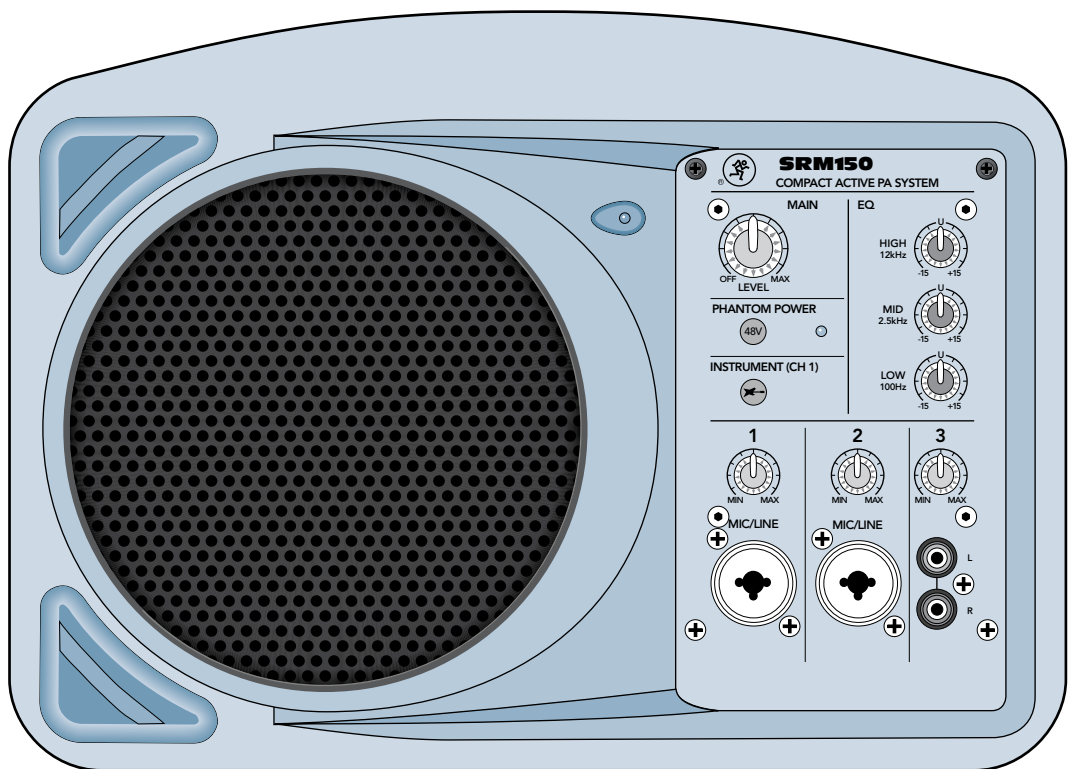


®  
**WACKE**

# SRM 150 COMPACT ACTIVE PA SYSTEM USER'S MANUAL



# IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
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 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.
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 a 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.
15. Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
16. This apparatus shall not be exposed to dripping or splashing, and no object filled with liquids, such as vases or beer glasses, shall be placed on the apparatus.
17. This apparatus has been designed with Class-I construction and must be connected to a mains socket outlet with a protective earthing connection (the third grounding prong).
18. The MAINS plug or an appliance coupler is used as the disconnect device, so the disconnect device shall remain readily operable.



19. NOTE: This equipment 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 the receiving antenna.
- Increase the separation between the equipment and the 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.

CAUTION: Changes or modifications to this device not expressly approved by LOUD Technologies Inc. could void the user's authority to operate the equipment under FCC rules.

20. This apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

ATTENTION — *Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de class A/de class B (selon le cas) prescrites dans le règlement sur le brouillage radioélectrique édicté par les ministere des communications du Canada.*

21. Exposure to extremely high noise levels may cause permanent hearing loss. Individuals vary considerably in susceptibility to noise-induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a period of time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the permissible noise level exposures shown in the following chart.

According to OSHA, any exposure in excess of these permissible limits could result in some hearing loss. To ensure against potentially dangerous exposure to high sound pressure levels, it is recommended that all persons exposed to equipment capable of producing high sound pressure levels use hearing protectors while the equipment is in operation. Ear plugs or protectors in the ear canals or over the ears must be worn when operating the equipment in order to prevent permanent hearing loss if exposure is in excess of the limits set forth here:

| Duration, per day in hours | Sound Level dBA, Slow Response | Typical Example                        |
|----------------------------|--------------------------------|--|
| 8                          | 90                             | Duo in small club                      |
| 6                          | 92                             |  |
| 4                          | 95                             | Subway Train                           |
| 3                          | 97                             |  |
| 2                          | 100                            | Very loud classical music              |
| 1.5                        | 102                            |  |
| 1                          | 105                            | Greg screaming at Troy about deadlines |
| 0.5                        | 110                            |  |
| 0.25 or less               | 115                            | Loudest parts at a rock concert        |

**CAUTION AVIS**

RISK OF ELECTRIC SHOCK. DO NOT OPEN  
RISQUE DE CHOC ELECTRIQUE. NE PAS OUVRIR

CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.  
ATTENTION: POUR EVITER LES RISQUES DE CHOC ELECTRIQUE, NE PAS ENLEVER LE COUVERCLE. AUCUN ENTRETIEN DE PIECES INTERIEURES PAR L'USAGER. CONFIER L'ENTRETIEN AU PERSONNEL QUALIFIE.  
AVIS: POUR EVITER LES RISQUES D'INCENDIE OU D'ELECTROCUTION, N'EXPOSEZ PAS CET ARTICLE A LA PLUIE OU A L'HUMIDITE

The lightning flash with arrowhead symbol 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.  
Le symbole éclair avec point de flèche à l'intérieur d'un triangle équilatéral est utilisé pour alerter l'utilisateur de la présence à l'intérieur du coffret de "voltage dangereux" non isolé d'ampleur suffisante pour constituer un risque d'électrocution.

The exclamation point within an equilateral triangle is intended to alert the user of the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.  
Le point d'exclamation à l'intérieur d'un triangle équilatéral est employé pour alerter les utilisateurs de la présence d'instructions importantes pour le fonctionnement et l'entretien (service) dans le livret d'instruction accompagnant l'appareil.

**Correct disposal of this product.** This symbol indicates that this product should not be disposed of with your household waste, according to the WEEE Directive (2002/96/EC) and your national law. This product should be handed over to an authorized collection site for recycling waste electrical and electronic equipment (EEE). Improper handling of this type of waste could have a possible negative impact on the environment and human health due to potentially hazardous substances that are generally associated with EEE. At the same time, your cooperation in the correct disposal of this product will contribute to the effective usage of natural resources. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, waste authority, or your household waste disposal service.

# Contents

|   |    |
|---|----|
| IMPORTANT SAFETY INSTRUCTIONS .....             | 2  |
| INTRODUCTION .....                              | 4  |
| QUICK START .....                               | 5  |
| HOOKUP DIAGRAMS .....                           | 6  |
| FRONT PANEL DESCRIPTION .....                   | 8  |
| 1. MIC/LINE Inputs .....                        | 8  |
| 2. Stereo Input .....                           | 8  |
| 3. Channel Gain Controls .....                  | 8  |
| 4. INSTRUMENT Switch (CH 1) .....               | 8  |
| 5. 48V PHANTOM POWER Switch and Indicator ..... | 8  |
| 6. MAIN LEVEL .....                             | 9  |
| 7. HIGH, MID, and LOW EQ .....                  | 9  |
| REAR PANEL DESCRIPTION .....                    | 10 |
| 8. POWER Switch .....                           | 10 |
| 9. FUSE .....                                   | 10 |
| 10. AC Power Receptacle .....                   | 10 |
| 11. THRU Connector .....                        | 10 |
| 12. MIC/LINE Switch .....                       | 10 |
| 13. MAIN IN .....                               | 10 |
| PLACEMENT .....                                 | 11 |
| THERMAL CONSIDERATIONS .....                    | 11 |
| AC POWER CONSIDERATIONS .....                   | 12 |
| CARE AND MAINTENANCE .....                      | 12 |
| CONNECTIONS .....                               | 13 |
| SERVICE INFORMATION .....                       | 14 |
| Troubleshooting .....                           | 14 |
| Repair .....                                    | 15 |
| SRM150 SPECIFICATIONS .....                     | 16 |
| SRM150 BLOCK DIAGRAM .....                      | 18 |
| SRM150 LIMITED WARRANTY .....                   | 19 |

Don't forget to visit our website at [www.mackie.com](http://www.mackie.com)  
for more information about this and other Mackie products.

# INTRODUCTION

Thank you for choosing a Mackie compact active PA system for your sound reinforcement applications.

The SRM150 is an active PA system that provides a built-in mixer, high sound pressure levels, and is designed to give you the best performance of any compact PA system in its class and price range.

Our design goal was to build a compact PA system with:

1. High precision, high output, and accurate playback.
2. Controlled, smooth dispersion of mid and high frequencies.
3. Ultra-clean, high-headroom mic preamps.
4. High-output Class-D amplification.
5. Onboard Mackie mixer with 3-band EQ.

Through the combined resources of our top-notch mechanical and analog engineers, we were able to achieve our design goals in every aspect. The result is a sound reinforcement PA system equally at home in a concert setting, in the studio, or impromptu concerts on the studio roof.

## The Transducer

The SRM150 active loudspeaker features a full-range 5.25-inch neodymium driver.

## Power Amplifier

Each SRM150 includes a Class-D power amplifier capable of producing 150 watts peak before clipping.

The amplifier includes the following features:

- The amplifier produces up to 100 watts rms continuous before clipping (150 watts peak).
- A built-in limiter acts when the input signal is large enough to cause clipping, distortion, and excessive voice coil heat. The limiter will automatically decrease the signal going to the amplifier to a safe level.



**Warning:** Although the amplifier has a limiter protection circuit, you must still make sure you don't overdrive the amplifier. If you hear any distortion, turn down the input (MIC/LINE) gain control, or turn down the MAIN LEVEL control.

## The Cabinet

The SRM150 cabinet was designed with the same material as our SRM350 and SRM450 loudspeakers, the strongest molded composite cabinet on the planet. It has an insert in the bottom for mic stand mounting (using the mic stand adapter included with your SRM150), and a threaded insert in the top for mounting a microphone boom (using the included boom extender).

Its light weight and durable finish make it ideal for portable sound system use. In addition, the unique design of the cabinet makes it easy to use as a floor wedge for stage monitor applications.

## The Active Advantage

There are a number of advantages to using an active speaker system over a passive loudspeaker:

- The amplifiers are designed specifically for the speaker load impedance. There is no guesswork as to what load the amplifier has to drive, so it can provide maximum acoustic output from the speaker, yet minimize the danger of speaker damage due to overdriving a lesser amplifier.
- The connecting wires between the amplifier output and the driver is kept to a minimum, so the damping factor of the amplifier isn't compromised by the resistance of long speaker cables. In addition, all the power from the amplifier is transferred directly to the driver with no speaker cable losses.
- The presence of active circuits within the speaker cabinet allow the designer to add on extra details, such as a high quality mic/line input section.

In short, all the complex interconnected components in the system are designed to work in harmony with each other to produce the best possible sound.

# QUICK START

1. Start with the following settings on the front of the SRM150:

- MAIN LEVEL [6] control down.
- PHANTOM POWER [5] switch out (unless you are using condenser microphones).
- INSTRUMENT [4] switch out (unless you have an electric guitar connected to channel 1).
- Channels 1-3 gain [3] controls down.
- EQ [7] controls centered.

And on the rear panel:

- Turn the POWER [8] switch off (down).
- MIC/LINE [12] switch out.



**WARNING:** Turn the MAIN LEVEL [6] control down (counterclockwise) before every use. If not, you could be in for a startling surprise, especially if the last time you used it was with a microphone and now you want to connect a line-level source.

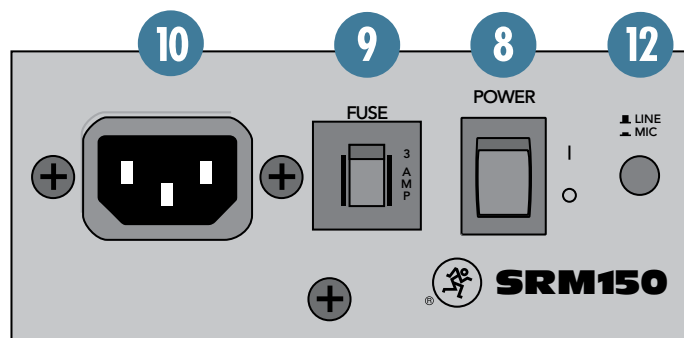
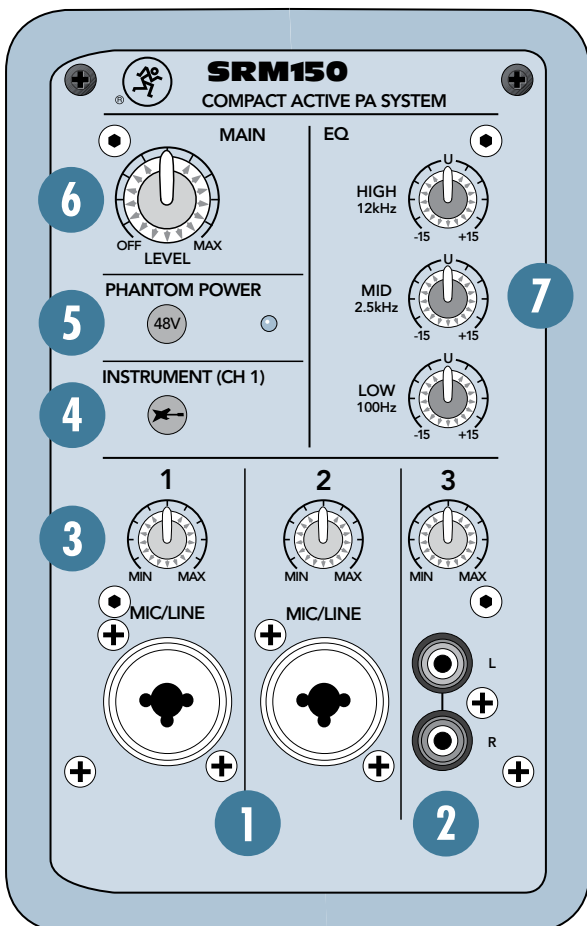
2. Connect the output from your signal source (mixing console, microphone, preamp, or other mic- or line-level source) directly to the MIC/LINE [1] combo connector on the front of the SRM150. It accepts balanced line-level signals from mixers, preamplifiers, CD players, tape decks, etc., and accepts direct

connections from microphones. Channel 3 has stereo RCA jacks [2] specifically for a stereo line-level input from a tape deck or CD player.

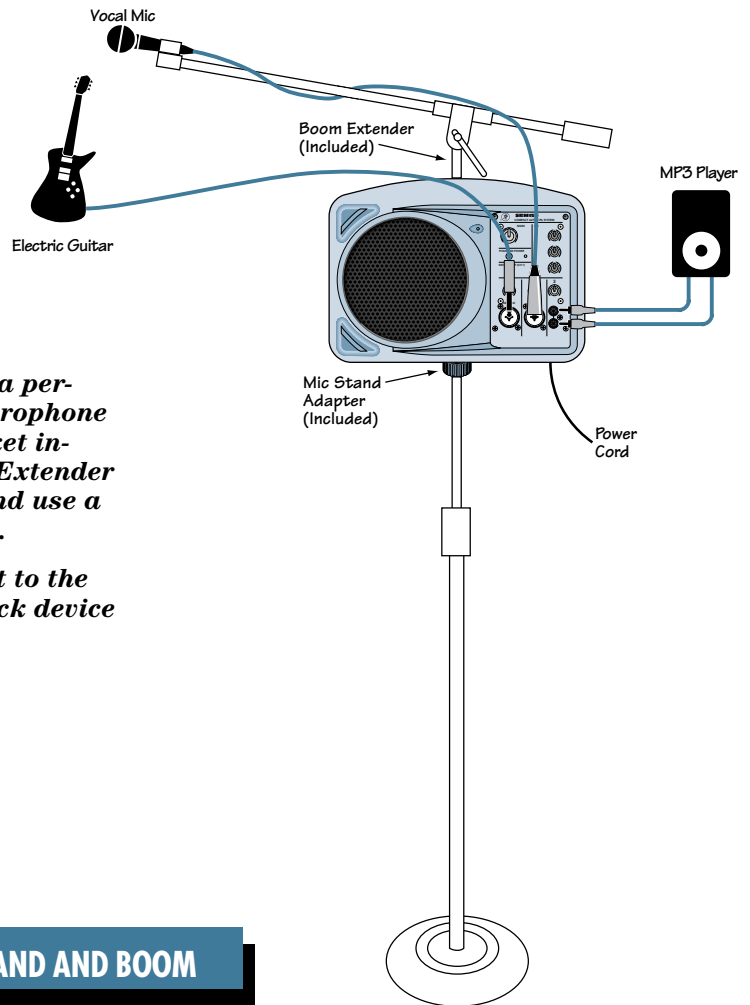
3. Connect the supplied AC power cord to the AC power receptacle [10] on the back of the SRM150. Plug the other end into an AC outlet properly configured with the correct voltage for your particular model. (The SRM150 has a universal power supply that accepts an AC mains voltage ranging from 100V to 240 V.)
4. Turn on your signal source. Make sure its Master Volume control (if it has one) is turned all the way down.
5. Turn on the SRM150 POWER [8] switch.
6. Start the signal source, whether it be speaking into a microphone, playing a guitar, or starting a CD player. Adjust any volume controls on the signal source for normal operation.
7. Turn up the MAIN LEVEL [6] control about halfway (12 o'clock).
8. Slowly turn up the gain [3] controls for the input channels until the desired volume is reached.
9. If it gets really loud, really fast, try turning down the MAIN LEVEL control (or the input source volume control, if it has one).

If it doesn't get very loud, even with the input channel gain control all the way up, try turning up the MAIN LEVEL control (or the input source volume control, if it has one).

10. If there is no sound, always turn down the SRM150 MAIN LEVEL control before investigating. There may be a mixer or preamplifier mute or tape switch engaged, or a mic switch off.



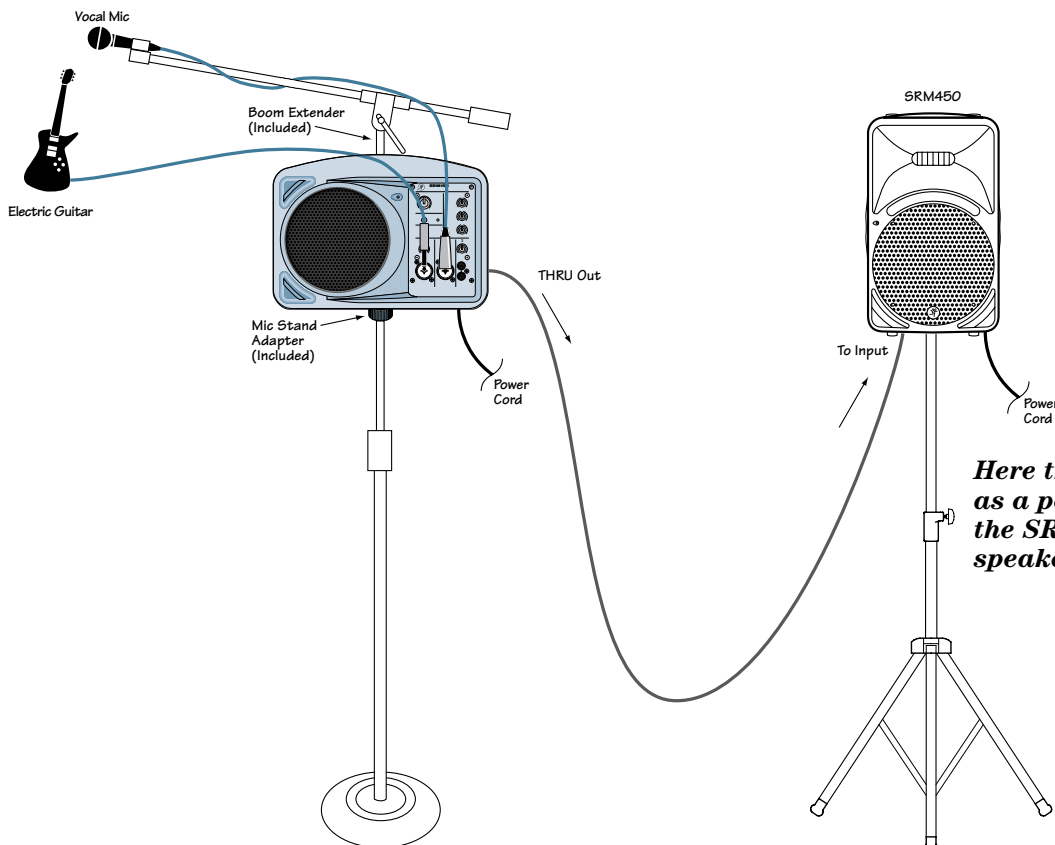
# HOOKUP DIAGRAMS



*This illustrates how to use the SRM150 as a personal monitor. Mount the SRM150 on a microphone stand using the Mic Stand Mounting Bracket included with the SRM150. Attach the Boom Extender (also included) to the top of the SRM150 and use a microphone boom to hold your microphone.*

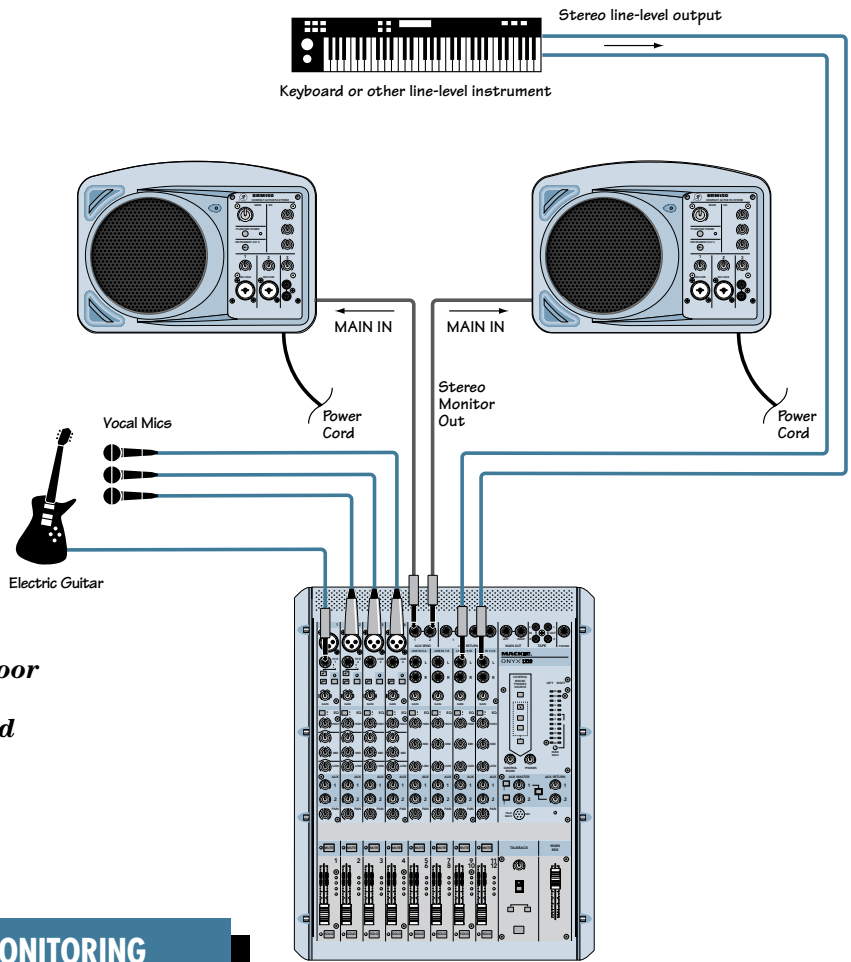
*Connect the microphone and an instrument to the SRM150 (Channels 1 and 2), and a playback device like an MP3 player to Channel 3.*

## SRM150: PRACTICE SETUP USING MIC STAND AND BOOM



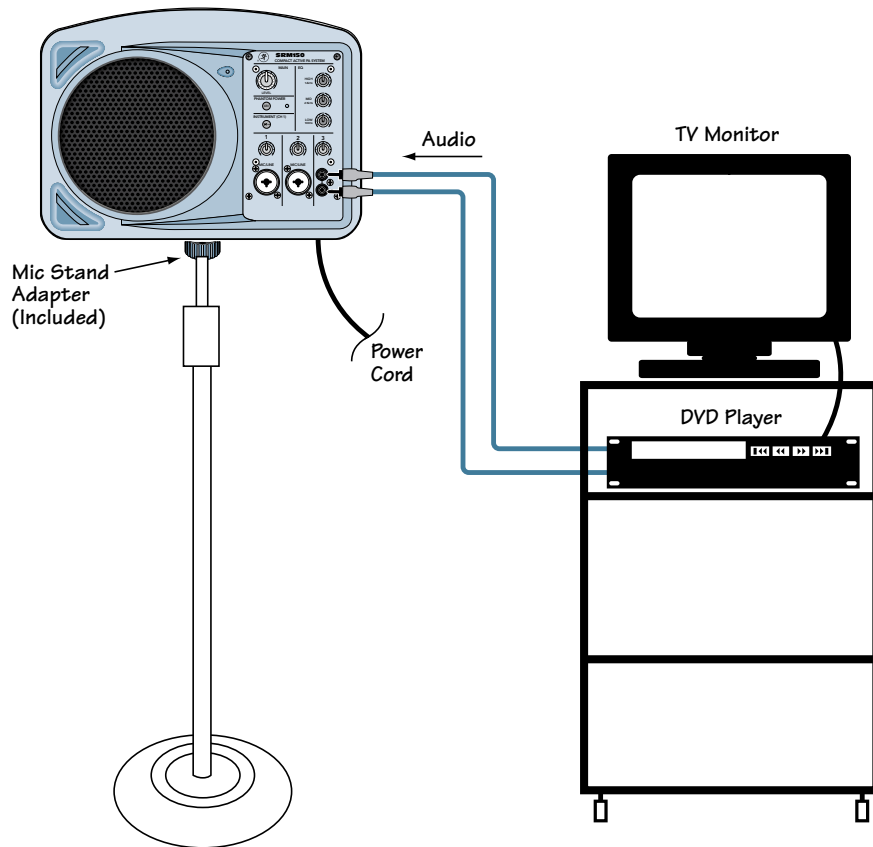
*Here the SRM150 is used as a personal monitor and the SRM450 is the main PA speaker.*

## SRM150: SMALL CLUB SETUP WITH SRM450



*Two SRM150s are used as floor monitors to provide a stereo monitor mix for the keyboard player.*

## TWO SRM150s: STEREO MONITORING



## SRM150: A/V CART



# FRONT PANEL DESCRIPTION

Most of the connections and controls on the SRM150 are located on the front panel for easy access.

## 1. MIC/LINE Inputs

Channels 1 and 2 have combo connectors, which accept balanced microphone inputs from an XLR connector, or balanced and unbalanced line-level inputs from a 1/4" TRS or TS connector.

The XLR inputs are wired as follows:

- Pin 1 = Shield or ground
- Pin 2 = Positive (+ or hot)
- Pin 3 = Negative (- or cold)

The 1/4" inputs are wired as follows and will accept both balanced and unbalanced inputs:

- Sleeve = Shield or ground
- Tip = Positive (+ or hot)
- Ring = Negative (- or cold)

## 2. Stereo Input

Channel 3 has a pair of RCA connectors, which accept a stereo line-level input from a CD player or MP3 player (or any other line-level device).

## 3. Channel Gain Controls

These are used to adjust the signal level for each individual channel. Since the SRM150 incorporates Mackie's world-class low-noise mic preamp technology, you can connect either a line-level or a microphone-level signal to the input, and use this control to adjust the level correctly.

Follow the Quick Start guide on page 4 for setting the gain controls. For most applications, it will be in the 12 o'clock position. If you have a particularly high line-level signal connected to the SRM150, you may need to turn the control down to the 9 o'clock position. If you have a low line-level or mic-level signal connected, you may need to turn the gain control up to the 3 o'clock position.

## 4. INSTRUMENT Switch (CH 1)

Push in this button to change the 1/4" line input on channel 1 to an instrument input. When the button is out, the 1/4" input accepts normal line-level signals from low-impedance sources. When the button is pushed in, the 1/4" input accepts high-impedance signals from instruments with electric pickups, which you would normally run through a DI box.



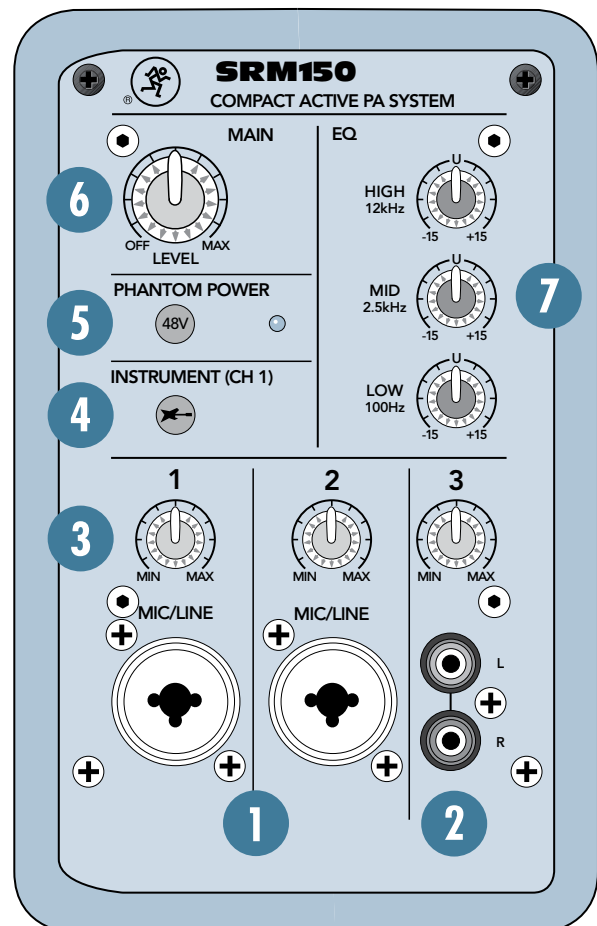
Plugging a guitar straight into a typical line-level input can result in the loss of gain, especially at high frequencies, resulting in a dull sound.

Normally, you must use a direct box between a guitar and a mixer's or preamplifier's input, which serves to convert the impedance of the guitar from high to low. The Instrument input on channel 1 makes the need for a direct box unnecessary. It's like it has its own built-in direct box!

**However:** The Instrument input *is* unbalanced, so if you are running a long cord between the instrument and the SRM150 (say over 20 feet), it is best to use a direct box with a balanced output to avoid picking up noise over the length of the cord.

## 5. 48V PHANTOM POWER Switch and Indicator

Most professional condenser microphones require phantom power, which is a low-current DC voltage delivered to the microphone on pins 2 and 3 of the XLR microphone connector. Push in the 48V button if your microphone requires phantom power. An LED lights next to the button to indicate that phantom power is active.





*This is a global phantom power switch and applies 48V to the XLR input connectors on channels 1 and 2.*

Dynamic microphones, like Shure's SM57 and SM58, do not require phantom power. However, phantom power will not harm most dynamic microphones should you accidentally plug one in while the phantom power is turned on. Be careful with older ribbon microphones. Check the manual for your microphone to find out for sure whether or not phantom power can damage it.

## 6. MAIN LEVEL

This is used to adjust the signal level from the SRM150 mixer, going into the built-in power amplifier.

Follow the Quick Start guide on page 4 for setting the MAIN LEVEL control.

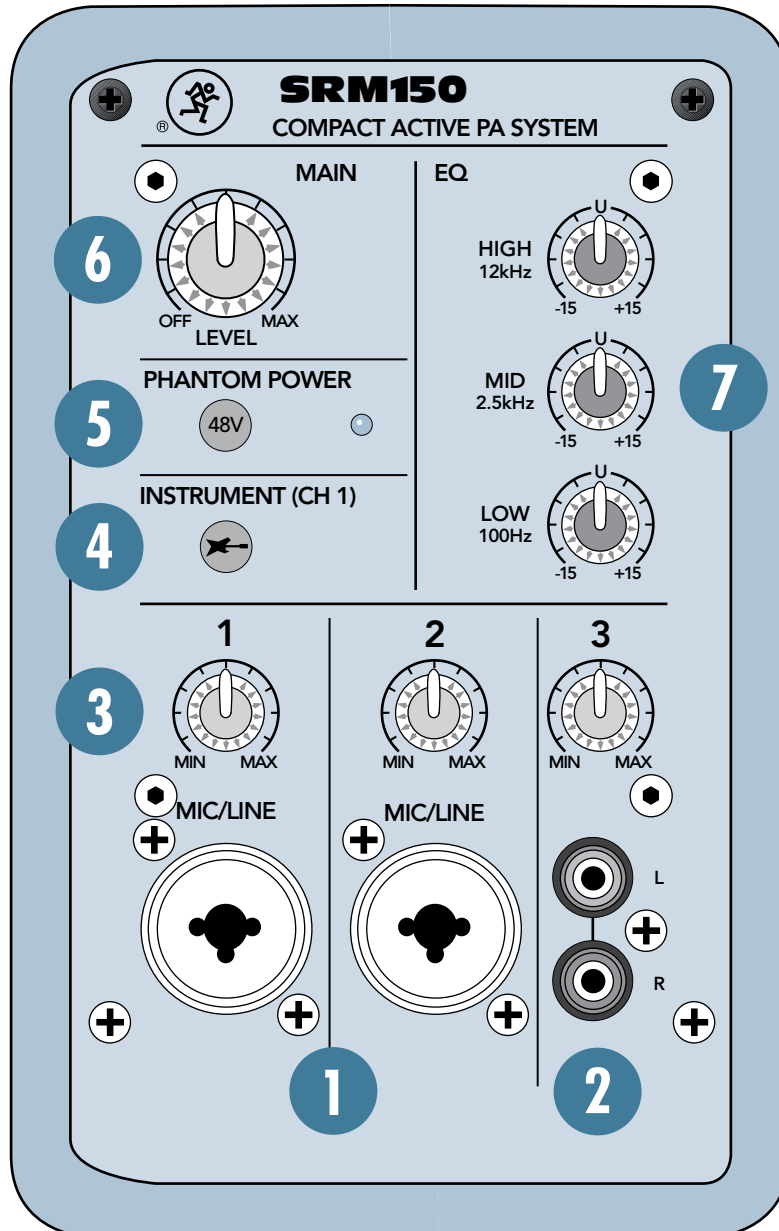
## 7. HIGH, MID, and LOW EQ

Use the EQ controls to make overall adjustments to the sound of the SRM150.

The HIGH EQ provides a boost or cut of up to 15 dB for the very high frequencies, above 12 kHz. These frequencies include the sizzle of cymbals, the edge of a guitar, or the upper harmonics of vocals. In general, boosting the HIGH EQ will brighten the sound of the loudspeaker.

The MID EQ provides a boost or cut of up to 15 dB for the mid-range frequencies around 2.5 kHz. Most vocals are located in the mid-range frequencies, so this can be used to bring the vocals up or down in the mix.

The LOW EQ provides a boost or cut of up to 15 dB for the very lowest frequencies, below 100 Hz. These frequencies are represented by the punch in bass drums, bass guitar, and some really serious male singers.



# REAR PANEL DESCRIPTION

## 8. POWER Switch

Switch up to turn the SRM150 on. Make sure the MAIN LEVEL [6] control is down before you turn it on.

Press the bottom of this switch to put the SRM150 into standby mode. It will not function, but the circuits are still live. To remove AC power, either turn off the AC mains supply, or unplug the power cord from the SRM150 and the AC mains supply.

When the POWER switch is turned on, and the linecord is connected to an active AC Mains supply, the cool blue LED on the front of the speaker glows to let you know that you're ready to rock and roll.

## 9. FUSE

This is a resettable circuit breaker that monitors the amount of current being drawn by the SRM150. Under normal operating conditions, this should never pop. An unusual condition may cause the breaker to pop, such as a mains voltage surge occurring at the same time as a peak amplifier output.

*To reset the breaker:*

- Turn the POWER [8] switch off and push the FUSE switch to its UP position.
- Turn the POWER switch back on and the SRM150 should resume normal operation. If the circuit breaker pops again, there may be something wrong inside the SRM150. Refer to "Repair" on page 15.

## 10. AC Power Receptacle

This is a standard 3-prong IEC connector. Connect the detachable linecord (included with your SRM150) to the power receptacle, and plug the other end of the linecord into an AC outlet. The SRM150 has a universal power supply that can accept any AC voltage ranging from 100VAC to 240 VAC. No need for voltage select switches. It will work virtually anywhere in the world.

**Note:** If you happen to lose the AC linecord, replacements are readily available at any office or computer supply store. Always use a three-pin plug with a ground pin.

## 11. THRU Connector

This is a male XLR connector that produces the main signal just prior to the EQ [7] controls and the MAIN LEVEL [6] control. The signal at the THRU connector includes the input signals connected to channels 1-3 [1/2] and the MAIN IN [13] signal.

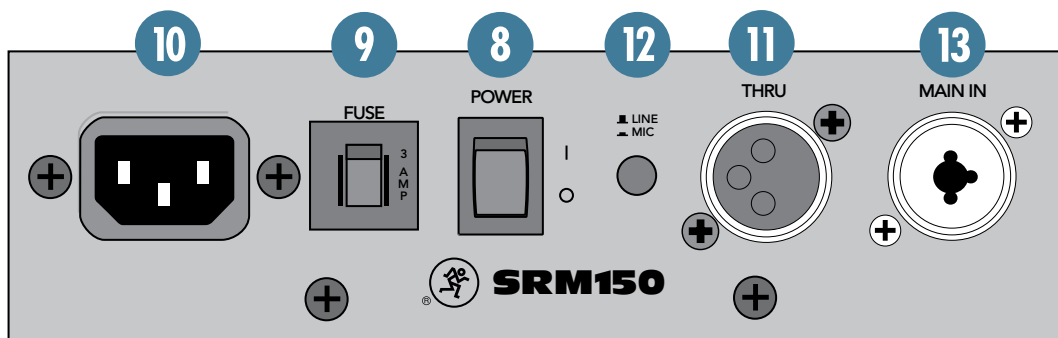
Use this connector to patch the signal from the SRM150 to another SRM150 or other active loudspeaker (like an SRM350 or SRM450), or to a mixer.

## 12. MIC/LINE Switch

The MIC/LINE switch affects the output level of the THRU connector. Leave the switch out (LINE) when connecting the THRU connector to another SRM150 or to a line-level input on a mixer. Push the switch in (MIC) when connecting the THRU connector to a microphone input on a mixer or a stage snake.

## 13. MAIN IN

This is a combo connector that accepts a balanced line-level signal from an XLR connector or a 1/4" TRS connector. The signal is mixed with the signals from channels 1-3 on the main mix bus, just prior to the THRU [11] output, EQ [7] controls and the MAIN LEVEL [6] control.

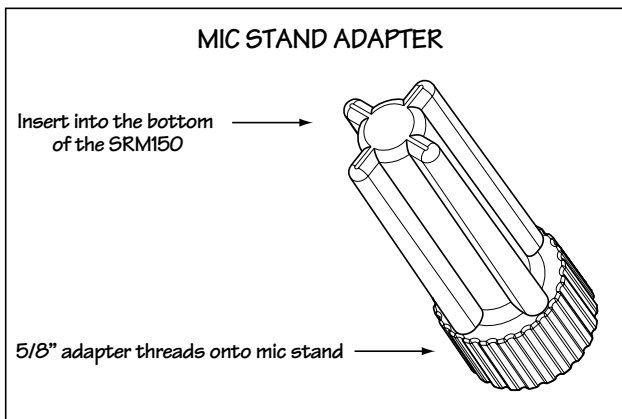


# PLACEMENT

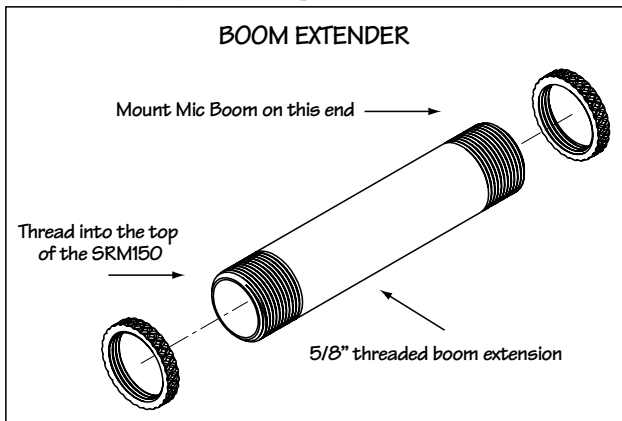
The SRM150 compact active PA systems are designed to sit on the floor, a tabletop, or to fit on a standard microphone stand.

You can place the SRM150 on the floor and angle it back to use it as a floor monitor. The unique shape of the cabinet provides a perfect angle for aiming up toward performers from the front of the stage.

You can also use the Mic Stand Adapter (included), which allows you to mount the SRM150 onto a standard microphone stand.



In addition, there is a threaded insert on top of the cabinet for mounting the boom extender (included). This allows you to attach a microphone boom on top of the SRM150 for your microphone.



As with any powered components, protect them from moisture. If you are setting them up outdoors, make sure they are under cover if you expect rain.

Here are some other placement tips:

- Avoid placing loudspeakers in the corners of a room. This increases the low-frequency output and can cause the sound to be muddy and indistinct.
- Avoid placing loudspeakers against a wall. This, too, increases the low frequency output, though not as much as corner placement. However, if you do need to reinforce the low frequencies, this is a good way to do it.
- Avoid placing the active loudspeaker directly on a hollow stage floor. A hollow stage can resonate at certain frequencies, causing peaks and dips in the frequency response of the room. It's better to place the active loudspeaker on a sturdy table or microphone stand.

## THERMAL CONSIDERATIONS



The amplifier inside the SRM150 is convection cooled by a large heatsink. For efficient cooling, it is important to allow at least six inches of free space behind the SRM150.

If the ambient temperature in the room is high, it could cause the amplifier to overheat. In this case, you should try aiming a fan at the heatsink to increase the air flow through the fins.

In the unlikely event that the amplifier does overheat, a built-in thermal switch will activate, placing the SRM150 amplifier into standby. When the amplifier has cooled down to a safe operating temperature, the thermal switch will reset and the SRM150 will resume normal operation.

## AC POWER CONSIDERATIONS

Be sure the SRM150 is plugged into an outlet that is able to supply enough current for the amplifier.

Under maximum SPL conditions, where musical peaks are just hitting the limiter, the SRM150 model draws 2 amps on average. Under normal conditions, the current draw is below 1 amp.

We recommend that a stiff (robust) supply of AC power be used because the amplifier places high current demands on the AC line. The more power that is available on the line, the louder the speaker will play and the more peak output power will be available for cleaner, punchier bass. A suspected problem of “poor bass performance” is often caused by a weak AC supply to the amplifier.

If lighting is used in a show, it is preferable to power the lights from a separate AC circuit than the one powering the audio equipment. This will help minimize noise from the lights coupling into the audio (particularly if SCRs, or light-dimmer switches, are used).

Wherever possible, connect all of your audio equipment to the same electrical circuit. This will help reduce the possibility of a ground loop problem causing an annoying hum in your speakers.

A maximum of five SRM150s can be connected per 15A service (120 VAC). This allows each SRM150 to be safely operated at its maximum level.

When turning your system on, turn on the SRM150s last. This will stop any turn-on thumps and bangs from your source equipment being amplified.

When turning off your system, turn off the SRM150s first. This will prevent any turn-off thumps and bangs from your source equipment being amplified.



When setting up for a show, often you are plugging into an AC power distribution system you know nothing about. You may even be faced with 2-wire outlets that are missing the third safety ground pin. It's a good idea to have a three-wire AC outlet tester in your toolbox so you can check the outlets yourself to make sure they are wired correctly. These testers will tell you if the polarity of the hot and neutral wires is reversed and if the safety ground is disconnected.



Don't use an outlet if it is wired improperly! This is to protect yourself as well as your equipment.

Never remove the ground pin on the power cord of the SRM150 or any other component. This is very dangerous.

## CARE AND MAINTENANCE

Your Mackie active loudspeaker will provide many years of reliable service if you follow these guidelines:



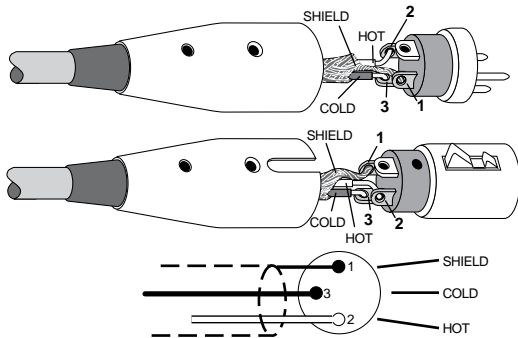
Avoid exposing the loudspeaker to moisture. If it is set up outdoors, be sure it is under cover if you expect rain or you live in Washington.

- Avoid exposure to extreme cold (below freezing temperatures). If you must operate the loudspeaker in a cold environment, warm up the voice coil slowly by sending a low-level signal through it for about 15 minutes prior to high-power operation.
- Use a slightly damp cloth with a mild soap solution to clean the cabinet. Only do this when the power is turned off. Avoid getting moisture into any of the openings of the cabinet, particularly where the driver is located.

# CONNECTIONS

## XLR Connectors

Inputs 1-2 accept 3-pin male XLR connectors on the combo inputs. They are wired as follows, according to standards specified by the AES (Audio Engineering Society).



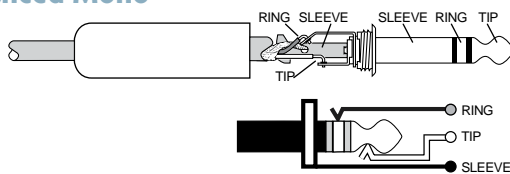
### XLR Balanced Wiring:

- Pin 1 = Shield
- Pin 2 = Hot (+)
- Pin 3 = Cold (-)

## 1/4" TRS Phone Plugs and Jacks

The combo inputs also accept 1/4" TRS connectors. "TRS" stands for Tip-Ring-Sleeve, the three connection points available on a stereo 1/4" or balanced phone jack or plug. TRS jacks and plugs are used for balanced signals and stereo headphones.

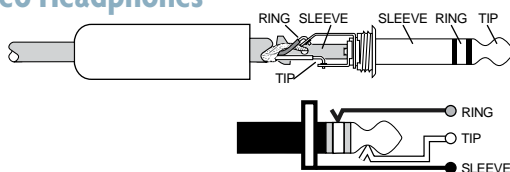
### Balanced Mono



### 1/4" TRS Balanced Mono Wiring:

- Sleeve = Shield
- Tip = Hot (+)
- Ring = Cold (-)

### Stereo Headphones

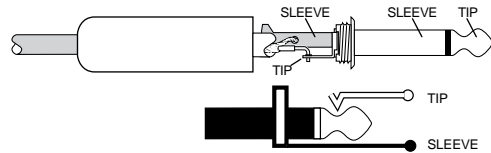


### 1/4" TRS Stereo Unbalanced Wiring:

- Sleeve = Shield
- Tip = Left
- Ring = Right

## 1/4" TS Phone Plugs and Jacks

"TS" stands for Tip-Sleeve, the two connection points available on a mono 1/4" phone jack or plug. They are used for unbalanced line-level signals and the high-impedance instrument input on Channel 1.

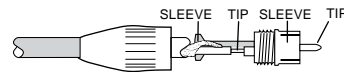


### 1/4" TS Unbalanced Wiring:

- Sleeve = Shield
- Tip = Hot (+)

## RCA Plugs and Jacks

RCA-type plugs (also known as phono plugs) and jacks are often used in home stereo and video equipment, and to make S/PDIF connections on consumer digital audio devices. They are unbalanced and electrically equivalent to a 1/4" TS phone plug.



### RCA Unbalanced Wiring:

- Sleeve = Shield
- Tip = Hot (+)

# SERVICE INFORMATION

If you think your Mackie product has a problem, please check out the following troubleshooting tips and do your best to confirm the problem. Visit the Support section of our website ([www.mackie.com/support](http://www.mackie.com/support)) where you will find lots of useful information such as FAQs and other documentation. You may find the answer to the problem without having to send your Mackie product away.

## Troubleshooting

### No power!

- Our favorite question: Is it plugged in? Make sure the AC outlet is live (check with a tester or lamp).
- Our next favorite question: Is the POWER switch on? If not, try turning it on.
- Is the blue light on the front panel illuminated? If not, make sure the AC outlet is live. If so, refer to “No sound” below.
- The resettable circuit breaker has popped. Refer to “FUSE” [9] on page 10 for information on the circuit breaker.

### No sound!

- Is the input gain control [3] or the MAIN LEVEL [6] control turned all the way down? Follow the procedures in the “Quick Start” section on page 4 to verify that all the volume controls in the system are properly adjusted.
- Is the signal source working (and making union scale)? Make sure the connecting cables are in good repair and securely connected at both ends. Make sure the output volume (gain) control on whatever is connected to the SRM150 is turned up sufficiently to drive the inputs of the speaker.

### Bad sound!

- Is it loud and distorted? Follow the procedures described in the “Quick Start” section to verify that the levels are set properly.
- Is the input connector plugged completely into the jack? Be sure all connections are secure. It’s a good idea to periodically clean all electrical connections with a non-lubricating electrical contact cleaner.

### Noise

- Make sure all connections to the active speakers are good.
- Make sure none of the signal cables are routed near AC cables, power transformers, or other EMI-inducing devices.
- Is there a light dimmer or other SCR-based device on the same AC circuit as the SRM150? Use an AC line filter or plug the SRM150 into a different AC circuit.

### Hum

- Turn the MAIN LEVEL control all the way down. If the noise disappears, it’s coming from the signal source. If not, try disconnecting the cables connected to the input jacks one at a time. If the noise disappears, it could be a “ground loop,” rather than a problem with the SRM150. Try some of the following troubleshooting ideas:
- Use balanced connections throughout your system for the best noise rejection.
- Whenever possible, plug all the audio equipment’s line-cords into outlets which share a common ground. The distance between the outlets and the common ground should be as short as possible.



Never remove the ground pin on the power cord of the SRM150 or any other component. This is very dangerous.



## Repair

For warranty service, refer to the warranty information on page 19.

Non-warranty service for Mackie products is available at a factory-authorized service center. To locate your nearest service center, visit [www.mackie.com](http://www.mackie.com), click “Support” and select “Locate a Service Center.” Service for Mackie products living outside the United States can be obtained through local dealers or distributors.

If you do not have access to our website, you can call our Tech Support department at 1-800-898-3211, Monday-Friday, during normal business hours, Pacific Time, to explain the problem. Tech Support will tell you where the nearest factory-authorized service center is located in your area.

### Need Help?

- **Visit [www.mackie.com](http://www.mackie.com) and click Support to find: FAQs (Frequently Asked Questions), manuals and addendums.**
- **Email us at: [techmail@mackie.com](mailto:techmail@mackie.com).**
- **Telephone 1-800-898-3211 to speak with one of our splendid technical support representatives (Monday through Friday, normal business hours, PST).**



# SRM150 SPECIFICATIONS

## System Specifications

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|                                   |                   |
|-----------------------------------|-------------------|
| <i>Frequency Response (-3 dB)</i> | 100 Hz – 17.5 kHz |
| <i>Frequency Range (-10 dB)</i>   | 60 Hz – 22 kHz    |
| <i>Max SPL Long-term @ 1m</i>     | 110 dB            |
| <i>Max SPL Peak @ 1m</i>          | 120 dB            |

## Mixer Section

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|                                      |  |
|--------------------------------------|--|
| <i>Frequency Response (-3 dB)</i>    |  |
| Mic Input to Line Out (Gain at 0 dB) |  |
| 5 Hz – 40 kHz (+0, -1 dB)            |  |

### Input Impedance

|            |                  |
|------------|------------------|
| Mic        | 3 kohm balanced  |
| Hi-Z       | 20 kohm balanced |
| Instrument | 1 Mohm           |
| Line       | 10 kohm balanced |
| Stereo     | 10 kohm balanced |

### Maximum Voltage Gain

|              |       |
|--------------|-------|
| Mic Input 1  | 51 dB |
| Mic Input 2  | 51 dB |
| Stereo Input | 9 dB  |

### Maximum Input Level

|        |   |
|--------|---|
| Mic    | -28 dBu, gain at +50 dB<br>+15 dBu, gain at +6 dB |
| Line   | -8 dBu, gain at +30 dB<br>+35 dBu, gain at -15 dB |
| Stereo | +20 dBu, gain at 0 dB                             |

### 3-Band Equalization

|      |                  |
|------|------------------|
| High | ±15 dB @ 12 kHz  |
| Mid  | ±15 dB @ 2.5 kHz |
| Low  | ±15 dB @ 100 Hz  |

|                     |        |
|---------------------|--------|
| <i>Line Out Pad</i> | -30 dB |
|---------------------|--------|

### Common Mode Rejection Ratio (CMRR)

55 dB @ 1 kHz, gain at unity

### Noise (20 Hz to 20 kHz BW, 150 ohm source impedance)

|  |          |
|--|----------|
| Equivalent Input Noise (EIN)                                       | -129 dBu |
| Residual Output Noise<br>(Line out, channel and master levels off) | -85 dBu  |

## Power Amplifier

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|                      |  |
|----------------------|--|
| <i>Rated Power</i>   | 100 watts rms continuous,<br>20 Hz to 20 kHz |
| <i>Maximum Power</i> | 150 watts peak                               |
| <i>Rated THD</i>     | 0.05%  |
| <i>Cooling</i>       | Convection Extrusion                         |
| <i>Design</i>        | Class D                                      |

## Transducer

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|                            |                |
|----------------------------|----------------|
| <i>Diameter</i>            | 5.25 in/134 mm |
| <i>Voice Coil Diameter</i> | 1.0 in/25.4 mm |
| <i>Sensitivity (1W@1m)</i> | 90 dB          |
| <i>Nominal Impedance</i>   | 8 ohms         |
| <i>Power Handling</i>      | 150 watts      |
| <i>Frequency Range</i>     | 90 Hz – 20 kHz |
| <i>Magnet Type</i>         | Neodymium      |

## Safety Features

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|                            |                                |
|----------------------------|--------------------------------|
| <i>Overload Protection</i> | Limiter                        |
| <i>Thermal Protection</i>  | Amplifier shutdown, auto-reset |

## Construction Features

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|                 |   |
|-----------------|---|
| <i>Material</i> | Polypropylene                                   |
| <i>Finish</i>   | Grey textured finish                            |
| <i>Handle</i>   | Top mounted                                     |
| <i>Grille</i>   | Perforated metal with weather-resistant coating |

## Physical Properties

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|                         |   |
|-------------------------|---|
| <i>Height</i>           | 8.0 in/20.3 cm  |
| <i>Width</i>            | 11.2 in/28.4 cm   |
| <i>Depth</i>            | 6.8 in/17.3 cm  |
| <i>Weight</i>           | 7.6 lb/3.4 kg   |
| <i>Mounting Methods</i> | Mic stand mountable via the built-in socket on the bottom of the cabinet with the supplied adapter. |

## AC Power Requirements

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|                                    |                   |
|------------------------------------|-------------------|
| 100 VAC – 240 VAC, 50/60 Hz, 35 VA |                   |
| <i>AC Connector</i>                | 3-pin IEC 250 VAC |

## Disclaimer

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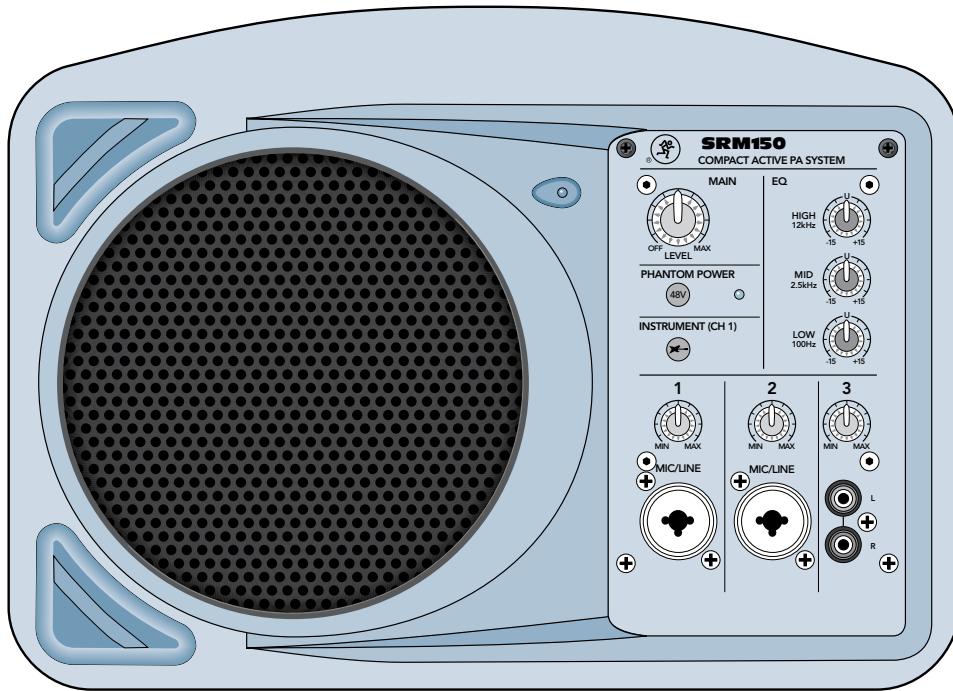
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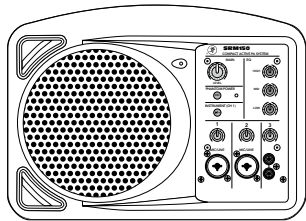
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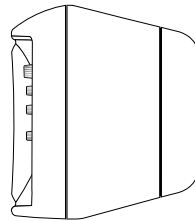




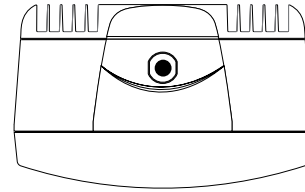
8.0 in/  
20.3 cm



11.2 in/  
28.4 cm

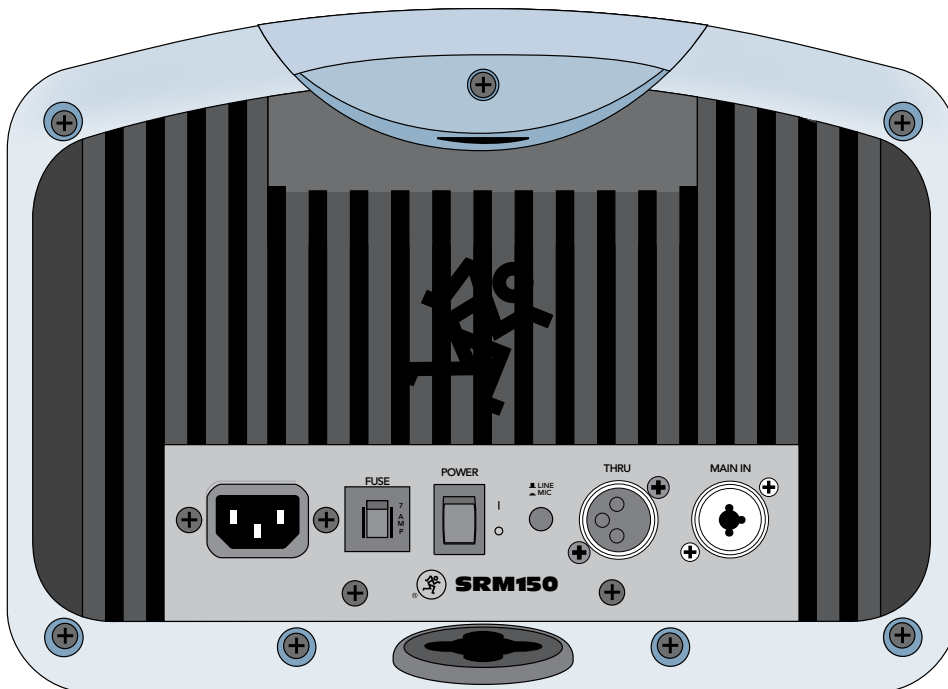


6.8 in/  
17.3 cm

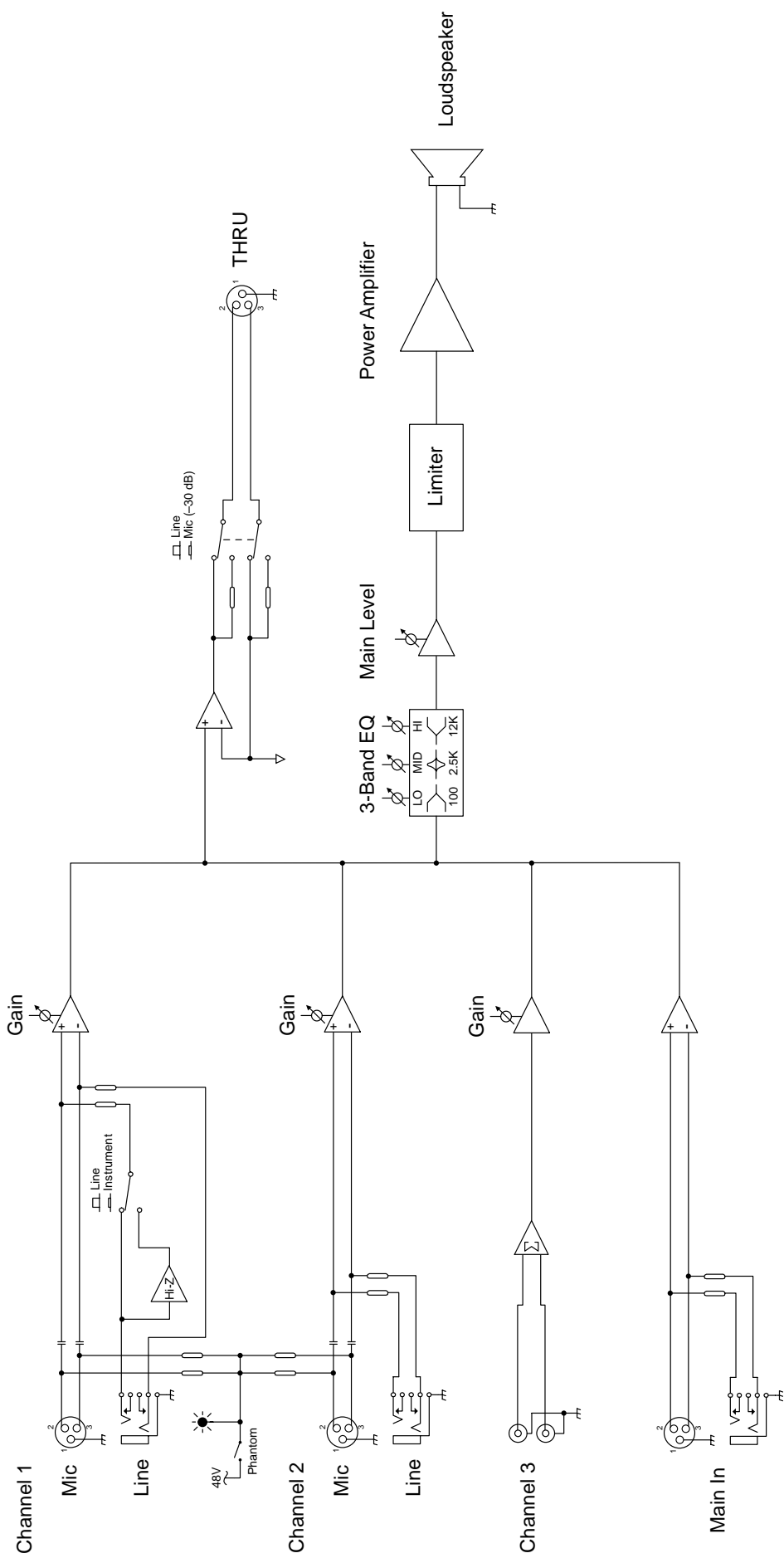


6.8 in/  
17.3 cm

11.2 in/  
28.4 cm



# SRM150 BLOCK DIAGRAM



# Mackie Limited Warranty

## **Please keep your sales receipt in a safe place.**

This Limited Product Warranty (“Product Warranty”) is provided by LOUD Technologies Inc. (“LOUD”) and is applicable to products purchased in the United States or Canada through a LOUD-authorized reseller or dealer. The Product Warranty will not extend to anyone other than the original purchaser of the product (hereinafter, “Customer,” “you” or “your”).

For products purchased outside the U.S. or Canada, please visit [www.mackie.com/warranty](http://www.mackie.com/warranty) to find contact information for your local distributor, and information on any warranty coverage provided by the distributor in your local market.

LOUD warrants to Customer that the product will be free from defects in materials and workmanship under normal use during the Warranty Period. If the product fails to conform to the warranty then LOUD or its authorized service representative will at its option, either repair or replace any such nonconforming product, provided that Customer gives notice of the noncompliance within the Warranty Period to the Company at: [www.mackie.com/support](http://www.mackie.com/support) or by calling LOUD technical support at 1.800.898.3211 (toll-free in the U.S. and Canada) during normal business hours Pacific Time, excluding weekends or LOUD holidays. Please retain the original dated sales receipt as evidence of the date of purchase. You will need it to obtain any warranty service.

For full terms and conditions, as well as the specific duration of the Warranty for this product, please visit [www.mackie.com/warranty](http://www.mackie.com/warranty).

The Product Warranty, together with your invoice or receipt, and the terms and conditions located at [www.mackie.com/warranty](http://www.mackie.com/warranty) constitutes the entire agreement, and supersedes any and all prior agreements between LOUD and Customer related to the subject matter hereof. No amendment, modification or waiver of any of the provisions of this Product Warranty will be valid unless set forth in a written instrument signed by the party to be bound thereby.

# **MACKIE®**

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**16220 Wood-Red Road NE • Woodinville, WA 98072 • USA**  
**United States and Canada: 800.898.3211**  
**Europe, Asia, Central and South America: 425.487.4333**  
**Middle East and Africa: 31.20.654.4000**  
**Fax: 425.487.4337 • [www.mackie.com](http://www.mackie.com)**  
**E-mail: [sales@mackie.com](mailto:sales@mackie.com)**