

## INSTRUCTIONS FOR

**DYNASCAN MODEL AV-1A R.F. PROBE**

The Dynascan Model AV-1A R.F. Probe can be used with the following vacuum tube voltmeters:

1. B & K Model 175
2. B & K Model 177
3. B & K Model 375
4. Precision Apparatus Model V-75
5. Precision Apparatus Model V-95
6. Precision Apparatus Model 48
7. Most other VTVM's with 11 megohm input resistance.

The AV-1A R.F. Probe enables the operator to make measurements of sine wave voltages at frequencies up to 250 MHz. This probe employs a crystal diode which is used as a half wave rectifier as shown in Fig. 1. The half wave rectifier circuit develops a DC voltage that is proportional to the peak value of the sine wave input signal. R-1 is a calibrating resistor which converts this peak reading to the proper reading on the VTVM.

Connect the R.F. Probe to your VTVM and put the Selector Switch to the -DC position. Use the DC ranges on the Range Switch. The DC readings that you will now obtain will be the RMS readings of the sine wave being measured. For example, a signal is to be measured and it is found that on the 15V DC range the meter reads 12V. This indicates that the RMS reading of the sine wave input signal is 12V.

Always use the ground lead from the R.F. Probe as the ground connection to the circuit under test. Do not use the long separate ground lead available from the VTVM front panel. Use of this long lead will result in inaccurate readings.

This Probe can be used in circuits where the DC voltage does not exceed 400V and where the AC voltage does not exceed 25V RMS.