ELECRAFT APPLICATION NOTE INTERFACING KPA1500 to CI-V RADIOS

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PURPOSE

The KPA1500 easily interfaces with radios featuring CI-V protocol. Three steps are involved:

- Connect Cabling
- Configure the Transceiver
- Configure the KPA1500

Cabling

Two cables are required. For larger radios, the phono-to-phono KEY IN cable connects between the transceiver's SEND jack and the KEY IN jack on the KPA1500. Small (mobile) CI-V radios use the E770057 CBL-ICOMKEY cable between the radio's 13-Pin DIN and the KPA1500 KEY IN jack. A data cable, Elecraft part number E980306, is connected between the CI-V radio's "REMOTE" jack and the "XCVR SERIAL" jack on the rear panel of the KPA1500.

Menu Settings

Referring to the transceiver's operating manual, open the transceiver's menu. Access the CI-V setup screen(s) and confirm the following:

CI-V Baud Rate = 9600 (exact value not important, but must match KPA1500's setting)

CI-V Address = (any value, default recommended; not used by KPA1500)

CIV-Transceive = ON

CI-V 731 = OFF (not all CI-V radios have this menu entry)

Other CI-V menu items are not used by the KPA1500 and may be left at their default values.

Power on the KPA1500 and access its menu by pressing MENU. Using the down-arrow key to the right of the display, scroll to RADIO TYPE. Hold the MENU button (EDIT) and use the down arrow to select "ICOM". Tap MENU again to exit the edit mode. Tap the down arrow a few times until SERIAL SPEED XCVR appears. Hold MENU (EDIT) and select 9600 bps (or match the CI-V Baud Rate set in the radio). Tap STATUS to exit the KPA1500 menu.

Operation

Test operation by changing bands on the CI-V transceiver. The amplifier should instantaneously follow and change bands. As you tune your transceiver, the KPA1500 will follow and automatically select the correct ATU tuning solution, even before transmitting.

If the amplifier does not follow the radio, double check that the data cable is fully plugged in at both ends, then confirm that the baud rate is set to the same value on both the transceiver and the KPA1500.

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