## REFLEX® MODEL 206 PRECISION REFERENCE

## PART NUMBER 12M03-00102-01 APPLICATION NOTES

- Minimum load resistance between terminals 5 and 8 is 500 ohms (20mA).
- Maximum reference source impedance is limited only by the requirement for .007 microamperes input current.
- 3. The ramp adjustment range can be extended by the addition of a low-leakage film type capacitor between terminals 3 and 4.

Add 1 MFD - Range 4 to 80 seconds Add 2 MFD - Range 6 to 120 seconds

- 4. If remote control of Accel/Decel rates is required, duplicate the network consisting of 1D, 2D, 1P, 9R and 10R externally between terminals 1 and 4, with internal adjustments 1P and 2P turned to a maximum (full CW). The maximum time will now be limited to 20 seconds. Additional capacitance may be added between terminals 3 and 4 if a longer time is required (see Para. 3 above).
- 5. Short circuiting of the output is not recommended but can be tolerated up to 3 minutes maximum.
- 6. If the external "Enable" circuit is not required, jumper terminals 6 and 7.
- 7. If reversed output polarity is required (so that terminal 3 is connected to system common) the assembly will function properly but the "Enable" (terminal 7) must not be returned to any power supply other than the minus 15 volt internal supply (terminal 6).

NOTE: THIS MODE OF OPERATION MAY BE SUSCEPTIBLE TO NOISE, WITH ERRATIC PERFORMANCE RESULTING. A PREFERRED METHOD OF OBTAINING REVERSED POLARITY IS TO ADD AN INVERTING OP-AMP WITH UNITY GAIN TO THE OUTPUT.

8. With a capacitive load on the output (possibly due to long leads), the assembly might oscillate causing erratic operation. In production prior to December 1988, a 0.047MF disk ceramic capacitor was added between the anode of 5D and the cathode of 3D. This has since been removed. If the oscillation problem occurs on a unit which has this capacitor, remove it.

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If the problem still persists or if the problem occurs on later production without this capacitor, there are two possible fixes:

- A. Add a 100  $\mathrm{Ohm}\ 1/2$  watt resistor in series with the output at terminal 3.
- B. Connect a series combination of a 100  $\rm Ohm~1/2~watt$  resistor and a 25MF, 16V electrolytic capacitor between terminals 3 and 8.

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