

## User Manual

# MPS SERIES

**MPS12A // MPS15A // MPS18BA**

**Thank you for choosing Plus Audio.**

Download the Plus Audio Control App to remotely control up to two MPS units via Bluetooth.

We recommend regularly checking the Plus Audio website to ensure you have the latest version of this document.

### Warranty

Please register your product within 30 days of the purchase date to activate your warranty.



TA-2025/3399

---

# Getting Started

Use the Push-to-edit Master knob to adjust the overall volume level. You can turn it to navigate to the Setup menu at the top right-hand side of the screen where you can set the following parameters: (Push the Master knob to confirm your selection and edits.) Push the back button to exit the set up page.

Output Mode (the balanced XLR output can be set to function in two modes) Options: Mix out, Link out (this is useful to provide a signal suitable for live recording and connecting a subwoofer)
Display Dim (automatically dim the display ten seconds after any control was last engaged) Options: Off , On
Front LED (You can disable the LED on the front grill or have it indicate limiter activity.) Options: Off , On, Limit

The system's memory stores all current DSP settings when you power it down and reloads those settings when you power it back up again.

The Bluetooth symbol (located top left of the screen indicates if Bluetooth audio streaming and App Control are enabled. This page also gives you the option to link a secondary speaker via Bluetooth TWS. Set App Control and Streaming to 'On' for the primary MPS and App Control to 'Secondary' for the second MPS.

Unlink cuts the TWS connection between the primary and secondary MPS, in which case the app can no longer control the second MPS speaker)

---

## Important Safety Instructions!

This product has been built by the manufacturer in accordance with IEC 62368-1. To maintain this condition and ensure non-risk operation, the user must follow the advice and warning comments found in the operating instructions. If this product shall be used in vehicles, ships or aircraft or at altitudes exceeding 2000 m above sea level, take care of the relevant safety regulations which may exceed the IEC 62368-1 requirements.







### WARNING:

- Do not open - no user serviceable parts inside.
- To prevent the risk of fire and shock hazard, do not expose this appliance to moisture or rain
- Do not use this product near water.
- Fuses are to be replaced exclusively by qualified personnel, and then only with fuses of the proper type and rating.
- Refer all servicing to qualified service personnel.
- Do not install near heat sources and keep away from direct sunlight.
- Do not block any ventilation openings.
- The device must be positioned at least 20 cm/8" away from walls.
- This product is capable of delivering sound pressure levels in excess of 90 dB, which may cause permanent hearing damage!Exposure to extremely high noise levels may cause a permanent hearing loss.
- Wear proper protection (in particular, a helmet gloves, and safety shoes) and use only suitable means of ascent (ladders, scaffolds, etc.) during installation.
- Regularly check the loudspeaker housings and accessories for visible signs of wear and tear, and replace them when necessary.
- Before connecting the device, please ensure that the mains supply you are using is equipped with adequate protection against short circuiting and grounding faults when the device is plugged in.
- To reduce the risk of electrical shock, the grounding of this product must be maintained. Use only the power supply cord

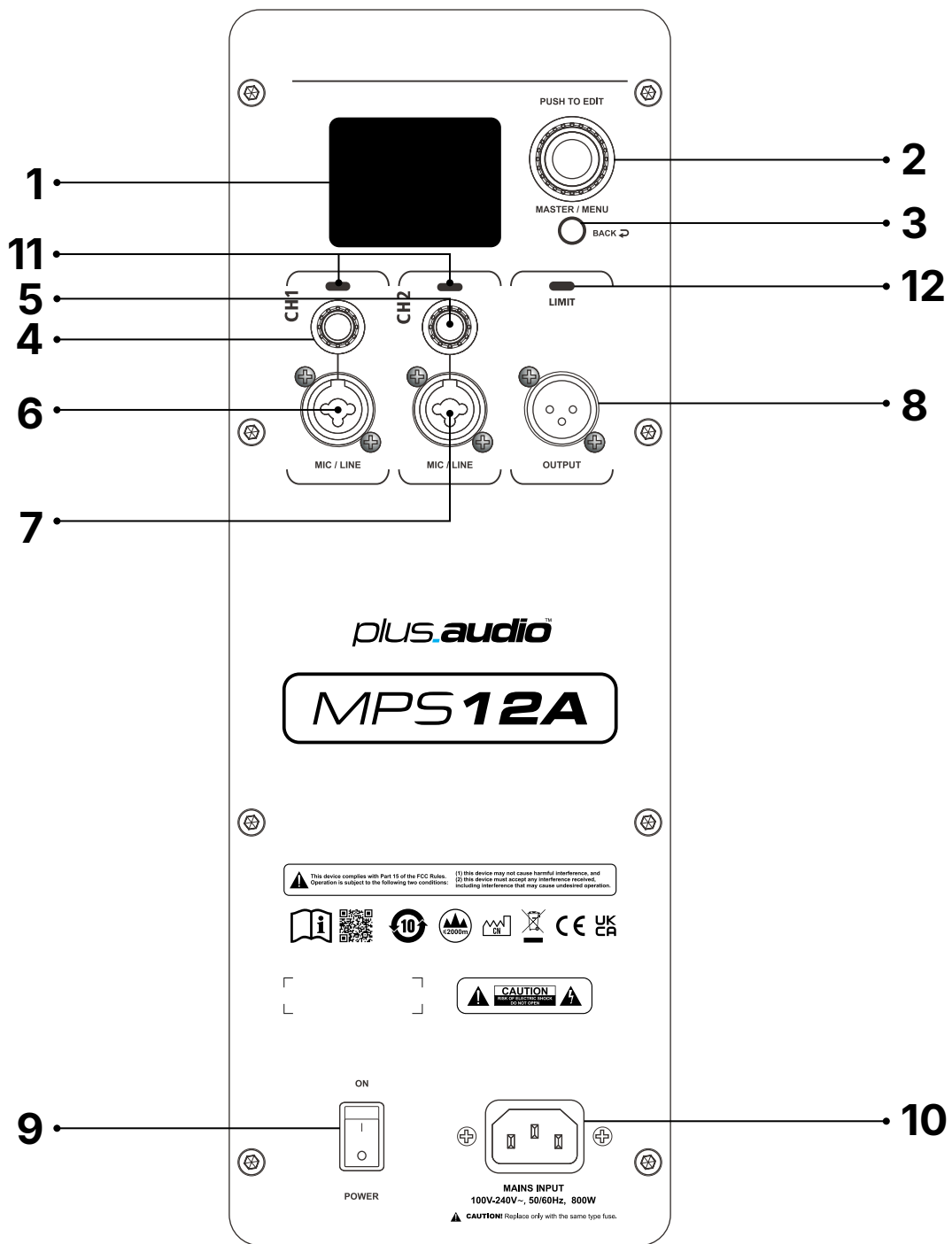
provided with this product and maintain the function of the centre (grounding) pin of the mains connection at any time. Make sure the mains outlet used provides a proper protective ground connection.

- Unplug this product during lightning storms or when unused for long periods of time.
- Never use a damaged power cord. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the device!Power supply cords should always be handled carefully. Periodically check cords for cuts or sign of stress, especially at the plug and the point where the cord exits the device.
- Do not connect external speakers to this product with an impedance lower than the rated impedance given on the product or in this manual. Use only cables with sufficient cross section according to the local safety regulations.
- Use only accessories recommended by the manufacturer
- This product is optimized for use with music and speech signals. Using this product with sine wave, square wave or other kind of measuring signals at higher level may lead to severe damage of the product.Important Safety Instructions!
- This product has been built by the manufacturer in accordance with IEC 62368-1. To maintain this condition and ensure non-risk operation, the user must follow the advice and warning comments found in the operating instructions. If this product shall be used in vehicles, ships or aircraft or at altitudes exceeding 2000 m above sea level, take care of the relevant safety regulations which may exceed the IEC 62368-1 requirements.

# Safety Guidelines

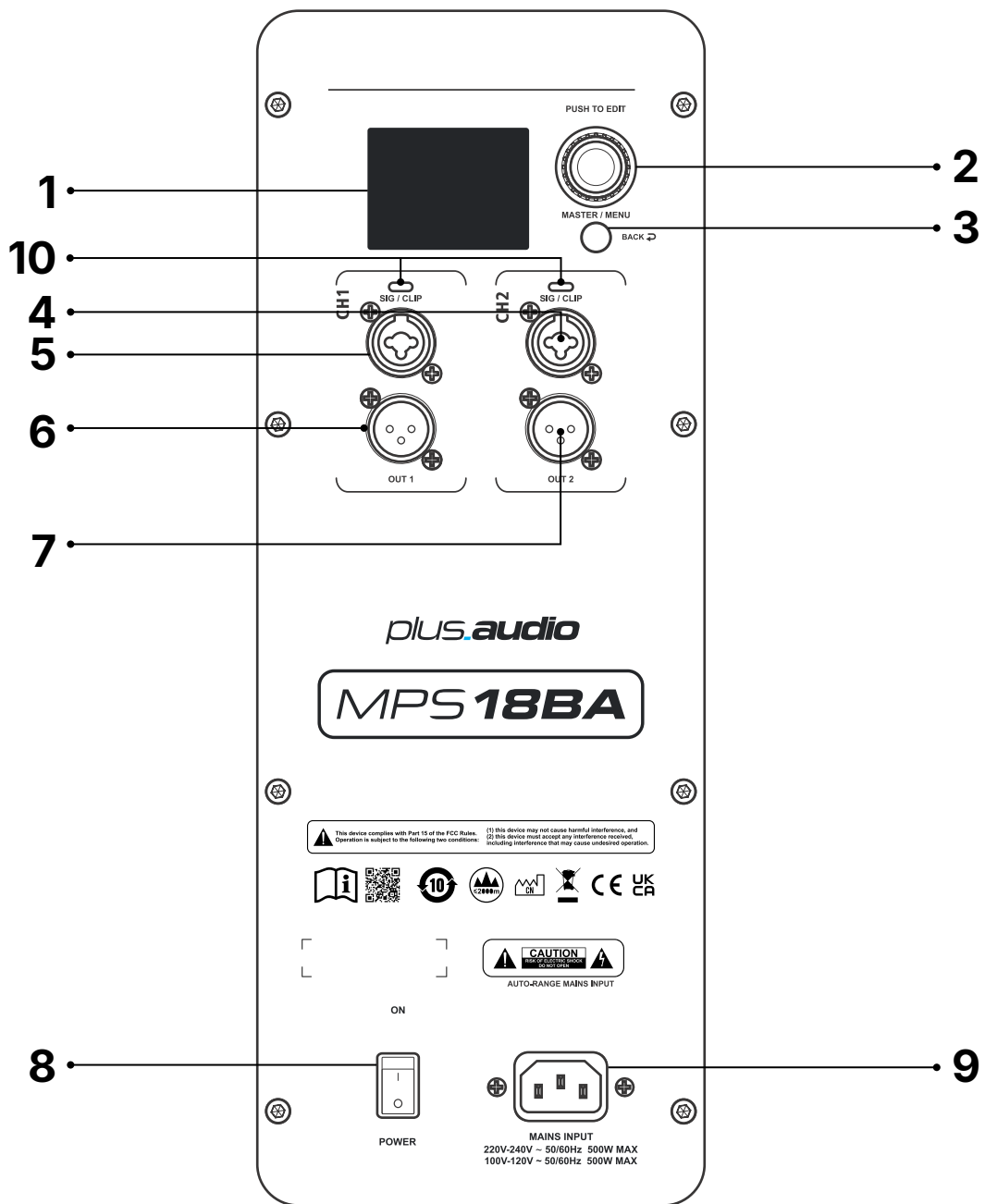
	<p>Follow all warnings and instructions marked on the product and in this manual.</p>		<p><b>Loudspeaker Systems Safety Precautions</b></p>
	<p>This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.</p>	<ul style="list-style-type: none"> <li>• Mounting systems may only be used for those loudspeaker systems authorized by the manufacturer and only with the mounting accessories specified in the installation instructions. Read the manufacturer's installation instructions. The indicated load-bearing capacity cannot be guaranteed and the manufacturer will not be liable for damages in the event of improper installation or the use of unauthorized mounting accessories. The system's load-bearing capacity cannot be guaranteed and the manufacturer will not be liable for damages in the event that loudspeakers, mounting accessories, and connecting and attaching components are modified in any way.</li> <li>• Components affecting safety may only be repaired by the manufacturer or authorized agents, otherwise the operating permit will be voided.</li> <li>• Be sure to observe speaker stands' maximum load-bearing capacity. Note that for reasons of design and construction, most speaker stands are approved to bear centric loads only; that is, the speakers' mass has to be precisely centered and balanced. Ensure speaker stands are set up on a level, stable surface.</li> <li>• Professional loudspeaker systems can produce harmful volume levels. Even prolonged exposure to seemingly harmless level (starting at about 95 dBA SPL) can cause permanent hearing damage. Therefore we recommend that everyone who is exposed to high volume levels produced by loudspeaker systems wears professional hearing protection (earplugs or earmuffs).</li> </ul>	
	<p>This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature.</p>		
	<p>This symbol, wherever it appears, tells you: Take care! Hot surface! To prevent burns you must not touch.</p>		
	<p>This symbol, wherever it appears, alerts you to the presence of externally accessible hazardous voltage.</p>		
<p><b>WARNING! CAUTION! Never suspend MPS speakers from their handles. Handles are intended for transportation, not for rigging.</b></p>			
<p><b>Cleaning</b> Clean only with dry cloth. Do not use any solvents.</p>		<p><b>Potential risk of material damage</b></p> <p>Loudspeakers produce a static magnetic field even if they are not connected or are not in use. Therefore make sure when erecting and transporting loudspeakers that they are nowhere near equipment and objects which may be impaired or damaged by an external magnetic field. Generally speaking, a distance of 0.5 m (1.5 ft) from magnetic data carriers (e.g. bank cards, etc.) is sufficient; a distance of more than 1 m (3 ft) may be necessary with computer and video monitors.</p>	

# Connections and Control Features



<ul style="list-style-type: none"> <li>1. LCD Display</li> <li>2. Push-to-edit Master knob</li> <li>3. Back button</li> <li>4. Volume Ch1</li> </ul>	<ul style="list-style-type: none"> <li>5. Volume Ch2</li> <li>6. Signal Input Ch1</li> <li>7. Signal Input Ch2</li> <li>8. Output</li> </ul>	<ul style="list-style-type: none"> <li>9. Power switch</li> <li>10. Mains Input</li> <li>11. Clip indicator</li> <li>12. Limit indicator</li> </ul>
--	--	---

# Connections and Control Features



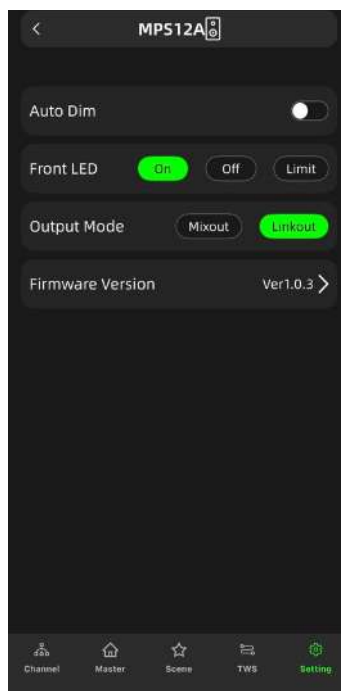
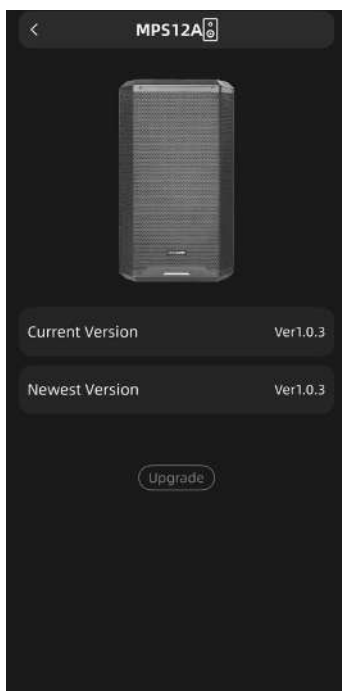
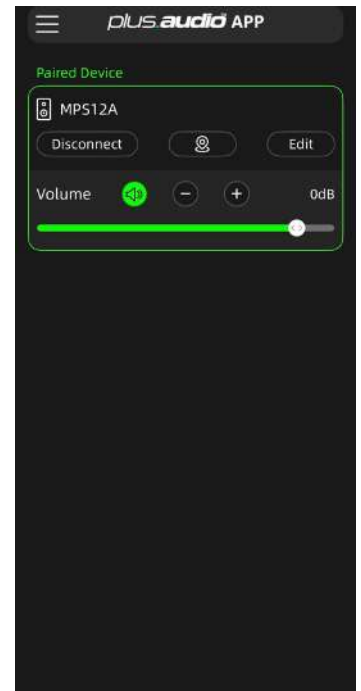
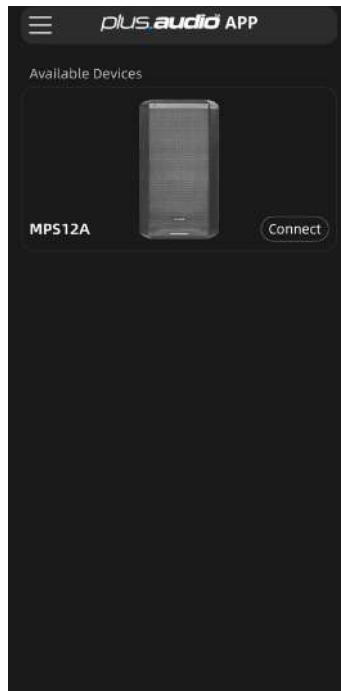
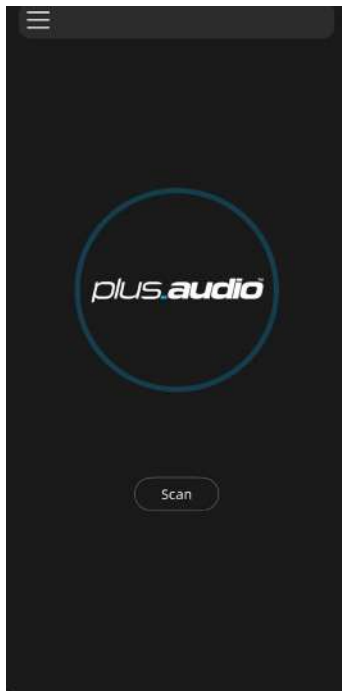
<ul style="list-style-type: none"> <li>1. LCD Display</li> <li>2. Push-to-edit Master knob</li> <li>3. Back button</li> <li>4. Signal Input Ch1</li> </ul>	<ul style="list-style-type: none"> <li>5. Signal Input Ch2</li> <li>6. Signal Output Ch1</li> <li>7. Signal Output Ch2</li> <li>8. Power Switch</li> </ul>	<ul style="list-style-type: none"> <li>9. Mains Input</li> <li>10. Clip indicator</li> </ul>
--	--	--

# Application - Firmware Update Guide

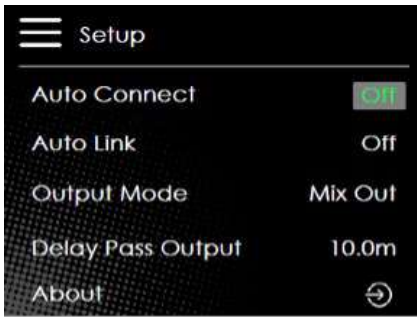
## Firmware Update via the Plus Audio APP

1. Open Plus Audio App → tap [Scan].
2. Select your device from the available MPS Devices → tap [Connect].
3. Paired device turns green → tap [Edit].
4. Tap Settings (bottom right).
5. Tap Firmware Version - If available → tap [Upgrade].

\* Please note that this update can take up to 15min



# Output Modes



## Options: Link Out (Pre Master), Mix Out (Post Master)

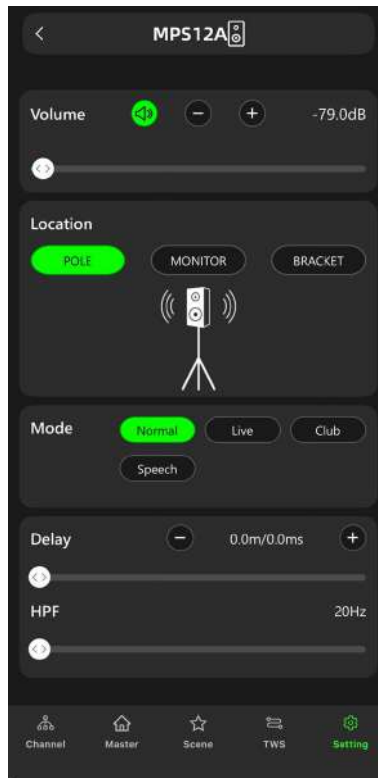
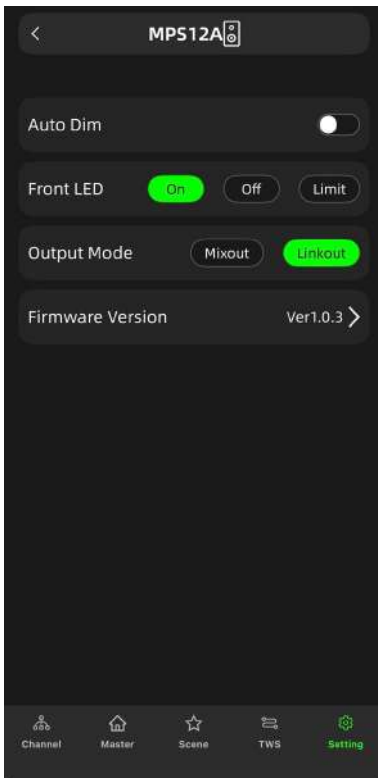
Choose Mix Out if you want the volume and equalizer settings of a second connected Plus Audio MPS to change when you adjust the first speaker's settings.

Choose Link Out if you do not want the downstream MPS12A/MPS15A volume or EQ settings to change, for example, you are using satellite speakers needing independent control.

**Note:** The Mix Out signal is a composite of all analogue input channels and the Bluetooth channels, including their EQ and volume settings.

Mode, Location, Delay and HPF settings have no impact on this signal; they only affect the local speaker's audio performance.

The Link Out mode is independent of all settings, including the analogue input gain and EQ settings on the local speaker and acts as a pass through to the downstream speakers. This is the most common mode for linking loudspeakers as it allows for independent volume, position and location settings without affecting any other connected loudspeakers.

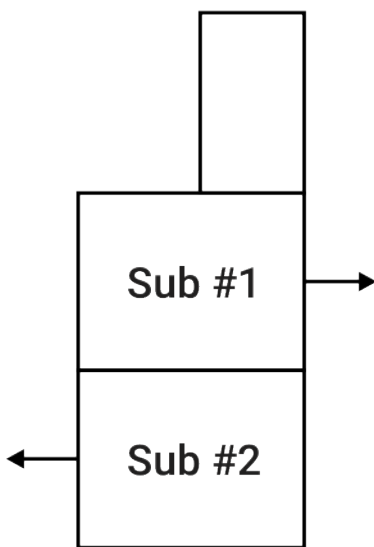


# MPS18BA in cardioid mode (two subwoofers stacked per side)

Increased low frequency levels can often be a problem on the stage behind the subwoofers. A cardioid subwoofer setup will increase the directivity at low frequencies. The rear facing subwoofer cancels the sound energy radiated to the rear. The low frequency level is attenuated behind the subwoofer cabinets resulting in a lower on stage sound level improving maximum gain before feedback.

MPS18BA includes two presets for cardioid setups. These are listed in the mode setting as Cardioid Front and Cardioid Rear. For a cardioid setup to work properly, the two subwoofers must be stacked on top of each other. The top subwoofer (Sub #1) must face the audience (Front); the bottom subwoofer (Sub #2) must face the stage (Rear). A side-by-side array stack will not achieve the desired effect.

When placing the cardioid stack, keep a distance to walls or other obstacles of at least 1m in order not to affect the radiation of the reversed cabinet. Please note that placing a cardioid stack directly at the rear wall of a room is not useful. Use a conventional stack for this application.



### Mode Settings:

Sub #1: "Cardioid Front"

Sub #2: "Cardioid Rear" and display dim option on.

Set both subwoofers to the same volume level

Note: Access to the delay parameter is blocked in the "Cardioid Front" and "Cardioid Rear" modes.

When display dim is set to on, the display dims 8 seconds after the volume knob was last engaged. The display lights up again the next time the volume knob is engaged and then dims again after 10 seconds with no activity.

### MPS18BA Menu items

Setup Mode: Standard operating mode and two pre-sets for cardioid setups. Options: Normal, Cardioid Front, Cardioid Rear
Polarity Reverse is a useful feature to have when you want to match the subwoofer to other speakers. Select reverse to invert the polarity by 180°. Options: Normal, Reverse
LPF: This option adjusts the crossover frequency to match the sub's response to MPS12A/MPS15A. Options: Off and 10Hz increments between 100Hz and 40Hz
Delay: This option delays the subwoofer's signal to align it with other speakers.

# Display



In standard operating mode, the colour display indicates the two input channels' signal level and the output level. It also shows the Bluetooth status and provides access to further DSP functions by pushing the master knob.







Correct gain structure is very important to minimize noise. The best way to do this is to set the gain levels for each channel: Turn up the input channels' volume (Knob 4 & 5) until the indicator lights up green even for the loudest signal and only rarely runs into orange (clip indicator 11). Then turn the Master knob up only as far as you need it to go. Turn unused channel volume all the way down.

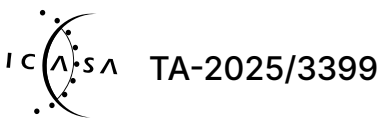
## Technical Specifications

Model	MPS12A	MPS15A	MPS18BA
Max. SPL	129dB	130dB	135dB
Frequency response	50 Hz – 20 kHz	45 Hz – 20 kHz	40 Hz – 120 Hz
Power amp output (peak power)	1000W (RMS)	1000W (RMS)	1000W (RMS)
Amp type	Class D	Class D	Class D
Low-/mid speaker	12"	15"	18"
HF driver	1.35"	1.35"	-
Dispersion	90° x 70°	90° x 70°	-
Analog inputs	2x Combo XLR	2x Combo XLR	2x Combo XLR
Analog outputs	1x XLR-M	1x XLR-M	2x XLR
Connectivity:	Bluetooth Operating Frequency: 2402 – 2480MHz	Bluetooth Operating Frequency: 2402 – 2480MHz	Bluetooth Operating Frequency: 2402 – 2480MHz
Display	2.4" colour display	2.4" colour display	2.4" colour display
DSP functions	Master Volume, Level Metering, 3-band EQ, Low-Cut Filter, Front LED, Screensaver, BT Auto Pairing, Delay, Output (mix/link)	Master Volume, Level Metering, 3-band EQ, Low-Cut Filter, Front LED, Screensaver, BT Auto Pairing, Delay, Output (mix/link)	Master Volume, Level Metering, LPF Off/100 90/80/7060 50/40Hz Polarity 0/180° BT Pairing, Delay
Sound modes	Live/Club/Speech	Live/Club/Speech	-
Setup modes	Pole/Monitor/Bracket	Pole/Monitor/Bracket	Normal/ Cardioid Rear/ Cardioid Front
Delay	0 -100m	0 -100m	0-100m
Output modes	Mix out / Link Out	Mix out / Link Out	-
Bluetooth features	Audio streaming and linking	Audio streaming and linking	Bluetooth Control
Pole mount	Compatible with standard 35mm mounting pole	Compatible with standard 35mm mounting pole	Compatible with standard 35mm mounting pole
Rigging points	3x M10	3x M10	M20 threaded flange
Power consumption	800W	800W	500W
Dimensions (HxWxD)	628 x 359 x 353 mm	703 x 430 x 403 mm	605 x 695 x 660 mm
Weight	16.9kg	21.5kg	55kg

# Regulatory Notices

## Disposal of Waste of Electrical and Electronic Equipment Within the European Union.

	<p>The symbol on the product indicates that this equipment must not be disposed of with other waste materials. In order to dispose of your waste equipment, it must be handed over to a designated collection point for recycling. The separate collection and recycling of your waste equipment at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city recycling office or the dealer from whom you purchased the product.</p>
	<p>This loudspeaker system is designed for safe operation at altitudes up to 2000 meters above sea level. Using the product above this altitude may affect performance or safety compliance.</p>
	<p>Indicates that the product or a specific component has a recommended service or replacement interval of 10 years, depending on component type. Follow the maintenance instructions provided for safe operation.</p>
	<p>Indicates that the product was manufactured in China (CN).</p>
	<p>The CE marking certifies that the loudspeaker complies with all applicable EU directives and safety, health, and environmental protection requirements, allowing it to be sold within the European Economic Area (EEA).</p>
	<p>The UKCA marking indicates that the loudspeaker meets the regulatory requirements for Great Britain (England, Scotland, Wales) and complies with applicable UK legislation for electrical/electronic equipment.</p>



The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. Apple, the Apple logo and iPad are trademarks of Apple Inc., registered in the U.S. and other countries. App Store is a service mark of Apple Inc.

All mentioned trademarks and copyrights belong to their respective owners.

---

# Regulatory Notices

## Safety Information

For protection against electric shock, the equipment must be connected to a mains socket outlet with a protective earth connection. In case of doubt contact a qualified electrician. To reduce the risk of electric shock, do not expose this equipment to dripping or splashing. Product is suitable for use in tropical locations with an ambient temperature of up to 40°C. Ensure that adequate ventilation is provided around the product and that it is not restricted. When rack mounting, ensure that the ventilation is not restricted by adjacent equipment. No operator serviceable parts inside product. Refer servicing to your local Plus Audio service centre.

## Plus Audio Warranty

The warranty covers the remedy of defects found in material or workmanship at no charge within the warranty term. The standard warranty term is two (2) years. Failure to perform maintenance as required and in accordance with the maintenance schedule specified by Plus Audio will void the warranty. Maintenance is the responsibility of the Customer and is not covered by this warranty.

The Warrantor reserves the right at his option to repair or replace parts of the product or replace the product in its entirety. The repaired product or replacement product is warranted for a period equal to the remaining warranty term of the original product. Replacement products may be new or refurbished.

The warranty does not cover damage caused by misuse, negligence, improper power source or connection, power surges, water condition exceeding the specified IP rating, accident, fire, flood, lightning, earthquake or other natural disaster. The warranty is void if the serial number is removed or defaced or non-original parts have been installed or if the device has been over-driven. Warranty is back to service hub in Johannesburg, South Africa, freight to be covered by the customer.