Acquiring Data from the Contec KT88

The KT88 appears as a serial port when connected to your system, and working with it consists basically of a series of reads and writes from/to a serial port in your preferred programming language.

To work with the KT88:

1. Install Windows Driver

The Contec device uses a CP2102 chip made by Silicon Labs. The Windows driver is located in the folder $CP210x_Windows_Drivers^{1}$. Try installing by running the file $CP210xVCPInstaller_x86.exe$ or $CP210xVCPInstaller_x64.exe$, depending on your operating system.

The installation is however likely to fail. So, go to Device Manager, and look for the Contec (probably showing under Unknown Devices or some other category). Right click to update driver, and after selecting the option to "browse my computer for driver software", follow the "let me pick from a list of devices" and "have disk" options. This will allow you to browse to the folder above, and select the slabvcp.inf file. This should provide a list of options, most with names starting with "Silicon labs...". Pick the Enhanced COM port option and finish the installation.

The Contec should now show under your device tree as a serial port device anytime you plug it.

2. Acquiring Data

- i. Configure the serial port. Note that the Contec apparently doesn't like slow Baud rates. Use 8 data bits, 1 stop bit.
- ii. To read from the KT88, write the following bytes to the serial port: 83, followed by 88.
- iii. A long string of data should subsequently be available in the appropriate COM port buffer. Process it the way you would any serial data. To understand how to work with the actual data (what data stands for which electrode, offsets etc.), read the enclosed pdf files.
- iv. To stop getting data, write the byte **FF** to the serial port.

 $^{^{1}}$ You can also get it from this URL: http://www.silabs.com/documents/public/software/CP210x_Windows_Drivers.zip as of July 2017.