MXW70

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MXW70

Last updated: June 17, 2025 11:08. Revision #14408

Introduction

Last updated: June 10, 2025 01:44. Revision #14539

Last updated: May 16, 2025 05:04. Revision #10022

This guide is designed to make installing and using this product as easy as possible. Information in this document has been carefully checked for accuracy at the time of printing; however, Cambridge Audio's policy is one of continuous improvement, therefore design and specifications are subject to change without prior notice.

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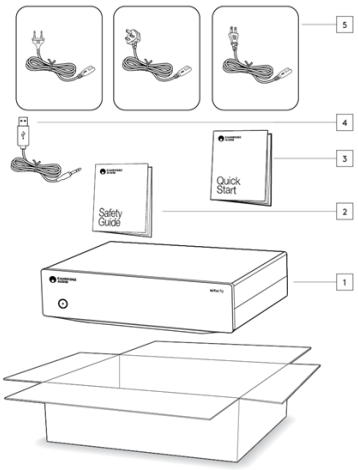
What’s included with the MXW70?

Last updated: June 10, 2025 01:43. Revision #14530

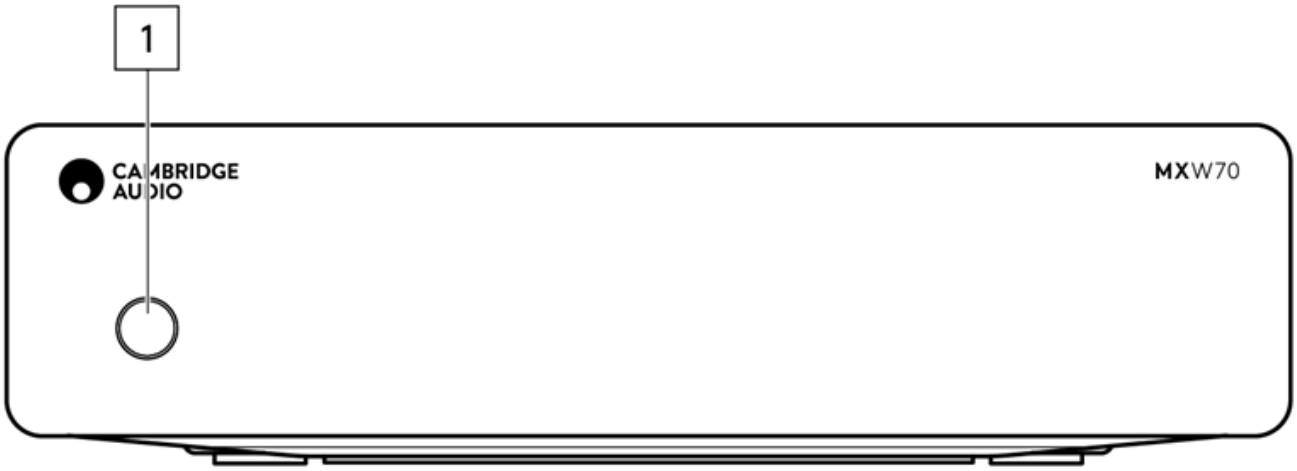
Inside the box of your MXW70 you will receive:



1. MXW70 Power Amplifier
2. Quick start guide
3. Safety guide
4. Trigger in Cable
5. UK power cord (Depending on which country the MXW70 was purchased in) EU power cord (Depending on which country the MXW70 was purchased in) CU power cord (Depending on which country the MXW70 was purchased in) JP power cord (Depending on which country the MXW70 was purchased in)

Front panel

Last updated: June 10, 2025 01:44. Revision #14531



1. Power button
Switches the unit between Standby Mode (indicated by dim power LED) and On (indicated by bright power LED). Standby Mode is a low power mode (0.5 Watts) – The unit should be left in Standby Mode when not in use.

AUTO POWER DOWN (APD)

The product will automatically switch to standby mode after inactivity of 20 minutes. To enable or disable this function, Refer to the “Auto Power Down (APD)' section of this manual for more information.

Rear panel connections

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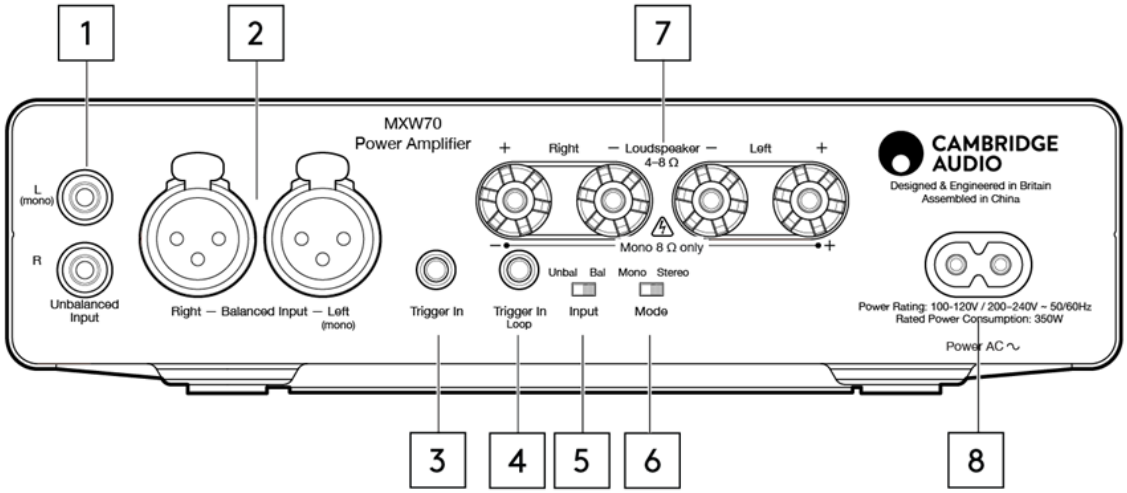


1. Unbalanced input.
RCA input is unbalanced.
Note: in mono mode, only the left (mono) channel needs to be connected, the Mode switch must be set to the “Mono” mode, Refer to the 'Mono connection' section of this manual for more information.

2. Balanced Input
For use with balanced XLR connections. The balanced connection is recommended for long distances (>2m) as it helps reject noise and interference in the cable when used with other equipment that supports XLR out .
Note: in Mono mode, only the left (mono) channel needs to be connected, the Mode switch must be set to the “Mono” mode.

3. Trigger in
The MXW70 can be connected to the trigger control output of audio or home automation equipment to control the power state of the MXW70. The input level should be 12V.

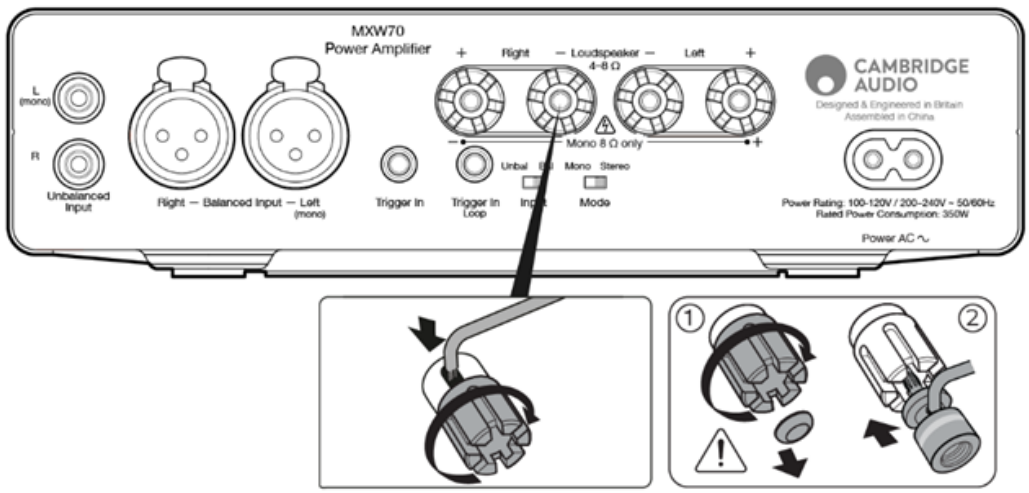
4. Trigger loop
The trigger loop will transfer the 12V from the Trigger in, this can be used to turn on a second MXW70 or another device.
Refer to the 'Power syncing' section of this manual for more information.

5. Unbalanced/Balanced input source switch - Select depending on whether a source is connected to the balanced XLR or unbalanced RCA input.

Note: There will be no sound from the amp if the correct input isn’t selected. If a source is connected to the balanced input, for example, ensure that the balanced switch has been selected.

6. Speaker-output Mode switch (Mono/Stereo)
the Mode switch toggles the Mono or Stereo mode.

7. SPEAKER TERMINALS
Note: When using a banana plug, make sure the speaker terminals are completely tightened before inserting the plug.



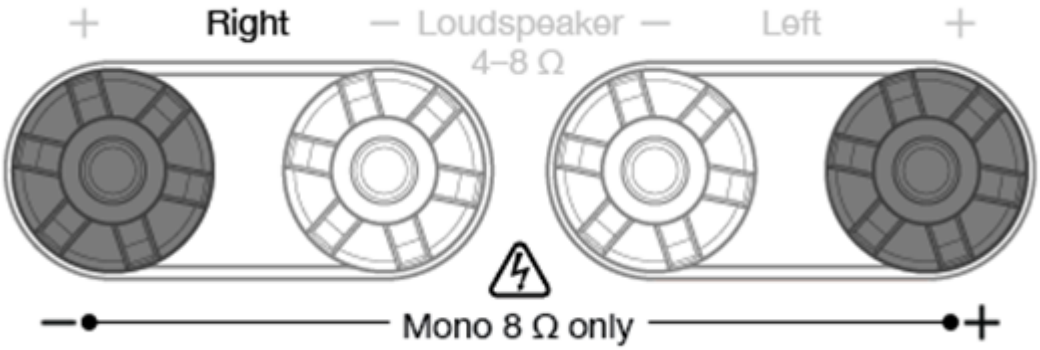
In Stereo mode

Connect the wires from your left channel loudspeaker to the left positive and negative terminals and the wires from the right channel loudspeaker to the right positive and negative terminals. The red terminal is the positive output and the black terminal is the negative output.

Care should be taken to ensure no stray strands of wire short the speaker outputs together. Please ensure that the loudspeaker terminals have been tightened completely to provide a good electrical connection. It is possible for the sound quality to be affected if the screw terminals are loose.

In Mono mode

NOTE: the red terminal of the “Left” is the positive output, the red terminal of the “Right” is the negative output.



8. AC POWER SOCKET

Once you have completed all connections to the amplifier, plug the AC power cable into an appropriate mains socket then switch on. Your amplifier is now ready for use.

Getting connected

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LOUDSPEAKERS

Check the impedance of your speakers. You can use types with an impedance of between 4 and 8 Ohms in stereo mode. Only 8ohm loudspeaker is supported in mono mode.

The red coloured speaker terminals are positive (+) and the black speaker terminals are negative (-). Make sure the correct polarity is maintained at each speaker connector or the sound can become weak and “phasey” with little bass.

Note: in the Mono mode, the red terminal of the “Left” is the positive output, the red terminal of the “Right” is the negative output.. refer to the 'Mono connection' section of this manual for more information.

USING BARE WIRE CONNECTIONS

Prepare the speaker cords for connection by stripping off approximately 10mm (3/8”) or less of the outer insulation. More than 10mm could cause a short circuit. Twist the wires tightly together so there are no loose ends. Unscrew the speaker terminal, insert the speaker cable, tighten the terminal and secure the cable.

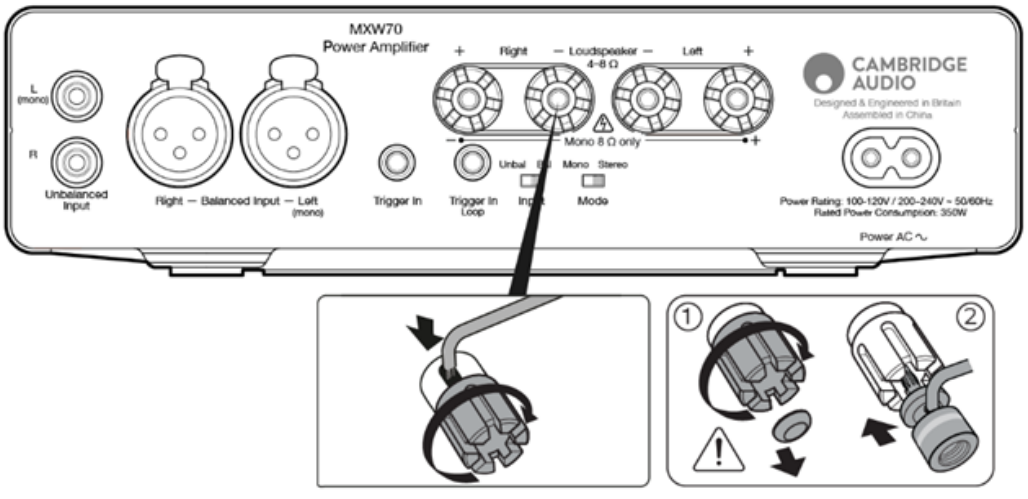
Note: All connections are made using standard loudspeaker cable.

USING BANANA PLUGS

We recommend using Banana plugs with our units to establish a secure connection and ensure there are no loose strands of wire that may cause unwanted noise or interference.

Once you have stripped the outer insulation of the cable and twisted the wires as indicated below, securely connect these to your banana plugs and push the plug in as far as possible without applying excessive force.

Note: When using a banana plug, make sure the speaker terminals are completely tightened before removing the "pip" from them, and then insert the banana plugs

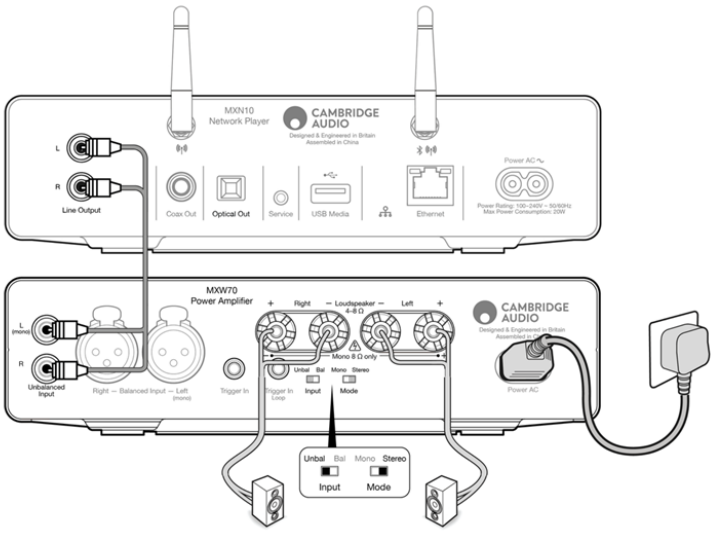


STEREO CONNECTIONS

The analogue inputs are to be connected to the Pre-Outs of a Preamplifier or Integrated amp. The diagrams below show the basic connection from a Preamplifier.

Unbalanced input

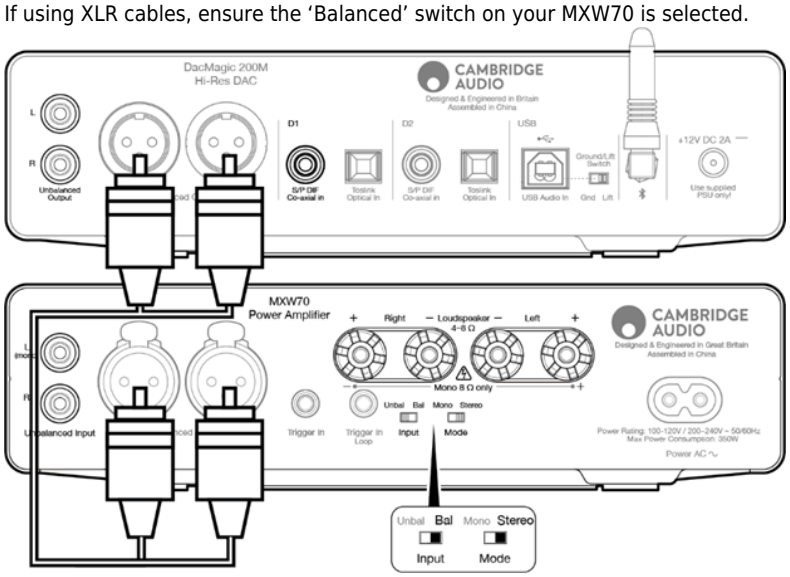
Using RCA cables will enable an unbalanced analogue connection to your MXW70.
If using RCA cables, ensure the 'Unbalanced' switch on your MXW70 is selected.



Balanced input

Using XLR cables will enable a balanced analogue connection to your MXW70. This will provide a cleaner signal path compared to an RCA unbalanced connection, especially over longer cable lengths, however the increase in audio quality they provide is subjective when used over shorter lengths.

If using XLR cables, ensure the 'Balanced' switch on your MXW70 is selected.



Power syncing

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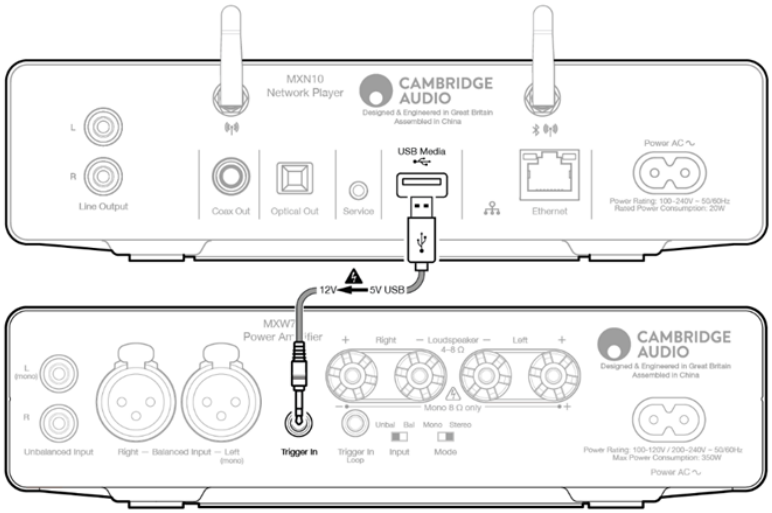
TRIGGER IN

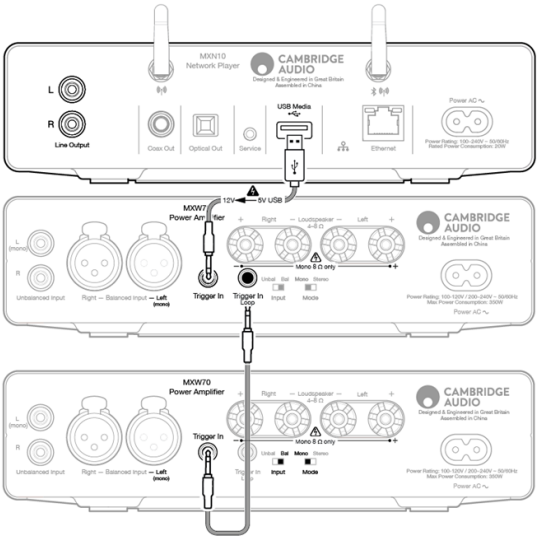
The MXW70 is supplied with a Trigger in cable that connects to any audio product's USB A port, allowing MXW70 to synchronize power on/standby. When you turn your product On/Off, the MXW70 will also power on/off.
The diagram below shows how to use Trigger in cable between the MXN10 and MXW70.



TRIGGER IN LOOP

The trigger loop will pass the 12V from the Trigger in, so this can be used to turn on the second MXW.
A standard 3.5mm jack cable (mono or stereo) can be used for the purpose.

NOTE: Trigger In Loop is different from a Trigger Out connection. MXW70 does not generate 12V on Trigger In Loop.
An external source connected to Trigger In is required to use Trigger In Loop



For the trigger in cable, avoid connecting to any other ports, as it can damage the unit.

Mono connection

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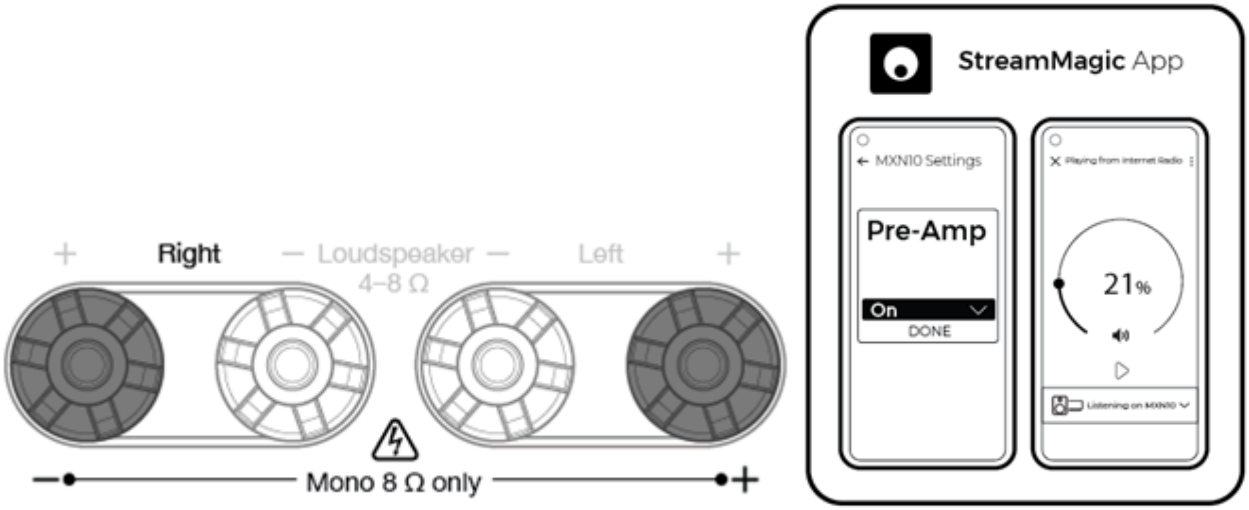
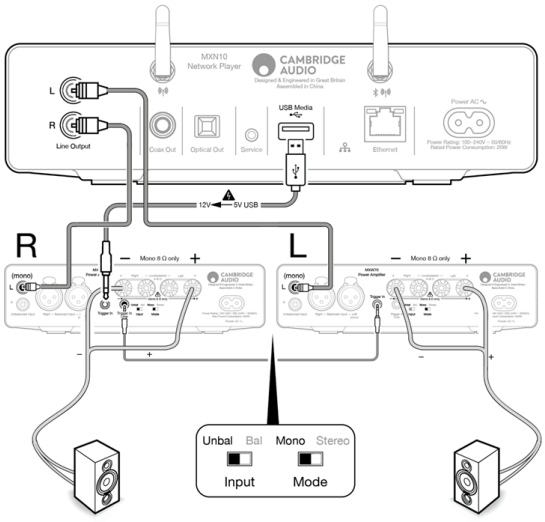
Mono mode allows you to drive the left speaker by one power amplifier and the right speaker by another power amplifier.

Power Amplifiers must be controlled by a product in pre-amp (variable output) mode. Otherwise you risk maximum volume output which may damage your speakers.

Unbalanced connection in mono mode

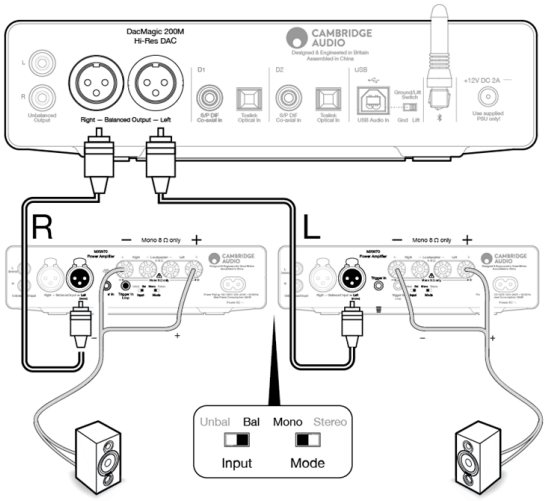
1.The diagram below shows how to drive a pair of MXW70's connected to a MXN10 using an unbalanced connection.
2. In the Mono mode, only 8ohm is supported and the red terminal of the “Right” is the negative output.
3. Turn on the Pre-Amp mode in the StreamMagic app, to ensure the volume increases/decreases in sync.
4. Set the Mode switch in Mono mode and ensure that the unbalanced switch has been selected.





Balanced connection in mono mode

The diagram below shows how to drive a pair of MXW70's connected to a DacMagic200M using the balanced connection.
the Mode switch in Mono mode and ensure that the balanced switch has been selected.


DacMagic 200M
Hi-Res DAC
CAMBRIDGE AUDIO
Right — Balanced Output — Left
R
L
Mono 8 Ω only
Unbal
Bal
Mono
Stereo
Input
Mode

Advanced settings

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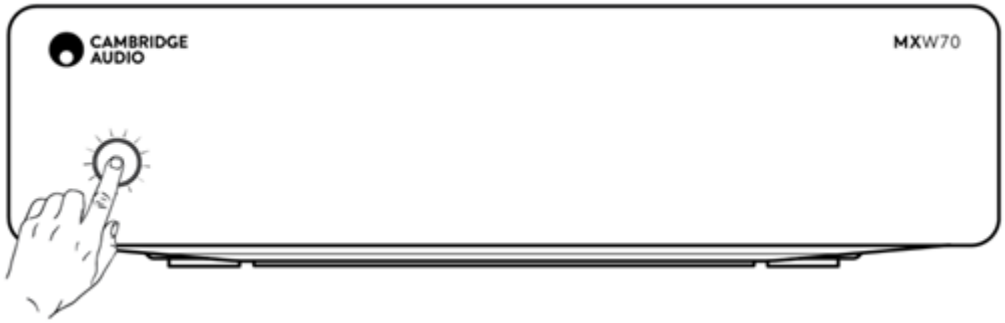

Auto Power Down (APD)

The MXW70 arrives with APD enabled, and this will automatically switch the unit to standby if no audio signal is detected for 20 minutes. To disable, or re-enable this function then please see the below instructions.

Disable APD

Note: Please ensure that the MXW70 is in standby, which is indicated by only the standby LED being dim .
Press and hold the Standby button for 5 seconds.
Will blink alternately red-white LED for five times and then go back to the standby state

Enable APD/To perform a factory rest

Note: Please ensure the AC power cable of MXW70 is unplugged and wait for the standby LED to turn off before plugging in the AC power to perform APD reset or factory reset.

Enable APD (default)

Press and hold Standby button for 5 seconds while plugging in AC power
Will blink alternately red-white LED for five times and then go back to the standby state

To perform a factory reset

Press and hold standby button while plugging in AC power until blink alternately red-white LED.
* APD function will enable.

Protection circuitry

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The MXW70 includes Amplifier Protection Circuitry to detect faults with Over Temperature, DC offset, Clipping and Power supply fault. If any of these faults are detected the button LED will blink red.

Press the button once to disable the protection indication, and press again to turn unit back on, when the fault has been removed.

DC

This is indicated by 1 short red blink followed by solid white.

MXW70 offers loudspeaker protection if the output of the amplifier goes to a high constant voltage (DC) because of some internal fault. This is a rare fault, although detecting it will protect your loudspeakers from damage.

If this fault occurs, please contact your dealer for service or our support team https://www.cambridgeaudio.com/contact

Over Temperature

This is indicated by 2 short red blinks followed by solid white

Over temperature can be caused by a combination of high listening levels, low impedance speakers and insufficient ventilation. If the internal temperature reaches a high level, the amplifier will automatically switch into a fault mode to protect itself from damage.

If the loudspeaker impedance is low, the temperature of the amplifier may rise faster as the amplifier is working harder.
If the amplifier is mounted in a closed cabinet, the over temperature detection may activate/reactivate after a short listening time.

Leave the unit for 5 minutes to cool down before resuming normal operation. Check if the loudspeaker impedance is suitable for the selected MXW70 operation mode, and also make sure there's at least 15cm room all around the unit to allow the necessary convection cooling.
The unit will not resume operation even when pressing the standby button if the internal temperature hasn't reached a safe level yet.

Power Supply Fault

This is indicated by 3 short red blinks followed by solid white.

In the unlucky event that the internal power supply becomes faulty. this can also happen when removing the power cord whilst unit is on, or if there's a sudden power outage.

If the issue persists, please contact your dealer for service or our support team https://www.cambridgeaudio.com/contact

Clipping

This is indicated by 4 short red blinks followed by solid white.

The unit will allow output clipping for a very short time, as this might occasionally happen during loud music transients. Red light will flash quickly. In this case it is recommended to reduce the volume of the source.
If clipping condition is persistent, then the unit will automatically shutdown to prevent loudspeaker damage.

Troubleshooting

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There is no power

- Ensure the AC power cord is connected securely.
- Ensure the plug is fully inserted into the wall socket and is switched on.
- Check fuse in the mains plug or adaptor.

There is no sound

- Make sure the unit is not in Standby mode.
- Check that source component is properly connected.
- Check that your speakers are properly connected.
- Ensure that the correct input has been selected via the Balanced/Unbalanced switch.
- Ensure that the correct mode has been selected via the Mono/Stereo switch.
- If possible, use different interconnect cables and speaker cables.
- Check your source devices' volume control to ensure this is not muted.
- Check with alternative source device.

There is no sound on one channel

- Check speaker connections.
- Check interconnects.

There is weak bass or diffused stereo imaging

- Ensure that speakers are not wired out of phase.

There is a loud buzz or hum

- Ensure no interconnects are loose or defective.

The LED standby button is flashing red

- Check the 'Protection Circuitry' section for troubleshooting steps.

Technical specification

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Last updated: June 10, 2025 05:05. Revision #10014

Continuous power output:

- 2 x 70W RMS into 8 Ohms
- 2 x 125W RMS into 4 Ohms
- 1 x 250W RMS into 8 Ohms (Mono)

THD (unweighted):

- <0.015% @ 5W/8ohm

Frequency Response:

- 10Hz - 30kHz (-1dB)

S/N ratio (ref 1W into 8 Ohm):

- >110dB (20-20k bw)

Crosstalk @ 1kHz:

- <-82dB

Inputs:

- Balanced, Unbalanced.
- 12v Trigger

Input sensitivity:

- 3.6V (mono XLR), 1.65V (mono RCA), 0.9V (stereo RCA), 1.9V (stereo XLR)

Outputs:

- Speakers, 12v Trigger Loop out

Max power consumption:

- 300W

Standby power consumption:

- <0.5W

Dimensions:

- 56 x 215 x 215mm

Weight:

- 1.65kg