Nifty! Ham Accessories

**K3 Mini-Manual Updates
for compatibility with
Elecraft Firmware Revisions**

The Nifty K3 Mini-Manual is periodically updated as Elecraft posts firmware updates that affect the radio's operating procedures. The version of firmware a Mini-Manual was released at is shown on the back cover of the guide.

When purchasing the K3 Mini-Manual from our web page, the firmware version that the Mini-Manual has been checked against, and revised if necessary, is described in this document. Some revisions do not affect operating procedures in the Mini-Manual.

This document identifies changes that have been made to the K3 Mini-Manual for compatibility with various K3 firmware releases. Only revisions that affect the radio's operating procedures are incorporated into the Mini-manual. Bug fixes, alignment procedures, performance improvements and similar changes generally do not affect actual operating procedures.

It is our intent to continue updating the K3 Mini-manual as Elecraft makes firmware and other improvements to this very excellent transceiver.

Thank You,

Bernie Lafreniere, N6FN

Mini-Manual Updates by K3 Firmware Revision

The **MCU** revisions between **MCU 4.86** and **MCU 5.14 / DSP 2.83** did not affect operating instruction in the Mini-manual. These updates primarily consisted of bug fixes, new host commands, changes in support of various add-on options and performance enhancements. As of May 7, 2015 **MCU 5.14** is the latest revision available from Elecraft.

The **MCU 4.86, DSP 2.83** production firmware release of 6/10/2014 added CONFIG:SPKR+PH entry to the config menus for the purpose of accommodating a new headphone jack on the KIO3. This change did not affect operating instruction in the Mini-manual. Other items listed in the release were either bug fixes or had been covered in prior releases.

The **MCU 4.83, DSP 2.82** firmware releases of 2/20/2014 and intermediate releases since MCU 4.66, DSP 2.81 included a number of performance improvements and bug fixes, which did not affect operating procedures in the mini-manual.

The **MCU 4.67, DSP 2.81** and **MCU 4.66, DSP 2.81** firmware releases of 4/16 and 3/22, 2013 made several performance improvements, allowed the radio to use an alternate LCD driver chip and had a couple of bug fixes; however none of the changes impacted the radio's operating procedures. Thus no changes were made to the mini-manual in support of these two revisions.

The **MCU 4.60 / 4.61, DSP 2.80** firmware releases of November 17 and 19th, 2012 resulted in the following minor changes to the mini-manual:

Page 12
In the Decoding Received CW Text section, revised a couple of the comments to reflect the latest recommendations for optimizing CW decode.

Page 20
Added the following comment to the **Using a Computer for RTTY and PSK Operation** section:
ⓘ As of MCU 4.60, CW paddles are only enabled when the internal decoder is on.

The **MCU 4.51, DSP 2.76** firmware release of May 9, 2012 made an improvement to AGC performance; however no changes were necessary to operating procedures in the mini-manual in support of this revision.

The **MCU 4.48, DSP 2.73** firmware release of Feb 2, 2012 made an improvement to the "GT" command used by PC applications, and a few additional changes in support of *Remote Rig* operation. Mini-manual updates in support of *Remote Rig* operation were added at the last revision. Consequently no changes were necessary in the mini-manual in support of this revision.

The Beta **MCU 4.47, DSP 2.73** firmware release of Dec 2, 2011 made several changes to the firmware, primarily to support *Remote Rig* operation. As there are several different ways this can be accomplished by using various computer programs and/or dedicated optional controllers (specialized Internet modems) the details are not covered in the MiniManual. But a short description of the capability and a reference to web resources was added to the manual.

The Beta **MCU 4.42, DSP 2.73** firmware release of Sept 24, 2011 incorporated several CONFIG menu changes, which did not affect operating instructions in the Mini-manual.

The **MCU 4.39, DSP 2.73** firmware release of July 6, 2011 incorporated a couple of improvements supporting KAT3 and P3 operation which did not affect instruction in the Mini-manual. In addition, several new left and right audio mixing combinations were added to the **CONFIG L-MIX-R** menu.

Page 21
Added the following statement to the **Using Headphones and External Speakers with the Sub Receiver** procedure:
• If using stereo headphones, you will hear the sub on the right and the main on the left. Various mixing combinations are settable in **CONFIG L-MIX-R**.

The **MCU 4.36, DSP 2.73** firmware release of April 20, 2011 incorporated several enhancements. Only a few of which affected the operating procedures in the Mini-manual as indicated below.

Page 3
Added the following statement to the description of the **REV** switch:
When operating FM with a repeater offset, permanently swaps the TX/RX frequencies, reversing the repeater offset.

Page 9
Added the following statement to the **Microphone Selection Settings** procedure:
• If there is insufficient gain with a mic connected to the front panel (**FP**) you can tap [**7**] to set the mic preamp for high gain operation.

Page 15
Modified the **CONFIG PWR SET** menu explanation as follows:
Setting to **PER-BAND** eliminates having to adjust the K3's power control when changing bands or switching the KPA500 amp between operate and standby. Two sets of per-band power levels are provided, one for the KPA500 and one for barefoot use when amp is in standby. The K3's power display shows an asterisk (i.e. 30 W*) when the amp's power levels are in effect.

The **MCU 4.25, DSP 2.71** and **FPF 1.14** firmware release of Jan 13, 2011 incorporated a A/B Switch bug fix and added Fixed-Tune mode support for the P3. These changes did not affect any of the operating procedures in the Mini-manual.

Firmware releases **MCU 4.22, DSP 2.70** and **FPF 1.14** were incorporated into the Nifty Mini-manual on December 9, 2010.

The above K3 firmware revisions contained a variety of performance improvements, which did not affect the Mini-manual, and a new APF feature, which resulted in the following Mini-Manual changes.

Page 12
Added the following APF procedure:
CW Mode Audio Peaking Filter (requires **CONFIG DUAL** to be set to **APF**)**✱✱**
ⓘ   APF enhances weak CW signals, making them pop out of the noise.
1.   Hold [**DUAL PB**] to activate the CW peaking filter.
2.   Rotate ↻[**SHIFT**] to control the center pitch of the APF filter.
ⓘ   Note: APF is independent for Main & Sub receivers, as well as Presets I & II.

Firmware releases **MCU 4.03** and **DSP 2.60** through **MCU 4.14** and **DSP 2.60** were incorporated into the Nifty Mini-manual on November 2, 2010.

The above K3 firmware revisions contained a variety of performance improvements, which did not affect the Mini-manual, and a couple of new features, which resulted in the following Mini-Manual changes.

Page 11
Modified the **Selecting Semi or Full QSK Break-in** procedure to read as follows:
1. To use full QSK, hold [**QSK**] until the **QSK** icon is displayed, otherwise semi break-in is enabled. (Ultra-fast QRQ is indicated by the **CW+** icon.)
ⓘ Ultra-fast break-in (up to 100wpm) can be enabled by setting **CONFIG CW QRQ** to **ON**.

Page 19
Added the following step to the **Receiving RTTY / FSK Signals** procedure:
4. Rotate VFO-A to select the baud rate. (45 and 75 baud are now supported)
 Remaining step numbers were increased by one to account for the above inserted step.

MCU 3.97 and **DSP 2.58** firmware released by Elecraft on May 9, 2010.

The above K3 firmware revision incorporated a few performance improvements and added a new feature, which resulted in the following Mini-Manual change.

Page 8
Added the following to the **Short Duration Impulse / Ignition Noise Blanking** procedure:
"The odd-numbered DSP NB levels (**-1**, **-3**, **-5**, etc) use a different algorithm than even numbered ones (**-2**, **-4**, **-6**, etc). Select the optimum algorithm and the lowest setting that does the job."

MCU 3.94 and **DSP 2.54** firmware release by Elecraft on April 17, 2010.

The above K3 firmware revision fixed a few minor problems and added a few new features. Some of these updates resulted in the following Mini-Manual changes.

Page 13
Added notes to the **Receive Audio Equalization (EQ)** procedure on page 13 to state that CW and Voice modes Receive Equilazation parameters are now independently set.

Page 13
Added notes and revised the **Transmit Audio Equalization (EQ)** procedure on page 13 to state

that the SSB mode Voice modes Receive Equilazation parameters can now be independently set from AM/FM/ESSB modes equalization.

Page 16
Revised the 1750 Hz Euro Tone generation information / procedure on page 16.

MCU 3.76 and **MCU 3.77** and **DSP 2.52** and **DSP 2.53** firmware releases by Elecraft on Jan 23 and Feb 27 of 2010.

The above K3 firmware revisions fixed a few minor problems and added a few new features. Some of these updates resulted in the following Mini-Manual changes.

Page 15
Added the following note to the **Recalling (or Clearing) a Memory Channel** procedure:
ⓘ   By tapping [**1**] in **CONFIG MEM 0~9**, recall of mem channels can be delayed until you tap [**M▶V**] a second time. Useful for external gear that switches when changing bands.

Page 13
Added the following procedure to page 13:

Erasing Message Buffer Memories
1. To erase a message buffer, tap [**REC**], select the buffer [**M1**] ~ [**M4**], then tap [**CLR**].

Page 16
Added the following procedure to page 16:

Monitoring Repeater Input Frequencies
1. When an offset is being used, holding [**REV**] switches VFO to the input frequency.