

CHANDLER LIMITED

Chandler Mini Rack Mixer

Thank you for purchasing the Chandler Limited Mini Rack Mixer. This unit is proudly hand wired and assembled in the USA. It uses a 100% discrete transistor circuit, specially wound transformers, and has been precisely designed to match its vintage cousins. Included are item descriptions and hints to get you on your way. Please feel free to contact our shop anytime for help or with questions.

Phone: 1-319-885-4200

Email: support@chandlerlimited.com

● **Warranty**- All Chandler Limited products have a two-year warranty. Each warranty repair must include \$12 for return shipping and are generally finished within 2-3 days of receipt. To make solving your problem easier please include the following information.

- 1) Written description of your problem.
- 2) Your name, address, phone, and email, if possible.
- 3) Receipt of purchase, if possible.
- 4) Your power supply and cable.

Send to: Chandler Limited

Attn: Repairs

222 S. Cherry St.

Shell Rock, IA 50670

● **Connections**- All connections on the Mixer are transformer balanced with pin 2 hot.

● **Power supply**- The Mini Mixer is designed to be used with Chandler Limited 3 amp external power supply.

- 1) chassis and audio ground
- 2) 48 volt
- 3) +28 volt
- 4) -28 volt

Notes on Grounding- On the back of the Mixer power supply are two black banana connectors. These join the audio ground to earth ground with a solid wire between them. Depending on your studio you may want this connected or disconnected. Turn up your monitors or headphones a bit and experiment which has a lower noise floor in your system.

You may also need to join the audio banana plug to other sections of you studio to obtain lowest noise floor. The audio banana is located closest to the edge of the power supply case. Use something simple like a guitar cord and touch the tip to other portions of your studio to find best results.

CHANDLER LIMITED

The Modules

● **Dual Input-** This module is transformer balanced with an input impedance of 10k. Each channel uses a discrete Chandler line amp and is an all discrete class A design.

Pan- A standard mixer pan control with a 6db change from center to full left or right.

Volume- This is set to unity gain at its full position. For DAW use it would normally be set to full and you would use automation and mute controls inside your digital system. As well as, each control can be pulled to mute the channel.

● **Buss/Talkback-** Essentially this is a simplified TG2 circuit functioning as gain make up for the passive summing circuit with an extra line amp to drive the talk back. The volume control for the stereo buss is on the meter module and acts as a rotary console fader. There are two outputs for the stereo buss on the rear panel of the unit. Use one for headphone amps or multiple 2 track outputs. The talk back section is operated by the momentary pushbutton on the front panel and volume is associated with the potentiometer below. The 1/4" jack is for the hookup of a talk back microphone of your choice, we have had success with several different types. External computer microphones, headsets, gooseneck mics, or a good ol' SM58 will all work well.

● **Control Room-** Another set of simplified TG2 circuits are used to drive the control room outs. Control room Mute, Dim, and Mono are all on the front panel. The volume for the control appears on the meter module. Dim is set for a 12db drop in the control level. Mono is generally used for checking phase cancellation, as well as, a reference for mono radio signals. Plus we just like the sound of mono!

● **Meter Module-** Two standard VU meters reading -20 to +3db. Included on this module are the stereo buss and control room volume controls, speaker switching for two sets of speakers, and external in (explained more under applications).

Applications

● **Mixer Gain Structure-** To set proper gain structure for the mixer is best to start simply by adjusting the input so the VU meters average 0db. Then adjust the control room volume as needed for comfortable (or uncomfortable) listening levels. Once you are used to that you may want to break the rules and try the opposite. Hitting the stereo buss very hard or even pegging the meters can have cool results. Similar to boosting the gain on a pre for extra coloration.

● **External Input-** Pressing this button disconnects the mix section from the control room section allowing for some interesting combinations. The most obvious is to listen to 2 track machines and CD players but was designed with other important uses in mind.

CHANDLER LIMITED

Applications Continued

● **Stereo Insert using External Input-** Since pressing the External pushbutton separates the Stereo Buss and Control Room sections this can create an insert point. Hit the External button patch the Stereo Output to the input of your mix compressor and the output of the compressor to the the rear panel External Input connectors. Now your Stereo Buss volume becomes a buss fader and the Control Room becomes your stereo output with an insert point.

● **Summing using External Input-** To use the mixer section for summing you must again hit the External button and then feed a stereo mix from your DAW to the External connections of the mixer. The Control Room section will then be completely separate from the Mixer and is used for listening. Now use the Mixer channels and pans for summing and mixing of sources as needed.

Technical notes

● **Swapping modules-** If you ever need to change modules please power down the Mixer first! Then, allow several minutes for the power supply to discharge before swapping the module. Failure to do this could damage the new module or the supply and will void your warranty. Please call us with any questions!