When all other work is concluded, put the new chip in the socket, carefully following appropriate safety techniques for dealing with CMOS devices. Be sure that the chip is positioned with the notch at the notched end of the socket.

If you are not comfortable doing such work, have someone with technical expertise make these changes.

Errata For CMOS Super Keyer 11 Kit Manual

This errata sheet is for owners and builders of the CMOS Super Keyer II Kit ONLY, and does not affect the Logilkey K-1 keyer manual.

Please make the following corrections in your CMOS Super Keyer II Kit manual:

Tutorial Side, Page 1, Last line of paragraph 4: Delete "or until the 9 volt back-up battery wears out in a few years." (This reference is for the K-1 only. The kit version does not accept a 9 volt battery! Do not use a 9 volt battery, but rather follow the design instructions in the November 1990 QST article!

Tutorial Side, Page 1, First Line of Paragraph 6: delete the second "the".

Tutorial Side, Page 1, Third Line of Paragraph 6: delete the "s" at the end of the word "messages."

Tutorial Side, Page 2, Second Line of Paragraph 7: Delete in its entirety the sentence beginning: "The 9 Volt battery holds the memories..."

Tutorial Side, Page 3, Third Line of Paragraph 7: Change "on" to "in".

Tutorial Side, Page 7, First Line of Paragraph 7: Change "lode" to "Load".

Tutorial Side, Page 11, Second Line of Paragraph 4: Change "send" to "sends". Also, the "d" should be capitalized.

Operating Manual Side, Page 2, Second Line of Paragraph 6: Change "6" to "Ø6" in the F dd instruction.

Operating Manual Side, Page 8, Last Line on page, Change: "WØSR/4W" to WØSR/70".

Manual Supplement: Version 2.0

Logilkey K-1   **CMOS Super Keyer II Kit**

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This Supplement is comprised of three sections:

a) A section describing the new capabilities and commands for your keyer when your keyer has been converted to the new chip and timing capacitor.
b) Instructions for the modification of your keyer to utilize the new chip.
c) Errata corrections for the Manual for the CMOS Super Keyer II only.

New Capabilities and Commands

Since the original development of the Logikey K-1/CMOS Super Keyer II, several additional functions and commands have been implemented, making your keyer even more versatile and powerful. And, these changes have been added to your keyer in such a way that you have nothing to unlearn. You only need to learn the new commands to expand the capabilities of your keyer. So, if. you are not already familiar with your keyer and its capabilities, first study your keyer and learn to use it as described in the tutorial and manual as supplied with your K-1 Keyer or CMOS Super Keyer II kit; then proceed to this addendum.

First, let's explore the changes you will discover in your keyer with the new chip installed. Internally, the method of controlling the keyer speed using the pot has been changed. (This is why a new capacitor is needed to replace the clock capacitor.) The new system tunes in smaller increments, and avoids occasional problems of speed instability that could occur in the old design while the operator was making rapid speed changes. But all that you will probably notice is that the speed change is smoother than ever.

Now, let's look at differences you will find in loading a message into memory. For one thing, memory boundaries are now soft sectored, rather than hard sectored as before. This means that each message can be any length you want, as long as the total memory used does not exceed 220 characters. And, when loading messages in the Character Mode, you will note that the "I" the keyer sends between words, indicating a word space, is now sent at a higher tone and at a higher speed, to make it more easily distinguished from your hand sent CW. You can discover the amount of unused memory at any time by entering the Inquiry Mode (by pressing buttons 3 &4) and responding to the "?" prompt by sending "C". (As in CAPACITY.) The keyer will read out the memory remaining in bytes.

Another improvement is that you now have the ability to change the monitor frequency. The default is 700 hertz, but the frequency can be changed from 500

to 990 hertz. To change the tone, enter the Function Mode, (Press buttons 1 & 2, then release) then respond to the "F" prompt by sending "Tdd", where dd is the first two digits of the desired frequency. For example, T99 will change to a monitor tone of 990 hertz, while T54 would give a frequency of 540 hertz. The existing monitor frequency can be obtained by entering the Inquiry Mode, then responding to the "T' prompt by sending the letter "T".

Another change that will be welcomed by some is the new "V" setting. This parameter allows the keyer timing to mimic that of other keyers, making the "feel" of the keyer more comfortable for operators used to different timing patterns. The default setting is VØ, a timing pattern which has proven to be the most user-friendly for many operators. Other values are as follows:

VØ	Super Keyer II timing w/dot and dash memory
V1	Super Keyer II timing w/dot memory only
V2	Super Keyer II timing w/dash memory only
V3	Accukeyer timing w/dot and dash memory
V4	Accukeyer timing w/dot memory only
V5	Accukeyer timing w/dash memory only
V6	Curtis "A" timing w/dot and dash memory
V7	Curtis "A" timing w/dot memory only
V8	Curtis "A" timing w/dash memory only
V9	Iambic timing w/no dot or dash memory

Note that this makes a full featured memory keyer finally available to those used to the Curtis "A" timing! Tell your Curtis equipped friends! To implement a setting different from VØ, enter the Function Mode and send 'W", where "d" is the desired setting. To determine the present setting of the V parameter in your keyer, enter the Inquiry Mode and respond to the "T' prompt with a "V". The keyer will annunciate the W" setting.

Two new embedded commands have been implemented, and the "/B" Break command has been slightly modified in its timing. Several users had trouble getting the "B" command to work properly because of a fairly precise timing requirement to use it properly. The timing tolerances have been lengthened, making this function easier to use for some users.

A new command, "/R" for RESUME has been implemented. This command will stop message play at the point where it is embedded, allowing hand keyed entry as long as desired, and with pauses as long as desired, until the same message button is again pressed, which will cause the message to resume play from where it was left off. Pressing a different message button will terminate that message and begin the new message attached to that button. Multiple "/R" commands are allowed in a message.

The other new command is the "/U" ULTRASPEED command. This command is anticipated to be primarily useful for meteor scatter specialists in conjunction with tape recorders for receive. The /U command offers speed settings for programmed message generation from 70 - 990 Words Per Minute! The command nomenclature is "/Udd", where dd is the first two digits of the desired speed. For example, /UØ7 will set the speed for that message at 70 words per minute. /U85 would generate the message at 850 WPM. (M) The side tone frequency will change at different Ultraspeed settings, and operator control of the side tone frequency is not available while in Ultraspeed Mode. The Weight (W) and Compensation (K) settings are disabled during message transmission under Ultraspeed, and programmed transmission speed accuracy exceeds 1%.

Two other procedural changes have been implemented that improve the utility of your keyer. One is a new way to cancel a message already playing. In the earlier version, the only way to kill a message was to touch your paddle, which sent one unwanted dot or dash over the air. Now, simply pressing any two message buttons during message transmission will terminate the message with no additional key closure being transmitted.

The other change allows one to listen to a message stored in memory without going over the air, either as it will be transmitted or, an important new feature, the edited mode, playing back the message sounding the embedded commands in place. To hear how a message will sound over the air, first enter the Inquiry mode (press buttons 3&4) then respond to the "?" prompt by pressing the button for the message desired. To hear the message with embedded commands, enter the Inquiry Mode, then, instead of pressing the message button, send through your paddle the message number you desire to examine, such as message number "3". The message will be played back complete with embedded commands.

Modifying Your Keyer for the New Chip and Software

If you are building your keyer from the kit, you may or may not find the .33 uf capacitor called for in the November 1990 QST design article. If you find this capacitor in your kit (there would be only one) discard the capacitor. It is replaced by the special .01 uf capacitor. (This would be the only capacitor of its type in the kit. All other capacitors will be identical to each other, excepting the .33 uf capacitor.

If you are modifying an existing Logikey K1 keyer or a CMOS Super Keyer II, you must change the .33 uf timing capacitor. Remove all power, including the back-up 9 volt battery if your keyer is the Logikey K-1 model. Unsolder and remove the capacitor and replace it with the .01 capacitor supplied with the replacement chip.