EMOTIVA®

XPA GEN 3

Modular Power Amplifier User Manual

Important Safety Precautions and Explanation of Symbols

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important installation, operation, and service instructions in this manual.

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

Please read this manual thoroughly before attempting to install, configure, or operate the XPA Gen3 modular power amplifier. After successful installation and configuration of the XPA Gen3 amplifier, be sure to retain this manual in a safe place for future reference.

Safety is a key component to a long lasting and trouble free installation. Please read and follow all instructions and heed all warnings on the XPA Gen3 amplifier and in this manual. The vast majority of the subsequent safety precautions are common sense. If you are not comfortable with the installation of audio/video entertainment equipment, you should seek the services of a qualified installation professional or call us for help.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THE XPA GEN3 AMPLIFIER NEAR WATER OR IN WET LOCATIONS, DO NOT EXPOSE IT TO RAIN OR MOISTURE, DO NOT EXPOSE IT TO DRIPPING OR SPLASHING FROM OTHER SOURCES, AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS (SUCH AS VASES) ARE PLACED ON IT. DOING SO MAY RESULT IN DAMAGE TO THE UNIT AND THE RISK OF ELECTRIC SHOCK, WHICH MAY RESULT IN BODILY INJURY OR DEATH.

WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER FROM THE XPA GEN3 AMPLIFIER. THERE ARE NO USER-SERVICEABLE PARTS INSIDE THE UNIT. REFER ALL SERVICE TO QUALIFIED SERVICE PERSONNEL.

Do not install the XPA Gen3 amplifier near or above any heat sources such as radiators, heating vents, or other apparatus' that produce heat. Do not block any ventilation openings or heat sinks. Avoid installing the unit directly above other heat-producing equipment unless sufficient ventilation or forced-air cooling is provided.

Do not install the XPA Gen3 amplifier in locations without proper ventilation. The XPA Gen3 should not be operated on a bed, sofa, rug, or similar surface that may block vents. The unit should not be installed in an enclosed location such as a bookcase, cabinet, or closed equipment rack unless sufficient forced-air ventilation is provided.

Always install your XPA Gen3 amplifier according to the manufacturer's instructions and only use attachments or accessories specified by the manufacturer.

Do not install the XPA Gen3 amplifier on any stand, shelf, or other piece of furniture that is unable to support its weight. If a cart is used to move the unit, use caution to avoid injury from tip-over.

Connect the XPA Gen3 amplifier only to power sources of the correct voltage (as shown in this manual and on the XPA Gen3 unit).

Protect power supply cables from being pinched, walked on, or otherwise damaged. Be especially careful where the power cable enters the power outlet and the unit.

Only connect the XPA Gen3 amplifier to an electrical outlet or extension cord of appropriate type and rating.

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 groundling 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.

The power cable for the XPA Gen3 amplifier should be unplugged from the outlet during severe electrical storms, or when unused for a long period of time.

Only replace the fuse(s) in the XPA Gen3 amplifier with fuse(s) of proper value and voltage rating.

The XPA Gen3 should only be cleaned as directed in the manual. Avoid spraying liquids directly onto the unit and NEVER spray liquids into the vents. Care should be taken so that small objects do not fall into the inside of the unit.

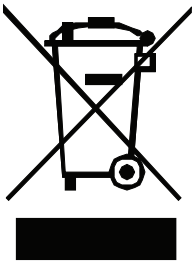
You should seek service for your XPA Gen3 amplifier by qualified service personnel if any of the following occur:

1. The power-supply cord or the plug has been damaged.
2. Objects or liquid have fallen or spilled into the vents.
3. The unit has been exposed to rain.
4. The unit exhibits a marked change in performance.
5. The unit has been dropped, or its enclosure or chassis is damaged.

NOTE: TO COMPLETELY DISCONNECT THE XPA Gen3 AMPLIFIER FROM THE AC POWER MAINS, DISCONNECT THE AC POWER CORD FROM THE AC RECEPTACLE.

NOTE: THE POWER CORD ON THE XPA Gen3 AMPLIFIER MUST REMAIN READILY ACCESSIBLE AT ALL TIMES.

WARNING: EVEN THOUGH THE XPA Gen3 AMPLIFIER UNIT IS MODULAR, MODULES SHOULD ONLY BE ADDED, REPLACED, OR RECONFIGURED BY AUTHORIZED SERVICE PERSONNEL. USERS SHOULD NOT ATTEMPT TO ADD, REMOVE, OR RECONFIGURE MODULES INSIDE THE XPA Gen3 AMPLIFIER UNLESS EXPRESSLY AUTHORIZED AND INSTRUCTED TO DO SO BY EMOTIVA OR ONE OF OUR AUTHORIZED REPRESENTATIVES. IMPROPER INSTALLATION OR CONFIGURATION OF MODULES INSIDE THE UNIT MAY RESULT IN EQUIPMENT DAMAGE OR PERSONAL INJURY.



EMOTIVA®

XPA Gen3 Modular Power Amplifier

Contents

Introduction

Thank you for purchasing the new Emotiva XPA Gen3 modular power amplifier.

The XPA Gen3 modular power amplifier is the proud result of many years of experience designing and refining audiophile power amps, culminating in an amplifier with the solid power and superb sound quality necessary to be equally at home in any two channel audiophile sound system or top quality home theater system.

The XPA Gen3 represents a fusion of the best aspects of both traditional and modern audio amplifier technologies - each chosen to provide the optimum combination of sound quality, efficiency, and functionality. The circuitry in each output module is based on the exceptional sounding short signal path Class A/B output circuit we designed for our XPA Gen1 and Gen2 amplifiers, combined with the enhanced efficiency of the Optimized Class H™ power topology we developed for our XPR series amplifiers.

The enormous amount of power required to operate the output modules in the XPA Gen3 is supplied by a massive Switched Mode Power Supply (SMPS). The SMPS we chose combines high efficiency, massive long term power capacity, and impressive short term dynamic power reserves. Although we tend to think of switching supplies as modern technology, the controller chip and basic circuit design used in our new SMPS have a long track record of reliably powering commercial and even automotive devices, so we feel comfortable trusting it with the critical mission of providing clean, reliable power for our new XPA Gen3 amps. Compared to the linear transformer-based power supplies used in our previous generation of amplifiers, the new SMPS offers improved electrical performance and reliability, while reducing the overall weight of the amplifier by about 35%, which makes the new XPA Gen3 amplifiers easier to ship and easier to install. It also seamlessly detects and configures itself for any line voltage between 100 VAC and 250 VAC, and features a convenient push-button circuit breaker for easy recovery from any power faults.

Another important aspect of the new XPA Gen3 amplifier series is its modular construction. The new XPA Gen3 amps all share a common chassis, microprocessor-controlled front panel, and power supply. The XPA Gen3 can be ordered with anywhere between two and seven amplifier modules installed - to fulfill your current needs; then additional modules (up to seven total) can be added later as you expand your system and require more channels of high quality amplification.

And, finally, we've added the extra features that our customers expect from a high-end amplifier.... like a heavy-duty chassis with elegant styling, and a trigger input and output, and switchable front panel status indicators, and independent input selection for each channel, and high quality chassis-mounted RCA input connectors, and heavy duty speaker terminals.

Whether you think of our new XPA Gen3 modular power amplifier as an impressive new product, or simply as the obvious successor to an already impressive line of audiophile amplifiers, we're sure you'll be as impressed with its performance, flexibility, and sound quality as we are...

Happy listening!

The Emotiva Team

About This Manual

This manual will provide you with the information you need to get started enjoying your XPA Gen3 modular power amplifier.

We suggest that you read through the entire manual; we kept things as short and direct as possible. Even if you're an expert user, you will probably find some interesting information and useful suggestions.

If you're really in a hurry to get started, please read the Quick Start section (on page 11); you may then read the remainder of the manual at your leisure.

You may wish to keep a copy of this manual with your records, and record serial numbers or other purchase information on the Notes page at the back.

Features

The XPA Gen3 modular power amplifier is an audiophile-grade power amplifier that provides up to seven channels of superb quality audio amplification. The XPA Gen3 features our fully discrete, high-current, short signal path class A/B output section, combined with the Optimized Class H™ power supply topology we developed for our iconic XPR amplifiers, and our new, powerful yet light weight and efficient, audiophile grade Switch Mode Power Supply.

Welcome to the XPA Gen3 modular power amplifier... the next generation of power amplification for the audiophile who wants it all: superb sound quality, modular construction, and lasting value.

Features of the new XPA Gen3 modular power amplifier:

- **True audiophile-quality sound** - as with all of our amplifiers, the XPA Gen3 modular power amplifier was designed first and foremost to sound superb in all types of audio systems.
- **Great sounding Class A/B output stage** - ensures smooth detailed sound and incredibly natural imaging - without a trace of harshness or strain.
- **Optimized Class H™ power supply topology** - delivers improved efficiency without compromising audio performance.
- **Switched Mode Power Supply (SMPS)** - offers all of the performance of a traditional linear power supply, while improving efficiency and reliability, and reducing overall weight.
- **Fully modular construction** - allows you to purchase as many channels as you need today, then add more channels later when and if you need them.
- **Top quality parts and construction throughout** - promise years of reliable service.
- **Totally stable** - designed for use in the real world, with real speakers.
- **Heavy steel 4RU chassis with milled aluminum face plate** - provide strength and rugged good looks.
- **Gold plated five-way speaker binding posts with clear shields** - allow you to use a wide range of speaker cables with bare wires, lugs, or banana plugs.
- **Solid machined gold-plated RCA input connectors** - provide a reliable connection with a wide variety of audio interconnects.
- **Choice of balanced or unbalanced inputs -** independently controlled by high-reliability metal toggle switches to ensure long service life.
- **Remote trigger input and output** - allow the XPA Gen3 to be turned on by trigger-enabled equipment, and to activate other trigger-enabled equipment.
- **Audiophile-grade fault protection** - entirely transparent under normal conditions, yet protects the amp and your other equipment from all common fault conditions.
- **Universal AC line voltage operation -** the XPA Gen3 operates on any line voltage between 100 VAC and 250 VAC; and is protected from faults by a rugged resettable circuit breaker.
- **Standard IEC power inlet -** fits all standard and audiophile IEC power cables.
- **Fully five year warranty** - ensures that you'll be able to enjoy your XPA Gen3 amplifier for years to come.

You can find more information about the XPA Gen3 on our website at www.emotiva.com.

Unpacking

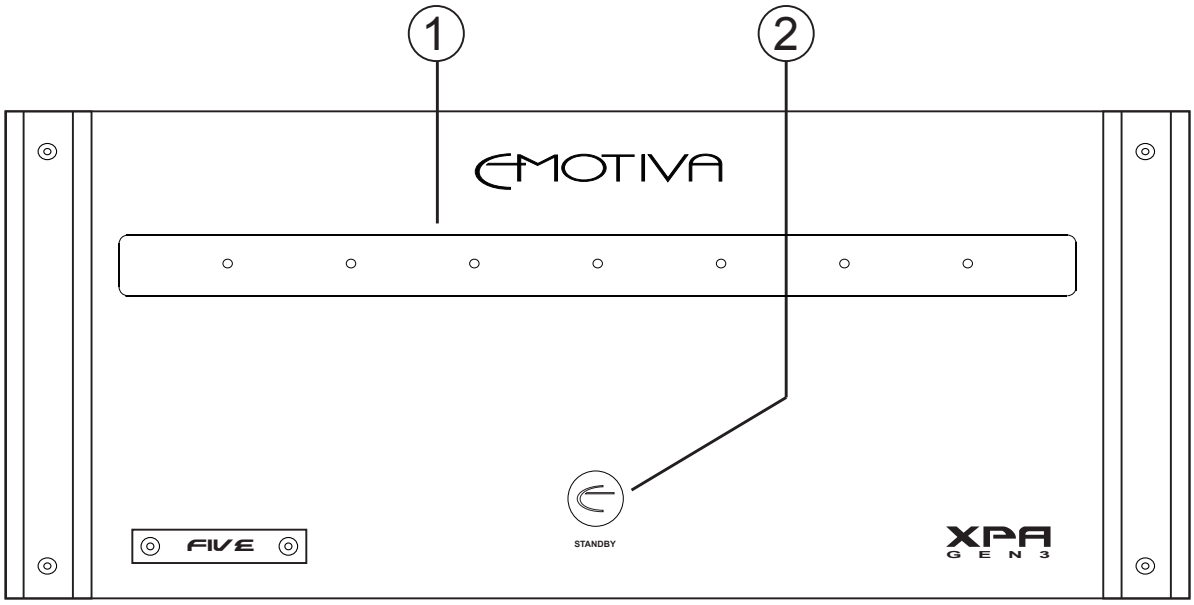
Your XPA Gen3 modular power amplifier was carefully packed and should reach you in perfect condition. If you notice any shipping damage or other issues when you unpack it, please contact Emotiva immediately.

Gently remove your XPA Gen3 from the packing carton and remove all wrappings and shipping material.

It is important to save the box and all packing materials in case your power amp ever needs to be moved or shipped back to the factory for service.

We truly value customer feedback and would like to hear from you.

XPA Gen3 Front Panel



1. Status Display Window

This window houses the status LEDs.

Note: The Status LEDs can be disabled by the Status Indicator switch on the rear panel.

Note: The Status LEDs illuminate red during startup; blue in normal operation; and flash red to indicate a channel fault.

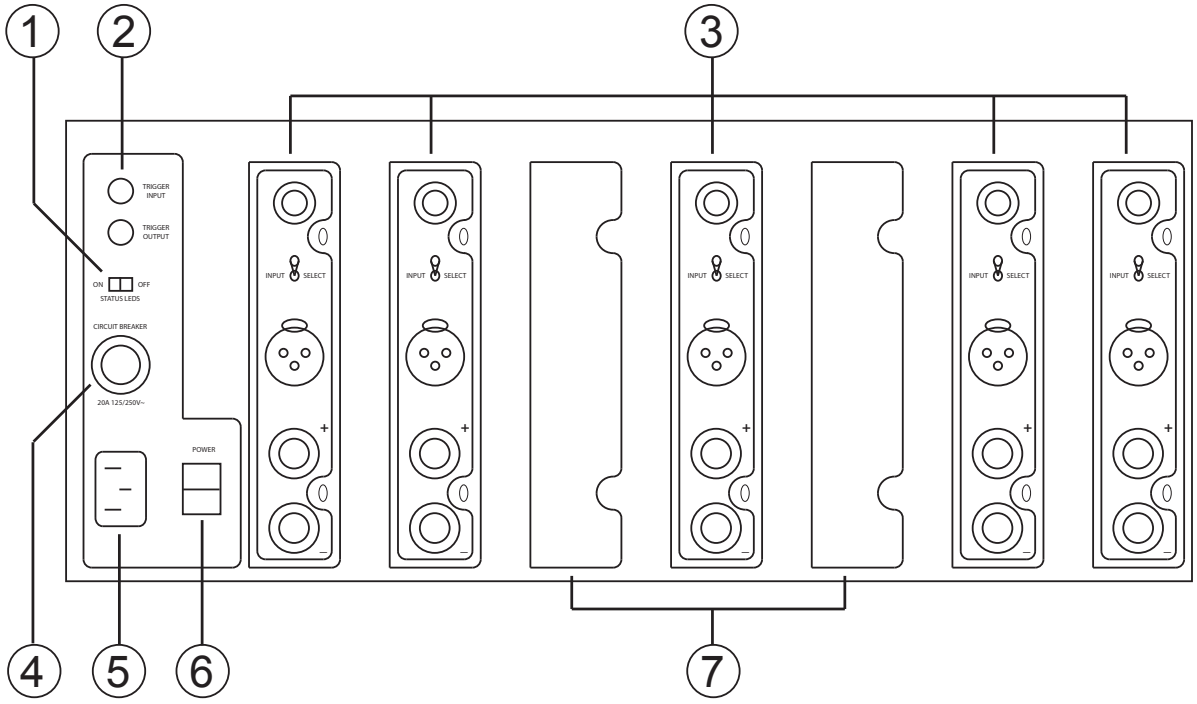
Note: On the XPA Gen3, each channel has one corresponding Status LED, so the number of Status LEDs on your XPA Gen3 will depend on the number of amplifier modules installed.

2. Standby Button

Press to switch the amplifier On; press again to return to Standby; the halo ring around the button (and the "E" on the button) illuminate amber for Standby and blue for On.

Note: In order for the XPA Gen3 to operate, the rear panel AC Power Switch must first be turned On.

XPA Gen3 Chassis Rear Panel (XPA Gen3 five shown)



1. Status LEDs Switch

Disables the front panel status LEDs when set to Off.

2. Trigger Input and Trigger Output

The XPA Gen3 is switched On (from Standby) when a trigger signal is presented at the Trigger Input; the XPA Gen3 returns to Standby when the trigger signal is removed. When the XPA Gen3 is on, a 12 VDC signal is sent from the Trigger Output to control other devices.

3. Amplifier Modules (see next section for details)

The XPA Gen3 chassis can be configured with anywhere from two to seven amplifier modules. All installed amplifier modules are powered by the XPA Gen3's power supply, and controlled and monitored by the XPA Gen3's microprocessor-controlled front panel and Status LEDs.

Note: The XPA Gen3 can be upgraded after purchase by adding additional amplifier modules. The front panel controls and indicators will automatically configure themselves to work with the number of amplifier modules installed. Only the Status LEDs associated with the modules currently installed will be illuminated.

Note: Amplifier modules should only be serviced, removed, rearranged, or installed by Emotiva or your local Emotiva authorized service center.

4. Circuit Breaker

The XPA Gen3 is protected by a heavy duty user-resettable Circuit Breaker. If a fault occurs, the button on the Circuit Breaker will pop out. When the Circuit Breaker button is out, the XPA Gen3 will not operate, and none of the Status LEDs will be lit. To reset the Circuit Breaker, press the button firmly in.

When the circuit breaker pops, the button will pop out and extend noticeably from the rear panel. If this happens, try resetting the Circuit Breaker by pressing the button firmly in. If the Circuit Breaker pops a second time, please contact Emotiva, or your nearest authorized Emotiva service representative.

5. IEC Power Cord Receptacle

The XPA Gen3 can be powered by any receptacle that provides between 100 VAC and 250 VAC at 50/60 Hz. This receptable accepts a standard removable IEC AC power cable (a high-quality commercial power cable is included).

Note: The XPA Gen3 will provide excellent performance and exceptional sound quality with any line voltage between 100 VAC and 250 VAC; however, for the absolute ultimate in performance, a 230 VAC line is recommended.

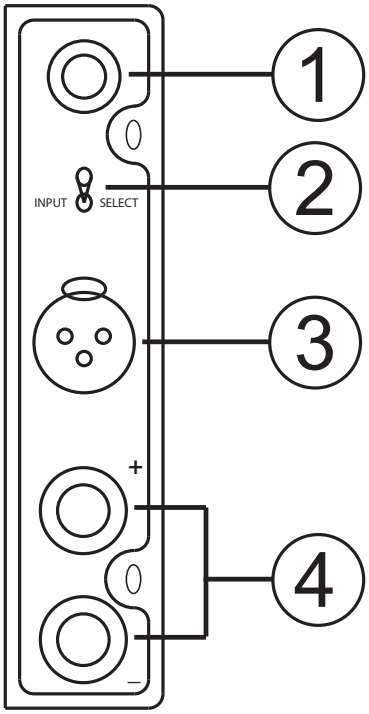
6. AC Power Switch

Switches the main AC power to the XPA Gen3 On and Off. When this switch is Off, no controls operate (the XPA Gen3 cannot be turned On from the front panel or by a trigger signal).

7. Covers

Blank metal cover plates cover unoccupied expansion slots in the XPA Gen3 chassis.

XPA Gen3 Amplifier Module (300M module)



Note: Each Amplifier Module channel has separate Balanced and Unbalanced inputs and an independent Input Selector switch.

1. Unbalanced (RCA) Input

Audiophile quality gold plated machined RCA input connector (accepts a line level unbalanced input).

2. Un-Balanced / Balanced Selector Switch

High-quality metal toggle switches independently selects between the Unbalanced (RCA) and Balanced (XLR) input for each channel. Up selects the Unbalanced input and Down selects the Balanced input. Only one input can be used at once for each channel. (Both a balanced and an unbalanced source may be connected at the same time, and the switch used to select between them, but only one will be active at any given time.)

3. Balanced (XLR) Input

Standard XLR connector (accepts a line level balanced input).

4. Speaker Terminals

Heavy duty audiophile quality five way binding posts with gold-plated contacts and clear covers accept speaker wires with banana plugs, spade lugs, or bare wire terminations.

Quick Start

To get the most from your XPA Gen3 modular power amplifier we urge you to read the entire manual. If you just can't wait to listen to it, this section will cover the basics you need to get started.

- Find a secure location for your XPA Gen3.
- Connect your XPA Gen3 to a signal source.
- Set the Input Selector switches on each channel of your XPA Gen3 for the type of input you're using (unbalanced or balanced)
- Connect your XPA Gen3 to a set of speakers (4 ohm or 8 ohm) using reasonably heavy gauge speaker wires (at least 16 gauge).
- Find some music you *really* like to listen to.
- Turn on the AC Power switch and turn up the volume a bit!
- Enjoy!

While you're enjoying your XPA Gen3, it would be a great time to read the rest of the manual to learn more about it.

Connections

Connecting speakers to your XPA Gen3

Your XPA Gen3 has no special connection requirements; audiophile grade five-way binding posts are provided for speaker connections.

- **Always** turn off the amplifier before connecting or disconnecting speaker cables or signal source interconnects.
- **Always** verify that your speaker cables are firmly attached, and not shorted to each other or to any other cables, before powering up your XPA Gen3.
- **Always** use high-quality speaker wire; 16-gauge or heavier.
- If you must use thinner wire, try to keep the length as short as possible.
- Be careful to wire all speakers "in phase" (the plus/red terminal on each speaker to the plus/red terminal on your amp).
- Try to use wires of equal length and gauge for both speakers in each pair (use the same gauge and length for both fronts, or for both surrounds; don't use a long 16-gauge wire for one speaker and a short 10-gauge wire for the other).
- If you use stranded cables, use care to avoid short circuits (from stray strands touching).
- Emotiva offers very high-quality, pre-made speaker cables at reasonable prices. You will find them in the Interconnects section of our website at www.emotiva.com.

Connecting an input source to your XPA Gen3

Your XPA Gen3 amplifier has both balanced (XLR) and unbalanced (RCA) inputs; switches independently select which input is active for each channel. Be sure to set these switches correctly. If your source component offers both types of outputs, a balanced connection is generally preferred, especially for long cable runs and in noisy environments. We suggest using reasonably high quality cables, keeping cables no longer than necessary, and avoiding running signal cables near power cables and speaker cables whenever possible.

DO NOT connect a digital signal to the inputs of your XPA Gen3 (or you may damage it or your speakers).

Connecting the Trigger Input and Trigger Output

The Trigger Input accepts a 12 VDC (nominal) trigger signal from another device via a standard 1/8" mono plug. When the trigger is asserted, the XPA Gen3 will switch On; when the trigger is removed, the XPA Gen3 will return to Standby mode. The Trigger Output sends out 12 VDC whenever the main power to the XPA Gen3 is On (and NOT when it is in Standby mode) which can be used to switch on other units with trigger capabilities.

Configuration and Operation

Line Voltage

The XPA Gen3 can operate from any line voltage between 100 VAC and 250 VAC and from any line frequency between 50 Hz and 60 Hz. The amplifier will automatically detect which line voltage it is connected to and configure itself accordingly.

AC Power Switch (rear panel)

The rear-panel AC Power switch controls the main AC power for your XPA Gen3. When this switch is in the Off position, the amplifier will not operate. Turning it On will put the XPA Gen3 into Standby mode.

AC Circuit Breaker (rear panel)

If an electrical power fault occurs, the button on the rear-panel Circuit Breaker will pop up. When the Circuit Breaker button is up, the XPA Gen3 will not operate, and none of the Status LEDs will be lit. The Circuit Breaker is reset by pressing the button firmly in.

Standby Switch (front panel push button)

Press to switch the amplifier On; press again to return to Standby; the halo ring around the button illuminates amber for Standby and blue for On.

Un-Balanced / Balanced Selector Switches

Independently switch between the Unbalanced (RCA) and Balanced (XLR) inputs for each input. Up selects the Unbalanced input and Down selects the Balanced input. Only one input can be used at once for each input. (Both a balanced and an unbalanced source may be connected at the same time, and the switch used to select between them, but only one will be active at any given time.)

Status LED Switch

Disables the front panel status LEDs when set to Off.

Trigger Input and Output

When a trigger cable is connected to the Trigger Input (on the rear panel), and a trigger signal is received (between 5-20 V - AC or DC), the XPA Gen3 will switch from Standby to On; when the trigger signal ceases, the XPA Gen3 will return to Off.

The trigger is typically connected to the preamp or pre/pro that provides a signal source for the XPA Gen3, and set to turn the XPA Gen3 on when the preamp or pre/pro is turned on.

Whenever the XPA Gen3 is On, the Trigger Output will assert a 12 VDC signal, which may be used to turn on other trigger-enabled equipment.

Care and Maintenance

Periodic Maintenance

Your XPA Gen3 requires no periodic maintenance or calibration.

Cleaning your XPA Gen3

- If necessary, the XPA Gen3 should be cleaned gently with a soft rag.
- If something sticky gets on the front panel or case of the XPA Gen3, it should be cleaned with a mild cleaning solution applied to a soft rag, followed by wiping with a clean rag dampened with plain water and drying with a soft dry rag or cloth.

Note: DO NOT spray water or cleaning solution directly onto the XPA Gen3 or into the vents.

Specifications

Modular Construction

The XPA Gen3 modular power amplifier is comprised of a heavy-duty chassis, which houses the oversized power supply, and up to seven amplifier modules. The XPA Gen3 can be purchased with anywhere between two and seven amplifier modules installed, and additional amplifier modules may be installed as more channels of amplification are needed (up to a maximum of seven modules). The front panel display and protection system are designed to work with the maximum number of channels, and so need not be updated when the XPA Gen3 is expanded; on the rear panel, slots not occupied by amplifier modules will be covered with protective cover panels.

Note: To ensure that additional amplifier channels are installed properly, and function to our specifications, additional amplifier modules must be installed by Emotiva, or by your local authorized Emotiva service representative.

A Word About Power Ratings

Music is, by its nature, dynamic. While it's relatively common for the two main channels in a stereo amplifier to be asked to simultaneously deliver high power levels, it is very uncommon for more than two channels to be called upon to deliver high power continuously at the same time, and this almost never occurs outside of laboratory test conditions.

In order to deliver the most dynamic performance where it counts - with real music - we have designed the XPA Gen3 modular power amplifier with a single immense power supply, which is able to deliver massive power continuously to any two channels, and to deliver huge amounts of power dynamically to any number of channels when and if called upon to do so.

The power ratings for the XPA Gen3 modular power amplifier are the same with both channels driven continuously in the two-channel version of the amplifier, and for *ANY TWO CHANNELS DRIVEN CONTINUOUSLY* in the versions of the XPA Gen3 configured with three, four, five, six, or even seven output channels.

In addition to this, because we always aim to provide the most complete information possible, we have also rated the other versions in terms of continuous power (under laboratory conditions) with all channels driven.

Also note that, while the exceptional sound quality of the XPA Gen3 modular power amplifier, and its two-channel continuous power rating, remain the same whether you choose to use a 120 VAC line or a 230 VAC line, the multi-channel power ratings are somewhat higher when you power the XPA Gen3 from a 230 VAC circuit. While the XPA Gen3 modular power amplifier will provide plenty of power for most home theater installations when run from a 120 VAC line, for the absolute best possible performance, we recommend operating the XPA Gen3 from a 230 VAC line.

Circuit Topology

A fully modular audio power amplifier with a high-efficiency switch mode power supply (SMPS), independent, fully discrete, dual differential, high current, short signal path Class A/B amplifier modules, Optimized Class H™ power supply topology, and microprocessor-controlled fault protection.

Power Output

ALL MODELS: Power Output Per Channel

300 watts RMS per channel; 20 Hz - 20 kHz; THD < 0.1%; into 8 Ohms
550 watts RMS per channel; 20 Hz - 20 kHz; THD < 0.2%; into 4 Ohms
800 watts RMS per channel; 20 Hz - 20 kHz; THD < 0.5%; into 2 Ohms

ALL MODELS: FTC Rated Power; 2 Channels Driven; 20 Hz - 20 kHz; THD <0.1%

300 watts RMS per channel; THD < 0.1%; into 8 Ohms (120 VAC line).
490 watts RMS per channel; THD < 0.1%; into 4 Ohms (120 VAC line).

Power Output Per Channel: All Channels Driven; THD <0.1% ; into 8 ohms

XPA two Gen3:	300 watts RMS per channel
XPA three Gen3:	275 watts RMS per channel
XPA four Gen3:	260 watts RMS per channel
XPA five Gen3:	250 watts RMS per channel
XPA six Gen3:	225 watts RMS per channel
XPA seven Gen3:	200 watts RMS per channel

Power Bandwidth (at rated power; 8 Ohm load)

20 Hz to 20 kHz + / - 0.1 dB.

Broad Band Frequency Response

5 Hz to 80 kHz (+ 0 / - 0.15 dB).

THD + noise

< 0.005%; at 200 watts RMS; 1 kHz; 8 Ohms

Signal to Noise Ratio (8 Ohm load)

> 115 dB; ref FTC rated power; unbalanced input (A-weighted).
> 86 dB; ref 1 watt; unbalanced input (A-weighted).

Minimum Recommended Load Impedance

4 Ohms; which equals one 4 Ohm load or two paralleled 8 Ohm loads.

Damping Factor (8 Ohm load)

> 500.

Speaker Output Connections

Audiophile grade, gold plated, 5-way binding posts.

Power Supply

High efficiency, audiophile grade, Switch Mode Power Supply (SMPS).

Input Sensitivity (for rated power; 8 Ohm load)

1.5 V.

Gain

29 dB.

Input Connections

Unbalanced (RCA); balanced (XLR); one each per channel, independently selectable.

Input Impedance

33 kohms (balanced).
23.5 kohms (unbalanced).

Trigger

Trigger Input: 5 - 12 V (AC or DC); <10 mA input current required.
Trigger Output: 12 VDC; can drive any load up to 120 mA.

Power Requirements

Between 100 VAC and 250 VAC @ 50 / 60 Hz (automatically detected).

Front Panel Controls and Indicators

Standby; push button (halo ring changes color to indicate Standby or On).
Status LEDs; one per channel; blue.
Status LEDs change to red to indicate a fault condition.

Rear Panel Controls

AC Power switch; rocker switch (switches AC main power).
Status LEDs switch; disables front panel Status LEDs and dims Standby button halo.
Input selector switches (one per channel); metal toggle switches; select between balanced and unbalanced inputs.
Circuit Breaker; press button to reset circuit breaker.

Protection

The XPA Gen3 is protected against excessive operating temperature, shorted speaker connections, ground faults, and other common fault conditions.

Dimensions:

17″ wide x 8″ high x 19″ deep (unboxed; including feet).
17″ wide x 7″ high x 19″ deep (unboxed; without feet).
24-1/2″ wide x 12″ high x 24-3/4″ deep (boxed).

Weight

XPA two Gen3:	35.5 lbs (unboxed)
XPA three Gen3:	39 lbs (unboxed)
XPA four Gen3:	42.5 lbs (unboxed)
XPA five Gen3:	46 lbs (unboxed)
XPA six Gen3:	49.5 lbs (unboxed)
XPA seven Gen3:	53 lbs (unboxed)

* For boxed weight, add 5 lbs to the above weights

Troubleshooting

Your XPA Gen3 was carefully designed and manufactured from high-quality precision components to ensure years of trouble free operation. We really doubt you'll ever have any problems with your XPA Gen3, but if you do, here are a few things you could try:

Problem: *No output (nothing is lit).*

Reason: You have no AC power.

- Verify that the rear panel AC Power switch is On.
- Verify that your circuit is live.
- Verify that the line cord on your XPA Gen3 is fully inserted and is tight.
- Verify that the Circuit Breaker hans't popped.

When the circuit breaker pops, the button will pop up and extend noticeably from the rear panel. If this happens, try resetting the Circuit Breaker by pressing the button firmly in. If the Circuit Breaker pops a second time, please contact Emotiva, or your nearest authorized Emotiva service representative.

Problem: *Your XPA Gen3 is operating normally, but none of the front panel Status Leds is lit.*

Reason: The front panel status LEDs are turned off.

- Set the Status LEDs switch on the rear panel to On.

Problem: *No sound or distorted sound is heard; the Standby button halo is lit blue; the status LEDs are lit blue.*

Reason: Your XPA Gen3 is not indicating a fault condition.

- Check your source.
- Check your Balanced/Unbalanced Selector Switches.
- Check your speakers and speaker connections.

Problem: *No sound is heard; one or more Status LEDs is flashing red.*

Reason: Your XPA Gen3 is in Protect mode, which indicates a fault condition.

- Switch the rear panel AC Power switch Off and On to clear the Fault condition.
- If the fault remains, look for a shorted speaker cable or damaged speaker.
- Check your sources and source connections (a bad interconnect, DC on the input, or an otherwise bad source component can cause a fault).

Problem: *The halo around the Standby button is lit amber and your XPA Gen3 fails to come on when triggered.*

Reason: Your XPA Gen3 is in Standby mode and should respond to a valid trigger signal.

- Check your trigger cable.
- Check the trigger settings on your source equipment.

Emotiva Audio Corporation Five-Year Limited Warranty

What does this warranty cover? Emotiva Audio Corporation ("Emotiva") warrants its products against defects in materials and workmanship.

How long does this coverage last? This warranty commences on the date of retail purchase by the original retail purchaser and runs for a period of five years thereafter. Emotiva warrants any replacement product or part furnished hereunder against defects in materials and workmanship for the longer of the following: (i) the amount of time remaining under the original warranty, or (ii) 120 days from your receipt of the repaired or replaced product. The duration described in the previous 2 sentences is hereinafter referred to as the "Term". TO THE FULLEST EXTENT PERMITTED BY LAW, ALL IMPLIED WARRANTIES RELATED TO THE ORIGINAL PRODUCT AND ANY REPLACEMENT PRODUCT OR PARTS (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE EXPRESSLY LIMITED TO THE TERM OF THIS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. A claim under this warranty must be made by you within the Term. A claim shall not be valid (and Emotiva has no obligation related to the claim) if it is not made within the Term and if it is not made in strict compliance with the requirements of the "How do you get service?" section.

What will Emotiva do? Emotiva will, at its option, either: (i) repair the product, or (ii) replace the product with a new consumer product which is identical or reasonably equivalent to the product. Emotiva may provide you with a refund of the actual purchase price of the product in the event (i) Emotiva is unable to provide replacement and repair is not commercially practicable or cannot be timely made, or (ii) you agree to accept a refund in lieu of other remedies hereunder. When a product or part is repaired or replaced, any replacement item becomes your property and the replaced item becomes Emotiva's property. When a refund is given, the product for which the refund is provided must be returned to Emotiva and becomes Emotiva's property.

What is not covered by this warranty? This warranty does not apply: (i) to damage caused by use with non-Emotiva products, where the non-Emotiva product is the cause of the damage; (ii) to damage caused by service or maintenance performed by anyone who is not a representative of Emotiva; (iii) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes; (iv) to a product or part that has been modified after its retail purchase, where the modification caused or contributed to the damage; (v) to consumable parts, such as batteries; or (vi) if any Emotiva serial number has been removed or defaced and Emotiva cannot otherwise confirm that you are the original retail purchaser. EMOTIVA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR RELATED TO ANY DEFECTS IN OR DAMAGES TO ITS PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

How do you get service? In order to make a claim under the warranty, you must:

1. Call a customer service representative ("CSR") of Emotiva at 1-877-EMO-TECH (1-877-366-8324). Provide the CSR with a description of your problem and the serial number of the product for which the warranty claim is being made.
2. The CSR will provide you with a returned material authorization number ("RMA").
3. Ship the product to Emotiva at the following address, with the RMA written in large, bold numbers on the outside of the box, and with the letters "RMA" written before the number. Parcels arriving without an RMA number on the outside of the box will be refused.

Emotiva Audio Corporation
Attn: Repair Department
139 Southeast Parkway Court
Franklin, TN 37064

How does state law apply? This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Accessories

Speaker Cables and Interconnects

Using high-quality speaker cables and audio interconnects will ensure that you get the best sound quality and maximum reliability from your XPA Gen3 amplifier and the speakers connected to it. Emotiva Audio offers high-quality speaker cables and audio interconnects that feature solid engineering, premium build quality, excellent performance, and reasonable cost.

Rack ears and alternate trim options are also available.

You will find both on our website at www.emotiva.com.

Notes

All information contained in this manual is accurate to the best of our knowledge at the time of publication. In keeping with our policy of ongoing product improvement, we reserve the right to make changes to the design and features of our products without prior notice.

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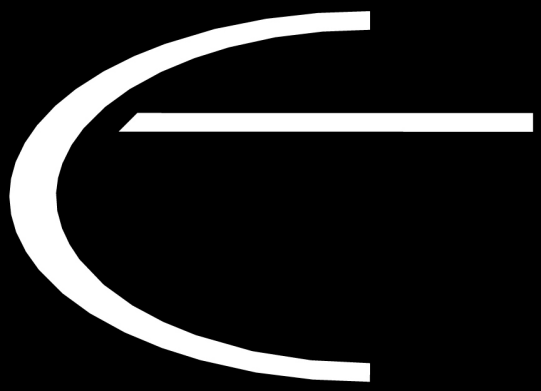

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