

ANTENNA/RADIO TESTER

Use internal battery or external 12 VDC

An easy to use pocketable meter that checks:

- Receiver Function ► Output Power ► Antenna VSWR

Set-up:

- 1 Attach the antenna to the "ANT" connection on the ART-3 meter.
- 2 Use a 1-meter length of 50-ohm cable (Shakespeare part #4079, sold separately) to connect the transceiver to the meter.
- 3 Insert supplied battery into device and test battery as per "To Test ART-3 Internal Battery" section. If battery is low, replace battery.
- 4 If desired, connect the supplied power cord to 12VDC only, making sure to observe polarity to avoid damage.

To Test Radio Transmitter Output Power:

- 1 Slide ART-3 Top Switch to "WATTS" mode.
- 2 Ensure Bottom Switch is at "PWR OFF".
- 3 Key VHF transmitter (Mic PTT) on Channel 72. Read top scale of the meter.

To Test Antenna (VSWR):

- 1 Slide ART-3 Top Switch to "SET".
- 2 Ensure Bottom Switch is at "PWR OFF".
- 3 Transmit on radio and turn "SET" knob until the needle just touches the leading edge of the blue "Set" line.
- 4 Slide top Switch to "VSWR". Read middle scale.
- 5 A reading higher than 3 indicates the need for inspection and possible replacement of the PL-259 connector, the coax cable, or the antenna. Seek technical help as needed.

NOTE: The needle will not move/move very little if antenna is functioning properly.

To Test VHF Receiver:

- 1 Set radio to CH72, volume up to 1/3 and squelch to minimum - counter clockwise.
- 2 Slide ART-3 Bottom Switch to "Rx TEST".
A Tone should be heard through the Noise on the radio. If no Tone is heard seek technical help.
- 3 Slide Bottom Switch to "PWR OFF".

To Test ART-3 Internal Battery:

- 1 Slide Bottom Switch to "BAT". Read "BAT" scale.
- 2 Slide to "PWR OFF" when done.
- 3 Use only type 23A or MN21 12V alkaline battery.

ART-3 SPECIFICATIONS

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|-------------------|--------------------|
| Frequency Range: | 155-158 MHz |
| RF Power Scale: | 0 to 30 watts |
| Impedance: | 50 ohms |
| Accuracy: | 10% |
| Connectors: | SO-239 |
| Construction: | Die-cast aluminum |
| Signal Generator: | 3Khz Deviation |
| Tone: | 1000 Hz |
| RF Level: | -115 dBm (approx.) |

Although the meter can be left in-line, to minimize line losses it is recommended that the ART-3 be removed from the system after measurement.

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