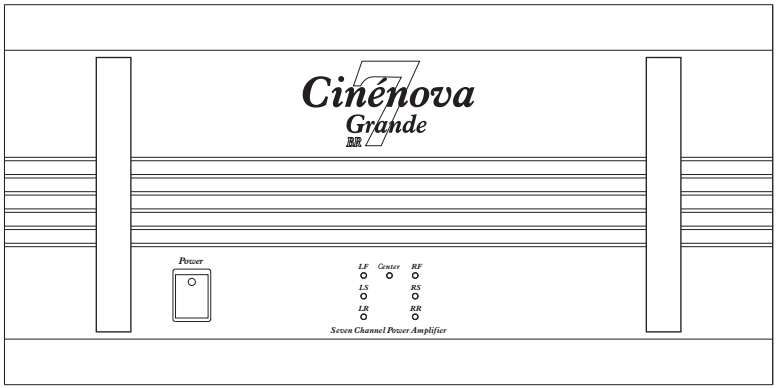
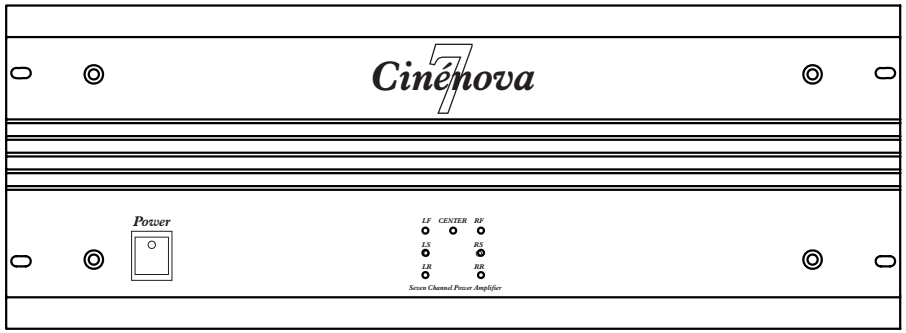
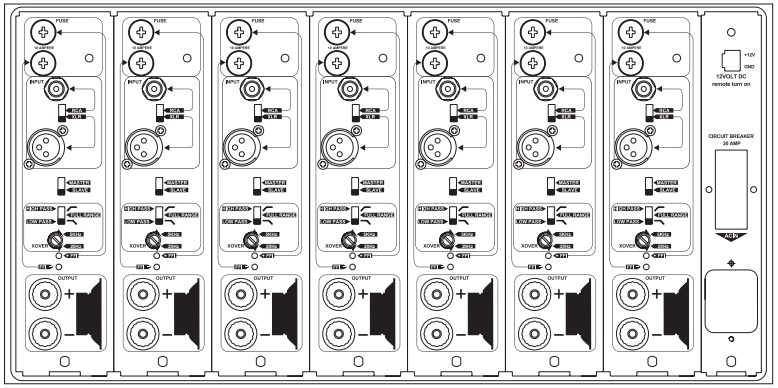
Cinénova Power Amplifiers

User's Manual

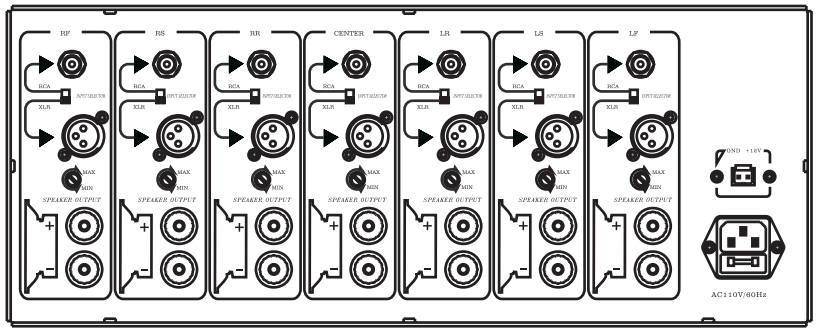




Cinénova Grande BR 7



Cinénova 7



Rated #1

Winner of Rave Award for BEST AMPLIFIER over $3,000.00

"Potent combination of speed, grace and power"

"This amp brings new meaning to the phrase 'gentle giant'"

- Home Theater Magazine

EARTHQUAKE® SOUND

The Sound That Will *Move* You

Earthquake Sound Corp. | (510) 732-1000 | U.S. Toll Free: (800) 576-7944 | www.earthquakesound.com

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EARTHQUAKE® SOUND

The Sound That Will *Move* You

Earthquake Sound Corporation
2727 McCone Avenue
Hayward, CA 94545
Tel: 510-732-1000
Fax: 510-732-1095

Customer Technical Support
US Toll Free: 1-800-576-7944
tech@earthquakesound.com

Five (5) year limited warranty

Earthquake warrants the original purchaser that all Factory Sealed New Audio Products to be free from defects in material and workmanship under normal and proper use for a period of five (5) years from the date of purchase (as shown on the original sales receipt with serial number affixed/written on it). The five (5) year warranty period is valid only if an authorized Earthquake dealer properly installs the product and the warranty registration card is properly filled out and sent to Earthquake Sound Corporation. If a non-authorized party installs the product, a ninety (90) day warranty period will be applied.

(A) Five (5) years limited warranty plan coverage guidelines:

- **First year:** Earthquake pays for labor, parts, and ground freight (only in US mainland, not including Alaska and Hawaii) (shipping to us is not covered).
- **Second, third, fourth & fifth year:** Earthquake pays labor only. Customer must pay for parts and freight both ways.

(B) Warning:

Products (sent for repair) that are tested by Earthquake technicians and deemed to have no problem(s) will not be covered by the five (5) year limited warranty. Customer will be charged a minimum of one (1) hour of labor (at the ongoing rates) plus shipping charges back to customer.
Each product sent for repair **must be packaged in its original packaging.** Otherwise, there will be repackaging charge in addition to labor, parts and shipping charges.

(C) Earthquake will repair or replace - at our option - all defective products/parts subject to the following provisions:

- Defective products/parts have not been altered or repaired by other than an Earthquake factory-approved technician.
- Products/parts are not subjected to negligence, misuse, improper use or accident, damaged by improper line voltage, used with incompatible products or have its serial number or any part of it altered, defaced or removed, or have been used in any way that is contrary to Earthquake's written instructions.

(D) Warranty Limitations:

Warranty does not cover products that have been modified or abused, including but not limited to the following:

- Damages to cabinet/casing finish due to misuse, abuse or improper use of cleaning materials/methods.
- Fading and or deterioration of speaker components & finish due to improper exposure to elements.
- Bent amplifier casing, damaged finish on the casing due to abuse, misuse or improper use of cleaning material.
- Burnt tracers on PCB.
- Product/part damaged due to poor packaging or abusive shipping conditions.
- Subsequent damage to other products.

A warranty claim will not be valid if the warranty registration card is not properly filled & returned to Earthquake with a copy of the sales invoice. Warranty card is located on the last page of this manual.

(E) Service Request:

To receive product service, contact Earthquake service department at (510) 732-1000 and request an RMA number (Return Material Authorization). Items shipped without a valid RMA number will be refused. Make sure you provide us with your complete/correct shipping address, a valid phone number, and a brief description of the problem you are experiencing with the product. In most cases, our technicians might be able to resolve the problem over the phone; thus, eliminating the need to ship the product.

(F) Shipping Instructions:

Product(s) must be packaged in its original protective box(es) to minimize transport damage. Shipper claims regarding items damaged in transit must be presented to carrier. Earthquake Sound Corporation reserves the right to refuse improperly packed product. Original sales receipt must accompany product returned for service. We encourage you to include with the package a written description of the problem. Ship product to: Earthquake Sound Corp. 2727 Mc Cone Avenue, Hayward, CA 94545. Ph (510) 732-1000. You are responsible for the cost of shipping the product to Earthquake Sound Corporation.

(G) Disputes Resolution:

All disputes - between clients and Earthquake Sound Corporation - resulting from the five (5) years limited warranty policy must be resolved according to the laws & regulations of the county of Alameda -California.

Product Registration

This Cinénova Grande Power Amp can be registered by returning the Product Registration card attached to this manual. Please also retain the sales receipt which represents proof of purchase and helps expedite warranty issues.

Your Cinénova Grande 7 BR

Thank you for purchasing this Cinénova Grande 7 BR reference amplifier designed to satisfy your audiophile needs for music enjoyment. The Cinénova Grande 7 BR is conceived to reproduce “true to life” music as it was originally recorded, without tempering, coloration or compression.

Like the finer things in life, the Cinénova Grande 7 BR was conceived with love for details, hunger for power, and respect for grace. The Cinénova Grande 7 BR enjoys the solitude of being the most powerful multichannel amplifier on the planet.

Most home theater systems sold to consumers integrate low power amplifier / receiver units, normally not exceeding 150 Watts per channel. However, professional theater systems employ individual components which provide the best separation and potentially a lot more power. Audiophiles know that an audio amplifier is the heart of any system; it must be able to meet the demands of the softest musical passage to the thundering special effects of a movie, without sacrificing audio quality.

The Cinénova Grande 7 BR’s untainted sonic quality is only matched by its enormous power and stringent technical performance. The finesse of high-fidelity audio, combined with the mastery of multi-channel amplification make the Cinénova Grande 7 BR the cornerstone for a high-end home theater setup. This amplifier caters to both the music aficionado and the home cinema buff. After all, faithful reproduction of music is our business.

The unique Cinénova technology integrates a minimum number of components in the audio path, leading to excellence in sound quality, efficiency, and clean amplification. Working side by side with engineers from Toshiba, our engineers helped develop one of the fastest transistors in the industry, a 15 Giga-Hertz switcher. Fast, accurate, and powerful, the 15 GHz switcher allowed engineers to use a smaller number of components in the audio path and reduce the need for high bias current, making the Cinénova amplifiers industry-leading in power efficiency. They are truly green amplifiers that do not sacrifice quality. Users are able to enjoy pure music, untainted by components distortion or guilt from a large carbon footprint.

Earthquake Engineers, driven by their desire for excellence, pushed the envelope beyond its limits. They designed the “bi-file” Ferrite/OFC toroidal transformer circuit witch allows five or seven separate power supplies (one for each channel) to be magnetically coupled to one huge single primary 4KVA transformer. The 99% efficient power supply permits large amount of current to flow through.

The “Alpha One” is a monaural 1000 watt amplification/power block, used in the Cinénova Grande 7 BR amplifiers. The “Alpha One” blocks are individually removable using the Earthquake patented “EZXS” system, without the need to dismantle the rest of the amplifier. Channel separation exceeds the norm of 90 decibels and stretches it to 110 decibels.
“Sounding good” and “looking good” are both integral characteristics of a Cinénova amplifier. The elegant industrial design is only surpassed by the sturdy chassis upon which the amplifier is built. 12 gauge steel is shaped to house the “Alpha One” modules and transformer. The chassis is beautifully faced with an 8 mm aluminum plate, hand engraved and available in both Black and Platinum finish.

Your Cinénova 7

Thank you for purchasing this Cinénova 7 state of the art multi-channel amplifier. This amplifier is designed to surpass your expectations and satisfy your audiophile needs for music and movie enjoyment. The Cinénova 7 is conceived to reproduce “true to life” music as it was originally recorded, without tempering, coloration or compression. Created in the image of its larger brethren, the Cinénova 7 is an uncompromising design built upon massively over-specified components. Using power dense transformers exceeding 2800 VA and completely self-contained output blocks, the Cinénova is a septo monaural amplifier. Completely separate output blocks are largely unheard of in this class of amplifier, but with Earthquake’s enduring strive for quality and excellence there simply was no other way. Designs that share a common motherboard inherently lack the fidelity of true separate designs. The Cinénova 7 is ready to take on even the heaviest of speaker and hold it in an iron grip. Large vertically-ripped individual heat sinks efficiently release heat and ensure that your show goes on no matter the intensity. From the loudest crescendo to the finest syllable, the Cinénova will remain composed and in control. Enjoy the unique ownership experience of this Cinénova that was designed by a brilliant mind and built with loving hands.

Constructing a Cinénova is a fun process. From hand assembling, calibrating, burn testing, and packaging, every step is conducted with love for details and hunger for perfection. We enjoyed building your Cinénova and we know you will feel the same using it.

From our hands to your ears... Thank you.

Joseph J. Sahyoun
President & Chief Engineer

Wood crates are used to package these 150+lbs amplifiers to prevent any damages during shipping.

Important Safety Instructions

1) Read these instructions in their entirety.

2) Store this manual and packaging in a safe place.

3) Heed all warnings.

4) Follow instructions (do not take short cuts).

5) Do not use this apparatus near water.

6) Clean only with a dry cloth.

7) Do not block any ventilation openings. Install in accordance with the manufacturers instructions.

8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatuses that produce heat.

9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider that the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the 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 plugs, convenience receptacles, and the pint where they exit from the apparatus.

11) Only use attachments & accessories specified by the manufacturer.

12) Use only with a cart, stand or table that can support the product weight, NOT RACK MOUNTABLE. Use caution when moving or positioning your rack or cart so that it will not tip over, which may cause serious injury to you or your products.

13) Unplug this apparatus during a lightning storm or when unused for long period of time.

14) Refer all servicing to qualified service personal. 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, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

15) To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

The following symbols are used in this document:

Appears on the component to indicate the presence of uninsulated, dangerous voltage inside the enclosure – voltage that may be sufficient to constitute a risk of shock.

CAUTION

Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in injury or death.

WARNING

Calls attention to a procedure, practice, condition or the like that, if not correctly performed or adhered to, could result in damage to or destruction of part or all of the product.

Note: Calls attention to information that is essential to highlight.

Cinénova Grande 7 BR Front Panel

1. Master Power Switch:

Turns the current to the amplifier ON or OFF manually. When turning on the amplifier via a 12VDC source the switch must be in the OFF position.

Additionally when adding or removing 12VDC connections or any other connections the main power circuit breaker needs to be in the off position. This will help prevent any surges that could damage your products or cause bodily injury.

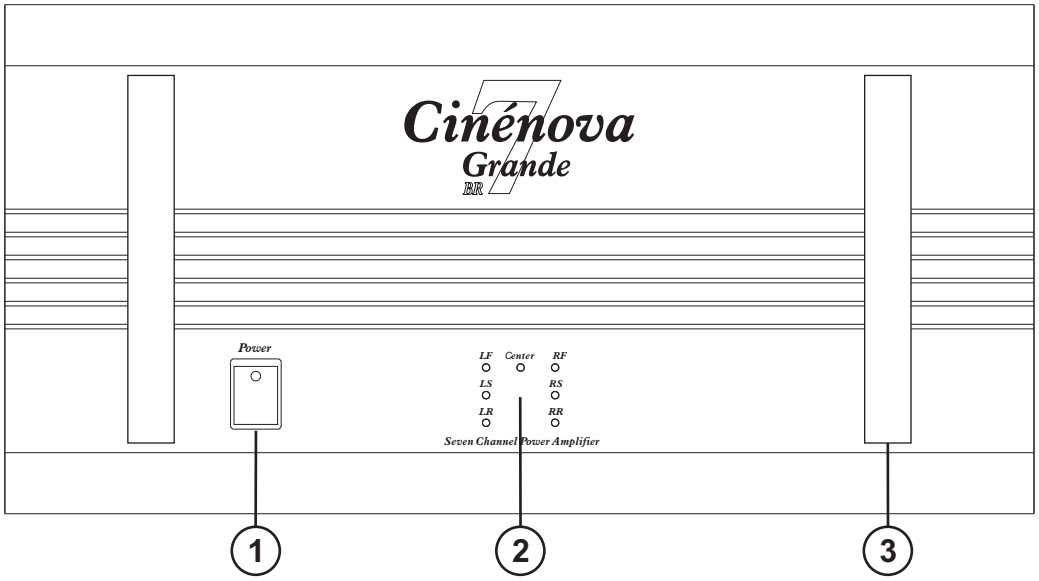
2. Peak LED Indicators:

The Cinénova Grande 7 BR is equipped with five or seven LED indicators on the front panel that should remain unlit. These LEDs indicate the operating status of each corresponding channel. If an LED or all LEDs remain lit continuously, the amplifier is clipping that channel and the volume should be turned down immediately to prevent damage. Its ok for the LED to flicker but it should never remain on continuously.

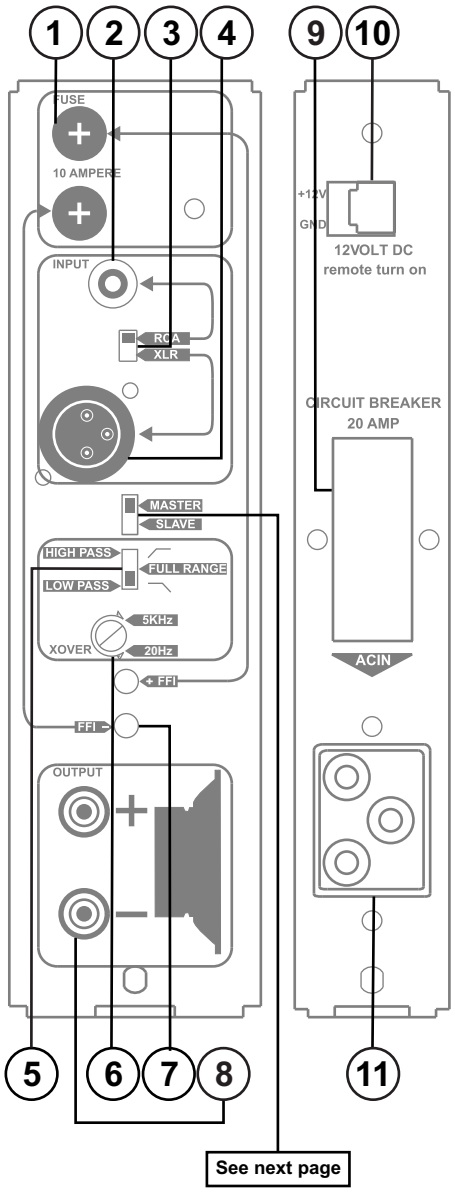
3. Handles

The front handles may be removed. The cover must come off first. You will need a 3mm hex driver for the front mounted screws.

CAUTION: Be sure that what ever is used to mount this amplifier on, is extremely strong and durable.



Rear Panel of Cinénova Grande 7 BR



1. Replaceable Fuses:
Each mono block has two (10 Amperes) fuses designed to protect and monitor the voltage of operating rails (+/-). If a fuse burns out you may replace it with the following fuse size: 10A - 250V, 5mm x 20mm, mini fuse slow blow. If fuses continue to blow check for shorts in the wiring system.

2. RCA Input:
Accepts low-level signal from any source. It takes 1.6V to output the rated power.

3. Input Selector:
To maintain signal integrity Cinénova provides you with an “Input Selector Switch”. This gives you (installer) the option to select between RCA or XLR inputs.

4. Fully Balanced XLR Inputs:
We recommend the use of fully balanced XLR inputs in cases when the distance between the Cinénova and the audio source is excessive and susceptible to noise interference. The XLR input is a true balance input. Both conductors are isolated relative to ground. The XLR will require a signal of 2.35 volts to output the rated power.

5. Three-way Crossover Switch:
A 3-way switch controls the operation of the output filter. The amp can run in full-range, low-pass, or high-pass mode to be used for different applications.

6. Variable Crossover 20Hz-5kHz:
Each monaural block features a built-in variable filter to select the desired frequency range, with a slope of 12dB/Octave. The fully buffered filter has a range of 20Hz when set to minimum to 5 kHz when set to maximum. This V/R is inactive when crossover switch is in by-pass mode.

7. Fused Fault Indicators:
Each fuse carries its own fault LED indicator that illuminates when the fuse is burnt.

8. Gold Plated Speaker Output Binding Posts:
We recommend that you use a high quality wire constructed of fine, multi-strand copper 10-gauge and up. Wire with a gauge of 16 may be used for short runs of less than twenty feet. We do not recommend that you use any wires with a gauge equivalent of 18 or higher due to the power loss and performance degradation.

9. Main Circuit Breaker

The enormous amount of power generated by the amplifiers requires a stable 120 or 240V connection. Your amplifier is supplied with a heavy-duty 20A circuit breaker. If power to your amplifier is interrupted, check the circuit breaker on the rear of the unit. If the breaker is in the off position you may reset it to the on position to restore AC power. If the circuit breaker automatically trips to the off position.

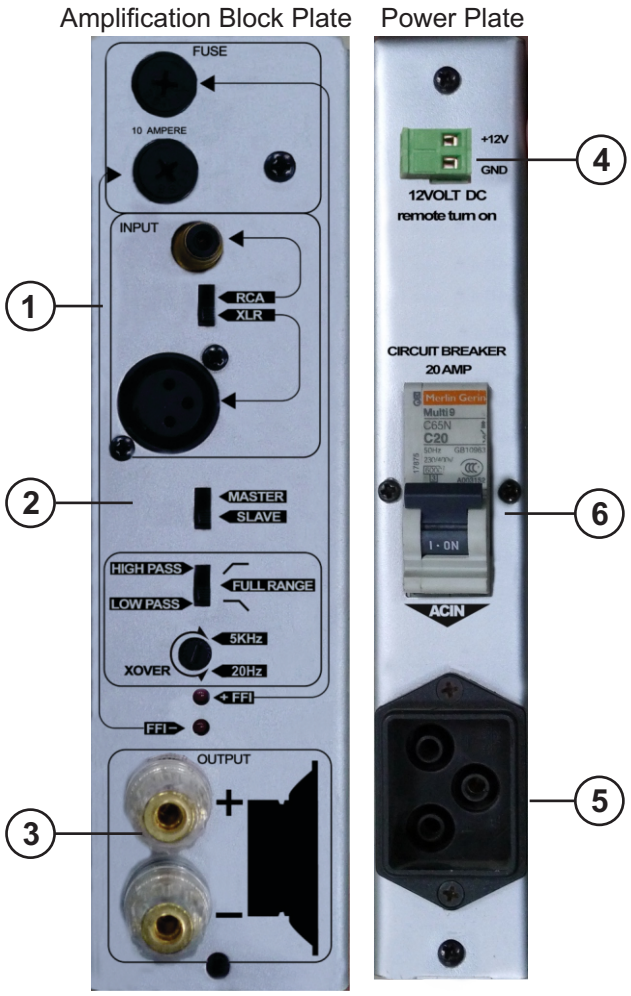
To ensure proper operation, we recommend a dedicated 20amp circuit breaker because a proper power supply translates to better performance. Most homes are wired with 20A circuits, but there is a chance that the wall receptors are rated at 15A. IF IN DOUBT, CONSULT WITH AN ELECTRICIAN.

10. 12VDC Trigger
In order for the Cinénova Turn-ON to be controlled via another source, connect the 12VDC trigger input to the 12VDC source output (polarity is not an issue). From your source, 12VD should have over 20mA. Then set the manual power switch to OFF and the circuit breaker to ON. Now any time the Cinénova detects an incoming 12VDC signal it will automatically power on.

11. AC Input Connector
A special heavy duty - 20 Amperes - AC cord is included with every unit. Do not attempt to replace the AC cord with lesser quality AC cords.

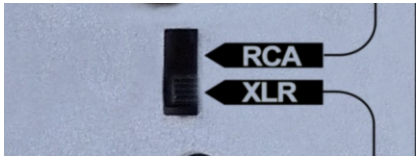
Getting Started with the Cinénova Grande 7 BR

Confirm the voltage setting of the amplifier. It must match the voltage in your home. The amp is set by factory to either 120V or 240V. Check above the circuit breaker for this information.



1) INPUT SELECTION

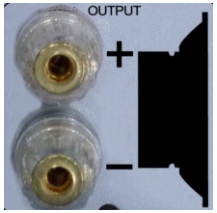
Set the input control to either RCA or XLR. This tells the amp which input type will be used.



2) X-OVER MODE SELECTION

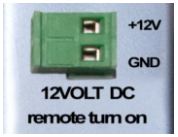
The Cinénova Grande 7 BR houses 7 amplification blocks. Each block comes with a 3-way Mode Selection switch. Generally the amplifier Is used in By Pass mode and fed a crossed signal from a processor. Unless otherwise desired, the crossover switch should remain in Bypass position.

3) SPEAKER CONNECTIONS



A pair of binding posts is provided for each channel. These posts accept bare wire, spade lugs & banana type plugs. If bare wire is used then, strip approximately 1/2 inch to 3/4 inch of insulation from the end of each wire and carefully twist the strands of each conductor together. Then insert.

4) 12VDC WHEN APPLICABLE



If you plan to power the Cinénova using an external source, then you will need to plug the source into the 12VDC Trigger.

When using this feature the main power switch must remain in the OFF position at all times.

5) PLUG IN POWER CORD

Plug the AC power cord into the amp first then into the wall outlet. Make sure it is firmly connected.

6) TURN ON CIRCUIT BREAKER

This amp is equipped with a 20 ampere circuit breaker. Once that all tasks have completed then proceed to turn the circuit breaker to the on position.

Bridging Channels: Understanding the MASTER/SLAVE Feature

The Cinénova Grande 7 BR is capable of bridging its channels in order to produce even more power. Bridging is achieved by setting two channels out of phase. This leads to a differential voltage between two blocks. In bridge mode, you are required to set one channel to master (non-inverted) and the second to slave (inverted). Since power is V2/R, the bridged output blocks will produce two times more than the unbridged.

WARNING

Please check your speakers' power handling capability as bridging could overload your speakers.

In bridge mode, connect the positive terminal of the master channel to the speaker positive and connect the positive terminal of the slave channel to the speaker negative. Be sure to connect the negative terminals of both bridged channels with the jumper wire.

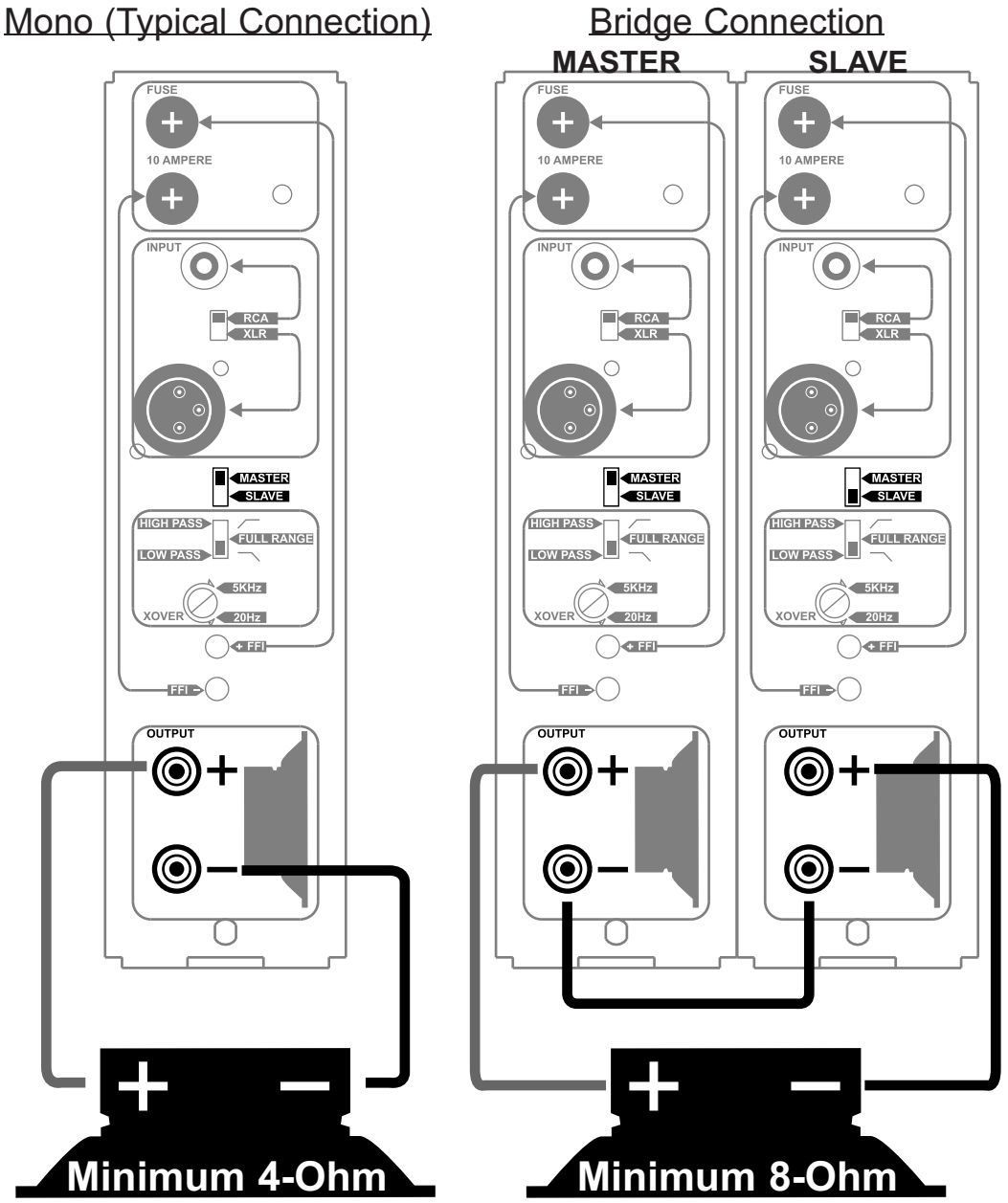
Advantage
Two bridged channels will more than double the wattage output of one channel. This will maximize the amount of power that this amplifier is capable of. For example:

1 channel outputs 300WRMS at 8 ohm
2 bridged channels output 1000WRMS at 8 ohm

MARS Technology
Cinénova Grande 7 BR implements MARS technology (Magnetically Actuated Reanimation System). This is a new type of protection system that enables the use of all the amplifier's power resources without compromising the survivability of the amplifier under catastrophic conditions. MARS is different as it is not in the signal path, but works by sensing the electro-magnetic signature of the speaker output wire then translating this input into amperes flowing through the wire.

During testing, the MARS technology showed that the output of the amplifier could be short-circuited at full power more than a thousand times with no damage to the amplifier. A specially designed circuit instantly shuts off the output drive.

In the event a short-circuit activates the MARS protection system, it continuously re-scans the output every 10 seconds. Normal operation automatically resumes as soon as the short-circuit condition is removed.



Bridging Cinénova Grande BR 7 Channel to 5 Channels

The Cinénova Grande 7 BR has six channels that can be bridged to create three channels. The seventh channel is always a stereo channel and should always be set to “MASTER” since it has no slave.

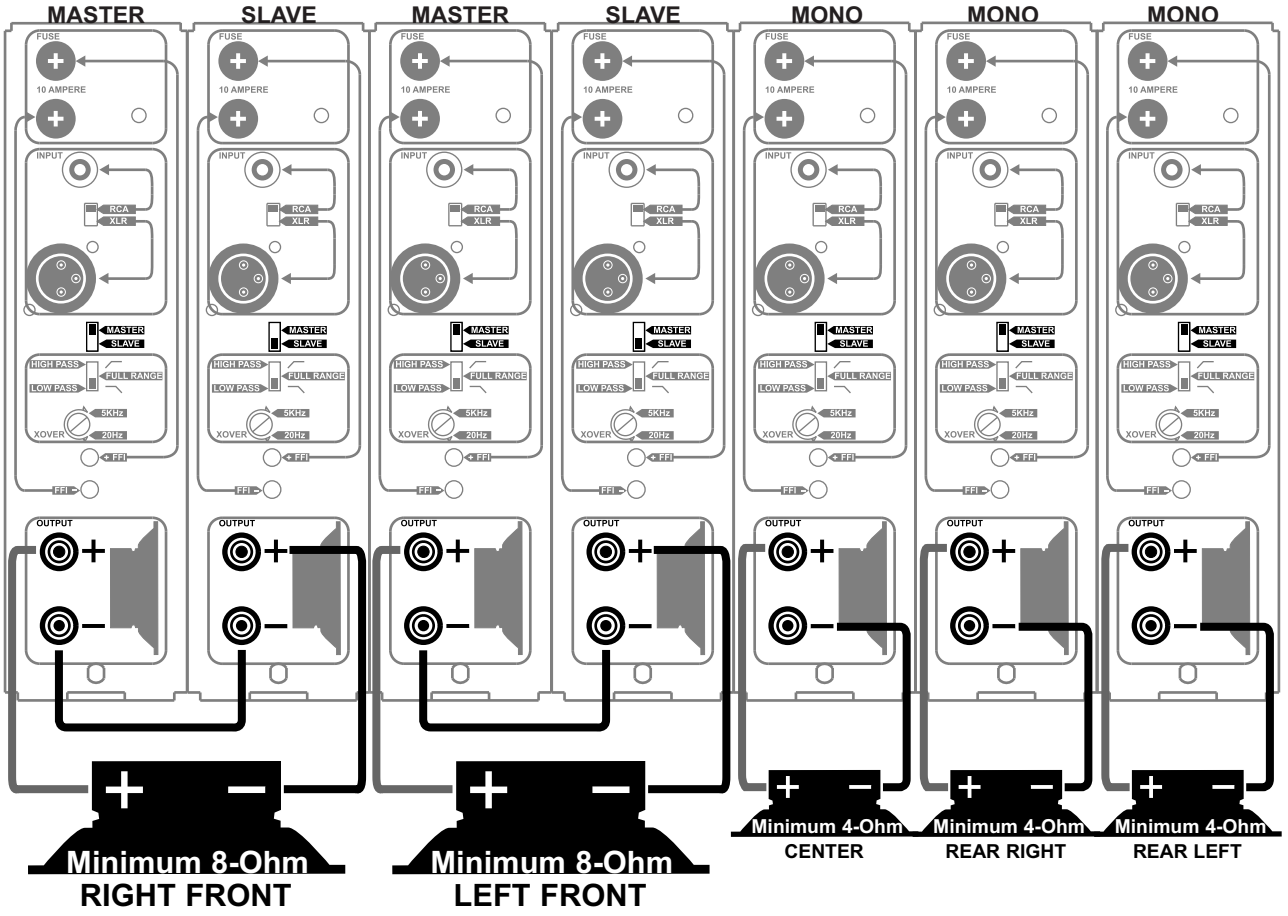
In order to bridge the first and second channels, the first channel must be set to “MASTER” and the second channel must be set to “SLAVE.”

To bridge the third and fourth channels, the third channel must be set to “MASTER” and the fourth channel must be set to “SLAVE.”

To bridge the fifth and sixth channels, the fifth channel must be set to “MASTER” and the sixth channel must be set to “SLAVE.”

Applications

In the diagram to the right, a seven channel amplifier has been bridged to create a five channel amplifier. Though it is capable of bridging two more channels, this bridging mode is applicable to more users.



Power Limitation

Each Cinénova Grande 7 BR amplifier block is capable of producing about 53 volts RMS of output power.

The power rating is:

each block P=V**/R=53**/8=360 WRMS at 8 ohm

2 bridged blocks P=V**/R=106**/8=1400 WRMS at 8 ohm (actual output is reduced to 1000 WRMS for safety reasons, see specification data sheet.)

Optical protection circuitry with auto reset.

Voltage	Current	Wattage
110 - 220	15A	1800
220 - 240	15A	3600
220 - 240	20A	4800

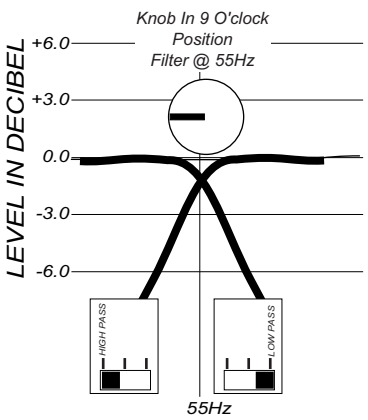
WARNING

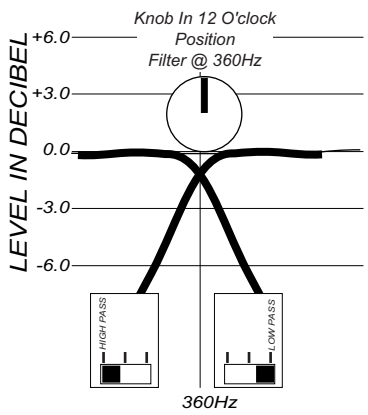
Depending on how your Cinénova Grande 7 BR is bridged, the power output may trip a circuit breaker in your house's electrical system. Check the maximum power load of your house's electrical system before attempting to use the bridge mode.

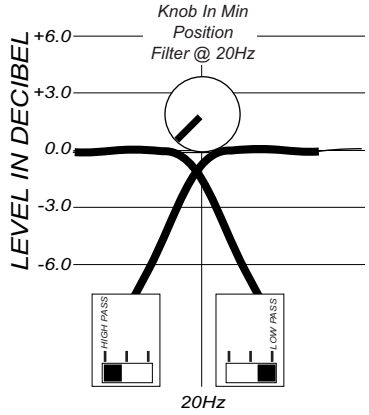
Cinénova Grande 7 BR Filter Settings

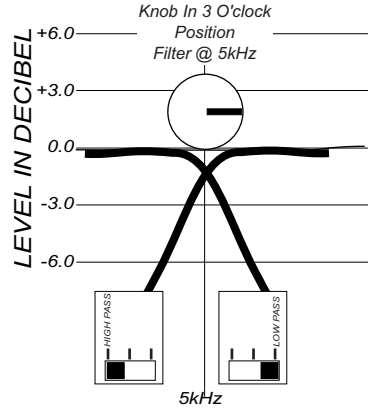
Each channel - monaural block - of the Cinénova Grande 7 BR amplifiers comes equipped with a fully buffered variable filter (range: 20 Hz to 5000 Hz). Once a crossover point is selected, the block can be run in low pass or high pass configuration, simply by a flick of a 3-way switch; the filter can be bypassed by setting the switch to the full range position.

REFER TO THE FOLLOWING ILLUSTRATIONS FOR FILTER SETTING:









Technology and Materials

EZXS Detachable Monaural Blocks:

Seven totally independent mono-block amplifiers each with its own power supply circuitry and pre-amplification stage for high fidelity audio reproduction. For ease of service, each block can be individually removed and serviced without the need to ship the entire amplifier. EZXS® is a trademark of Earthquake Sound Corporation.

Multiple Heat Sinks:

Over 500 square inches of heat radiating aluminum surface per channel maximizes heat exchange for cooler amplifier operation. The 12 gauge steel cover is perforated - top, sides & bottom- for effective air circulation.

Peak LED Indicators:

These LEDs monitor the corresponding channel's output level. The LEDs will come on only when the amplifier output reaches its maximum level, near 1% THD. If an LED flickers that is ok. If an LED should remain on for longer than 10 seconds then simply back the volume down slightly to maintain a stable level of output.

Thermal Protection:

Each monaural block is equipped with a thermal sensor designed to shut the amplifier down when it overheats. Overheating is not typical. It only occurs if the amplifier is over driven with low impedance speakers, or if the amplifier is located in an improperly ventilated space. The Thermal Protection Circuit will kick in at 85ºC and release at 65ºC. It is unusual for this amp to reach temperatures of this nature during normal or high power operation.

Individually Selected and Matched Components:

Components used to construct the Cinénova Grande are subjected to an exhaustive selection process; during which, the components are matched and individually tested to exact tolerances. Which leads to the impressively low idling current of 600mA for the 5ch Cinénova.

Toroid Power Transformer:

Each Cinénova contains a monstrous 4KVA high efficiency bifilar toroid transformer. This ferrite core transformer weighs over 30Lbs and is wound with oxygen free, 99% pure copper that minimizes transport losses. Hum suppression is accomplished by using a 12 gauge toroid mount, insulated with 10 layers of pressed foam.

Special Features

- Independent amplification blocks & power supplies (EZXS® detachable monaural blocks)
- Built-in line conditioner
- 7-channel configurations
- Soft Start Circuitry
- Fully balanced inputs
- 12VDC trigger input
- Three-way mode selection switch: High-pass, By-pass & Low-pass
- 20Hz-5kHz variable crossover for each channel
- Oversized bifilar toroidal power transformer with extraordinarily low DC resistance and thermal protection
- Fuse Fault Indicators
- Thermal protection against overheating
- Individually selected and matched components
- Speaker protection against DC and frequencies below 10Hz
- Protection against short circuits, device failures, miss wiring, and internal faults
- Heavy duty gold plated output terminals
- Front mounted removable handles

Note:

The soft start circuitry will cause a slight delay (around 6 seconds) between the time when the amplifier is switched on and the time when you hear any audio through the speakers. This time delay is essential as it slows down the rushing current at initial start up, allowing it to slowly charge the huge capacitor banks without tripping the main circuit breaker.

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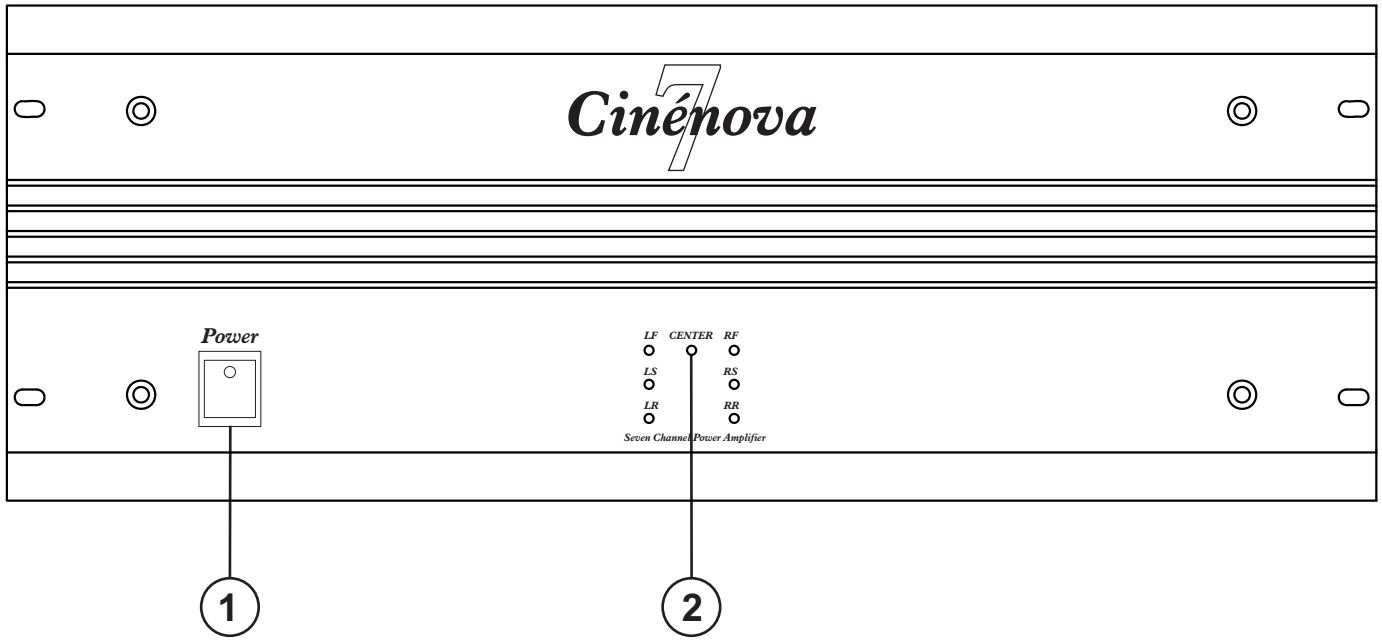
Cinénova 7 Front Panel



1. **Master Power Switch:**

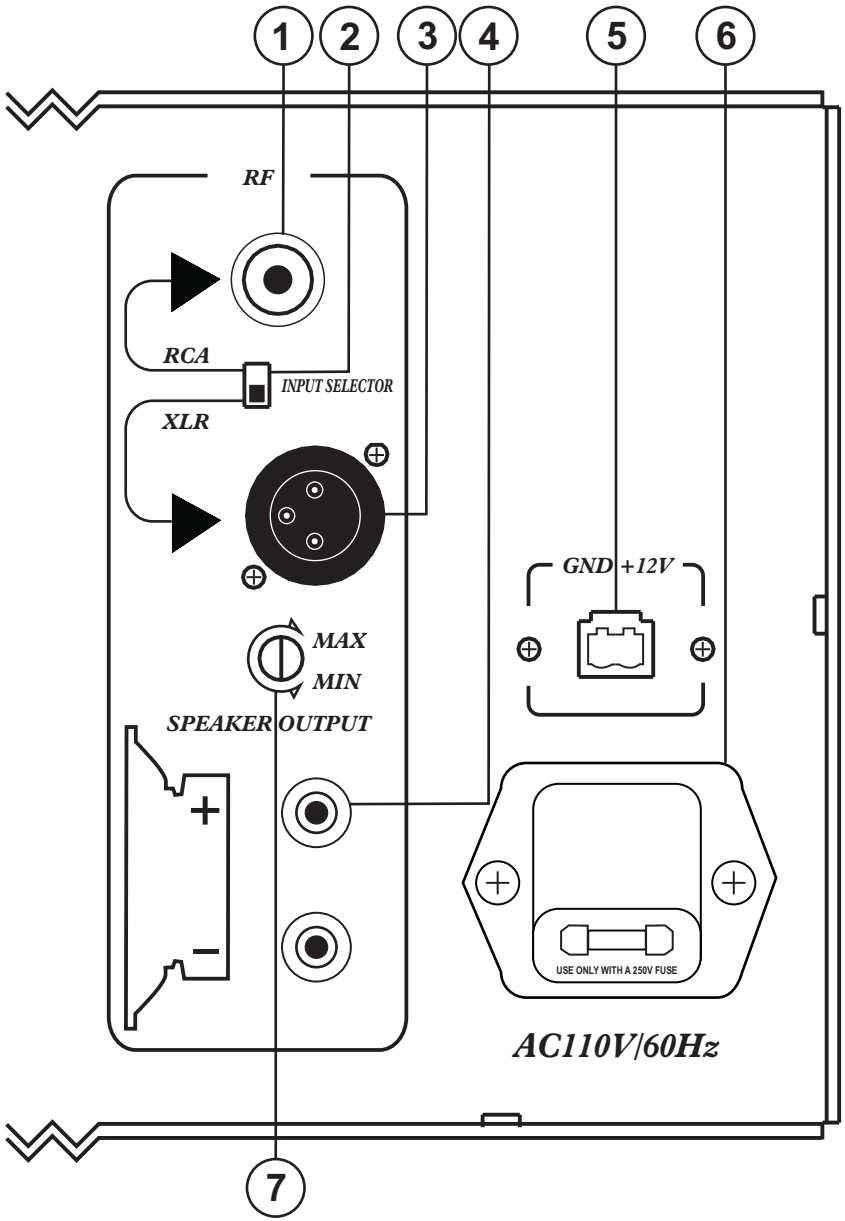
   Turns the current to the amplifier ON or OFF manually. When turning on the amplifier via a 12VDC source the switch must be in **the OFF position.**

   Additionally when adding or removing 12VDC connections or any other connections the main power circuit breaker needs to be in the off position. This will help prevent any surges that could damage your products or cause bodily injury.

2. **Peak LED Indicators:**

   The Cinénova 7 is equipped with five or seven LED indicators on the front panel that should remain unlit. These LEDs indicate the operating status of each corresponding channel. If an LED or all LEDs remain lit continuously, the amplifier is clipping that channel and the volume should be turned down immediately to prevent damage. Its ok for the LED to flicker but it should never remain on continuously.

Rear Panel of Cinénova 7



1. RCA Input:

Accepts low-level signal from any source, such as a processor or receiver. From 0.4 Vac up to 6 Volt AC.

2. Input Selector:

To maintain signal integrity Cinénova-7 provides you with an “Input Selector Switch”. This gives you (installer) the option to select between RCA or XLR inputs.

3. Fully Balanced XLR Inputs:

We recommend the use of fully balanced XLR inputs in cases when the distance between the Cinénova and the audio source is excessive and susceptible to noise interference.

4. Gold Plated Speaker Output Binding Posts:

We recommend that you use a high quality wire constructed of fine, multi-strand copper 10-gauge and up. Wire with a gauge of 16 may be used for short runs of less than twenty feet. We do not recommend that you use any wires with a gauge equivalent of 18 or higher due to the power loss and performance degradation.

5. 12VDC Trigger:

In order for the Cinénova Turn-ON to be controlled via another source, connect the 12VDC trigger input to the 12VDC source output (polarity is not an issue). From your source, 12VD should have over 20mA. Then set the manual power switch to OFF and the circuit breaker to ON. Now any time the Cinénova detects an incoming 12VDC signal it will automatically power on.

6. AC Input Connector:

IEC Power Receptacle

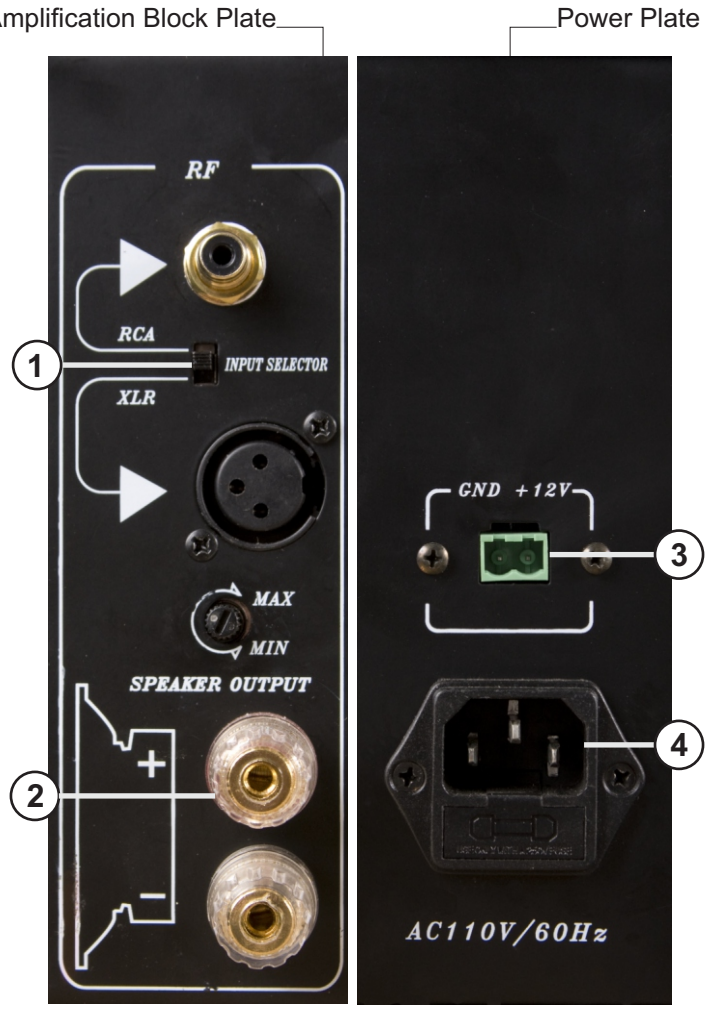
7. Input Sensitivity:

Input selector gain set is based on your processor output voltage. The table shown below reflects the signal required from your processor if you were to set this gain based on the displayed position.

Signal required 6 Volts	Signal required 5 Volts	Signal required 4 Volts	Signal required 3 Volts	Signal required 2 Volts	Signal required 1.5 Volts	Signal required 1 Volts	Signal required 0.75 Volts	Signal required 0.5 Volts	Signal required 0.4 Volts

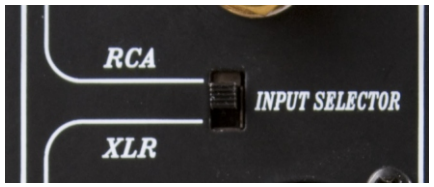
Getting Started with the Cinénova 7

Confirm the voltage setting of the amplifier. It must match the voltage in your home. The amp is set by factory to either 120V or 240V. Check above the circuit breaker for this information.

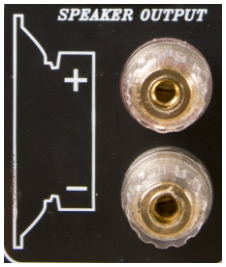


1) INPUT SELECTION

Set the input control to either RCA or XLR. This tells the amp which input type will be used.



2) SPEAKER CONNECTIONS



A pair of binding posts is provided for each channel. These posts accept bare wire, spade lugs & banana type plugs. If bare wire is used then, strip approximately 1/2 inch to 3/4 inch of insulation from the end of each wire and carefully twist the strands of each conductor together. Then insert.

3) 12VDC WHEN APPLICABLE

If you plan to power the Cinénova using an external source, then you will need to plug the source into the 12VDC Trigger.

When using this feature the main power switch must remain in the OFF position at all times.

4) PLUG IN POWER CORD

Plug the AC power cord into the amp first then into the wall outlet. Make sure it is firmly connected.

CAUTION

The fuse holder is located directly under the power socket. It contains one extra 15 ampere, 250V fuse.

To access the fuse holder, make sure your Cinénova is turned off and unplugged from both the wall outlet and the amplifier's power socket. Place a flat head screwdriver in the groove on the top of the fuse holder and simply pry off the fuse holder.

MODEL	Cinénova Grande BR 7	Cinénova 7
Number of Channels	7-channels	7-channels
Power Rating Per Channel	[1] (8-ohm load), all channels driven: 360 Watts [2] (4-ohm load), all channels driven: 610 Watts [2] (2-ohm load), all channels driven: 810 Watts	(8-ohm load) Rated:150 WRMS Measured:170 [2](4-ohm load) Rated:250 WRMS Measured:300 [2](2-ohm load) Rated:300 WRMS Measured:350
Output Load Impedance	Safe with all loads from 2-Ohm to 16-Ohm	Safe with all loads from 4-Ohm to 16-Ohm
Input Impedance	- RCA: 28-kOhms - XLR: 48-kOhms	- RCA: 28-kOhms - XLR: 48-kOhms
Input Sensitivity	- RCA: 1.6V - XLR: 2.4V	See table pg. 16, item 7
Voltage Gain (Av)	42V Gain Relative to 1 watt	42V Gain Relative to 1 watt
Frequency Response	up to 50kHz ±0.1dB	up to 30kHz ±0.1dB
Crossover Filter (LPF/HPF)	Variable Selector from 20Hz - 5kHz with a slope of 12dB/Octave	N/A
Total Harmonic Distortion + Noise	0.003% at 1 watt	0.003% at 1 watt
Signal to Noise Ratio (A-Weighted)	Greater than -121 dB	Greater than -121 dB
Cross Talk / Channel Seperation	Greater than -110 dB from 17Hz to 40kHz	Greater than -110 dB from 17Hz to 40kHz
Slew Rate	55V/microsecond	60V/microsecond
Damping Factor	1600 at 8-Ohm, 800 at 4-Ohm, 400 at 2-Ohm	600 at 8-Ohm, 300 at 4-Ohm
DC Output Offset	Less than 0.004V	0.004
Power Requirement	120 VAC/240 VAC Factory Pre-set	120 VAC/240 VAC Factory Pre-set
Dimensions (H x W x D)	9 3/8” (with feet) x 17 5/8” x 21 3/8” (with handles)	6 7/8” x 17” x 16 1/4” (175mm)x(432mm)x(413mm)
Net Weight	123.5 lbs / 56.0 kgs	80 lbs / 36.3 kgs
Shipping Weight	162 lbs / 73.5 kgs	89 lbs / 40.4 kgs

[1] RMS power, measured at 1% THD and 1kHz input frequency
[2] Adequate ventilation may be required and 240VAC/20 Ampere circuit is recommended
Depending on listening habits and ambient temperatures, 4-ohm and 2-ohm uses might require additional cooling

Troubleshooting All Cinénova Models

Peak LEDs "ON" Constantly

It is normal when running the amplifier to full power that the LEDs flicker. If the LEDs are on constantly without flickering (solid orange) it means that the amplifier output is clipping. Reduce volume level to prevent damage to speakers or amplifier.

Humming noise from speakers

Often humming noise is emanating from equipment that have their ground prong broken. To isolate this problem:

a) With the amplifier OFF, unplug all RCAs connected to the amp.

b) Turn on amp and listen to speakers. If buzz has changed or reduced in level, then the problem is coming to the amp from another source. The rest of the hum you hear is normal and related to the fact that the RCAs are open ended.

c) The above step should isolate your problem: star-ground all components, except amplifier, by daisy-chaining a thin wire from the processors chassis to all sources connected to it.

Maintenance

The following maintenance should be performed routinely:

- Clean the exterior surfaces of the unit with a soft, dry, lint-free cloth.
- Do not use alcohol, benzene, acetone-based cleaners, or strong commercial cleaners.
- Do not use a cloth made with steel wool or metal polish.
- If the unit is exposed to a dusty environment, a low-pressure blower may be used to remove dust from its interior & exterior.

Circuit Protection - For Cinénova 7 only

The Cinénova 7 is protected with optical short circuit protection. If it is tripped, the shorted channel will mute and reset every 7 seconds. If fault remains, it will stay in mute mode. We recommend to swap the speaker with a guaranteed working speaker and see if the channel works.

Troubleshooting Cinénova Grande BR 7

Amplifier "ON" No Sound

a) Completely shut your system down, including your Cinénova via the circuit breaker.

b) Now turn on the Cinénova only. Check to see if the front Main Power Switch is on.

c) Check the Input Selector switch and make sure that it is in the correct position. Either RCA or XLR which ever you are using. Also slide the Input Selector switch back and forth to ensure good contact.

d) Set the crossover switch so that it is centered. Slide it up and down and finally back to the middle position.

e) Confirm that the output wires are connected to the speaker.

f) Rock the crossover switch back & forth at the amplifier, you should hear a thump through the speaker during this process.

WHEN A THUMP IS HEARD:

Check your input source signal. Make sure they are connected properly to output from processor/source, not input of processor.
Try to change source to make sure that at least one of the sources works.

WHEN NO THUMP IS HEARD:

Check amplifier speaker connections and make sure the speaker wires are securely connected to the amplifier speaker output and to the speaker. **NOTE:** It is possible that if you have proper connections and you don't hear sound, the speaker is burnt.

Turn amplifier ON and circuit breaker shuts down

This can either be a short in amp, a poor circuit breaker in the house or the power cord is not fully connected. Plug amplifier into another outlet on a different circuit breaker with nothing connected. If the amp turns on then the problem is with your home circuit breaker. If the amplifier still does not power up, please call Earthquake to consult with a technician.

If Problems Persist:

Contact Earthquake Sound Technical Service
Phone: 1-800-576-7944 or 510-732-1000
Email: tech@earthquakesound.com

EARTHQUAKE® SOUND

The Sound That Will *Move* You

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