



12 Channel - 6 Zone Power Amplifier

Description

TRUAUDIO's 12-channel power amplifier is a perfect solution for those multi-room audio installations that require flexibility and quality sound. With smooth appearance and versatility, this well-constructed amplifier has many features to enhance your installation and can be customized to fit any system. Features include: individual input sensitivity control for each channel, local source input for each channel and BUS 1 and BUS 2 source inputs, bridging between channels, and in and out auto-sensing triggers. The specially designed torroid transformers and cooling fans will minimize unwanted heat build-up to ensure the long life of the amplifier.

No matter what brand of controller the system requires, this 12 channel amplifier will deliver audiophile sound and maximize your listening experience.

Caution:

MAKE SURE TO READ THIS INSTRUCTION MANUAL BEFORE TURNING THE POWER ON OR HOOKING UP THIS POWER AMPLIFIER.

Never expose the amplifier to any kind of moisture. This piece should NOT be used near bath tubs, sinks, wet basements or swimming pools. Also avoid placing this unit by heat sources such as radiators, heat registers or stoves.

This unit should not be in direct sunlight.

Before connecting any cables to the amplifier, the power must be OFF.

When deciding on where to place the unit, make sure there is plenty of airflow. Do not set other components directly on top of the amplifier. If other components must be placed on top of this piece, you must use some kind of spacers. If it will be installed into a cabinet, the cabinet should have proper airflow. Adding an additional cooling fan might be necessary.

Make sure the speakers that will be connected to this unit can handle the output power of the amplifier.

We suggest NOT to use any kind of extension cord unless it is polarized and made from heavy gauge wire. If at all possible, plug this unit directly into the wall outlet or surge protection.

General Information and Features

Front Panel

Power Switch: This is used to turn the unit on or off.

LED Indicators: There is one LED indicator for the power and each zone. When first turning the power on, the power LED will come on red and then switch to blue to indicate the amplifier is in a ready mode, if there is no audio active to any of the inputs approximately 15 minutes later the power light will turn red to indicate it's in sleep mode. Zone LED lights will come on blue as each zone senses an audio source to the zone input. In case of a fault to a particular zone the LED changes to RED. If the fault remains, the corresponding LED remains red. If the short circuit is momentary then the zone LED changes to red and then switches to solid blue after a few seconds. Once all zones are cleared of faults the front LED's will turn blue as long as they are active, if no audio source is present the lights will turn off to indicate the zones are in sleep mode.

Rear Panel

BUS 1 and 2 Inputs: There are "right" and "left" RCA style connectors labeled as "1" & "2". These inputs are used for sending a single audio source (i.e. CD, Tuner, MP3 etc.) to more than one zone. For using this feature correctly, see "Amplifier Connection" later in this manual.

BUS 1 & 2 Output: There are "right" and "left" RCA style connectors labeled as "1" & "2". These outputs are used to loop the audio source that is connected to the "BUS INPUTS" out to a second AMP7012.

Individual Zone Line Inputs: These RCA style input connectors are the audio inputs for each individual channel of the amplifier. These inputs are to have audio sources dedicated to a single channel or zone on the



amplifier. We suggest using a good quality RCA patch cable for best performance. The RCA inputs are labeled “Left” and “Right”.

BR/ST Switch: This is used to switch each individual zone between stereo, or bridged.

BUS/LINE IN switch: this is used to indicate which input the individual channel or zone will receive audio source from.

Sensitivity Adjustment: There is an adjustment for the different voltage inputs with each source (75mVrms-3Vrms). Set the control so that the speakers are not distorting.

Speaker Terminals: These Phoenix type terminal connectors are used to connect the speaker to each zone.

3-Conductor AC Cord Receptacle: A standard male receptacle that fits a 3-conductor power cord.

Amplifier Connection ---

Always turn off the power of your amplifier, processor/preamp and all input/playback units before any connections are made.

Before turning your amplifier and preamp back on, make sure your volume is turned all the way down.

Remember the cooling issues mentioned earlier in this manual. Improper airflow will reduce the life of the amplifier.

When deciding on the final location, keep in mind that there needs to be adequate space behind the amp to fit the speaker cables and patch cables.

Stereo Connection: Use a good quality RCA type patch cord. Connect the right and left output from the processor to the right and left input jacks on the back of the amplifier. Repeat this for each channel and/or zone.

The BR/ST switch should be in the “Stereo” position. Connect the speaker cable coming from each pair of speakers to the “Speaker Input” connector on the back of the amplifier. This connector is removable to make connection easier. When connecting the cable to the

connector, check for any wire strands that might be sticking out the connection terminal that might cause a short.

These amplifiers are stable down to 4 ohms. The impedance with the connected speakers should not be lower than 4 ohms.

Bridged Connection: The bridging mode is meant for a single speaker and high power application such as Home Theater. In the bridged mode the speakers should be 8 ohm minimum.

Make sure the amplifier power is OFF before making connections.

Connect the right and left outputs from the audio source to the right or left inputs of the zone you are bridging. Repeat this for each zone you want in bridged mode.

The “BR/ST” switch should be in the bridged (BR) position. Make sure the switch is in this mode only on the zones you want bridged.

Connect the speaker cables coming from one speaker to the “speaker input” connector on the back of the amplifier. For bridging, one speaker will connect to one connector. Make sure to follow the labeling on the back of the amp where the speaker input connector is for the bridged zone. The speaker input connector is removable to make connection easier. When connecting the cable to the connector, check for any wire strands that might be sticking out the connection terminal that might cause a short.

BUS 1 & 2 Connection: The BUS inputs are used to input audio sources such as a preamp, CD, tuner, and MP3 player over multiple zones. For example, you could have a CD player on BUS 1 that goes to zones 1, and 2 and a MP3 player going to zones 3, and 4. The other two zones could have independent input sources. When designing a single-source, multiple zone system this mode is perfect. Use a good quality RCA type patch cord. Connect the right and left outputs from the preamp to the right and left inputs connectors on the back of the amplifier. Repeat this for each channel and or zone. Then, on the zones you want to access one of the BUS sources, put the input switch into the appropriate setting 1 or 2 position. Proceed to connect the speaker cable to the amplifier as per the instruction the “Stereo

Connection” section of this manual.

General Maintenance and Service

The front panel is finished with a high-grade anodizing process to ensure that it maintains a flawless appearance. Occasionally, you should wipe off any dust build up with a damp, soft cloth.

DO NOT use any kind of cleaning solution or cleanser on these units.

If for some reason the amplifier needs to be repaired, please contact us immediately. We will issue a Return Authorization Number (RA#) as well as a UPS call tag for the return. This unit should not be shipped back to TRUAUDIO without the RA#.

DO NOT attempt to open or dismantle this amplifier. THIS WILL VOID THE WARRANTY!

SYMPTOM	POSSIBLE CAUSE AND TEST PROCEDURE
No sound on one channel pair and zone LED is red.	<ol style="list-style-type: none"> 1. Check that connections are secure and that there are no loose strands of wire crossing from positive to negative terminals at the back of the amplifier and/or speaker. 2. Disconnect the speaker wire at both ends. Separate the two conductors at both ends and test with a meter for a short circuit. If there is no short, connect the two conductors at one end and test for continuity.
Hum from all the speakers.	<ol style="list-style-type: none"> 1. Hum can be caused due to a ground potential difference between connected components (especially those connected to antenna or cable TV feeds). 2. Check for faulty cables, faulty source signals, an ungrounded phono system, cable feed, and/or a defective component. 3. Reverse the AC plug of the components with non-polarized plugs. 4. Test the AC receptacle using a ground tester.
Sound is distorted on one or more channels at normal volume.	<ol style="list-style-type: none"> 1. Check the setting on the SEN/ADJ knob. You may need to turn down controls.
Bass is weak and stereo sound is "phasey".	<ol style="list-style-type: none"> 1. Check that the bridging switch is "off". If two adjacent channels are connected normally but the bridging switch is set to the bridged position, the two speakers will be out of phase. 2. The speakers may be wired out of phase. Recheck polarity and reverse the connections on the back of one speaker if necessary.

AMP-3512 Specifications



Channels:	12 channels, 6 zones
Power Output, Continuous:	35 watts/ch @ 8 Ω
Bridged Power Output:	90 watts/ch @ 8 Ω
Total Harmonic Distortion:	0.01%
Channel Separation:	>-80dB
Signal to Noise Ratio:	>-89dB (A weighted)
Frequency range:	5Hz - 74kHz (+/- 3dB)
IM Distortion:	< 0.03% 19kHz, 20kHz, 1:1(IHF), RL+8Ω
Safety:	ETL, CE (or CB scheme)
Damping factor:	7261 (+/- 10%)
Input Impedance (all):	>17k Ω
Input Sensitivity:	75mVrms - 3Vrms
Input requirements, domestic:	120VAC, 50-60Hz
Trigger IN:	3 - 30V AC or DC
Trigger OUT:	12VDC out w/100mA
Dimensions:	3.9" H, 16.4" W, 14.5" D
Weight:	27.5 lbs

AMP-7012 Specifications

Channels:	12 channels, 6 zones
Power Output, Continuous:	70 watts/ch @ 8 ohms 90 watts/ch @ 4 ohms
Bridged Power Output:	120 watts/ch @ 8 ohms
Total Harmonic Distortion:	0.01%
Channel Separation:	>-80dB
Signal to Noise Ratio:	>-98dB, (A Weighted)
Frequency range:	5Hz-74kHz (+-3dB)
IM Distortion:	< 0.03%, 19kHz, 20kHz, 1:1 (IHF), RL+8Ω
Safety:	ETL, CE (or CB Scheme)
Damping factor:	150
Input Impedance (all):	>17k ohms
Input Sensitivity:	45mVrms ~ 3Vrms
Input requirements, domestic:	115VAC, 60 Hz / 230VAC 50Hz
Trigger IN:	3 - 30V AC or DC
Trigger OUT:	12VDC out w/ 100mA
Dimensions:	H 6 3/4" (with feet), W 17", D 16 1/2"
Weight:	47.5 lbs.

WARNING

- TO PREVENT FIRE OR SHOCK HAZARD. DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
- THIS APPLIANCE SHALL NOT BE EXPOSED TO DRIPPING OR SPLASHING WATER AND THAT NO OBJECT FILLED WITH LIQUIDS SUCH AS VASES SHALL BE PLACED ON APPARATUS.

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.</p>		



This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.

IMPORTANT SAFETY INSTRUCTIONS

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| <ol style="list-style-type: none"> 1) Read Follow and Keep these instructions 2) Heed all warnings. 3) Only connect this apparatus to a grounded outlet. 4) Ensure the main plug is undamaged, and fully functional as a disconnect device. 5) Do not use this apparatus near water. 6) Clean only with dry cloth. 7) Do not block any ventilation openings. Install in accordance with the manufacturer's instructions. 8) Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) 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 than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet. | <ol style="list-style-type: none"> 10) Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. 11) Only use attachments/accessories specified by the manufacturer. 12) Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over. 13) Unplug this apparatus during lightning storms or when unused for long periods of time. 14) Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped. |
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SoundVision Technologies dba TRUAUDIO

PRODUCT WARRANTY

All in-wall, in-ceiling, outdoor speakers, volume controls and freestanding loudspeakers have a limited lifetime warranty. This warranty includes lifetime parts and repair labor on all components. Powered subwoofers and active electronics have a one (1) year limited warranty. This warranty includes one (1) year parts and repair labor on all components. TRUAUDIO's obligation under these warranties is limited to repairing or replacing any component found defective in material or workmanship under normal conditions of use. These warranties shall not apply to products which have been abused, modified, disassembled, or repaired by anyone other than TRUAUDIO or one of its appointed service centers. Products to be repaired under this warranty must be returned to the factory or designated service center with all transportation and insurance charges pre-paid.

It is the policy of TRUAUDIO to continuously incorporate improvements into our products. All specifications are subject to change without notice. If you have any questions regarding this or any other TRUAUDIO products, please call 1-888-858-1555, Monday – Friday, 7:00 am – 6:00 pm MST.

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