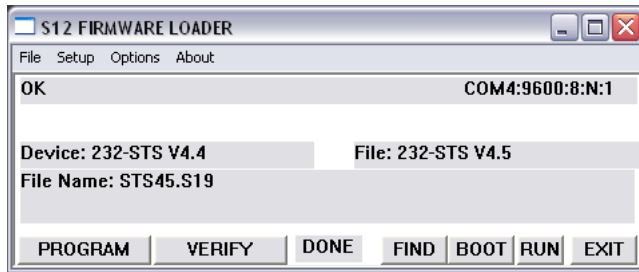
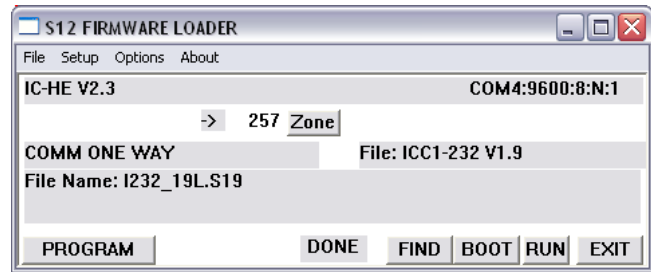


S12 Firmware Loader

RS-232 Tool for CR Control Firmware



Loading to Device



Loading to IC-HE Head End

Many Contemporary Research products, including AV tuners, the 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 Tuners and Controllers

The firmware download process works simply and easily:

- Download the desired firmware self-extracting EXE file.
- Connect the S12-series CR product to an RS-232 port and note which RS-232 port you are using.
- Make sure programs such as HotSync aren't already using the RS-232 port.
- 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).
- Run the EXE program, then click SETUP to select COM port.
- 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:**.
- Normally, the desired firmware file is already loaded – you can use **File/Open** if you have several firmware files stored in your PC.
- 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.
- 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.

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.