

## UTAH-400 288R Firmware Upgrade

### Scope

The firmware on the 288r Crosspoint Card (121174-1) will provide the ability to field reprogram the DSP. Before you attempt to upgrade software in the card, consult with Utah Scientific Customer Service to ensure you are upgrading to the proper version for your application.

Before attempting, ensure that you have connected to the card as described in Section 2 of the Utah-400 288R Operations Guide and are able to access the menus using TeraTerm. Information regarding TeraTerm's installation and configuration can be found in the Utah Scientific System Installation Guide.

**CAUTION - THIS UPGRADE WILL RENDER THE CARD INOPERABLE FOR 1 MINUTE. IF YOUR SYSTEM DOES NOT INCLUDE A REDUNDANT CROSSPOINT CARD, WAIT FOR A SUITABLE TIME WINDOW TO PERFORM THE UPGRADE.**

Follow the procedure below to program this board.

1. Using a CAT5 cable with the 140000-8 serial adapter (or similar), connect to COM1 of your computer, then to Debug port on the 121174-1. If the system is in use, connect to the redundant crosspoint card, identified by the illuminated 'REDUN' LED, DS6.
2. Open TeraTerm on your PC.
  - Set it up for COM1, 38400 baud, 8 data, 1 stop with no parity bits, and XON/XOFF handshake. Also set input translation to CR = CR/LF.
3. Press the reset button on the 121174-1. Verify that the terminal reports – "(c) 2007 USI. S-Record loader. Version 1.0" Followed by a version banner indicating the current version of the board.

**IMPORTANT NOTE: No additional status or communication will be possible when the upgrade is performed on the redundant crosspoint card.**

4. In TeraTerm, select the option 'File' then 'Save File'. Select the file provided to you by USI customer service (a typical file name is "08200-22 UT4-288R XP SW V2\_01.S") but do NOT press *Open* yet.

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5. Press the reset button on the 121174-1 card. *IMPORTANT: When the green power OK LED lights, you will have 2 seconds to press the 'Open' button on the TeraTerm screen.*
    - A successful download will show a window indicating that data is downloading for about 30 seconds, following by a version banner being printed indicating the version that was just downloaded.
    - An unsuccessful download will not show the new version. In this case, repeat steps 4 and 5.
  6. Repeat these steps with the other crosspoint card if required.