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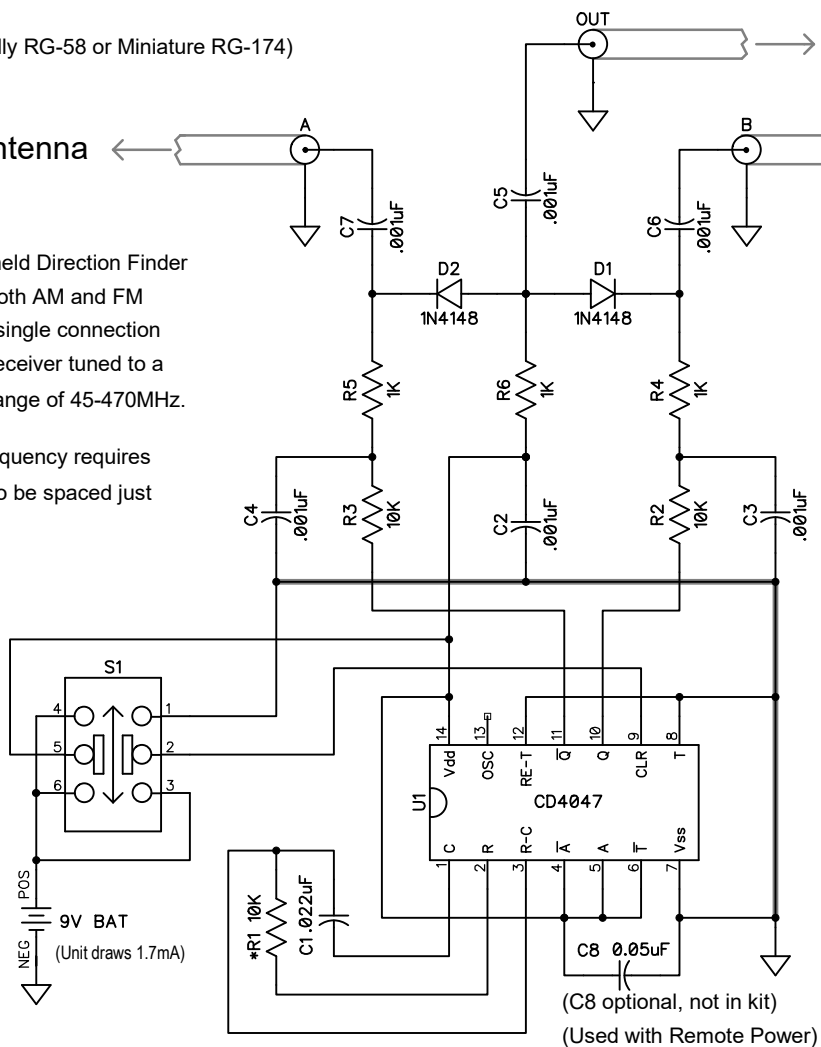
("Coax" = Coaxial Cable, typically RG-58 or Miniature RG-174)

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.

S1 Slide Switch 3-Positions:
Up = ON-Rcve, w/DF tone
Center = OFF
Down = ON-Rcve, No Tone



Coax to Receiver: (Route down the center line of solder side. Ground the coax shield at the large hole.)

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 the flexibility of an R-C style oscillator plus a divide-by-two function, all in one package, producing the ideal, inherent, 50% duty-cycle output.

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

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

\*For adjustable frequency, replace R1 with 50K Pot in series with 2.7K Fixed Resistor.

(Use Bourns trim-pot Style 3296 or equivalent size/shape)

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

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

Direction-Finder Attachment  
Model HF10R21

Drawn using: DIPTRACE CAD

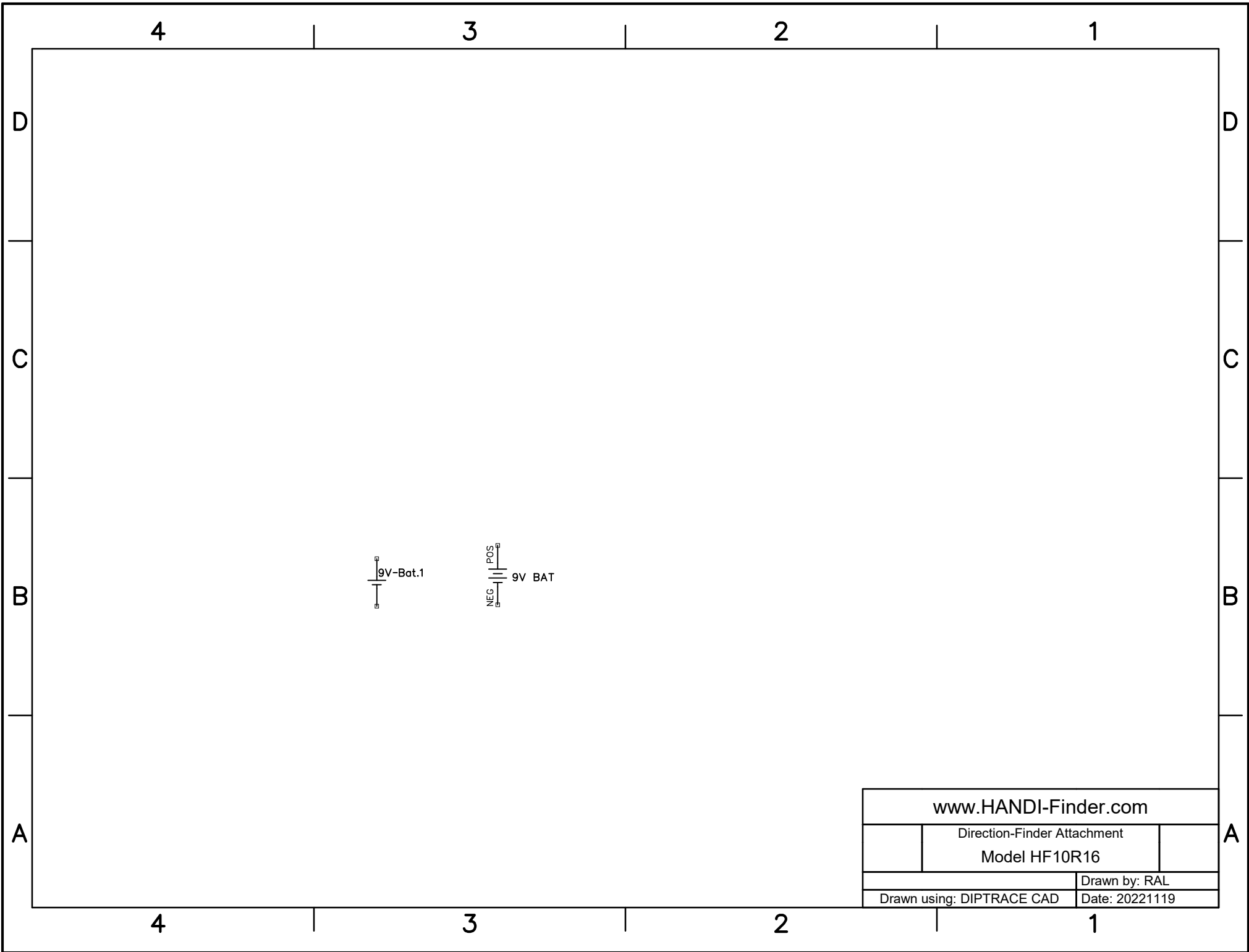
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C

C

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A

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9V-Bat.1

NEG POS  
9V BAT

www.HANDI-Finder.com

Direction-Finder Attachment

Model HF10R16

Drawn by: RAL

Drawn using: DIPTRACE CAD

Date: 20221119

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