

Using Delphi with CI-V commands to an Icom IC-7300

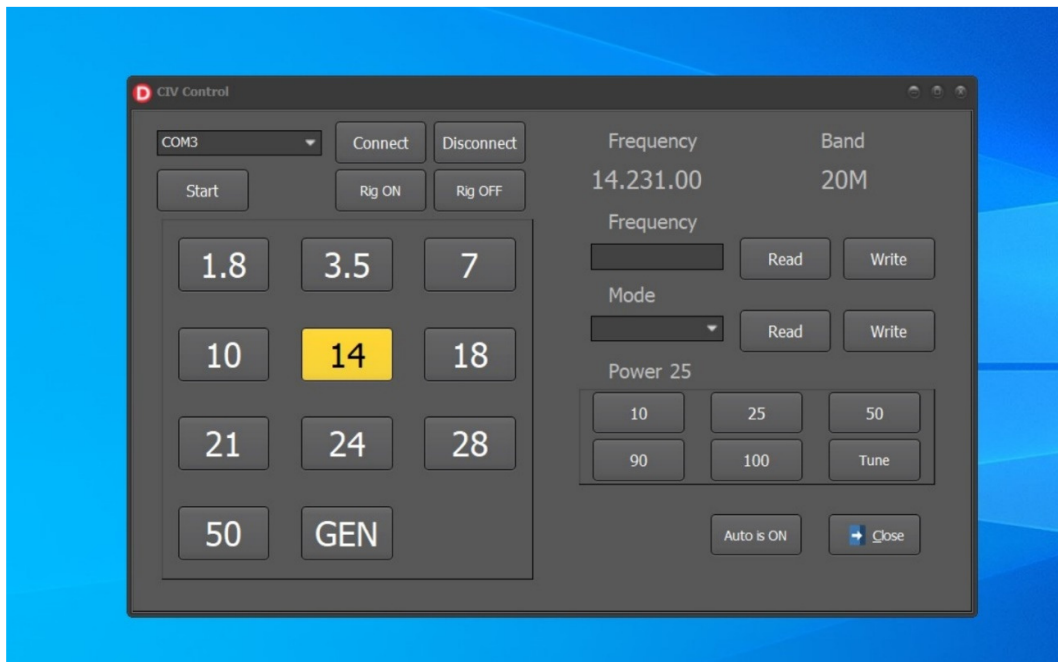
This project started as a small exercise really but developed into something useful to me and perhaps useful to others.

Initial trials using various software available on the net with communication between my laptop and the transceiver resulted in a heap of interference in the receiver which I was simply not happy with. It was all fixed by using a high quality, well shielded USB cable for the connection.

The code is of course not entirely original with snippets obtained from various sources on the net. Much of what I found, while useful, was either incomplete or didn't work – hence this exercise. The main example application here was developed as part of a computer logging program I am using. I have commented out some references to a bandplan unit, data unit and application unit leaving them as a hint of connection to other units. Also some of the externally available functions were being accessed to read the transceiver settings (Frequency, Power, Mode) directly to the logging screen.

Operation

On startup the software locates and lists the active COM ports in a dropdown. If there is more than one then the correct port for the transceiver must be selected.



Connect – opens up the connection between the software and the transceiver. Disconnect of course closes that.

Rig ON does what it says perhaps! The code as it stands starts my rig if 9600 Baud rate is used. See the IC-7300 manual – higher baud rates require a different number of preceding characters to be sent before this command will work. Rig OFF should be fine.

Start Sets a timer in operation that determines the rate at which the software will obtain data from the transceiver. The effect of the timer is to enable display of information like frequency as it is changed on the transceiver. If the software is being used as part of a logging program for example then the timer needs to be paused while operations like posting to the database are actioned.

Auto ON/OFF Suspend / restart the automatic updating i.e. the timer operation.

Tune Sets the transceiver onto low power FM to enable some output on transmit for tuning an external tuner.

The Rest Fairly straightforward. Some of the buttons are deliberately large for ease of operation on a touch screen.

Whatever else – the bare bones are here for you to add whatever you would like.

Transceiver settings

Select: Menu/SET/Connectors/CI-V

CI-V Board Rate	Auto
CI-V Address	94h
CI-V Transceive	OFF
CI-V USB-Remote Transceive Address	00h
CI-V Output (for ANT)	OFF
CI-V USB Port	Unlink from [REMOTE]
CI-V USB Baud Rate	Auto
CI-V USB Echo Back	OFF

These settings enable this software to work alongside the analog S meter also described on this web site.

Please Note

This software may be freely used and given away but must not be sold for profit. As always you must use it at your own risk.