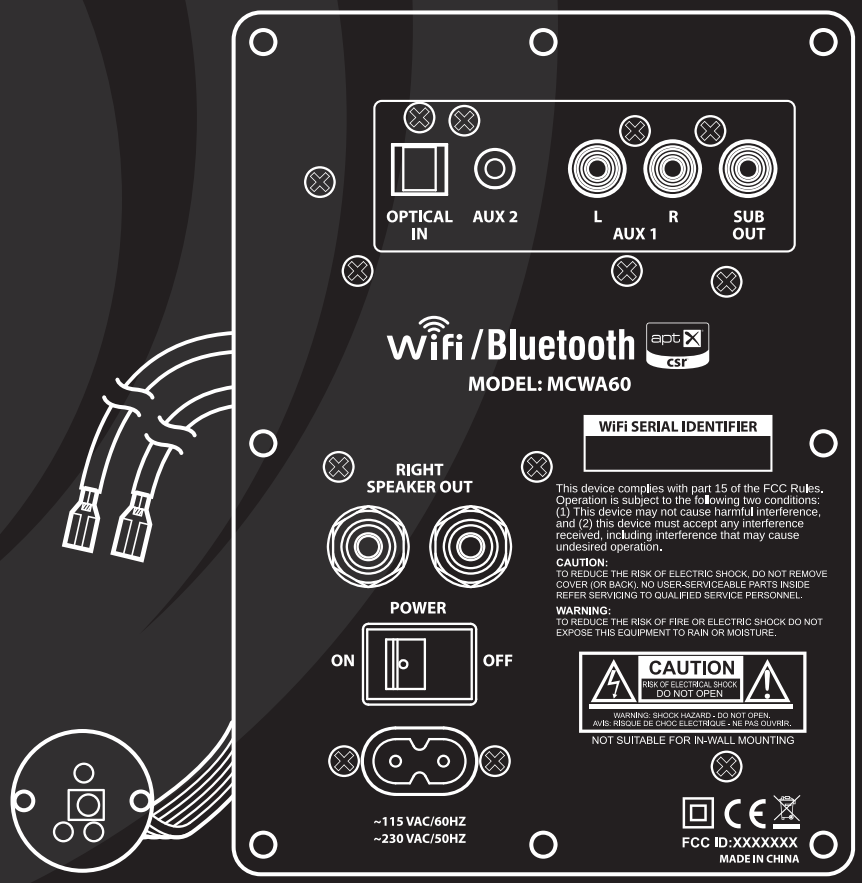
DAYTONAUDIO

60 WATT CLASS D PLATE AMPLIFIER with Wi-Fi and BLUETOOTH 4.0 aptX

Model: MCWA60 User Manual



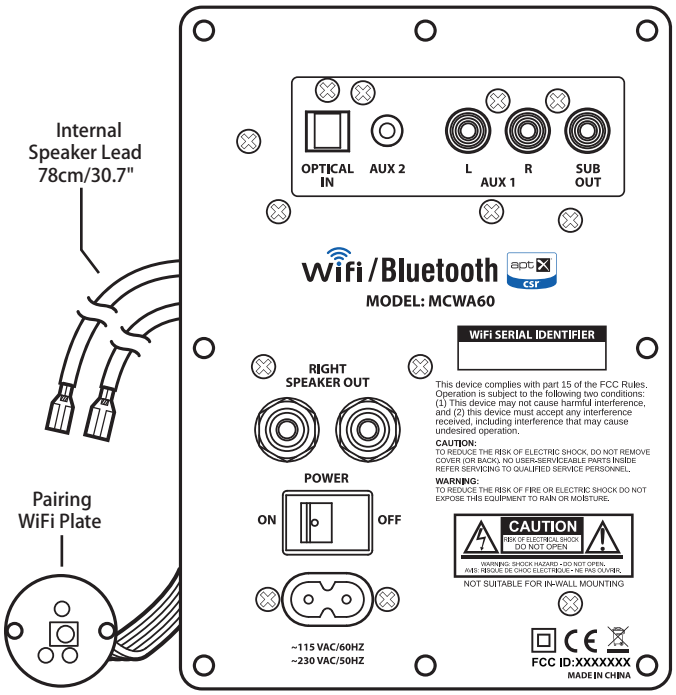
INTRODUCTION

Congratulations on your purchase of the Dayton Audio MCWA60 60-watt plate amplifier with Wi-Fi and Bluetooth audio! The MCWA60 is a feature-packed full range Class D plate amplifier that makes it easy to add high-quality Wi-Fi and AptX Bluetooth 4.0 wireless connectivity to your speakers. In addition to its wireless inputs, the MCWA60 features RCA, 3.5mm, and optical digital inputs, plus a subwoofer output (LFE).

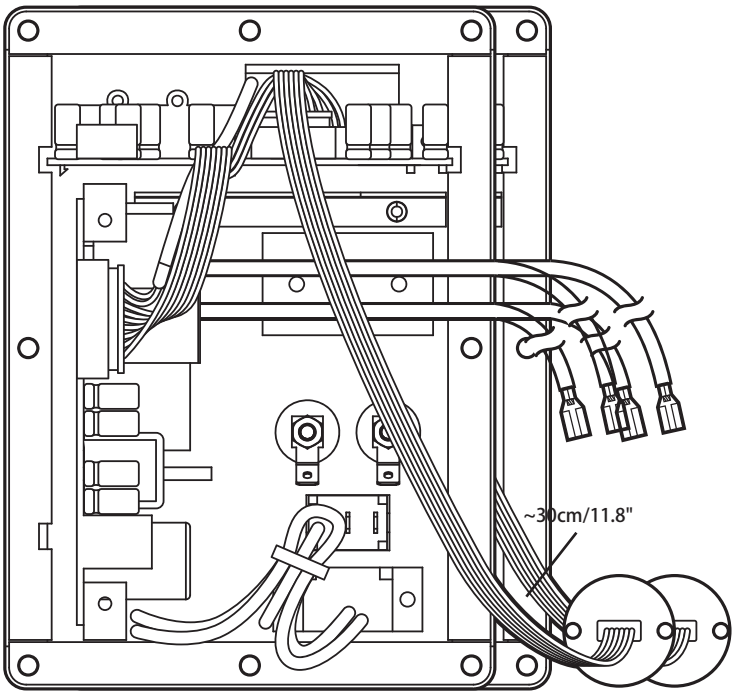
The MCWA60 is ideal for the project builder or OEM, with endless applications. Use the MCWA60 to build multimedia speakers, powered monitor speakers, or even retrofit existing speakers! Each Wi-Fi module is serialized for easy identification when using multiple plate amps, and each plate amp powers its host speaker plus an additional passive unit with up to 30 watts per channel.

ASSEMBLY

Select a mounting location for the MCWA60 amplifier module that allows the 30" speaker cable to easily reach the speaker or crossover input terminals. The 30 " lead is factory terminated with 0.205" disconnects for easy connection to speaker and crossover terminals. Mount the MCWA60 amplifier module into a 3-3/4" (W) x 5-1/2" (H) cut-out in your cabinet, and bore an 11/16" diameter hole to mount the IR target/BT/Wi-Fi pairing indicator PCB.



FRONT



BACK

Note: For modeling use both 2D and 3D mechanical files are available for download of this plate amplifier. Files can be found on the daytonaudio.com website.

INPUTS/OUTPUTS

The MCWA60 features a variety of input connections to suit a variety of needs:

OPTICAL – Connect an S/PDIF Toslink cable to this input. The Toslink input supports PCM digital audio signals via an optical cable and a high-quality AKM digital-to-analog converter.

AUX 2 – Connect a line-level or headphone-level signal to the 3.5mm AUX 2 input using a 3.5 mm to 3.5mm or 3.5mm to RCA cable.

AUX 1 – Connect a line-level stereo audio signal to the AUX 1 input using quality RCA style cables.

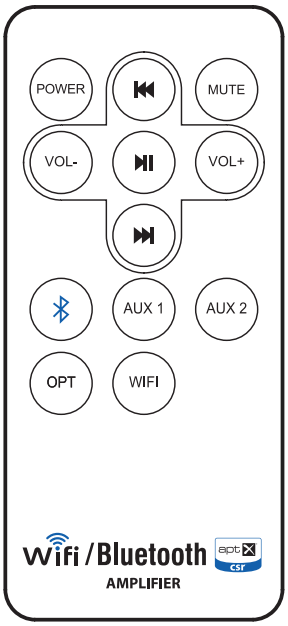
SUB OUT – Connect a powered subwoofer to the SUB OUT using a standard RCA style cable. The subwoofer plays content below 80 Hz when connected; the speaker outputs remain full-range.

SPEAKER OUT –Connect a remote full-range speaker to the SPEAKER OUT. Be sure and pay attention to positive and negative polarity. The amplifier will provide up to 30 watts into a 4 ohm minimum impedance on this connection.

AC INPUT – Connect line power to the AC INPUT using the included non-polarized "figure 8" style power cord. The MCWA60 switch-mode power supply accommodates a full range of operating voltages from 90-230V, and is double insulated for use with non-grounded line cords.

POWER – Switch to the ON position when operating the MCWA60 and the OFF position when the unit is not in use.

REMOTE CONTROL



POWER – Toggles the power state of the amplifier from STANDBY to ON. When the unit is ON, the indicator LED will illuminate BLUE. When the unit is in STANDBY, the indicator LED will illuminate RED. (**Note:** Turning OFF the rear power switch will turn power completely off to the unit, disabling the remote.)

VOLUME – Adjusts the volume level of the amplifier. If the source device has a volume control in itself, set the volume to full then control the volume with the MCWA60 volume control. As the volume increases or decreases the blue indicator LED will flash. When volume is at min or MAX, the blue indicator LED will not flash.

MUTE – Press once to temporarily mute the amplifier. The blue indicator LED will flash slowly while the MCWA60 is muted.

PLAY/PAUSE ⏯ – Press once to play or pause program audio in Bluetooth mode only.

PREVIOUS/SKIP ⏮ ⏭ – Press to move to the beginning of the current song or advance to the next song in Bluetooth mode only.

AUX 1/2 – Press once to switch to the corresponding analog input on the amplifier. The blue indicator LED will flash once.

OPTICAL – Press once to switch to the S/PDIF Toslink input on the amplifier. The blue indicator LED will flash once.

BLUETOOTH – Press to switch to and pair with the Bluetooth input on the amplifier. The blue indicator LED will flash once.

WiFi – Press once to switch to and pair with the Wi-Fi input on the amplifier. The blue indicator LED will flash once.

OPERATION

Once you have completed installation of the MCWA60 into your project it is best to test the system using a known operating source component connected to one of the analog inputs. The default state of the amplifier at power-ON is to enter STANDBY mode; use the remote to turn the power on and select an input to begin listening.

PHYSICAL CONNECTION

Connect an audio source to any of the three external inputs. Permanent connection of sources including CD/BD/DVD players, television/satellite/cable boxes, game consoles, and other sources are best supported using the OPTICAL or AUX 1 (RCA) inputs, while portable music players and PCs are best supported by the AUX 2 (3.5mm) input.

WIRELESS CONNECTION – BLUETOOTH®

Bluetooth connectivity provides an easy, wireless connection for a personal audio device such as a tablet or mobile phone. The MCWA60 utilizes a Bluetooth 4.0 transceiver featuring aptX® decoding for CD quality audio, and also supports legacy A2DP, AVRCP, HFP, and HSP Bluetooth audio profiles. This is a Class II Bluetooth receiver with a range of approximately 10 meters.

To pair your device, put the phone or tablet into pairing mode. Press the Bluetooth button on the remote control. Press "scan" on the phone or tablet and select the device labeled "DABTA". The blue indicator LED will illuminate brightly to show pairing was successful.

Note: The remote control functions PREVIOUS, SKIP, PLAY, and PAUSE are only available for use in Bluetooth mode.

WIRELESS CONNECTION – Wi-Fi

The Wi-Fi connection in the MCWA60 operates using the same principles as your home Wi-Fi internet connection; however, the MCWA60 does not connect to your home Wi-Fi or to the internet. Instead, it creates its own Wi-Fi network, which your source device connects to. The Wi-Fi connection provides an easy, wireless connection for a personal audio device such as a smartphone, tablet, or PC.

Note: Each MCWA60 is assigned a unique Wi-Fi serial Identifier. This number can be found on the amplifier's face (same as serial number).

Open the Wi-Fi settings in your smartphone, tablet, or PC. Press the Wi-Fi button on the remote control. Scan for Wi-Fi networks and select the network labeled DAWAXXX, where "XXX" is a unique string of numbers assigned to the Wi-Fi module. **Note:** In most cases your smartphone, tablet, or PC will lose internet WiFi connectivity while connected to and streaming audio to the MCWA60 amplifier.

STANDBY MODE

The MCWA60 will automatically switch to standby mode if no signal is sensed for 15 minutes. When a signal is sensed, the MCWA60 will "wake-up" automatically and begin to operate. Power consumption in standby mode is less than 0.5W.

SPECIFICATIONS

Power:	2 x 30 Watts RMS (Class D)
Inputs:	AUX 1: 2 x RCA, AUX 2: 3.5mm Stereo, S/PDIF Optical: Toslink
Outputs:	30" lead with 0.205" disconnects, Dual 5-way binding posts, RCA LFE Output (80 Hz Xover)
Frequency response:	45-20,000 Hz
Operating power:	90 ~ 230 Vac, 50/60 Hz, 80Watts
Standby power:	<0.5Watts
Bluetooth module:	V4.0 + EDR, Class II
Bluetooth Audio Profiles:	aptX, A2DP, AVRCP, HFP, and HSP
Bluetooth range:	10 meters
Wi-Fi:	2.4 GHz, Apple AirPlay® compatible
Signal to noise ratio:	>95dB

Specifications and design subject to modification without notice

Apple and AirPlay are trademarks of Apple Computer, Inc. Registered in the US and other countries.

Warranty Information

Dayton Audio® products are constructed by industry experts, and are thoroughly tested before shipment. Dayton Audio® products are warranted for the period of one year. This warranty is limited to manufacturer defects, either in materials or workmanship. Dayton Audio® is not responsible for any consequential on inconsequential damage to any other unit or component or the cost for installation or extraction of any component of the audio system. In the rare case of a product failure, please contact your place of purchase or call our Customer Support Department at (937) 743-8248.

Warranty Limitations

There are no other warranties, either express or implied, which extend the foregoing, and there are no warranties of merchantability or fitness for any particular purpose. The warranty will not cover incidental or consequential damage due to defective or improper use of products. This includes but is not limited to burnt voice coils, overheating, bent frames, holes in the cone, or broken lead wires.

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Non-Warranty Service: If non-warranty service is required, the product may be sent to the Company for repair/replacement, transportation prepaid, by calling (937) 743-8248 for details, complete instructions, and service fee charges.

FCC Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.