NOTE: In order to perform the calibration correctly, the Factory Load must be performed.

The Factory Load resets the unit and loads the factory presets into the memory. However-- if the user presets have been changed and saved, the Factory load will overwrite those presets and they will be lost. If you need to save the presets that are programmed into the unit, then you will need to transfer or "dump" them to an external storage medium. This procedure is outlined in the Triaxis owner's manual on pages 4 and 5. (Note: The stored information can be transferred to another Triaxis for saving if necessary).

To perform the Factory Load: Turn the unit on and set it to any Program except Program 1. Find the Factory Load pads on the TX2 board, at the front edge directly behind the Dynamic Voice control. Simply short the two pads together with a screwdriver or a pair of pliers. The unit should revert to Program 1. This will indicate that the factory Load has been completed. After the Factory Load, check the controls to see if they respond correctly. If a calibration is not needed, skip ahead to the bench test.

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(Due to variables in the manufacture of the LDRs, they must be calibrated in order to operate in a predictable manner. This is done by measuring the resistance on the cell side at a specific setting while changing the voltage (and therefore the current) on the LED side. The voltage is set with a trim pot.)

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1) Turn the unit on, and set it to Program 1. Push the Shift key once. The Program/Channel display should flash three times. Now perform the Factory Load. This puts the unit into the calibration mode. All the parameters should now read 10, except the Presence, which reads 5.0 and the Dynamic Voice, which reads 1.0. The mode should be Rhythm Green and the Loop LED should be on. The Preset and Program should read 01. Set the VOM to ohms.

2) Middle: Connect one side of the meter to ground, and the other to the outside leg of LDR 21. Using TP6, adjust until the resistance reads 33K.

3) Bass: Leave the meter connected to the outside leg of LDR 21, and connect the other lead to the outside leg of LDR 29. Using TP5, adjust until the resistance reads 1M.

4) Treble Low: Connect one lead of the VOM to the outside leg of LDR 27, and the other lead to the outside leg of LDR 28. Using TP7, adjust until the resistance reads 215K.

5) Treble High: Move the lead that is connected to LDR 28, and connect it to the leg that is next to the outside leg of LDR 27. This means that the meter will be connected to the two rearmost legs of LDR 27. Push the Treble down arrow on the front panel once-- the Treble should now read 0. Using TP8, adjust until the resistance reads 240K. Push the Treble up arrow on the front panel once-- the Treble should noce-- the Treble should read 10 again.

6) Gain Low: Connect one lead of the VOM to ground, and the other lead to the outside leg of LDR 18. (This is the top LDR of the two). Pull V2 from its socket. Using TP10, adjust until the resistance reads 1M.

7) Gain High: Move the lead that is connected to ground and connect it to the forward leg of C801. This cap is located on the left edge of the TX1 board. Push the Gain down arrow on the front panel once-- the gain should now read 0. Using TP9, adjust until the resistance reads 1M. Reinstall V2, and push the Gain up arrow once-- the Gain should read 10 again.

(For the remainder of the calibration procedure, one lead of the VOM will be connected to ground.)

8) Lead 1 Drive: Connect the VOM lead to the outside leg of LDR 20. Using TP11, adjust until the resistance reads 680K.

9) Lead 2 Drive: Connect the VOM lead to the outside leg of LDR 23 (the top LDR of the two). Using TP4, adjust until the resistance until it reads 1M.

10) Presence: Connect the VOM lead to the left side of C002. This cap is located in the middle of the TX1 board, just to the right of LDR22/23. Using TP3, adjust until the resistance reads 180K.

11) Dynamic Voice: Connect the VOM lead to the outside leg of LDR 24 (the bottom of the two). Using TP1, adjust until the resistance reads 15K.

12) Master: Connect the VOM lead to the outside leg of LDR 25, directly above LDR 24. Using TP2, adjust until the resistance reads 100K.