

# MFJ-407C DELUXE ELECTRONIC KEYER

The MFJ-407C uses a reliable Keyer-IC to make sending perfect code easier.

## CONTROL FUNCTIONS

1. The PWR switch turns the unit ON and OFF.
2. The SPEED CONTROL varies code speed from 5 to over 60 WPM.
3. The WEIGHT CONTROL varies the code weight. The standard dot-dash-space ratio (counter-clockwise) is 1:3:1. This control is turned clockwise to increase dot and dash lengths.
4. SEMI-AUTO allows semi-automatic "bug" and manual operations. The keyer generates dots automatically when a squeeze or single lever key is used. Dashes are manually made. The keyer is completely manual when a straight key is used.
5. The TONE CONTROL sets the desired sidetone pitch.
6. The TUNE SWITCH continuously keys the transmitter for tuning.
7. The VOLUME CONTROL adjusts the loudness of the sidetone from the internal speaker.
8. IAMBIC A/B SELECT is inside the unit. A strap allows the user to choose between IAMBIC Type "A" or Type "B".

Type "A" does NOT produce a following alternate element when a squeeze is released during a dot or dash. Type "B" does produce a following alternate element after squeeze release. For example, in Type "A", a squeeze release during the "dah" in the letter A will produce "dit dah" (A). In Type "B", squeeze release during the "dah" in the letter A will produce "dit dah dit" (R).

*Note: Power must be off when changing the strap setting.*

## INSTALLATION

1. A 9 V transistor battery may be installed by removing the two screws on the side of the box.
2. An optional AC ADAPTER (12 VDC), the MFJ-1312B may also be used. One end of the ADAPTER should be plugged into the subminiature jack on one the rear panel and the other end should be plugged into a 110 V (230 V) outlet. Batteries are automatically disconnected when the external power is used. An adapter with a 2.1 mm coaxial plug and a sleeve as ground should be used.
3. A squeeze or single lever key can be used. Squeeze key allows IAMBIC operation. A 3.5 mm stereo phono plug and a two-conductor shielded cable should be used. The two shields should be tied together and connected to ground if separately shielded cables are used. The dot wire should next be connected to the ring of the plug and the dash wire to the tip. The MFJ-407C becomes a manual keyer when a straight key is used. The unit will safely key your transmitter and eliminate the shock hazard of high voltage being present on the straight key.

*Note: To use a straight key, first switch the keyer to the SEMI-AUTO mode. Again a 3.5 mm stereo phono plug should be used because a mono plug will not work on a straight key on SEMI-AUTO mode. Connect one wire to the tip of the plug and another wire to ground. The ring of the plug should not used.*

## KEYER OPERATION

1. A 9 V battery or an optional AC ADAPTER may be used to supply power to the keyer. The length of the battery's lifetime depends on the volume at which the keyer is operated.
2. The key paddle should be connected to the KEY jack. A dual paddle squeeze key or a single lever key can be used.
3. Next, the keyer should be turned ON and the SEMI-AUTO switch set to AUTO.
4. The user should now start sending with paddle and adjust volume, tone, weight, and speed to his preference. The weight or speed should be reduced if a steady tone at high speed occurs. This adjustment is accomplished by turning the respective knob counterclockwise.
5. The dot and dash memories make sending easier. The memories allow the user to key a dot before the completion of a dash or vice versa. This feature can be checked by setting the keyer to the lowest speed and tapping first the dash lever and then the dot lever before the completion of the dash. The keyer will provide both the dash and the dot. The dash memory can be checked in a similar manner. The dot insertion feature allows the user to insert a dot by tapping the dot lever while holding the dash lever in. The dash insertion feature allows the user to insert a dash while holding the dot lever in. The IAMBIC operation feature allows sending of alternate dots and dashes when using squeeze key and with both paddles squeezed. The first paddle contacted will determine whether a dot or dash occurs first.
6. The user may select either IAMBIC A or B according to his preference.

## TECHNICAL ASSISTANCE

If you have any problem with this unit first check the appropriate section of this manual. If the manual does not reference your problem or your problem is not solved by reading the manual you may call MFJ Technical Service at 601-323-0549 or the MFJ Factory at 601-323-5869. You will be best helped if you have your unit, manual and all information on your station handy so you can answer any questions the technicians may ask.

You can also send questions by mail to MFJ Enterprises, Inc., 300 Industrial Park Road, Starkville, MS 39759; by Facsimile to 601-323-6551; or by eMail to [techinfo@mfjenterprises.com](mailto:techinfo@mfjenterprises.com). Send a complete description of your problem, an explanation of exactly how you are using your unit, and a complete description of your station.