

Licor 7500 settings

Apr 12, 11:32 am

The output format and reporting rate of the 3 Licor 7500s that were re-installed today had been reset during the calibration procedure to generate verbose output, with labels. To save archive space, we configure the units for a terse output, without labels, at 10 Hz.

To setup the Licors for the format that our data system expects, do the following from the data system login prompt:

1. shut down the data process
adn
2. run minicom on the Licor port (ttyS2=2m, ttyS7=7m, ttyS11=16m, ttyS14=30m, ttyS17=43m)
minicom ttyS2
3. If the baud rate agrees with minicom (9600) you should see the default Licor output
4. Send a break character, by doing "control-A f" from minicom
ctrl-Af
5. Send these strings to the Licor:

```
(Outputs (RS232 (EOL "0A") (Labels FALSE) (DiagRec FALSE) (Ndx FALSE) (Aux FALSE) (Cooler FALSE)
(CO2Raw TRUE) (CO2D TRUE) (H2ORaw TRUE) (H2OD TRUE) (Temp TRUE) (Pres TRUE) (DiagVal TRUE)))
(Outputs (BW 10) (Delay 0) (RS232 (Freq 10.0) (Baud 9600)))
(Outputs (Dac1 (Source NONE)(Zero 0)(Full 5)) (Dac2 (Source NONE)(Zero 0)(Full 5)))
```

6. You won't see much output, perhaps just 1 column of digits on the right-hand-side, since the Licor is sending just a line-feed termination and no carriage-return. You can turn on line wrap in minicom, with "control-A w" to see the data stream wrap from side to side:
ctrl-Aw
7. Exit minicom with control-A q
ctrl-Aq
8. restart the data process:
aup
9. check the Licor data with rserial. It may take 30 seconds or so for the data system to open the port. During that time rserial will report an error about not finding the sensor. Eventually it should work.
rs 2
10. The data should look like:

```
248\t0.06460\t12.4193\t0.01218\t81.586\t16.10\t76.1\t\t\n
248\t0.06462\t12.4179\t0.01207\t81.459\t16.11\t76.1\t\t\n
```

11. Exit rserial with control-D
ctrl-d