



## How to Update LD5000 Firmware using a 1K X-Modem

1. Download the LD5000 firmware from our support page at [www.rletech.com](http://www.rletech.com) , or contact us directly via email at [support@rletech.com](mailto:support@rletech.com) .
2. Copy the LD5000 firmware to a directory on your PC.
3. Connect to the LD5000 using Hyperterminal. For instruction on how to do so, see our support document: "Connecting Hyperterminal to RLE Products".
4. From the Main Menu, enter EX <enter>

```
RLE Products - HyperTerminal
File Edit View Call Transfer Help
[Icons]
LS - Leak Status
SL - Silence Leak Relay
SF - Silence Fault Relay
SR - Silence All Relays
CA - Current Alarms
RA - Reset Alarms
UP - Update Alarms
AS - Alarm Silence (LCD)
AH - Alarm History
CH - Clear Alarm History
TD - Trend Data Table (Leakage Current)
CT - Clear Trend Data Table
TI - Display Date/Time
NS - Network Status (RS485/Modbus)
MR - Reset Modbus Status (RS485/Modbus)
ND - Network Display (RS485)
MT - Modbus Display
EX - Exit
EX
bh Firmware V1.2 BOOTUP - WED 02/16/05 17:44:27
For help press ?<CR> or type RUN<CR> to restart the Flash Firmware
bh Boot>
```

5. From the bh Boot Prompt, enter ERASE PRGM <enter>

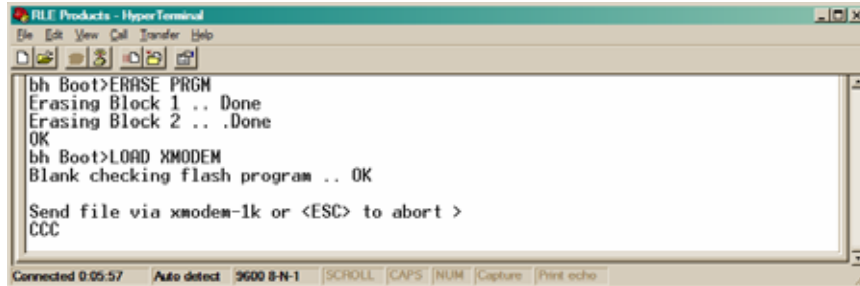
```
RLE Products - HyperTerminal
File Edit View Call Transfer Help
[Icons]
EX
bh Firmware V1.2 BOOTUP - WED 02/16/05 17:45:53
For help press ?<CR> or type RUN<CR> to restart the Flash Firmware
bh Boot>ERASE PRGM
Erasing Block 1 .. .Done
Erasing Block 2 .. .Done
OK
bh Boot>
```



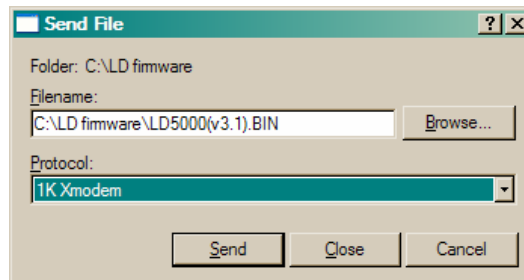
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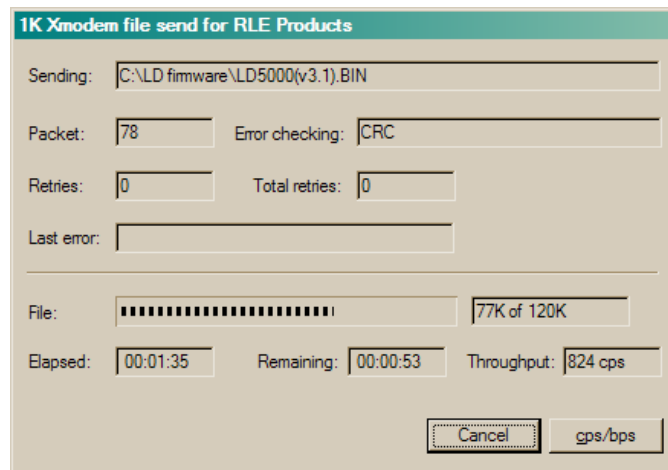
6. From the bh Boot Prompt, enter LOAD XMODEM <enter>



7. From the Hyperterminal Menu select Transfer -> Send File. Use the browse button to select the LD5000 firmware. Select the "1K Xmodem" protocol. Then click Send.



8. The following transfer status screen will be displayed. The transfer time will take about 3 minutes.





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9. Once the transfer is complete, the transfer status window will automatically close. The Hyperterminal window will indicate when the upload is complete.

```
RLE Products - HyperTerminal
File Edit View Call Transfer Help
Blank checking flash program .. OK
Send file via xmodem-1k or <ESC> to abort >
CCCCC
Program upload complete
LD5000 V3.1 B0 12/16/04
Bytes = 123480
Blocks = 120
bh Boot>
```

Connected 0:14:12 Auto detect 9600 8-N-1 SCROLL CAPS NUM Capture Print echo

10. From the bh Boot Prompt enter RUN <enter>

```
RLE Products - HyperTerminal
File Edit View Call Transfer Help
Blank checking flash program .. OK
Send file via xmodem-1k or <ESC> to abort >
CCCCC
Program upload complete
LD5000 V3.1 B0 12/16/04
Bytes = 123480
Blocks = 120
bh Boot>RUN_
```

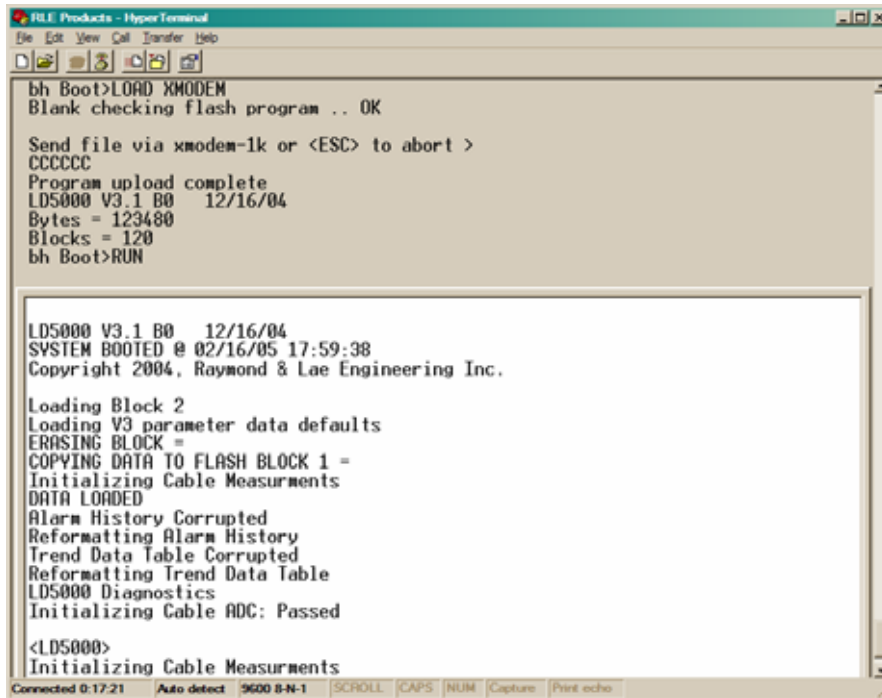
Connected 0:15:43 Auto detect 9600 8-N-1 SCROLL CAPS NUM Capture Print echo



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11. The LD5000 will restart and run the new firmware.



```
RLE Products - HyperTerminal
File Edit View Call Transfer Help
[Icons]
bh Boot>LOAD XMODEM
Blank checking flash program .. OK

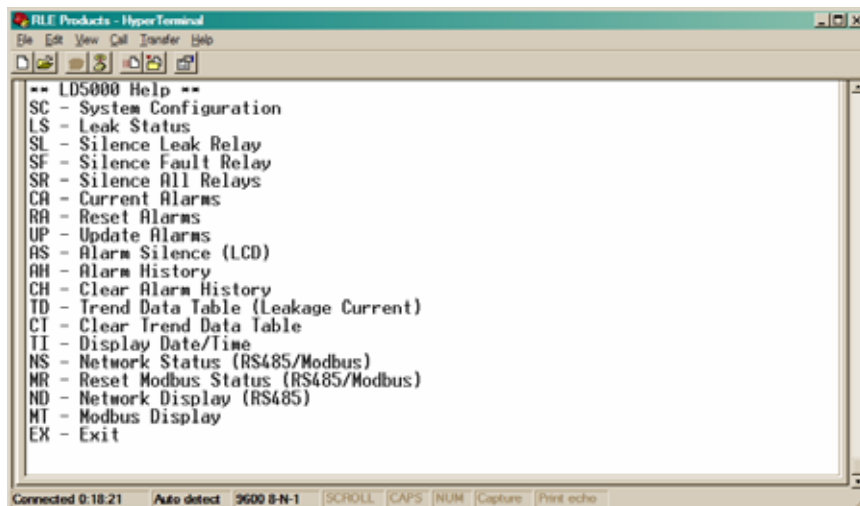
Send file via xmodem-1k or <ESC> to abort >
CCCCC
Program upload complete
LD5000 V3.1 B0 12/16/04
Bytes = 123480
Blocks = 120
bh Boot>RUN

LD5000 V3.1 B0 12/16/04
SYSTEM BOOTED @ 02/16/05 17:59:38
Copyright 2004, Raymond & Lae Engineering Inc.

Loading Block 2
Loading V3 parameter data defaults
ERASING BLOCK =
COPYING DATA TO FLASH BLOCK 1 =
Initializing Cable Measurements
DATA LOADED
Alarm History Corrupted
Reformatting Alarm History
Trend Data Table Corrupted
Reformatting Trend Data Table
LD5000 Diagnostics
Initializing Cable ADC: Passed

<LD5000>
Initializing Cable Measurements
Connected 0:17:21 Auto detect 9600 8-N-1 [SCROLL] [CAPS] [NUM] [Capture] [Print echo]
```

12. Press Enter to display the LD5000 Main Menu.



```
RLE Products - HyperTerminal
File Edit View Call Transfer Help
[Icons]
** LD5000 Help **
SC - System Configuration
LS - Leak Status
SL - Silence Leak Relay
SF - Silence Fault Relay
SR - Silence All Relays
CA - Current Alarms
RA - Reset Alarms
UP - Update Alarms
AS - Alarm Silence (LCD)
AH - Alarm History
CH - Clear Alarm History
TD - Trend Data Table (Leakage Current)
CT - Clear Trend Data Table
TI - Display Date/Time
NS - Network Status (RS485/Modbus)
NR - Reset Modbus Status (RS485/Modbus)
ND - Network Display (RS485)
MT - Modbus Display
EX - Exit
Connected 0:18:21 Auto detect 9600 8-N-1 [SCROLL] [CAPS] [NUM] [Capture] [Print echo]
```

13. Once the firmware upgrade is complete, disconnect the serial cable and close Hyperterminal.