### **MODEL 1820**

#### RF PRODUCTS

- Keeps RF Mounts at operating temperature 24/7
- Reduces system down-time
- Saves you time and money
- Provides constant, regulated power control to one or two mounts
- LEDs and Analog Meters are conveniently located on the front panel
- Economical, easy to use, compact and light-weight
- One-year warranty



## **Operation**

The 1820 consists of two separate temperature controllers. Each control circuit has an LED indicator that illuminates when the temperature reaches 60 °C. Each control circuit has a meter movement that, when stopped, indicates stability at 60 °C. A thermistor mount is ready to use when the LED is illuminated and the meter movement is stable. The two outputs are via front panel four-pin audio connectors. The instrument is fused for safety.

# **RF Mount Heater**

The Model 1820 RF Mount Temperature Controller provides a stable power source for one or two Precision RF Coaxial Power Standards (mounts). The Model 1820 maintains the mount at operating temperature, reducing warm up time. Simply connect the mounts and in two hours they are temperature stable. Leave the mounts connected and they remain at operating temperature. Connect the mount to your Model 1804, Model 1806 or System II at any time and begin to take measurements.

The 1820 is an economical alternate voltage controller, providing a stable source to the mount's internal thermal coils which is essential for

thermistor temperature elevation. This is critical for RF Mount stability and performance. This unit is compatible with all TEGAM mounts.

The 1820 is designed to be used on the bench or in a rack. Two mounts can be placed in the Mount Stabilizing Plate on the top of the unit. The Mount Stabilizing Plate can also be purchased seperately and used on a bench or other work surface.

Standard equipment includes two 12-inch four-wire temperature control cables with knurled lock collars. An optional three-foot temperature control cable is also available. An easy-to-follow manual provides step-by-step instructions on its operation and maintenance.



### **Specifications**

#### **Temperature Controller**

Bias Power Temperature Sensitivity

Mount Warm-Up Time

Ambient Temperature Dynamic Range

Internal Temperature

Loop Gain

2 hours nominal

+12°C to +32°C

+60°C nominal

80 dB minimum

Open Loop Frequency Response 0.1 Hz

Warm-Up Drive (saturated) 15 V @ 200mA minimum

Indicator Voltmeter

#### **Temperature Range**

Operating  $+10 \text{ to } +40^{\circ}\text{C } (+50^{\circ} \text{ to } 104^{\circ}\text{F})$ Storage  $-40 \text{ to } +75^{\circ}\text{C } (-40^{\circ} \text{ to } +167^{\circ}\text{F})$ 

#### Connectors

2 x 4 pin microphone (audio) connector.

#### **Power Requirements**

105-125 or 210-250 Vac, 47 to 420 Hz, 12 Watts (factory optional)

#### Weight

Net 6 lbs. (2.72 kg)

#### **Physical Dimensions**

 Height
 91.96 mm (3.62 in)

 Width
 250.00 mm (9.84 in)

 Depth
 260.00 mm (10.24 in)

#### **Rack Mounting**

The Model 1804 can be shelf mounted in any cabinet or rack designed according to EIA RS-310 and MIL-STD-189

