



JB 1002 FC/M



WAWASEE ELECTRONICS CO., INC.

P.O. Box 36 • Syracuse, Indiana 46567 • Phone (219) 457-3191

OPERATING INSTRUCTIONS

COUNTER

FREQUENCY RANGE: 100 Hz to 50 MHz (typical)

INPUT CHARACTERISTICS: Sine Wave Sensitivity 50 MV (typical)

DISPLAY: 6 Digits .5 Format with Leading Zero Blanking, Overflow Indication, Light Indicates Display Range Exceeded.

ACCURACY: \pm Time Base Accuracy \pm 1 Count. MHz and KHz Range.

POWER REQUIREMENTS: AC Equipment 117 VAC, 60 Hz 1A.

INSTALLATION

To install it is merely necessary to remove the antenna transmission line from the transceiver or amplifier and connect to SO-239 connector on the rear marked "Ant Load". Connect a jumper cable about two feet long of RG 58/U or RG 8/U terminated in a PL-259 connector from the connector marked "transmitter" to the transceiver or amplifier. The counter in this unit *is not* connected to the RF source directly. Therefore the RF power applied to the unit can be the full range of the instrument, 0-2000 watts.

OPERATION

To measure RF watts select the proper scale for the power to be measured, put the FWD-REV switch in the FWD position. Key the transmit-

ter and read watts directly on the scale corresponding to the function switch setting.

To measure SWR move the selector switch to SWR position and set the rocker switch to Forward Key Transmitter and adjust RF level control for maximum setting on meter pointer (to "SET"). Then move Rocker Switch to "Reverse" and read SWR directly from scale.

To adjust antenna proceed as outlined for SWR measurement, leave meter in Reverse position and adjust antenna for lowest reading. Use antenna manufacturer's instructions for adjustment of antenna.

FREQUENCY COUNTER — The MHz, KHz function switch lets you select the count gate time for your most accurate frequency reading. The decimal point is automatically placed by the selection of the count gate time (MHz, KHz switch).

The overflow indicator only operates in the KHz position. It will indicate an overcount and remain on until the frequency is removed from the input, thus resetting the counter.

The counter features leading zero blanking, only the first zeros are displayed. When a frequency is to be measured, only the display necessary for the count will be illuminated. All other zeros above the count will remain blanked in two digit segments. Thus a 10 KHz signal with the counter in the MHz range would read .0100, the two digits in front of the decimal point would remain blanked out.

If carrier frequency measurements are performed with a high percentage of amplitude modulation present, erroneous frequency reading may be obtained. This is caused by the fact

LIMITED WARRANTY

Every Wawasee Electronic's unit is checked very carefully. Once in a while, a less-than-perfect unit goes out . . . or a part is missing from the package. If there is a problem with your Wawasee Electronic's purchase, we'd like to correct it. Return the unit to your dealer or distributor and they will return it to the factory.

Your Wawasee Electronic's unit is guaranteed to the original purchaser for a period of ninety (90) days from the original purchase date — under normal use and service — against defective materials or workmanship.

Defective parts will be repaired, adjusted, and/or replaced when it is returned prepaid to Wawasee Electronics Co., Inc. Consumer Service Facility by your dealer.

The warranty is void if unit has been visibly damaged by accident, misuse, or if it has been serviced or modified by any person other than a Wawasee Electronics Service Facility.

This warranty contains the entire obligation of Wawasee Electronics Co., Inc. and no other warranties expressed, implied, or statutory are given. The warranty is void unless the Purchase Registration Card has been properly completed and mailed to Wawasee Electronics Co., Inc. within 10 days of purchase.

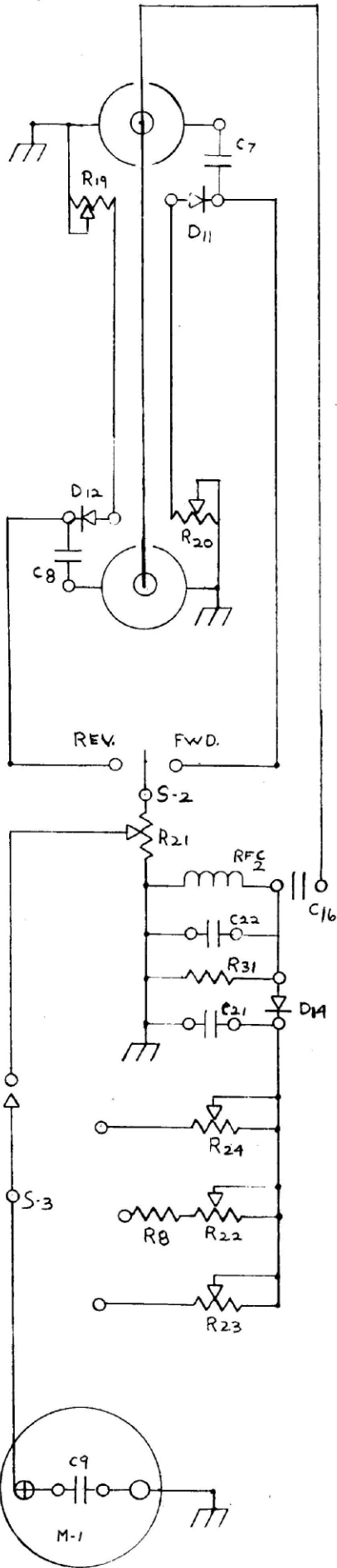
that the carrier level periodically decreases to a near zero amplitude at 100% modulation. When this occurs, the counter does not count during the entire interval and an erratic and inaccurate reading results.

RECALIBRATION

This should only be undertaken in the field by a qualified technician and only if a suitable laboratory standard RF wattmeter is available and a 50 ohm dummy load with power handling capacity up to 2000 watts RF. There is a calibrating potentiometer on the PC Board for each Wattmeter range. Adjust these to agree with the readings on the Lab Standard. To adjust the SWR reading, insert a low power 150 ohm resistor in the "Ant Load" Connector. Adjust to set in the Fwd position, and position the 100 ohm resistor on the RF board so "REV" reads 3 to 1.

CAUTION

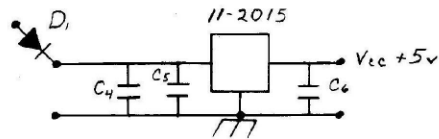
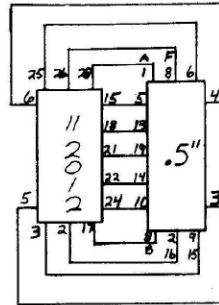
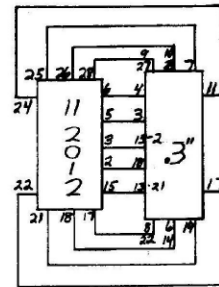
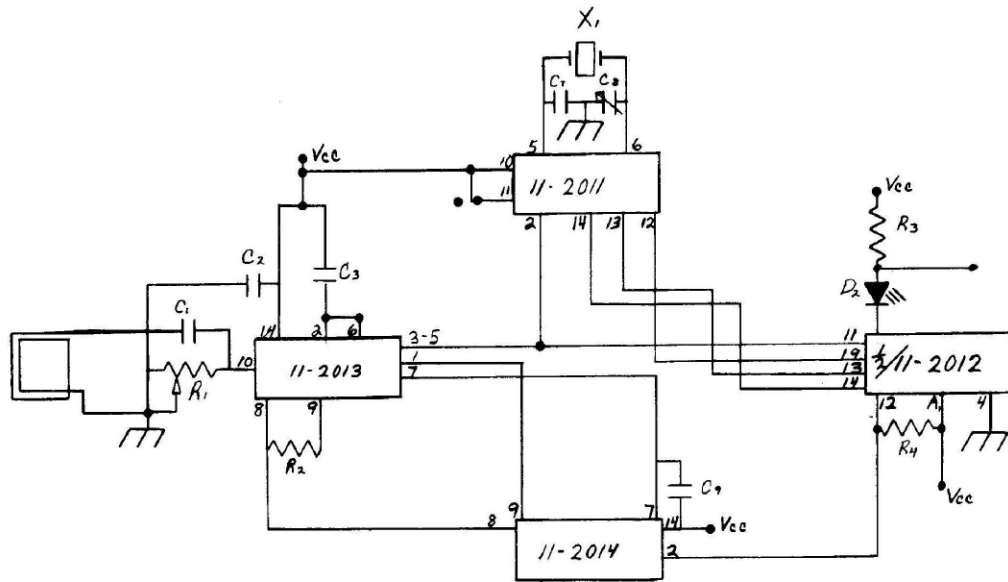
This unit was calibrated using a dummy load or reflected power to less than 4/10% and correct readings are possible only when the antenna SWR is very low (1.1 to 0) or less.



PARTS LIST

- R-8 10K ¼W
- R-19, 20 200 Ohm P/C Control
- R-21 50K Control
- R-22, 23 100K P/C Control
- R-24 1 Meg. P/C Control
- R-31 680 Ohm ¼W 5%
- S-2 Single Pole 2 Position
- S-3 Single Pole 4 Position
- C-7, 8 .001 1KV.
- C-9, 21 .01 1 KV.
- C-16 8.2 PF 1 KV.
- C-22 56 PF 1 KV.
- RFC 2 24 UH Choke
- D-11, 12, 14 IN68 Diode
- M-1 500 UA Meter
- PCB 2 SWR/Power PC Board

JB 2000 SW 6-80 METERS		
WAWASEE ELECTRONICS.		
P.O. Box 36, SYRACUSE, IND.		
SEPT 77	DRW. JM	CIC. JM



Frequency Counter
 MARCH 1977 DRN. BS.
 WAWASE ELECTRONICS INC.
 SYRACUSE IN. 46567

PARTS	
C _{1,2,3,6,9}	.1μF 50v
C ₅	.01μF 50v
C ₄	1000μF 16v
C ₇	15 pF 50v
C ₈	8-20 variable
R ₁	5K POT
R ₂	2700Ω
R ₃	100Ω
R ₄	220Ω
X ₁	Cryst #1
D ₁	1N4001
D ₂	LED

PURCHASE REGISTRATION

Owner's Copy

JB 1002 FC/M

Serial No. _____

Purchase Date _____

Where Purchased _____

*Cut Along This Line***PURCHASE REGISTRATION**

Return within 10 Days of Purchase

Serial No. _____ **JB 1002 FC/M** Purchase Date _____

Purchaser's Name _____

Purchaser's Address _____

City _____ State _____ Zip _____

*Would you please help us in planning future product design and service by providing the following information:***OCCUPATION:**

- Businessman—Professional
 Sales
 Educator
 Engineer
 Scientist
 Farmer—Rancher
 Student
 Other _____

USED MOST:

- Town—City
 Highway

PURCHASED FOR:

- Gift
 Personal Use

Make of Your Car

Model _____**Year** _____**DID YOU SEE THIS ADVERTISED IN:**

- Newspaper Magazine Catalog Mailer