CONNECT SYSTEMS CS-SERIES RADIOS FIRMWARE UPDATE PROCEDURES

Please use the following as a guideline for updating all CS Series radios, HT and Mobile units.

PRIOR TO ANY UPDATE, CHECK YOUR FIRMWARE VERSION -

HT Radios – Press the 'O' key, select 'Utilities' (Wrench) menu, select 'Radio Info' menu, scroll through until you see 'Firmware Ver.' and select it to determine current version in radio. Press the 'C' key, then scroll until you see 'Bootloader Ver.' and select it to verify the current bootloader is D2.01.

** If the Firmware is S1.##.## or S2.##.##, you may need an authorization file to proceed with S3.##.## updates. Please see the Authorization Procedure document if this is required. **

Mobile Radios – Press the 'P4' key, select 'Utilities' (Wrench) menu, select 'Radio Info' menu, scroll through until you see 'Firmware Ver.' and select it to determine current version in radio. Press the 'P1' key, then scroll until you see 'Bootloader Ver.' and select it to verify the current bootloader is R2.02S. Press the 'P1' key again, then scroll until you see 'Frontpanel Ver.' and select it to verify the current front panel firmware.

** If the Firmware is S1.##.## or S2.##.##, you may need an authorization file to proceed with S3.##.## updates. Please see the Authorization Procedure document is this is required. **

FIRMWARE UPDATE PROCEDURE FOR ALL HT RADIOS – CS610, CS611, CS710, CS711, CS750, CS751

Confirm that you have all necessary hardware and software for the firmware update – programming cable, fully charged battery, FlashBurn2.00_CSI, and the current version of firmware as a binary file (.bin). Other files may be necessary, such as fixed voice data (.fv file), or latest CPS for other updates. A fully charged battery is recommended since radio disconnect during a firmware update will render it unusable until the update can be completed and may require the radio to be sent in for service.

Test your connection to your computer prior to a firmware update to verify proper operation. Connect the radio and computer using the programming cable, turn on the radio and listen for the Windows connection acknowledgement (sound file played on computer), and then use CPS to read data from radio to confirm proper communications. Save this data as a backup prior to updating. Any connection issues should be resolved prior to continuing.

- 1.0 Connect the radio to the computer using the USB to speaker/mic jack cable (if not already done)
- 2.0 Open FlashBurn2.00_CSI
 - 2.1 FlashBurn will indicate 'No device detected!'
 - 2.2 Click 'Select(*.bin)' and navigate to firmware version to be uploaded
- 3.0 While holding PTT key (blue) and Top Button (orange), turn on radio
 - 3.1 Computer will play connection sound
 - 3.2 LED will flash R-Y-G and display will be blank (clear)
 - 3.3 FlashBurn will indicate 'The device has been connected!'
- 4.0 Click 'Flash'
 - 4.1 FlashBurn will indicate 'The program is being upgraded, please wait patiently...'
 - 4.2 Monitor the green progress bar
 - 4.3 When complete, FlashBurn will indicate 'Data transmitted successfully, Please wait for radio to reset to confirm successful write!'
 - 4.4 Click OK button
- 5.0 Radio will reset and display channel information
 - 5.1 If radio indicates 'Unprogrammed', the firmware update has taken the radio from 1K channels/1K contacts to 2K channels/65K contacts and the code plug needs to be updated.
 - 5.2 In the CPS, select Tools > CPS Data Translate to update the code plug data and then reload this new file to the radio
 - 5.3 If the screen is blank and the LED flashes R-G-G-Y-Y-Y, the radio requires authorization
 - 5.4 Please follow the Authorization Procedure guidelines in a separate document
- 6.0 Disconnect the radio from the computer
 - 6.1 If the Channel Voice does not annunciate the channel number, the fixed voice data needs to be updated
 - 6.2 Reconnect the radio to the computer
 - 6.3 Open the CPS
 - 6.4 Select Tools > Load Fixed Voice Data
 - 6.5 Navigate to the 'VoicePacket2015-03-23.fv' and select it
 - 6.6 Press the OK key to write the data to the radio
- 7.0 Disconnect the radio from the computer

FIRMWARE UPDATE PROCEDURE FOR ALL MOBILE RADIOS – CS800, CS810, CS810, CS811

Confirm that you have all necessary hardware and software for the firmware update – programming cables, power supply, FlashBurn2.00_CSI, and the current version of firmware as a binary file (.bin), front panel updating tool (if necessary) and front panel binary file. Other files may be necessary, such as fixed voice data (.fv file), or latest CPS for other updates. A good quality power supply is recommended since radio disconnect during a firmware update will render it unusable until the update can be completed and may require the radio to be sent in for service.

Test your connection to your computer prior to a firmware update to verify proper operation. Connect the radio and computer using the programming cable, turn on the radio and listen for the Windows connection acknowledgement (sound file played on computer), and then use CPS to read data from radio to confirm proper communications. Save this data as a backup prior to updating. Connect the front panel cable to the computer and listen for Windows acknowledgement, then verify that it is properly recognized in the Device Manager as a 'Prolific USB to Serial' device under 'Ports (COM & LPT). Note the COM port number assigned to the cable. Any connection issues should be resolved prior to continuing.

1.0 Connect the radio to the computer using the USB to DB-15 cable – rear of radio (if not already done)2.0 Open FlashBurn2.00_CSI

- 2.1 FlashBurn will indicate 'No device detected!'
- 2.2 Click 'Select(*.bin)' and navigate to firmware version to be uploaded
- 3.0 While holding P1 key, turn on radio
 - 3.1 Computer will play connection sound
 - 3.2 LED will flash R-G and display will show 'Program Mode'
 - 3.3 FlashBurn will indicate 'The device has been connected!'
- 4.0 Click 'Flash'
 - 4.1 FlashBurn will indicate 'The program is being upgraded, please wait patiently...'
 - 4.2 Monitor the green progress bar
 - 4.3 When complete, FlashBurn will indicate 'Data transmitted successfully, Please wait for radio to reset to confirm successful write!'
 - 4.4 Click OK button (Do not wait for reset)
- 5.0 Radio will not reset automatically for Mobile units
 - 5.1 Press and hold power key for about 5 seconds to shut down radio
 - 5.2 Press power key to restart radio
 - 5.3 If radio indicates 'Unprogrammed', the firmware update has taken the radio from 1K channels/1K contacts to 2K channels/65K contacts and the code plug needs to be updated.
 - 5.4 In the CPS, select Tools > CPS Data Translate to update the code plug data and then reload this new file to the radio
 - 5.5 If the screen is blank and the LED flashes R-G-G-Y-Y-Y, the radio requires authorization
 - 5.6 Please follow the Authorization Procedure guidelines in a separate document
- 6.0 Disconnect the radio from the computer
 - 6.1 If the Channel Voice does not annunciate the channel number, the fixed voice data needs to be updated (the channel voice will not annunciate if the radio is connected)

- 6.2 Reconnect the radio to the computer
- 6.3 Open the CPS
- 6.4 Select Tools > Load Fixed Voice Data
- 6.5 Navigate to the 'VoicePacket2015-03-23.fv' and select it
- 6.6 Press the OK key to write the data to the radio
- 7.0 Front Panel Update Instructions
 - 7.1 If you have not done so, check the front panel version using earlier procedures and confirm whether an update is necessary
 - 7.2 Keep the USB to DB-15 cable connected to verify completion of boot cycle prior to front panel update start (see below)
 - 7.3 Plug the USB Prolific to RJ45 front panel cable into the computer confirm Windows connection sound and settings in Device Manager
 - 7.4 If not already done, set cable properties in device manager to 19200 baud rate and verify COM port number
 - 7.5 Connect the RJ45 to the front panel microphone port
 - 7.6 Run 'Upgrade Tool R1.02'
 - 7.7 Set COM port number and baud rate as per information obtained from Device Manager
 - 7.8 Press and hold P7 (volume knob, top left of panel) and power key to turn on radio
 - 7.9 LED will show steady red and display will show 'Program Mode'
 - 7.10 Listen for Windows connection sound to confirm radio is ready for updating
 - 7.11 Run 'Upgrade Tool R1.02'
 - 7.12 Leave Radio Type as DM6000, set Serial Port to COM port number for front panel cable, set Baud Rate to 19200
 - 7.13 Click '...' button and navigate to Mobile_Panel_R1_00_04.fot' and select it
 - 7.14 Click 'Flash' button LED will flash red and progress bar will cross screen in program
 - 7.15 When update is complete, click OK
 - 7.16 Hold power key for 5 seconds and release to shut down radio
- 8.0 Disconnect the radio from the computer