

KPA500 and KAT500 Version 2.1 to 2.2 Changes

Section 2.7.1:

Remove reference to PR6.

Add:

Preamplifier Control

K3s transceivers have an internal 20 dB preamplifier that can be activated on 12-, 10-, and 6-meters in the **CONFIG:PREAMP 2** menu. K3s owners do not have to worry about the dual use of the DIGOUT1 signal described below. If you are a K3s user, skip ahead to **Error! Reference source not found.**

A K3 user might use DIGOUT1 to turn on the PR6 six-meter preamplifier when switching the K3 to six meters. This conflicts with using DIGOUT1 to inhibit the KPA500 operation because if you are using DIGOUT1 to inhibit the KPA500 on some other band, you will also disable it on 6 meters. You should set the KPA500's **INHIBIT IN** menu to **DISABLE** if you want to use the KPA500 on six meters and turn on the preamplifier with DIGOUT1.

Added Section 2.8.2:

2.8.2 Setting the K3/K3s ALC and Power Out

Many new K3/K3s users report that when operating in a voice or data mode the KPA500 output starts off at a low power output that increases as the transmission continues. This is almost invariably caused by improperly setting up the K3/K3s Mic Gain or Line In gain ALC level. Elecraft transceivers control power differently than other amateur transceivers. ALC is not used to control the output power. Therefore, set the K3/K3s as indicated in the manual and ignore the internet advice (and some software instructions) which would have you set the power to full and adjust the power output with the audio level. That does not work with Elecraft transceivers. To do so will result in erratic power output.

Microphone Gain and Compression Setting for SSB

- Hold **TEST** to put the K3/K3s into transmit test mode. The TX icon will start to flash.
- Tap the compression **CMP** knob and see that the green CMP LED is lit.
- Adjust **CMP** to 0.
- Hold **METER** to select the compression and ALC display.
- While speaking into your microphone with a normal voice, adjust **MIC** for a peak ALC reading of about 5 – 7 bars with the 7th bar just flickering. DO NOT turn up the microphone gain any higher – higher settings may cause splatter!
- Adjust the **CMP** knob for the desired speech compression. About 7 – 10 dB or less is a good place to start, depending on your voice and **MIC** setting. You will want to do some on-the-air tests to confirm that your signal sounds OK.
- Hold **METER** to return to the S-meter and power display.
- If you were in transmit test mode, hold **TEST** to return to normal transmit.
- Adjust the **PWR** knob for the output power you want.

Line In Gain for Data Modes

You should not use USB or LSB modes for data modes. Use a Data mode. When you do this, any compression and transmit equalization you have done for SSB will be turned off.

- Set up your initial computer sound card output level to about 75%.
- Connect the Line In and Line Out cables if you are not using the K3s USB soundcard.
- Ensure that **MENU:MIC SEL** is set to *LINE IN* and **MENU:MIC+LIN** is *OFF*.
- Hold **METER** to select the compression and ALC display.
- Hold **VOX** to turn on VOX mode.
- Hold **TEST** to put the K3s into transmit test mode. The TX icon will start to flash.
- Start your data program sending characters and adjust **MIC** and the sound card output level for a peak ALC reading of about 4 to 5 bars with the 5th bar just flickering. A useful setting is to have your **MIC** level the same as you use for SSB and to then set the computer sound card output. Compression is automatically set to zero when in data modes.
- You may have to adjust the Main menu's *VOX GN* to get the audio from the computer to reliably key the transmitter.
- Hold **METER** to return to the S-meter and power display.
- If you are in transmit test mode, hold **TEST** to return to normal transmit.
- Adjust the **PWR** knob for the output power you want.

Added to Table 2.6:

INVALID	Transmission attempted on an unauthorized frequency.	Hard		KPA500 switches to STBY until the RF drive is removed.
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