DirecTemp™ USB Precision Temperature Probe Linux Usage

Introduction
DirecTemp USB temperature probes can be used in a Linux style environment if desired. The benefit of using Linux in comparison to other operating systems with respect to the DirecTemp USB device is that there are no headaches for driver installation. Some care must be taken in interfacing with the HID probe, but both interfaces, the virtual serial port and HID can be used. The ability to use multiple probes for a given host running Linux with the serial version is straight forward, however the HID code provided does not allow multiple probes as of this release. We are continually updating and improving our product offering however and will include that code set when it is available.

USB (Virtual) Serial
The simplest version to incorporate in Linux is the serial device. The virtual port will show up in the /dev/ folder under debian as ttyACMx where x is the number of the USB interface. This is most often a zero.

For testing in the linux environment, it is simplest to use a terminal program such as minicom. Refer to the minicom user guide for specifics on minicom setup. Use the commands in Table 1 to communicate with the device. These commands are detailed further in the DirecTemp-USB-Serial-Communication-API.pdf file.

Table 1: Basic serial command set. Commands are single character and require no termination.

Command	Description	Response
1	Stream temperature	Temperature Value (°C) with carriage return and linefeed terminator
x	Stop streaming data	>
2	Single temperature	Temperature Value (°C) with carriage return and line feed terminator
3	Probe information	Firmware version and calibration date
4	Serial number	Serial number followed by eight digits