PA-5150BT

5″ 150-WATT
PORTABLE
PA SYSTEM



POLSEN®

PRODUCT
MANUAL

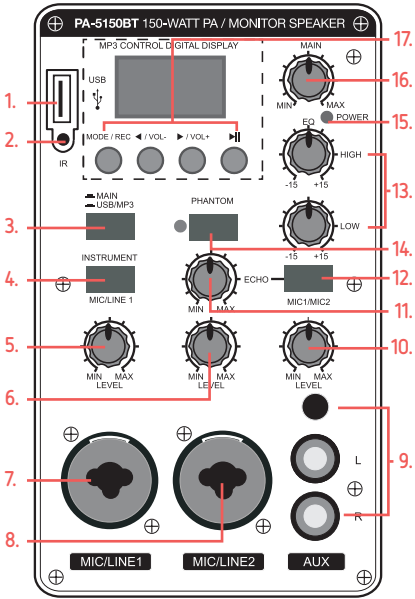
THANK YOU FOR CHOOSING POLSEN.

The Polsen PA-5150BT is an active PA system that's ideal for solo performers or vocalists. It can be used as a PA system at smaller venues or clubs, or as a monitor in a multi-speaker setup. The PA-5150BT is designed to give you hands-on control over the level of your microphones, instruments, or other line-level signals during performance. Its compact size, easy-to-carry weight, and rugged construction make it easy to set up on a mic stand and transport to gigs or rehearsals.

At its core, the PA-5150BT features a 5-inch driver and a 150 W class-D amplifier that offers plenty of power to fill a room with clear and accurate sound. It features two inputs that accept mic- and line-level signals, and an aux stereo input for a CD, DVD, or other line-level audio source. An additional 3.5 mm mini-plug input can be used for an MP3 player or a smartphone. An integrated mixer with 2-band EQ and an echo effect provide creative control of your sound.

PRECAUTIONS ⚠

- Please read and follow these instructions, and keep this manual in a safe place.
- Keep this unit away from water and any flammable gases or liquids.
- Make sure the unit is powered off when plugging it into a power source.
- Use only the correct, recommended voltage.
- Do not attempt to disassemble or repair the equipment—doing so will void the warranty, and Polsen will not be responsible for any damage.
- Clean the unit with only a soft, dry cloth.
- Make sure that this product is intact and that there are no missing parts.
- Exposure to high sound levels can cause permanent hearing loss. Avoid listening at high volumes for extended periods of time.
- All images are for illustrative purposes only.



FRONT PANEL

1. USB
   - Connect a thumb drive to play MP3s.
   - Record the output of the PA-5150BT to a USB disk.
2. IR sensor
   - Needs line-of-sight connection to receive signals from the remote.
3. Source Selector
   - MAIN: Sends the Ch. 1 & 2 and Aux input signals to the output.
   - USB/MP3: Sends Bluetooth or USB input signal to the output.
4. Instrument
   - Changes the channel 1 line input to an instrument inputs. Connect a high-impedance instrument, such as an electric guitar or electric bass, to the PA-5150BT, without a direct box.

5 & 6. Ch. 1 and 2 Input Gain Level
   - Adjusts the gain of the mic/line-level signal for each channel.

7 & 8. Mic/Line Inputs (Ch. 1/ Ch. 2)

- Combo jacks accept balanced XLR mic cables, 1/4 in. balanced, or 1/4 in. unbalanced cables.

9. Aux Inputs

- RCA jacks accept stereo line-level input from a stereo, DVD player, or other line-level audio source. The 3.5 mm jack accepts a TRS mini-plug connector from devices like MP3 players or smartphones.

10. Aux Input Gain Level

- Adjusts the Aux input level from devices connected to the RCA or the mini jacks.

11. Echo

- Controls the echo level that's added to channels 1 or 2. It will not add echo to the Aux input signals.

12. Mic 1/Mic 2 Switch

Up**:** Adds echo to the signal from inputs 1 and 2.

Down**:** Adds echo to the signal from input 2 only.

13. Two-Band EQ

- Cuts or boosts high and low frequencies by up to 15 dB**:**
  - High (12 kHz) Brightens overall sound and adds clarity and brightness to vocals.
  - Low (80 Hz) Adds punch to bass guitars or kick drums, and resonance to low male vocals.

14. Phantom Power and Phantom Power Indicator

- Provides +48 V phantom power for condenser microphones.

15. Power Indicator
16. Main Level
    - Controls the master volume.
17. MP3 Functions & LCD Screen

MODE/REC

- Press the MODE/REC button repeatedly to select Bluetooth, Record, or MP3 mode.
  Note: The PA-5150BT automatically enters MP3 mode and begins to play back stored MP3 files when a device is plugged into the USB port.

◀/VOL-

- Press to return to the beginning of a track or to jump to the previous track.
- Press and hold to decrease volume.

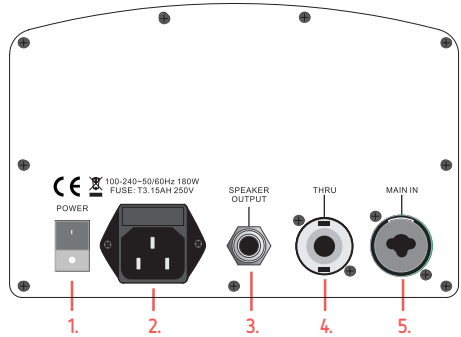
▶/ VOL+

- Press to skip to the next track.
- Press and hold to increase volume.

▶II

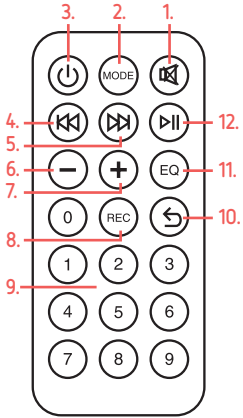
- Pauses and resumes playback.
- Double-press to switch between stored MP3 files and MP3 files that were recorded by the PA-5150BT.

REAR PANEL



1. Power Switch
2. AC Power Socket
3. Speaker Output
   - Select the appropriate signal level for the THRU connector. Select LINE when sending the signal to another PA-5150BT or another speaker. Select MIC when connecting the THRU connector to a mic input on a mixer.
4. THRU
   - The THRU jack accepts a male XLR connector. Use the THRU jack to connect another PA-5150BT or a second speaker. The THRU connector combines signals from the Main Level or EQ with the signal from the Main In.
5. Main In
   - Accepts an XLR male or 1/4-inch balanced TRS connector. Use this input to connect the signal from the THRU connector of another PA-5150BT. The signal from the Main In is mixed with the signals from inputs 1 through 3.

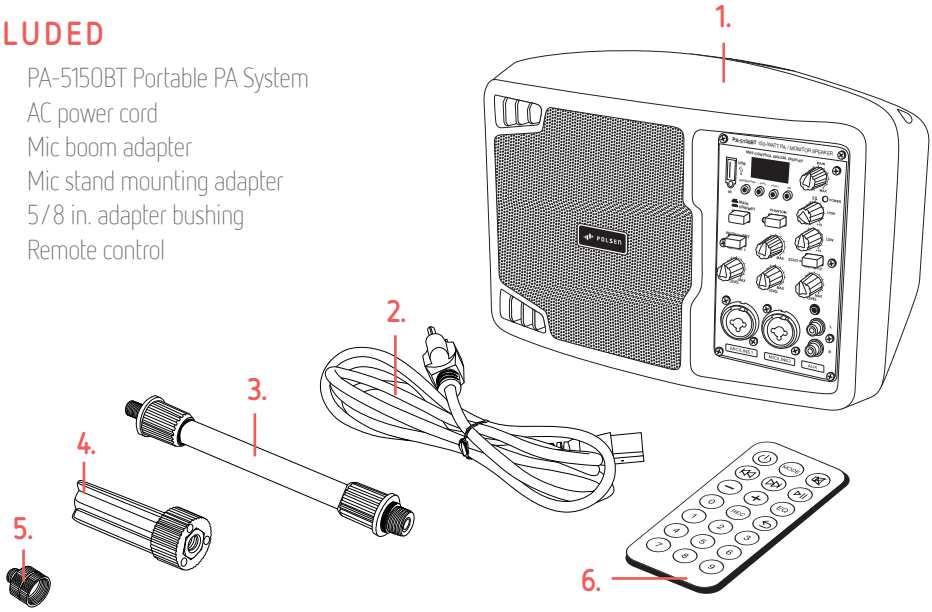
REMOTE



1. Mute
2. Press to switch between Bluetooth and Record modes. If a thumb drive is connected, it will also switch to MP3 mode. (See *Selecting a Mode* below.)
3. Press to turn MP3 mode on or off.
4. Press to skip to the previous track. Press and hold to rewind.
5. Press to skip to the next track. Press and hold to fast forward.
6. Press and hold to lower the volume.
7. Press and hold to raise volume.
8. Press to start recording. Press and hold to stop recording. (See *Record Mode* below.)
9. Press a number to select the corresponding audio file (1 to 9). For tracks numbered higher than 9, use the ⏭ button.
10. Press to select playback options in MP3 mode. (See *Playback Options* under *USB/MP3 Mode*.)
11. Press to select an EQ preset. (See *EQ Presets* in below.)
12. Press to pause and resume playback. Double-press to select a folder. (See *USB/MP3 Mode* below.)

INCLUDED

1. PA-5150BT Portable PA System
2. AC power cord
3. Mic boom adapter
4. Mic stand mounting adapter
5. 5/8 in. adapter bushing
6. Remote control



SETTING UP THE PA-5150BT

One-Speaker Setup

The PA-5150BT can be set up as a personal speaker and monitor.

1. Attach the mic stand mounting adapter to a mic stand by screwing the adapter onto the stand's 5/8-inch threaded post.

Note: If the mic stand's arm has a 1/4-inch post, remove the 5/8-inch bushing from the mounting adapter.

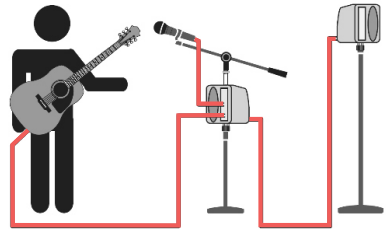
2. Screw the mic boom adapter into the 1/4-inch socket on the top of the PA-5150BT, and tighten the locking collar by turning it clockwise until secure.
3. Align the adapter socket on the bottom of the PA-5150BT with the mic stand mounting adapter, and place it onto the adapter.
4. Attach a mic boom arm onto the mic boom adapter.



Two-Speaker Setup

Use one PA-5150BT as a monitor, and the other as a PA speaker.

1. Set up the PA-5150BT on a mic stand as described above.
2. Plug an XLR female plug into the THRU jack, and attach the other end of the cable (XLR male or 1/4-inch balanced TRS) to the MAIN IN jack.



Using the PA-5150BT as a Monitor with a Passive PA Speaker

1. Set up the PA-5150BT on a mic stand as described above.
2. Use a 1/4-inch male to 1/4-inch male speaker cable to connect the SPEAKER OUT jack to a PA speaker.

SELECTING A MODE

Bluetooth, Record, and USB/MP3 modes are accessed by pressing the MODE/REC button.

BLUETOOTH MODE

By activating Bluetooth mode, you can play audio from any Bluetooth device such as a smartphone or tablet. To use Bluetooth mode, follow these steps:

1. Press the MODE/REC button repeatedly until *Bluetooth* appears onscreen.
2. Enable Bluetooth on your smartphone, and select TB7 in the device list. The PA-5150BT will automatically pair with your device and display *BT Connected* onscreen.
3. Set the source selector to USB/MP3.

Play/pause, volume control, and forward and back track selection can be controlled from the front panel or from the remote.

Note: The record function is disabled in Bluetooth mode.

Using the Remote:

1. Press MODE repeatedly until *Bluetooth* appears onscreen. Wait until the screen indicates that Bluetooth is connected.
2. Press ⏯ to play
3. Press ⏮ to skip to the previous track. Press and hold to rewind.
4. Press ⏭ to skip to the next track. Press and hold to fast forward.

RECORD MODE

The PA-5150BT will record any audio sent to the main output. It will not record in Bluetooth or MP3 modes. To record audio to the PA-5150BT, follow these steps:

1. Attach a thumb drive to the PA-5150BT.
2. Press the MODE/REC button repeatedly until *Record* appears onscreen.
3. Set the source selector to MAIN.

Important! Do not set the source selector to USB/MP3, or no sound will be recorded.

4. Attach instruments or a playback device to the PA-5150BT, set the gain level on their channels, and add echo to channels 1 or 2 as desired.
5. Press and hold the MODE/REC button until recording begins. The PA-5150BT displays the record time while it's recording.

Press the MODE/REC button to stop recording.

The PA-5150BT will automatically play back the recording. To hear the playback, set the selector to USB/MP3. The PA-5150BT continues to the first recorded track and plays through all recorded tracks until paused.

Note: The PA-5150BT creates a new folder on your USB device for recorded files, and it assigns a consecutive number for each additional track that's recorded. When you access this folder, the PA-5150BT plays files in the order they were recorded.

To return to playing MP3s in other folders on the USB device, double-press the ▷II button, and navigate to the track you want to play.

Using the Remote:

1. Press MODE repeatedly until *Record* appears onscreen.
2. Press REC to record.

Press and hold REC to stop recording.

USB/MP3 MODE

When you insert a thumb drive, the PA-5150BT automatically begins to play back MP3 files that are stored on the drive.

The PA-5150BT will automatically play all MP3 files that are stored on the disk, and it will continue to cycle through the files in the same order until paused.

Select a Folder

If you've saved MP3s to several different folders on your drive, you can select a folder by following these steps:

1. While in MP3 mode, press and hold the MODE/REC button. The current track's name will appear highlighted onscreen.
2. Press the ◀ or ▶ buttons to scroll through the MP3 files in the folder. When you have stopped scrolling, the PA-5150BT will play the selected MP3 in approximately 3 seconds.

Select a Different Folder:

1. Press and hold the MODE/REC button until the name of the current MP3 is displayed onscreen.
2. Repeatedly press ◀ or ▶ until UP LEVEL is highlighted onscreen.
3. In approximately 3 seconds, a list of folders will appear. Use the ◀ or ▶ buttons to scroll through the folder names. When you stop scrolling, the PA-5150BT will begin playing the MP3s in the folder in approximately 3 seconds.

The PA-5150BT will continue to cycle through the MP3s in the selected folder. To change the playback options, see Playback Options at the end of this section.

Listen to Audio Recorded on the PA-5150BT

The PA-5150BT creates a folder on your drive and places all recorded MP3s in it.

The RECORD folder is accessible on a computer, but it cannot be accessed by the above steps to select a folder. In order to play back recorded audio, follow these steps:

1. While in MP3 mode, double-press the ▷II button. The first of your recorded MP3s will begin to play in approximately 3 seconds.
2. To select another MP3, press and hold the MODE/REC button until the current track is highlighted onscreen. Press the ◀ or ▶ button to scroll through the tracks in the folder. When an MP3 is selected, it will automatically play in approximately 3 seconds.
3. To return to the saved MP3s, double-press the ▷II button. The PA-5150BT will play the last stored track that was selected.

Using the Remote:

1. Press ▷II to play and pause.
2. Press ⏮ to skip to the previous track. Press and hold to rewind.
3. Press ⏭ to skip to the next track. Press and hold to fast forward.
4. Press 1 to 9 to play the corresponding numbered track. For tracks numbered higher than 9, use the ⏭ button.

Playback Options (Remote Only)

The PA-5150BT offers three playback options via the remote.

Select whether you want to play MP3 files recorded by the PA-5150BT, or the stored MP3s on your disk, by double-pressing the ⏯ button.

Press the ⮌ button repeatedly to select the desired playback option:

- RPT ALL: Repeats all tracks in the current folder.
- RPT ONE: Repeats the current track.
- RANDOM: Plays the MP3s in random order.
- INTRO: Plays the first ten seconds of your MP3s. After it has cycled through all of the MP3s, the playback reverts to RPT ALL and will play all of the MP3s in their entirety.

EQ PRESETS (REMOTE ONLY)

The PA-5150BT offers five EQ presets: Pop, Rock, Jazz, Classic, Country, and Normal.

The EQ setting is applied to all audio output from the PA-5150BT.

Press the EQ button repeatedly to select the desired EQ. Select Normal for flat response.

SPECIFICATIONS

OUTPUT POWER	RMS: 60 W @ 8 Ω / 2 × 120 W @ 4 Ω Peak: 75 W @ 8 Ω / 2 × 150 W @ 4 Ω
SPEAKER DIAMETER	5 in. (12.7 cm)
INPUT SENSITIVITY	Line 1/Line 2: -40 dBu ±2 dBu (Mic) -22 dBu ±2 dBu (Line) Line 3 (RCA): -10 dBu ±2 dBu Main: 0 dBu ±2 dBu (Mic) 0 dBu ±2 dBu (Line)
COMPRESSION	20 dBu
INPUT IMPEDANCE	20 kΩ
CHANNEL LEVEL CONTROL	∞ to +30 dB
MAX INPUT LEVEL	20 dB
PHANTOM POWER	+48 V
FREQUENCY RESPONSE	-10 dB: 80 Hz to 14 kHz -3 dB: 100 Hz to 10 kHz

MAXIMUM SPL	114 dB SPL @ 1 m
EQ SECTION	**High (12 kHz):** 15 dB ±3 dB **Low (80 Hz):** 15 dB ±3 dB
CONNECTION	**THRU:** XLR, Mic/Line switchable **MAIN IN:** XLR and 1/4 in. TRS
POWER SUPPLY	**Input voltage:** 100 to 240 V AC (3.15 AH 250 V) **Power consumption:** 180 W
DIMENSIONS (H × W × D)	8.1 × 11.3 × 6.8 in. (20.6 × 28.6 × 17.2 cm)
WEIGHT	6.5 lb. (3 kg)

TROUBLESHOOTING

Problem	Solution
The AC power cable is plugged in, but there's no power.	• Make sure both ends of the AC power cable are completely plugged into their respective sockets. • Make sure the wall outlet is live. • Make sure the power switch is in the On position (up), and that the power indicator is illuminated.
There's no sound, or the volume is too low.	Turn down the main volume on the PA-5150BT before troubleshooting this problem. • Check to see if the main level is turned up high enough. • Check the input gain levels to make sure they are turned up. • Make sure the volume control of your input device is turned up. • Make sure all cables are completely connected at both ends. • Check to see if a mute is engaged on the remote. • If your microphone has an on/off switch, make sure it's turned on.
The sound is too loud or distorted.	• Turn down the volume control of your input device. • Turn down the input gain level of the channel that's distorting. • Turn down the main level.
Audio doesn't sound right.	• Use the EQ button on the remote to make sure the EQ is set to NORMAL. • Move the high and low EQ dials to the center position, and adjust the audio as needed.

Problem	Solution
There is audible noise or hum.	• Turn the main volume all the way down. If the noise or hum disappears, the problem is with one of the input devices. • Make sure cables from your input devices are not running near AC or lighting cables or other devices that can create interference. • You may be experiencing a 60 Hz hum (ground loop). Try inserting a hum eliminator in the signal path before it reaches the input of the PA-5150BT. Or use an AC hum eliminator on the power cable of the input device that's creating the hum. • If you're using a direct box, press the ground-lift button.
A thumb drive is connected, and the MP3 is playing, but there's no sound.	• Make sure the main volume is turned up. • Make sure the source selector is switched to USB/MP3. • Skip to another track to make sure the MP3 isn't blank audio.
A smartphone is connected to the Aux input, and it's playing, but there's no sound.	• Make sure the cable is completely connected at both ends. • Check to see if the MAIN volume is high enough. • Make sure the volume control on your device is turned up. • The source selector should be set to USB/MP3. • Make sure the mute isn't engaged on the remote.

ONE-YEAR LIMITED WARRANTY

This Polsen product is warranted to the original purchaser to be free from defects in materials and workmanship under normal consumer use for a period of one (1) year from the original purchase date or thirty (30) days after replacement, whichever occurs later. The warranty provider's responsibility with respect to this limited warranty shall be limited solely to repair or replacement, at the provider's discretion, of any product that fails during normal use of this product in its intended manner and in its intended environment. Inoperability of the product or part(s) shall be determined by the warranty provider. If the product has been discontinued, the warranty provider reserves the right to replace it with a model of equivalent quality and function.

This warranty does not cover damage or defect caused by misuse, neglect, accident, alteration, abuse, improper installation or maintenance. EXCEPT AS PROVIDED HEREIN, THE WARRANTY PROVIDER MAKES NEITHER ANY EXPRESS WARRANTIES NOR ANY IMPLIED WARRANTIES, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. This warranty provides you with specific legal rights, and you may also have additional rights that vary from state to state.

To obtain warranty coverage, contact the Polsen Customer Service Department to obtain a return merchandise authorization ("RMA") number, and return the defective product to Polsen along with the RMA number and proof of purchase. Shipment of the defective product is at the purchaser's own risk and expense.

For more information or to arrange service, visit www.polsenaudio.com or call Customer Service at 212-594-2353.

Product warranty provided by the Gradus Group.
www.gradusgroup.com

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