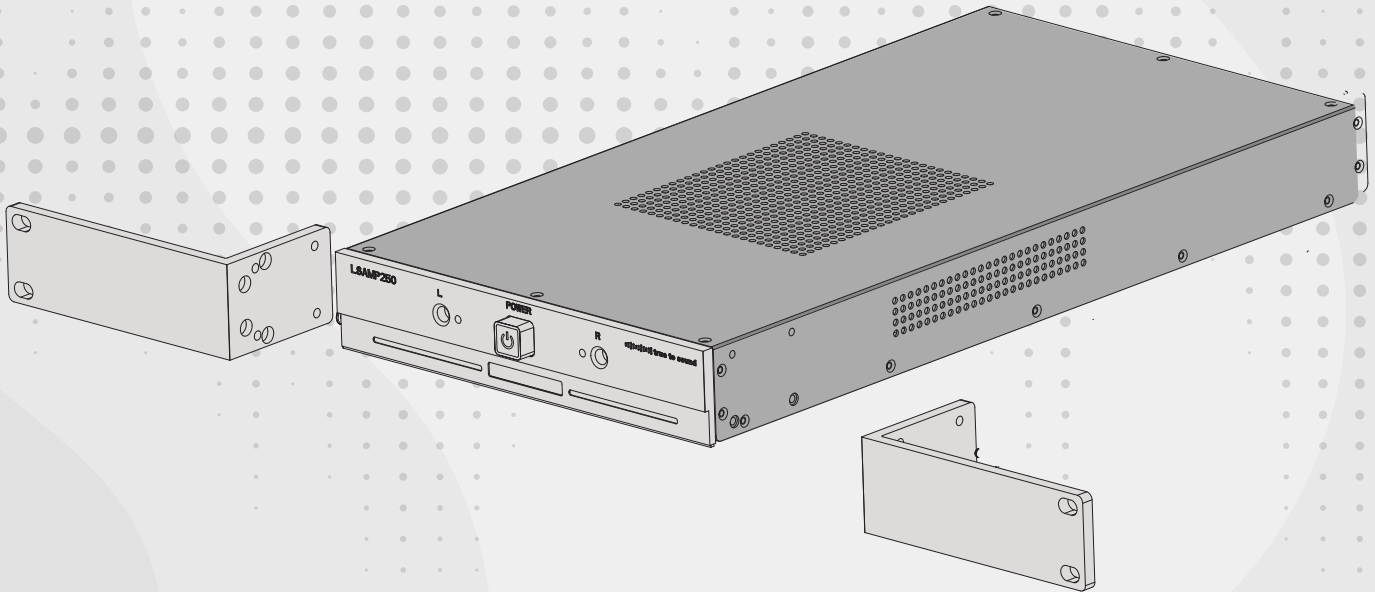


LSAMP250

TWO-CHANNEL DSP AMPLIFIER

INSTRUCTION MANUAL



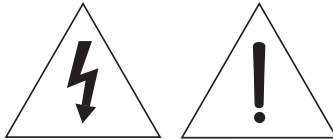
SIXFIVE
||| ||| ||| ||| true to sound

This amplifier is designed to be used with SixFive Audio's Fusion Soundscape pathway lights with integrated speakers. This amplifier is capable of running up to 8 individual landscape speaker lights as well as a single LSSUB Direct Burial Subwoofer for the ultimate immersive outdoor audio system.

Pair With The Following:

LSSPKR4B	4 Fusion Soundscape Landscape Speaker Lights - BLACK
LSSPKR4	4 Fusion Soundscape Landscape Speaker Lights - BRONZE
LSSUB	Direct Burial Landscape Subwoofer
LSTFMR	Transformer for Fusion Soundscape Lighting

CAUTION



RISK OF ELECTRICAL SHOCK DO NOT OPEN

**WARNING: SHOCK HAZARD. DO NOT OPEN.
AVIS: RISQUE DE CHOC ELECTRIQUE - NE PAS OUVRIR.**

**CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK,
DO NOT REMOVE THE COVER (OR BACK)**

**NO USER-SERVICEABLE PARTS INSIDE.
REFER SERVICING TO QUALIFIED PERSONNEL**

The lightning flash with arrowhead within an equilateral triangle 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.

The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

**CAUTION: TO PREVENT ELECTRIC SHOCK, MATCH
WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERTED.**

Always follow the safety precautions outlines below when using your LSAMP250 amplifier. These precautions are designed to reduce the risk of fire, electric shock and injury.

1. Read and follow the instructions below.
2. Never use the amplifier near water
3. This amplifier should be used only with a cart or stand that is recommended by SixFive Audio. An amplifier and cart combination should be moved with care.
4. This product features a polarized cord. DO NOT use this product with an extension cord, receptacle or other outlet unless the blades can be fully inserted to prevent blade exposure.
5. Only use this amplifier with adequate ventilation
6. Keep amplifier away from heat sources including but not limited to: radiators, ovens, fire places, additional amplifiers, or other sources that may generate excessive heat.
7. Grounding or polarization are precautions that should be taken so that these attributes are not defeated
8. Do not allow power cords to be pinched or damaged by other items
9. To clean the amplifier you can use canned air to blow out dust and debris. Only wipe the amplifier with a soft cloth, do not use solvents as it may damage the amplifier
10. If this amplifier will be unused for prolong periods of time, unplug the amplifier when not in use
11. Do not allow objects to fall into the openings of the enclosure
12. Do not expose this amplifier to moisture or water of any kind. be cautions to not place liquids in any close proximity to this amplifier as accidental spills can damage the amplifier.
13. If this amplifier is damaged, have the amplifier serviced by a qualified professional. Do not attempt to service the amplifier in any way beyond what is described in this user manual. All other servicing must be provided by a qualified service professional
14. This amplifier is designed for use with a minimum 15 amp (20 amp preferred) grounded wall outlet. Do not connect this product to the accessory outlet of any other component.
15. During storms lightning can cause damage to your electrical equipment. It is advised to unplug the unit when thunderstorms are present to prevent accidental damage to the product.

WARNING

This unit has been tested and found to comply with the limits for a class B digital device pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio/TV technician for help

The LSAMP250 Amplifier, designed by SIXFIVE Audio, is specifically engineered to complement the Fusion Soundscape landscape speaker light system. This amplifier offers a robust stereo output of 250 watts and features intuitive DSP presets accessible via a user-friendly dial located on the amplifier's rear panel. Whether your outdoor setup involves hardscape or softscape elements, the amplifier's presets are tailor-made to optimize the audio performance of the Fusion Soundscape system in any outdoor environment.

With its versatility in mind, the LSAMP250 boasts a variety of input options, including digital coax, Toslink, and analog connections, accommodating a wide range of audio sources and streaming devices. Additionally, each input includes a loop output, simplifying the connection of multiple LSAMP250 amplifiers to power multiple FUSION SOUNDSCAPE landscape audio components including landscape speaker lighting or an in ground subwoofer.

For installation convenience, the LSAMP250 offers flexible mounting options. You can choose to rack-mount it using the provided rack ears for professional installations, or surface-mount it using the included feet for simpler setups. This adaptability ensures that the LSAMP250 Amplifier seamlessly integrates with your Fusion Soundscape landscape speaker lights enhancing your outdoor audio experience.

WHAT'S IN THE BOX?

- LSAMP250 Amplifier
- Installation Manual
- IEC Power Cord
- 2 Long Rack Ears
- 4 Rubber Feet

UNBOXING

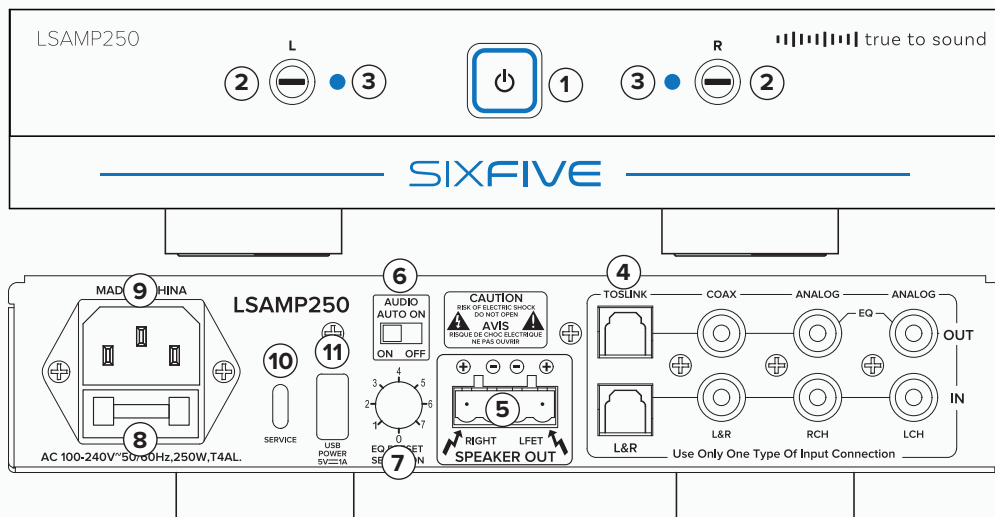
Save the carton and packaging inserts. In the event of return shipping this packaging will protect the product in transport

SERIAL NUMBER

Prior to installing your new LSAMP250. Take a moment to locate the serial number located on the product. Not the serial number and write it down in this manual or another safe location. You may need this number in the future and once the amplifier is installed it will not longer be visible.

PLACEMENT

This amplifier is intended to be used in an upright fashion. It should not be placed in direct sunlight and should be away from any areas that may be in contact with moisture. Avoid placing it under windows where rain and weather may impact the amplifier. Avoid placing in areas where accidental spills may occur. Avoid placing amplifier near heat sources like ovens, furnace vents, fireplaces etc. Never operate this amplifier on a carpeted surface. Amplifier must be properly ventilated by convection or suitable cabinet fans. Do not place objects directly on or against the amplifier. When installing this amplifier in a cabinet, the front or back of the cabinet must be open during operation. If this is not possible, fans must be installed to ensure adequate ventilation in the cabinet.



- | | |
|---|---|
| <ul style="list-style-type: none"> 1 Illuminated Power Button 2 Recessed Volume Level Control 3 Power, Active, Protection Indicator led 4 L/R Line-In/Coax/Toslink 5 Speaker Block Connector 6 Audio Auto On/Off Switch | <ul style="list-style-type: none"> 7 EQ Preset Selection 8 AC Fuse Holder 9 Power Cord Connection 10 SERVICE For DSP Software Update 11 USB Power Charge |
|---|---|

POWERING ON / BOOTUP:

Pressing the Power Button (1) turns the amplifier on or off. After powering on the amplifier will experience an approximately 12 second boot-up cycle. This is a normal part of the startup process.

STATUS / PROTECT MODE / STANDBY MODE

SOLID WHITE POWER BUTTON: Power is ON and ready to operate

DIMMED POWER BUTTON: Amplifier is in STANDBY mode

RED GLOWING CHANNEL LED: Amplifier is in PROTECT mode

BLUE CHANNEL LIGHT: Each channel is active and performing normally

BLINKING RED CHANNEL LIGHT: Indicates the channel is being overdriven

SOLID RED CHANNEL LIGHT: The amplifier is in protect mode.

PROTECT MODE

When in Protect Mode, the channel lights will periodically illuminate blue. The amplifier is attempting to test the output to determine if the short has been removed. Protect mode is typically caused by a short in the wire, overheating of the amplifier or possible problems within the amplifier.

POWER SUPPLY PROTECTION:

BLINKING LIGHT ON POWER BUTTON

If the power supply heat sink exceeds the maximum temperature, the protection circuit will active and disconnect all channel outputs.

IF ANY AMPLIFIER LED IS ILLUMINATED RED, TURN OFF THE AMPLIFIER IMMEDIATELY.

Do not turn on the amplifier until you have determined the cause of the problem.

VOLUME LEVEL CONTROL

The volume level control is a recessed volume knob. These controls can be adjusted when the power is on. By turning the knob clockwise you increase the volume output of the channel you are adjusting.

INPUTS

This amplifier features analog, coax and Toslink line inputs and loop outputs.

The analog loop outputs are not buffered. The maximum number of amplifiers that can be looped together will depend on the output capability of your source component. The digital outputs are buffered and can support multiple amplifiers. Only one output can be used at a time.

SPEAKER CONNECTIONS:

The removable block on the back of the amplifier will accept up to 12 gauge wire.

Use caution, do not allow any bare wires to make contact with the chassis of the amplifier.

AC FUSE HOLDER:

Use a screwdriver to remove the fuse from the fuse holder.

The proper replacement fuse is: **4 Amp AC T4-AL**

Only use the fuse specified in this manual, using a different fuse may result in damage to your amplifier and equipment.

POWER CORD:

This amplifier features a removable IEC power cord. Do not plug the amplifiers power cord into any other audio or video component.

This cord is polarized so if you must use an extension cord, be certain both blades fit properly into the cord. Use an extension cord of at least 14 Gauge to avoid starving the amplifier of power.

POWERING ON

The LSAMP250 includes an IEC power connector. This device is only intended to be used with a 14 gauge EIA standard 120 volt grounded power cable.

Verify all system connections have been securely made prior to plugging in the amplifier and powering it on.

Plug the female end of the connector into the amplifier. Plug the male end of the power cord into your 15 or 20 amp wall outlet.

NOTE: If your location frequently experiences spikes or brownouts in power, a power conditioner designed for use with high fidelity equipment should be used to protect the amplifier and avoid accidental damage.

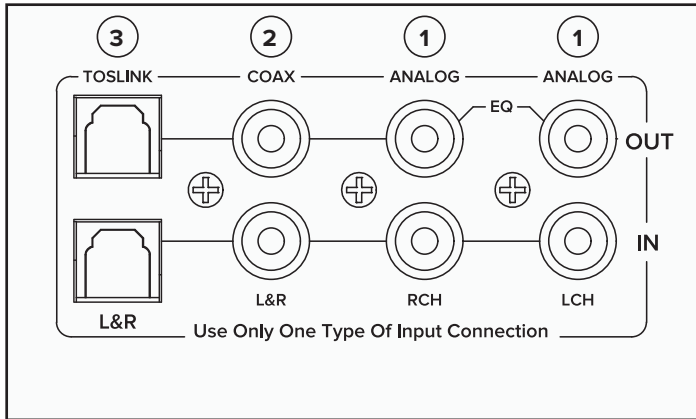
POWER REQUIREMENTS

MODEL	Input Voltage	Output Power (sine wave)	Draw Watts	15 Amp Breaker Qty of Amplifiers	20 Amp Breaker Qty of Amplifiers
LSAMP250	100-120V AC	Full Power All Channels @ 8Ω	168	4	6
		Full Power All Channels @ 4Ω	365	4	5
		1/8 Power All Channels @ 8Ω	26	23	31
		1/8 Power All Channels @ 4Ω	50	22	30
		@ Idle	6.3		
		@ Standby	0.45		
MODEL	Input Voltage	Output Power (sine wave)	Draw Watts	15 Amp Breaker Qty of Amplifiers	20 Amp Breaker Qty of Amplifiers
LSAMP250	220-240V AC	Full Power All Channels @ 8Ω	160	4	6
		Full Power All Channels @ 4Ω	332	4	6
		1/8 Power All Channels @ 8Ω	27	24	32
		1/8 Power All Channels @ 4Ω	50	24	32
		@ Idle	6.8		
		@ Standby	0.5		

NOTE: ONLY REPLACE THE FUSE WITH THE SAME FUSE TYPE AND RATING AS INDICATED IN THIS MANUAL

SOURCE CONNECTIONS AND SELECTION

The LSAMP250 features 3 options when connecting audio inputs:



- 1 Line Inputs L & R - For use with Analog sources
- 2 Coax Inputs L & R - For use with Coax sources
- 3 Toslink Inputs L & R - For use with Toslink sources

SOURCE CONNECTIONS

Locate the audio inputs for the left and right channels. In addition to the left and right inputs, there are also loop outputs for each channel.

NOTE: the RCA analog outputs are programmed per the DSP selector switch setting. The Digital Outputs are pur passthrough.

Analog loop outputs are non-buffered. The maximum number of amplifiers that can be looped together will depend on the output capability of your source component. The digital outputs are buffered and can support multiple amplifiers. The source connected to the LEFT and RIGHT LINE inputs pass through the LEFT and RIGHT LINE outputs. This also applies to the COAX and Toslink inputs

SPEAKER CONNECTIONS

When connecting speaker wire it is crucial that you use only high quality wire that complies with all codes in your area. If you intend to run wires into wall cavities or ceilings, check your local codes prior to installing to be certain you are in compliance and utilizing the correct wire for the scenario. The speaker wire block on the back of the amplifier can be easily removed and can accommodate up to 12 gauge speaker wire.

Insert the speaker wire into the correct Right/Left +/- location on the speaker wire terminal block. Tighten down the screws for a secure connection.

Insert the terminal block back into the back of the amplifier once all connections are made.

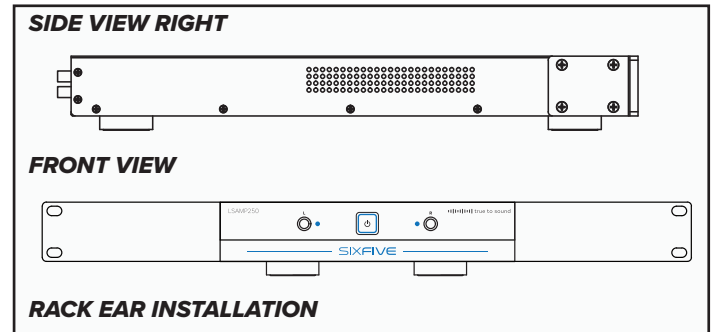
MOUNTING AND STACKING

SHELF MOUNTING

The amplifier includes (4) feet which can be attached into the threaded openings.

RACK EAR INSTALLATION:

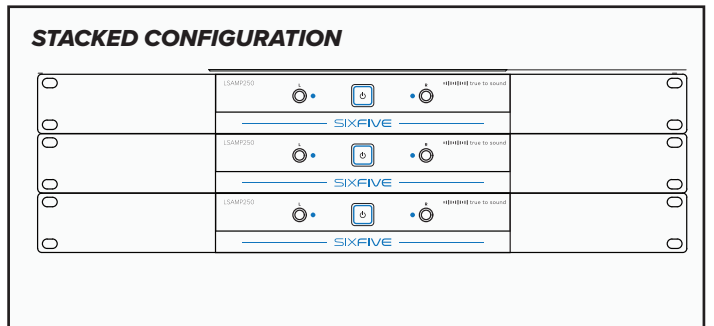
(2) Long rack ears are included with the amplifier to be used in a 1U space. There are (4) phillips head screws on each side of the amplifier. Remove these screws to connect the rack ears.



AMP STACKING

This amplifier is capable of being directly stacked with the feet removed. This should only be done in low or moderate output applications. For high output applications it is strongly recommended that you leave at least 1U of space between the amplifiers for adequate ventilation.

You should not stack more than 3 amplifiers high without spacing. Disconnect all channel outputs. This is indicated by a BLINKING LIGHT on the front panel power switch.

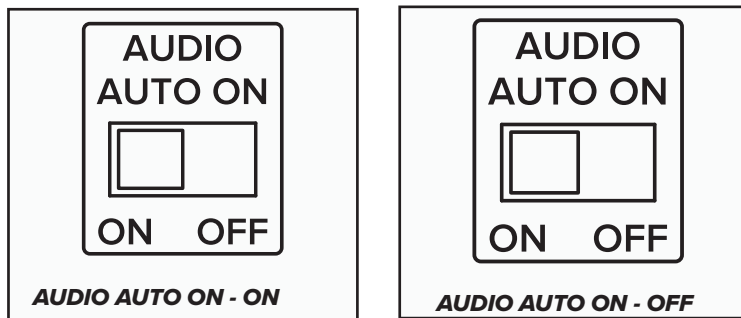


AUDIO AUTO ON

When Audio Auto On is in the ON position, the amplifier will power off after 15 minutes of inactivity on any of the channels. When audio signal is resumed the amplifier will turn on after approximately 10 seconds and begin playing again. The Audio ON function consumes the least amount of power when the amplifier is not playing.

AUDIO AUTO ON - OFF

When in the OFF position the amplifier will enter a sleep mode after 15 minutes of inactivity. Once audio signal activity resumes the system will resume playing in only 2-3 seconds.



DSP PRESETS

This amplifier has preprogrammed DSP presets. Select the preset using the EQ Preset Selection dial.

POSITION 0: Set to Flat

POSITION 1: For landscape lights with +3dB bass boost

POSITION 2: For landscape lights without bass boost

POSITION 3: Flat with +3dB boost at 6kHz

POSITION 4: Flat with +3dB boost at 7kHz

POSITION 5: Flat with +3dB boost at 8kHz

POSITION 6: Flat with +3dB boost at 9kHz

POSITION 7: Flat with a High Pass filter at 15Hz and +3dB boost at 6kHz

TECHNICAL SUPPORT

If you need assistance contact SixFive Audio directly at **800.489.2300**

SixFive Audio is a division of Memphis Audio. Any SixFive Audio product purchased in the United States from an authorized retailer are guaranteed against defective material and workmanship for a period of **ONE** year from the date purchased by the end user, and limited to the original retail purchaser of the product. Product found to be defective during that period will be repaired or replaced by at no charge. This warranty is void if it is determined that unauthorized parties have attempted repairs or alterations of any nature. Warranty does not extend to cosmetic or finish. This warranty does not cover damage to the product or damage to additional components in your audio system that were caused due to excessive heat, excessive cold, humidity, moisture, unauthorized repair attempts or physical destruction of the product before presuming a defect is present in the product, be certain that all related equipment and wiring is functioning properly. Memphis Audio disclaims any liability for other incurred damages resulting from product defects. Any expenses incurred in the removal and re installation of products are not covered by this warranty. Memphis Audio's total liability will not exceed the purchase price of the product. If a defect is present, your authorized SixFive Audio dealer may be able to effect repairs. Proof of purchase is required when requesting service, please retain your sales receipt. For additional warranty information and claims please contact us at 800-489-2300.

SPECIFICATIONS

MODEL:

LSAMP250

Number of Channels

2 (1 stereo pair)

Power Output - 8 ohms

60 Watts RMS per channel (both channels driven)

Power Output - 4 ohms

125 Watts RMS per channel (both channels driven)

Frequency Response

10Hz - 20kHz, bandwidth limited

Total Harmonic Distortion

0.08% (1kHz, 8 ohms) 0.08% (1kHz, 4 ohms)

Signal to Noise Ratio

100dB (20Hz-20kHz)

Input Gain

33dB

Input Sensitivity

43mV for 1 Watt Output @ 8 ohms

335mV for 60 Watts Output @ 8 ohms

Input Impedance

20k ohms

Loop Output Impedance

600 ohms

Maximum Analog Input Voltage

3V VAC RMS

Power Consumption 120V AC

@8 ohms (sine wave, full power)

152 Watts (all channels driven)

@4 ohms (sine wave, full power)

327Watts (all channels driven)

@8 ohms (sine wave, 1/8 power)

28 Watts (all channels driven)

@4 ohms (sine wave, 1/8 power)

49 Watts (all channels driven)

@idle

7.4 Watts

@standby

0.4 Watts

Power Consumption 220V AC

@8 ohms (sine wave, full power)

145 Watts (all channels driven)

@4 ohms (sine wave, full power)

290 Watts (all channels driven)

@8 ohms (sine wave, 1/8 power)

28Watts (all channels driven)

@4 ohms (sine wave, 1/8 power)

47 Watts (all channels driven)

@idle

7.6 Watts

@standby

0.49 Watts

Heat Output

@8 ohms (sine wave, full power) BTU (all channels driven)

@4 ohms (sine wave, full power) BTU (all channels driven)

@8 ohms (sine wave, 1/8 power) BTU (all channels driven)

@4 ohms (sine wave, 1/8 power) BTU (all channels driven)

Operating Voltage

100-120V@60Hz, 220-240V@50Hz

AC Fuse

3.15A (T3.15AL-250V) 4A(T4AL-250V)

Rack Space Requirement

1U – 1/2 Rack Width

Dimensions w/ Feet (W x H x D)

8 5/8"x21/8"x16 13/16"(219mm x 54mm x 427mm)

Dimensions w/ Rack Ears w/o Feet (W x H x D)

19"x 1 3/4" x 16 13/16"(482mm x 44mm x 427mm)

Shipping Weight

6.6lbs (3.0kg)

SIXFIVE
||| true to sound

800.489.2300

www.sixfiveaudio.com