



The Premier Headphone
Amplifier
User Guide

Check our website for the most recent user
guides, firmware, and drivers:
www.msbtechnology.com

Technical support email is:
techsupport@msbtechnology.com

10.11.2021

Technical specifications

AC Voltage	120/240V (manual selection) Optional 100V fixed configuration
Dynamic Range 20Hz-20kHz (Max Power at 45Ω)	>125dB >134dBA
Frequency Response	20Hz-20kHz ±0.3dB
XLR Input	Optimized for 75Ω or 150Ω Balanced Source
Common Mode Rejection Ratio	> 82dB CMRR @ 60Hz > 82dB CMRR @ 1kHz > 80dB CMRR @ 20kHz
Crosstalk	> 130dB Crosstalk @ 1kHz > 110dB Crosstalk @ 20kHz
Max Power @ 1% THD+N	8Ω @ 4.5Vrms (2.53W) 16Ω @ 7.5Vrms (3.51W) 32Ω @ 11.4Vrms (4.06W) 45Ω @ 13.2Vrms (3.87W) 150Ω @ 13.8Vrms (1.27W)
XLR Output	Direct connection to input when enabled or unit is powered off. When listening to headphones, output is muted with 75Ω output impedance
Headphone Output	1X 4 Pin XLR (Balanced) 1X 1/4" Stereo jack (Single-ended)
Power Consumption	82W (8W in pass-through mode)
Chassis Dimensions	Width: 17 in (432 mm) Depth: 12 in (305 mm) Height without feet: 2.45 in (62 mm) Stack height: 3.05 in (77 mm) Weight: 31 lbs (14 kg) Product Feet: The Viton Foot (M6X1 Thread)
Shipping Dimensions	Width: 22 in (558.8 mm) Depth: 18 in (457.2 mm) Height: 7 in (177.8 mm) Weight: 40 lbs (18.2 kg)
Included Accessories	Ground Cable User Manual

****GENERAL WARNINGS****

Only for use with an MSB DAC.
DO NOT open your headphone Amp.
NO SERVICEABLE PARTS.

Getting Started - Selecting AC Mains Voltage

Before connecting to power, the amplifier AC voltage must be chosen using the voltage switch located on the underside of the product. If ordered as 100 Volt configuration, it will be permanently built as 100 Volt. Please check the voltage switch to confirm.

Amplifier Connections

After selecting your AC mains voltage and connecting your amplifier to power, proceed to make the following connections:

Connect your MSB DAC XLR analog outputs to the amplifier inputs.

Connect your headphones to one of the front headphone jacks. The output of the headphone amplifier is fully balanced unless the single-ended 1/4" jack is used. When there is a connector plugged into the 1/4" jack the amplifier automatically becomes single-ended.

Connect pass-through XLR outputs to your main system amplifiers if this is part of a loudspeaker system. If not, leave them disconnected. Do NOT put termination blocks in the analog pass-through outputs. Use the mode switch on the front of the unit to switch between headphone listening and the pass-through mode.

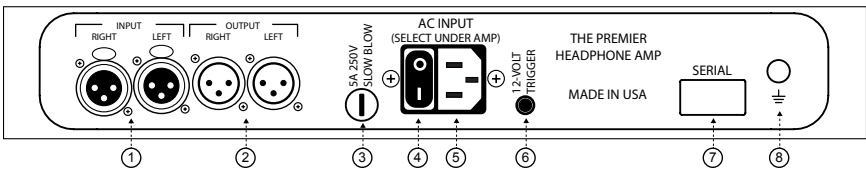
Amplifier Controls

Power Switch	There is a power switch to turn on and off the product located next to the IEC plug on the rear jack panel.
Mode Switch	This switch is located on the front of the product and has two positions: Headphone Symbol (Left) - Enables headphone listening. Pass-Through Symbol (Right) - Enables the analog input to directly bypass the headphone amplifier when connected to a full loudspeaker system and puts the amplifier into a reduced power mode
Voltage Switch	Selectable on the bottom of the product (120/240)

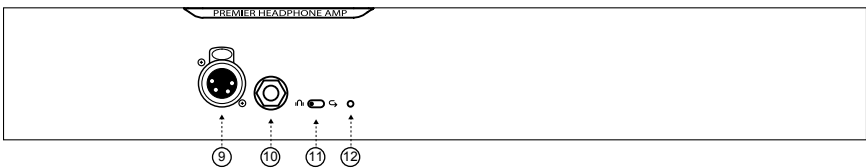
User Interface

1	Balanced analog inputs (Right and Left)
2	Balanced analog outputs (Right and Left)
3	5 AMP fuse slow-blow (5x20mm)
4	Power switch
5	Power input (100,120/240 VAC)
6	12 Volt trigger
7	Serial number (ex. PH100001)
8	Grounding lug
9	Headphone output (Balanced 4-pin XLR)
10	Headphone output (Single-ended 1/4" stereo jack)
11	Pass-through/Headphone mode switch
12	Power indicator LED

(Premier Headphone Amplifier Jack Panel)

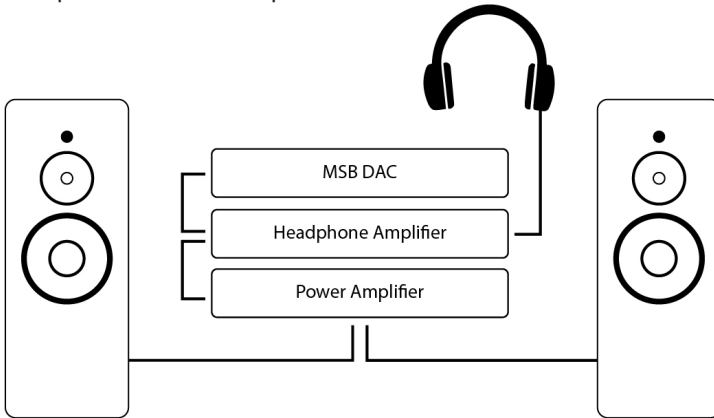


(Premier Headphone Amplifier Faceplate)



2-Channel System Pass Through Setup

This is the setup that you will follow when implementing your headphone amplifier to be used as a part of a 2-channel system with power amplifiers and loudspeakers.



Connect the “Analog Outputs” located on the back of your MSB DAC to the “Analog Inputs” located on the back of your headphone amplifier.

Connect the “Analog Outputs” located on the back of your headphone amplifier to the analog inputs of your power amplifier(s).

Connect your loudspeakers to your power amplifier(s) and connect your headphones into the 4-pin XLR or 1/4” Stereo jack connector on your headphone amplifier.

When setup in this configuration the “Analog Outputs” act as a direct connection pass through to the “Analog Inputs” whenever the headphone amplifier is switched off or into pass-through mode.

When the Headphone Listening mode is selected, the “Analog Outputs” that connect to your power amplifier(s) are muted.

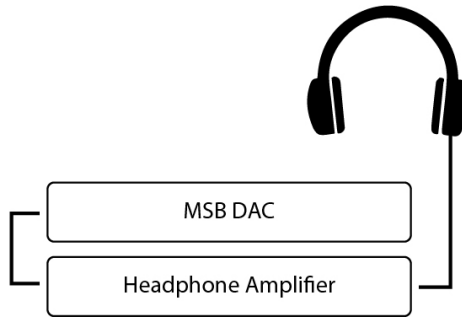
Grounding Setup - pass-through usage

When the headphone amplifier is being used in a loudspeaker system, DO NOT connect your headphone amplifier to the grounding network. Connect your DAC powerbases directly to the power amplifiers in your system.

More information can be found at:
www.msbtechnology.com/support/grounding-setup/

Standalone Headphone System Setup

This is the setup that you will follow when implementing your headphone amplifier to be used as the only amplifier in your system.



Connect the “Analog Outputs” located on the back of your MSB DAC to the “Analog Inputs” located on the back of your headphone amplifier.

Connect your headphones into the 4-pin XLR or 1/4” Stereo jack connector on your headphone amplifier.

Switch the “Mode Switch” to the headphone listening position.

Grounding Setup - Headphones only system

When the headphone amplifier is used as a headphone only system with no loudspeakers or power amplifiers, connect your grounding wire to the provided brass terminal on the back of the headphone amplifier to the “amp” terminal on your DAC powerbase.

More information can be found at:

www.msbertechnology.com/support/grounding-setup/

12 Volt Remote Trigger (Limited functionality)

This powerbase is equipped with a 12 Volt remote trigger for use with other MSB products. The trigger uses a 3 pin mini jack. When any MSB product is turned off, the other products connected will also turn off and vice-versa. This trigger can also be used with other products. Products may use this trigger differently, so you may need to rewire a cable or use an interface relay. The MSB 12V Trigger on the Premier Headphone amp is equivalent to the "Linked" mode of the MSB Powerbases. To use this mode simply connect the mini jack cable to the powerbase and leave the headphone amplifier on. The headphone amplifier will come on and off with the DAC powerbase.

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Technical Support

If you are experiencing any issues with your MSB product, please contact your nearest dealer or try our support page at www.msbtechnology.com/support. Please be sure you have the most current edition of your products firmware installed. If your issue persists please feel free to contact MSB directly. Emails are usually responded to in 24 - 48 hours.

Email: techsupport@msbtechnology.com

MSB Return Procedure (RMA)

If a customer, dealer, or distributor has a problem with an MSB product, they should email tech support before sending anything back to the factory. MSB will do their best to respond as quickly as possible. Should it be clear that a product must be returned, tech support should be informed and all the following relevant information should be provided:

1	Product in question
2	Serial number
3	Exact configuration when symptom is observed along with a list with the input used, source material, system connections, and amplifier
4	Customer name
5	Customer shipping address
6	Customer phone number and email
7	Special return shipping instructions

MSB will issue an RMA number and create an invoice with all details outlined except the final price as the product has not yet been seen. This invoice will be emailed so all the above information can be checked and verified by the customer.

The product should be returned with the RMA number present on the box. Work can then begin immediately and the product can be sent back quickly.

Any repair that is difficult and cannot be completed in two weeks will be identified and the customer will be informed when it is to be expected. Otherwise the majority of repairs should be shipped back within two weeks if all the required information is present on the invoice.

Link to page:

<http://www.msbtechnology.com/faq/msb-product-return-procedure/>

The Premier Headphone Amplifier Limited Warranty

Warranty includes:

- MSB warrants the unit against defects in materials and workmanship for a period of **1 year** from the date the unit was originally shipped from MSB.
- This warranty covers parts and labor only, it does not cover shipping charges or tax/duty. During the Warranty period, there will normally be no charge for parts or labor.
- During the warranty period, MSB will repair or, at our discretion, replace a faulty product.
- Warranty repairs must be carried out by MSB or our authorized dealer. Please contact your dealer if your unit requires service.

Warranty excludes:

- The Warranty does not cover standard wear and tear.
- The product is misused in any way.
- Any unauthorized modifications or repairs were performed.
- The product is not used in accordance with the Operating Conditions stated below.
- The product is serviced or repaired by someone other than MSB or an authorized dealer.
- The product is operated without a mains earth (or ground) connection.
- The unit when returned is inadequately packed.
- MSB reserves the right to apply a service charge if the product returned for warranty repair is found to be operating correctly, or if the product is returned without a returns number (RMA) being issued.

Operating Conditions:

- Ambient temperature range: 32F to 90F, non-condensing.
- The supply voltage must remain within the AC. Voltage specified on the power base.
- Do not install the unit near heat sources such as radiators, air ducts, power amplifiers or in direct strong sunlight.