New Arduino CI-V Router Software Release Available

Version 1.04 Jim Michener K9JM

I have released a revision of the CI-V firmware. This version adds new features and corrects a few issues found in the previous version of the code. If you are not having problems with your CI-V router, there is no pressing reason to upgrade. A new revision of the User Guide reflects the following changes.

NEW PARAMETERS

1. **SUBSWITCH:** This feature corrects a problem whenever a PC logging program is set to acquire both the MAIN and SUB VFO transceiver frequencies. The acquisitions of both VFO frequencies in past versions of the router code caused CI-V to report the new sub frequency to PW-1.

SUBSWITCH is user configurable.

When SUBSWITCH is enabled (True) the router passes both the Main VFO and SUB VFO frequency and band information to the PC logging software and to other equipment connected to the CI-V bus. This optional feature should be used with great care if your software does this, to assure that the Linear amplifier (e.g. PW-1) does not hot switch between bands while transmitting. This is the default operation of previous versions of software.

The operator may want to use the SUBWITCH feature when operating SO2V on two different bands, or for cross band split operation. Again, use great caution when doing this, make sure the controlling software does not periodically check the sub VFO frequency.

When SUBSWITCH is disabled (False) the router only passes the main VFO frequency and mode information to other equipment connected to the CI-V bus. (This protection happens regardless of the PC logging program setting; acquiring both VFO conditions or only one). In this mode cross band split operation is not supported. This is the safer of the two options.

2. **USB ECHO:** This feature enables feedback of messages sent by the USB port back to the USB port. USB ECHO must be enabled (True) when using DX4WIN. USB ECHO will slightly slow down the transmission of messages from the radio to the controller program.

USB ECHO is user configurable:

CONFIGURING THE CI-V ROUTER

Configuration of the CI-V router has not changed and is detailed in User Manual. There are now two new settings.

To control these two new parameters, connect the jumper on pin 53 to ground and communicate with the Arduino board through a serial terminal program (e.g. PUTTY). See the User Guide for additional details about establishing this communication link with the CI-V Router.

When viewed with a terminal program (PUTTY), the new configuration screen looks similar to this (Parameters are examples only):

```
Version 1.04 March 18, 2012
Free memory: 6583

Config CI-V Router
1 -Computer baud rate = 38400
2 -CI-V baud rate = 9600
3 -Transceive = True
4 -USB Echo = True
5 -Subswitch = True
Which parameter to change?
```

To change a parameter, select which number you want to change, and press Enter. For TRUE/FALSE parameters, merely selecting the number will toggle the value between True and False.

After configuring the CI-V Router: Remove USB and/or wall wart power from the router, remove the jumper between pin 53 and ground, and then reconnect power to the router.