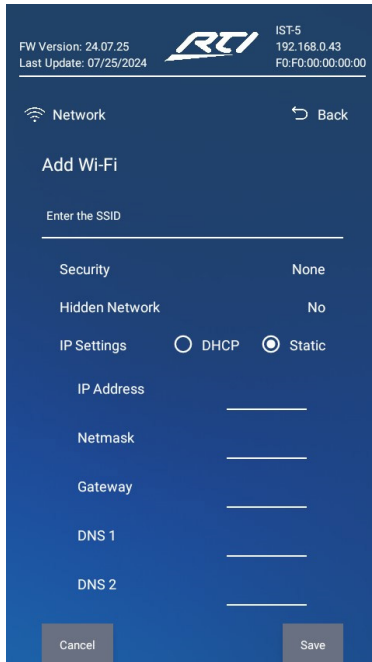
Click anywhere along the line under the name of the chosen access point (starting with the word

“Password”) will open an alphanumeric keyboard to enter your password. Click on the “show Password” to view what you are typing. Once complete, click “Join” to confirm, or “Cancel” to return to the list.

Option 2 – Enter Wi-Fi Information Directly

This option bypasses the scan feature and enables you to enter all the access point information manually. This is particularly useful for hidden SSID access points.

Click on the “+ Add Network” box which will open a page to enter all the specific details about the network you want to connect to. Progress down the list of dialog boxes and toggles to enter all your information. As you select each field, the appropriate popup boxes will appear with choices for your selection. Switching between DHCP and Static will expand or contract additional information to enter. Once complete, click on “Save” to join the network, or “Cancel” to go back to the previous screen.



The screenshot shows the RTI Network configuration interface. At the top, it displays 'FW Version: 24.07.25', 'Last Update: 07/25/2024', the RTI logo, and 'IST-5' with IP '192.168.0.43' and MAC 'F0:F0:00:00:00:00'. Below this is a 'Network' header with a 'Back' button. The main section is titled 'Add Wi-Fi' and contains the following fields and options:

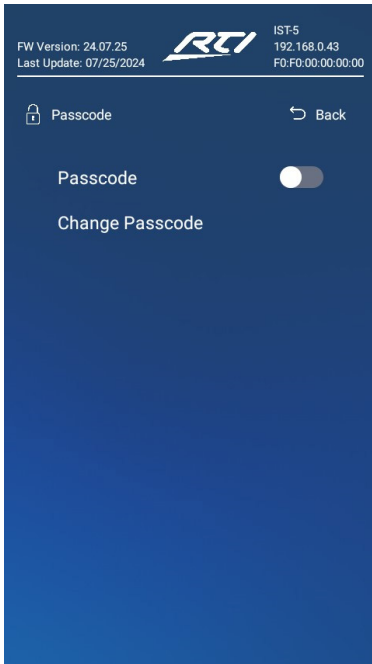
- 'Enter the SSID' with a text input field.
- 'Security' set to 'None'.
- 'Hidden Network' set to 'No'.
- 'IP Settings' with radio buttons for 'DHCP' (unselected) and 'Static' (selected).
- 'IP Address' with a text input field.
- 'Netmask' with a text input field.
- 'Gateway' with a text input field.
- 'DNS 1' with a text input field.
- 'DNS 2' with a text input field.

At the bottom, there are 'Cancel' and 'Save' buttons.

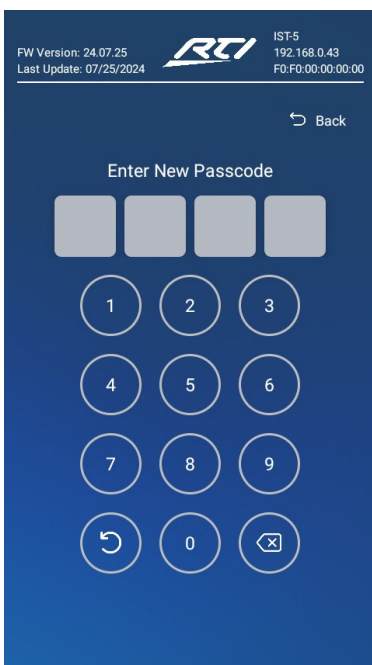
Passcode Setting

Enabling a passcode can restrict access to the settings page for a user when the IST-5 is running an ID program. This is particularly useful to allow select users to adjust the settings of the IST-5.

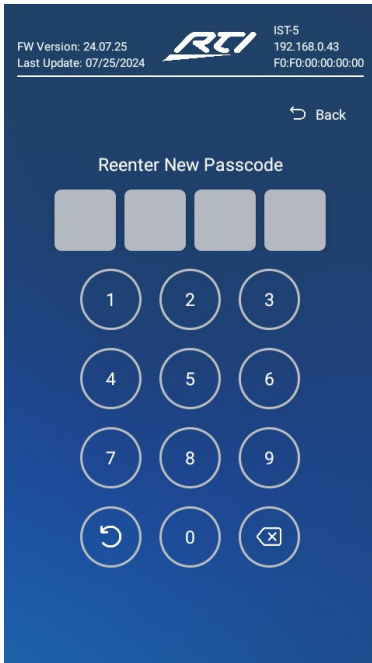
When first selecting “Passcode” from the menu, if a passcode has not previously been assigned either by the user or through ID, it will default to disabled and show the following screen.



Clicking on the toggle to the far right of the “Passcode” word will immediately take you to the creation of a passcode four-digit number.



Use the number keypad on the IST-5 to select the code which will appear on the grey squares. Once the fourth digit is entered you will be asked to enter the passcode a second time to verify.



FW Version: 24.07.25
Last Update: 07/25/2024

RTI

IST-5
192.168.0.43
F0:F0:00:00:00:00

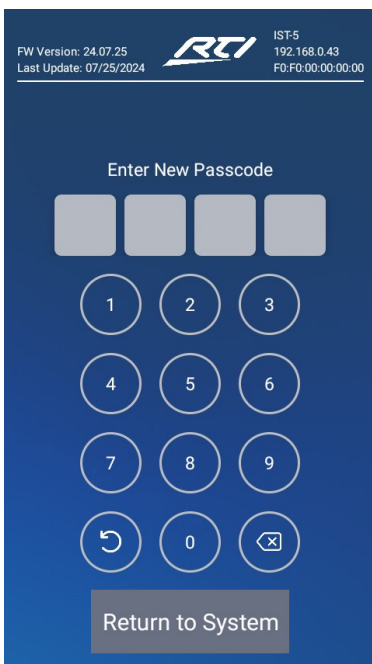
Back

Reenter New Passcode

Four grey squares for passcode entry.

Numeric keypad with digits 1-9, 0, a back arrow, and a delete key.

Once completed, the screen will return to the main menu. From then on the settings menu is accessed when the IST-5 is running an ID program, the user will be prompted to enter the correct four-digit passcode.



FW Version: 24.07.25
Last Update: 07/25/2024

RTI

IST-5
192.168.0.43
F0:F0:00:00:00:00

Enter New Passcode

Four grey squares for passcode entry.

Numeric keypad with digits 1-9, 0, a back arrow, and a delete key.

Return to System

About Settings

This screen is a great way of summarizing the information of your IST-5 device. Contained in this information are the following:

Name: name of the IST-5 given by ID program file

Model: type of device, IST-5

Wired

- IP address
- IPv6 address (if available)
- MAC address

Wi-Fi

- IP address
- IPv6 address (if available)
- MAC address

FW Version: The current version of firmware loaded onto the IST-5.

OS Version: This is a long filename that is used for RTI reference to help determine what version of OS is installed on the device.

Last Update: This indicates the last time anything was downloaded or changed on the IST-5 device.



Additionally at the bottom are some buttons to quickly perform some useful functions.

Reboot

This reboots the IST-5 restarting back either at the settings screen if there is no ID program loaded or restarts the ID file if one already exists.

Network Reset

This resets only the network settings, returning them to the default state of DHCP enabled. This is particularly useful if the network is not responding or there is a problem with a static IP address as it will return the IST-5 back to DHCP.

Settings Reset

This will reset all the settings that have been updated locally through the settings menu and revert either to the original settings for the ID file, or to the default if no program is loaded

Factory Reset

This will erase all updates, including firmware version, and revert the IST-5 back to the condition it was in on original purchase. This is useful for any issues with corrupted files. Note that the factory reset will not reset the OS version.

Safety Suggestions

Read and Follow Instructions

Read all safety and operating instructions before operating the unit.

Retain Instructions

Keep the safety and operating instructions for future reference.

Heed Warnings

Adhere to all warnings on the unit and in the operating instructions.

Accessories

Only use attachments/accessories specified by the manufacturer.

Heat

Keep the unit away from heat sources such as radiators, heat registers, stoves, etc., including amplifiers that produce heat.

Power

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

Power Sources

Connect the unit only to a power source of the type described in the operating instructions, or as marked on the unit.

Power Sources

Connect the unit only to a power supply of the type described in the operating instructions, or as marked on the unit.

Power Cord Protection

Route power supply cords so that they are not likely to be walked on or pinched by items placed on or against them, paying particular attention to the cord plugs at power receptacles and at the point at which they exit from the unit.

Water and Moisture

Do not use the unit near water—for example, near a sink, in a wet basement, near a swimming pool, near an open window, etc.

Object and Liquid Entry

Do not allow objects to fall or liquids to be spilled into the enclosure through openings.

Servicing

Do not attempt any service beyond that described in the operating instructions. Refer all other service needs to qualified service personnel.

Damage Requiring Service

The unit should be serviced by qualified service personnel when:

- The power supply cord or the plug has been damaged.
- Objects have fallen or liquid has been spilled into the unit.
- The unit has been exposed to rain.
- The unit does not appear to operate normally or exhibits a marked change in performance.
- The unit has been dropped or the enclosure has been damaged.

Cleaning

To clean this product, lightly dampen a lint-free cloth with plain water or a mild detergent and wipe the outer surfaces. **NOTE:** Do not use harsh chemicals as damage to the unit may occur.

Federal Communications Commission Notice

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the device.

This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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

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

Industry Canada Compliance Statement

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

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

Cet appareil est conforme avec Industrie Canada exempts de licence standard RSS (s). Son fonctionnement est soumis aux deux conditions suivantes:

1. Ce dispositif ne peut causer des interférences nuisibles.
2. Cet appareil doit accepter toute interférence reçue y compris des interférences qui peuvent provoquer un fonctionnement indésirable.



Declaration of Conformity (DoC)

The Declaration of Conformity for this product can be found on the RTI website at:
www.rticontrol.com/declaration-of-conformity

Contacting RTI, an AVPro Brand

For news about the latest updates, new product information, and new accessories, please visit our web site at: www.rticontrol.com

For general information, you can contact RTI at:

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Sioux Falls, SD 57104

Tel. 877-886-5112

Tel. International +1-605-274-6055

RTISupport@avproglobal.com

Service & Support

If you are encountering any problems or have a question about your RTI product, please contact RTI Technical Support for assistance (see the Contacting RTI section of this guide for contact details).

AVPro provides technical support by telephone or e-mail. For the highest quality service, please have the following information ready:

- Your Name
- Company Name
- Telephone Number
- E-mail Address
- Product model and serial number (if applicable)

If you are having a problem with hardware, please note the equipment in your system, a description of the problem, and any troubleshooting you have already tried.

Please do not return products to AVPro without return authorization.

Limited Warranty

AVPro Global Holdings, LLC warrants new products for a period of three (3) years (excluding consumables such as rechargeable batteries which are warranted for one (1) year) from the date of purchase by the original purchaser (end user) directly from AVPro Global Holdings, LLC (herein referred to as "AVPro"), or an authorized AVPro dealer.

Warranty claims may be initiated by an authorized AVPro dealer using the original dated sales receipt or other proof of warranty coverage. In the absence of the receipt of purchase from the original dealer, AVPro will provide warranty coverage extension of six (6) months from the date code of the product. Note: AVPro warranty is limited to the provisions set forth in this policy and does not preclude any other warranties offered by third parties who are solely responsible for those other warranties.

Except as specified below, this warranty covers defects in product material and workmanship. The following are not covered by the warranty:

- Product purchased via unauthorized sellers or internet sites will not be serviced- regardless of purchase date.
- Damages caused by accident, misuse, abuse, neglect or acts of God.
- Cosmetic damage, including, but not limited to, scratches, dents and normal wear and tear.
- Failure to follow instructions contained in the Product Installation Guide.
- Damages due to products used in an application or environment other than that for which it was intended, improper installation procedures or adverse environmental factors such as incorrect line

voltages, improper wiring, or insufficient ventilation.

- Repair or attempted repair by anyone other than AVPro or authorized service partners.
- Failure to perform recommended periodic maintenance.
- Causes other than product defects, including lack of skill, competence or experience of user.
- Damage due to shipment of this product (claims must be made to the carrier).
- Altered unit or altered serial number: defaced, modified or removed.

AVPro is also not liable for:

- Damages caused by its products or for failure of its products to perform, including any labor costs, lost profits, lost savings, incidental damages, or consequential damages.
- Damages based upon inconvenience, loss of use of the product, loss of time, interrupted operation, commercial loss, any claim made by a third party or made on behalf of a third party.
- Loss of, or damage to, data, computer systems or computer programs.

AVPro's liability for any defective product is limited to repair or replacement of the product, at the sole discretion of AVPro. In cases where the warranty policy conflicts with local laws, the local laws will be adopted.

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