

Gas Gauge Update Instructions

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1. Terminal Software Installation

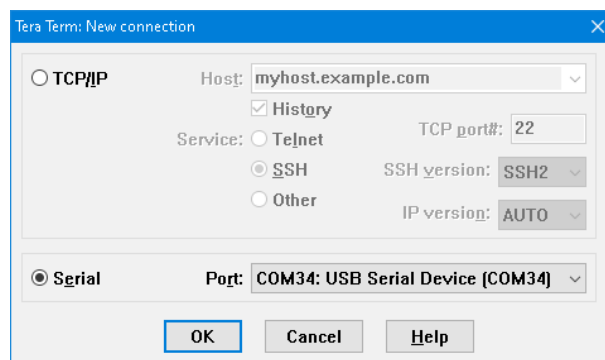
A serial communications program is required to use the Battery Programmer. We recommend TeraTerm, but other serial terminal programs may work. TeraTerm can be downloaded from:

<https://osdn.net/projects/ttssh2/downloads/74780/teraterm-4.106.exe/>

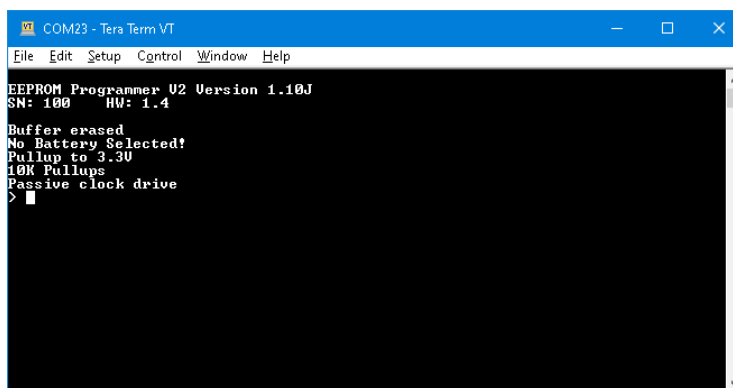
NOTE: The the box is **NOT** compatible with the Arduino IDE serial monitor

Plug the box into your PC and make a note of the serial port it was assigned. After installing TeraTerm start it and you will see the following dialog, select “Serial” and then pick the port assigned to the box. It will probably be labeled “USB Serial Device”.

When you first plug in the box you may also see a drive pop up with a bunch of files on it. Those files are stored on the box and are needed for the update process. Do not delete or modify them. The drive window can be closed as it is not needed for the update process.

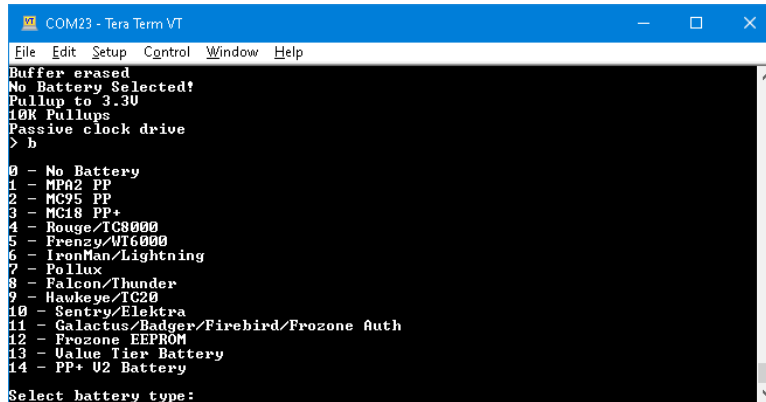


When the TeraTerm window opens you should see the following:



2. Select the battery type

Enter the battery select command 'b' followed by enter. You should now see the list of supported batteries as shown below:

A screenshot of a TeraTerm VT window titled 'COM23 - Tera Term VT'. The window has a menu bar with 'File', 'Edit', 'Setup', 'Control', 'Window', and 'Help'. The terminal output shows the following text: 'Buffer erased', 'No Battery Selected!', 'Pullup to 3.3V', '10K Pullups', 'Passive clock drive', '> b', a list of battery options from 0 to 14, and 'Select battery type:'. The list of options is: 0 - No Battery, 1 - MP42 PP, 2 - MC95 PP, 3 - MC18 PP+, 4 - Rouge/IC8000, 5 - Frenzy/VI6000, 6 - IronMan/Lightning, 7 - Pollux, 8 - Falcon/Thunder, 9 - Hawkeye/IC20, 10 - Sentry/Elektra, 11 - Galactus/Badger/Firebird/Frozone Auth, 12 - Frozone EEPROM, 13 - Ualue Tier Battery, 14 - PP+ V2 Battery.

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COM23 - Tera Term VT
File Edit Setup Control Window Help
Buffer erased
No Battery Selected!
Pullup to 3.3V
10K Pullups
Passive clock drive
> b
0 - No Battery
1 - MP42 PP
2 - MC95 PP
3 - MC18 PP+
4 - Rouge/IC8000
5 - Frenzy/VI6000
6 - IronMan/Lightning
7 - Pollux
8 - Falcon/Thunder
9 - Hawkeye/IC20
10 - Sentry/Elektra
11 - Galactus/Badger/Firebird/Frozone Auth
12 - Frozone EEPROM
13 - Ualue Tier Battery
14 - PP+ V2 Battery
Select battery type:
```

We want the PP+ V2 Battery, so type the number 14 followed by enter.

3. Update a gas gauge

Place a battery into the fixture. You should see the text "Battery detected!" on TeraTerm.

Enter the update gas gauge command 'ugg' followed by enter.

The box will now check the battery, check the files it needs for the update, and then update the battery.

This process will take a little over a minute to finish. The LED will glow red during the update.

----DO NOT REMOVE THE BATTERY UNTIL THE UPDATE IS DONE ----
----Doing so will render the battery unusable----

When the update is finished, the LED will return to green, at that point the battery can be removed from the fixture.