![Leviton logo] **LEVITON** ®
Building A Connected World

Supplemental User Guide

SUPPLEMENTAL GUIDE FOR UPDATING FIRMWARE ON Z-MAX™ LIGHTING CONTROL RELAY PANELS WITH MASTER CONTROL MODULE

Software revision 1.00 an up

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Tera Term - COM3 VT
File  Edit  Setup  Control  Window  Help

** Leviton Z-MAX Boot CLIF V0.06**

Boot [USB]: HELP
  HELP       This Command!
  CLS        Clear the screen.
  GET        GET <F¦E> <A¦C¦D> (F=Flash, E=EEPROM, A=All, C=Code, D=Data)
  PUT        PUT [A] (A=Program Code & Data, C=Program Code Only, & Reboot)
  PGM        PGM <A¦C¦D> (Program Flash from EEPROM A=All, C=Code, D=Data)
  ERASE      ERASE <F¦E> <A¦C¦D> (F=Flash, E=EEPROM, A=All, C=Code, D=Data)
  VER        VER <F¦E> (Version of code in F=Flash, E=EEPROM)
  FLASH      FLS <R¦W> <B¦W¦L> <address> [<val>] (Flash only)
  SEEW       <address> <data> [R] (Serial EEPROM Write, R=repeat for testing)
  SEER       <address>          (Serial EEPROM Read)
  SEED       Read Serial EEPROM IDs
  TIME       Displays Time
  EXIT       Exit the boot application.
Boot [USB]:
```

Updating Firmware

On occasion, it may be necessary to update the Z-MAX's operating system. This can be accomplished via a PC running a terminal program connected to the controller board inside the cabinet via USB.

USB Port
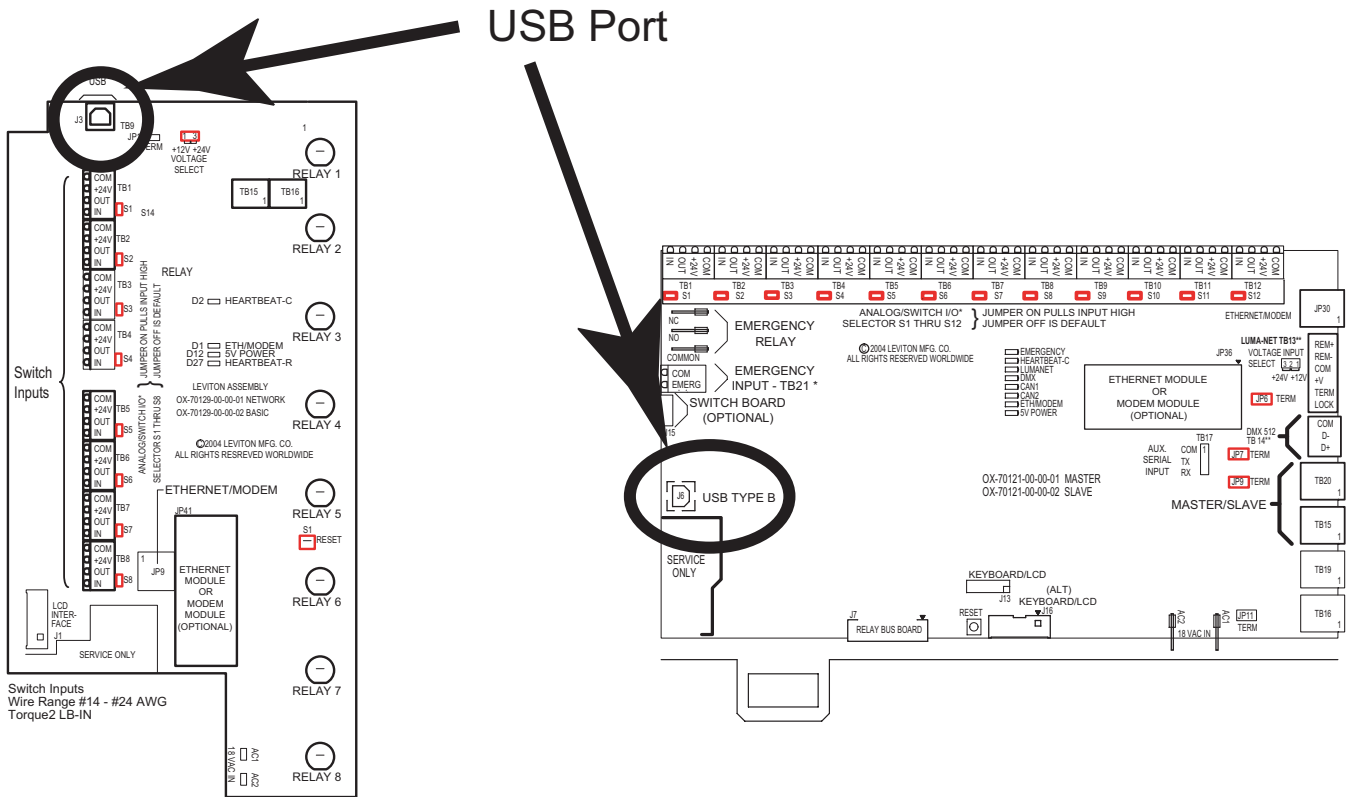
8 Basic and Network Cabinets

24 and 48 Master Cabinets

NOTE New operating system files can be found on Leviton's web site under product Information and then Lighting Controls

**NOTE** A USB driver for the Z-MAX cabinet can be found on Leviton's web site.

Any terminal program, such as Window's Hyper Terminal, should work, however we recommend a freeware program called Tera Term, http://hp.vector.co.jp/authors/VA002416/teraterm.html, because of its superior efficiency.

**NOTE** The Tera Term install file can also be found on Leviton's web site.

The terminal programs settings are as follows:

- COM Port - set to port number of the USB port.
- Baud Rate - 115200
- Data - 8 Bit
- Parity - None
- Stop Bits - 1
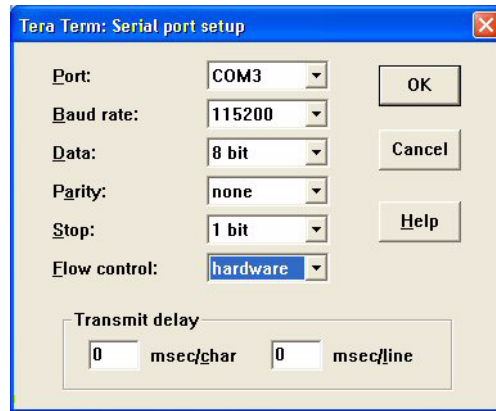- Flow Control - Hardware

Step 1: To set up Tera Term, first start the program. You will be asked to select a connection type. Select Serial along with the COM port assigned to USB port and click OK.
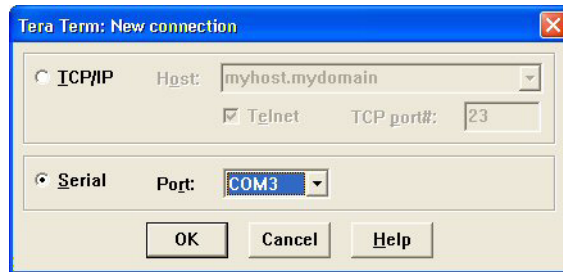
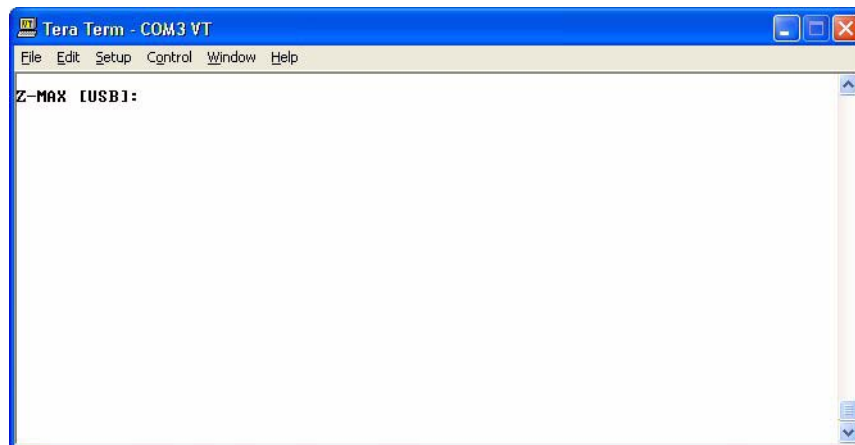**Step 2:** To setup the serial port, select the Setup item from the menu bar and click on Serial Port.
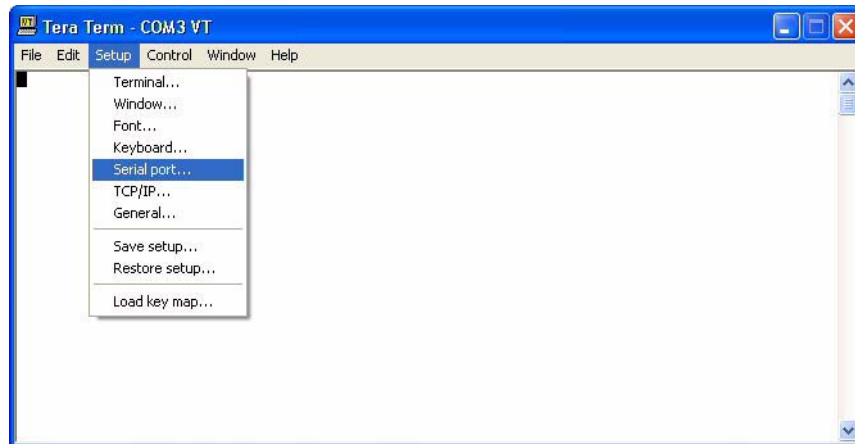
Step 3: Enter in the parameters listed above.
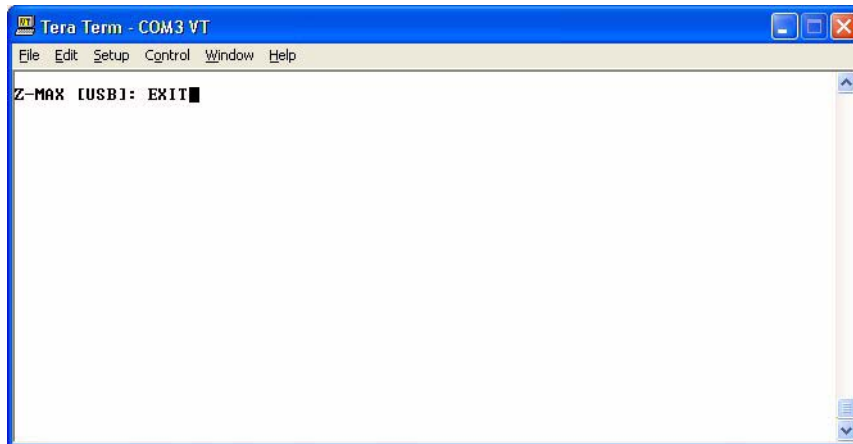
Once you have the terminal program configured you should be able to communicate to the Z-MAX cabinet.

Step 4: Tap Enter on the PC's keyboard and you should see a prompt appear on the terminal program's text window.

Since you will be replacing the operating system of the control board, you must jump out of the main operating system that is managing the communications and into a boot section of code that will perform the file transfer.

Step 5: To enter the boot system, type EXIT followed by Enter at the prompt.
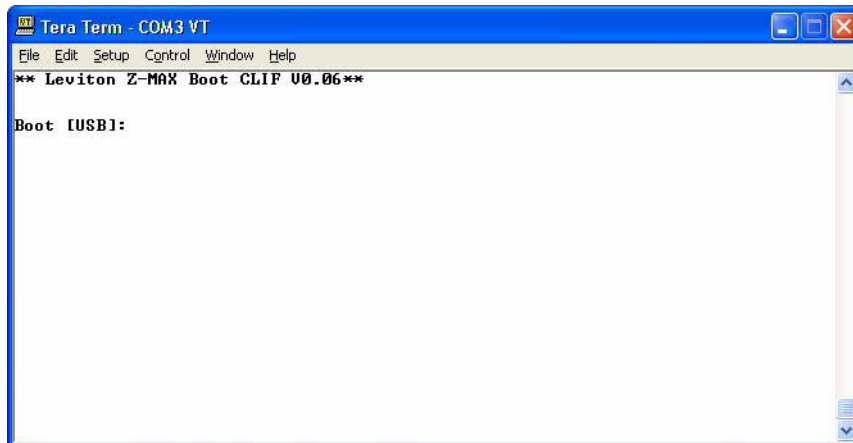
The prompt will now be "Boot" instead of "Z-MAX".
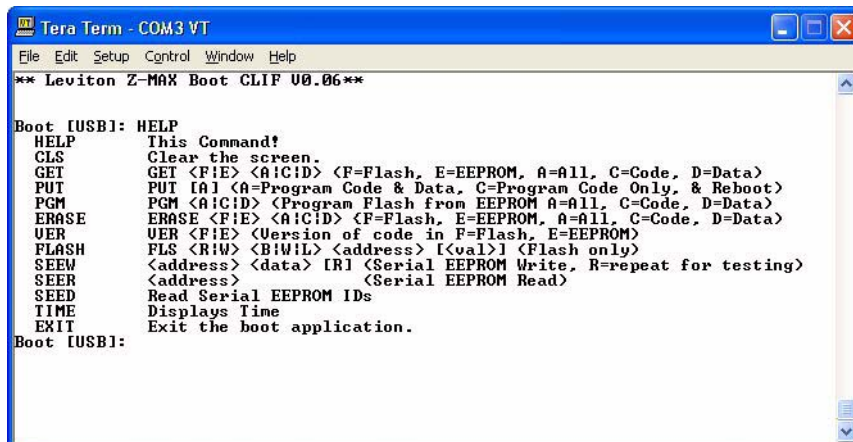
Only a few commands are necessary to load the operating system. To see all commands available, type HELP.

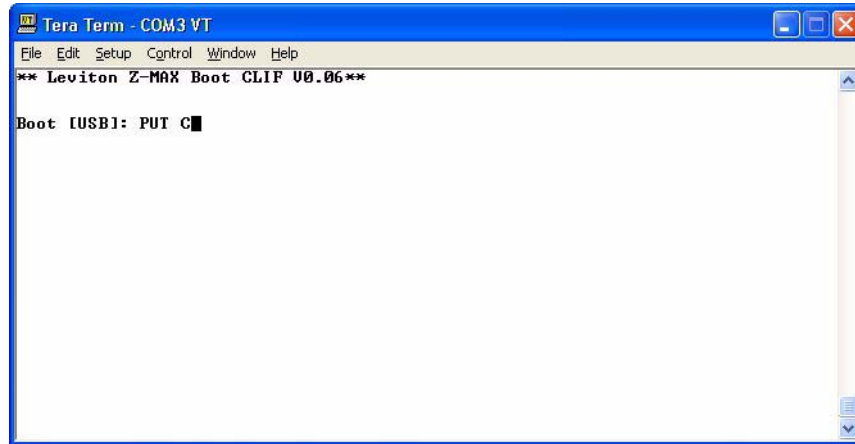**NOTE** Many of the commands listed are for trained personnel and used improperly could render the Z-MAX cabinet inoperable. Therefore, only use those commands listed below as described.

Step 6: To transfer the new operating system file, issue the PUT command. In most cases you will only want to upgrade the operating system. In this case, use the "C" parameter following the PUT command. If it is desired or necessary to also return all user programming to factory defaults, use the "A" parameter.
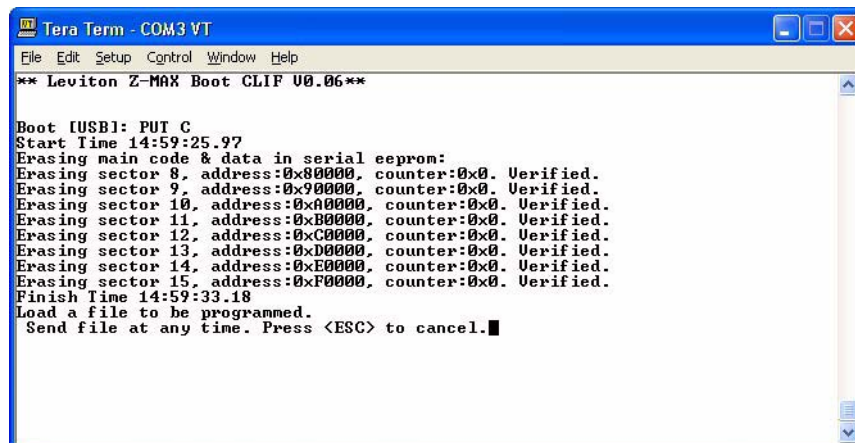
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Tera Term - COM3 VT

File  Edit  Setup  Control  Window  Help
** Leviton Z-MAX Boot CLIF V0.06**

Boot [USB]: PUT C█
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Step 7: Tap Enter. You will be prompted to begin the transfer from your terminal program.
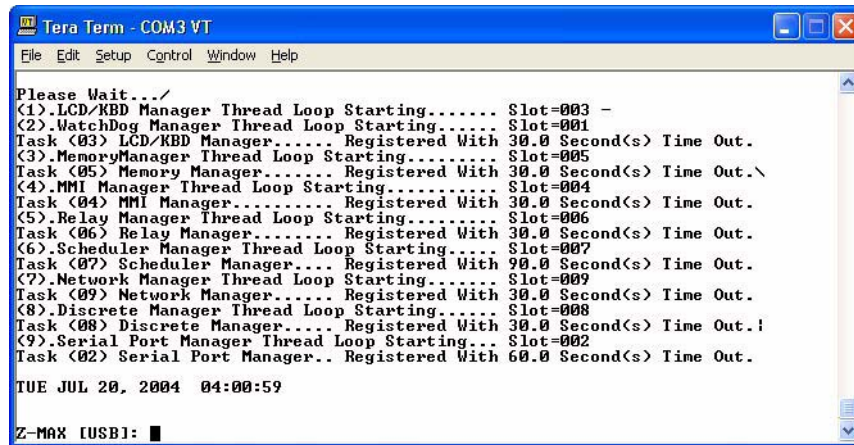
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Tera Term - COM3 VT

File  Edit  Setup  Control  Window  Help
** Leviton Z-MAX Boot CLIF V0.06**

Boot [USB]: PUT C
Start Time 14:59:25.97
Erasing main code & data in serial eeprom:
Erasing sector 8, address:0x80000, counter:0x0. Verified.
Erasing sector 9, address:0x90000, counter:0x0. Verified.
Erasing sector 10, address:0xA0000, counter:0x0. Verified.
Erasing sector 11, address:0xB0000, counter:0x0. Verified.
Erasing sector 12, address:0xC0000, counter:0x0. Verified.
Erasing sector 13, address:0xD0000, counter:0x0. Verified.
Erasing sector 14, address:0xE0000, counter:0x0. Verified.
Erasing sector 15, address:0xF0000, counter:0x0. Verified.
Finish Time 14:59:33.18
Load a file to be programmed.
 Send file at any time. Press <ESC> to cancel.█
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Step 8: To transfer the file using Tera Term, select the "send file..." item from the File menu.

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Step 9: Then select the file from the dialog box.

The new operating system will then be transferred.

When the transfer is complete, the new system will start and boot mode will be exited.

To verify the new code in the cabinet:

Step 1: Press the Menu button

Step 2: Press ⬆ until the display reads:

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MAIN MENU SELECT
 SOFTWARE BUILD
```

Step 3: Press Select/Save
The display will now show you the version of firmware the unit is running.