

REVISIONS				
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DRAWN	09/30/2005	Lassen SQ Firmware Upgrade Instructions		
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I. Lassen SQ firmware field upgrade tools and requirement

The following is required for firmware upgrade:

- PC with RS232 serial port (com) which can support at least 9600 and 115,200 baud
- Lassen SQ Starter Kit Interface Unit
- Suitable power supply for Lassen SQ receiver or Starter Kit Interface Unit

II. Firmware upgrading procedures

1. Copy both the SQ_load.exe and sq.rom into the same directory in which you want to have them stored. If a previous version of sq.rom already exists in the directory, rename it to something with reference to its release version before copying the new version over; e.g. rename old sq.rom to sq_1-04.rom if it is release 1.04.
2. Connect the serial ports of the Starter Kit Interface Unit and the PC with a RS232 cable.
3. Connect an antenna to the Lassen SQ.
4. Turn on the power supply to the Lassen SQ.
5. Confirm operation of the receiver by running TSIPCHAT or SQ_Monitor.
6. Serial port setting must be 9600-8-Odd-1 and protocol must be TSIP IN/OUT. If not, then reset them to such by using key-board command "U"(packet 0xBC) in TSIPCHAT or using the [Configure]/[Serial Port] menu in SQ_Monitor.
7. After receiver operation is confirmed, close the TSIPCHAT or SQ_Monitor program before proceeding to step.
8. Leave the receiver power on and then run the SQ_load program by double clicking the .exe file.
9. The flash programming should take about one minute (for an average PC) to complete.
10. To run the receiver in normal operation again, it is required to power cycle the receiver. This is done by removing the ribbon cable from the 8 pin header of the Lassen SQ and let the receiver sit without the ribbon cable connected for at least 15 seconds.