



NERO **XA5180**

HOME THEATER
AMPLIFIER



OWNER'S
MANUAL

This manual contains important instructions for the safe operation of the unit. Read and follow the safety instructions and all other instructions. Keep the manual for future reference. Make sure that it is available to all those using the device. If you sell the unit, please make sure that the buyer also receives this manual.

- Use only an approved power cable and plug or distribution board to connect your amplifier to a power outlet. Do not use an extension cable.
- Never touch the mains plug if your hands are wet.
- Do not attempt to open the equipment. Refer servicing and repair to qualified service personnel. Touching live components inside the case can result in a fatal electrical shock!
- Read the Owner's Manual and Safety Precautions before operating the equipment.
- Keep this Manual in a safe place so that you can refer to it later.
- Please heed all warnings on the equipment itself and in the Owner's Manual.
- Please follow the instructions contained in your Owner's manual and never use this equipment for any purpose other than is explained in this Owner's Manual.
- Only connect this equipment to a power source of the type described in the Owner's Manual and specified for this equipment.
- Make sure that there is adequate ventilation around the equipment to allow proper cooling. Keep the equipment away from direct sunlight. Avoid installing the unit close to sources of heat or in spaces such as bookshelves or cupboards where heat radiation may be obstructed. Avoid excessive temperatures in the room, as these could ultimately damage sensitive components and reduce the service life of your player.
- Never use the unit in damp rooms, at temperatures of below 15°C, or in the open air. When bringing your amplifier in from the cold, allow it time to achieve room temperature before plugging it in.
- Always switch the unit off before removing or inserting interconnects. Doing this with the amplifier switched on can damage not only the amplifier itself but also equipment connected to it.
- If you ever spill water or any other liquid onto the equipment: Do not touch the case! Remove the plug from the wall outlet and contact your dealer or our service department.
- Never remove the earth connection from the plug. It is there to ensure your safety.
- Arrange the power cable so that no one can accidentally stand on it. Avoid locating it under objects that might put pressure on the cable. Pay particular attention to areas where the cable exits from plugs, AC outlets and from the unit itself.
- Never operate the unit without being present. Disconnect the plug from the wall outlet and remove all aerial connections (including cable aeriels) when: you clean the unit, you do not expect to use the unit for long periods of time, during an electrical storm.
- If you have an external antenna or cable antenna connected to your hi-fi system, we recommend that you use a signal isolating filter to avoid interference or damage during thunderstorms.
- Problems: If you lose the sound while the amplifier is operating, or if you notice smoke or burning, switch the unit off immediately and contact your dealer or our service department.
- Only replace defective fuses after you have traced and removed the cause of the fault and then only with a fuse of the same rating. Remove the mains plug before changing fuses. Use an insulated screwdriver to remove and replace the fuse.

CAUTION

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment. Properly shielded and grounded cables and connectors must be used for connection to host computers and/or peripherals in order to meet FCC emission limits. To reduce the risk of electric shock, the speaker cable should be connected to the apparatus and the speakers in accordance with the following instructions.

DO NOT defeat the safety purpose of a grounding or polarized plug by removing ground pins or using unsafe adapters. A polarized plug has two blades - one wider than the other. A grounding plug has a third ground prong in addition to the two main conductors. The wide blade or third grounding prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician to replace your obsolete outlet. If you replace the power cord, only use one of similar type and equal or greater current rating.



For Class II apparatus only: This symbol means that the equipment is a Class II or double insulated electrical appliance. It has been designed in such a way that it does not require a safety connection to electrical earth. When servicing use only identical replacement parts installed by an instructed person or with use of ready-made leads or cords.

WARNING SYMBOLS



TYPE OF DANGER: Warning - Danger Zone



TYPE OF DANGER: Warning - High Voltage



DANGER
Hazardous Voltage

Hazardous voltage may be present at cable ends and screw terminals. The connection of screw terminals as well as all maintenance and repair work on the electrical installation of the device must only be performed by qualified electrical personnel in volt-free-condition. Failure to do so may result in electric shock and risk of fire and loss of life.

By all means you have to observe all electrical safety instructions applicable at the place of operation.



DANGER
Electric shock caused by short-circuit

Always use proper ready-made insulated mains cabling (power cord) with a protective contact plug. Do not modify the mains cable or plug. Failure to do so could result in electric shock/death or fire. If in doubt, seek advice from a registered electrician.

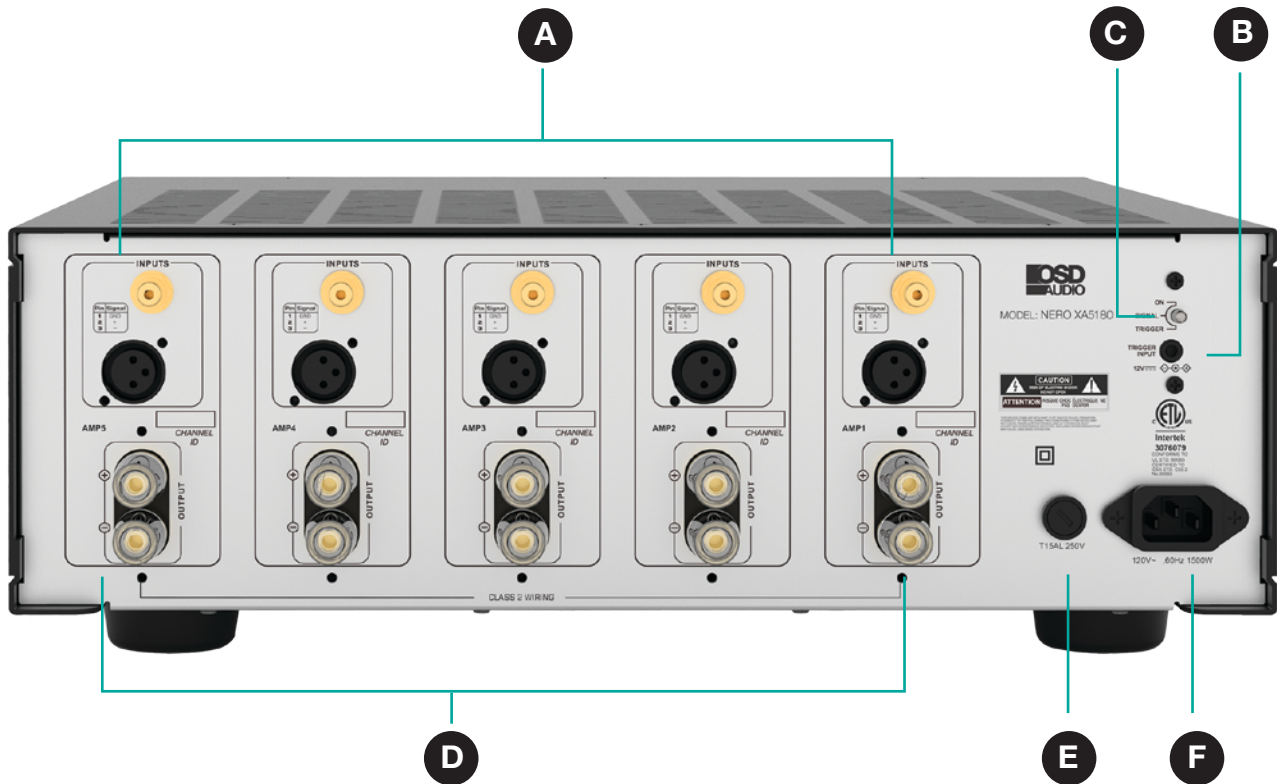


This product has been tested by ETL and has been found to be complying with:

- UL 60065, Second Edition, "Standard for Audio/Video and Musical Instrument Apparatus for Household, Commercial, and Similar General Use"
- CSA C22.2 No. 60065-03, First Edition: 2006 "Audio, Video and Similar Electronic Equipment"

WARNING: The mains plug/appliance coupler is used as disconnect device, the disconnect device shall remain readily operable.

- 1) Disconnect the AC power cord from the MAINS.
- 2) Strip 10 to 15 mm of the wire insulation of the speaker cable.
- 3) Connect the speaker cable to the apparatus and the speakers carefully so as not to touch the core of speaker cable by hand. Also disconnect the AC power cord from the MAINS before disconnecting the speaker cable from the apparatus and the speakers.



A. Audio Inputs (see page 4)

Inputs for connecting the XA Amplifier to the outputs of an AVR, pre-pro, or other devices.

B. Remote Trigger Input (see page 5)

Power On/Off using 8-24v signal from connected device, such as AVR, control system or processor.

C. ON/Trigger Power Switch

In ON position: the Power switch on the front panel turns the XA Amp on and off.

In TRIGGER position: the XA can be turned on and off remotely by a device connected to the REMOTE TRIGGER jack. In this mode, the LED's on the front panel will glow yellow when the amplifier is in standby mode, and bright blue when powered on.

D. Speaker Outputs (see page 4)

5-way binding posts used to connect the XA Amp to your speakers.

E. AC Fuse

Protects in case of a power surge.

F. AC Input

Use the supplied power cord to plug the XA amp in. (see precautions on page 2).

IMPORTANT NOTE: To avoid damage to the XA amp or connected devices, please turn off and unplug the XA amp before making any changes to the wiring.

Failure to do so can potentially result in severe damage to your amplifier & loudspeakers

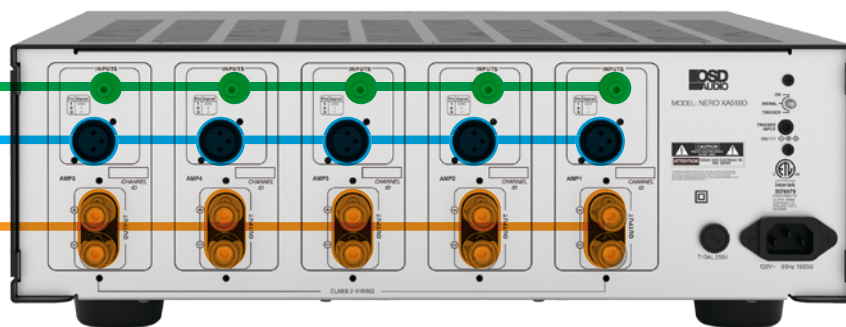
INPUTS:

Non Balanced RCA

Balanced XLR

OUTPUTS:

Connect to Speakers



Connecting your speakers:

Use Class 2 wiring for speaker connections.

Wiring the speaker connector with bare wire:

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.
4. For spades or banana plugs, simply insert in correct terminals.

5. Ensure + terminal goes to + terminal of speakers and – goes to – do this by checking the marking on the speaker wire. Usually, RED wire is +

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.



Remote Trigger

Power Options:

There are 3 options for controlling the power ON/OFF

1. Select ON if you want to turn the amp on front the front panel power switch
2. The XA amps can also be powered on automatically by other devices equipped with a 12v trigger output: Select TRIGGER position. When the switch is set to TRIGGER, the XA amp will turn on when a 12v signal is present and go into standby when there is no signal present.

Note: If you set the ON/SIGNAL/TRIGGER switch to Trigger, but don't connect the XA Amp to another device, the status LED's will be bright blue, but the amplifier will not respond if you press the power button.

3. You can also turn your amp ON when it senses a signal though the RCA or XLR inputs. Select the SIGNAL option and the amp will turn on when a signal is sensed and go into standby when no signal is sensed.

Before you begin:

Ensure that the amp is plugged into a 15 Amp power socket. At full power the amp will require in excess of 10 Amps. Ensure the amp has air clearance with nothing covering the ventilation slots. 6 inches of clearance is recommended, or, if rack mounted, please use a cooling fan.

Double-check all connections from connected processors or AVR 's, and connections to speakers. Make sure all connections are good and that there are no stray wires, or strands of wire.




Tip - If speaker wires are running through walls or ceiling, you can check that the speaker wires are connected correctly by taking a 9V battery and momentarily touching the speaker wire to the + and – terminals. If the speakers are connected there will be a small 'popping' sound. Turn the volume level of the connected Processor or AVR down to zero for all channels.

Power-On - Normal Operation

Press the front panel switch labeled POWER. After a short pause the front panel LED indicators will light-up.

Individual channel, power status indicators

Front Panel Status LEDs

Power: Bright Blue	
Standby: Yellow	
Protection: Red	

Power:

Blue Lights – The amp is on and working correctly

Standby:

Yellow/Orange light – The amp is in standby mode, no signal to speakers, no sound.

Protection:

Red Light – The amp has automatically detected a problem and is in protection mode to prevent damage to speakers.

Turn amp off, unplug

and check speaker connections for short circuits (positive and negative wires touching).

Power-on - auto signal detecting mode

Press the front panel switch labeled POWER. After a short pause the front panel LED indicators will light-up.

When the SIGNAL position is selected the front panel indicator lights will be Yellow/Orange if there is no signal from the connected Processor or AVR. When a signal from any channel is present the indicator lights for that channel will turn to Blue and the speaker will play that signal.

Power-on – Trigger

Press the front panel switch labeled POWER. After a short pause the front panel LED indicators will light-up.

When the rear panel switch is set to TRIGGER the front panel indicator lights will be Yellow/Orange and the amp will be in Standby mode. When a TRIGGER signal is present the amp will turn on and the indicator lights will be Blue. The amp will stay on as long as there is a TRIGGER signal present. When the TRIGGER signal is removed, the amp will return to Standby and the front panel indicator lights will go to Yellow/Orange.

To turn Off

Press the front panel switch labeled POWER, all lights will turn off.

Maintenance

If the amp requires cleaning, wipe with a clean, dampened soft cloth. Do not use chemicals and remove any moisture. Do not use abrasive cleaners, as they may damage the paint. Do not expose the amp to insecticide, waxes, polishing agents, or an aerosol spray as moisture may enter the amp.

Service Information

Should you encounter any problems with your XA amplifier please reset the power by switching off and un-plugging the amp. Re-check all connections from Processors or AVR's and to the speakers. Turn on the amp again and refer to the 'Amplifier Operation and Maintenance' instructions. If a problem still exists, contact OSD Nero's customer service department at OSDAUDIO.COM.

Performance Specs

XA5		AMP 1	AMP 2	AMP 3	AMP 4	AMP 5		
OUTPUT POWER (RMS) (UNIT:W) @1% THD (SINGLE CHANNEL)	4 Ohms	320	320	320	320	320		
OUTPUT POWER (RMS) (UNIT:W) ,@5% THD (SINGLE CHANNEL)	4 Ohms	410	410	410	410	410		
OUTPUT POWER (RMS) (UNIT:W) @1% THD (SINGLE CHANNEL)	8 Ohms	190	190	190	190	190		
ALL CHANNEL OUTPUT POWER (RMS) (UNIT:W) @0.1% THD	8 Ohms	135	135	135	135	135		
ALL CHANNEL OUTPUT POWER (RMS) (UNIT:W) @1% THD	8 Ohms	150	150	150	150	150		
THD @1W (UNIT:%) (SINGLE CHANNEL)	8 Ohms	0.02%	0.02%	0.02%	0.02%	0.02%		
THD @RATED POWER (UNIT:%) (SINGLE CHANNEL) 130W	8 Ohms	0.025%	0.025%	0.025%	0.025%	0.025%		
THD @1W (UNIT:%) (SINGLE CHANNEL)	4 Ohms	0.05%	0.05%	0.05%	0.05%	0.05%		
THD @RATED POWER (UNIT:%) (SINGLE CHANNEL) @250W	4 Ohms	0.03%	0.03%	0.03%	0.03%	0.03%		
FREQUENCY RESPONSE @-3dB - Hz	1W	7.5HZ-80K	7.5HZ-80K	7.5HZ-80K	7.5HZ-80K	7.5HZ-80K		
	Rated power	7.5HZ-80K	7.5HZ-80K	7.5HZ-80K	7.5HZ-80K	7.5HZ-80K		
DAMPING FACTOR rated power	1 KHz	150	150	150	150	150		
IDLE CURRENT - Amps	0.15							
MAX.CURRENT @ALL CH. At rated power - Amps	10.7							
EFFICIENCY OF AMPLIFIER - %	72%							

General Specs

Number of Output Devices:	4 per channel
Power Bandwidth:	5Hz - 54kHz +0/-3 dB
Filter Capacitance:	Four 6800µF Caps per channel
Crosstalk:	>-70dB - 20Hz -20kHz
Gain:	29dB
Input Impedance:	40k ohms
Input Sensitivity:	1.00 Volt
Remote Trigger Voltage:	8-24v DC - 5 mA
Dimensions:	including feet (HxWxD) 6.0" x 17.0" x 16.75"
Weight:	50lbs
Power Requirements:	120VAC, ±3%, - 60Hz 1500 watts maximum

WARRANTY

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.

