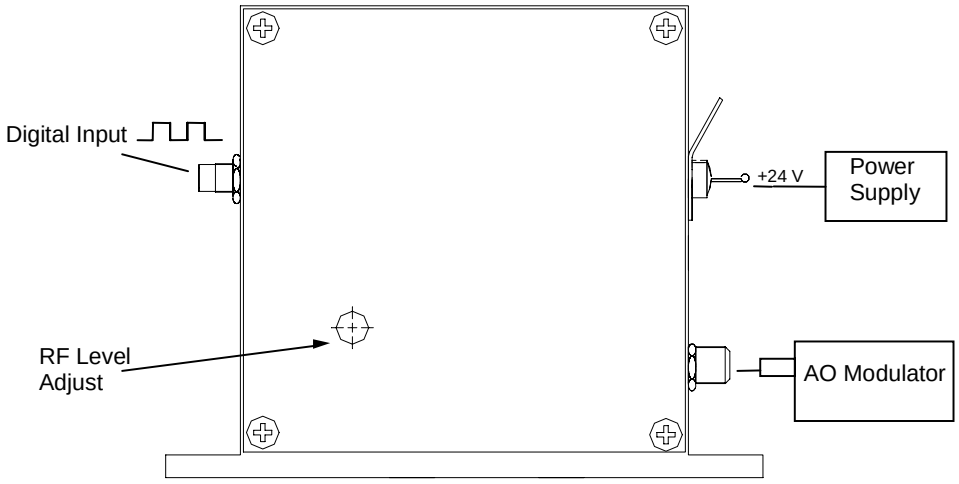
USING THE MODEL 1080AF-DINA-3.0 RF DRIVER

P/N: 97-02910-19



Operation:

1. Connect RF out of the driver to the input of the AO modulator using a 50Ω coax cable.

2. Connect a 24V DC input to the +Vin connector. (Center conductor is positive.)

3. Use a 50Ω coax connector to connect the modulation input. The input level should be set to standard TTL levels for digital modulation.

4. The RF level potentiometer is used for manually setting the maximum RF output power. The factory setting is 3.0 Watts RF at a standard TTL 'ON'.

5. The warm-up period for the RF driver is 5 minutes.

6. For optimum digital setting, the driver and modulator need to be tuned together. Set-up both devices in the laser system and allow the driver to warm-up. After the driver warms up, set the input level to TTL 'ON'. Adjust the Bragg angle and height of the modulator to peak up the diffraction efficiency. Adjust the power level potentiometer to further improve the diffraction efficiency. Longer wavelengths require higher powers to reach peak diffraction efficiency or saturation point. It is possible to overdrive the modulator and cause the diffraction efficiency to drop. Depending on the power level and the wavelength, lowering the RF power could cause an increase in diffraction efficiency. It's always best to find the saturation point of the modulator to ensure optimum performance.