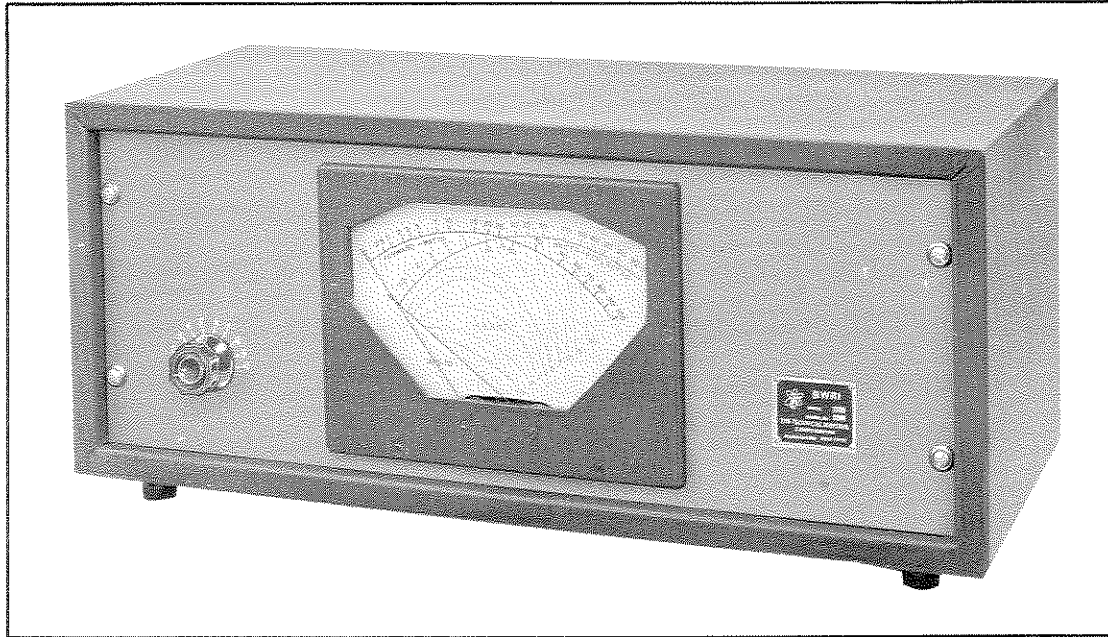


SALES SERVICE BULLETIN NUMBER 198A

Standing Wave Ratio Indicator
Model SWR-3000



Front View Model SWR-3000RM

The TMC Model SWR-3000 Standing Wave Ratio Indicator provides an accurate indication of the voltage standing wave ratio for one or more transmission circuits over the frequency range 2 to 30 megacycles. The unique design of the instrument permits simultaneous indications of incident R.F. power, reflected R.F. power and direct readings of Standing Wave Ratio. The Model SWR-3000 may be used in either 50 ohm or 70 ohm unbalanced systems by the proper choice of coupling units.

The power rating of the system is 3000 watts R.F. with a maximum VSWR of 5 to 1. For VSWR greater than 5, a suitable reduction in transmitter power must be made to prevent overheating of the SW Coupling Unit. The equipment consists of two major units, the SWR Meter and SWR Coupling Unit plus a Junction Box. The Meter is available in two forms;

A. Mounted on a standard 19" rack panel with a ten position selector switch which is used in a supervisory position in conjunction with up to 10 coupling units.

B. A portable Meter is available for general station checking or for mounting at an individual transmitter.

The Coupling Unit which is available for either 50 or 70 ohm systems should be placed in the coaxial line as close to the transmitter as possible. The Coupling Unit output is D.C. and is connected back to the Meter panel by means of two pairs.

The Junction Box allows a Portable Meter to be connected at a transmitter position either permanently or temporarily, and permits the Coupler output to be switched to either the portable Meter or the supervisory Meter.

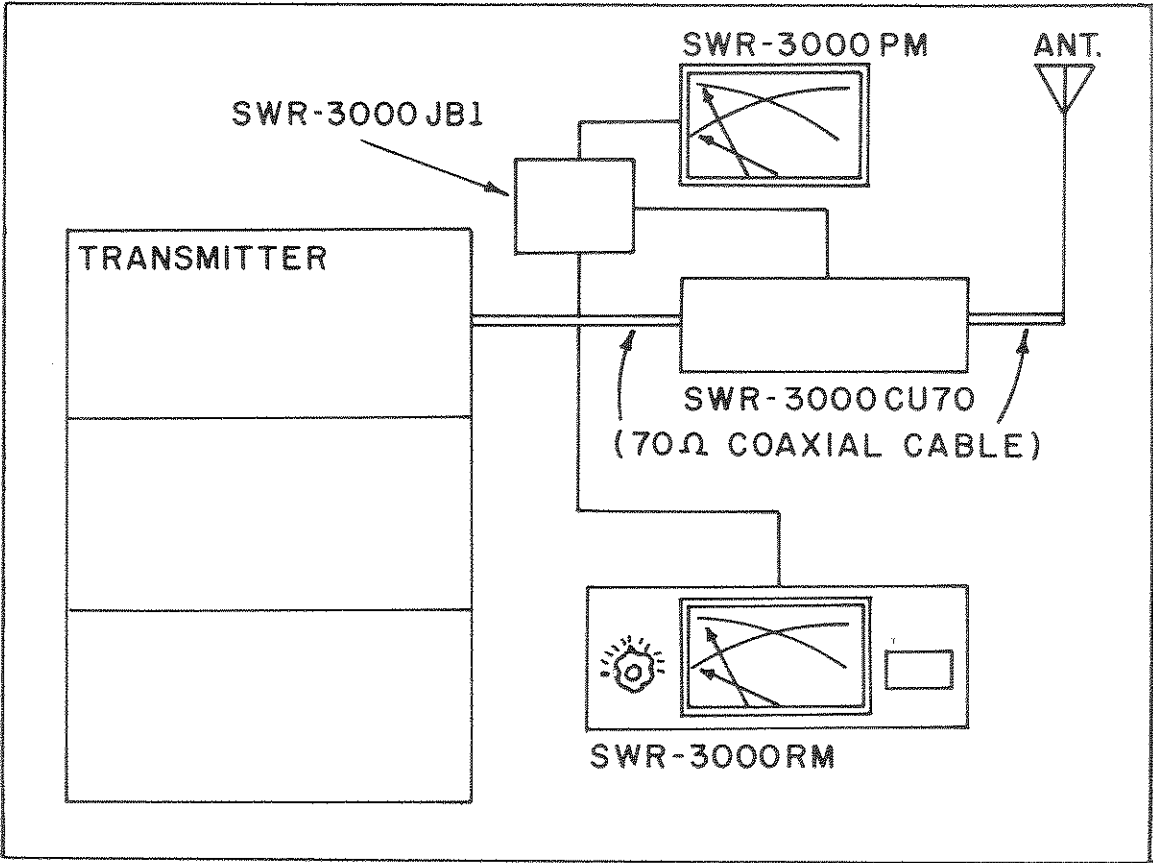
UNIT DESCRIPTION:

- A. Model SWR-3000 RM Control - Indicator SWR Meter Panel with 10 position selector switch. Standard 19" relay rack mount.
 - B. Model SWR-3000 PM Control - Indicator, Portable Portable SWR Meter Unit, hand held or bracket mounted.
 - C. Model SWR-3000 CU-70 Coupler, Directional 70 ohm system
 - D. Model SWR-3000 CU-50 Coupler, Directional 50 ohm system
- Coupling Unit, mounted in transmission line by means of QDL connectors.
Mating QDL plugs supplied. For use with cables RG-17, 18, 35 and 164/U.
- E. Model SWR-3000 JB-1 Junction Box
- Junction Box, furnished with bracket for ease in mounting to transmitter.

TECHNICAL SPECIFICATIONS:

- FREQUENCY RANGE:** Broad band 2 to 30 megacycles.
- POWER CAPACITY:** 3000 watts maximum with a VSWR of not more than 5/1. For greater VSWR, a suitable reduction in transmitter power must be made to prevent overheating of the Coupling Unit.
- ACCURACY:** Within 10% for SWR readings.
- DIAL CALIBRATION:** Analog isolines directly indicate VSWR. Power indication on linear scales.
- SIZE AND WEIGHT:**
- | | <u>SIZE</u> | <u>WEIGHT</u> |
|--------------------------------|---------------------------|----------------|
| CONTROL-INDICATOR | 20-1/2" x 8-1/2" x 9-3/4" | 20 lbs. (App.) |
| CONTROL-INDICATOR,
PORTABLE | 7" x 6" x 2" | 2 lbs. (App.) |
| COUPLER, DIRECTIONAL | 14-1/2" x 5" x 5" | 4 lbs. (App.) |
| JUNCTION BOX | 3" x 3" x 1-1/2" | 1 lb. (App.) |
- COMPONENTS AND CONSTRUCTION:** Equipment manufactured in accordance with JAN/MIL Specifications wherever practicable.

SPECIFICATION FILES



Typical Example using Model SWR-3000 (70 ohm system)

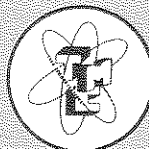
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