

Rosette. ACOUSTIC DI-PREAMP

Owner's Manual

Greetings from the Home of Tone®

... You, smart player and intuitive human, have put your trust in us to be your amplifier company. This is something that we do not take lightly. By choosing this instrument to be part of your musical voice, you have become part of the MESA* family... WELCOME!

Our goal is to never let you down. Your reward is that you are the new owner of an amp, bred of fine heritage, benefitting from the many pioneering and patented MESA circuits as well as fresh cutting edge research and development efforts, leading to this new and exciting model. We feel confident that this amp will inspire many hours of musical satisfaction and lasting enjoyment. It was built with you in mind, by players who know the value of a fine musical instrument and the commitment it takes to make great music. The same commitment to quality, value and support we make to you... our new friend.



Table of Contents

PRECAUTIONS AND SAFETY INSTRUCTIONS	
OVERVIEW	1
TOP PANEL (CONTROLS & FEATURES)	
· · · · · · · · · · · · · · · · · · ·	
INPUT JACK	2
TUNER OUTPUT JACK	
MUTE FOOTSWITCH	
POWER LED	
BOOST FOOTSWITCH	
GAIN CONTROL	
PHASE SWITCH	
BOOST CONTROL	
NOTCH FILTER	
HI-PASS FILTER	
BASS CONTROL	3
LOW & HIGH Sweepable MID BANDS	
TREBLE CONTROL	4
MASTER VOLUME CONTROL	4
REAR PANEL (CONTROLS & FEATURES)	
OPERATING POWER REQUIREMENTS & POWER JACK	4-5
PREAMP OUT XLR JACK	
PREAMP OUT GROUND LIFT SWITCH	
PREAMP OUT ¼" (6.3mm) JACK	
EFFECTS LOOP ¼" (6.3mm) JACKS	
DIRECT OUT XLR JACK	
DIRECT OUT GROUND LIFT SWITCH	 5-6
DI OUT SOURCE SWITCH	
TROUBLESHOOTING	7.0
TROUBLESHOOTINGSPECIFICATIONS	
SPECIFICATIONSBLOCK DIAGRAM	10
DLUCK DIAGRAM	!!

IMPORTANT SAFETY INSTRUCTIONS

- Read, keep and follow these instructions.
- Heed all warnings.
- Do not use this apparatus near water.
- Clean only with dry cloth.
- Use only with approved AC (mains) power adapters.
- Protect any power cords from being walked on or pinched, particularly at plugs, receptacles, and the point where
 they exit from the apparatus.
- Unplug this apparatus during lightning storms or when unused for long periods of time.
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any
 way, such as 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.
- No naked flame sources, such as lighted candles, should be placed on the apparatus.
- The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as drinks or vases, shall be placed on the apparatus.
- **WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- To avoid damaging your speakers and other playback equipment, turn off the power of all related equipment before making the connections.
- Do not use excessive force when handling buttons, switches and controls. Do not use solvents such as benzene or paint thinner to clean the unit.
- Only connect to an AC power supply adapter that meets the power supply specifications listed on the rear of the unit. Make certain grounding/earthing conforms with local standards.



Operating Instructions

Overview

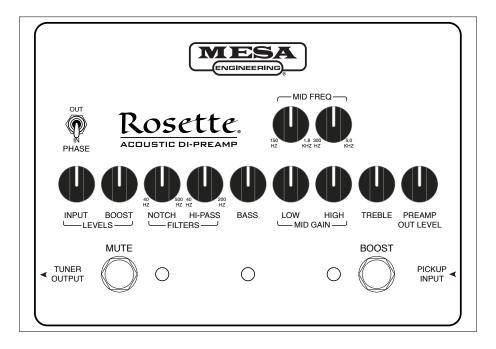
Congratulations on your choice of the ROSETTE® DI-PREAMP and welcome to the MESA/Boogie® family! First, we would like to thank you for choosing us as your amplifier company and trusting us to help create your musical voice. This is something we never take for granted and you'll find that we are here and ready to assist you should you ever need help. Our goal is to help you sound your best at all times! We feel confident that your new pre-amplifier will bring you many years of reliable service, rewarding inspiration and create for you a newfound freedom to express your music. You have chosen an instrument bred of a fine heritage and this model is yet another testament to our legacy of Tone.

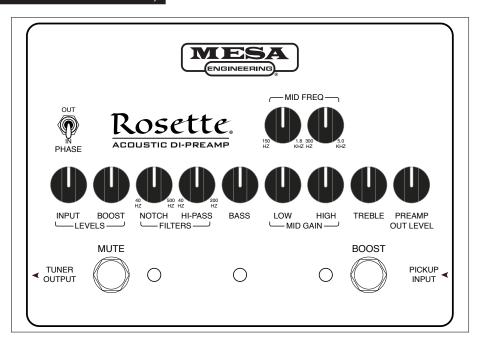
Our goal with the Rosette Series was clear from the start and our commitment to excellence has guided us to what we feel is the FIRST ACCURATE Acoustic DI Preamp/Pedal and, the Rosette 300 Watt 2x8 Combo Amplifier.

In Rosette, we opted for architecture straight from high-end recording console designs. We developed Input stages that were not the typical, compromised dual-purpose circuits fed by universal XLR+1/4" combo jacks found on many acoustic amplifiers in the marketplace. Instead, we chose dedicated, time-tested designs, proven over decades of great recordings, to deliver the uncompromised, accurate truth.

This dedicated acoustic instrument Preamp and DI platform was initially designed for acoustic guitars, but it is also a great choice for mandolin, ukulele, violin/fiddle, dulcimer, cello, upright bass and other varied acoustic instruments. Not only does The Rosette DI Preamp include a rich feature set suitable for the professional gigging player, but it also includes touring-grade, Line Level Balanced Preamp Output and a studio-quality Mic Level Balanced DIRECT Output.

The ROSETTE DI Preamp and 2x8 Combo represent the new frontier in the MESA/Boogie's amplifier bloodline. This tone-infused powerhouse pedal is both compact and light-weight, yet built to go the distance with the features and control necessary to continue the legacy that was started almost 50 years ago in that shack in the redwoods above Lagunitas, California. All MESA amplifiers and products, like Rosette, are handcrafted in Petaluma, California using the Finest Materials from Around the World.





This jack (located on the right side of the chassis) is the PICKUP INPUT that feeds the first stage monolithic J-FET buffer amp of the ROSETTE® DI-PREAMP. The input sensitivity of this input buffer amp is compatible with all common pickup levels and impedances (input impedance is approx. 1M ohms). When a 1/4" (6.3mm) plug is inserted into the jack, the power is automatically turned on, but please note that it is important for the 1/4" (6.3mm) plug to be of the TIP-SLEEVE type as TIP-RING-SLEEVE types may not engage the power-on circuit properly. It is always good practice (and customary) to inform the FOH/monitor engineer that you will be turning your DI on or off so as to prevent any pops or unexpected signal into their system(s).

TUNER OUTPUT JACK

This jack (located on the left side of the chassis) is the TUNER OUTPUT. This signal is fully buffered and is not muted when the mute footswitch is engaged to allow for "silent" tuning without sending signal to the PA, stage speakers or recording devices.

MUTE FOOTSWITCH

This footswitch mutes the audio signal being sent to the DIRECT OUTPUT, FX SEND and PREAMP OUTPUT for silent tuning with a tuner connected to the TUNER OUTPUT jack, or just to mute a guitar at any time. There is a red LED indicator that illuminates when the DI-PREAMP is in MUTE mode.

POWER LED This blue LED indicates that the DI-PREAMP is connected to a power source and is switched on, operating correctly.

BOOST FOOTSWITCH This footswitch engages the boost (or solo) function. The amount of boost is set by using the BOOST control on the top of the DI-PREAMP. There is a green LED indicator that illuminates when the DI-PREAMP is in BOOST mode.

INPUT (GAIN) This control determines the INPUT GAIN of the first gain stage in the Rosette DI Pre and, ultimately, sets the level at which the following electronics stages operate. There is considerable headroom built into this stage to accommodate most reasonable gain structures, though it is possible to overdrive the INPUT with some pickups by using extreme settings and/or an aggressive playing style. If this occurs, increase the MASTER volume control and decrease the INPUT control.

PHASE SWITCH This switch sets the PHASE (or polarity) of the Rosette DI Pre to all outputs except the tuner output. Depending on how your instrument's pick-up/microphone is wired, it can be either in PHASE or out of PHASE (there is no way to tell by looking at it). Under some conditions, if the signal from your instrument and the signal from the speaker are of the same polarity, feedback can become an issue. Set this switch to the position that produces the minimum tendency for feedback before attempting to use the HI-PASS, NOTCH FILTER or EQ for feedback issues.

This control sets the amount of BOOST (or Solo) level applied when the BOOST FOOTSWITCH is engaged. Fully counterclockwise there is almost no gain increase, and fully clockwise there is about 6dB gain increase applied to the original level.

NOTCH FILTER

This control sets the frequency point where a narrow notch (cut) in the response is positioned. This filter is used to remove feedback caused by excessive resonance from the body of the acoustic instrument by decreasing the amount of energy amplified within that resonant band. If low or low mid frequency resonance/feedback is encountered (more common at higher volumes), slowly rotate clockwise (from 7:00/off) until the resonance drops out or diminishes greatly in volume. Generally, this control would be used after the HI-PASS FILTER control has been set. The sweep range of the notch is from 40Hz to 500Hz. Set at the 40Hz position the filter is effectively bypassed/off.

This control is an important feature in establishing control over the extreme low frequency response, especially under higher volume conditions. This precision 2-pole variable frequency filter has a turnover frequency that sweeps from 40Hz – 200Hz with a smooth, minimum-ripple response. While HPF's have been standard fare within the pro audio industry for decades, this feature has only recently begun to appear in acoustic instrument and bass amplifiers within the past few years (with a few notable exceptions). This variable filter helps you coordinate the sub-sonic harmonics generated by the acoustic cavity of larger instruments (like cello, mando-cello, upright bass, viola, jumbo guitars and even some dreadnought guitars). Starting with the control fully counterclockwise, plug in your instrument and slowly increase the INPUT until you hear the very beginning of low frequency feedback (don't let it run away into excessive feedback, of course). At this point, rotate the HI-PASS FILTER control clockwise until this low frequency ring is no longer a problem. As a tone enhancement feature, if your instrument feels heavy or "woofy" on the low end, try rotating this control clockwise until you hear adequate improvement before attempting to adjust the BASS EQ. Experimentation and practice is key with this approach and it can be a musician's best kept secret to getting great Tone in many different musical applications – live performance, recording, and mixing especially.

BASS

This active EQ control is responsible for the amount of low frequencies present in the signal, relative to the rest of the spectrum. Low frequencies (150Hz and below) are responsible for the bottom-end, roundness, fullness and "feel" of the tone. These are an active controls with boost and cut, the amount of boost proportional to the clockwise rotation to the right of "flat" (12:00 straight up) position and the amount of cut proportional to the counter-clockwise rotation to the left of "flat" (12:00 straight up) position. As with everything related to EQ, generally, a little bit goes a long way. Use enough to get the job done and no more. Note that if you are experiencing low frequency woofiness, or tubbiness, try turning this control down a little bit. This is a shelving style filter. It will be helpful to first fine tune the response with the variable HI-PASS FILTER before using the BASS EQ control, as often a combination of the BASS EQ and HI-PASS FILTER is more effective than applying only one of these low frequency controls.

LOW & HIGH Sweepable MID BANDS These Active EQ controls are responsible for the amount of LOW and HIGH MIDRANGE frequencies present in the signal, relative to the rest of the spectrum. Like all semi-parametric tone controls, they are comprised of the GAIN control that determines either a cut or a boost of the selected Frequency range from a 12:00 "flat" (neither cut or boost) setting, and a FREQUENCY control that allows selection of the frequency you wish to control within a wide and adjustable range.

SUBTRACT FOR TONE! SETTING THE SWEEPABLE MIDS

Recording and live sound engineers have long known that, when searching for a great sound, removing what you don't want works far better than boosting what you find pleasing to achieve a balanced sound. This method reduces noise floor, avoids clipping and produces better overall results than trying to boost frequencies. Don't frustrate yourself by ignoring this time-proven Golden Rule of Audio and you will arrive at great Tone quickly and easily.

LOW MID BAND: With the BASS set at 10:00 and the TREBLE set at 11:00, set both LOW and HIGH MID FREQUENCY Controls all at NOON. Increase the LOW MID GAIN to 2:00 and sweep the LOW MID FREQUENCY back and forth from 12:00 until you hear a frequency you do not like and stop there. Then, reduce the LOW MID GAIN until you reach a desired blend, keeping in mind you do not want to remove too much of that frequency, or the sound will be unnatural.

HIGH MID BAND: Repeat the same procedure with the HIGH MID FREQUENCY Control; Increase the HIGH MID GAIN to 2:00, sweep the HIGH MID FREQUENCY back and forth from 12:00 until you hear a frequency you do not like and stop there. Then, reduce

the HIGH MID GAIN until you reach a desired blend, keeping in mind not to remove too much of that frequency, or the sound will be unnatural. Usually a MID GAIN setting of 11:00, sometimes as low as 10:00, should remove enough of the unwanted frequencies. LOW MID FREQUENCY provides control over frequencies between 150Hz and 1800Hz and these regions are responsible for the "earthy" or "woody" character of the tone. HIGH MID FREQUENCY gives you a range of frequencies between 300Hz and 5000Hz to work with and these frequencies are responsible for the "attack" or "biting" character of the tone. These are Active controls with boost and cut controlled by the LOW MID GAIN and HIGH MID GAIN controls, the amount of boost proportional to the clockwise rotation to the right of "flat" (12:00 straight up) position and the amount of cut proportional to the counter-clockwise rotation to the left of "flat" (12:00 straight up) position.

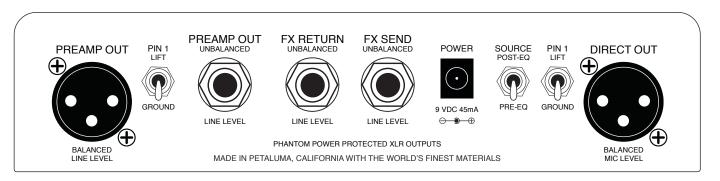
NOTE: Keep in mind that with the GAIN control in the "flat" (12:00) position, there will be no difference heard when sweeping the corresponding FREQ control to that because there is no cut or boost being applied in that band.

This style of control is referred to as a peak-dip (or bell) style filter. Here in the Rosette DI Pre, the pair that comprises the MID controls offers accuracy and flexibility only found on fully professional recording or live sound mixing consoles. It may take a minute to become familiar with the level of control and power they provide in shaping your sound, but if you start with the basic procedure outlined above, you'll be dialing in great tones for all your instruments with ease and confidence before you know it.

TREBLE
This active EQ control is responsible for the amount of high frequencies present in the signal, relative to the rest of the spectrum. High frequencies above 5kHz are represented here and these are associated with the "bright", "airy", "shimmery" character of the tone. This is also an Active control with boost and cut style power, the amount of boost proportional to the clockwise rotation to the right of the "flat" (12:00 straight up) position and the amount of cut proportional to the counter-clockwise rotation to the left of the "flat" (12:00 straight up) position. If the sound is perceived as too bright, thin or brittle, try turning this control down a bit. This is a shelving style filter meaning that the frequency range covered is a bit broader and it is fixed rather than adjustable like the HIGH and LOW MID Band semi-parametric style controls.

This control is responsible for the overall level of signal being sent to the PREAMP OUTPUTS, and determines the overall playing volume of the ROSETTE® DI-PREAMP. Using the MASTER control along with the INPUT (GAIN) control allows the optimal control over playing volume. For example, if you are using an instrument with a very high output level, it will be likely be necessary to adjust the INPUT control a little lower and maybe the MASTER VOLUME control a little higher to obtain a reasonable playing volume and to avoid overdriving of the input. Likewise, if you have an instrument with very low output level, it will be necessary to turn the INPUT control up higher and maybe use a lower MASTER VOLUME control setting to obtain the desired playing volume.

REAR PANEL (CONTROLS & FEATURES)



OPERATING POWER REQUIREMENTS & POWER JACK

The ROSETTE® DI-PREAMP is designed to operate from either its internal 9 volt battery (alkaline is recommended), or from any standard 9VDC center "-" (minus) power supply using a standard 2.1mm center pin and 5.5mm outside barrel. The internal battery may remain in place as there is circuitry present that will automatically select the external DC power supply when present. The internal battery is accessed by removing the cover from the battery box, located on the bottom of the unit. The internal circuitry is protected against accidental battery and external power supply

reversed polarity connection attempts. Current requirements of the DI-PREAMP are less than 20mA, resulting in an expected battery life of about 15-25 hours depending on the type and quality of battery used. While the Rosette DI PRE itself is tolerant of noise from outside power supplies, inadvertent ground loops can be created between pedals generating noise between each other. In the event that noise is encountered, start with powering and connecting the DI-Preamp first, then add pedals noting which pedal is responsible for introducing the noise.

PREAMP OUT XLR JACK

This output jack is fully balanced and can deliver a +4dBu (Line Level) with a maximum output level of about +12dBu. The XLR PPREAMP OUT offers plenty of signal to drive any of the standard pro audio power amplifiers or powered monitors on the market today and this is its primary function. The Rosette DI Pre can be incredibly compact and handy as your advanced acoustic instrument Tone control device by plugging in to any standard powered monitor or power amp and speaker enclosure. The signal is derived after all voicing and EQ filters as well as after the MASTER volume control. It is also fully phantom power protected, in the event of accidental connection to an input that has phantom power present.

PREAMP OUT GROUND LIFT SWITCH

This switch connects or lifts the circuit ground/earth/common connection from Pin 1 on the XLR PREAMP OUT connector only. Balanced Outputs do not rely on the Pin 1 or Shield connection to transmit signal to the amplifier. While Pin 1 is almost always connected to amplifier's ground bus, often (due to differences in potential of a building's ground/earth system) currents will flow between grounds if there is a common connection, resulting in hum. By lifting the ground at the sending (preamp) end, this allows the shielding to remain in place while breaking the ground current flow that is the cause for inducing hum into the signal carrying pair of conductors. Now, the one thing that complicates this is that at very high (radio) frequencies, ground is not "really" ground, so additional techniques are incorporated within this network that allows 2 functional grounding spectrums within the same network, providing added RFI (radio frequency interference) rejection. The general rule is to start with Pin 1 lifted, and if there is noise, then try connecting it. It should also be noted that there are a lot of other possible causes for noise, this switch is a solution for ground loop noise between the preamp and the power amp.

PREAMP OUT 1/4" (6.3mm) JACK

This output jack is unbalanced and can deliver a +4dBu (line level) with a maximum output level of about +6dBu, enough to drive any of the standard MI type power amplifiers Inputs on the market today, including all amplifier Input jacks, power amp Input jacks, and FX Return power section inputs. While this output is phantom power protected, it is unlikely that phantom power is ever encountered on a 1/4" (6.3mm) input as this violates industry standards.

FX (Effects) LOOP ¼" (6.3mm) JACK

A serial (series) FX LOOP is provided (FX SEND and FX RETURN jacks) for connecting both Line Level outboard effects devices and pedals such as compressors, and parallel outboard devices and pedals such as delays, reverbs, harmonizers and octavers, etc. by using the wet-dry mix control on the outboard device. This loop is located right before the MASTER volume control. The FX LOOP's RETURN jack contains a "normal switch" that interrupts the signal whenever a plug is inserted into the RETURN jack, and automatically bypasses the FX LOOP when the plug is removed. Because of this, the FX SEND jack may be used as another post-EQ, pre-MASTER volume Output.

DIRECT OUT XLR JACK

A feature that sets the Rosette DI Pre apart from the rest of the market is the studio grade XLR (male) Balanced Direct Output. This high-quality, professional-grade output is capable of driving balanced analog lines as long as 500 feet, are fully phantom power protected, are noise resistant and stability compensated for reliable, high quality signal transmission to either Stage Monitor and/or Front Of House and Recording consoles. These outputs follow the Pro Audio standards of pin 2=non-inverting, pin 3=inverting and pin 1=ground. Every known console in the world follows this wiring standard, so interfacing will be consistent and reliable no matter where you roam with your amplifier.

This fully featured, great sounding DI Section separates the Rosette Pre as a fully professional performance tool that will shine in any environment you put it in, in any size venue – from Club to Concert Stage to Studio.

DIRECT OUT GROUND LIFT SWITCH

1 on the XLR DIRECT OUT connector only. Balanced outputs do not rely on the Pin 1 or Shield connection to transmit signal to the audio console. While Pin 1 is always connected to console's ground bus, often (due to differences in potential of a building's ground/earth system) currents will flow between grounds if there is a common connection resulting in hum. By lifting the ground at the send-

ing (preamp) end, this allows the shielding to remain in place while breaking the ground current flow that is the cause for inducing hum into the signal carrying pair of conductors. One thing that complicates this is that at very high (radio) frequencies, ground is not "really" ground, so additional techniques are incorporated within this network that allows 2 functional grounding spectrums within the same network, providing added RFI (radio frequency interference) rejection. The general rule is to start with Pin 1 lifted, and if there is noise, then try connecting it. It should also be noted that there are a lot of other possible causes for noise, this switch is a solution for ground loop noise between the preamp and the console.

This switch selects the signal source routing that is used to derive the DIRECT Output signal. In the PRE position, the signal is sourced directly from the input buffer (pre GAIN control), so the ROSETTE INPUT (GAIN) and EQ settings will have no effect on the instrument's sound. In the POST setting, the signal is sourced from the output of the 4-Band Equalizer section and before the MASTER volume control. Generally, for live PA use the FOH (Front Of House) engineer will probably prefer a PRE-EQ signal because the capability of his PA system and the venue needs may be significantly different than the stage rig and the EQ that pleases you on stage may not work on the bigger system in the venue's larger acoustic space. For Recording, depending on the tracking goals of the engineer and sound desired, PRE or POST might be used.

Enjoy your new Preamp!

That wraps it up for the Controls and Features of your Rosette DI Preamp. Exercise a little patience the first couple weeks of ownership and learn the controls. You will be well rewarded for your time spent with years of enjoyable performance.

Thank you for your support and for trusting us to be your Amplifier Company. We never take it for granted and we wish you countless hours of fun, inspiration and enjoyment from your new instrument. Feel free to reach out to us anytime you may need assistance. We're always glad to hear from you!

From the Entire MESA/Boogie Family. Welcome and Enjoy!

TROUBLESHOOTING

In the event that your DI-PREAMP appears not to work correctly, often enough the problem is not with the PREAMP-DI, but a related piece of equipment that it's necessary to take a deliberate, systematic approach to troubleshooting in order to effectively identify and correct the problem. Yes, believe it or not, we have seen all of these things (and more) many times.

SYMPTOM

NO AUDIO OUTPUT

Is the power LED lit?

NO: Possible causes to check in this order are:

- 1. Verify that the power source is good (if using an external AC powered power supply).
- 2. If you are using an external supply, verify that it's the correct voltage and polarity and that it's actually plugged into the power source. Also check to be sure it is functioning correctly.
- 3. If you are using the internal battery, be sure that it is a good battery (i.e. fully charged) and that it's actually present (yes, this really does happen)
- 4. Verify that the input cable you are using is a standard ¼" (6.3mm) TIP-SLEEVE type. TIP-RING-SLEEVE type cables may fail to turn the unit on under conditions where the ring floats or is not solidly connected to sleeve at the other end.
- 5. If these do not solve your problem, it's possible that your DI-PREAMP has failed. Call our Customer Service department and we will help you get this resolved.

YES: Possible causes to check in this order are:

- GAIN and MASTER VOLUME controls must be turned up for the PREAMP OUTPUTS to work.
- 2. When using the PREAMP OUTPUTS with an external power amp, the power amp's input sensitivity controls must be turned up.
- 3. Defective pickup or cable (test with known good pickup and cable)
- 4. Defective cable to the external device, or defective external device (i.e. console, recording interface)
- 5. There is indeed a problem with your DI-PREAMP. Call our Customer Service department and we will help you get this resolved.

SYMPTOM

DISTORTED AUDIO OUTPUT

- 1. Defective battery in active instrument causing instrument's onboard preamp to distort (replace battery)
- 2. Defective battery in PREAMP-DI causing preamp's electronics to distort (replace battery)
- 3. Slightly intermittent cable in some part of the system (this can be an instrument cable, patch cable or XLR cable)
- 4. Defective or blown speaker(s) in cabinet (test with known good cabinet, repair cabinet as needed)
- 5. There is indeed a problem with your DI-PREAMP. Call our Customer Service and we will help you get this resolved.

SYMPTOM

NOISE (LOW FREQUENCY HUM) IN AUDIO

- Defective instrument cable or problem with instrument wiring. Plug a very short instrument cable into the instrument input (to turn the DI-PREAMP on), if hum is greatly reduced or eliminated, this means that the noise is entering from outside the DI-PREAMP. Try a known good instrument cable and/or instrument).
- 2. If using the XLR outs, try switching the ground lift switch on those in use to eliminate any inadvertent ground loops between connected devices.
- 3. Disconnect audio feeds from the DI-PREAMP to the noisy equipment and see if the noise goes away. If it does not, the noise is being generated or introduced external to the DI-PREAMP.
- 4. If the volume level of the hum changes with position of the instrument (rotating or general movement), the problem may be external stray magnetic field present that is coupling into the pickups, especially single coils. Possible causes are large power transformers located near the performance area. If this occurs when you get close to another instrument amp it may be due to stray field from its power supply. Moving the offending amp further from your pickups is a possible solution as the pickups and the offending amp's field is the issue, not your DI-PREAMP.

SYMPTOM

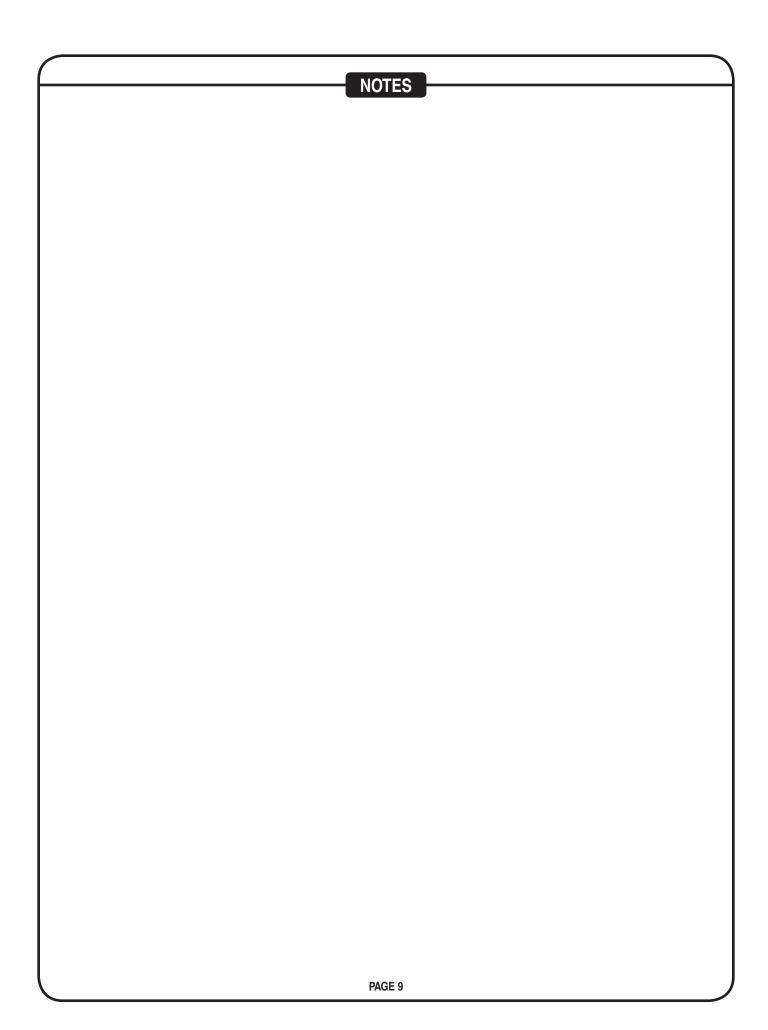
NOISE (HIGH FREQUENCY HISS AND HASH) IN AUDIO

- Defective instrument cable or problem with instrument wiring. Plug a very short instrument cable into the instrument input (to turn the DI-PREAMP on), if hum is greatly reduced or eliminated, this means that the noise is entering from outside the DI-PREAMP. Try a known good instrument cable and/or instrument).
- Defective battery in active bass or DI-PREAMP causing excessive noise (replace battery).
- 3. If there is neon or fluorescent lighting close by, it's possible that EMI (electromagnetic interference) is radiating into the pick-up wiring. Arcing secondary wire on neon lighting or a failing ballast or tube on fluorescent lighting may be radiating EMI into instrument pick-up. Try turning off such lighting to see if noise goes away.
- 4. Disconnect audio feeds from the DI-PREAMP to the noisy equipment and see if the noise goes away. If it does not, the noise is being generated or introduced external to the DI-PREAMP.
- 5. Tweeter turned all the way up in a quiet room, especially if the sensitivity of the tweeter greatly exceeds that of the low frequency drivers. Turn tweeter down is these conditions.

SYMPTOM

NOISE (POPPING) IN AUDIO

- 1. Popping while playing, especially one string. Check instrument set-up to be sure there is adequate clearances between the string and pickup pole pieces.
- 2. Popping while just sitting there, or when touched. Under dry environmental conditions, it's possible that electrostatic discharge is the cause. Try antistatic mat on floor or a humidifier in room.
- 3. Popping while moving cables or connectors indicates that there might be a defect in those cables or connectors. Replace cabling with known good and working cabling.





Specifications

Output Levels:	Preamp Outpo Preamp Outpo DIRECT Outpo EFFECTS LO	Nominal +4dBu 0dBu -30dBu 0dBu	Maximum +12dBu +6dBu -10dBu +6dBu	(nominal) (line) (line) (mic) (line)		
Signal to Noise Ratio:	-77dB (20-20kHz, unweighted, battery operation)					
Maximum Available Gain:	~42dB, (eq controls flat, passive mode, XLR preamp output))					
Equalization:	Bass: +14dB/-14dB @ 40Hz [note 1] Low Mid: +14dB/-14dB @ 150Hz-1.8kHz High Mid: +14dB/-14dB @ 300Hz-5kHz Treble: +11dB/-14dB @ 4kHz [note 1]					
Notch Filter:	40Hz – 500Hz, sweepable					
High Pass Filter:	40Hz – 200Hz, sweepable 2 pole, modified Butterworth alignment					
Power Requirements: Current draw: Battery Life:	9 V alkaline battery or 9 VDC external power supply (2.1mm, center negative) ~20mA average ~20-25 hours average					
Size:	2.56" (65mm) wide x 5.50" (140mm) deep x 8.19" (208mm) high [note 2]					
Weight:	Approx. 2 lbs (0.91 kg) [note 3]					

[note 1]: measured approx. 1 octave from knee

[note 2]: including feet and controls

[note 3]: not including battery

MESA/Boogie® continually develops new products and improves existing ones. For this reason, specifications and information in this manual are subject to change without notice.

SERVICE INFORMATION

• USA /CANADA Customer Support:

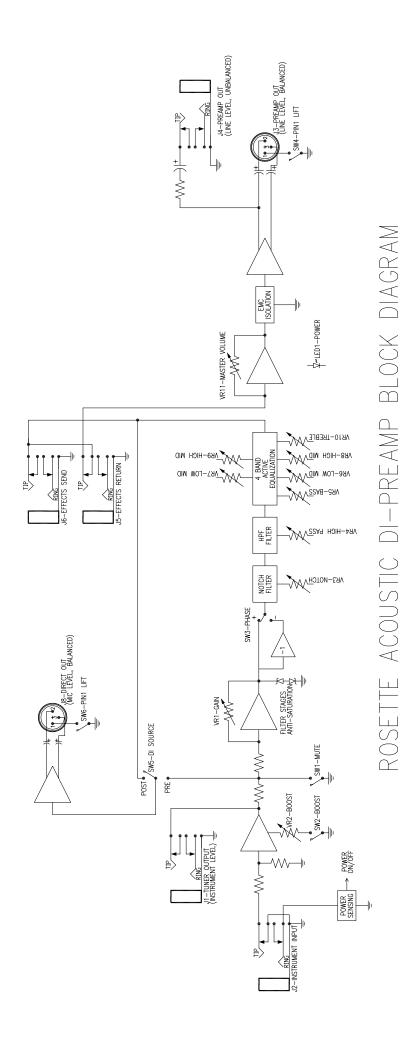
For technical support, troubleshooting, tone questions, settings help and more...

707-778-6565 Monday-Thursday, 9AM-5PM Pacific Time

NOTE: If a Product Specialist is not available when you call (helping other customers), PLEASE leave a voice message with a phone number and a good time to call and WE'LL CALL YOU BACK!

INTERNATIONAL Customer Support:

For warranty and technical support, please contact your LOCAL MESA DISTRIBUTOR. You may use this link to search the web for your local distributor's contact information: www.mesaboogie.com/support/locations.html



$\underline{\textit{MESA/BOOGIE}_{\&}}$ The Spirit of Art in Technology.

Thank you for trusting MESA/Boogie® to be your amplifier company and we wish you many years of toneful enjoyment from this handcrafted instrument.



