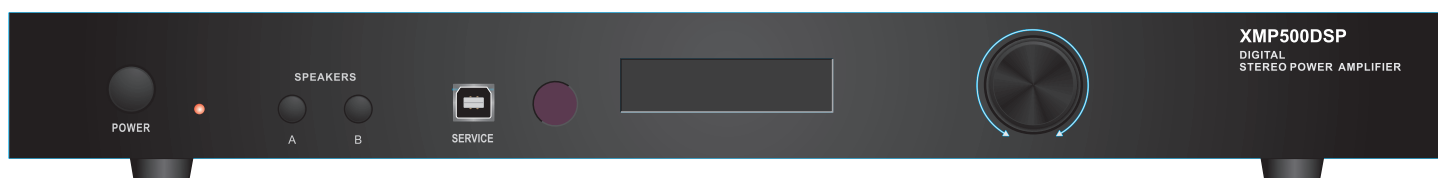




XMP500DSP OWNER'S MANUAL



XMP500DSP

Digital Stereo Power Amplifier

FEATURES:

MAIN / INTERRUPT priority input switching

MAIN auxiliary output

Speaker A/B switching

Front panel Balance and Volume controls

Signal sensing "Power On" and Trigger mode

Rear mounted treble and bass controls

Congratulations on your purchase of the OsdAudio® XMP500DSP. Please take a few moments to read this entire manual, and be sure to retain this document for future reference. Please read and observe all safety instructions detailed on page 2.

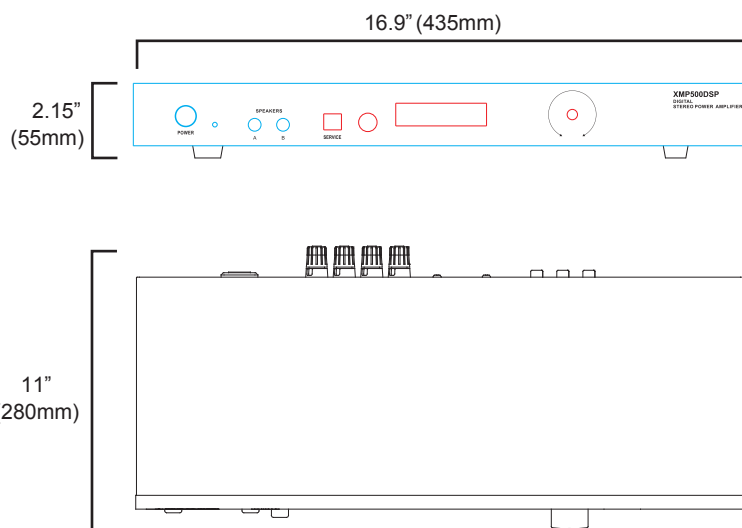
NOTE: If any part of this product is damaged or missing, please call your dealer or OsdAudio® directly at 562 697 2600.

Please read your warranty and retain your receipt and original carton for possible future use.

For more information about OsdAudio® electronics, speakers and accessories please visit www.osdaudio.com

SPECIFICATIONS

Stereo (8 ohm):	250W per channel, <1% THD+N
Stereo (4 ohm):	350W per channel, <1% THD+N
Bridged Mono (8 ohm):	700W, 1kHz, <1% THD+N
Frequency Response:	10Hz ~ 30kHz, -2dB/ +1dB
Signal to Noise Ratio:	100dB below 250W output into 8 ohms w/20kHz Lowpass filter
Channel Separation:	65dB @ 1kHz, referred to 250W output into 8 ohms
Input Sensitivity:	700mV input for rated 250W output into 8 ohms
Bass/Treble Control:	+/- 12dB @ 100Hz and 10kHz
AC Power Consumption:	700W maximum
Net Weight:	9.85lbs / 4.6kgs
Gross Weight:	12.85lbs / 6kgs



OsdAudio®
775 Columbia St.,
Brea, CA92821

www.osdaudio.com



CAUTION

**RISK OF ELECTRICAL SHOCK
DO NOT OPEN**



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER. NO USER SERVICABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL!

EXPLANATION OF SAFETY SYMBOLS



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



The lightning flash with the 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.

IMPORTANT SAFETY INSTRUCTIONS

- WARNING: TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE. THE APPARATUS SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING AND THAT OBJECTS FILLED WITH LIQUIDS, SUCH AS VASES, SHALL NOT BE PLACED ON APPARATUS.
- WARNING: TO PREVENT FIRE OF SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.
- WARNING: THE MAINS PLUG IS USED AS DISCONNECT DEVICE. THE DISCONNECT DEVICE SHALL REMAIN READILY AVAILABLE.
- WARNING: ONLY USE ATTACHMENTS OR ACCESSORIES SPECIFIED OR PROVIDED BY THE MANUFACTURER.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Do not block any ventilation openings. The ventilation should not be impeded by covering the ventilation openings with items such as newspaper, tablecloths, curtains etc. Install in accordance with the manufacturer's instructions.
8. Do not install near heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. No open flame sources, such as lighted candles, should be placed on the apparatus.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point of exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart or rack is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.



13. Unplug the apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. WARNING: To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. The apparatus shall not be exposed to dripping or splashing and that objects filled with liquids, such as vases, shall not be placed on apparatus.
16. WARNING: The mains plug/appliance coupler is used as disconnect device, the disconnect device shall remain readily operable.
17. ☐ This equipment is a Class II or double insulated electrical appliance. It is designed in such a way that it does not require a safety connection to electrical earth.



18.
 - This lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of non-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.
 - Warning: to reduce the risk of electric shock, do not remove cover (or back) as there are no user-serviceable parts inside. Refer servicing to qualified personnel.
 - The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

MAGNETIC FIELD: !!CAUTION!! Do not locate sensitive high-gain equipment such as preamplifiers or tape decks directly above or below the unit. Because this amplifier has a high power density, it has a strong magnetic field, which can induce hum into unshielded devices that are located nearby. The field is strongest just above and below the unit. If an equipment rack is used, we recommend locating the amplifier(s) in the bottom of the rack and the preamplifier or other sensitive equipment at the top.

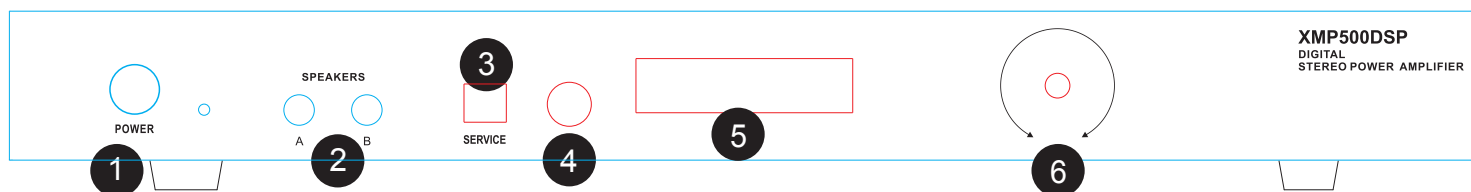


Figure 1. Front Panel

FRONT PANEL CONTROLS

1. Power Switch

Switches the XMP500DSP on or off. A red LED indicates connection to AC power while in standby mode. Turns green indicating audio signal is present.

2. Speaker Selector

Selects speaker zone A or B. For A + B zones push both buttons in.

3. Service

For uploading new firmware or update

4. IR receiver

For uploading new firmware or update

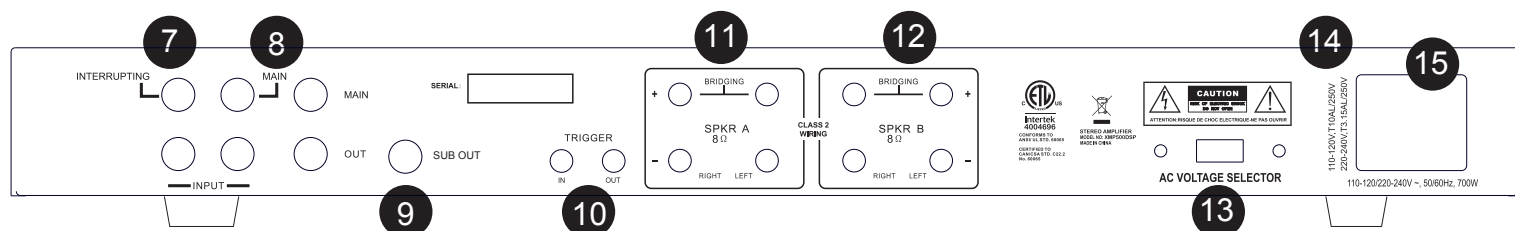


Figure 2. Rear Panel

5. 16 Character x 2 row Liquid Crystal Display

Shows the amplifier's status, menus and settings and works in conjunction with the turn and push navigation controls and the remote control.

6. Programming Navigation Control

Used to scroll through the display menus, change setting and program the DSP controller.

REAR PANEL CONTROLS

7. Interrupting Line Input

This is the secondary input, use MAIN IN for your main input. INTERRUPTING INPUT can be used if a second source is desired and takes over when signal is present and has at least a 5mV level. When there is no signal, or a signal with less than 5mV level, the amp switches back to MAIN IN after a brief delay.

8. Main Input/Output

MAIN IN should be used as the "primary" or main input for the amplifier. Connect your receiver or main source to this input. Use MAIN OUT to pass MAIN IN signal to another amplifier.

9. Subwoofer Output

Provides signal for a separate subwoofer amplifier or active subwoofer.

10. 12V Trigger IN/OUT

Allows the XMP500DSP to be powered on by other electronics or to power on other electronics via a 3.5mm mini phone plug cable.

11. Speaker Zone A Output

Speaker output terminals for zone A. Minimum impedance: 8 ohm bridged or 4 ohm stereo.

12. Speaker Zone B Output

Speaker output terminals for zone B. Minimum impedance: 8 ohm bridged or 4 ohm stereo.

SPEAKER TERMINALS - STEREO MODE

For stereo output connect the speaker's positive (red) terminal to the amplifier's positive (red) terminal, and the speaker's negative (black) terminal to the amplifier's negative (black) terminal for each Right and Left speaker.

SPEAKER TERMINALS - BRIDGED MODE

Place the "DSP" display menu in "BRIDGED" MODE and use both red terminals to connect to the speaker. Connect the speaker's positive (red) terminal to the amplifier's red (+) terminal noted next to the bridging mark, and the speaker's negative (black) terminal to the amplifier's unmarked positive (red) terminal.

NOTE: Only one zone (A or B) can be bridged. Do not attempt to bridge both A and B speaker terminals! This may result in a lower impedance than the amplifier is designed for and may damage your amplifier. The minimum impedance for the total load connected in bridged mode is 8 ohms.

To wire the output connector: 1. Strip the insulation off each speaker wire to expose 3/8" (10 mm) of bare conductor. 2. Unscrew the output terminal binding post several twists, insert each wire into the correct terminal. 3. Tighten binding post by twisting clock-wise until it is firmly clamping the speaker wire. Warning: While the amplifier does self-protect under most improper output conditions, misconfiguration of loudspeaker mode and incorrect connection of loudspeakers could damage connected loudspeakers and/or amplifier. Please refer installation to a qualified installation professional, and always check state and local electrical codes when installing.

BRIDGED MODE- MONO APPLICATION

For bridged mode, playing Right and Left together as mono output, plug RCA cables in to Right and Left RCA at MAIN input. Set the MODE switch to BRIDGED and follow the instructions for bridged speaker connection in the SPEAKER TERMINALS section of this manual.

NOTE: The XMP500DSP supplies 700W in bridged mode, Please verify that your speakers are capable of handling such power to avoid possible damage!

13. Voltage Selector Switch

The amplifier can be used on 110 - 120V or 220 - 240V(50/60) line voltage. To change the operating line voltage, turn the power off using the power button and unplug the power cord. Remove the plastic cover screws and the plastic cover over and screws over the voltage selector switch.

NOTE:

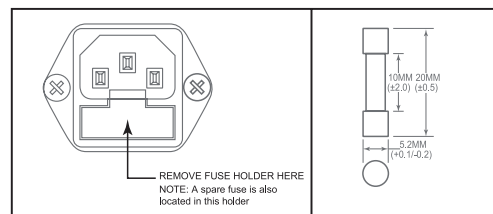
If required, remove the IEC line core and replace with an IEC AC cable that matches the AC wall socket, this should be a 10A rated cable. When the voltage selector switch is changed, the fuse must also be changed to continue to provide protection to the amplifier.

14. Fuse Holder

This is the power fuse access.

WARNING! In the event the fuse must be replaced, the replacement fuse must match exactly the original fuse value or damage to the amplifier may result. Use a 10A 120V or 5A 240V fuse.

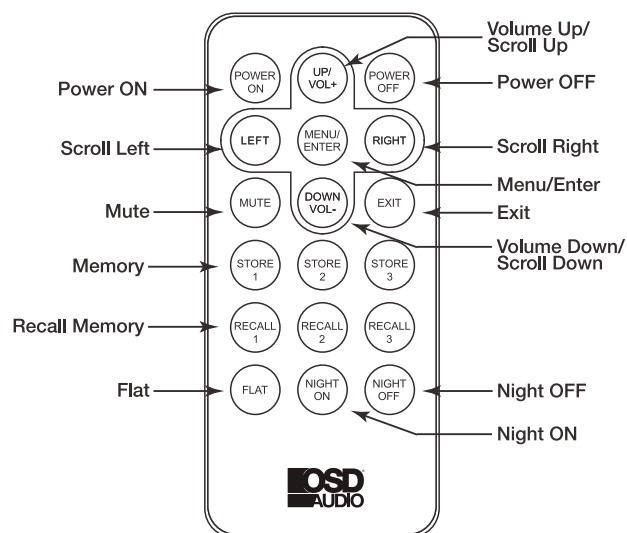
CAUTION! Before replacing the fuse, disconnect the power cord from the power receptacle.



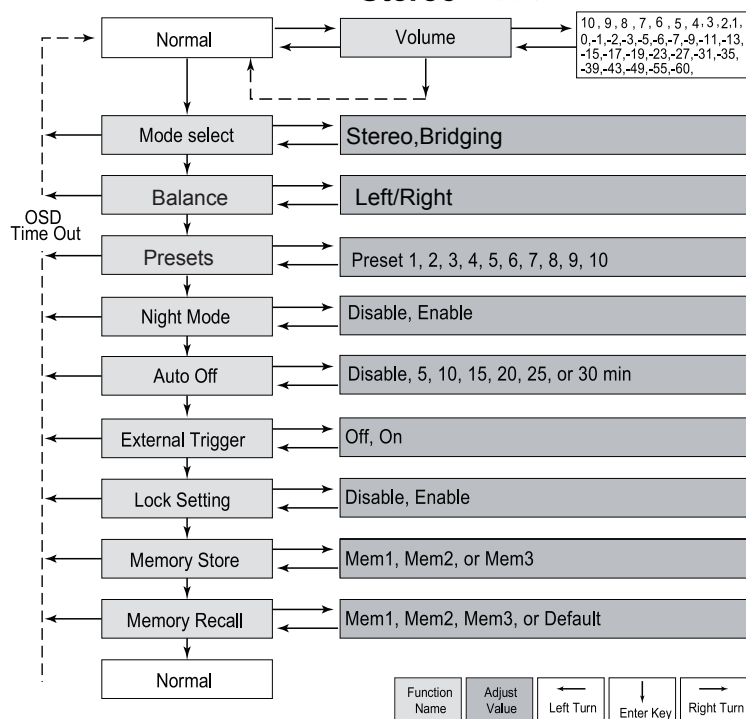
15. Power Cord Receptacle

The supplied power cord needs to be connected to this receptacle in order for the amplifier to work properly.

Remote Control



Control Flow Chart - Stereo Mode



LCD Display Screens and Functions

Normally, the LCD display will show the status for a number of settings as well as the volume level and a flashing output level bar display.

Volume Control: Adjusts the output of the system. The volume control should be set to achieve similar volume levels from both the main speakers and subwoofer.



Volume Control

Mode Select: This allows the user to select a mode. Set values contain: Stereo or Bridged



Mode Select

Balance Mode: Adjust Left & Right speaker balance.



Balance Mode

Preset Mode: Choose from 10 preset EQ settings.



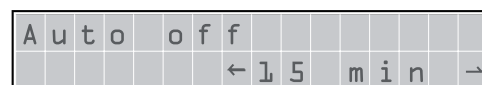
EQ Mode

Night Mode: Limits the dynamic range of the amplifier so the louder context of the source signal is reduced. This feature allows the user to select night mode. Choose enable or disable.



Night Mode

Auto Off: This feature allows the amplifier to turn itself off when not in use. With the function set to active, the amplifier will monitor its input signal. If no signal is present the amplifier will shut down and go into standby mode. As soon as a signal is present, the amplifier will turn itself back on.



Auto Off

External Trigger: This allows the user to select the enable external trigger function. Press and hold the navigation control knob with the power switch in the ON position to change.



External Trigger

Lock Setting: When this function is active, all settings will be protected until disabled. Values are: Disable or Enable.



Lock Setting

Memory Store: This allows the user to select the memory bank. There are three memory banks.



Memory Store

Memory Recall: This allows the user to recall settings saved using the "Memory Store" function.

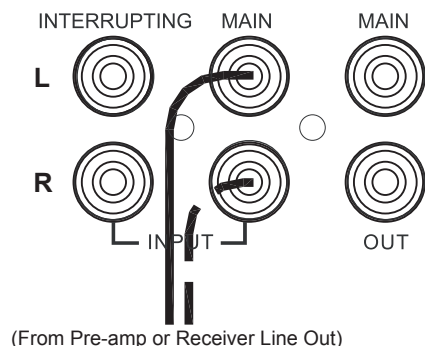


Memory Recall

APPLICATIONS

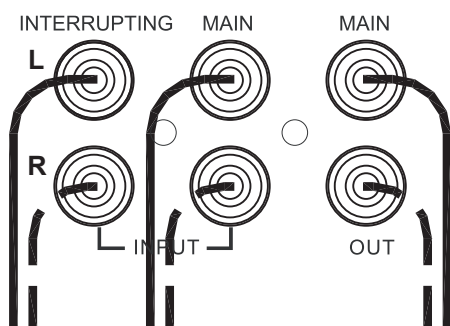
STEREO SETUP

In this configuration, the mode switch is set to "Stereo". Connect the line out jacks from a stereo pre-amplifier or source to the MAIN input jacks of your XMP500DSP. Next connect your speakers to the terminals marked "Speaker A" observing proper polarity. Select the "A" speakers using the front panel zone selection buttons. Connect a second (optional) pair of speakers to the terminals marked "Speaker B". If you are connecting 4 speakers to the XMP500DSP they must be 8 ohm speakers only. Press A and B together to use both zones.



SETUP FOR MULTIPLE SOURCE

In the multiple source set up, a distributed audio system is connected to the XMP500DSP as a local zone amplifier via the MAIN inputs. Normally the distributed audio system will be the audio source for the XMP500DSP. The distributed audio is then passed on to be used by additional zones or sub zones in the distributed system via the MAIN outputs.



The audio output of a local source, such as an MP3 Player, CD, television, computer, etc., is connected to the XMP500DSP via the INTERRUPTING inputs, and whenever the local source is active its signal will take priority over the distributed audio signal present at MAIN input. However, the distributed audio signal will still be present at the MAIN input. In this circumstance the audio output of the local source will be heard via the XMP500DSP. Once the local source is turned off or muted, the XMP500DSP will automatically switch back to the distributed audio system as an audio source, assuming the local source remains inactive. There is a delay of up to 6 seconds when switching from INTERRUPTING input back to MAIN inputs.

Limited Warranty

OsdAudio® warrants its amplifier products against defects in materials and workmanship for a limited period of time. For a period of two years from date of original purchase, we will repair or replace the product, at our option, without charge for parts and labor. Customer must pay all parts and labor charges after the limited warranty period expires. The limited warranty period for factory refurbished products expires after ninety (90) days from date of original purchase.

This limited warranty applies only to purchases from authorized OsdAudio® electronics retailers. This limited warranty is extended only to the original purchaser and is valid only to consumers in the United States.

Consumers are required to provide a copy of the original sales invoice from an authorized OsdAudio® dealer when making a claim against this limited warranty. This limited warranty only covers failures due to defects in materials or workmanship that occur during normal use. It does not cover failures resulting from accident, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, modification, service by anyone other than OsdAudio®, or damage that is attributable to Acts of God. It does not cover costs of transportation to OsdAudio® or damage in transit. The customer should return his defective product, freight prepaid and insured, to OsdAudio® only after receiving a Return Authorization.

This warranty will become void if the serial number identification has been wholly or partially removed, altered or erased. Repair or replacement under the terms of this warranty does not extend the terms of this warranty. Should a product prove to be defective in workmanship or material, the consumer's sole remedies will be repair or replacement as provided under the terms of this warranty. Under no circumstances shall OsdAudio® be liable for loss or damage, direct, consequential or incidental, arising out of the use of or inability to use the product. There are no express warranties other than described above.