

USB Console Setup for a Luxcom Modem

Description

Many of Luxcom's products have a USB mini B console management port to monitor status and set operation parameters. This document explains the three steps in creating a connection from a Windows computer to Luxcom's USB management port.

1. Installing a USB serial COM port driver on the PC.
2. Installing a terminal program on the PC to access the COM port.
3. Setting the terminal program parameters to talk to the COM port.

1. Installing the USB serial COM port driver

Windows require installation of device driver. It will prompt to install the driver automatically when the USB cable is first connected. Alternatively the VCP Driver can be downloaded manually from <https://www.ftdichip.com/Drivers/VCP.htm>

2. Installing the Terminal Program

A serial terminal program is required to interface with the Luxcom management interface. If you will be uploading new software, then a terminal program with X-Modem support is required. If you are already using a suitable terminal emulation program you may jump this section. Otherwise we suggest using the open source Tera Term which has X-modem, and may be downloaded for free here: <https://ttssh2.osdn.jp/index.html.en>

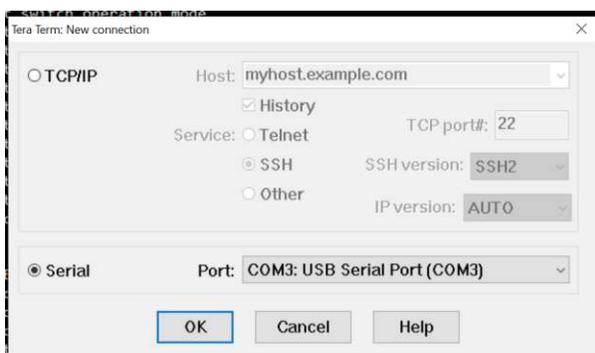
Once the program is down loaded you type Tera Term in Windows to start it.

3. Setting the Terminal Program's Parameters

Windows allocates a USB serial COM port when the USB cable is connected to the modem.

If you are using a program other than Tera Term, such a Putty, you will have to determine which COM port is used by opening the Ports (COM & LPT) tab in the Windows Device Manager.

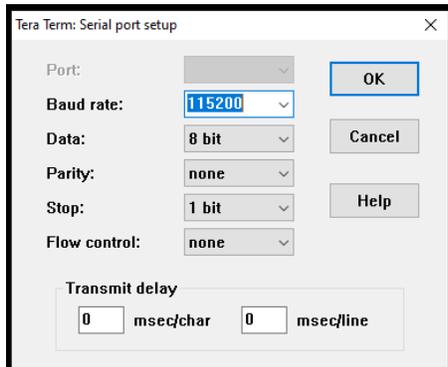
If you are using Tera Term it will allow you to choose the allocated port. See the figure below.



The serial port settings are 11520 bps*, 8 data bits, no parity, 1 stop bit, and no flow control.

*Some of Luxcom's earlier modems used 38400 bps. The manual will say, or just try both speeds.

If you are using Tera Term click on **Setup** and set the menu as shown below.



The interface assumes a dumb terminal, so almost any terminal type is usable, VT100 for example.

Enter **Setup/Save Setup** so the next time you access Tera Term the settings will be correct.

At this point pressing enter on the keyboard will bring up the modem's management menu.

Updating Software

Luxcom's management usually has the option of downloading new software to add features to the modem. The following explains the procedure in the unlikely case you have to do this. Software can be updated using the commands in the *Software upload menu*.

- Two copies of the application are stored - *PRIMARY* and *BACKUP*.
- The *PRIMARY* software file is automatically installed at power up (or when *reprogrammed*).
- The *BACKUP* file is loaded if the *PRIMARY* is missing or fails to load.
- The *PRIMARY* and *BACKUP* files can have different software with different functionality.
- Version information can be viewed with the *Software upload /Show stored files* command.
- Software files have a *.b08* or *.bin* extension.

The following is an example of the *Software upload menu*

- 1 Show stored files
- 2 Upload new BACKUP
- 3 Swap BACKUP and PRIMARY
- 4 Reprogram card with PRIMARY

Software Download Procedure

1. Luxcom will send you new software by email.
2. Note that if you do not swap the backup and primary before the download you will be able to restore the pre-download state, because after the download and the *Swap BACKUP and PRIMARY* command, the earlier software will be in backup. If you do not like the new download, you *Swap BACKUP and PRIMARY* and *Reprogram card with PRIMARY*.
3. Decide whether you want to replace the *BACKUP* or *PRIMARY* file using the *Show stored files* command. If you want to replace the *PRIMARY* (current software) file, use the *Swap BACKUP and PRIMARY* command. Normally backup and primary are the same files so it doesn't matter which one you overwrite.
4. Second, execute the *Upload new BACKUP* command. At this point you will have to enter the management password (factory set as *luxcom*). You must start the upload within 60 seconds. If the upload seems to be stalled, restart the upload.
5. To select the file, use TeraTerm's *File/Transfer/X-modem...* command. TeraTerm then presents a dialog box that allows the user to select the file and protocol. If the file upload fails, the *BACKUP* file will be empty and any previous file in this location will be lost.
6. Once the file is uploaded, use the *Swap BACKUP and PRIMARY* command.
7. Now use the *Reprogram card with PRIMARY* command (or power cycle the chassis).
8. If the modem's functionality is satisfactory, upload the same file into the *BACKUP*, or you may keep the earlier version.
9. Updating is now completed.