PRESTEL

Prestel ADP-WBT2

Bluetooth Panel Control Software

USER MANUAL

Contents

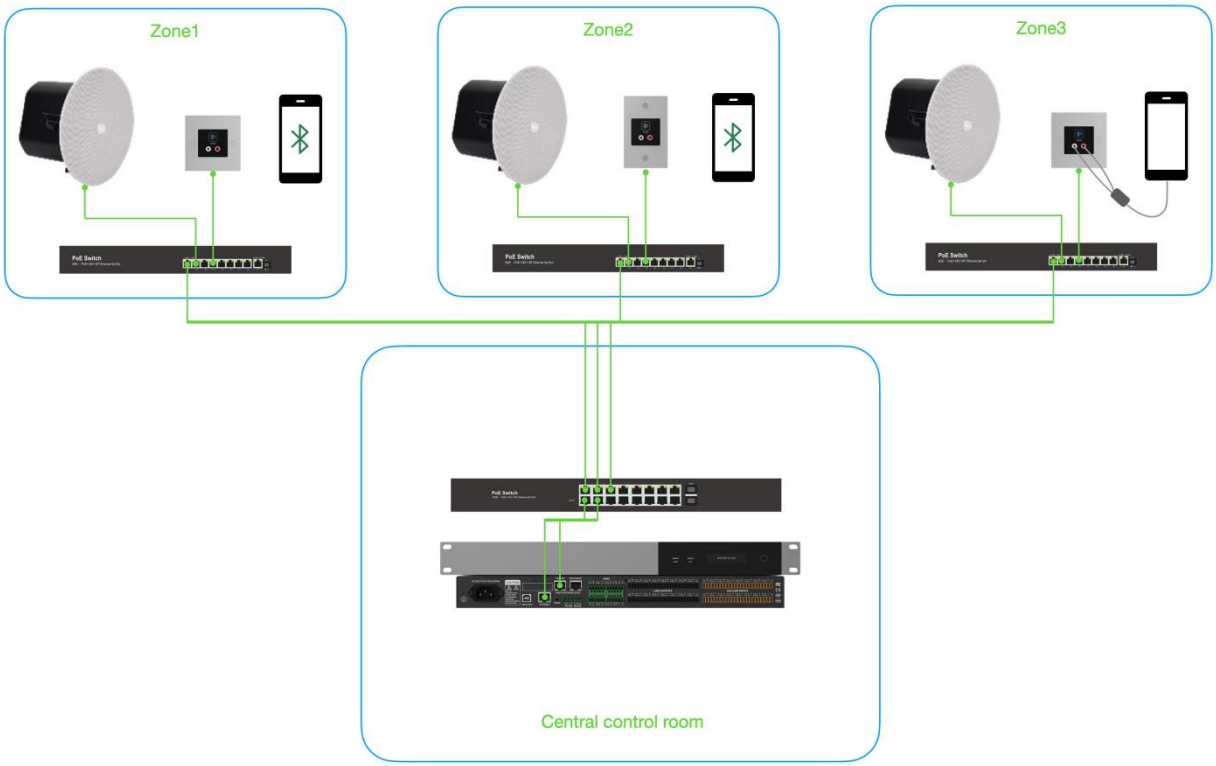
1 Technology Overview

1.1 Introduction to Technology

This Bluetooth panel is powered by a standard IEEE 802.3af PoE network solution and also supports the Dante network protocol, significantly reducing deployment cost and improving ease of use. On the hardware side, the panel adopts the Bluetooth SIG 5.0 standard with a standard stereo audio channel, delivering stable and reliable performance with substantially improved transmission distance and data rate. It integrates a Dante module and an analog input interface, allowing Bluetooth audio or analog input signals to be converted into Dante audio outputs. On the software side, the panel supports software-based control, such as increasing or decreasing volume, modifying the Bluetooth panel name, and switching audio sources, making operation more convenient for you. The Bluetooth panel is available in two different sizes to accommodate European and North American wall box standards, and installation is straightforward.

1.2 Typical System Application

The diagram below illustrates a Bluetooth application in a pure networked audio reinforcement system. The Bluetooth panel connects to a PoE switch for power supply, control, and signal transmission, while audio signals are processed and distributed through a DSP processor.



2 Hardware

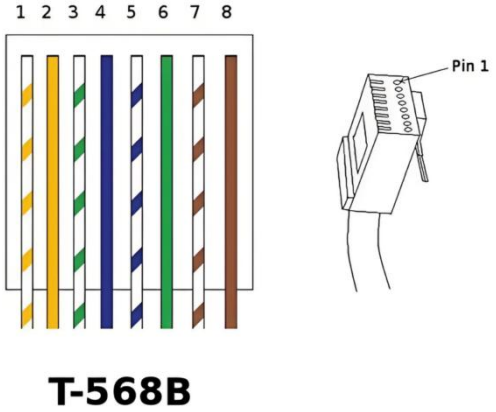
2.1 Safety

Important Safety Instructions

1. Read these instructions.
2. Retain these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this device near water. The device must not be exposed to dripping or splashing, and no objects filled with liquids, such as vases, should be placed near the device.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install the device only in accordance with the manufacturer's instructions.
8. Do not install the device near any heat sources such as radiators, heat registers, stoves, or other equipment that produces heat, including power amplifiers.
9. Use a protective grounding connection. Do not connect this device to a mains power outlet, as the panel is powered via a PoE network supply.
10. Protect cables from being walked on or pinched, especially at plugs, sockets, and the point where they exit the device.
11. Use only attachments and accessories specified by the manufacturer.
12. Use only carts, tripods, brackets, or tables specified by the manufacturer or sold with the device. When a cart is used, move the cart and device combination with caution to avoid injury from tipping over.
13. Disconnect the device from its power supply during lightning storms or when it will not be used for extended periods.
14. Refer all servicing to qualified service personnel. Servicing is required when the device has been damaged in any way, such as damage to cables or connectors, liquid spillage, objects falling into the device, exposure to rain or moisture, abnormal operation, or if the device has been dropped.

2.2 Network Cable RJ45 Reference

Pinout

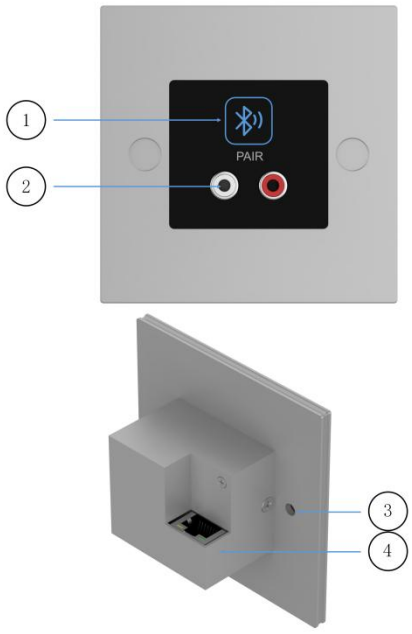


2.3 Device Parameters

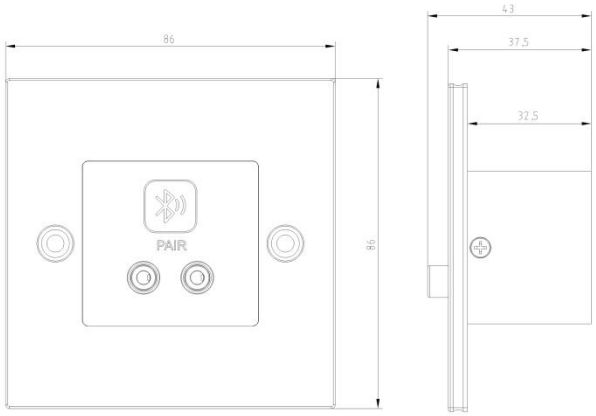
Product Specifications:
Power Supply: PoE, IEEE 802.3af
Bluetooth Channels: 2
Dante Channels: 2
Analog Channels: 2 RCA
Sample Rate: 48 kHz
Bit Depth: 24 bit
Bluetooth Standard: v5.0
Transmit Power: 9 dBm
Network Port: RJ45
Chassis Material: Sandblasted aluminum alloy
Dimensions (W x H x D):
EU standard 86 x 86 x 32.5 mm,
US standard 115 x 70 x 32.5 mm

2.4 Panel Style

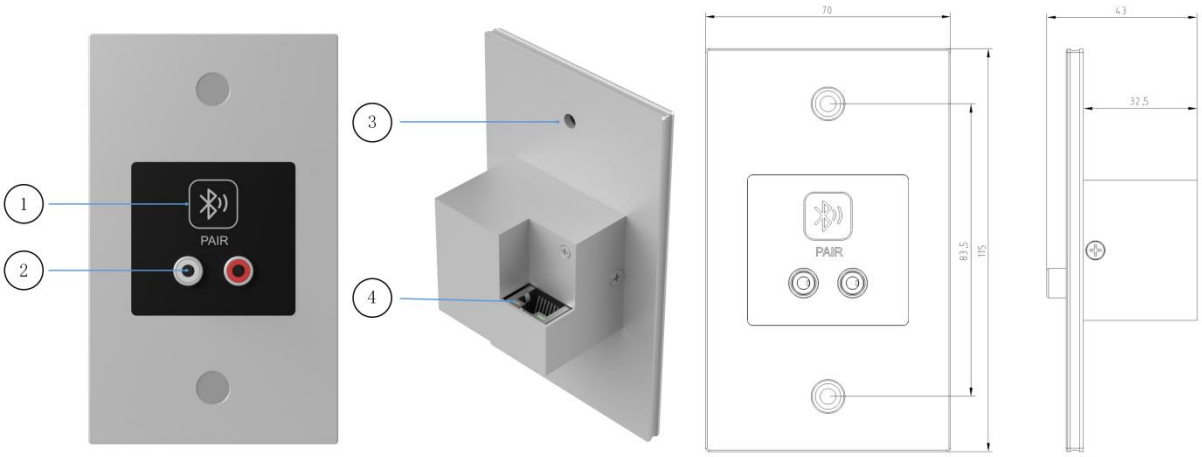
EU Standard



1. Bluetooth Button: Blinking for pairing, steady on when connected, press to switch to analog source.
2. RCA Interface: Connects external stereo sources, supports switching with Bluetooth stereo signals.
3. Mounting Holes: Compatible with EU standard junction boxes, for secure device installation.
4. Network Interface: Supports PoE power supply, enables Dante network audio transmission and software control.



US Standard



1. Bluetooth Button: Blinking for pairing, steady on when connected, press to switch to analog source.
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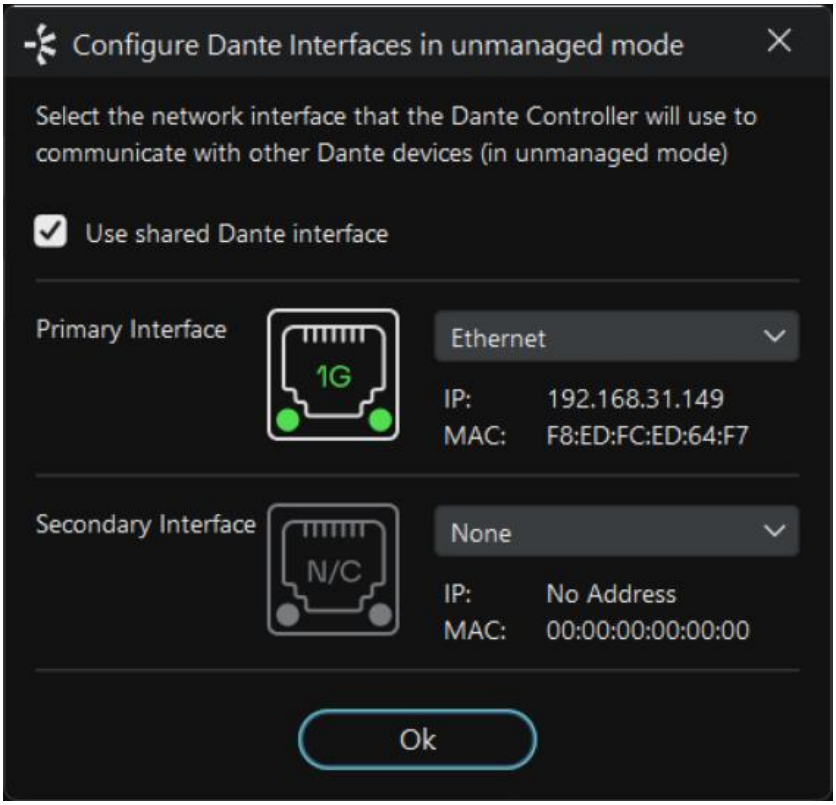
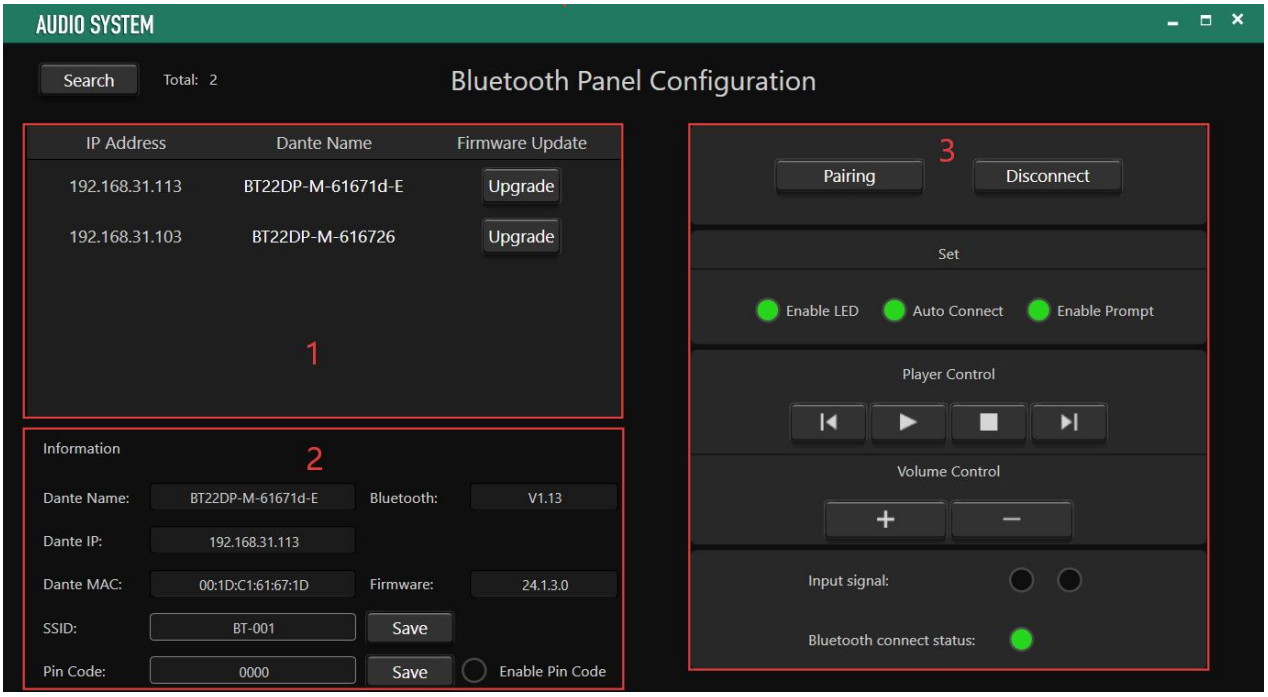
3 Operation Settings

Note: Before using the Bluetooth control software, you must first ensure that the Dante Controller application is installed on the computer. In the Dante Controller software, you must enable the option “Use shared Dante interface”. If this option is not enabled, the Bluetooth panel software may fail to discover the corresponding Bluetooth devices.



3.1 Software Description

The control software is divided into 3 main operating areas, as shown in the figure below.



Area 1: This area lists all Bluetooth panel devices discovered within the local network. Each Bluetooth panel is identified by its Dante IP address and Dante device name. If you need to modify this information, make the changes in the Dante Controller software for the corresponding device. Firmware Upgrade is used to update the firmware of the Bluetooth panel.

Area 2: This area displays Bluetooth panel device information, including the Bluetooth software version, firmware version, and Dante-related information. The Bluetooth SSID represents the name shown on the client device and can be modified in this area. Click Save to apply the changes. The PIN Code is the password required for initial Bluetooth pairing. You can enable or disable it in this area and change the password as needed.

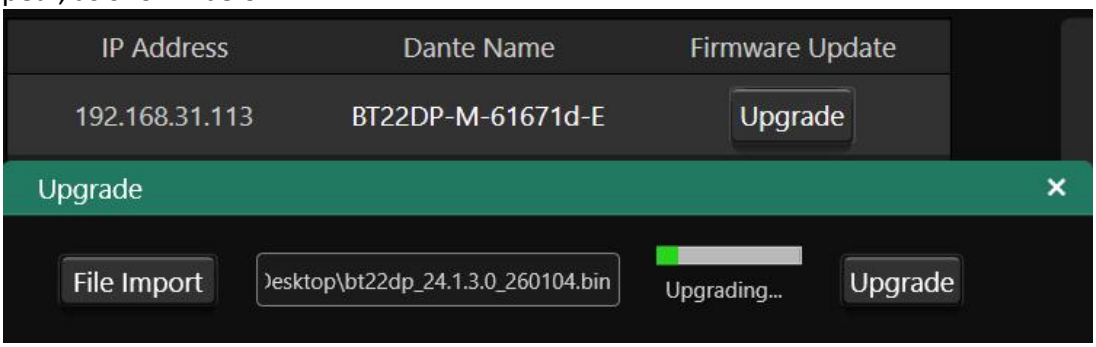
Area 3: This is the Bluetooth pairing and control area, used for pairing with client devices, operational control, and mode switching.

3.2 Operation Introduction

3.2.1 Software Operation

Area 1

Firmware Upgrade: In software Area 1, you can only perform firmware upgrades for the Bluetooth panel. After selecting the target panel device and clicking Upgrade, a dialog window will appear, as shown below.



Click Import File to select the appropriate firmware file, then click Upgrade in the dialog to start the firmware update for the selected Bluetooth panel. During the firmware upgrade process, do not power off the Bluetooth panel or perform any other operations, as this may cause the panel to become unresponsive or no longer discoverable.

After the firmware upgrade is completed, a message indicating Upgrade Successful will be displayed, confirming that the update is complete. Each panel must be upgraded individually, as batch upgrades are not supported.

Area 2

Bluetooth SSID Setting: You can modify the name of the Bluetooth panel as displayed on the client device. English letters and symbols are supported. The maximum length is 32 bytes using UTF-8 encoding, where each English character or symbol occupies 1 byte. The name can contain up to 30 bytes. After making changes, click Save. A successful name update indicates that the SSID has been set correctly.

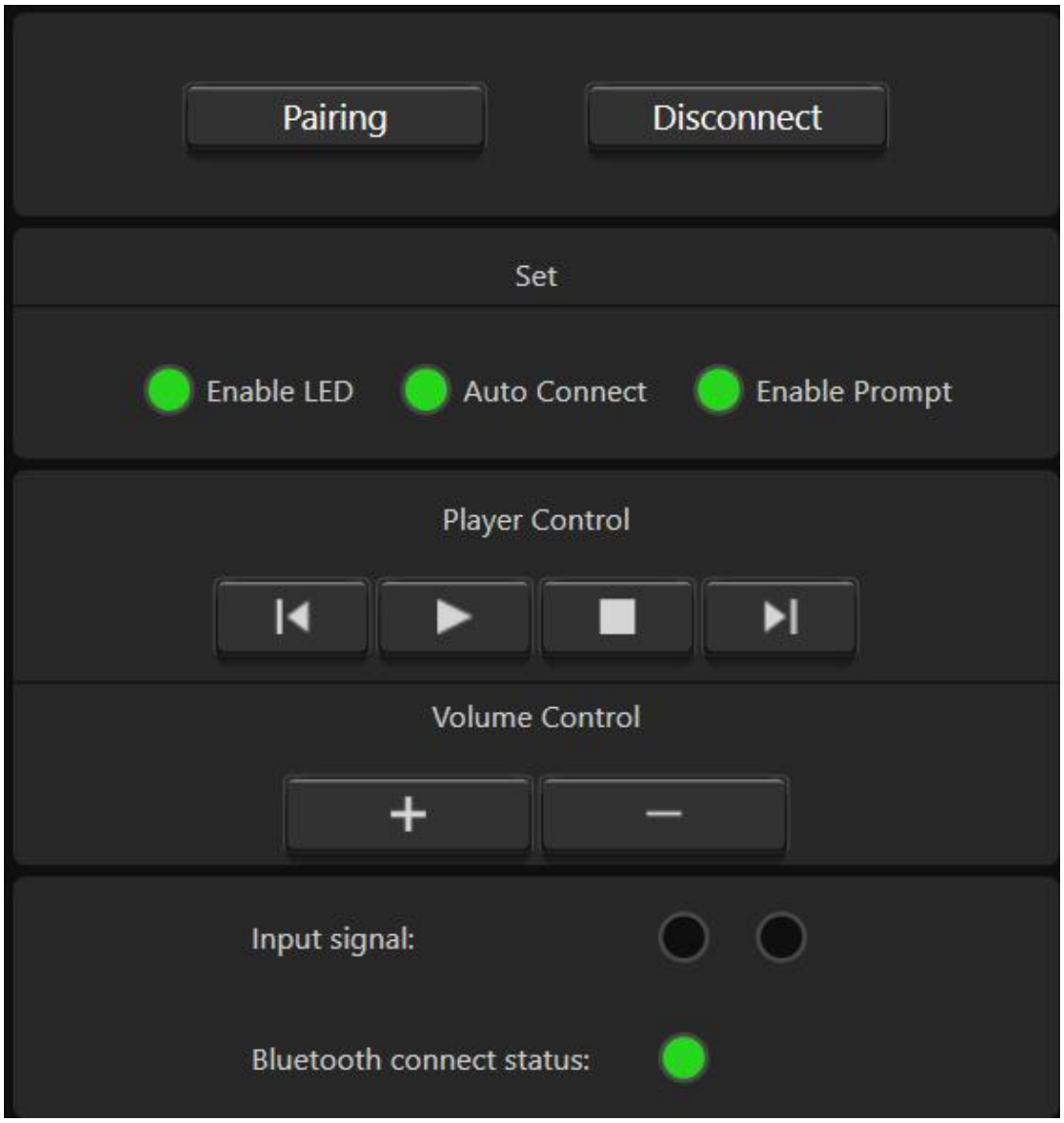
Note: If the Bluetooth panel has already been paired with a client and the client is currently in the Connected state, modifying the SSID and clicking Save will disconnect the client. The client

name will then automatically update to the new SSID. To reconnect, simply click Pairing again on the client.

PIN Code Setting: You can enable PIN code verification for initial client pairing to prevent unauthorized devices from pairing. The PIN code must consist of 4 digits. After setting the PIN code, click Save. If PIN code verification is not required, turn off the green Enable PIN Code indicator. PIN code settings or changes apply only to devices that pair for the first time. For clients that were already paired previously, PIN code settings or changes will not take effect. To apply the PIN code to such devices, you must remove or forget the Bluetooth device on the client and then re-enter pairing mode. During the pairing process, the PIN code will be required for verification.

Note: If the Bluetooth panel has already been paired with a client and the client is currently connected, changing the PIN code and clicking Save will disconnect the client. Enabling or disabling the PIN code option will also disconnect an active client. To reconnect, simply initiate the connection again on the client.

Area 3



Pairing: Enables pairing mode on the Bluetooth panel. For initial use, click the Pairing button in the software or press the Bluetooth logo on the panel, when the LED function is enabled. The Bluetooth logo will flash, indicating that the panel has entered pairing mode. Once in pairing mode, both computers and mobile devices can discover the Bluetooth panel, and the device name displayed will be the SSID. When a device has been successfully paired and connected, clicking the Pairing button again will disconnect the Bluetooth connection and re-enter pairing mode. If the Bluetooth panel is connected to both a Bluetooth device and an RCA analog input at the same time, Bluetooth audio has priority. When Bluetooth audio is playing, clicking Pairing will disconnect Bluetooth and switch to the RCA line-level audio input.

Disconnect: Disconnects a client device that is currently connected. If the Bluetooth panel is in pairing mode, clicking Disconnect will only exit pairing mode. After exiting pairing mode, unpaired third-party devices will no longer be able to discover the Bluetooth panel. In this state, even previously paired clients will not be able to reconnect automatically and must re-enter pairing mode by clicking Pairing in the software or pressing the Bluetooth logo on the panel to reconnect successfully. When the Bluetooth panel and a client are connected and audio is playing, clicking Disconnect will terminate the Bluetooth connection. If there is an audio signal present on the RCA input at that time, playback will switch to the RCA audio source. When Bluetooth reconnects successfully, audio will automatically switch back to the Bluetooth source.

Enable LED: Turns the Bluetooth logo LED on or off. When disabled, the logo LED will not be visible on the panel in either pairing or disconnected states. It is recommended to keep the logo LED enabled.

Auto Connect: After the Bluetooth panel has been paired and successfully connected to a client, you can disconnect it using the Bluetooth logo button and then enter Auto Connect mode. In this mode, the panel will automatically reconnect to the client device. The connection logic follows the third Auto Connect mode associated with the Bluetooth logo button on the panel.

Enable Prompt Tone: When enabled, a beep tone will be played each time a device connects successfully, indicating a successful connection. This prompt tone is relatively loud, so enable it as appropriate for the application. No prompt tone is played when a device disconnects.

Playback Control:

 Previous Track

 Play

 Pause (behavior may vary depending on the client application, such as pausing at the current position or returning to the start of the track)

 Next Track

 Volume Control: Increases or decreases the audio volume.

Bluetooth Input Signal: When a Bluetooth connection is established and the client is playing audio, the indicator will light, indicating that a Bluetooth audio signal is present.

Bluetooth Connection Status: Indicates the connection status between the Bluetooth panel and the client device.

The functions described above apply only to the first client that successfully connects. In this case, a simple disconnect-and-reconnect process is required for any additional client devices.

3.2.2 Hardware Operation

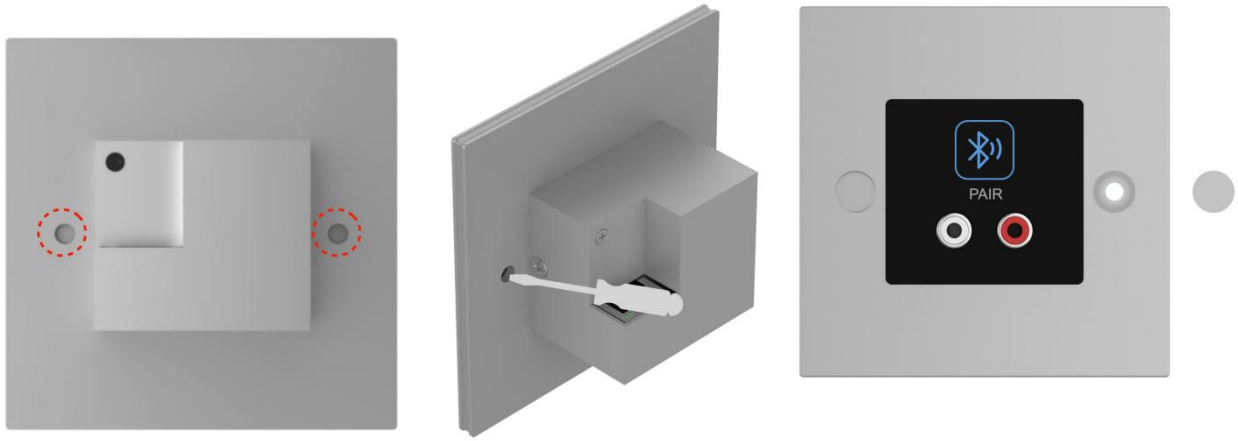
Bluetooth Logo Touch Button: The touch button cycles through three operating states in sequence.

1. Pairing Mode: When you touch the button once, the logo LED flashes (LED indication enabled), indicating that the panel has entered pairing mode. Client devices can search for the panel to pair, or previously paired devices can establish a Bluetooth connection.
2. Disconnect Mode: When the panel is in pairing mode, touching the button again turns off the logo LED and switches the panel to disconnect mode. Any currently connected Bluetooth client device will be disconnected. In disconnect mode, client devices cannot discover the panel, and previously paired devices cannot reconnect. Reconnection requires entering pairing mode again. If the Bluetooth panel is receiving RCA line input audio, playback will switch to the RCA source automatically when in disconnect mode.
3. Auto Connect Mode: Provided Auto Connect is enabled, touching the button In disconnect mode keeps the logo LED off, but the panel will attempt to automatically reconnect to the last successfully paired device. If Auto Connect is disabled, the panel will automatically switch to pairing mode after 3 seconds. When Bluetooth connection occurs, any RCA line input audio will be disconnected and switched to Bluetooth audio, as Bluetooth audio has priority over RCA audio. If the last connected device is not available, the panel will attempt to reconnect to other previously paired devices that are currently online, in sequence.

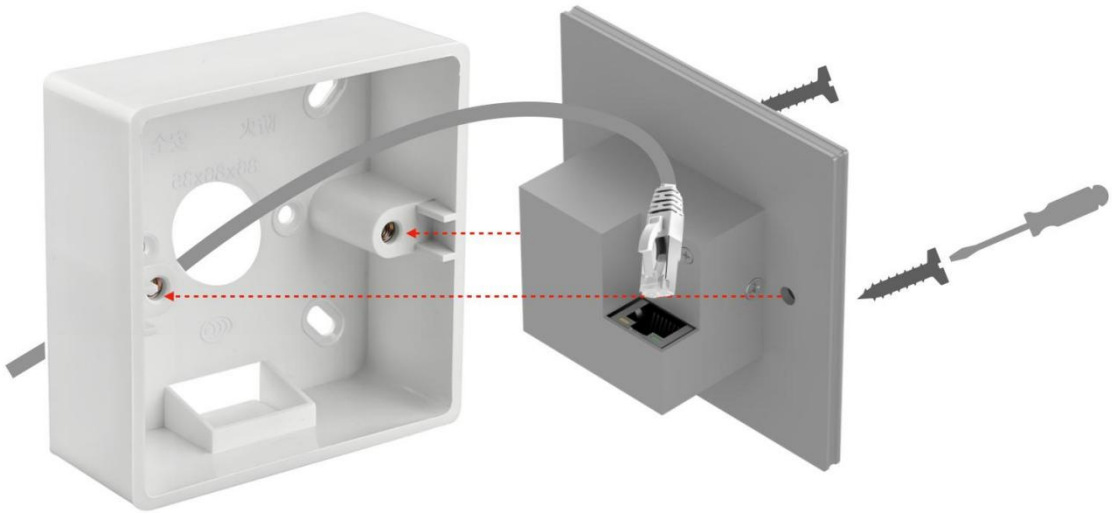
4 Panel Installation

Before installing the panel, confirm the compatible mounting box: European standard panels fit 86-type boxes, and North American standard panels fit 120-type boxes. It is also recommended to verify power supply, functionality, signal transmission, and control before proceeding with installation.

Step 1: After confirming there are no quality or functional issues, use a small screwdriver or suitable tool to push out the PVC screw hole spacers from the back of the panel. The spacers are attached with pressure-sensitive adhesive, so handle carefully to avoid injury, as shown below.



Step 2: Take the screws provided with the panel. Using a suitable Phillips screwdriver, thread the screws through the panel's mounting holes into the corresponding holes in the installation box. Before tightening the screws, insert the network cable. Then securely fasten the screws on both sides (top and bottom), as shown below.



Step 3: Reattach the two panel mounting hole spacers that were removed in Step 1. Installation is now complete.

Thank you for reading this manual section.
We hope it helps you quickly understand and operate the device.
If you encounter any errors, unclear explanations, or technical issues, please contact us for prompt clarification and correction.