

# Powerwerks™

## **PW505/BT**

Personal PA System

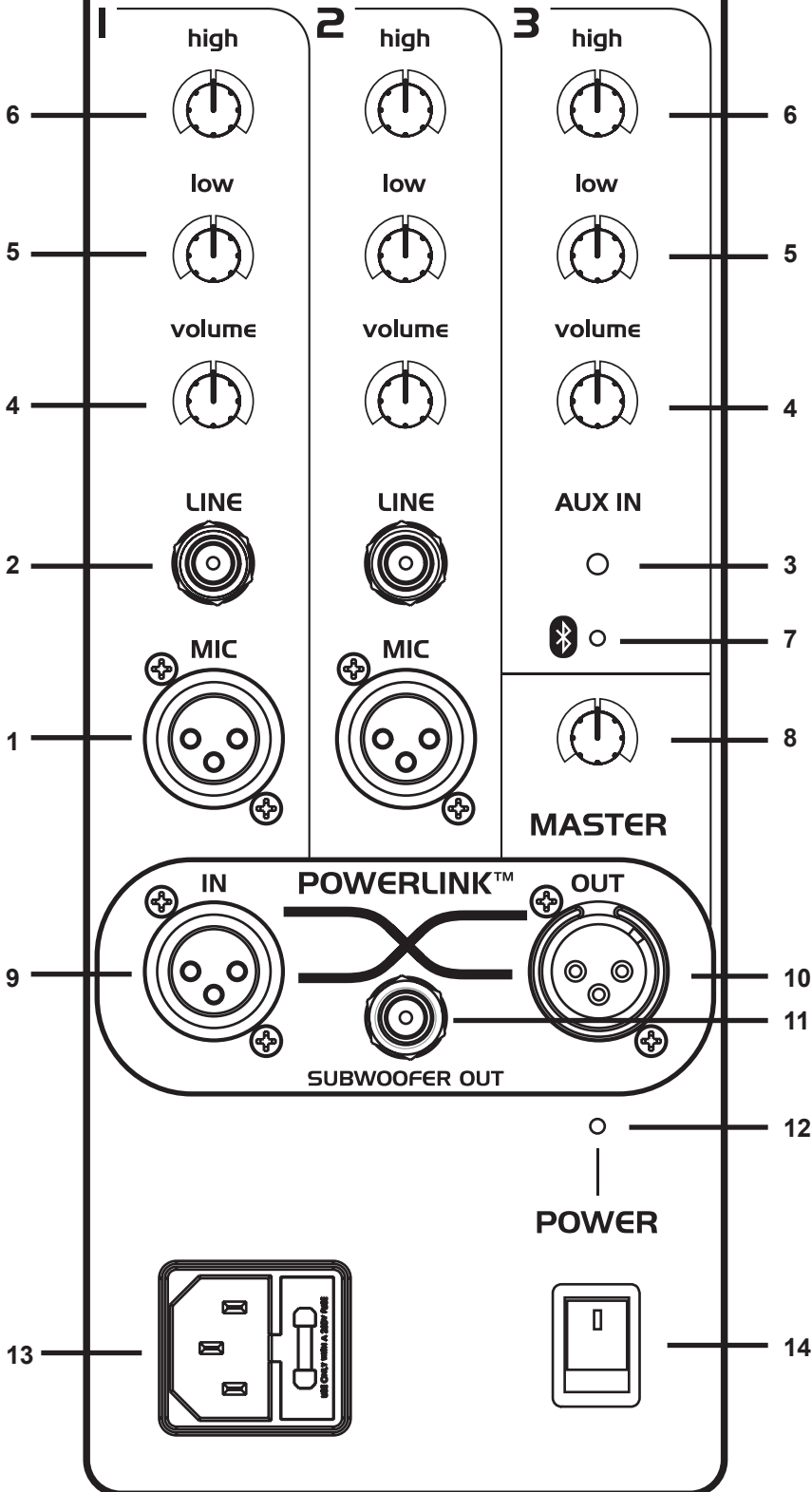


### **Congratulations on the purchase of your PW505/BT PERSONAL PA SYSTEM.**

Your PW505/BT Model draws on decades of amp design and manufacturing experience at Powerwerks. This model was built from the ground up to offer world-class tone, useful features and reliable performance. Inside this manual you'll find valuable information about your product's controls and specifications. Being familiar with its features will help you effectively use your system. We wish you many years of enjoyment with your Powerwerks PW505/BT.

# Powerwerks™

## PW505/BT



### BLUETOOTH PAIRING INSTRUCTIONS:

To connect your Bluetooth device to the Powerwerks Bluetooth receiver for the first time, navigate to the Bluetooth settings menu on your Bluetooth enabled device. Ensure that Bluetooth is enabled and your Powerwerks product is powered on. Perform a scan for available devices. Select and pair to the Powerwerks product in the list of available devices. Enter 0000 for the passcode if prompted. Once paired, a connection can be established. Depending on the device, future connections may be established automatically when a previously paired Bluetooth device is in range of the Powerwerks Bluetooth receiver.

The Bluetooth receiver in Powerwerks Bluetooth products is an A2DP device and will work with other A2DP compatible Bluetooth devices including most smart phones. Additional hardware and/or driver software may be required for computers with integrated Bluetooth adaptors due to a lack of support for A2DP devices by some operating systems.

A2DP protocol only allows for one to one device connections. Therefore, only one Bluetooth device can be connected to a Powerwerks Bluetooth product at one time. Similarly, a Bluetooth device can only be connected to one Powerwerks Bluetooth product at one time. Plugging a 1/8" connector into the AUX jack disables the Powerwerks Bluetooth receiver.

## CONTROLS & FUNCTIONS OVERVIEW

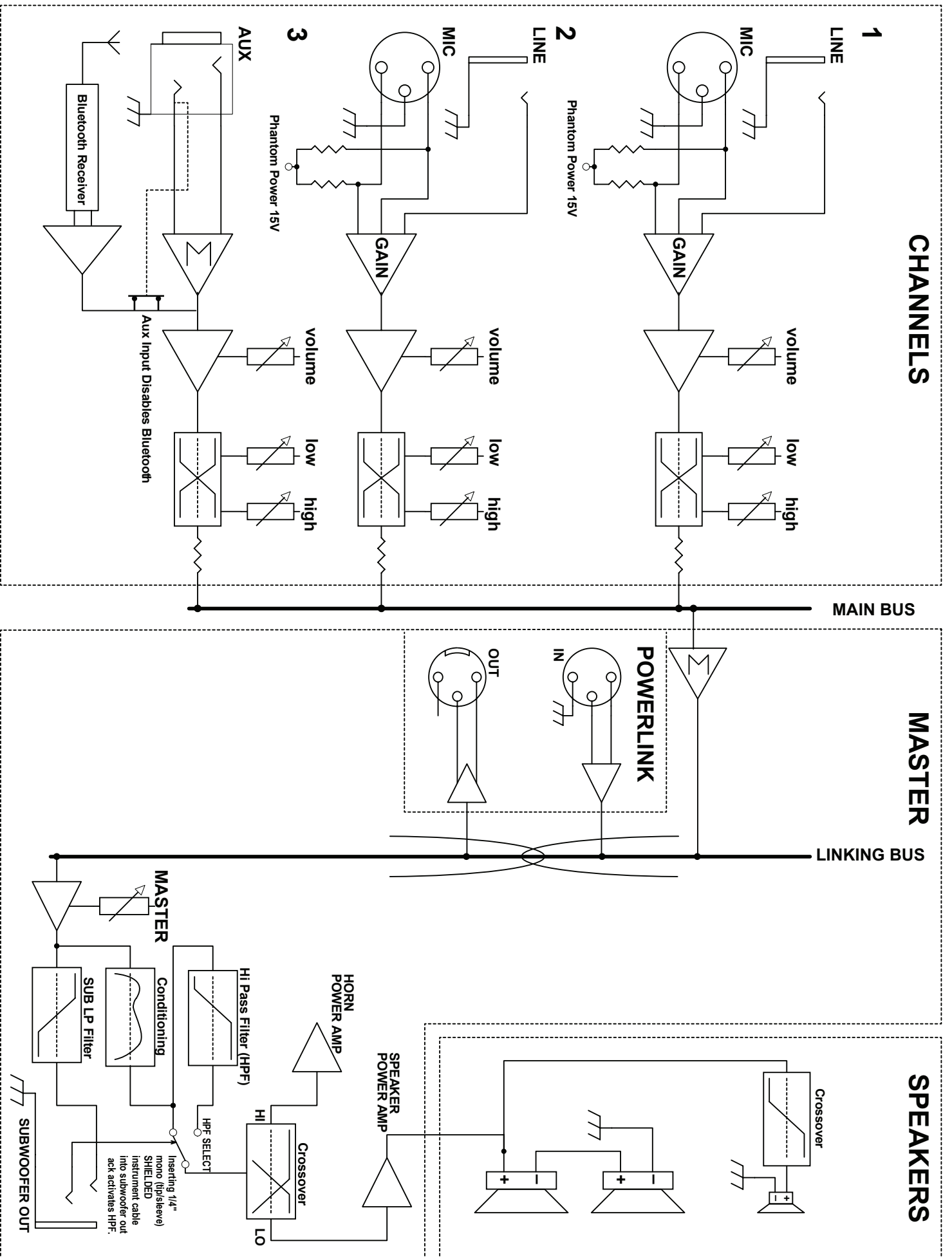
### INPUT SECTION:

This is where you may plug in microphones, instruments, keyboards, drum machines and other audio devices, adjust the volume, bass and treble.

- 1. MIC Inputs:** These XLR inputs are designed for low-impedance microphones or equipment that has a mic-level advanced output (often called a Direct Out). Note: These inputs receive 15-volt phantom power. This is used to provide power to condenser microphones. Phantom power will not damage any dynamic or non-condenser microphone.
- 2. LINE Inputs:** These ¼-inch inputs may be used to connect high-impedance microphones or keyboards, drum machines and other audio devices.
- 3. AUX IN:** Use this stereo input to connect an external audio device such as an MP3, CD player or computer for playback  
Note: Right and Left channels are summed to mono on this input
- 4. Volume:** Use these controls to adjust the volume level of each channel and the relative balance between them.
- 5. Low:** Determines the emphasis of bass frequencies. Turning this knob clockwise creates a deeper, warmer tone. If you need a brighter sound, reduce the bass by turning counterclockwise.
- 6. High:** Turned clockwise, this control accents treble frequencies to produce clearer, crisper sound. Turn counterclockwise to make the sound softer and less bright.
- 7. Bluetooth LED(Available with PW505BT model only):** Indicates that a Bluetooth equipped device has successfully paired with the PW505BT.
- 8. Master Volume:** Controls the overall volume of all channels and input on POWERLINK  
*Note: Does not affect POWERLINK Output level.*
- 9. POWERLINK IN:** This balanced XLR Jack accepts the POWERLINK output from another PW505/BT using a standard mic cable. Channels from both Powerwerks PW505/BT's are summed together. Use the channel volume controls to get the mix of the channels (If a channel is not used turn the volume all the way down). MASTER volume controls the loudness of the mix through its PW505/BT. It does not affect volume of a linked PW505/BT.  
*Note: The shield connection (pin 1) on this jack is connected to chassis ground. It is not lifted.*
- 10. POWERLINK OUT:** This balanced XLR Jack accepts the POWERLINK input from another PW505/BT using a standard mic cable. Channels from both PW505BT's are summed together. Use the channel volume controls to get the mix of the 6 channels (If a channel is not used turn the volume all the way down). MASTER volume controls the loudness of the mix through its PW505/BT. It does not affect volume of linked PW505/BT. This jack may also be used to connect the PW505/BT to a power amp with a balanced line input.  
*Note: The shield connection (pin 1) on this jack does not connect to chassis ground. It is lifted.*
- 11. Subwoofer Out:** The PW505/BT subwoofer output jack sends a line level unbalanced low frequency signal crossed over at 150Hz to a powered subwoofer. It will also work with any powered subwoofer that accepts a line level input. A crossover that rolls off the frequencies below 150Hz through the PW505/BT's speakers is activated when using this jack with a standard ¼" mono (tip/Sleeve) SHIELDED instrument cable. When Subwoofer jack is not used, this crossover is bypassed and PW505BT speakers are full range. Note: It is recommended to connect subwoofer using a standard ¼" mono (tip/sleeve) SHIELDED instrument cable because the sleeve connection to ground activates crossover on speakers. When possible, plug AC cable on PW505/BT and SubWoofer into same outlet or power strip. This will prevent possible ground loop hum through the system.
- 12. Power Indicator Light:** Indicates that the power switch is in the "ON" position.
- 13. AC Power Cord Receptacle:** Insert the PW505/BT's AC cord firmly into the AC receptacle. Be sure to use the cable provided with your PW505/BT. The power cord can be removed for storage or replacement if damaged. Note: Replace the AC cord if its protective jacket is damaged or ground pin is damaged or removed.
- 14. Power:** This switch activates AC power to the powered PA.

## PW505/BT Powered PA Specifications

Output Power 1%	50W	8 Ohm load
Accepted Inputs	Channels 1 and 2	Mic XLR Balanced, Line level 1/4" Un-balanced
	Channel 3	1/8" Stereo Line Level
Hum & Noise	-65dB	Residual Noise, all level controls 0% (minimum)
	-48dB	Nominal System Noise, all level controls at 50%
System Gain (Measurements made at 1kHz)	+70dB	Mic to Speaker Output (CH 1 & 2)
	+56dB	Line to Speaker Output (CH 1 & 2)
	+42dB	AUX IN to Speaker Output
Channel EQ (high, low)	4kHz and above , 800Hz and below.	
POWERLINK (IN and OUT)	Both jacks accept a balanced input and sends a pre-master volume output mix of channels. Recommended use: Linking two PW50BT units together.	
Subwoofer Out	Line Out	20Hz-150Hz.
Phantom Power	+15V	Mic inputs (Ch 1 & 2)
Power Requirements	USA/Canada	120VAC/60Hz, 80W nominal
	Europe	230VAC/50Hz, 80W nominal
	UK	230VAC/50Hz, 80W nominal
	Australia	240VAC/50Hz, 80W nominal
	Japan	100VAC/50-60Hz, 80W nominal
Speakers	Two 5"	25W 16 Ohm each
Horn	3.5" Prezo Driver	
Power Capacity	50W	RMS
Frequency Response	60HZ-20kHz	Full range (subwoofer jack not used)
	150HZ-20kHz	Crossover Active (1/4" mono plug in subwoofer jack)
Nominal Impedance	8 Ohms	Not designed for external speakers
Bluetooth Module Features	Bluetooth 3.0+EDR compliant. Typical +2dBm Class 2 output power. Audio DAC:94dB SNR.A2DP profile support.	
Dimensions & Weight	mm/kg	192 W x 478 H x 185 D / 7.2 kg
	Inches/Pounds	7.6 W x 18.8 H x 7.3 D / 16 lb



Powerwerks PW505BT SIGNAL FLOW DIAGRAM





PowerWerks  
c/o Hanser Music Group  
Cincinnati, Ohio 45246  
(859) 817-7103

## LIMITED PRODUCT WARRANTY

### WHO IS COVERED?

The PowerWerks Limited Warranty applies to the original retail purchaser. The original purchase receipt is required for any warranty claims.

This Warranty applies only to products purchased in the United States by a U.S. resident. Products purchased by a consumer living outside the United States from a U.S. PowerWerks Dealer or a U.S.-based website are NOT covered under the terms of this limited warranty. Products purchased outside the United States are subject to country-specific warranties. Contact the PowerWerks International Distributor in your country for details.

### WHAT IS COVERED?

PowerWerks warrants this product to be free of defects in materials and workmanship for a period of three (3) years from the original date of purchase.

PowerWerks warrants loudspeakers to be free from defects in material and workmanship for a period of one (1) year from the date of original purchase.

This speaker warranty is subject to the following exclusions and limitations:

1. Speaker must be inspected by PowerWerks or an Authorized Service Center for damage or misuse.
2. Speakers damaged due to overpowering are not covered under this warranty.
3. PowerWerks reserves the right to repair or replace the speaker with one of comparable quality.

### WHAT IS NOT COVERED?

This warranty is subject to the following conditions and exclusions:

Defects caused by wear and tear, misuse or neglect are not covered by this warranty.

This warranty will be void if:

- A. The unit has been altered or modified.
- B. The serial number has been removed or defaced.
- C. The unit has been operated improperly.

This warranty is for PowerWerks products only. Any service claims resulting from other brands used in conjunction with PowerWerks products will not be allowed or honored.

### WHERE DO I GO?

All warranty service must be performed by PowerWerks or by an Authorized PowerWerks Service Center. All component replacement costs will be assumed by PowerWerks within this warranty period. The labor costs will be covered by PowerWerks according to the established current rate schedules. Transportation to and from the warranty center is the sole responsibility of the purchaser. PowerWerks assumes no liabilities for damages incurred in transit to or from the service center.

### WHAT DO I DO?

If warranty repairs become necessary, the owner is responsible for delivery of the unit to an Authorized PowerWerks Service Center. If return is to be made to PowerWerks, the customer must first obtain a Return Authorization from PowerWerks' Service Department by telephone or mail. After receipt of a Return Authorization, the owner must ship the unit with a copy of the original sales receipt and a detailed description of the needed repairs. Please include your Return Authorization number on all correspondence. Repaired products will be returned freight collect. PowerWerks will, at its option, repair or replace defective parts or products.

### LIMITATION OF WARRANTY:

POWERWERKS SHALL NOT BE LIABLE UNDER ANY CIRCUMSTANCES FOR CONSEQUENTIAL, SPECIAL OR INCIDENTAL DAMAGES RESULTING FROM ANY DEFECT IN OR FAILURE OF POWERWERKS PRODUCTS. POWERWERKS' LIABILITY AND YOUR REMEDY FOR DAMAGES AGAINST POWERWERKS SHALL NOT EXCEED THE AMOUNT OF THE PURCHASE PRICE OF THIS POWERWERKS PRODUCT.

**This warranty is effective on the date of purchase.**

FOR YOUR RECORDS

Model \_\_\_\_\_ Serial #: \_\_\_\_\_

Date Purchased \_\_\_\_\_ Dealer \_\_\_\_\_

Dealer Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_

Original Sales Receipt or a legible copy must be presented for any warranty repair or transaction.

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**OWNER'S MANUAL**  
[www.powerwerks.com](http://www.powerwerks.com)

