

ULTRASOUND[®]

amplifiers

DI MAX

DI MAX 2 Channel (Mic/Instrument) Preamp/DI BOX SPECIFICATIONS

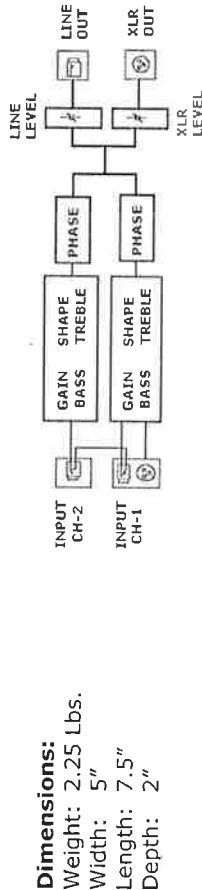
Input Impedance:
CH-1 1/4": 1 Meg
CH-1 XLR: 1K
CH-2 1/4": 1 Meg

Shape:
+5db @ 3kHz
-5db @ 1500HZ
+5db @ 100HZ

EQ: (Active)
Bass: +/- 12db @ 150HZ
Treble: +/- 12db @ 5kHz

Power Supply:
9V Alkaline Battery
9VDC Reg. Power Supply (500mA)
(2.1MM DC Power Plug, Center +)
48V Phantom Power

Output Impedance:
600 Ohm (XLR OUT) 680 Ohm
(LINE OUT)



IMPORTANT SAFETY INSTRUCTIONS

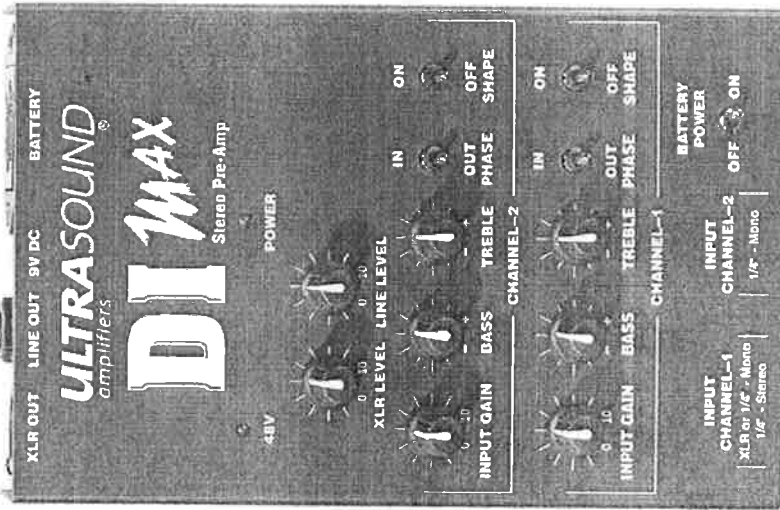
WARNING: When using electric products, basic cautions should always be followed, including the following:

1. Read all safety and operating instructions before using this product.
2. All safety and operating instructions should be retained for future reference.
3. Obey all cautions in the operating instructions and on the back of the unit.
4. All operating instructions should be followed.
5. This product should not be used near water, i.e., a bathtub, sink, swimming pool, wet basement, etc.
6. This product should be located so that its position does not interfere with its proper ventilation. It should not be placed flat against a wall or placed in a built-in enclosure that will impede the flow of cooling air.
7. This product should not be placed near a source of heat such as a stove, radiator, or another heat producing amplifier.
8. Connect only to a power supply of the type marked on the unit adjacent to the power supply cord.
9. Never break off the ground pin on the power supply cord.
10. Power supply cords should always be handled carefully. Never walk or place equipment on power supply cords. Periodically check cords for cuts or signs of stress, especially at the plug and the point where the cord exits the unit.
11. The power supply cord should be unplugged when the unit is to be unused for long periods of time.
12. If this product is to be mounted in an equipment rack, rear support should be provided.
13. Metal parts can be cleaned with a damp rag. The vinyl covering used on some units can be cleaned with a damp rag or an ammonia-based household cleaner if necessary. Disconnect unit from power supply before cleaning.
14. Care should be taken so that objects do not fall and liquids are not spilled into the unit through the ventilation holes or any other openings.
15. This unit should be checked by a qualified service technician if:
 - a. The power supply cord or plug has been damaged.
 - b. Anything has fallen or been spilled into the unit.
 - c. The unit does not operate correctly.
 - d. The unit has been dropped or the enclosure damaged.
16. The user should not attempt to service this equipment. All service work should be done by a qualified service technician.
17. Exposure to extremely high noise levels may cause a permanent hearing loss. Individuals vary considerably in susceptibility to noise induced hearing loss, but nearly everyone will lose some hearing if exposed to sufficiently intense noise for a sufficient time. The U.S. Government's Occupational Safety and Health Administration (OSHA) has specified the following permissible noise level exposures:

Duration Per Day In Hours	Sound Level dBA, Slow Response
8	90
6	92
4	95
3	97
2	100
1	102
1	105
1/2	110
1/4 or less	115

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

SAVE THESE INSTRUCTIONS!



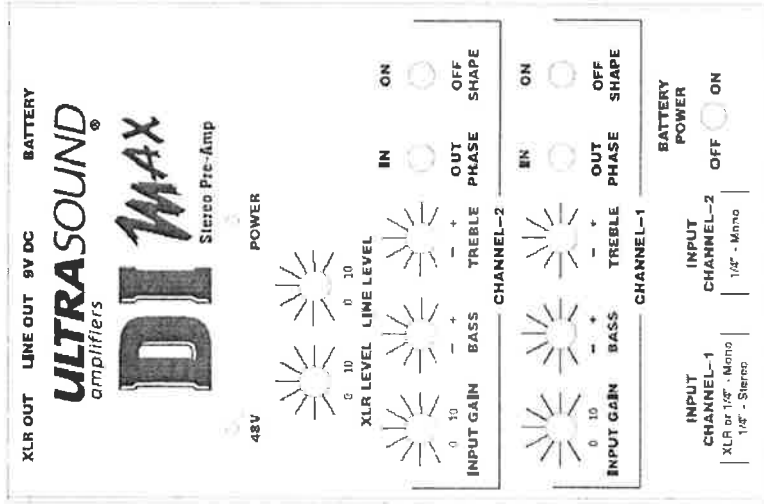
OPERATING GUIDE

ULTRASOUND AMPLIFIERS
2150 DELAVAN DR. #11
WEST DES MOINES, IA 50265
PHONE: 515-282-1650
FAX: 515-282-1680
www.UltraSoundAmps.com
E-MAIL: info@UltraSoundAmps.com

CUSTOMER / TECHNICAL SUPPORT:
E-MAIL:
Support@UltraSoundAmps.com
TOLL FREE 1-888-993-5091

DI MAX CONTROL PANEL

USER CONTROLS



Description:

Now with 2 channels, the DI MAX can be used as a blender as well as a pre-amp. The Channel-1 input will accept a stereo (TRS) plug and allows the DI MAX to process the tip signal through the Channel-1 controls and the ring signal through the Channel-2 controls giving you a huge amount of flexibility for some creative signal blending from your stereo pickups. Of course you can plug 2 different instruments into the DI MAX and blend the signals also. Channel-1 also allows the use of an XLR input so you can use the DI MAX as a personal mic pre-amp.

Don't let the name fool you, this is not only a DI but a full-featured preamp designed after our famous AG-series amps. You will be able to dial in the clear natural acoustic sound that our amplifiers are known for, and route it to the stage PA through a balanced XLR output. Sound engineers will appreciate the versatile controls and the optional 48-volt phantom power operation. (No more wall warts or batteries if your mixer has phantom power.)

Getting Started:

As a rule of thumb for all of our products, begin with all of the controls at the mid point (12:00 o'clock) with the "NOTCH" and "SHAPE" switches "OFF". This is a medium gain setting with FLAT frequency response. The "INPUT GAIN" control will be the first control that you will want to dial in. The "INPUT GAIN" is not a volume control, rather this control sets the level of amplification applied to the input signal to boost it to a useable level. The reason this is adjustable is to accommodate a wide range of pickup devices. For instance if you are using a high output active pickup system you will want to use a lower setting on the "INPUT GAIN" than say if you are using a passive type pickup system. You will want to use the highest "INPUT GAIN" setting you can without overdriving or distorting the signal. To achieve this, while playing, slowly turn the "INPUT GAIN" up (clockwise) until you begin to hear some distortion, then back the "INPUT GAIN" down (counter-clockwise) until the distortion disappears. This will give the DI MAX the most signal to work with and the best signal to noise ratio. Once you have determined the best setting for the "INPUT GAIN" we recommend that you take note of this setting and also the settings on your guitar controls for future reference.

INPUT CHANNEL-1: This input is designed for all passive and active type pickup signals. The Channel-1 input will accept both 1/4" mono or 1/2" stereo (TRS) inputs. If using a pickup system with stereo output use this input to process the signal. When using a stereo (TRS) input the DI MAX will process the tip signal through the Channel-1 controls and the ring signal through the Channel-2 controls. (If you plug an instrument into Channel-2 it will disable the signal on the ring of the Channel-1 input) CHANNEL-1 will also accept low impedance XLR inputs so it can be used for controlling a microphone or other device that has a low impedance XLR output.

INPUT CHANNEL-2: This input is designed for all passive and active type pickup signals. This is a mono input.

It is recommended that you turn down your amp or mixers input before plugging/unplugging from the INSTRUMENT INPUTS or powering the unit on or off. This will protect your speakers from loud pops.

XLR OUT: Plug a standard XLR cable from your PA or recording console into this low impedance balanced output. Use the "XLR LEVEL" control to set the output level which matches up best with your PA or recording gear and gives you the least amount of noise. If your board provides 48V phantom power on the XLR cables, the DI MAX will run from this and save the battery. It is suggested that you keep a battery in the unit as a backup when using the phantom power.

LINE OUT: This is a standard unbalanced line level output signal. Use the "LINE LEVEL" control to adjust the signal level on this jack. This output can be used simultaneously with the XLR OUT jack for some creative signal routing. Plug a standard instrument cable from this output to a stage monitor amp or unbalanced Mic input on a mixer.

INPUT GAIN (CH-1 & CH-2): Please see **Getting Started** section for a full description of the INPUT GAIN control.

BASS: (CH-1 & CH-2) This is an "Active" control. The BASS control adjusts the amount of cut or boost in the low frequency (150HZ) range.

TREBLE: (CH-1 & CH-2) This is an "Active" control. The TREBLE control adjusts the amount of cut or boost in the high frequency (5KHZ) range.

SHAPE: ON/OFF (CH-1 & CH-2) - This switch enables or disables the SHAPE control. This control is a mid dip control. In the ON position, the mid frequencies will be cut and the high and low frequencies will be boosted.

PHASE: Changes the polarity of the signal. Phase affects the way the guitar top is pressurized by the loudspeakers. When the signals are out of phase with each other, low-end feedback is minimized. If you experience "positive acoustic" feedback on stage, flip the phase switch from its current setting to see if this will kill the feedback. Phase will also affect the way the guitar signal mixes live and when recording. Each channel has an individual PHASE switch to allow you to control the channels separately. This is very useful if you are sharing the DI MAX with another player.

XLR LEVEL: This control adjusts the amount of signal sent to the XLR OUT jack.

LINE LEVEL: This control adjusts the amount of signal sent to the LINE OUT jack.

BATTERY POWER: This is the on/off switch when using "battery power". If you have a battery installed and wish to run the DI MAX from the battery this switch must be in the on position. To conserve the battery, make sure this switch is in the off position when the unit is not in use.

48V: (Phantom Power) This LED lights when there is 48V Phantom Power present on the XLR OUT jack. No battery drain will occur when Phantom Power is present.

POWER: This LED indicates the DI MAX is ready to operate. The POWER LED will illuminate when:

- A. There is a fresh battery installed in the DI MAX and the Battery Power switch is in the ON position.
- B. A 9VDC adapter (Wail Wart) is plugged into the power jack.
- C. There is 48V phantom power on the XLR cable plugged into the XLR OUT jack. (The 48V LED and the POWER LED will both be illuminated.)