

# SUPER REDHEAD

## OWNER'S MANUAL



SWR • SCOTTSDALE, AZ • USA

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#### INTRODUCTION

Congratulations on your purchase of an SWR Super Redhead professional bass amp combo. By choosing an SWR bass amplification system you have made a sound decision that could very well be the best of your life!

Just a little humor there, but true nonetheless. For over 15 years, we here at SWR have been putting everything we know about bass into the SWR product line. We've earned a reputation for designing and manufacturing gear that has changed the way bassists hear themselves. That's why you'll find our bass amps, cabinets and combos on stages and in recording studios all over the world, and why you'll hear SWR on countless recordings, spanning all genres of music.

Originally introduced in 1988, the SWR Redhead was immediately recognized by discerning bassists as the premier bass combo amplifier for small gig/recording studio use. As the Redhead was the first of its kind (i.e., small and powerful with features geared toward the professional musician), it has inspired many imitations. In 1996, the Redhead was upgraded to include a host of additional features and renamed the Super Redhead. Upgrades included increased power output and power handling, the addition of an internal cooling fan, redesigned front and rear panels, a mute switch for the XLR Output, and a front ported speaker section.

Inside this User Guide you'll find specifications, features, and usage suggestions for your Super Redhead. New SWR user and seasoned user alike will benefit from reading through this brief but informative manual.

Thanks for choosing the SWR Super Redhead.

Sincerely,

**SWR** 

#### SUPER REDHEAD SPECIFICATIONS

Note: All measurements were taken with a line voltage of 120VAC. All noise specifications are "unweighted." All voltages and watts are "RMS." All measurements taken with tone controls set flat, Aural Enhancer at minimum.

#### POWER OUTPUT (minimum):

350 Watts @ 4 ohms (internal)

400 Watts @ 2.67 ohms (or with an 8 ohm extension speaker connected)

450 Watts @ 2 ohms (or with a 4 ohm extension speaker connected)

Note: Internal speaker impedance is 4 ohms.

FREQUENCY RESPONSE (power amplifier): -3dB @ 20Hz and 40kHz

**INPUT IMPEDANCE:** 

Passive/Active Input: 800kohms

Active Input: 60kohms Effects Return: 27kohms

**OUTPUT IMPEDANCE:** 

Effects Send: 100 ohms Tuner Send: 100 ohms

XLR Balanced Out: 750 ohms

SIGNAL-TO-NOISE RATIO: -72 dB (<10 millivolts typical)

EQUIVALENT INPUT NOISE: 9 microvolts

POWER HANDLING: 350 watts RMS continuous program

CROSSOVER (located in the Super Redhead's chassis): Third order, 6dB roll off, 18dB Butterworth

high pass, 4kHz turnover

SPL: 105 dB (-3dB @ 45Hz and 15kHz)

SENSITIVITY: 101dB SPL @ 1W1M

**WOOFER ASSEMBLY:** 

10" woofer assembly

2" Hi temperature, high efficiency copper-wound Kapton voice coil

46 oz. focused magnet/175 watts RMS

CABINET INPUT: Stereo phone jack assembly

#### INTERNAL CABINET SPECIFICATIONS:

Cabinet Construction: 5/8" 7 ply, maple or birch, dado and rabbet joints, glued (waterproof) and nailed with extremely heavy bracing

Finish: Black Ozite carpeting and stack lock corners

Internal Volume: 2.45 cubic feet

Tuning: Front slot port, designed to eliminate unwanted noise.

Internal Cabinet Impedance: 4 ohms

DIMENSIONS: 23" W x 23" H x 17"D (84.2 x 84.2 x 31.8 mm)

WEIGHT: 80 lbs. (36.29 kg) (total with cover)

#### FRONT PANEL FEATURES

#### TUNER INPUT

The Tuner Input jack allows you to connect an instrument tuner and tune up without having to unplug and go back and forth from amp to tuner. This feature is totally isolated from the rest of the preamp and will function regardless of the settings on the front panel. Being isolated on a side chain avoids loading down of the instrument, which can result in a loss in dynamic range.

To use this feature, connect a shielded patch cable from the Tuner Input jack to the input on your instrument tuner. Turn the amplifier on and you're ready to go. If you do not want to monitor your sound during tuning, either turn down the Master Volume completely or turn the Speaker On/Off switch to the "Off" position.

#### PASSIVE/ACTIVE INPUT JACK

This input can and should be used if your instrument contains passive electronics (i.e., no built-in preamp). Some instrument pickups use batteries for operation and will work perfectly using the Passive/Active input. Generally speaking, this input should be used if your instrument puts out a maximum of 1 volt RMS or less. Consult the owners manual for the instrument or ask the manufacturer if you are unsure.

Note: If you hear a small amount of distortion and neither the Preamp Clip LED nor the Power Amp Clip LED are activated, try using the Active Input jack.

If you would like to overdrive the first tube stage, this can be accomplished by using a preamp between your instrument and the Passive/Active input. To obtain optimum sound when trying this, make sure the Preamp clip LED is not activated. If this occurs, turn down your Gain control. The first preamp stage is not monitored by the Preamp clip circuit for this reason.

#### **ACTIVE INPUT**

The Active Input jack should be used with instruments that contain a built-in (on-board) preamp that put out a signal over 1 Volt RMS. Some really "hot" pickups installed in your instrument may find the Active input more compatible. Let your ears be the judge.

Note: The input impedance of the Active Input jack is 82kohms. Using the Active Input with passive instruments (active instruments will always employ a battery) may result in a loss of highend transients. Players who roll off their high end starting at about 2 or 3kHz may find this input more to their liking.

If you hear distortion when using an active instrument in the Active Input jack, check your battery! Also, make sure that none of the clip indicators are lit.

#### PREAMP CLIP LED

The Preamp Clip LED will light whenever the preamp, tone section, or output buffer reach clipping (run out of headroom). This function does NOT monitor the first tube stage of the Passive/Active Input jack (see "Passive/Active Input" for more information). Since the Preamp Clip LED also monitors the tone section, radically boosting any of the tone controls can cause the LED to activate. If this occurs, turn down the Gain control.

Note: Constant clipping will not harm the electronics in the Super Redhead, however, damage may result to the loudspeakers due to near-DC content present in a clipped waveform.

#### **GAIN CONTROL**

The Gain control adjusts the volume of the preamp section. After the tone controls, Aural Enhancer, etc., have been adjusted to your liking, the Gain control should be set to where the Preamp Clip LED barely flashes upon striking your loudest note; then adjust the Master Volume control to the desired volume level. Since the Gain control is similar to a "Pad," a small amount of signal will be heard when the Gain control is rotated fully counter-clockwise. Utilizing these controls in this manner assures the user of maximum signal-to-noise ratio without distortion caused by the preamp circuits clipping.

#### AURAL ENHANCER

SWR's Aural Enhancer was developed to bring out the fundamental low notes of the bass guitar, reduce certain frequencies that help mask the fundamentals, and enhance the high end transients. The resulting frequency response should be similar to that used for recording the bass in the studio. This effect becomes more radical as the control is turned to maximum. The result is a more "transparent" sound and is especially noticeable when using the thumb style technique ("slapping") on the bass guitar.

The Aural Enhancer can basically be described as a tone-shaping control, as it is a passive R/C network that alters the frequency response throughout the bass spectrum. This pre-shaping is "blended" into the original signal via the Aural Enhancer control. Exact frequencies affected are dependent on the characteristics of the instrument used.

#### BASS CONTROL

The Bass control employs a shelving-type circuit and boosts or cuts the bass response  $\pm 15$ dB. Starting at mid-position ("center click"), turning the control counter-clockwise cuts the bass response; turning the control clockwise boosts the bass response.

#### **PULL TURBO FUNCTION**

Pulling the Bass control to the "out" position widens the bandwidth of the Bass Control to include frequencies down to 30Hz (low "B" on a 5-string bass). Since some of these notes can be felt more than heard, it is especially important to keep an eye on the preamp and power amp clip LEDs. Constant clipping of these frequencies can diminish the life of Super Redhead's internal speakers or cause them to fail.

#### MID RANGE SECTION

#### LEVEL CONTROL

The Level control cuts or boosts the frequency set by the Frequency control a maximum of  $\pm 15 dB$ . Starting at mid-position ("center click"), turning the Level control counter-clockwise cuts the frequency set by the Frequency control; turning the Level control clockwise boosts the frequency. When the Level control is set at mid-position, turning the Frequency control will have no affect on the sound.

To find the midrange area you are looking for:

- 1. Set the Level control to the full boost or cut position.
- 2. Rotate the Frequency control until the area you wish to boost or cut is found.
- 3. Adjust the Level control to the amount of cut or boost desired.

#### FREQUENCY CONTROL

The Frequency control sets the area that is to be cut or boosted by the Level control. If the Level control is set at mid-position, turning the Frequency control will have no affect.

#### TIPS FOR USING THE MID RANGE CONTROLS

If you need to "cut through" the band a little more, try boosting 200 to 400Hz. If you like a more transparent sound, try cutting 800Hz. The Midrange controls are especially useful in controlling fretless basses and their inherent qualities.

#### TREBLE CONTROL

The Treble control is a shelving-type tone control that cuts or boosts the high frequencies. Starting from mid-position, turning the Treble control counter-clockwise cuts the high frequencies; turning the control clockwise boosts the high frequencies.

#### PULL TRANSPARENCY FUNCTION

In the normal (in) position, the shelving point of the Treble control is approximately 2kHz. By pulling the control to the "out" position, the shelving point is changed to 4kHz, which essentially allows you to control the output of the tweeter (as the Super Redhead's internal speaker complement is crossed over at 4kHz). The end result should be a clearer, more "transparent" sound.

#### MASTER VOLUME CONTROL

The Master Volume control adjusts the signal level going to the power amplifier, the Effects Send jack, and the Record Out section when set in the "Line" mode. The Master Volume does not control the level of the Record Out section when set in the "Direct" mode. If the Power Amp Clip LED lights, turn down the Master Volume to correct the overload condition.

#### POWER AMP CLIP LED

The Power Amp Clip LED will light when the internal power amp reaches clipping (runs out of head-room). Although this will not harm the electronics in the Super Redhead, continual clipping of the power amp section will shorten the life of the internal speakers and may damage them. Turn down the Master Volume to correct the situation. Speaker damage due to continuous clipping of the power amp section is not covered under warranty.

#### **RECORD/LINE OUTS**

#### **Unbalanced Output**

The Unbalanced Out can be patched into any unbalanced input on tape decks, mixing consoles, etc. The signal at the Unbalanced Out corresponds to the position of the Line/Direct switch. In the Line position, the level is adjusted by the XLR Pad and all front panel controls are functional (i.e., affect the sound and level). In the "Direct" position, the level is adjusted by the XLR Pad and the front panel controls do not affect the signal. Output impedance of the Unbalanced Out is 1.5kohms.

#### Balanced XLR Output

The Balanced XLR Out is a true balanced output and its level is set by the XLR Pad. The signal appearing at the XLR out is determined by the position of the Line/Direct switch. In the "Line" position, all front panel controls are functional and the signal is essentially the same as that being sent

to the internal power amplifier. If you are using an effect, this will also appear mixed in the signal when you are in the "Line" mode. In the "Direct" position, the Balanced Out becomes an active tube direct box. No front panel controls are functional and once again, the level is adjusted by the XLR Pad.

When using the Balanced Out for recording, optimum results can be achieved by driving the tape deck direct. If this is not possible, any matching level can be achieved via the XLR Pad.

A ground lift is built into the XLR Pad control. To lift the ground, pull the knob outward until it clicks.

If a persistent hum exists after lifting the ground, there may be a problem with the AC wiring or possibly a dirty AC line. If this is the case, we suggest using an isolation transformer between the Super Redhead and the wall socket.

Wiring for the XLR connector is as follows:

Pin 1 = ground, Pin 2 = +, Pin 3 = - (American Standard)

#### XIR PAD

To pad or adjust the level of both the Balanced XLR and Unbalanced Outs, use the XLR Pad. Rotating the control clockwise raises these levels. If you are in the "Line" position and change the Gain level, this will also affect the output level of the record outputs. You may readjust the record level if necessary with the XLR Pad without affecting any other function.

#### GROUND/LIFT SWITCH

When using the Balanced XLR out, this feature may help in eliminating ground loops between your Super Redhead and an external mixing board. Normal setting for this switch is in the "Ground" position. When switched to "Lift," the ground (Pin 1 as noted above) is lifted. In some cases, this will eliminate unwanted hum.

#### LINE/DIRECT SWITCH

The Line/Direct switch gives the user the option of either a line signal (preamp out) or direct signal from the instrument. The direct signal is active and generally hotter than most active direct boxes. Both the line or direct signal can be adjusted with the XLR Pad.

To use the Line/Direct switch, position the switch ito either "Line" or "Direct." Make sure the switch is all the way to the left or right to avoid an intermittent signal.

#### MUTE/LIVE SWITCH

The Mute/Live switch affects both the balanced and unbalanced outputs of your Super Redhead. Normal setting for this switch is "Live," so signal will be present at both outputs. In the "Mute" position, the signal is muted to both outputs. This is useful when changing instruments, as no "thud" will be heard [out of the outputs].

Note: Turn-off transients appear at the balanced and unbalanced outs when turning off the amplifier. Therefore, it is recommended that the Mute/Live switch be set to "Mute" prior to powering down your Super Readhead.

#### EFFECTS BLEND CONTROL

The Effects Blend control allows the user to mix the dry signal with the signal coming from an effect patched through the Effects Loop on the rear panel. The Effects Blend control functions only when the Effects Loop is being used. It is activated when a 1/4" phone plug is inserted into the Effects Receive jack.

#### **HEADPHONE JACK**

The Headphone jack allows the user to monitor the sound via the use of stereo headphones. To practice without sound coming through the Super Redhead's speakers, turn the Speaker On/Off switch to the "Off" position and connect headphones to the Headphone jack. Stereo headphones must be used in this jack, as mono headphones will short out one side.

Since the headphone "amp" is actually a reduced signal from the power amp, the Headphone volume is controlled by the Master Volume control.

#### SPEAKER ON/OFF SWITCH

Setting the Speaker On/Off switch to the "On" position allows the speakers to function as normal. Turning the switch to the "Off" position cuts the signal off to the Super Redhead's internal speakers. This feature does not affect the external speaker output jack.

The Speaker On/Off switch allows the user to:

- 1. Use the record out system without using the internal speakers. This is especially useful when only a direct signal is required.
- 2. Practice in a quiet environment without disturbing your neighbors by using the Headphone jack.
- 3. Tune up without interfering with other band members when using the Tuner Input jack.

#### POWER ON/OFF SWITCH

Setting the switch to the "On" position activates the electronics in the Super Redhead as indicated by the Power LED lighting.

#### REAR PANEL FEATURES

#### **EFFECTS LOOP**

The Effects Loop accepts any line level effects unit. Many high quality effects on the market have input level adjustments, usually a switch that can be set for either –10dB or +4dB. In all cases, these should be set for either OdB or +4dB. The level going to your effect is controlled by the Gain control. The Effects Loop is designed as a "side chain" and functions similarly to recording studio mixing consoles.

Because the Effects Loop is after the preamp gain stages in the signal chain, use of the Effect Loop should greatly reduce any residual noise generated by your effects unit (as compared to using an effect "in line" between your instrument and the input to the Super Redhead).

#### **SEND**

To use an effect in the Effects Loop of your Super Redhead, connect a shielded patch cable from the Send jack to the input of your effects unit. The output impedance of the Send jack is 100 ohms. This jack may also be used as a line level output for use in conjunction with an external "slave" power amp.

#### **RECEIVE**

After connecting the send jack as described above, connect a shielded patch cable from the Receive jack to the output jack of your effects unit. The input impedance of the Receive jack is 27kohms minimum.

A unique feature of the Receive jack is that you can practice along with pre-recorded music. To do this, insert a tape recorder or other sound source into the Receive jack (make sure it is a mono source). Using the Effects Blend control on the Super Redhead's front panel, adjust the level of the outside source so that a good blend is achieved with the sound level of your instrument.

The blended signal can be heard through the internal speakers or through the Headphone jack. This same procedure can be used for playing along with a drum machine, sequencer, etc.

Note: Inserting a plug into the Receive jack activates the Effects Blend control. The Effects Blend control "receives" this command through the ground created when inserting a 1/4" plug into the Receive jack. Therefore, best results will only be obtained by using a mono phone plug. If you must use a stereo plug, connect it by pushing in to the first "click" only.

If you are not hearing any effect through your speakers, check the position of the Effects Blend control on the front panel.

#### FAN ON/OFF SWITCH

In the "On" position, the Fan On/Off switch activates the internal cooling fan when the internal heatsink reaches approximately 55 degrees C. The fan will shut off when the heatsink has cooled down to about 45 degrees C. This action is controlled by an internal thermal switch located on the heatsink.

The "Off" (or Defeat) position prevents the cooling fan from being operational. SWR recommends that this position be used ONLY in situations where normal fan noise might be audible and therefore problematic—such as when miking the internal speakers in a recording situation. If you decide to defeat the fan for extended periods of time, we recommend that you turn it back on and allow it to run between songs, sets, etc. This way, the fan will be doing its job and will extend the life of the internal components. Double check the position of this switch each time you use your Super Redhead. Continuous use of the Super Redhead at loud volumes without use of the fan can cause the power amp to overheat and possibly fail.

Note: If you hear the fan operating after use, we recommend that you allow the fan to run until it turns itself off, prior to turning off the Power switch.

#### HIGH FREQUENCY ATTENUATOR

The High Frequency Attenuator adjusts the amount of high frequency heard through the horn/tweeter. Turning the Attenuator control clockwise increases the signal; turning the Attenuator control counter-clockwise decreases the signal. In the full counter-clockwise position, no signal will be heard through the horn/tweeter. Recommended position for the High Frequency Attenuator is anywhere between 9:00 and 12:00 depending on your taste.

Note: Any clipping or unwanted distortion will be accentuated through the horn/tweeter. We have found that players using an especially "hard" technique to strike the strings can cause the strings to come in contact with the bass's pickup and result in sharp spikes. If the clip indicators are not lit and you hear distortion coming from the horn/tweeter, try playing a little "softer." Also, if using a bass with active electronics, check the battery.

#### INTERNAL SPEAKER CABLE

If you intend to use the Super Redhead's internal speakers, make sure the speaker cable from the chassis to the input jack is properly connected. Switching the internal speakers off via the Speaker On/Off switch on the front panel will not harm the amplifier in any way.

#### EXTENSION SPEAKER JACK

The Extension Speaker jack is provided for connecting an external speaker enclosure. Adding an external speaker cabinet will increase the overall volume of your system and give you a "fuller" sound. When using an external speaker, make sure the total impedance of any external speaker enclosure(s) is no less than 4 ohms (the Super Redhead is designed to drive a minimum impedance of no less than 2 ohms). In most cases, we recommend the use of a single 8 ohm extension speaker.

Recommended SWR extension speakers for the Super Redhead include the following models:

- SWR Goliath III (4x10)
- SWR Goliath Junior III (2x10) (8 ohm version)

- SWR Son of Bertha (1X15)
- SWR Big Ben Subwoofer (1x18)
- SWR Workingman's 4X10T
- SWR Workingman's 2X10T
- SWR Workingman's 1X15T

Note: The Speaker On/Off switch does not affect the Extension Speaker jack.

#### SPEAKER CABLE

For all speaker connections, we recommend the use of high quality speaker cable that is at least 18 gauge or heavier (the lower the gauge, the heavier the cable).

Note: Do not use shielded instrument cable to connect an external speaker enclosure. Doing so can result in intermittent power loss, cause your amplifier to oscillate and damage itself (and/or your speakers), and render the cable useless for any purpose.

#### SPEAKER AND HORN FUSES

These fuses are provided for protection of the Super Redhead's internal speakers and horn/tweeter in the unlikely event of a power amp failure (or vice-versa). The fuses can also blow due to improper connections, shorted speaker cable, or playing while connecting or disconnecting speaker cabinets.

Correct size and rating of the speaker fuse is 3AG, 10 amp, fast-blo.

Correct size and rating of the horn fuse is 3AG, 3 amp, fast-blo.

Note: Do not defeat the purpose of this feature by using a fuse with a higher rating.

#### LINE FUSE

The Line Fuse will open (blow) if an internal problem exists with the electronics or in the event of a power surge or high power line transients.

Correct US size and rating: 3AG, 7 amp, slo-blo (for 120 volt operation).

Correct European size and rating: 3AG, 4 amp, slo-blo (for 220/240 volt operation).

Note: Do not defeat the purpose of this feature by using a fuse with a higher rating.

#### AC CONVENIENCE OUTLET

Any electronic device that operates on 120 volts, 60Hz and draws less than 3 amps or 360 watts may be plugged into the convenience outlet. This outlet is especially useful for powering units housed in the internal rack space such as multi-effects or rack tuners.

It should be noted that some appliances such as fluorescent lights can cause interferenceor noise to be induced in the Super Redhead.

#### SPECIAL FEATURES

#### FRONT COVER/ANGLE STAND

The Super Redhead's front cover was designed to serve two main purposes: to protect the electronics

and speakers during transport, and to double as a stand. To use the cover as an angled stand, remove the cover and place it in the desired location (carpet side up). Next, remove the caster wheels from the bottom of the unit and place it carefully on the cover/angle stand. You now have an angled amplification system that still couples the low end to the floor. Since all things have their limits, we do not suggest using the cover/angle stand as a ramp.

#### BUILT-IN RACK SPACE

The single rack space directly below the Super Redhead's chassis is included for your convenience and is designed to accept any standard single rack space unit (19" wide x 1.75" high).

#### REMOVABLE CASTERS

The Super Redhead comes with removable caster wheels for easy transportation. To remove the caster wheels, simply turn the unit on its side and pull them out from the caster sockets. This will be necessary if you plan to use the cover/angle stand during practice or performance.

#### SPRING-LOADED RUBBER-GRIP HANDLES

The handles on either side of the Super Redhead were chosen for their "rattle free" properties and the extra-thick rubber padded grips. The handle placement allows for near perfect balance (meaning the unit should not tilt forward or backward when carried).

#### THE TOP

Almost every musician we talked to told us that at some time or another they were going to end up sitting on the amp. With this in mind, we would like you to know that we spent a great deal of time and effort to remove all mounting screws, vents and other obstacles from the top of the combo and covered it with carpet just to make these times more comfortable for you. Enjoy.

#### REGARDING COMBO AMPLIFIERS

The SWR Super Redhead has been designed with a robust 350-watt power amp, capable of driving its own speaker complement as well as cleanly driving an extension cabinet. When used by itself, a large amount of headroom is available in the Super Redhead's power amp, which provides two important benefits: 1) A cleaner signal and better sound; 2) A power amp that operates at lower temperature, thereby prolonging component life.

However, because "combo" amplifiers such as the Super Redhead are designed as "all-in-one," self-contained units (i.e., incorporating both power and speaker sections), some players are under the impression that they should be able to turn all controls to maximum without fear of speaker damage, distortion, etc. This is simply not the case. The Super Redhead will not overpower its internal speaker section when run properly and in accordance with the operating instructions in this manual. However, damage to the internal drivers may occur if the amplifier section is driven into clipping for long periods of time. Please be aware of this possibility and turn down your Master Volume control if you hear distortion or notice that the Power Amp Clip LED is constantly lighting during operation.

#### LIMITED WARRANTY

The **SUPER REDHEAD** from FMIC is warranted to the original consumer purchaser for TWO YEARS from the date of purchase, against defects in materials and workmanship and provided that it is purchased from an Authorized SWR Dealer. This warranty applies only to products purchased in the USA or Canada.

This warranty is VOID if the unit has been damaged due to accident, improper handling, installation or operation, shipping damage, abuse or misuse, unauthorized repair or attempted repair, or if the serial number has been defaced or removed. FMIC reserves the right to make such determination on the basis of inspection by an Authorized FMIC Service Center.

All liability for any incidental or consequential damages for breach of any expressed or implied warranties is disclaimed and excluded herefrom.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so that the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

## SHOULD YOUR SWR AMPLIFIER REQUIRE SERVICE OR REPAIR, PLEASE USE THE FOLLOWING PROCEDURE:

- 1 Locate your original receipt showing date of purchase, model and serial number.
- 2 Determine the closest Authorized FMIC Service Center to your location. The fastest way to get a complete list of Authorized FMIC Service Centers is on the web, at:

http://www.mrgearhead.com/fag/allservice.html

You can also get this information by calling FMIC Consumer Relations at (480) 596-7195.

- To receive warranty service, return the complete product to an Authorized FMIC Electronics Service Center, with proof of purchase, during the applicable warranty period. Transportation costs are not included in this Limited Warranty.
- Defective products that qualify for coverage under this warranty will be repaired or replaced, at FMIC's discretion, with a like or comparable product, without charge.

For a complete list of Authorized FMIC Service Centers

– and to learn more about SWR products and artists –

point your browser at:

swrsound.com

#### IMPORTANT SAFETY INSTRUCTIONS

### CAUTION: TO REDUCE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER OR BACK. NO USER-SERVICEABLE PARTS INSIDE. PLEASE REFER TO A QUALIFIED SERVICE TECHNICIAN.

- A. Read Instructions: All safety and operation instructions should be read before the product is operated.
- **B. Retain Instructions:** The safety and operating instructions should be retained for future reference.
- C. Heed Warnings: All of the warnings on this product and in the operating instructions should be adhered to.
- **D. Follow Instructions:** All operating and use instructions should be followed.
- **E. Cleaning:** Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a slightly damp cloth for cleaning.
- F. Water and Moisture: Do not use this product near water; for example, near a swimming pool, wet basement, and the like.
- **G. Accessories:** Do not place this product on an unstable cart, stand, tripod, bracket or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product.
- **H. Ventilation:** Slots and openings in the unit are provided for ventilation and to ensure reliable operation of the product, to protect it from overheating, thus these openings must not be blocked or covered. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
- **I. Grounding:** This product is equipped with a three-wire grounding-type plug, a plug having a third (grounding) pin. This plug will only fit into a grounding-type power outlet. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the grounding-type plug.
- **J. Power Cord Protection:** Power supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon them, paying particular attention to cords at plugs and the point where they exit the product.
- **K. Lightning:** For added protection of this product during a lightning storm or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.
- L. Overloading: Do not overload wall outlets or extension cords as this can result in a risk of fire or electric shock.
- **M. Object and Liquid Entry:** Never push objects of any kind into this product through the openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- **N. Servicing:** Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.
- **O. Damage Requiring Service:** Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
  - 1) When the power supply cord has been damaged
  - 2) If liquid has been spilled or objects have fallen into the product
  - 3) If the product has been exposed to rain, water, or other conductive liquids
  - 4) If the product does not operate normally by following the operating instructions
  - 5) If the product has been dropped or damaged in any way
  - 6) When the product exhibits a distinct change in performance.
- **P. Replacement Parts:** When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- **Q. Safety Check:** Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- **R. Heat:** The product should be situated away from heat sources such as radiators, heat registers, stoves or other products that produce heat.

# Learn more about SWR products and artists by pointing your browser to:

## swrsound.com



**SWR** 

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