## Upgrade Firmware via the EIA-232 Port (X-Modem)



Thank you for purchasing an RLE device. These directions will help you upgrade the firmware on your appliance using an x-modem connection.

If you need further assistance, please contact RLE Technologies via our website - http://www.rletech.com/ or call us at 800-518-1519, Option 2.

v2.0 (04/2013)



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## Upgrade Firmware via the EIA-232 Port (X-Modem)

You may encounter a situation where you need up upgrade firmware on an RLE device via X-Modem. If that should happen, these directions will walk you through the process.

- 1. Connect to the device using HyperTerminal.
- 2. Start firmware updates by either:
  - a. Pressing any key after power-up when a 10 second window provides an opportunity to abort the Flash Main Program, or
  - b. Typing RESET to exit to Bootloader once the Main Menu appears.
- 3. The bootloader is customized a bit for each individual RLE device. For instance, the boot prompt for the LD1500 displays on the screen as ld1500boot. The prompt for the FMS displays as FCFboot. The LD2100 boot displays as ld2100boot, and the LD5200 displays as ld5200boot. For the purposes of generalization in these instructions, the boot prompt is called \*\*\*boot. Replace the \*\*\* for the type of controller you're working with, and you'll have a more accurate representation of what you'll see on your screen.
- 4. From the \*\*\*boot prompt, type ? and press Enter to see the list of available commands.
- 5. From the \*\*\*boot prompt, type ID and press Enter. Note which Flash has the lowest serial number. The Flash with the lowest serial number is the backup. The idea is to erase the backup, load the new version—which becomes the active Flash—then erase and load the other Flash.
- 6. From the \*\*\*boot Prompt, erase the back up Flash program (the one with the lowest serial number) by typing ERASE PRGM followed by Enter. After a few seconds, the screen will update with an ok and \*\*\*boot>.
- 7. From the \*\*\*boot prompt, type LOAD PRGM XMODEM (LOAD PRGM1 XMODEM or LOAD PRGM2 XMODEM if you're updating firmware on an FMS) followed by Enter. Select the same program that was erased.
- 8. From the HyperTerminal menu select Transfer -> Send File. Use the browse button to select the firmware file from the computer's directory. The file must be binary and have a .bin extension. Select the file and upload it using the 1K X-Modem protocol. Then click Send.
- 9. A transfer status screen will be displayed. The transfer takes just a minute or two on less complicated devices. When you upload the firmware file to an FMS, the transfer may take as many as 10 minutes. Once the transfer is complete, the transfer status window will automatically close. The HyperTerminal window will indicate that the upload is complete.
- 10. From the \*\*\*boot prompt, type RUN or power down the device and restart it to verify that the new Flash program runs.
- 11. Press Enter to display the \*\*\*Main Menu and repeat the steps above to erase and download to the other Flash program chip.
- 12. Once the firmware upgrade is complete, disconnect the serial cable and close HyperTerminal.