## HANDI-Finder® EXPERIMENTER'S KIT

## COMPONENT PARTS PACKING LIST and ASSEMBLY NOTES

4ea Sets, 6-32 x 1/2" (or 3/8") Binder Head Machine Screws, flat washers, nuts, and lock washers.

(Use lock washers under nuts, and use a flat washer against the board so the lock washer doesn't cut into the circuit board foil.)

- 1 ea C1, capacitor, .022μF/50V (labeled "223" or similar code) Mylar type, --sets frequency.
- -- "JUMPER" is made from the cut off lead of C1 or similar! Don't forget to install the jumper!
- 1 ea C2 thru C7 capacitor, 1000pF/50V, ceramic disk (may be labeled "102")
- -- (C8, capacitor, 0.1μF/50V, or 0.056μF bypass, not needed with kit PC board)
- 1 ea Dl, D2, diode, switching, Silicon, 1N4148 or 1N914
- 3 ea R1, R2, R3, resistor, carbon film, 10k, 1/4w, 5% (Brn-Blk-Org-Gold)
- 3 ea R4, R5, R6, resistor, carbon film, 1k, 1/4w, 5% (Brn-Blk-Red-Gold)
- 1 ea S1, micro-mini slide-switch, DP3T, ALCO MHS-223 or COMAX 02, ON-OFF-ON

(Function: *UP*-ON-D.F.; *CENTER*-OFF; *DOWN*-ON-STBY-LISTEN)

The above items are usually found in a small bag, and these following parts are in the main bag:

- 1 ea U1, IC, CD4047B or equivalent, mounted in 14 DIP socket, foil-wrapped.
- 1 ea Battery Holder, Keystone #1291 (--which has ribbon leads that may be a tight fit into the holes. Ease them in slowly and carefully.) -Rear can be fastened with Pop Rivets from top.
- 1 ea PC Board and Instruction Manual

The user must add: 2 antennas, 9V battery, coax cable down-lead with connector, and a handle. (An alkaline battery will give best service. Current Draw is 1.7mA.)

## **MORE SAFETY NOTES:**

AND FIBERGLASS SLIVERS! Electronic construction requires use of solder with appropriate rosin-core (non-acid) flux. SOLDER CONTAINS LEAD and OTHER METALS and FLUXES, WHICH ARE DANGEROUS, and GIVE OFF DANGEROUS FUMES ESPECIALLY WHEN HEATED. TAKE PRECAUTIONS! Set up a little

fan to draw away fumes! The new "no-lead" solder, if used, requires careful temperature control and a lot of experience to get good results. Extra liquid Rosin Flux helps with all solder types and can be cleaned off with common "rubbing alcohol" otherwise called Isopropyl Alcohol (use 91 percent) available at drug stores.

WARNING! DO NOT USE EXCESSIVELY LONG POLES OR ALLOW the HANDI-Finder or any antennas to ever come into contact with overhead wires or other potential sources that can cause electrical shock and injury! Always be aware of your surroundings! Work to foresee hazardous situations and avoid them! Think about the people around you, watch for sharp edges, and don't lose things out of car windows. Avoid making yourself a target for lightning as well. Don't take chances or tempt fate!

If you have any missing or defective parts, or are in any way dissatisfied, regardless of where you bought your kit, contact the *master distributor*, NOARD, Inc., P.O. Box 271, Brunswick, OH 44212, Tel. 330-225-7373. Describe the problem, and state where you purchased the unit. Be sure to include the series number on the circuit board, and state whether the RALTEC, NOARD, or *other* trademark appears thereon. --www.noard.com