QRPworks

Bluetooth Rig Interface Manual

Overview

This manual describes how to connect and use the QRPworks Bluetooth rig interface for the Icom IC-705.

It provides end-to-end CAT interface connectivity between the SideKar *Decoder Edition* and the IC-705, which provides additional features in the SideKar *Decoder Edition*, including:

- Quick QSY feature, which allows the user to quickly and easily change frequency and mode from the keyboard.
- Auto-populate the frequency and mode in the log
- Sending CAT commands from SideKar *Decoder Edition* rig macros, using the Icom CI-V CAT protocol.

This interface connects to the IC-705 via Bluetooth. It connects to the SideKar *Decoder Edition* and subsequent models via a serial port.

Physical Connections

There are two connections necessary.

1. DC power. Connect 9-15 VDC to the DC connector labeled "9-15 VDC" using a standard 5.5 x 2.5mm DC coaxial plug.

2. Serial connection. Connect a double-ended male 3.5mm TRS cable (i.e. stereo cable) from the Bluetooth Rig Interface's "5 VOLT SERIAL PORT" to the SideKar *Decoder Edition*'s "5 VOLT SERIAL PORT". This cable is available from QRPworks in the SideKar *Decoder Edition* Store at www.QRPwortks.com (scroll to the bottom of the page to see accessories).

First Time Setup for the IC-705

1. Start with the IC-705 and the Bluetooth Rig Interface powered off.
2. Power up the IC-705
3. Go to the Bluetooth settings by pressing the MENU button, then SET / Bluetooth Set
4. Turn on Bluetooth and also Auto Connect, if not already on
5. Then tap Pairing/Connect / Device Search / Search Data Device
6. The IC-705 will then search for nearby Bluetooth data devices and should find one called the "SideKar"
7. When finished searching, tap "SideKar", then Connect? Yes
8. You'll then see "SideKar Connecting…"
9. When asked for the PIN code, tap OK then tap 1234 Ent. Note the PIN only needs to be entered once, once the Rig Interface is successfully paired.
10. If successful, The IC-705 will flash "SideKar Connected" flashed briefly mid-screen. You will also see the blue Bluetooth icon at the top center of the IC-705 and the green Link LED on the Bluetooth interface will illuminate.
11. If not successful, try connecting again. In some cases, it might take a few tries.
12. If the connect was successful, now turn on the SideKar *Decoder Edition*. It will attempt to connect to the IC-705. If successful, you will see "CI-V Rig connected". It will try 9 times to establish the connection.
13. To repeat the SideKar *Decoder Edition* connection tries, either cycle power on the SideKar *Decoder Edition* or press Alt-R on the keyboard then Y to reset it.

Subsequent Usage

1. If you power down the IC-705 but the Rig Interface says powered up after a successful connection, the IC-705 will automatically connect again, and you'll see "SideKar

Connected" in the center of the IC-705 screen briefly approximately 8-10 seconds after powering up the IC-705.

2. If the Bluetooth Rig Interface was powered off, then repeat the steps above under First Time Setup, except the Device Search screen will already show the SideKar and you won't need to enter the PIN again.

Revision History

Version	Changes
1.0	Original version