General Description

The MFJ-412 Iambic Keyer Module for MFJ QRP Transceivers is a plug-in board which adds the full keying power of an iambic keyer to your rig.

Before You Install

1. Iambic Mode: You may select mode "A" or "B" iambic response by using jumper JMP1. When a *squeeze is released* during an element (dot or dash), mode "B" iambic adds an opposite element. Mode "A" iambic just finishes the element in progress. The MFJ-412 is normally set for mode "A" iambic at the factory. If you prefer mode "B" iambic, set the jumper to the "B" position.

2. Paddles: A 3.5 mm stereo plug is needed for your paddles. If your paddles already have a 1/4" plug installed, you must replace it with a 3.5 mm stereo plug. A two conductor fully shielded cable should be used. Wire the tip of the plug to the dot contact and the ring of the plug to the dash contact. Be sure to use the braid of the cable for the paddle ground contact.

3. Speed Range: Keyer sending range is 3 to 66 WPM. Turn the Speed control clockwise to increase speed and counter-clockwise to decrease speed.

Installation Procedure

1. Disconnect power source and remove transceiver cover (6 screws). Set cover aside without stressing the speaker leads.

2. Remove mounting hardware from keyer module Speed control. Look to left-rear of transceiver for a 4-pin header and two (2) rear-panel access holes (Speed control and Keyer jack).

3. Place Speed control shaft into mounting hole and CAREFULLY rotate board down onto header so pins mate into the socket (see drawing below). Reinstall hardware, securing potentiometer to rear panel. Install the #6-32 screw to secure board to the support stud.

4. Test operation. If keyer fails to function, confirm all four header pins are inserted in the module correctly. Also, make sure keyer paddles are wired properly.

Operation

For simplicity, weighting is fixed at the standard dot-dash-space ratio of 1:3:1. Keying speed is adjustable over a 3 to 66 WPM range. The MFJ-412 should not interfere with the normal function of your transceiver's "Straight Key" jack.

The dot and dash memories make sending easier. The memories allow the user to key a dot before the completion of a dash and 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 both paddles are squeezed. The first paddle contacted will determine whether a dot or dash occurs first.

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 FAX to 601-323-6551; or by email to 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.

Schematic