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("Coax" = Coaxial Cable, typically RG-58 or Miniature RG-174)

Coax to Off-Board Antenna

The HANDI-Finder<sup>®</sup> is a Handheld Direction Finder which can be used to localize both AM and FM carrier-based sources, using a single connection to the antenna input of an FM receiver tuned to a frequency of interest, in the range of 45-470MHz.

Max performance at a given frequency requires the vertical antenna elements to be spaced just under one quarter wavelength.

Coax to Receiver (route down the center line)

Coax to Off-Board Antenna

Coax connects to more complex type antennas, when not using the simple open-loop wire antennas.

A basic HANDI-Finder<sup>®</sup> Experimenter's Kit is available which includes the circuit board and small components. An extensive on-line manual discusses antenna variations DF-ing tips, terrain problems, and safety hazards.

The quick-build kit uses open-loop wire antennas made from user-supplied coat-hanger wire, and the user also supplies the receiver down-lead coax and connector.

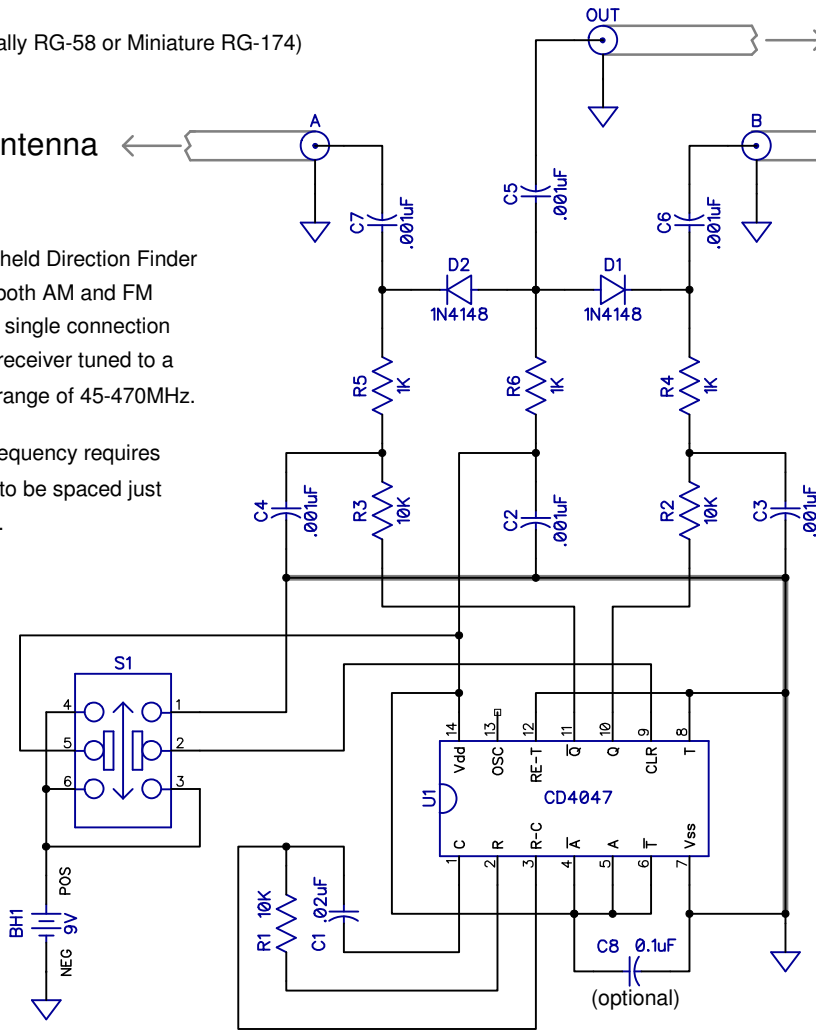
The CD4047 has been a standard component since the early days of CMOS and continues to be available from catalog sources such as Digi-Key, Mouser, and others.

It offers contains the convenience of an RC osc. plus a divide-by-two function, all in one package, producing an inherent 50% duty cycle output.

Details at: [www.handi-finder-com](http://www.handi-finder-com).

3-Position Slide Switch - S1
Up = DF tone ON
Center = OFF
Down = ON Standby

9 Volt Battery (Unit draws 1.7mA)



Tone Frequency	R1	C1
400Hz	10K	.056uF
1000Hz	10K	.02uF
1200Hz	47K	.01uF

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[www.HANDI-Finder.com](http://www.HANDI-Finder.com)

Direction-Finder Attachment  
Model HF10R16

Drawn using: DIPTRACE CAD

Drawn by: RAL  
Date: 20180616

HANDI-Finder<sup>®</sup> Functional Schematic Layout of Circuit Board.

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