GPS Newsletter – Sensor

A One Page Newsletter On System 500 GPS, Vol. 01, No. 14.

V3 Firmware (continued)

Newsletter Vol. 01, No. 13 described some of the major new features and improvements that have been introduced with the **System 500 v3 firmware**.

There are of course more than just "major" new features in the new firmware – there are many other smaller but important improvements. This newsletter describes some of the other new functionality with v3 firmware.

ASCII Input

This functionality allows you to connect virtually **any device** to the System 500 sensor and record the **ASCII data** being sent from the device as an annotation of a stored point.

Imagine you wish to complete a survey of a small lake measuring the depth of the lake. The depth sounding device is constantly measuring the depth and outputting this information as an ASCII string.

With v3 firmware, it is possible to connect the depth sounder to the sensor and whenever a point is measured and stored, the last received depth measurement is stored with that point as an Annotation.

This data can then be imported into SKI-Pro and the

position and depth of all points measured over the lake and the depth of these points can then be exported.

But of course, you can connect other devices… barometers, Geiger counters, cable detectors, bar code readers…

Additional Laser Devices Supported

System 500 now supports the **Leica Vector** binoculars and the replacement of the Vector – the **Laser Locator**. You can literally be a one person walking total station using these devices.

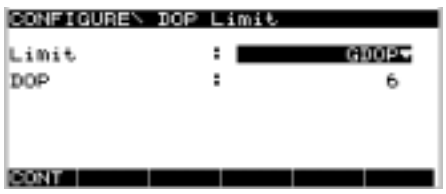
Additional GSM Devices Supported

The **Wavecom WMOD2** GSM device is now supported and fits into a "normal radio housing". As described in **newsletter Vol. 01, No. 10**, it is simple to use GSM with System 500.

Additionally, the **Siemens S25/S35I**, the **Sagem MC850**, the **Bosch 908/909** and the **Sprint PCS Motorola Timeport P8167** are also supported. These are normal "handys" and would not be used in a radio housing.

DOP Limits

It is now possible to set a **DOP limit** (HDOP, VDOP, PDOP or GDOP), such that if this limit is exceeded, it is no longer possible to collect points.



This may be useful for surveys where the client demands that data is only collected with a DOP under a specified limit.

MaxTrak

MaxTrak was introduced with v2 firmware and was then only available on the GS50 and SR510.

After several requests from customers, it is now also possible to use **MaxTrak** on the SR520 and SR530.

MaxTrak basically lowers the threshold at which satellites are no longer tracked by the sensor. The advantage of this is that it is possible to track satellites and obtain a position measurement even under more severe conditions.

Of course, because "noisier" data is being used to compute the position co-ordinates, the accuracy of the computed position will be reduced. This may be acceptable for certain applications where a lower accuracy is acceptable.

Note, that only code position solutions are possible when **MaxTrak** is activated. Also, only code data will be imported into SKI-Pro when raw data is collected with **MaxTrak**.

Keyboard Locking

After requests from customers, it is now possible to lock the keyboard of the TR500 (use **ALT** then **L** to lock and unlock).

But remember that it is even better to simply remove the TR500 from the sensor – the sensor will continue to function as normal.

Remember

- V3 firmware not only contains "big" features such as the new RTK, but many small features which will also improve your use with System 500.
- Many new features come from ideas from existing System 500 users.
- ALL new features are fully explained in the **Release Notes.**

Leica Geosystems