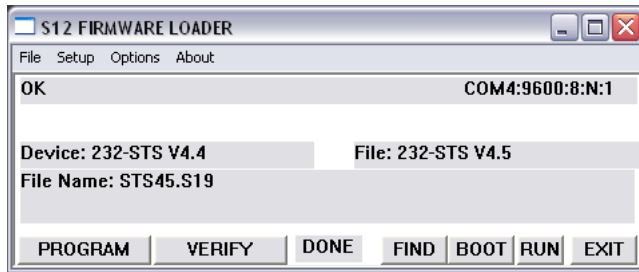
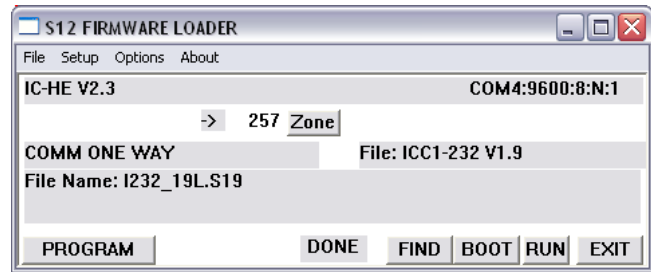


S12 Firmware Loader

RS-232 Tool for CR Control Firmware



Loading to Device



Loading to IC-HE Head End

Many Contemporary Research products, including AV tuners, QMOD, IR-232 Interface, all iC-Net controllers and others feature our advanced S12 processor that allows in-the-field firmware updates using a Windows PC and an RS-232 null modem cable (DB7 Female to Female, TX and RX swapped at one end).

RS-232 Driven CR Products

The firmware download process works simply and easily (see **Extracting Files** below if you don't have WinZip):

1. Download the desired firmware ZIP file, extract to a folder or open ZIP with Windows Explorer.
2. Connect the S12-series CR product to an RS-232 port and note which RS-232 port you are using.
3. Make sure programs such as HotSync aren't already using the RS-232 port.
4. Also check to see if the tuner is set to Unit 1 (hold Mute and Volume (or Select) Up for front-panel mode, then press Volume Up to select view mode 2 Unit # settings, use Channel Down button to set unit to 1, if needed).
5. Run the S12LOAD.EXE program in the folder, then click SETUP to select COM port.
6. When the program connects with the tuner, you'll see the name of the product after **Device:** and the firmware file you are loading after **File Name:**.
7. Normally, the desired firmware file is already loaded – you can use **File/Open** if you have several firmware files stored in your PC.
8. Click the **PROGRAM** button to start the loading process. You may see several messages while the program tests the COM port baud rate - You'll see a RUN message when the load process begins.
9. The VERIFY, FIND, BOOT, RUN are manual operations that the loader and PROGRAM performs automatically - you'll rarely use them unless asked by CR Tech Support.

If you do not have a successful install, do this:

- Go to the Options menu and select Boot Mode.
- Unplug power to the unit.
- While holding down both Channel (QMOD Up and Down) buttons, re-apply power, then release the buttons
- Within about 10 seconds, click the Program button to load the firmware.

Extracting files for Windows users who don't have WinZip software:

- Right-click the compressed folder (folder with zipper icon) and select Extract All
- On the Select a Destination window, click Browse, click on the Desktop icon
- At this point, you could click Finish on the next screen which shows you the new folder, or just open the folder on your desktop
- Go to Step 5 above

IC-NET Controllers – Update Firmware Over RF Coax

The firmware download process is similar to above, with the following differences:

- When the software “Finds” an ICC/ICE-HE Head End, it will add options for device # and Zone
- Enter a specific controller number, or select one of 15 Zones – or ALL.
- Click **PROGRAM** to update controllers.

The IC-NET controllers are intelligent, and will only upload firmware intended for a specific controller type. For example, you can download ICC1-232 firmware to ALL devices on the iC-Net bus. Only ICC1-232 controllers will be updated, other types of controllers will ignore the download.