

## Firefly Bluetooth Adapter Configuration

Last Edit Date: 03/14/2012

### Liquid Controls LC3

The LC3 meter requires the Firefly adapter to be set to DTE mode. To put the Firefly in DTE mode, place the jumpers on the top 4 sets of pins leaving Pins 9 and 10 empty.

On the back of the adapter, move DIP switch 4 to the ON position to set the speed of the adapter to 9600 baud.

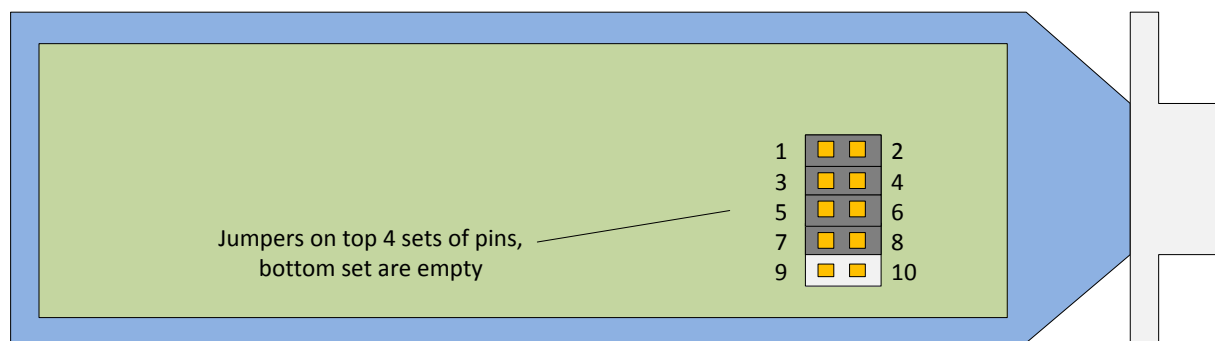


Fig A. Internal View (remove screw and cover)

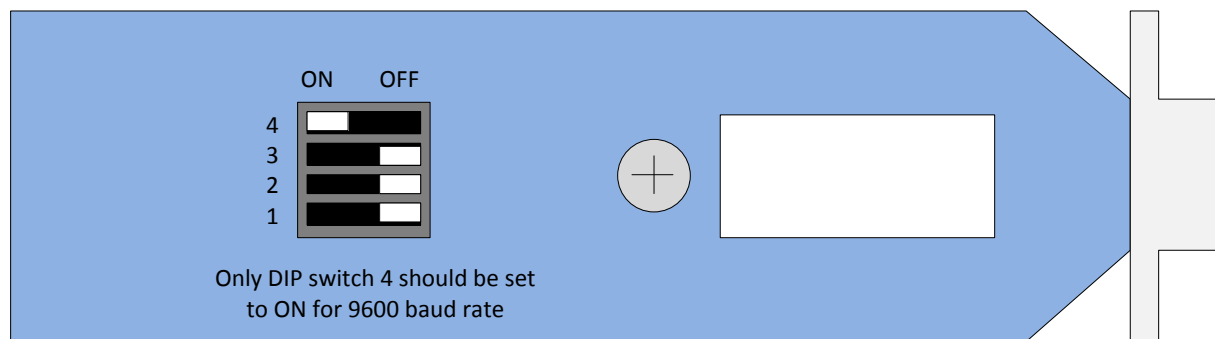


Fig B. Rear View of outer case

## Liquid Controls LCR II

The LCR II meter will work with the factory default jumper settings. This will work with either a lap pad adapter (single meter) or a multiplexer (dual meter) configuration.

On the back of the adapter, you should leave all of the DIP switches set to OFF. In order to set the baud rate to 19200, you will need to set it through a terminal emulator such as HyperTerm or TeraTerm. See the page labeled **Setting the baud rate to 19200 on the Firefly adapter**

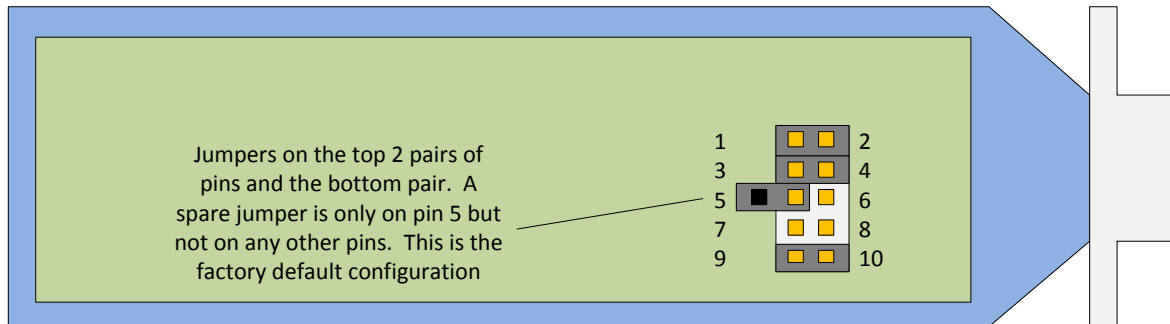


Fig C. Internal View (remove screw and cover)

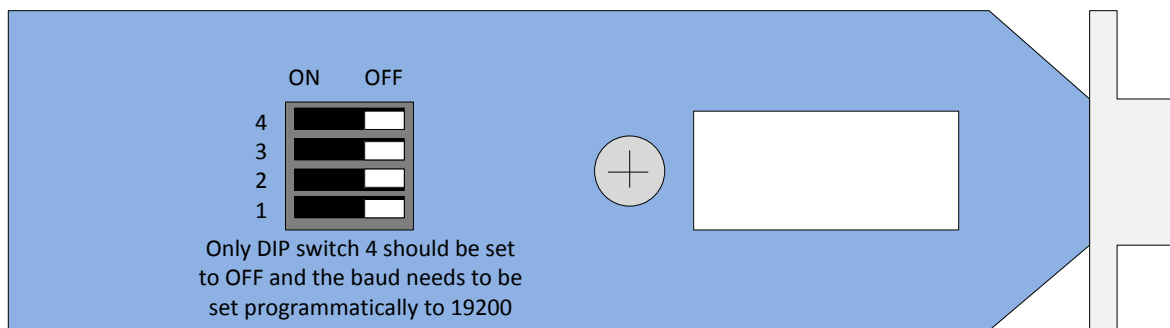


Fig D. Rear View of outer case

## MID:COM ECount, 8000

The MID:COM ECount and 8000 do not require any change in the jumper configuration from the factory defaults.

They do however require that you put DIP switch 4 into the ON position to set the baud rate to 9600.

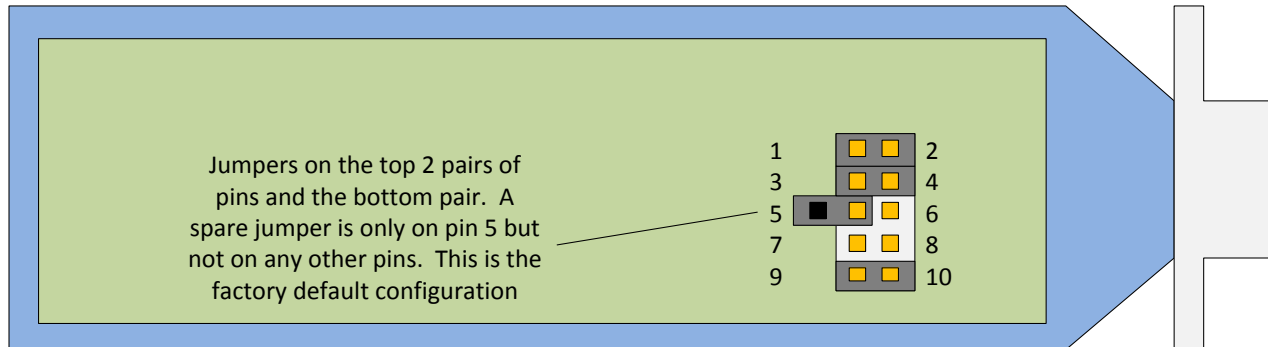


Fig E. Internal View (remove screw and cover)

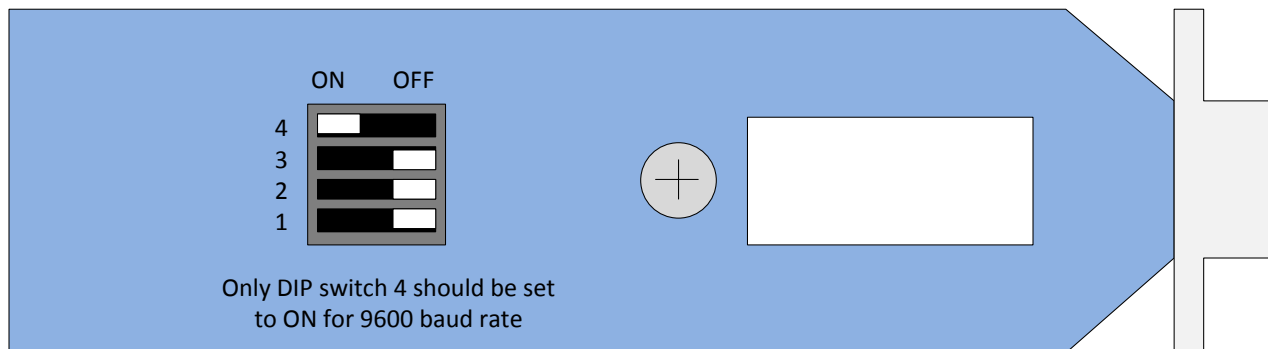


Fig F. Rear View of outer case

## Connecting Via Bluetooth

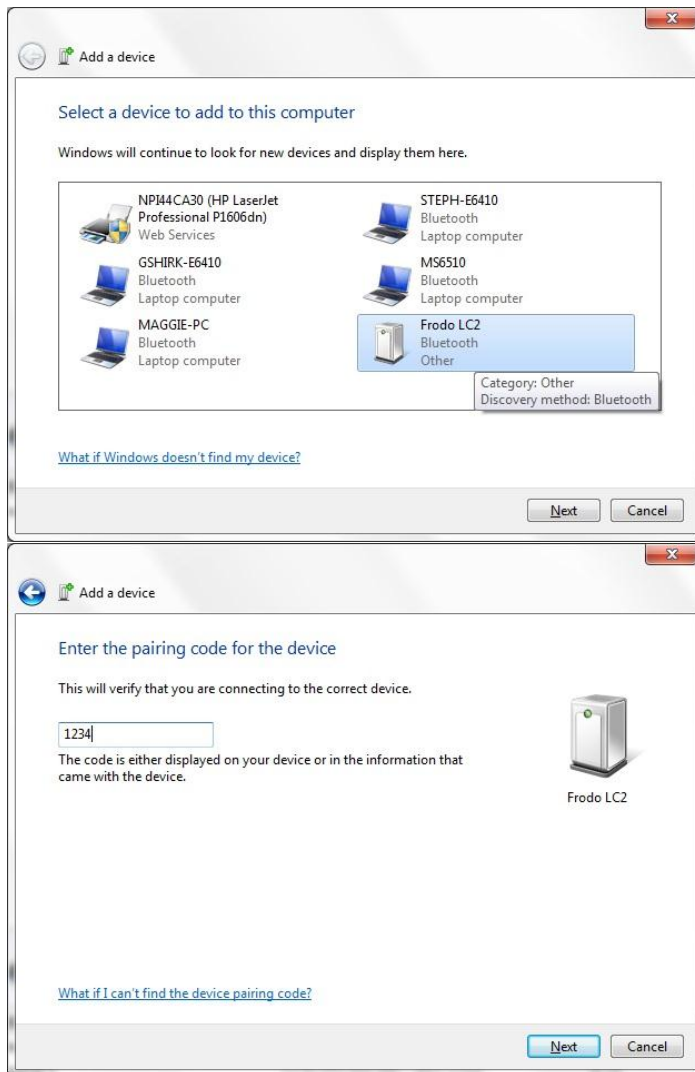
In order to configure the firefly Bluetooth adapter over Bluetooth connection you need to perform the following steps:

Software Needed:

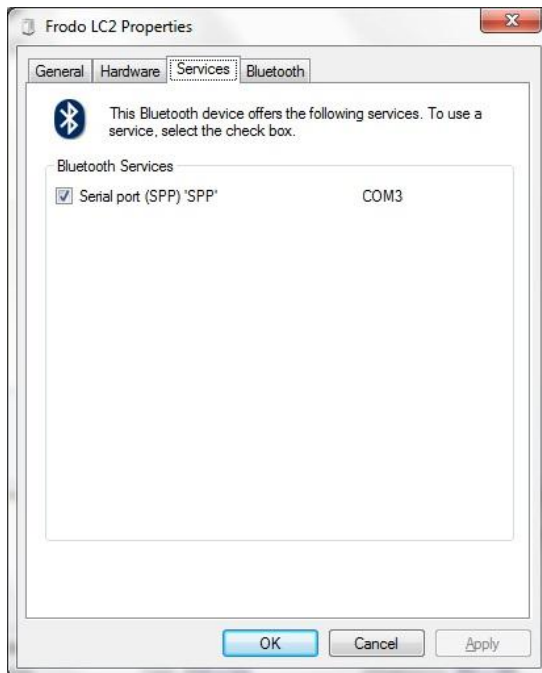
Tera Term: <https://cargas.zendesk.com/entries/21089927-configure-a-firefly-adapter-over-bluetooth>

**Copy to local computer, extract and install exe file to install Tera Term. You need this to communicate with the Bluetooth adapter.**

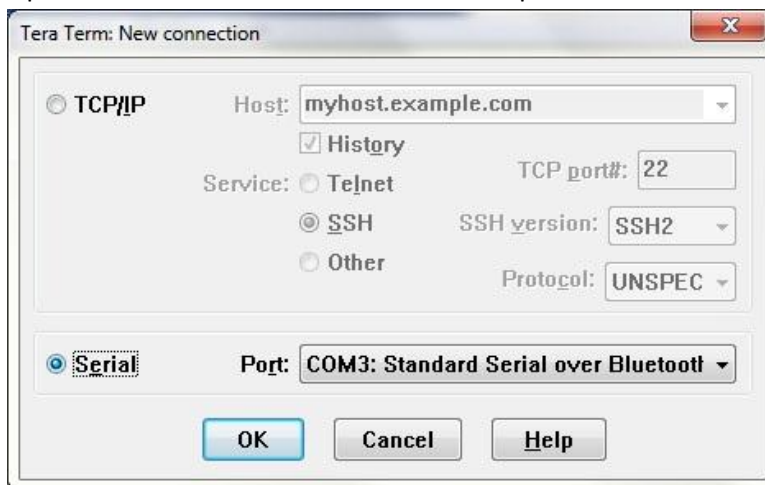
1. Make sure firefly adapter is plugged in for power and pair your computer to the Bluetooth device. The pairing code is '1234'.



2. After the device is paired, check the properties to verify that it is properly configured on a COM port.



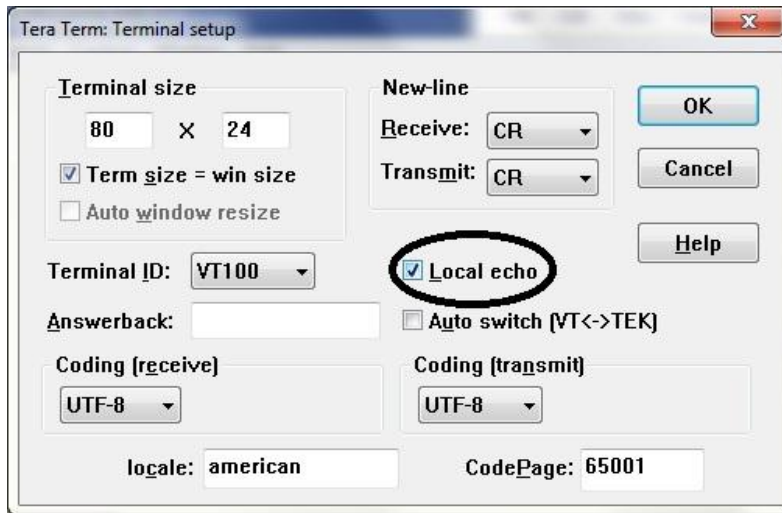
3. Open Tera Term and select the same COM port used for the Bluetooth adapter.



Close Tera Term.

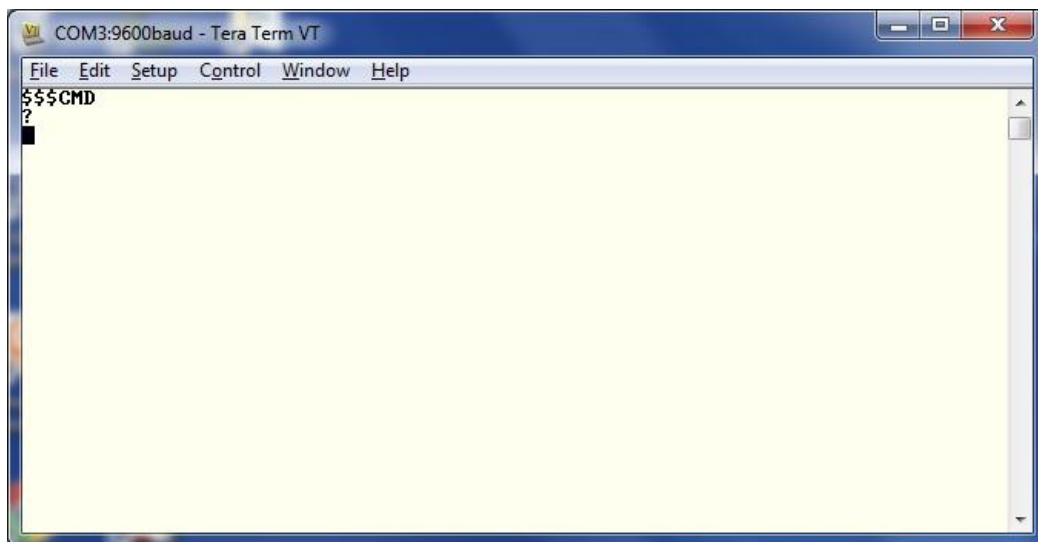
4. At this point you are ready to configure the Bluetooth adapter.  
Unplug power from the Bluetooth and replug power.  
You now have **1 minute** to enter command mode to configure the device.  
Reopen Tera Term and again connect to the same COM port as in Step 3 above.

5. Go to **Settings->Terminal...** and check the box for Local Echo



Click **OK**.

6. Now you are ready to put the Bluetooth adapter in command mode!  
Type **\$\$\$** and immediately the device should respond **CMD** to let you know it has acknowledged that it is now in command mode. If you do not see **CMD** something is not right and you should start over.  
Press **ENTER** and the device should return **'?'**.



7. At this point you can now enter whatever commands needed. Command reference can be found in the Firefly User's Guide PDF starting on Page 25.

## Setting the Baud Rate to 19200 (LCR-2)

Once you have properly put the device in CMD mode send the following command to change the baud rate to 19200.

**SU,19** (Press Enter)

## Changing the Device Name

Once you have properly put the device in CMD mode send the following command to change the device name.

**SN,DeviceName** (Press Enter)

## THE MOST IMPORTANT THING YOU WILL EVER DO

After pairing to the Bluetooth device and setting baud rate, changing names or doing whatever it is CRITICALLY IMPORTANT that you then UNPAIR the device from your computer. Failure to do so can/will cause catastrophic problems with testing if multiple devices attempt to pair to these firefly adapters.

UNPAIR

UNPAIR

UNPAIR

## Connecting Via Serial

**You will need a Female To Female Serial Cable or adapter! The preferred method is to use Bluetooth to edit the connection.**

Connect a cable from a PC or from an ASCII terminal to the Firefly. Communication settings of your program should match the stored settings. Once you change these parameters, they will be stored permanently.

*Note: If the Firefly is jumpered as a DCE device, then use a straight thru cable. If jumpered as a DTE device, then use a cross-over or NULL Modem cable between the Firefly and your PC.*

Default baudrate is 115200 (switch 4=OFF), no parity, 8 bits, 1 stop.

Local configuration works at any time the device does NOT have a Bluetooth connection, and also works under certain conditions when the device is connected. If the device is in configuration mode and a connection occurs, the device will exit configuration mode, and data will pass back and forth from the remote device.

- Run your favorite terminal emulator, HyperTerminal or other program.
- Cycle power to the Firefly.

