Hello from the Tone Farm...

..You, smart player and all around intuitive human, have put your trust in us to be your amplifier company. This is something we do not take lightly. Our reward is that we've made a classic pre-amplifier and by choosing this wonderful unit, you have become part of the MESA family...WELCOME! Our goal is to never let you down. Your reward is that you are now the owner of an archetypal guitar pre-amp, bred of fine all tube amp heritage...benefiting from the many pioneering and patented MESA circuits that led to the refinement of your new instrument. Feel confident, as we do, 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.
Your MESA/Boogie Amplifier is a professional instrument. Please treat it with respect and operate it properly.

USE COMMON SENSE AND ALWAYS OBSERVE THESE PRECAUTIONS:

- Do not expose amplifier to moisture, rain or water, direct sunlight or extremely high temperatures.
- Always insure that amplifier is properly grounded.
- Always unplug AC power cord before changing tubes.
- Avoid direct contact with heated tubes.
- Insure adequate air circulation around this pre-amp.
- Keep amplifier away from children.
- Do not throw or drop amplifier, especially on living beings.
- Be sure to connect to an AC power supply that meets the power supply specifications listed on the rear of the unit.
- If there is any danger of lightning occurring nearby, remove the power plug from the wall socket in advance.
- 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 in handling control buttons, switches and controls.
- Remove the power plug from the AC mains socket if the unit is to be stored for an extended period of time.
- Do not use solvents such as benzene or paint thinner to clean the unit. Wipe off the exterior with soft cloth.
- Be sure to have the warranty card for this product filled out by the store at which it was purchased and return to MESA Engineering.

ALL OF THE OUTPUTS WHEN CONNECTED TO THEIR RESPECTIVE SOURCES ARE CAPABLE OF PRODUCING VERY LOUD SOUND LEVELS AND EXPOSURE TO THESE HIGH VOLUMES MAY CAUSE THE USER PERMANENT HEARING DAMAGE.

No user serviceable parts inside. Refer service to qualified personnel. Always unplug AC power before removing chassis.

READ AND FOLLOW INSTRUCTIONS OF PROPER USAGE.
Congratulations on your purchase of the V-TWIN! This handbuilt, all tube, 3 mode preamp combines all the features and versatility found in our trademark pre-amplifiers and offers them up in a compact and rugged floor format. Historically, floor pre-amplifiers have been used primarily to add or enhance gain and flexibility to existing stand alone combos or heads. V-TWIN does this extremely well, offering three sounds, two of them footswitchable and can create tone that will surely rival, if not shame all but the most diligently tweaked contenders. However, V-TWIN does not stop here! A full blown pre-amp, V-TWIN goes on to become an ingenious and innovative brain to any rack system by providing an optimized output for interfacing with power amps. To complete its arsenal, V-TWIN packs a high caliber recording circuit that appears in the form of the Mixer/Headphone jack. This studio helper makes direct to tape recording a breeze, minimizing set up time and the many hours normally spent on microphone placement and cabinet swaps.

And finally, the best feature of all...the V-TWIN will fit into just about any standard size gig or accessory bag that you would normally store your cords and other related tools of the trade in. This compact format allows you amazing tone wherever you may roam. The ultimate spare rig, sit-in-savior or personal headphone stack...V-TWIN provides many possible ways to enjoy your playing a whole lot more!

**POWER UP:** Connect the 12 volt power supply adapter to the jack located in the center on the rear panel of unit.

**CHOOSING A SOURCE OUTPUT:** Connect the desired output to its intended source using shielded cable of the shortest convenient length available. The three choices are:

- **MIXER**
- **HEADPHONES**
- **TO POWER AMP**
- **TO GUITAR AMP**
- **STEREO SIMUL CLASS 2**

**EXTERNAL SELECT**

**EXTERNAL BYPASS**

**INSTRUMENT INPUT**

**TO POWER AMP**

**TO GUITAR AMP**

**MESA BOOGIE**

HANDBUILT IN PETALUMA, CA, USA
**BASIC SET-UP:** Set the controls as per this diagram. Then run through the 3 sounds by using the Channel Select footswitch and the Alternate Channel push key located between the Middle and Treble controls.

![Diagram of control settings](image)

**OUTPUTS:**

**TO GUITAR AMP:**

This jack is provided to allow interfacing with existing amplifiers, giving the user an additional three sounds (two are footswitchable) and thus expanding the potential of virtually any amp. You will find the inherent quality of V-TWINS voices to be a nice addition to even the coolest circuits. When using this jack the V-TWIN can be set up two different ways:

1. **Normal** = Footswitchable from Clean to Solo, or
2. **Alternate** = Footswitchable from Blues to Solo.

In most situations using an existing amplifier that has a clean channel - one would choose the Alternate configuration.

In this set-up you would use the host amplifier's clean sound having V-TWIN in Bypass (LED on) and activate V-TWIN for two different soloing sounds...Blues or Solo. See illustration below.

![Diagram of jack use](image)

However, the Normal configuration works great if you need an alternate clean sound of a different level and tone. The Normal position can also work great for driving an amplifier's front end stage into clip by using the Clean mode and setting V-TWIN'S Gain control high and switching it in for the *pushed* rhythm sound or a lower gain Solo sound.
TO POWER AMP: This jack provides a hotter signal level and a slightly different E.Q. curve for interfacing with the FX Return stage of any amplifier, or simply to use V-TWIN as a stand alone pre-amp with an existing power amplifier. (We suggest an all tube power amp...e.g. MESA'S Stereo Simul-Class 2 : Ninety or Fifty / Fifty.) The level here should be more than enough to drive even much less sensitive Non-MESA amplifiers.

NOTE: When the Bypass Footswitch is selected (and the LED goes out,) all sound is muted at this output.

MIXER / HEADPHONES: This 1/4" output and its accompanying switch (located on the side panel) support V-TWIN's recording circuit. This circuit is voiced to re-create the sounds you're accustomed to hearing from the "To Guitar Amp" and "To Power Amp" outputs. With the Record circuit mode switch set to "MIXER," the output level is optimized for console input stages (with all controls set at 12' o clock = +10 db.) This should be more than adequate for most all direct applications, allowing adjustment in either direction. Use the Master control to vary the level at this output.

When the rocker switch is set to "Headphones," the output level remains constant, but the tip is connected to ring internally on the jack making stereo phoning possible. Use the Master to adjust the listening level. Keep in mind the type and quality of headphones greatly affect the performance of this circuit, with the fully enclosed, studio quality type producing the best results.

CONTROL JACKS:

EXTERNAL SELECT: V-TWIN can be controlled by an external switching source to select between two of the three modes. This can be most any tip to ground type switch logic. This feature makes possible the inclusion of V-TWIN into programmable rigs or multiple pre-amp rigs where the units within are controlled by a programmable switcher.

NOTE: V-TWIN must remain in the power-up switch logic to be controlled via this jack. In other words...every time you get ready to use the unit in an External Select situation, remove the A.C. adaptor and plug it back in without choosing any modes...Leave it alone. This procedure clears the switching logic leaving the circuit in the receive-ready state and awaiting commands from the external switching device.

EXTERNAL BYPASS: The Bypass function may also be triggered by an external switching device.

This logic is controlled via a standard tip to ground type switch. This jack performs the same function as the footswitch located on the face of the unit. It is wise to use the same power-up procedure as when using the External Select to clear the switching logic.
Now that you have a better understanding of the Outputs and set-up procedures, let’s listen to a few sample settings... Keep in mind that if you are using the TO GUITAR AMP jack, the setting of the host amp determines much of the overall character of the sound. We suggest you start by plugging into the host amplifier first and dialing up a balanced and warm clean rhythm sound. Watch out for excessive highs or lows, as an over abundance of either of these frequencies can make it difficult to create a great lead sound.

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SPARKLING CLEAN:

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<tr>
<th>GAIN</th>
<th>BASS</th>
<th>MIDDLE</th>
<th>TREBLE</th>
<th>PRESENCE</th>
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CLEAN MODE:
Neck Single / All 3 Singles

HINT: It is possible to alter the gain structure of all three modes in V-TWIN by simply replacing one or both 12AX7 tubes housed under the shielding cage with 12AT7 tubes. This will reduce the amount of gain fairly substantially without compromising the V-TWIN's overall voice. Make sure the unit has not been in use just prior to this simple user mod as hot pre-amp tubes can cause severe burns.

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(continued on page 5)
SAMPLE SETTINGS:  

These settings are mere suggestions that should get you in the ball park so to speak...taking into account pick-up differences and host amp / power amplifier variables. Spend time with the controls as they interact with each other a great deal and sometimes the frequencies you wish to adjust lie in more than one control i.e. — to adjust high "cut" work with upper regions of the Mid control, as well as the Treble and Presence controls. To soften the sound reduce Mid while increasing Bass. With some time well spent, you'll find so many great sounds...you'll think V-TWIN was and is, the deal of the century.

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Thank you for trusting MESA/Boogie to be your amplifier company. We wish you many years of toneful enjoyment from this handbuilt all tube instrument.