CLASS D DIGITAL 2.1 POWER AMPLIFIER

USER GUIDE

Important Safety Instructions

The lightning flash with the arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of dangerous voltage inside the product that may constitute a risk of electric shock.

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 product.

TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL

1. Read Instructions — Read all the safety and operating instructions before operating this product.

2. Retain Instructions — Retain safety and operating instructions for future reference.

3. Heed Warnings — Adhere to all warnings on the product and in the operating instructions.

4. Follow Instructions — Follow all operating and use instructions.

5. Cleaning — Unplug this product from the wall outlet before cleaning. Use a damp cloth for cleaning. Clean the outside of the product only.

6. Attachments — Do not use attachments that are not recommended by the product manufacturer; they may be hazardous.

7. Water and Moisture — Do not use this product near water.

8. Accessories — Do not place this product on an unstable cart or stand. The product may fall, causing bodily injury and damage to the product. A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart to overturn.

9. Ventilation — Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided.

10. Power Sources — Operate this product only from the type of power source indicated on the label. If you are not sure of the type of power supply to your home, consult your dealer or local power company. This product is equipped with a three-prong grounding plug. This plug will only fit into a grounding power outlet. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding plug.

11. Power Cord Protection — Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them.

12. Lightning — Unplug the unit from the wall outlet for added protection during a lightning storm and when it is left unattended and unused for long periods of time. This will prevent damage to the product due to lightning and power line surges.

13. Overloading — Do not overload wall outlets or extension cords. This can result in a fire or electric shock.

14. Inserting Objects into Unit — Never push objects of any kind into this product through any openings; they may touch dangerous voltage points or short out parts that could result in fire or electric shock.

15. Servicing — Do not attempt to repair or service this product yourself. Opening or removing covers may expose you to dangerous voltage and other hazards. Refer all servicing to qualified service personnel.

16. Damage Requiring Service — Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions: **a)** If the power-supply cord or plug is damaged. **b)** If liquid has been spilled into the product. **c)** If the product has been exposed to rain or water. **d)** If the product does not operate normally by following the operating instructions. **e)** If the product has been dropped or damaged in any way.

f) If the product exhibits a distinct change in performance.

17. Replacement Parts — When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer. Unauthorized substitutions may result in fire, electric shock, and other hazards.

18. Safety Check — Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

19. Wall or Ceiling Mounting — Mount the product to a wall or ceiling only as recommended.

20. Heat — The product should be situated away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.

INTRO / FEATURES

The OSD XSP2.1 is a new Sub/SAT system Power Amplifier Combo featuring a 100-watt x 2-channel Stereo 4Ω Stable Power Amplifier and a Single 200-watt-per-channel mono 4Ω Stable Subwoofer Amplifier. It offers maximum flexibility when designing an indoor or outdoor System with one to two pairs of 8-ohm or just one pair of 4Ω Satellite speakers along with a single 4Ω Passive Subwoofer or two 8Ω Passive Subwoofers.

Features:
AMP Setup: 2.1 Satellite and Subwoofer Combo Amplifiers
AMP Type: Satellite AMP Class D and Subwoofer AMP Class D
Transformer Type: Multi-Voltage High Current Switching Power Supply
Satellite Controls: Adjustable Bass and Treble Front Panel Knobs
Subwoofer Controls: Adjustable Crossover (40hz to150Hz), Phase Control (0º to 180 degrees), and Sub Level/Gain Front Panel Knobs
Master Volume Control: Controls the Volume levels of the Satellites and Subwoofer together.
Three turn-on options: Normal On (Front Panel Power Switch), Auto/Signal/Music Sensing, and 12 Volt Trigger (In/Out Hard-Wired Connection). Note: The Power button must be enabled for all three options to function.
Input Terminals: Right and Left Channel Female RCA Analog Inputs, Ideal match for our NERO SRT1 Gen2 Wi-Fi/BT Preamp Media Streamer with an Aux-Line Output connection.
Power Supply: Switchable 110-240V 50/60Hz Input Voltage

1. Main Input/Output: The XSP2.1 Main Input consists of stereo RCA jacks and are used as the amplifier's primary audio inputs. The Main Output also consists of stereo RCA jacks and passthrough the XSP2.1's Main Input audio signal to another amplifier.
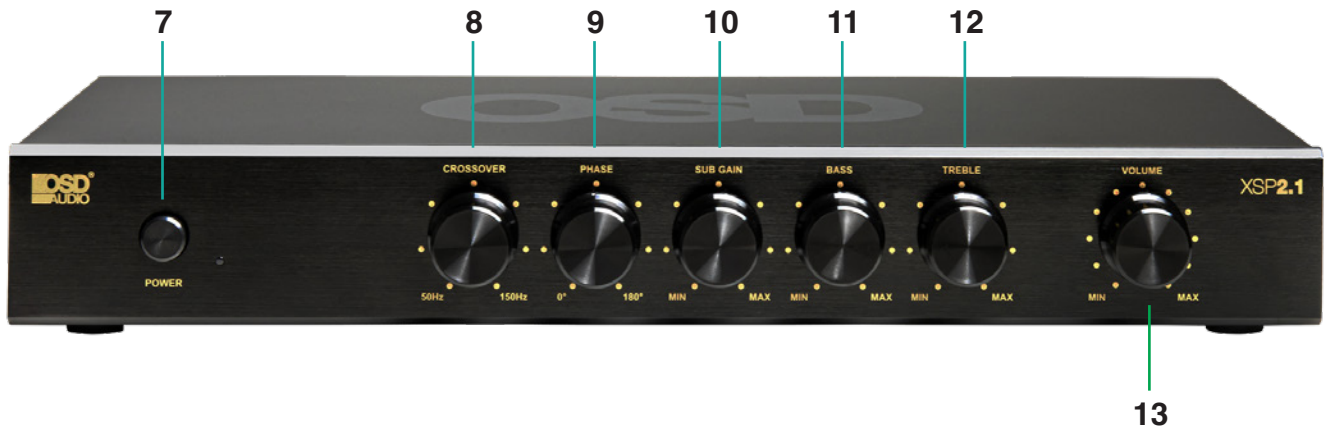
2. Trigger In/Out: The 12V trigger input and output allow the XSP-2.1 to be powered on by other electronics or to power on other electronics via a 3.5mm minijack cable. The trigger input can operate with voltages between 3 and 20VDC.

3. Power Mode AUTO ON: Set the Auto On switch to Normal for manual power on/off. Set the Auto switch to Auto for signal sensing; the amp will turn on when the audio signal (>5mV) is detected at the inputs. The front-panel power switch must be in the ON position (pushed in) for the Auto On feature to operate. Or select 12V Trigger which allows the XSP to be powered on by other electronic components or to power on other electronics via a 3.5 minijack cable (between 3-20VDC).

4. Stereo Speaker Terminals: The XSP2.1 is fitted with binding-post terminals for R&L Stereo speaker connection for powering a single 4-ohm/ 8-ohm pair of speakers or two pairs of 8-ohm speakers in parallel for a 4-ohm load. There is no Bridged Mode for these stereo pairs. The binding post terminals will accept bare wire (up to 10AWG), pin connectors, and banana plugs (single only).

5. Mono (+/-) Terminals: The XSP21 is fitted with binding-post terminals for driving a single 4-ohm/8-ohm or two 8-ohm Mono Subwoofers (wired in parallel). The subwoofer output features three front panel control switches, an Adjustable Crossover low pass filter, a variable Phase switch, and a dedicated Sub Gain control. The binding post terminals will accept bare wire (up to 10AWG), pin connectors, and banana plugs (single only).

6. Power Supply Cord: The digital 2.1 stereo/mono power amplifier features a detachable 6ft AC power cord terminated by a 3-prong connector. The Power Supply is switchable 100-240Volt, 50/60Hz Input Voltage

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7. Power Switch: The front-panel Power Switch turns the XSP-2.1 on or off. A Blue LED indicates the switch is on and a signal is present. The unit goes into standby with the Power Switch in the On position. The power LED turns off until it sees another audio signal, then turns Blue again.

8. SUB-CROSSOVER: The Crossover sets the Low Pass Frequency cut-off for the Mono Subwoofer output, a Variable between 50Hz and 150Hz. Start at the top spot (100Hz)

9. SUB-PHASE: The Phase setting allows compensation for the Subwoofer location to the main speakers. Adjust the Phase setting to the point of highest sub-audio output, Range 0° to 180°

10. SUB-GAIN: Adjust the Mono audio output level to the connected Subwoofer. Set to an appropriate level for a smooth, natural-sounding transition to extend and enhance the low-frequency output of the full-range speaker Level Output.**11. STEREO-BASS:** Adjust the Bass for Stereo Output at 100Hz from Min (-12dB) to the Max (+12dB).

12. STEREO-TREBLE: Adjust Bass for Stereo Output at 10KHz from Min (-12dB) to Max (+12dB).

13. MASTER VOLUME CONTROL: This adjusts for the Stereo and Subwoofer channels combined.

Set Rear Controls First, then Front Panel Controls before turning on.

1. Mode – Combination Stereo and Mono Sub Output, 2.1

2. Do you want to power the amp via the front panel on/off switch or use a 12-volt trigger or have the amp turn on when a signal is present? Select your choice on the rear panel. Note: If you choose Trigger or Auto, the front panel on/off switch must be ON.

3. The XSP2.1 features a Two-channel stereo amplifier that is 4-ohm stable. You can connect a single 4 or 8-ohm pair of speakers or wire a pair of 8-ohm speakers in a parallel for a summed 4-ohm Load. It also features a 4-ohm Mono Subwoofer output. This will drive our IWSDual8 in-wall Sub, FORZA10 outdoor sub, R10 In-Ceiling Sub, and our ARC Sub8" a hanging Pendant Sub all rated at 4-ohm. It will also power our single IWS10 In-Wall Sub or two of these in parallel for a summed 4-ohm load. Make sure your speaker wires are hooked up correctly.

4. Then connect the power cord.

5. Adjust the volume to the desired level, starting between ½ to ¾ turn.

6. Bass and Treble Controls: Start these off at the top dot, 0dB

7. Sub Bass Controls: Starting points, Crossover 100 Hz, top dot. Phase control starts at 0 dB. The Gain control should be set between the halfway top dot (#4) and the Top right dot (#5).

8. Make sure the Master Volume Control on the front panel is turned down before turning the amp on.

9. Turn the amp on using the front panel on/off switch. If you are using a trigger, make sure it is on, if you are using auto, make sure there is a signal playing.

10. Finally, adjust the tone controls on the rear panel to suit the acoustics of the room or your personal preference.

OSD AUDIO

Spec

Amplifier Type	Satellite AMP Class D, Subwoofer Amp Class D
Channels/Zone	2 Stereo Full range, 1 Channel Mono, 3 Total Channels
Power Handling	200 Watts RMS/400 Watts Peak (Subwoofer) Mono @ 4Ω
	100 Watts RMS/200 Watts Peak (Subwoofer) Mono @ 8Ω
Power Handling	2X100 Watts RMS/2X200 Watts Peak (Satellites) Stereo @4Ω
	2X50 Watts RMS/2X100 Watts Peak (Satellites) Stereo @8Ω
Frequency Response	20Hz - 200Hz (Subwoofer)
	20Hz - 200KHz (Satellites)
Impedance	4 & 8 Ohm Stable (Subwoofer) Mono
	4 & 8 Ohm Stable (Satellites) Stereo
Transformer Type	Switching Power Supply
Input Terminals	RCA Signal (Low) Level Analog Inputs
Input Sensitivity	250mv
Crossover	40Hz to 150Hz (Subwoofer) Mono
Phase Control	0-180 degrees (Subwoofer) Mono
Signal to Noise Ratio	90 dB
Controls (Subwoofer)	Crossover, Phase, Sub Gain
Controls (Satellites)	Bass & Treble
Master Volume	Subwoofer and Satellites
3 Turn On Options	Normal, Auto On Sensing and 12V Trigger
12 Volt Trigger	In and Out
Power Supply	Switchable 1-240V 50/60Hz Input Voltage
Dimensions (L x D x H)	430mm/16.92" x 226mm/9.0" x 62.5mm/2.46"
Weight	2.7KG/5.95Lb.

OSD Audio electronics have (2) year Limited Warranty against defects in materials and workmanship. Proof of purchase must accompany all claims. During the warranty period OSD Audio will replace any defective part and correct any defect in workmanship without charge for either parts or labor.

OSD Audio may replace returned electronics with a product of equal value and performance. In such cases, some modifications to the mounting may be necessary and are not OSD Audio 's responsibility.

For this warranty to apply, the unit must be installed and used according to its written instructions. If necessary, repairs must be performed by OSD Audio . The unit must be returned to OSD Audio at the owner's expense and with prior written permission. Accidental damage and shipping damage are not considered defects, nor is damaged resulting from abuse or from servicing performed by an agency or person not specifically authorized in writing by OSD Audio.

OSD Audio sells products only through authorized dealers and distributors to ensure that customers obtain proper support and service. Any OSD Audio product purchased from an unauthorized dealer or other source, including retailers, mail order dealers and online sellers will not be honored or serviced under existing
OSD Audio warranty policy. Any sale of product by an unauthorized source or other manner not
authorized by OSD Audio shall void the warranty on the applicable product.

Damage to or destruction of components due to application of excessive power voids the warranty on those parts. In these cases, repairs will be made on the basis of the retail value of the parts and labor. To return for repairs, you must email customer service at RMA@audiogeargroup.com for a Returned Merchandise Authorization (RMA) number then the unit must be shipped to OSD Audio at the owner's expense, along with a note explaining the nature of service required. Be sure to pack the product(s) in a corrugated container with at least 3 inches of resilient material to protect the unit from damage in transit.

This Warranty Does Not Cover: Damage caused by abuse, accident, misuse, negligence, or improper operation (installation) • Any products that have been altered or modified • Any product whose identifying number of decal, serial #, etc. has been altered, defaced or removed • Normal wear and maintenance.

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XSP21-man. 7/23/25