



# ACECO

# HUNTER

## Introduction

The Aceco Hunter is the latest advance in hand-held radio frequency detector. It excels at detecting radio frequencies between 1 MHz and 3 GHz. Advanced features such as field strength measurement are incorporated. It is compact, truly pocket sized, test instrument designed for ease of use and dependable performance. Supplied as a complete with internal rechargeable battery pack, AC wall charger and 7 section telescopic antenna.

## Specifications

Frequency range:	1 MHz - 3 GHz
Weight:	210 g
Size:	80 mm high x 68 mm wide x 31 mm deep
Impedance:	50 Ohms (BNC Socket)
Case:	Stamped aluminum with black anodized finish
Battery:	Internal 4 x AA 600 mAH rechargeable battery pack
Power:	9 VDC 300 mA
Timebase:	Less than 1 PPM at room temperature

## Features

- 7 digit Liquid Crystal Display
- Low power consumption (Average 6 hour battery life)
- Supplied with battery pack, AC wall charger and telescopic antenna
- Filter prevents display of random noise
- Sensitivity up or down switch to adjust the signal strength alert sensitivity
- Holds a valid frequency
- Low battery indicator
- Ultra sensitive synchronous detector 15 section bargraph to show RF signal strength

## Controls

1. **Power** Switch. This slide switch turns the RF detector on and initiates a 2 second test of all the LCD segments.
2. **Alert** Switch. This is switched to the LIGHT position for LED alert output mode and switched to the BEEP position for BEEP & LED alert output mode.
3. **Filter** Switch. Slide the switch to turn the filter on and off.
4. **Sensitivity +** Button. This is used to increase the sensitivity.
5. **Sensitivity -** Button. This is used to decrease the sensitivity
6. Calibration. The calibration adjustment opening is located on the front panel of the RF finder. This allows access to the trimmer capacitor that provides about a 10 PPM adjustment range of the time base oscillator. This is not usually necessary but to do so read a signal of a known frequency before adjusting the trimmer for correct frequency display. If you calibrate at 4.1943 MHz or above then the RF detector will be more accurate.

## Warranty

Aceco Electronics, Corp. guarantees the RF detector and its accessories for one year against defects in manufacture. This warranty does not cover items that have been modified, subject to unauthorized repairs, misuse or abuse. This warranty does not cover damage caused by excessive power levels applied to the signal input. **Never make any kind of connection between the RF detector and a transmitter.**

## Hints and Tips

1. Battery Operation

This RF detector can operate for up to six hours from its fully charged batteries. They are charged when the unit is plugged into the supplied AC/DC adapter. Full recharge will occur over 12 to 16 hours. Before recharging the batteries you should be deep cycled occasionally by allowing them to completely discharge to maintain maximum battery capacity. The NiCd batteries should last for several years. However, it is a good idea to check them every twelve months for signs of corrosion or leakage. Always replace the whole set if any one cell fails.

## 2. Signal Input

When using the RF detector with an antenna for signal pick up, random frequencies may appear on the display. This is quite normal and is caused by the high gain of the receiver circuits, which amplify noise in the absence of a strong readable signal. Never get the unit too close to a transmitter as internal damage will result.

## 3. Antenna Selection

The supplied telescopic antenna is best for general purpose use. This is because its length can be adjusted to suit the frequency required. Usually you will want a shorter antenna for UHF and a fully extended one for VHF / HF.

## 4. Reception Distance From Transmitter

The distance from which you will be able to receive frequencies will depend upon the type and location of the transmitting antenna, transmitter output power and the frequency in use.

Some typical distances are:

Cordless Phone	0.3 meters
Analog Cellular Phone	3 - 20 m
CB radio	2 - 8 m
VHF Two Way Radio	3 - 30 m
UHF Two Way Radio	3 - 30 m

## Input Sensitivity ( Typical )

Amplifier:	50 Ohm
Impedance:	50 Ohm VSWR less than 2:1
Range:	1 MHz - 3 GHz
Sensitivity:	less than 2 mV at 100 MHz - 1.2 GHz
Max. input:	15 dBm

## RF Signal Strength Bargraph

