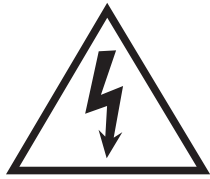


Origen^æ

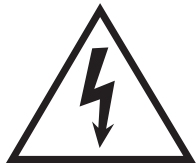
M7 Amplifier with DAC User Guide





CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER SERVICEABLE PARTS INSIDE. REFER TO QUALIFIED AUTHORIZED SERVICE PERSONNEL FOR SERVICING.

Origen^{ae} is not responsible for any damages due to external causes, including but not limited to, improper use, problems with electrical power, accident, neglect, alternation, unauthorized repair, improper installation or improper testing. This manual should be read before installation and operation.



The lightning flash with an arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated "dangerous voltage" within the products enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

WARNING: DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE. IF EXPOSED THERE IS AN INCREASED RISK OF FIRE OR ELECTRIC SHOCK.

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Specifications

Amplifier

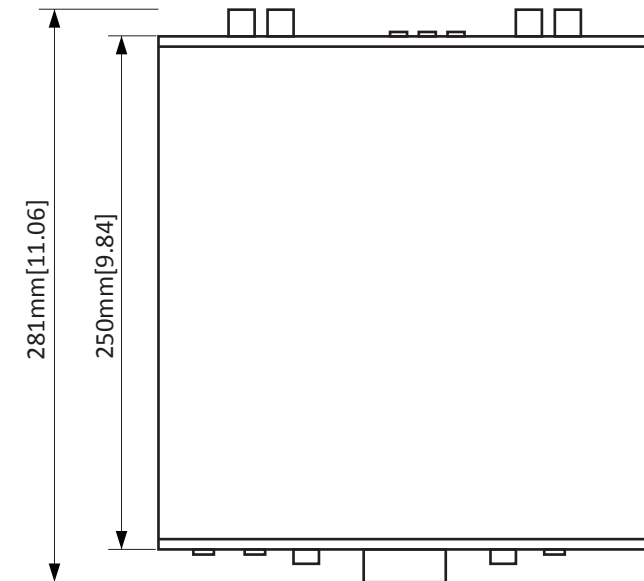
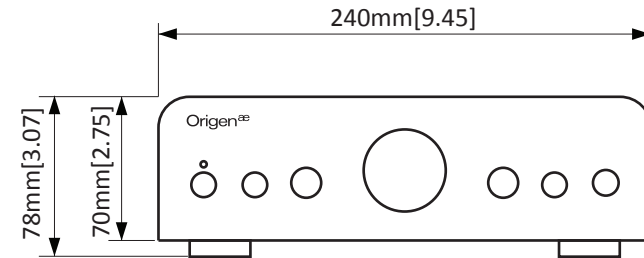
- 2 channel HiFi stereo integrated amplifier
- 50 watt per channel RMS at 4 ohm
- 25 watt per channel RMS at 8 ohm
- Frequency response : 5Hz ~ 120KHz(-3dB)
- S/N Ratio : > 85db
- Total harmonic distortion : <0.05%(20KHz / 8ohm)
- Inputs :
 - USB input for DAC audio
 - Gold RCA tuner device audio input
 - Gold RCA compact disc player audio input
 - Gold RCA auxillary audio input
- Output connector : Gold binding post pairs

DAC

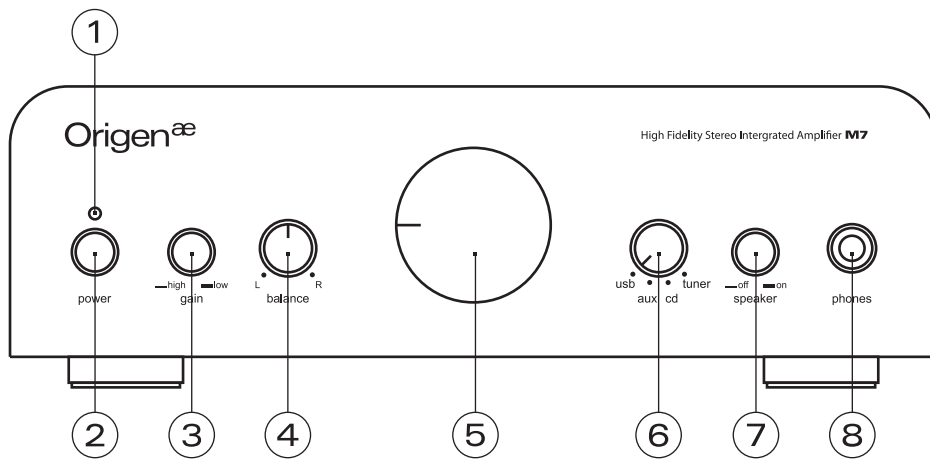
- Wolfson WM8740 powered DAC
- Tenor TE7022L USB streaming controller
- USB 2.0 full speed compliant & USB audio class 1.0 supported
- 16/24bit resolutions supported
- 8/16/32/44.1/48/96 KHz sampling rates supported
- Compatible with Microsoft Windows XP/Vista/7, Apple OSX and Linux

Dimensions

Units: [inches] millimeters



Front panel layout



1 - Power status LED

When the amplifier is first powered on the LED is illuminated red to indicate the powering up phase, this lasts for approximately two seconds. Once the amplifier has successfully completed its powering up phase, the LED changes to a blue color to indicate the amplifier is successfully powered on.

If the speaker button is in its depressed position to disable speaker output, the LED changes color to pink, to indicate audio will only be output to the headphone jack.

2 - Power button

Pressing this button once turns power to the amplifier on and the button becomes depressed. To turn the power to the amplifier off press the button again and the button will return to its extended position.

3 - Gain button

The gain for the device can be set to either high or low, by pressing the button in so it is in a depressed state gain will be set to high, to set gain to low press the button again to return the button to its extended position.

4 - Audio balance adjuster

The audio balance adjuster can be used to adjust the balance of the audio between the two audio output channels. By turning the adjuster to the left the balance will move to the left channel and by turning the adjuster to the right the balance will move to the right. For equal balance adjust the centerline indicator to the middle.

5 - Volume adjuster

The volume adjuster allows control of the volume of audio that the amplifier outputs. By setting the centerline indicator to the left-most position the audio volume will be muted. The audio volume progressively increases as the adjuster is turned until it reaches the right-most position where the volume is at its maximum level.

6 - Input selector

The input selector allows one of the four available audio inputs to be selected. To select an audio input turn the selector so the centerline indicator is directed towards the desired audio input.

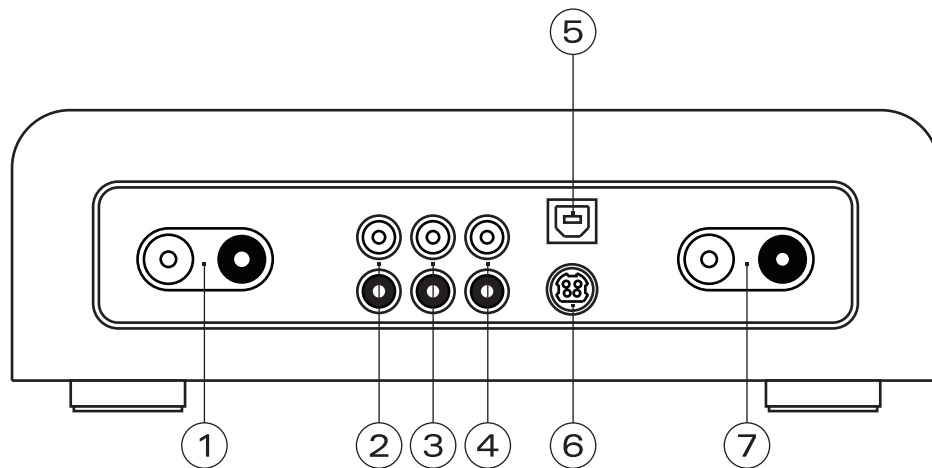
7 - Speaker button

The speaker button allows the speaker output to be enabled or disabled. By pressing the speaker button once the button becomes depressed and speaker output will be disabled. If the button is pressed again the speaker output will be enabled and the button will return to its extended position.

8 - Headphone jack

The 6.35mm TRS headphone jack allows a pair of headphones that have the standard 6.35mm connector to be plugged into the amplifier, and be used as an audio output.

Back panel layout



1 - Left speaker output terminals

The left speakers for audio output can be connected to these terminals.

2 - Tuner RCA input jacks

An external tuner audio device that has RCA audio output can be connected to these RCA jacks so that it can be used as an audio input to the amplifier, the device can be selected using the input selector on the front panel.

3 - Compact Disc Player RCA input jacks

A compact disc playback device that has RCA audio output can be connected to these RCA jacks so that it can be used as an audio input to the amplifier, the device can be selected using the input selector on the front panel.

4 - Auxillary RCA input jacks

An auxillary device that has RCA audio output can be connected to these RCA jacks so that it can be used as an audio input to the amplifier, the device can be selected using the input selector on the front panel.

5 - USB input jack

In order to utilize the DAC functionality of the amplifier a computer can be connected through the USB interface to provide digital sound input.

6 - DC Power socket

The supplied power adaptor is connected to this socket and to a power outlet in order to provide power to the amplifier. Please ensure only the power adaptor provided is utilized with the amplifier as other adaptors may cause permanent damage to the device.

7 - Right speaker output terminals

The right speakers for audio output can be connected to these terminals

*Any audio device with standard RCA audio output can be connected to either the tuner, compact disc or auxillary RCA input jacks.

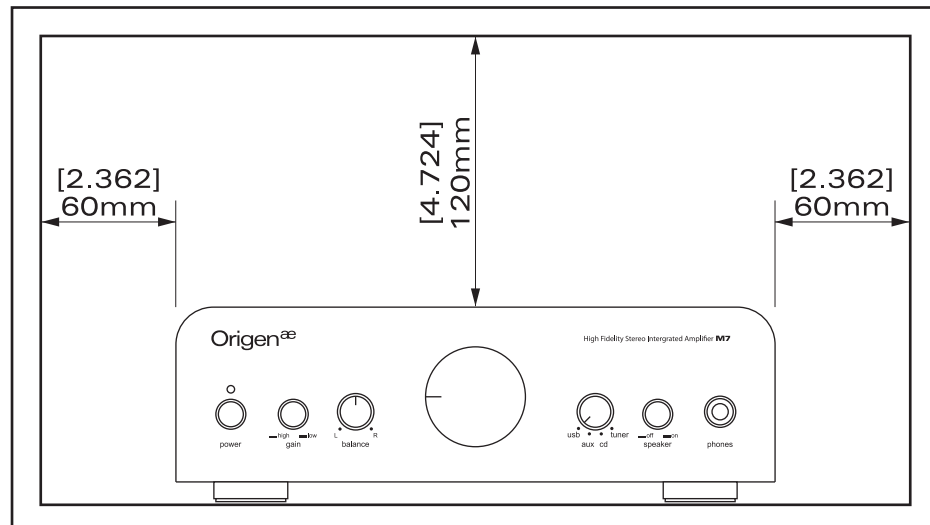
Operating environment

In order to ensure longevity of the life of the amplifier, do not locate the device where the following conditions occur:

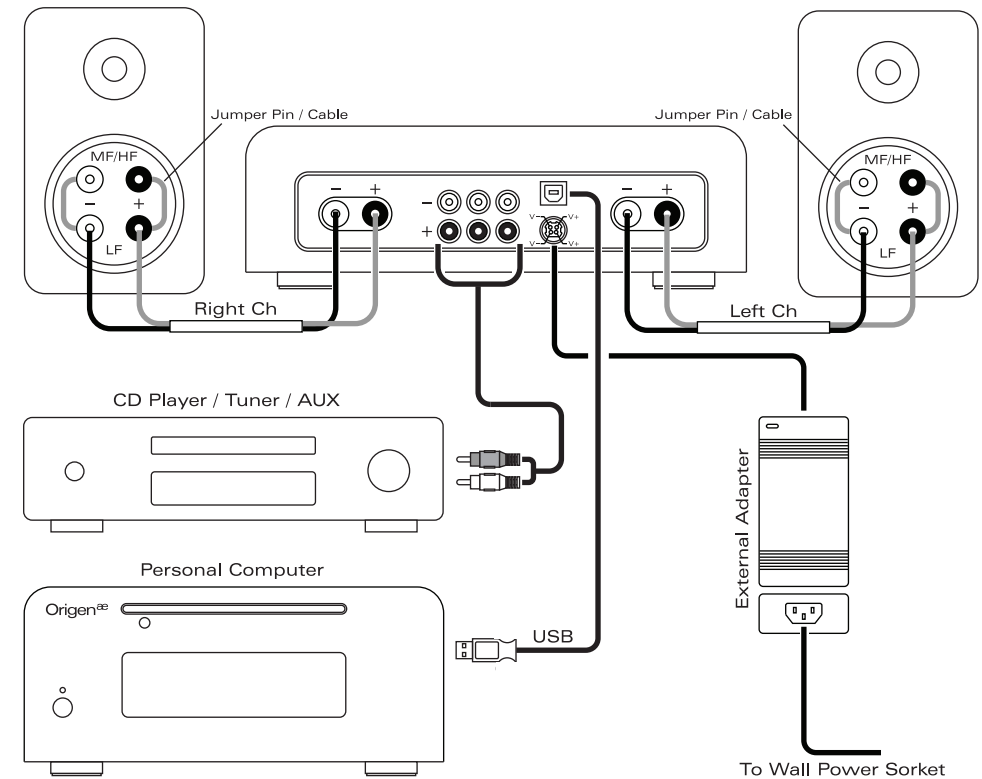
- Direct exposure to sunlight
- High dust volume environments
- Places where mechanical vibrations may occur
- On an unstable surface
- Near sources of heat generation such as heaters
- Very humid or poorly ventilated environments
- Where the top vents are obstructed

To allow proper dissipation of heat please ensure that the minimum clearance below is made available to the amplifier.

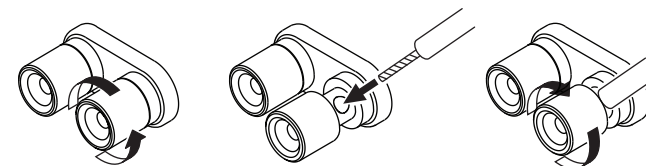
Units: [inches] millimeters



Connecting and wiring



For further information on the connection information about your external input devices please refer to the documentation that came with the device.



Wiring steps for speaker output terminal connections.

Computer setup

As the amplifier is compliant with the USB audio device specification, no additional drivers are required in order to use the amplifier with your computer, so long as the operating system is compliant with the USB audio device specification.

For support in configuring your audio settings in a operating systems other than those covered below please refer to the appropriate operating system support documentation for the configuration of USB audio devices.

The following instructions explains how to configure the amplifier as the default audio device after you have connected the amplifier to the USB port of the computer and the operating system has detected the device.

Further adjustment of audio settings are possible through your audio playback application.

Microsoft Windows 7

Step 1 - Click the start button and then click the 'Control Panel' menu item.

Step 2 - Click the 'Hardware and Sound' link.

Step 3 - Click the 'Manage audio devices' link.

Step 4 - Click the item: 'Speakers - Origen^{ae} USB DAC'

Then click the 'Set Default' button. The amplifier is now setup as the Windows default audio playback device.

Other versions of Microsoft Windows

The follow are generic instructions for configuring other versions Microsoft Windows to use the amplifier as the default audio device:

Step 1 - Click the start button and then click the 'Settings' menu item, then click the 'Control Panel' menu item.

Step 2 - Double click the item named 'Sounds and Multimedia' or 'Sounds and Audio'

Step 3 - Click the tab named 'Audio'.

Step 4 - Under the section labelled 'Sound Playback' ensure that the item 'Origen^{ae} USB DAC is selected'. (Depending on your version of Microsoft Windows this may be detected as 'USB Audio Device').

Apple OSX

Apple OSX can be configured with the following version generic instructions:

Step 1 - Navigate to 'System Preferences'.

Step 2 - Click 'Hardware'.

Step 3 - Click 'Sound'.

Step 4 - Ensure that 'Origen^{ae} USB DAC' is selected under the section labelled 'Output'. If the computers system sounds are desired to be output through the amplifier also ensure that 'Origen^{ae} USB DAC' is selected in the section labelled 'Sound Effects'.