

Redhead (Original 240 watt version)

Please Note: The Redhead is no longer in production (it was upgraded in 1996). The text below is provided for the convenience of SWR users who purchased this model on the used market.

CONGRATULATIONS!

THE SWR BASS AMPLIFIER YOU HAVE JUST PURCHASED HAS OUR NEW UPDATED POWER SUPPLY! IT INVOLVES A MULTI-PRIMARY TRANSFORMER THAT ENABLES YOU TO USE YOUR UNIT VIRTUALLY ANYWHERE IN THE WORLD. THE NEW SUPPLY WILL WORK ON 100 VOLTS, 120 VOLTS, 220 VOLTS, AND 240 VOLTS. ALL THAT IS NEEDED IS A SIMPLE WIRING CHANGE TO CORRESPOND TO THE COUNTRY THAT YOU WILL BE VISITING. THIS MODIFICATION CAN BE DONE BY ANY COMPETENT TECHNICIAN. FOR MORE INFORMATION AND/OR INSTRUCTIONS, JUST WRITE OR GIVE US A CALL.

FRONT PANEL FEATURES

TUNER INPUT: The Tuner Input allows the user to plug their instrument tuner into this jack 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 on a side chain (isolated) also avoids loading down of the instrument causing a loss in dynamic range.

To use this feature, plug in a shielded patch cord from the Tuner Input to the input on your tuner. Turn the amplifier on and you're ready to go. If you do not wish to monitor your sound during tuning, you may either turn the Master Volume off or turn the Speaker On/Off switch to the Off position.

INPUT JACKS

PASSIVE/ACTIVE: This input can and should be used if your instrument has passive electronics (no built-in preamp). Some pickups such as EMG, etc. employ batteries for operation and will work perfectly using the Passive/Active input. Generally speaking, this input should be used if your instrument will put out a maximum of 1 volt RMS or LESS. Consult your owners manual or ask the manufacturer if you are unsure.

NOTE: If you hear a small amount of distortion and neither the Preamp Clip LED or Power Amp clip LED are activated, try using the Active input jack. Also, some built-in preamps such as used by Tobias Guitars can be used in the Passive/Active input.

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 having a built-in (on-board) preamp that will put out signals over 1 Volt RMS. Known basses that should use the Active input only are Kubicki X-Factor and Ovation Electrics. Some really "hot" pickups installed in your instrument may find the Active input more compatible. The best judge is your own ears.

NOTE: The input impedance in the Active input jack is 82K Ohms. Using the Active input on passive basses (active instruments will always employ a battery) may result in a loss in high-end transients. Players who roll off their high end starting at about 2K to 3K Hz may find this input more to their liking.

If you hear some distortion on your active bass and are using the Active input jack, check your battery! Also, make sure none of the overload indicators on the Redhead are lit.

PREAMP CLIP LED:

The preamp clip led will become lit whenever the preamp, tone section or output buffer reach clipping (run out of headroom). The function does NOT monitor the first tube stage of the Passive/Active input jack (see that section for more info). In the event this occurs, turn down your Gain Control. Since the Preamp Clip LED also monitors the tone section, boosting any one of the tone controls can cause the LED to activate. As already stated, turning down the Gain Control will correct the situation.

NOTE: CONSTANT CLIPPING OF THE PREAMP WILL NOT HARM THE ELECTRONICS IN YOUR REDHEAD, HOWEVER, DAMAGE MAY RESULT TO THE SPEAKERS 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. Adjust the Master Volume to desired volume level. Since the Gain Control is similar to a "Pad" a small amount of signal will get through with the Gain Control rotated fully counter-clockwise. Utilizing these controls in this manner assures the user of maximum signal to noise ratio with no distortion caused by the preamp circuits clipping.

AURAL ENHANCER:

The 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. This effect becomes more radical as the control is turned to maximum. The result is a more transparent sound and is especially noticeable with a slap style technique of playing.

BASS CONTROL:

The Bass Control cuts or boosts the lower or bass frequencies. Starting at mid-position, turning the control counter clockwise cuts the bass response and 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 30 cycles (low B on a five 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 LED's. Constant clipping of these frequencies can diminish the life of the speakers or cause them to fail!

MID RANGE SECTION

LEVEL:

The Level control cuts or boosts the frequency set by the Frequency control a maximum of + or - 15db. Starting at mid-position, turning the Level control counter-clockwise cuts the desired frequency. Turning the Level control clockwise boosts the frequency set by the Frequency control. With the Level control set at mid-position, turning the Frequency control will have NO affect on the sound.

It is suggested that to find the midrange area you are looking for:

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

FREQUENCY:

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

Some hints: If you need to "cut through" the band a little more, try boosting 200 to 400 Hz. If you like a more transparent sound, try cutting 800 cycles. The midrange area is especially useful in controlling fretless basses and their inherent qualities.

TREBLE:

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

PULL SHIFT FUNCTION:

In the normal (in) position, the shelving point of the treble control is approximately 2k Hz. By pulling the knob outward, the shelving point is changed to 4k Hz. By changing the shelving point to 4K Hz, you will essentially be controlling the output of the tweeter. This is because the built in crossover incorporated in the Redhead has a turnover point of 4K Hz. The end result should be a clearer, more transparent sound.

MASTER VOLUME:

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 or runs out of headroom. Although no harm will come to the electronics due to the power amp clipping, continual clipping of the power amp will shorten the life of the internal speakers and could cause them to fail. Turn the Master Volume down to correct the situation.

RECORD/LINE OUTS

UNBALANCED OUT:

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 or volume is adjustable by the XLR Pad and all front panel controls are functional (affect the sound or level). In the Direct position, the front panel controls do not affect the signal and once again, the level or volume is set by the XLR Pad.

Output impedance of the unbalanced out is 1.5K Ohms.

BALANCED XLR OUT:

The Balanced XLR out is a true balanced output whose level is set by the XLR Pad. The signal appearing at the XLR out is governed 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 that is 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. Of course, 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, just pull the knob outward until it clicks.

If a persistent hum still exists after lifting the ground, there is probably a problem with the AC wiring or just a dirty AC line.

If this is the case, we suggest using an isolation transformer between the Redhead and the wall socket.

Wiring for the XLR connector is as follows:

Pin 1 = ground, Pin 2 = +, Pin 3 = -

(American Standard)

XLR PAD:

To pad or adjust the level of BOTH the balanced and unbalanced record outs, use the XLR Pad. Rotating the control clockwise raises these levels.

The XLR Pad has a built-in ground lift for the Balanced out. Pulling the knob outward lifts the ground (pin 1).

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.

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 in the desired location. Make sure the switch is all the way to the left or right to avoid intermittents.

NOTE: Turn off transients appear at the record outs when the amplifier is turned off. It is recommended that equipment that is being used in conjunction with the record outs be turned down, off, or disconnected BEFORE the Redhead is turned off.

EFFECTS BLEND CONTROL

The Effects Blend control allows the user to mix their normal (raw or dry) signal with the signal coming from an effect when the effect is used in the EFFECTS LOOP on the back 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 feature allows the user to monitor their sound via the use of stereo headphones. "Silent" practicing can be achieved by turning the speaker ON/OFF switch to the off position and using the headphones only. Stereo headphones must be used in this jack. 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.

SPEAKER ON/OFF SWITCH

Turning the 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 internal speakers in your Redhead.

This feature allows the user to:

1. Use the record out system without using the internal speakers. This is especially useful when you are done "miking" the speakers and only a direct signal is needed.
2. Practice in a quiet environment without disturbing your neighbors by using headphones only.
3. Tune up without interfering with other band members while using the TUNER feature.

This feature DOES NOT AFFECT the external speaker outlet.

POWER ON/OFF SWITCH

Turning the switch to the ON position turns the Redhead on as indicated by the green LED lighting.

REAR PANEL FEATURES

EFFECTS LOOP:

The Effects Loop will accept any LINE LEVEL effect such as a chorus, etc. Many high quality effects on the market have input level adjustments. For instance, some units have a switch that you can set for either -20db or +4db. In all cases, these should be set for either 0db or +4db. The level going to your effect is controlled by the Gain Control. The Effects Loop is designed as a "side chain" function and works similar to studio mixers.

Use of this effect loop should greatly reduce the noise heard at the speakers generated by the effect (as compared to using it between your instrument and the input to the Redhead).

SEND:

Run a shielded patch cord from the SEND jack to the INPUT of your effects unit. Output impedance of the Send jack is 100 ohms. This jack may also be used as a line level output to use in conjunction with a slave power amp.

RECEIVE:

Run a shielded patch cord from the RECEIVE jack to the OUTPUT jack of your effects unit.

One unique feature of the receive jack is your ability to practice a part along with pre-recorded music. To accomplish this, insert a tape recorder or other sound source into the Receive jack (make sure it is a mono source). Using the Blend control, adjust the level of recorded music from the Receive jack to the "live" sound of your instrument. The mixed sound will be heard through the internal speakers or, of course, through the Headphones! This is also especially useful for playing along with drum machines, etc.

Input impedance of the Receive jack is 27k Ohms minimum.

NOTE: Inserting a plug into the Receive jack activates the Effects Blend control. The Effects Blend control "receives" this command through the ground created by insertion of the plug in the Receive jack. Therefore, best results can only be obtained by using a mono phone plug. If you have a stereo plug only, tie the ring and the ground together.

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

INTERNAL SPEAKER CORD:

If you intend on using the internal speakers in the Redhead, make sure the speaker cord 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 can be used to plug in a second set of speakers. If you use this feature, make SURE that the impedance of the cabinet that you are plugging in is NOT LESS than 4 ohms. Also, be sure and use a good quality speaker cable that is at least 18 gauge or heavier (the lower the gauge, the heavier the wire).

DO NOT USE INSTRUMENT CABLE FOR HOOKING UP SPEAKER CABINETS!!!

The Speaker ON/OFF switch DOES NOT turn on or off the extension speakers.

SPEAKER FUSE and HORN FUSE:

This feature is provided to protect your speakers and horn from 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 plugging or unplugging 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.

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. Power surges or high power line transients may also cause the line fuse to open.

Correct size and rating of the line fuse is 3AG, 7 AMP SLOW BLO FOR 120 VOLT OPERATION AND 4 AMP SLOW BLO FOR 220/240 VOLT OPERATION.

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, 60 Hz and draws less than 3 amps or 360 watts may be plugged into the convenience outlet.

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

CABINET FEATURES AND SPECIFICATIONS

CABINET CONSTRUCTION:

3/4" 5 ply, Maple construction, waterproof glue

All joints Dado and Rabbet, glued and nailed

Extremely heavy bracing

FINISH:

Black carpeting with stack lock corners

INTERNAL VOLUME:

2.45 cubic feet

TUNING:

Front slot port. Specially designed to eliminate unwanted noise.

POWER HANDLING:

300 Watts RMS continuous program

CROSSOVER:

Third order, 6db rolloff, 18db butterworth high pass 4KHz turnover
The crossover is located inside the Super Redhead's chassis.

SPL:

101 dB SPL @ 1W 1 meter

WOOFER ASSEMBLY:

10" woofer assembly, 2" Hi temp. copper wound high efficiency Kapton voice coil. Massive 60 oz. focussed magnet/150 watts RMS

INPUT:

Stereo phone jack assembly.

WEIGHT:

80 pounds total with cover

GENERAL FEATURES

The overall size of the Redhead is 22 1.2" wide x 21 1/4" high x 16" deep. With the front cover attached the depth is increased to 16 3/4".

FRONT COVER PLATE AND ANGLE STAND

The front cover plate was made to serve two main purposes. The first being to protect the speakers and electronics during transportation, the second is it doubles as a stand. After removing the cover, place it carpet side up in the desired location. Next, remove the casters from the bottom of the Redhead and place the unit on the cover plate. You now have an angled unit that still couples the low end to the floor. Since all things have their limits, we do not suggest using the cover plate for a ramp.

BUILT IN RACK SPACE:

The rack space directly below the Super Redheads electronics has been added for your convenience and should accept any unit taking up ONE rack space (1 3/4").

REMOVABLE CASTERS:

Because of possible rattles, the decision to include casters had only one alternative and that was to make them removable. To remove the casters, simply turn the Redhead on its side and pull them out, You will need to do this when using the angle stand. To avoid losing the casters once removed you may want to put them in your instrument case until needed for transporting.

HANDLES:

The handles on either side of the Redhead were chosen for their rattle free properties and the extra thick padding of the hand grips. You might also note that when the Redhead is picked up on either side, the handles were placed for perfect balance, meaning the unit does not tilt forward or backwards.

THE TOP:

Just about 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 and covered it with carpet just to make these times more comfortable.