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INTRODUCTION

The MFJ-810 and MFJ-812 VHF SWR/WATTMETER are low loss meters primary designed for 2
meter operation. However it will function down to 21 MHz with reduced sensitivity.,,hhe
MFJ-812 also has a field strength circuit built-in to monitor RF radiated signals.

INSTALLATION

1. Connect a coax cable from the transmitter to the coax connecter on the meter marked "TRANSMT. TTER"

I 2. Connect the antenna cable to the coax connector in the meter marked "ANTENNA".
OPERATION

1. SWR Measurement:
A) Set the FS/SWR button to OUT for SWR. (For model MFJ-812 only.)
B) Set the FWD/REF button OUT. Transmit a continuous carrier and set the SWR/
POWER control for full scale deflection.
C) Push IN the FWD/REF button and read SWR.
NOTE: The SWR sensitivity must be reset when power level is changed . This will maintain an accurate SWR reading.

2. Power Measurement:

A) Set the FS/SWR button OUT (For model MFJ-812 only).
B) Set the FWD/REF button OUT.

C) Set the SWR/POWER control OUT.

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cal i l m t h i s control . However, due to component tolerance when precision reading is desi red,
the 300 watt range can be recalibrated as follows: Set the FWD/REF button
OUT. (Set the FS/SWR button OUT on the MFJ-812.) Set the SWR/POWER control
to 30, note the power level on the 30 watt scale, then rotate the control
to read the same power level on the 300 watt sca'?. Mark the control setting
for the recalibrated 300 watt range.

FIELD STRENGTH METER (For MFJ-812 Only)

1. Connect a 1 to 2 feet length of wire to the binding post on the rear of the meter.
2. Set the FS/SWR button to FS (IN). The FW@/REF button can be either IN or OUT.
3. Adjust the SWWPCWER control for the desired meter sensitivity.

TRANSMITTER ANTENNA 50 OHM STRIPLINE

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1 UF

f

100 uA

OUT I

REF
sw1

''IUFONLY

I sw2

ON MFJ-812

FIELD
STRENGTH
ANTENNA

1 N34 1
ON MFJ-810 JUMPER A TO B L - - -- -_I

MFJ-8 12/8 10 SCHEMATIC DIAGRAM