



CW75
ELECTRONIC KEYER
MODEL 1507

OPERATOR'S MANUAL



I. GENERAL DESCRIPTION

The CW75 Keyer can be used to provide a keying function for virtually any type of transmitter (cathode keying, grid block keying, solid-state etc.), as well as a code practice keyer. The styling matches that of the Drake 7-line. A sidetone oscillator is provided with an internally adjustable tone control.

The CW75 may be used with a straight key, semi-automatic key (bug) or squeeze paddle. When using a squeeze paddle, the keyer provides iambic operation. Front panel controls adjust sidetone volume, keyer speed and ON / OFF / TUNE.

II. FEATURES

- Built-in Sidetone
- Optically Coupled Keyline for Positive or Negative Keying Voltages
- Speed and Volume Control (Front Panel Adjustable)
- Tone Control (Internally Adjustable)
- Self-Completing Dots and Dashes
- Squeeze Keyer, Semi-Automatic "Bug" or Straight Key Operation
- Iambic Keying
- Optional Internal 9 Volt Supply (Battery)
- Speed Control (5...50 WPM)

III. SPECIFICATION

Keying: Reliable optically coupled solid state (± 300 V, 100 mA maximum)

Supply: 7...16 VDC, 50 mA @ Maximum Output (TUNE) @ 13 VDC

Speed: 5...50 Words Per Minute

Sidetone Output:

Level: 20 mW @ 13 VDC

Frequency: Adjustable Internal (700 ... 1100 Hz)

Size: 7" L \times 6.25" W \times 2.25" H (17.3 \times 15.9 \times 5.4 cm)

Weight: 1.4 lbs. (0.63 kg)

IV. INSTALLATION

The CW75 may be located at any convenient location but care should be exercised in not putting the keyer in a position to block heat venting holes in other equipment.

The CW75 may be secured to the top of an RV7, MS7, SP75, CS7, P75 or equivalent cabinet with the two retaining clips provided. First, remove the screw-in mounting feet on the CW75 and replace with the four number 6 screws provided. Place the four stick-on rubber feet on the bottom of the CW75 next to the cover mounting screws on the cover. Remove the top screws on each front extrusion end cap of the cabinet that is to be under the CW75 and the bottom screws on each CW75 end cap. Place the retaining clip between the end cap and extrusion. Position so that the hole is properly aligned and replace the screws. Repeat the retaining clip installation on the other side.

Screw terminals are located on the rear panel for all external connections. The wiring cables can be secured by one of the cable clamps on the rear panel.



Figure 2 - Rear Panel Connections

- EXT (1 - 2): For External Power Supply (7...16 VDC at 50 mA).
- KEY LINE (3 - 4): Connect Key Line of Transmitter (internally protected against reverse connections).
- HAND KEY (5 - 7): Connect Key to Terminals to Leads 5 and 7.
- PADDLE: Connect to Squeeze Keyer. Noting Dot and Dash Connections.

V. OPERATION

The CW75 electronic keyer may be used as a code practice keyer or connected to the key line of a transmitter/transceiver for transmitter CW keying.

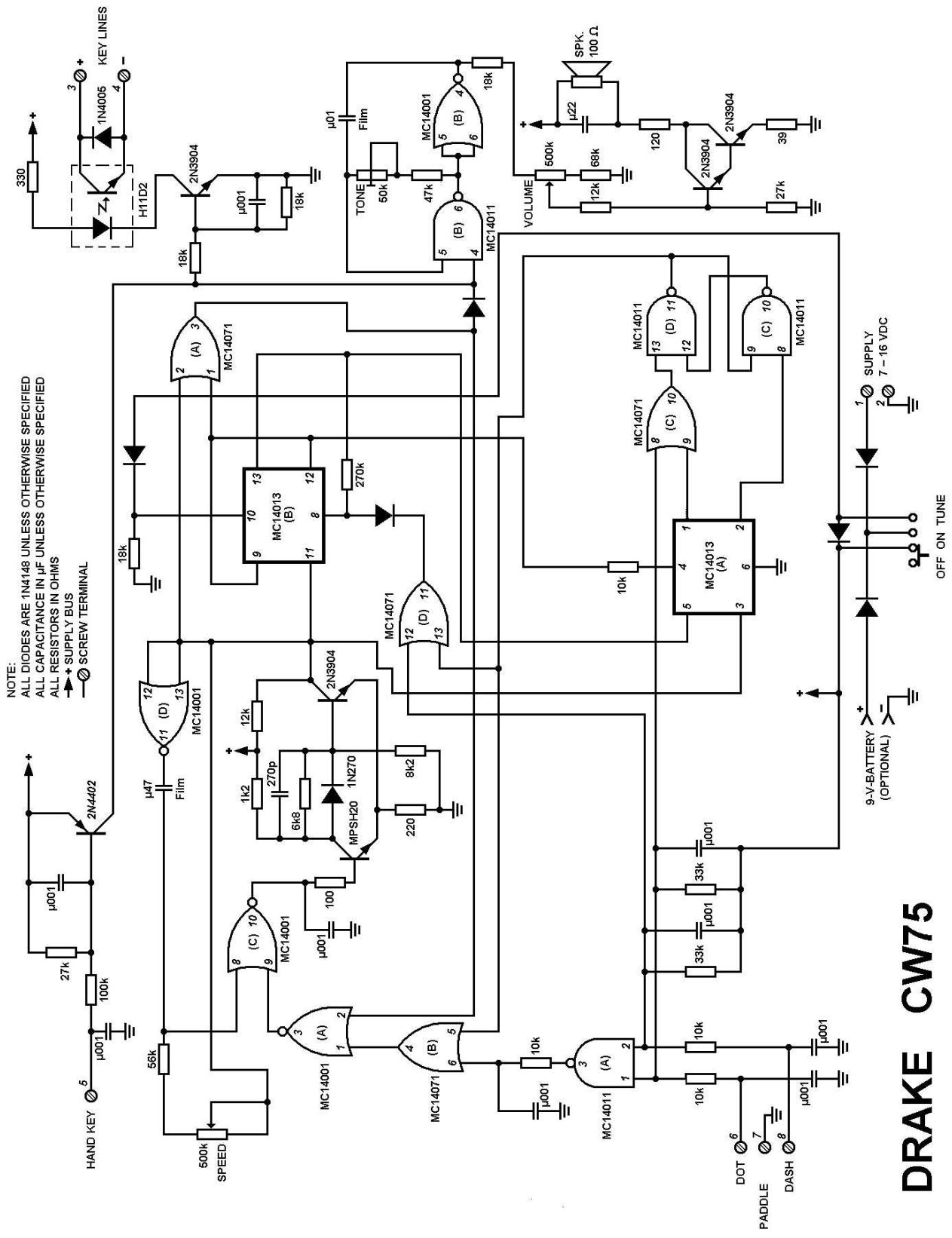
An optical coupled solid state keying circuit is used to provide keying action to solid state transmitters as well as vacuum tube transmitters. The keying circuit will provide reliable keying to key lines as high as plus or minus 300 Volts (open circuit) and will sink as much as 100 mA. Connect the key line to transmitter, noting the polarity. (The CW75 is internally protected against reverse polarity hook-up.)

Connect an external supply (7 ... 16 VDC) to the rear or use an internal 9 V battery. Connect the key to the rear panel connections and the CW75 is ready for operation.

The 3-position rocker switch provides an OFF position, ON position in the middle and TUNE position at the extreme right. The tune position provides a constant keyed output for use in tuning a transmitter or matching unit.

A small access hole is located on the bottom cover to permit adjustment of the side-tone frequency. This adjustment provides a range of about 700 to 1100 Hz and may be adjusted for your preference. Use a small blade screwdriver and adjust the variable resistor for the desired tone while in tune position.

NOTE:
 ALL DIODES ARE 1N4148 UNLESS OTHERWISE SPECIFIED
 ALL CAPACITANCE IN μF UNLESS OTHERWISE SPECIFIED
 ALL RESISTORS IN OHMS
 \rightarrow SUPPLY BUS
 \ominus SCREW TERMINAL



DRAKE CW75