

Welcome to the online version of your DOSY Manual. We hope that you find this helpful and informative.

### A.M. Modulation Check (CONT.)

NOTE: A.M. modulation check functions must be performed on each wattage range, to prevent possible damage to the meter movements.

#### **SSB Modulation Check**

- 1. Turn Mode Selector Switch (#5 Fig. 1) to MOD position
- 2. Switch SSB/AM rocker (#6 Fig. 1) to SSB
- 3. For this test, the Transmitter must be in AM mode for setting modulation on meter to the SET line position on meter. Make sure you use the lower scale marked SSB MOD.
- 4. With Transmitter keyed, turn Mode Switch on Transmitter to either UPPER or LOWER SIDE BAND and talk or whistle steadily into the microphone. Read modulation on the lower scale of meter, marked SSB MOD.

### **Meter Scale Reading**

0 - 20 Watts	20 Scale
0 - 200 Watts	20 Scale X 10
0 - 2000 Watts	20 Scale X 100
0 - 4000 Watts	4000 Scale

### **General Notation**

On Grounded Grid amplifiers, we do not recommend checking modulation at higher powers. Grounded Grid amplifiers will not be able to output 100% modulation in the A.M. mode, however, the feed through power prevents the grounded grid from being fully modulated. This is the reason A.M. modulation should be checked at the transmitter, or with the Linear Amplifier in standby position.





- 3. 2000/4000 Watt Range
- Switch
- 4. SET/MOD Switch
- 5. Mode Selector Switch
- 6. Lite Switch
- 7. SSB/AM Mode Switch
- 8. Ear-Phone Jack

## Installation Instructions

The test center can be installed at any point in your transmitter line.

Test Center

Figure 1



## Headphone and Dial Lite

This DOSY meter is equipped with a head phone jack and meter panel lights. For these features to work this unit must be plugged into a 120-volt outlet with the supplied power adapter. The power adapter cable must be plugged into the power jack on the back of the test center. Position the toggle switch (#6 Fig. 1) to the ON position to turn on the lights.

## **Starting Tips**

- 1. Set SWR and MOD RF level control to minimum.
- 2. Set Range Switch to 2000.
- 3. Set SWR and MOD functions on each Range to prevent damage to the meter movements.

# **Operating Instructions**

### Watts

The TC-4001-P Test Center will indicate the power output (in watts) of your equipment at the point in the transmission line where you have installed the test center. To measure any power from 1 to 2000 watts, just set the Mode Selector Switch (#5 FIG. 1) to the appropriate range: 20, 200, 2000 watts. If wattage to measure is larger than 2000 watts, the 2000/4000 switch (#3 Fig. 1) must be switched to 4000. When returning back to the 2000 watt scale, you must return the switch (#3 Fig. 1) back to the 2000 watt setting.

NOTE: If power output is uncertain, use the highest range and work down until the range is appropriate to prevent possible damage to the meter movement.

### SWR Set

- 1. Turn Mode Selector Switch (#5 Fig. 1) to SWR-SET Position.
- 2. Turn SWR RF Level Control (#1 Fig. 1) to Min.
- 3. Key transmitter and turn SWR RF Level Control clockwise (#1 Fig. 1) to give a full scale meter reading to Set Line on the SWR Meter (#1 Fig. 1).
- 4. With Transmitter keyed, switch Mode Selector Switch (#5 Fig. 1) to the SWR position and read SWR ratio directly on SWR Scale.

NOTE: The SWR Functions need to be performed on each wattage range to prevent possible damage to the meter movements.

### A.M. Modulation Check

- 1. Turn Mode Selector Switch (#5 Fig. 1) to the MOD position
- 2. Switch Set/Modulation rocker (#4 Fig. 1) to SET
- 3. Switch Modulation Mode rocker (#6 Fig. 1) to AM  $\,$
- 4. Turn RF Level control (#1 Fig. 1) to MIN
- 5. Key Transmitter and turn RF Level Control clockwise to read full scale to SET line on AM Modulation Scale.
- 6. With Transmitter keyed, switch SET/MOD rocker (#4 Fig. 1) back to MOD position and talk into the microphone or steadily whistle to read modulation percentage on the AM Scale.
- 7. DO NOT CHECK MODULATION WITH HIGH POWER.