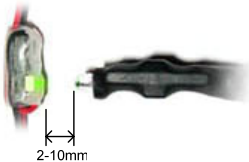


Description: The HRPoly-X low-voltage warning device is an advanced microprocessor based system used to indicate lithium polymer battery voltage levels in RC models. Not only does this device indicate when a battery is approaching a low voltage limit, but its also data-logs the battery voltage during flight. In order to access this data it is necessary to purchase a special download cable which plugs into the serial port on your windows PC. Free HRPolyPlotter software from www.customidea.com can be used to view the voltage data in the form of a graph.

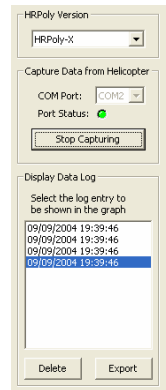


The data: The HRPoly-X device stores one voltage sample every 20 seconds, and can store a maximum of 126 samples, giving a maximum log-time of 42 minutes. The device starts to log a little while after the device is switched on, and stops when the device is switched off. Data from the previous flight is overwritten every time the device is switched on (after a short period). Data is transferred through the green LED in the first second after the device is switched on, and during this time the LED may seem slightly dimmer than usual – this is normal. The download cable has a detector which detects the data being sent from the green LED on the device, and allows the data to be transferred without any physical connection between the device and cable (a wireless link). The cable will only successfully detect the entire data stream from the green LED if the detector on the end of the cable is positioned within 2-10mm from the green LED whilst the device is turned on, and for the first second.



HRPolyPlotter Software: Software can be downloaded from www.customidea.com which allows the data to be viewed in the form of a voltage graph, and facilitates the communication with the cable. This software is provided as a free download, and as such is not supported. The procedure to use the software is as follows:

(1) Download, install, and run the HRPolyPlotter Software available as a free (unsupported) download from www.customidea.com. (2) Connect the HRPoly download cable to a serial port on your computer. (3) Select the correct HRPoly Version and the COM port you have connected the cable to and click the Start Capturing button. (4) Position the detector on the end of the cable within 2-10mm (but not touching) the LED on the HRPoly device. (5) Switch on the device, and watch the Graph to see if data has been received. If this does not happen within one second of the device being switched on, **switch off the device immediately**, to prevent the previous data being overwritten. Data being transferred can be misinterpreted if the detector on the cable is not positioned as described or if there are bright ambient light conditions (e.g. a nearby desk lamp). Don't forget that shortly after the device is switched on it will begin to be overwrite the old data. If a new data entry does not pop up then simply switch off the device, check the positioning of the cable detector and try again. After a few trials it becomes a simple matter to transfer the data successfully.



Other Features: Any data which is successfully transferred is automatically stored on your computer and will appear in the Display Data Log list every time you start the HRPolyPlotter program. The vertical axis shows voltage and the horizontal axis shows samples (one graduation for every sample period of 20 seconds). Data can be deleted or exported in excel standard format using the appropriate buttons. The raw data is in the form of integer numbers from 0 – 255 where 0 represents 0V and 255 represents either 18V or 12.5V in the case of the HRPoly-X or HRPoly-2/2A/3/3A devices respectively.

Contact: If you have any problems or questions about this data cable, or are kind enough to give feedback, comments or suggestions then please do not hesitate to email support@customidea.com. Note that although the software is not supported, I will try to respond to questions regarding its use (if I have time!)