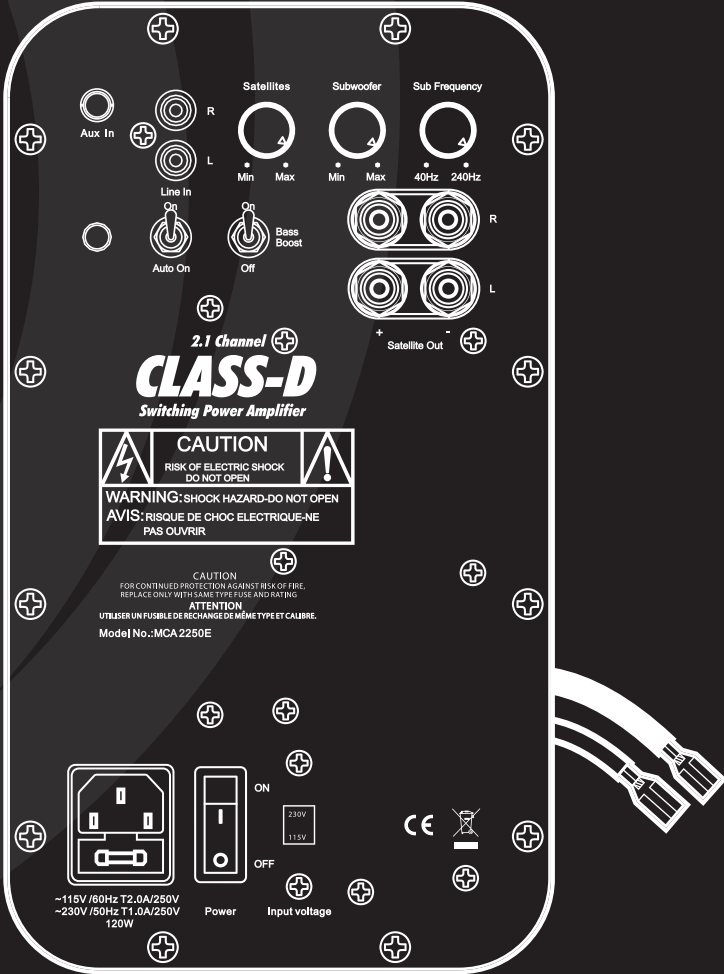




# 2.1 CHANNEL CLASS D PLATE AMPLIFIER

Model: MCA2250E User Manual



Thank you for purchasing the MCA2250E 2.1 Channel Amplifier. It was designed and built to provide years of high quality sound reproduction, and is ideal for use for music playback and computer audio systems. The amplifier includes features like efficient Class "D" technology, independent amplifiers, selectable subwoofer crossover frequency, auto on/off circuitry, and internal protection against shorted speaker loads, thermal faults, and overload conditions.

#### Features:

- Independent high frequency and low frequency amplifiers
- Efficient Class D technology
- Satellite level control
- Subwoofer level control
- Variable subwoofer crossover
- Switchable +3dB bass boost @ 63Hz
- RCA line level and 3.5mm stereo inputs
- Thermal, overload and fuse protection circuitry
- LED power status indicator

## CONTROLS AND CONNECTIONS

### POWER SWITCHES AND INPUT

#### 1.) Master ON/OFF Switch:

The amplifier is manually turned ON or OFF via this master switch. When the power switch is moved to the "ON" position, the amplifier will be in one of two modes depending on the "On/Auto on" switch position.

#### 2.) Indicator LED:

When the master switch is on and the indicator LED is red, the amplifier is in standby mode. When the On/Auto-On switch is in the "On" position, the LED will stay green, and the amplifier is fully active. In the "Auto-On" position the LED will be green and will turn to red after 10 minutes without a signal

**Note:** The master power switch will turn off the amplifier regardless of the "On/Auto on" switch setting.

#### 3.) On/Auto-On Switch:

When the "On/Auto on" switch is in the "On" position the amplifier will operate normally. When in the "Auto-On" position the amplifier will operate normally when a signal (via RCA input) is present and go in "stand by" mode when idle (no signal present). It will take approximately 10 minutes for the unit to switch from active to stand by mode. In standby mode the power draw is less than 0.7W and heat generated is low therefore it is not a problem to leave in the "Auto on" position indefinitely.

**Note:** The Master "ON/OFF" power switch must be in the "ON" position to operate regardless of the "On/Auto on" switch setting.

#### 4.) IEC Power Jack / Fuse Holder:

The unit comes with an IEC jack that permits removal of the AC power cord. This allows the flexibility of changing the power cord for different countries. The IEC socket also houses the main fuse holder. Plug the power cord supplied with the amplifier into the amplifier and a grounded wall outlet or appropriate surge protector. In most 230V applications a separate power cord will be required and is not included.

**Fuse:** Replace with only 5mm x 20mm, fast blow 3.15A, 250V type fuse for 115V operation and 2.5A for 230V operation.

#### 5.) AC Voltage Switch:

The unit is set at the factory for 115V U.S. operation; simply connect the included IEC power cord to your wall outlet. For 230V operation, move the voltage selector switch to the 230V position. When operating at 230V the internal fuse located in the IEC socket should also be changed. In most 230V applications a separate power cord will be required and is not included.

**Note:** Be sure to change the fuse to a 2.5A rating before switching to 230V operation.

### LEVEL CONTROLS

#### 6.) Satellite Level Control:

This adjusts the overall output level of the satellite amplifier. By adjusting both the satellite and subwoofer level controls, the user will have the ability to blend the output levels of the satellite and subwoofer speaker systems.

#### 7.) Subwoofer Level Control:

Independently adjusts low frequency output level to the subwoofer only. Adjustment range is 0 ~ +5dB. Use this control to match the subwoofer output level with the satellite output level.

#### 8.) Subwoofer Frequency Control:

Independently adjusts low pass frequency to the subwoofer only. Adjustment range of this active low pass crossover is 40 ~ 240Hz with a 12dB / octave slope.

#### 9.) Bass Boost (On/Off) Switch:

When in the "On" position the amplifier subwoofer output is increased 3dB centered at 63Hz. This will give the user added bass output in the low frequency region.

**Note:** This switch should not be activated when the amplifier is being played at high volume levels, damage to the subwoofer driver may result.

### INPUT CONNECTIONS

#### 10.) RCA Line Input:

RCA female connection accepts standard line level nominal 200mV p-p signal. This is suitable for connection to home equipment as well as mixing console outputs in studio applications.

#### 11.) 3.5mm Stereo Input:

The unit also features a 3.5mm stereo input jack for quick connection to computers, MP3 players and other portable electronic devices.

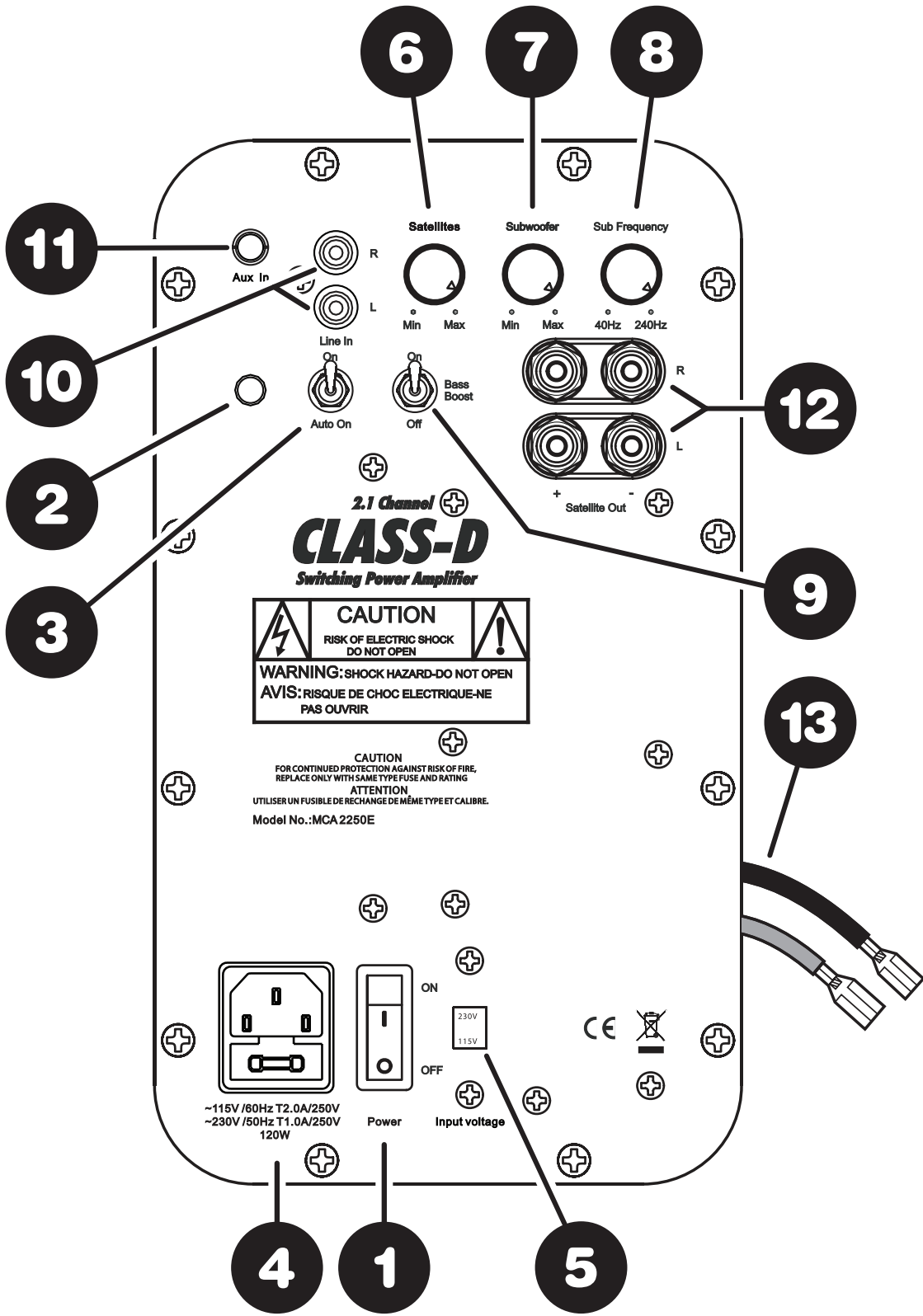
### SPEAKER OUTPUTS

#### 12.) Satellite:

The two pair (left "L" and right "R") of binding post located on the front panel, each color coded red "+" and black "-", contain an active 12dB/octave high pass filter @ 150Hz for satellite speaker connection. Load on each output must have a nominal impedance of 8 ohm or higher.

#### 13.) Subwoofer:

There is one set of speaker outputs, red "+" and black "-" wires, located on the rear (PC board side) of the amplifier module. More specifically at the bottom of the larger PC board that is perpendicular to the front panel. This amplified output contains an active 12dB/octave variable low pass filter for subwoofer speaker connection. Load on output must have a nominal impedance of 4 ohm or higher.



## SPECIFICATIONS:

### Satellite Section:

Speaker Impedance:	8 ohm
Power Output:	22W RMS x 2 @ 8ohm
Frequency response:	150Hz - 20KHz
THD:	Less than 0.3% @ rated power
Signal to Noise Ratio:	90dB at rated power

### Subwoofer Section:

Speaker Impedance:	4 - 8 ohm
Power Output:	50W RMS @ 4ohm
Variable Low Pass Frequency:	40Hz ~ 240Hz
THD:	Less than 0.3% @ rated power
Signal to Noise Ratio:	90dB at rated power
Bass Boost:	+3dB centered at 63Hz

### General:

Crossover Slope:	12dB / octave low pass and high pass filters
Input Sensitivity:	235mV p-p
Auto Turn-On Sensitivity:	10mV
Turn-Off Time:	25 minutes
Power Requirements:	115V/60Hz or 230V/50Hz 120W
Stand-By Power Rating:	115V, < 0.5W*
Overall Dimensions:	10 7/16" (H) x 5 7/8" (W) x 2-3/4" (D)
Required Opening:	9 1/4" (H) x 4 5/8" (W)

\* The MCA2250E complies with the CE EuP directive

### Important Safety Instructions

To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. Refer servicing to qualified personnel. To reduce the risk of fire and shock do not expose unit to rain or moisture. The unit should be connected to an earth grounded AC electrical socket. The unit should be operated in a well ventilated area. Minimum clearance is 2 inches from the ventilation openings.



Note: Unit is set at the factory for 115V operation. Be sure to change the fuse to a 2.5A rating before switching to 230V operation.

#### Warranty Information

Dayton Audio products are warranted free from defects in material and workmanship for **5 years** from date of purchase (see exceptions below). 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, that extend the foregoing, and there are no warranties of merchantability or fitness for any particular purpose. Dayton Audio is not responsible for any consequential or inconsequential damage to any other unit or component or the cost for installation or extraction of any component of the audio system, or for the 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. Warranty does not apply to misuse, abuse, neglect, accident, improper use, etc. Dayton Audio reserves the right to repair or replace the products with either a new or factory refurbished unit.

**Exception:** Dayton Audio HDMI Cables -- No registration, no questions asked LIFETIME warranty. Replacement of Dayton Audio HDMI cables is with equal or better quality HDMI cables. Unassembled Kits - A 45-day return policy applies to unassembled kits. Once assembly has been started or completed, kits are deemed used and are nonreturnable for refund/exchange. This does not limit the manufacturers' warranty policies on any kit component.

This warranty gives you specific legal rights and you may also have other rights that 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.



daytonaudio.com  
tel + 937.743.8248  
info@daytonaudio.com

705 Pleasant Valley Dr.  
Springboro, OH 45066  
USA

