ELECRAFT

KIO3B Upgrade
Frequently Asked Questions

Ver. A   9/4/15

Copyright © 2015, Elecraft, Inc. All Rights Reserved

Q: What are the new features of the KIO3B?

A: The KIO3B Upgrade kit is a group of 3 boards you will install in your K3.

KIO3BUP	• Adds direct USB connection • Eliminates need for external PC soundcard and cables with a built-in soundcard • All original RS232 connections remain supported • An adapter cable is included for full compatibility with K3 peripherals

Q: What boards make up the KIO3B Upgrade kit?

A: There are 3 boards that must be installed together. They cannot be mixed with any of the earlier generation boards.

KIO3B Upgrade kit board set	What has changed?
KIO3B Main Board	• Adds USB hub and FTDI RS232 chip • Adds a built in soundcard for Line In/Out • Retains transformer isolation for the original Line In and Line Out ports
KIO3B Digital Board	• Now has a USB A style port • The ACC port remains unchanged
KIO3B Analog board	• Board redesign to align ground planes for better protection

Q: What cables are shipped with the KIO3B Upgrade kit?

A: The KIO3B Upgrade will ship with an adapter cable, E980297 for operators requiring legacy connections to peripheral devices.

Q: Do I need replace all 3 boards at the same time?

A: Yes. The entire KIO3 digital and analog connection boards were redesigned as a set. This means you cannot retrofit the earlier KIO3A series boards individually nor can the K3 be

Elecraft • www.elecraft.com • 831-763-4211
Technical content subject to change without notice
For more information, please contact: sales@elecraft.com

updated with one separate board. You must install all 3 boards as a group.

Q: Will I need to update my K3 firmware to use the KIO3B?
> A: Yes. The KIO3B Upgrade requires that you be on the latest K3 firmware release (MCU 5.26 or later). You can check if you are running the latest firmware with the K3 Utility. Firmware to support the KIO3B is available now via the K3 Utility.

Q: What has changed on the rear panel with the KIO3B?
> A: The most important change is to the communication ports in the upper right corner of the rear panel. This is where the new USB connector is located. The original RS232 port functions are preserved, though with a different jack type (RJ45) and a supplied DE9 adapter cable. The accessory jack (ACC) is unchanged.
>
> The included adapter cable (shipped with the K3S) duplicates the original 9-pin RS232 port, so you can continue to use all of your station accessories as before.
>
> The illustration below shows the rear panel of a K3 with the KIO3B Upgrade Kit installed in the upper right hand corner.

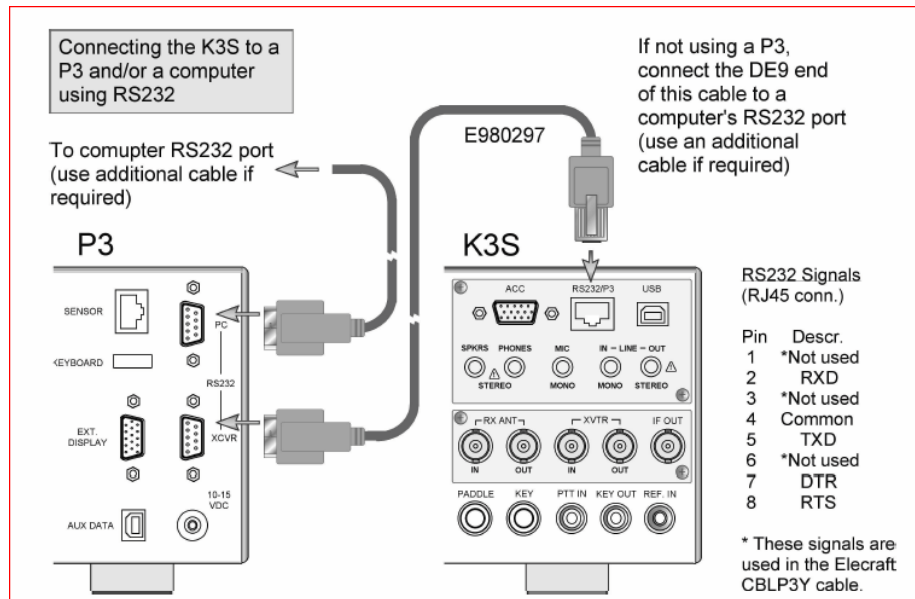**Q: What is that port that looks like a LAN connection?**
> A: The port labeled RS232/P3 is not a LAN connection. It is a dual RS232 port system that supports full functionality with a P3 connected. See more details below in this document.

Q: After I install the KIO3B, will the KPA500 and KAT500 be connected in the same way?
> A: Yes. The KIO3B Upgrade supports these K-Line products. All cabling will remain the same as you see in the KAT500 and KPA500 Owner's Manuals.

Q: Will the P3 operate with the KIO3B Upgrade in the same way?
> A: Yes. You have 2 options for operating the P3. You can use the same cables you are using now for your P3 connections, with the addition of the supplied RJ45-to-DE9 adapter, E980297, shown below. You will still use the KUSB cable to connect your PC to the P3 as you have always done.

Elecraft • www.elecraft.com • 831-763-4211
Technical content subject to change without notice
For more information, please contact: sales@elecraft.com

Connecting the K3S to a P3 and/or a computer using RS232

To computer RS232 port (use additional cable if required)

If not using a P3, connect the DE9 end of this cable to a computer's RS232 port (use an additional cable if required)

E980297

P3   **K3S**

RS232 Signals (RJ45 conn.)

Pin	Descr.
1	*Not used
2	RXD
3	*Not used
4	Common
5	TXD
6	*Not used
7	DTR
8	RTS

* These signals are used in the Elecraft CBLP3Y cable.

You can find more details on this configuration in the K3S Owner's Manual.

Q: How can I operate the P3 and use the new USB port at the same time?

A: To use both USB connectivity and the P3, you'll need a new cable, CBLP3Y. The CBLP3Y cable will enable direct USB connection while accommodating full P3 support. You will need to order this cable separately when the KIO3B Upgrade Kit is ordered. Here is how it is used:

Connecting the K3S to a computer via USB, with optional P3 Panadapter

USB

CBLP3Y

P3   **K3s**

⚠ CAUTION
DO NOT PLUG USB CABLE INTO THE RS232/P3 JACK. THIS WILL DAMAGE THE JACK AND KIO3B MODULE.
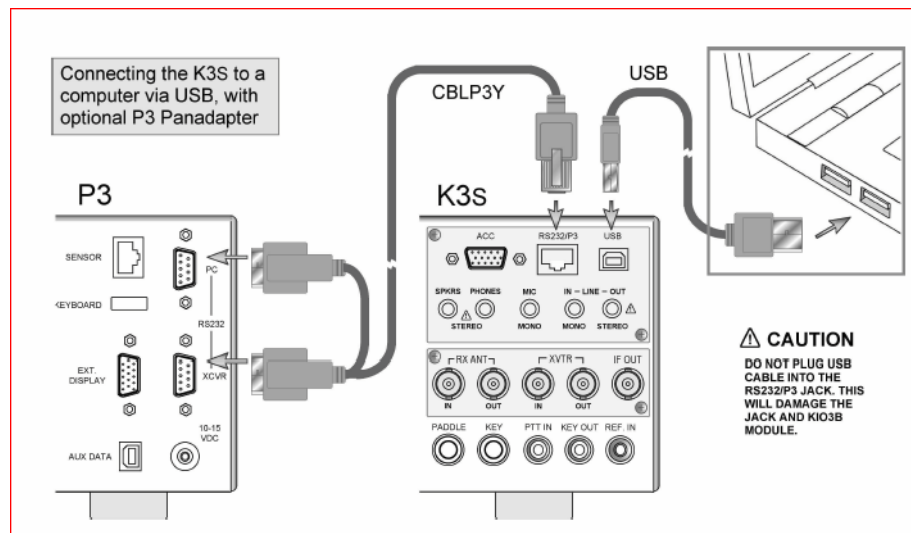
You can find more details on this configuration in the K3S Owner's Manual.

*** End of FAQ ***

Elecraft • www.elecraft.com • 831-763-4211
Technical content subject to change without notice
For more information, please contact: sales@elecraft.com