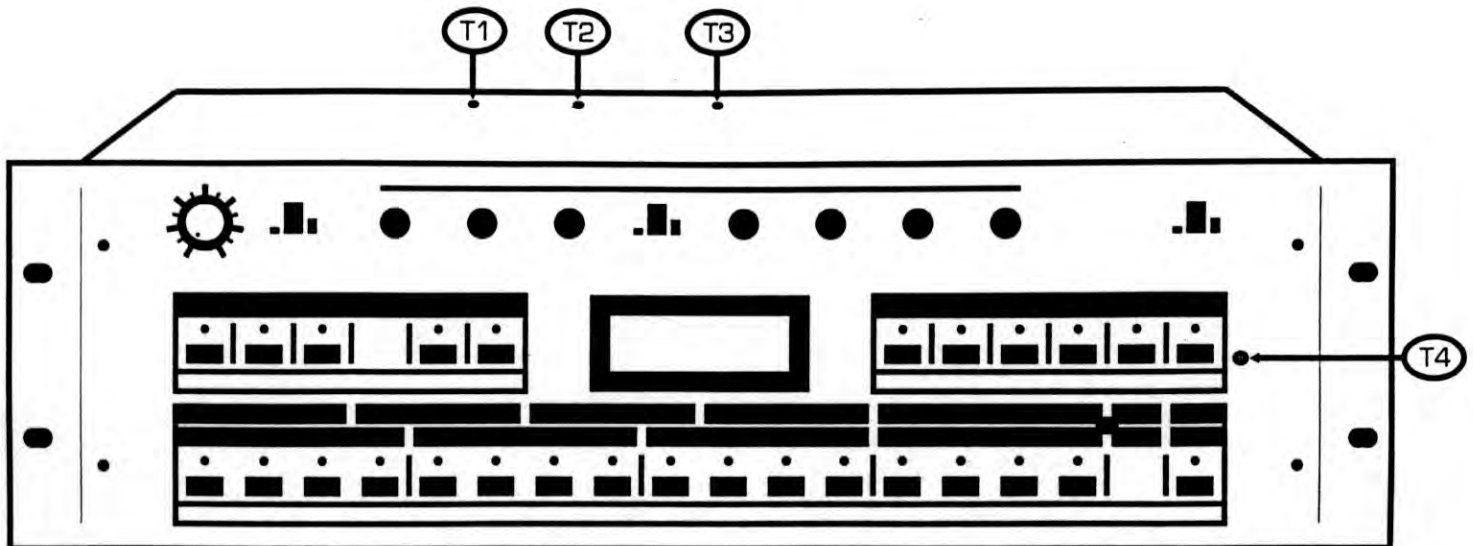


Calibrating the Mobius



The Mobius has 4 internal trim points that are used to calibrate the control voltages and trigger pulse width that it produces. These trimmers are set at the factory but may need to be adjusted over time to allow the Mobius to accurately control your analog equipment.

V/OCT CV OUT-

To calibrate the V/Oct output you will need to remove the 4 hex screws on the front panel, by using a 7/64" hex driver. You may want to remove the glide time control as well to fully remove the front panel, but it is not necessary. With the front panel detached, locate trimmer T4 as shown above. This trimmer is used to set the V/Oct scaling so that V/Oct output changes 1 volt for every octave played by the sequencer. Set up two patterns each containing only one note. The first pattern should be programmed to play C1, the second pattern should play C6.

If you have a volt meter, plug a short 1/4" cable into the V/Oct output and connect the leads of your voltmeter to the other end of the 1/4" cable. Play the two patterns and toggle back and forth between them as you adjust T4 so that the pattern playing C6 outputs a voltage 5 volts higher than C1.

If you don't have a volt meter, connect the V/Oct output and the Gate output up to a 1 V/Oct synthesizer and play the two patterns as you adjust T4 until the synthesizer plays the correct scaling.

Once calibration is complete, re-install the front panel.

HZ/V CV OUT-

To calibrate the Hz/V output accurately you must make sure that the V/Oct output is properly calibrated and producing 1 volt per octave. For this procedure you will need to adjust trimmers T1 and T2. These trimmers can be adjusted through the access holes in the chassis using a small 5/64" flat blade screw driver.

Set up two patterns each containing only one note. The first pattern should be programmed to play C1, the second pattern should play C6.

If you have a volt meter, plug a short 1/4" cable into the Hz/V output and connect the leads of your voltmeter to the other end of the 1/4" cable. Play the pattern with C1 and adjust T1 until it produces .25 volts. Now play the pattern with C6 and adjust T2 until it produces 8 volts. You will notice that if you play C1 again it's setting of .25 volts has shifted. You will need toggle back and forth between setting these two trimmers until T1 is set at .25 volts and T2 is set at 8 volts.

If you don't have a volt meter, connect the Hz/V output and the Gate output up to a Hz/Vt synthesizer and play the two patterns as you adjust T1 and T2 until the synthesizer plays the correct scaling.

TRIGGER OUT-

Trimmer T3 is used to adjust the pulse width of the +12 volt Trigger output. You may want to adjust the Trigger output if external equipment you are using requires a shorter or longer trigger pulse than that set at the factory.

For accurate results plug a 1/4" cable into the Trigger output and connect the other end of the cable to the probe of an oscilloscope. Using the oscilloscope, adjust T3 until it produces the desired pulse width for the Trigger output.

If you don't have an oscilloscope, make the necessary connections from the Mobius to an external synthesizer requiring a trigger signal, and adjust T3 until correct triggering occurs.