

## HAL MKB-1 Morse Keyboard Codetyper

If you're a CW man who wants more fun from his mode, consider the MKB-1, a complete Morse keyboard codetyper, available either as a kit or fully assembled. If you've never used a codetyper, a new world of operating ease awaits you. Touch the keys--just like those of a standard typewriter--and you send perfect code effortlessly. Here are some of the advanced features you'll find in the MKB-1:

- Code speed is variable from 10 to 60 WPM
- Weight (dot-to-space ratio) is adjustable and is not affected by speed changes.
- A monitor oscillator, with variable volume and tone, drives an internal speaker or an external audio system--ideal for group code lessons.
- The internal transmitter keying transistor can be used for grid-block keying (up to -150 V at 150 ma.) or cathode keying (250 V at 150 ma.).

The MKB-1 is designed with the engineering skill and high-quality components you've come to expect from HAL. The dependable TTL logic circuitry, which contributes to the unit's compactness and light weight, is constructed on a 3 by 6 inch double-sided circuit board. Plated-through holes make soldering easy.

The keyboard assembly uses reliable commercial keyswitches with durable double-shot-molded keytops. The switches are encased in groups of 4 or 5, ensuring perfect key alignment and adding to the rigidity of the PC board on which they mount. The proven core matrix technique is used for character coding. Extra keyswitches are provided to actuate the optional KB-ID identifier.

The KB-ID, which automatically transmits your station call, mounts in the MKB-1 cabinet. The identifier is described separately in this catalog.

The MKB-1 comes complete with all circuitry and components, the keyboard assembly, and an attractive sloping-panel cabinet. The internal power supply operates from either 115 or 230 volts AC, 50 to 60 Hz. HAL's one-year warranty against defects in materials and workmanship covers all factory-assembled keyboards.

Now's the time to move up to codetyper convenience and accuracy. See the equipment price list for full ordering information.

## **KB-ID** Automatic Identifier

An accessory for the MKB-1 keyboard, the KB-ID automatically transmits the letters "DE" followed by your station call at a touch of the keyboard ID key. Hold the key down and your call repeats (without the "DE" prefix) until you release it.

The identifier memory has ample storage capacity for any amateur call sign plus the portable designator, "/ number". When you're operating from your fixed station, just throw a toggle switch and the portable designator is deleted.

Two other keys activate still another identifier feature. Each one may be programmed to transmit any group of two characters followed by a space. For example, you could code one of the keys to send "73". The following space is produced automatically. Or if you prefer, you can eliminate the space and substitute a third character. As with the ID message, the character group repeats as long as the key is held down. All functions are self-completing and the keys are locked out while the message is being sent.

The MKB-1 keyboard codetypers come equipped with three extra keyswitches for the identifier functions. Cabinet space is reserved for mounting the identifier, which is constructed on a  $3 \times 4$  inch G10 circuit board with plated-through holes for ease of assembly. The identifier operates from the keyboard power supply.

The KB-ID can also be used with the W4UX Touchcoder II formerly produced by HAL. It may be necessary to provide a separate identifier power supply.

The KB-ID is available as a kit, or, if you order it with an assembled MKB-1, HAL engineers will wire, install, and test it before your keyboard is shipped. On assembled units, HAL will also precode the identifier memory with the messages of your choice. Be sure to specify the call (complete with the portable designator) and the other two character groups you'd like. Consult the equipment price list for additional ordering information.