# INSTRUCTION FOR KATSUMI MESSAGE KEYER

## Model MK-1024





### **INSTALLATION INSTRUCTION**

#### FEATURES

The model MK-1024 itself the dots, dashes and spaces in the precise ratio required for perfect code, at any speed desired by the operator.

Four independent 256 bits programmable memories or one 1024 bit long message memories. Pushbutton both select and start a message run.

Memories are large enough for CQ/ID and contest, schedule, test ..... "Exchange" ... all you do is send one call per contact! LED end of message indicator, instant reset and STOP pushbutton.

Squeeze (IAMBIC) sending with full dot and dash memories. Plug-in unit PCB and solid-state circuitry. Built-in sidetone with tone and volume control, switch for SEMI/AUTO. Built-in speaker and headphone jack.

Heavy duty transistor switch (2SB546) for 150 V, 2 Amp. DC and with a built-in high speed plate relay for max. 700 V, 500 mA any transmitter keying.

Operates on 100–120 VAC / 220–240 VAC, 50–60 Hz or external power 9–14 VDC.

#### **OPERATION**

- (1) Check polarity and the required keying voltage and current on your transmitter key terminals, using a tester (voltmeter - milliameter). The key-up (open circuit) voltage must not be in excess of 150 VDC and the key-down (closed circuit) current must not be in excess of 2 A (2000 mA).
- (2) Connect the keyline 15 on the rear panel terminal + to the POSITIVE keying terminal of the transmitter and the to the NEGATIVE terminal as previously determined by voltmeter test in (1).
- (3) Setting for AC line source voltage, carefully position the slide-switch 18 into the conformity for a small screwdriver use.
- Plug in the power cord 19 to the 100–120 V/220–240 V, 50–60 Hz alternating current supply. Set the PWR switch 10 to the pushbutton ON and the STOP switch 8 to the push. The pilot lamp (LED) 9 should light.

#### **OPERATION OF ELECTRONIC KEYER**

- (5) Moving the dual key levers 6 to the dot position (push to right for left key lever) should result in dots being heard from the speaker and moving the the dual key lever 7 to the dash position (push to left for right key lever) should produce dashes.
- (6) Turn the speed control knob 5 to the desired, which may be instantly adjusted within the ranges of 6 to 60 WPM.
- (7) The MONITOR knob 11 controls the volume of the speaker and headphone 16. Adjustable TONE control 12 (tone pitch L : low, H : high).
- (8) The switch 4 on the AUTO position is normal use, automatic dot and automatic dash. The SEMI position is automatic dot manual dash alternate use and transmitter tune.

#### **OPERATION OF MESSAGE PROGRAM MEMORY**

- (9) Operation of this MK-1024 is quite simple. Programmable memory to write data into the memory, set the slide-switch 1 to the WRITE position. The operator message program selects the desired memory with the start button switch 2 is push. The LED 3 should light. A quickly into message for use with electronic keyer.
- (10) Approximately 30 characters can be stored in a 256 bit memory. There are four memories (A, B, C, D) with 256 bit each or one (ALL: A+B+C+D) with 1024 bit for approximately 120 characters.
- (11) If a mistake is made, simply depress the start button switch 2 again and start over. Even if the previous cycle is not complete, the counters will be reset to 000.
- (12) Many times during a contest, especially during low activity periods, a message such as a CQ, callsign, text (such as "RST" or contest serial number) is to be repeated a number of times without having to manually recycle the memory each time.
- (13) To read the date in storage, set the slide switch **1** to the **READ** position. The operator message program selects the desired memory with the start button switch **2** is push, being sending message and heard from the speaker.
- (14) Four separate messages can be stored and select by A, B, C, D buttons 2. Again, the start button may be repressed at any time to restart the message. CQ CQ DE JA1PMK JA1PMK K into message memorized. Sending message is CQ \* CQ CQ DE JA1PMK JA1PMK \* CQ \* CQ CQ DE JA1PMK JA1PMK K. (\* is repressed the start button 2.)
- (15) Message read speed is turn the speed control knob 5 to the desired.
- (16) The **STOP** button 8 will halt sending. If a mistake is made, depress the start button 2 to use the **STOP** button switch 8.

#### **EXTERNAL CONNECTION**

- (17) External power source 9 to 14 VDC to adapter jack 14 can be taken for mobile use; negative to ground.
- (18) To use an external speaker or headphone, connect the jack 16. The output impedance is 8 ohms.

#### **SPECIAL CONDITIONS**

When the voltages and currents are greater the the values recommended in (1) above, various arrangements may employed.

Generally, transmitter utilizing high voltage cathode keying will exceed the voltage values given above. These transmitters my be operated by using the built-in relay. Set the **KEYING** switch to **RELAY** position. Relay keying output is max. 500 mA at 700 V.

#### CAUTION

DO NOT open the cabinet covers while you are "ON THE AIR". Possible damage of the MOS IC ( $\mu$ PD2102).

When you are in WRITE mode, do not push the **STOP** switch **8** because this will interfere to the other channel cod had been memorized in.

If a mistake is made, you can just simply push the MESSAGE PROGRAMM SEL. switch 2 reset and do again as described in (11).

On **READ**, even you push the **STOP** button **8**, it won't effect to the other channels.

**ELE-KEY** 



#### MEMORY

