

G8TMV Keyer V2 Manual

Controlling the keyer

If push-button 1,2 or 3 are pressed and released then the currently stored message for that button is sent.

If push-button 1 is pressed and held, the keyer will respond after about two seconds with the letter **R**. This indicates that the keyer is ready to accept a command, simply enter a command letter in Morse on the paddles and the command will be executed. Some commands have sub-menus that are used to further specify a configuration change. All commands provide some sort of feedback to tell you if the command was understood and executed properly. If an illegal command is entered the keyer will respond with a question mark.

Command Summary

A	Toggle sidetone enable
C	Load callsign memory
D	Play contents of the callsign memory
F	Adjust inter-letter (Farnsworth) spacing
I	Toggle Iambic mode A and B
L	Load message memory 1
M	Load message memory 2
N	Load message memory 3
P	Preserve (save) the current user setup
S	Set the CW speed
T	Tune mode, key transmitter
W	Play current CW speed and padding
U	Toggle autospacing
X	Exchange paddles
Z	Zap (Restore) to default settings

Detailed Command Descriptions

- A** The sidetone enable is toggled. The keyer always powers up with the sidetone enabled. Note that sidetone is always forced on while in command mode.
- C** This command is used to load the callsign memory. After you issue the **C** command the keyer will respond with a single dit. This is the prompt to enter the first character of the callsign. When that letter has been accepted the keyer will send another dit and you can enter the next letter. This will continue until either 10 characters have been entered or you enter EOM (.-----) as a single character. To signal that loading mode is complete the letter **K** will be sent by the keyer.
- D** This command is used to check the contents of the callsign memory. The stored callsign will be played without keying the transmitter.
- F** This command is used to add extra (Farnsworth) spacing/padding between characters when playing message memory contents. After the command is entered the keyer will wait for a single number from 0 to 9 to be entered. The value is the number of extra 'dit' times to be added between letters. The default is zero.
- I** Toggle between Iambic mode A and B. In either iambic mode alternating dits and dahs are sent while both paddles are held closed. In mode B an extra alternate dit or dah is sent after both paddles are released. An **A** or **B** is sent in response to this command to indicate the new mode.
- L** This command is used to load message memory 1. It works exactly like the **C** command except that up to 31 characters can be entered. If you want to enter a word space, simply wait for two dits before entering the next character. To include the stored callsign at any point in the message enter CS (-.-....) as a single character.
- M** This command is used to load message memory 2. It works exactly like the **L** command.
- N** This command is used to load message memory 3. It works exactly like the **L** command.
- P** Preserve (Save) the user configuration and callsign memory to non-volatile memory so that they are available at power up. Note that the message memories are always saved as soon as they are entered.

- S** Set the CW speed. The keyer will respond with a dit. Send the first digit of the speed. The keyer will again respond with a dit. Send the second digit of the speed. The keyer will respond with an **R** and change the speed. If the input is unrecognised or out of range then a question mark will be sent. The cut numbers **A** for one and **T** for zero are recognised.
- T** Tune mode, the transmitter is keyed continuously until either paddle is pressed.
- U** Toggle autospace mode. When autospace is enabled the keyer will force the proper inter-letter spacing. An **A** will be sent when changing to autospace mode and an **N** when changing to normal mode.
- W** This command plays the current CW speed and Farnsworth spacing values.
- X** Exchange Paddle Inputs (dit and dah) to accommodate left handed operators.
- Z** Zap (restore) the keyer to default settings. The callsign and message memories are **not** affected.
 - Speed 13wpm
 - Iambic Mode B
 - Sidetone on
 - Farnsworth spacing off (0)
 - Autospace off
 - Paddles not swapped

Important Note!

During command mode operations transmitter keying is disabled and replies are sent in sidetone only. Thus in order to use command mode you must have some sort of sidetone output device connected. Even if sidetone has been disabled with the **A** command it will be forced on during command mode.

Sleep Mode

The keyer utilizes the automatic sleep mode of the PIC CPU. The PIC normally rests in sleep mode and draws about 1uA of DC current. When either of the paddles or a push button are pressed, the chip wakes up and goes into active mode drawing about 10mA. After the paddle or push button has been serviced the PIC goes back to sleep.

The small text version of the instruction summary below can be cut out and fixed to the keyer and used as an aide-memoire .

A	Toggle sidetone enable
C	Load callsign memory - EOM to end
D	Play contents of callsign memory
F	Adjust Farnsworth spacing
I	Toggle Iambic mode A and B
L	Load message memory 1) EOM
M	Load message memory 2) to
N	Load message memory 3) end
P	Preserve (save) the current setup
S	Set the CW speed
T	Tune mode, key transmitter
W	Play current speed and padding
U	Toggle autospacing
X	Exchange paddles
Z	Zap (Restore) to default settings