

AKD-WA1 VHF/UHF Absorption Wavemeter

Technical Specifications Overview

- **Frequency Coverage:** 120 MHz to 450 MHz split over two selectable ranges. [1]
 - **Band Allocation:**
 - **Range 1:** 120 MHz – 200 MHz (Covers the 2-metre amateur band and marine VHF).
 - **Range 2:** 195 MHz – 450 MHz (Covers the 70-centimetre amateur band and PMR446). [1]
 - **Form Factor:** Compact hand-held enclosure measuring roughly 5.00 x 3.25 x 1.50 inches. [1]
 - **Internal Indicator:** Analog moving-coil panel needle meter. [1]
 - **RF Input Mechanism:** Rear panel RCA phono socket for the included plug-in aerial. [1]
 - **Power Requirements:** 1 x standard 9-Volt PP3 transistor battery. [1]
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Step-by-Step User Instructions

1. Setup & Powering On

1. Access the battery bay on the reverse side of the chassis.
2. Connect a fresh **9V PP3 battery** to the terminal clips.
3. Locate the RCA phono socket on the back panel and insert the provided rigid wire or telescopic aerial. [1]

2. Tuning & Operation

1. Position the wavemeter antenna near the radiating element or chassis of the active RF transmitter.
 2. Flip the range toggle switch on the front panel to select either **Range 1** or **Range 2** based on your target band.
 3. Slowly sweep the large central **tuning dial** across its arc.
 4. Watch the internal meter needle. When the internal tank circuit resonates with the transmitter's frequency, the needle will sharply peak.
 5. Read the exact frequency directly off the dial scale marking pointed to by the cursor line. [1, 2]
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Crucial Safety Precautions

- **Do Not Hardwire to Transmitters:** This is an *absorption* wavemeter designed strictly to capture loose radiated energy over the air. **Never** connect a radio's antenna output jack

directly to the wavemeter's RCA socket. Doing so will immediately burn out the internal germanium or silicon detector diodes. [[1](#), [2](#)]

- **Managing Overload:** If the analog needle slams hard against its maximum limit ("pegs" to the right), pull the wavemeter further away from the transmitter to prevent circuit degradation. If the needle barely moves, bring the unit closer or extend the telescopic aerial section.