

## **CS750/751 FIRMWARE UPDATE**

### **November 2017**

This firmware update to version 4.00.00 sets up the CS750 series radios to support 130K contacts, 4000 channels, and corrects some firmware bugs in the radio.

**IMPORTANT NOTE:** Advanced Features (Front Panel Programming) and User Voice Recordings for Channels and Zones are NOT supported in this version of firmware. If you need these features, please remain on firmware version 3.00.14 or 3.00.17 until we get all of the features operational again.

Please note that this is a multi-step update process, so get comfortable. The procedure must be followed in the order presented below. Please read through this first, and if you have any questions wait until they can be answered before performing the updates. We can be reached via email or phone call. An improper firmware update will render the radio inoperable. While it can be fixed, it will need to be sent in to Connect Systems to have the MCU cleared and reprogrammed.

You will need:

Your radio, charged battery, computer, and programming cable

FlashBurn3.00\_CSI.exe

CS750\_Bootloader\_D2.03\_Use\_CSI\_Flashburn3.0\_Upgrade.bin

CS750(4000)\_Host\_Font\_UHF\_RCDB\_S4.00.00\_Auth\_20171016.bin

Or

CS751(4000)\_Host\_Font\_VHF\_RCDB\_S4.00.00\_Auth\_20171016.bin

Depending on your radio model

CS75X(4000)\_Subscriber\_M100100\_Host\_S4.00.01\_Auth\_20171122.bin

DMR\_CPS750\_HAM\_R4.01.002setup.exe

VoicePacket2015-03-23.fv

Download the programs and files from the CSI website for the CS750 series radios. Place them all in a directory where you will be able to find them easily.

Connect your radio to your computer with the programming cable. Read your code plug from your radio and save it. Turn the radio off.

Install CPS version 4.01.002 on your computer by running 'DMR\_CPS750\_HAM\_R4.01.002setup.exe'

Run the FlashBurn3.00 program. Press and hold the PTT and top orange buttons and turn the radio on. The radio will enter Program Mode, show a blank display, and the LED will flash Red, Yellow, Green, and FlashBurn will indicate that the device has been connected.

Click the 'Select' button on the FlashBurn program, then use the navigation window to locate the bootloader update 'CS750\_Bootloader\_D2.03\_Use\_CSI\_Flashburn3.0\_Upgrade.bin'. Select this file and click the 'Flash' button. The progress bar will move to the right. NOTE: The new bootloader must be loaded into the radio before the firmware. Listen and watch for the radio to disconnect and reconnect after the upload, then turn the radio off manually after the upload completes.

After the bootloader has been updated, turn the radio on normally and wait about 10 – 15 seconds for the MPU to set up some data locations. Turn the radio off again.

Press and hold the PTT button and the top orange button and turn the radio on again in Program Mode. The display will be blank, the LED will flash R-Y-G, and FlashBurn will indicate the device has been connected.

Click the 'Select' button on the FlashBurn program, then use the navigation window to locate the firmware update 'CS750(4000)\_Host\_Font\_UHF\_RCDB\_S4.00.00\_Auth\_20171016.bin' or 'CS751(4000)\_Host\_Font\_VHF\_RCDB\_S4.00.00\_Auth\_20171016.bin' depending on your radio model. It is important to use the correct version since some basic data will be written to the radio and it must correspond to the frequencies covered by the model. Select this file and click the 'Flash' button. The progress bar will move to the right. Listen and watch for the radio to disconnect and reconnect after the upload, then turn the radio off manually after the upload completes.

After loading firmware S4.00.00, repeat the above procedure and load firmware 'CS75X(4000)\_Subscriber\_M100100\_Host\_S4.00.01\_Auth\_20171122' to the radio.

Close the FlashBurn program and open the new CPS, version 4.01.002. Use the CPS to open your existing code plug data from an archive or from the data you downloaded and saved at the start of this procedure.

Turn the radio on normally. When it is running, upload your code plug to the radio. Do not turn the radio off or disconnect it yet.

In the CPS, select Tools > Load Fixed Voice Data. In the window that opens, click the button with '....' next to the Write Fixed Voice Data field. Navigate to and select 'VoicePacket2015-03-23.fv' Click the OK button to write the data to the radio. When the data upload completes, turn the radio off and disconnect it from the computer.

Turn the radio on. It should operate properly and as it did previously with your existing code plug. You will now be able to load the entire DMR-MARC contacts database again, for those who enjoy having all of the contact names available.