

232-ATSC+1, ATSC+SDI Firmware Pack Updates

- Press **Setup**, then click the **Up** arrow to the Firmware menu. Check if the current firmware is the latest version.
- Download the firmware pack from the 232-ATSC+1 or ATSC+SDI Product page. Both use the same update format, but use different HD and S37 files.
 - Browse to www.contemporaryresearch.com
 - Select **Products**, then choose the tuner you want to update
 - Select the **Downloads** tab and download the latest firmware
 - Extract the ZIP folder, typically in your Desktop or Downloads folder, which includes the S37 and HD firmware, and the update instructions

Operation Firmware .S37 File

Update to the latest S37 file before updating HD Load.

- Connect your PC to the USB port of the tuner.
- Copy the S37 Update file.
- Select the red **Setup** button on the ATSC front panel, then go to the **Setup: Firmware** setting
- Click **Setup** and **Power** together – a file folder will open on your desktop and the front panel of the tuner will display **Firmware Loader** (Some PCs are set to not automatically open the folder – you may need to look for the folder in Windows Explorer)
- Paste or drag the S37 file into the folder
- The front panel will show **File Loading**, then **Copying Image**.
- When the process is complete, the display will change to **Firmware Loader**
- Press the **Left Arrow** to exit the mode, no need to exit **Setup** or reset power

HD Load Processor Firmware

This firmware process updates the HD processor in the 232-ATSC+1 or ATSC+SDI; it's a much larger file and uses a different set of steps for updating.

- Go to the **Firmware** menu again, and click the Right arrow twice to view the HD version.
 - For the 232-ATSC+1, the version should be 5.xx – if it shows 6.xx, call CR Support and we'll get you the correct firmware.
 - For the 232-ATSC+SDI, the version should be 2.xx – if it shows 3.xx, call CR Support and we'll get you the correct firmware.
- Connect an RS-232 null modem cable from your Windows PC to the RS-232 input on the back of the tuner. The data rate of the update is too fast to use the USB connection on the front of the tuner.
- *Remove the 12V DC cable from the back of the tuner.*
- Run the **HD Load.exe** installer in the Firmware Pack folder usually in your Desktop or Downloads folder.
- Select the COM port you're using from the pull-down list at **Connection**. Don't select **Enable Dynamic 2X Speed** as an option.
- Keep the default settings, Model=TL9xx, Data Type=Application
- Under the **File** option, browse to select the HD--Vxxxx.raw file in the Firmware Pack folder.
- Click the **Connect** button below Configuration.
- Click the **Start** button to begin the download process
- Hold down **both Volume** ◀▶ buttons and **connect DC power**. The front-panel display will flash and show HD LOAD, to show it is in the Processor Download mode.
- The **Download Progress** bar and **Message** box will keep you up to date on progress. If you have difficulty downloading, try updating the driver for the USB adapter, use a different adapter, or retry the process a few times.
- The app will tell you when the process is complete. Close HD Loader reset DC power to the tuner.
- You can check the firmware update version by selecting **SETUP**, click the Up arrow to show the **Setup:Firmware** menu, press the right arrow twice to see the HD version.

Updating the HD firmware resets the HDCP mode in the 232-ATSC+1 tuner. To change the HDCP mode, hold the white **Setup** button and click the **Down** arrow. Repeat if needed.