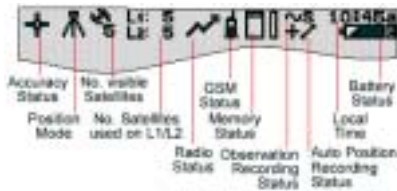


## The TR500 Terminal – Icons

The most important information a surveyor needs to see during a survey is always displayed with icons along the top of the screen.



Most users know the meaning of most of the icons displayed on the TR500. But some questions seem to be always asked in Support.....

### No. of Visible Satellites

This displays the number of satellites that are theoretically visible from the current position of the antenna above the cut off angle at the present time. The number is computed from the almanac that is currently stored on the sensor.

**Q. But sometimes the number is different on the reference to the rover even when they are next to each other!**

It could be that the almanac on one sensor is different to the other. This is possible if only one of the sensors was used one day (remember the latest almanac can take up to 15mins to be downloaded). Check also that the reference and rover have the same satellite cut off angles.

### No. of Satellites used on L1/L2

These figures have a different meaning depending on if a position solution (Accuracy Status) icon is displayed.

If a position solution icon is not shown, then the numbers indicate the number of satellites **being tracked**. You normally only see L1/L2 values but no position solution icon when the sensor is first switched on. (During this time, the incoming satellite data is screened for quality before computing the first positional solution).

If a position solution icon is shown, then the numbers indicate how many L1 and L2 data are being used at that time to compute the position solution. This is why you may often see that there are 8 **visible satellites**, but the **number of satellites used** displays L1=6, L2=5. Due to the constant screening (quality check) of the received satellite data it is quite possible that not all data received from all satellites will be used to compute the position solution. Would you include data in a positional solution if you suspect the data to be bad?

**Q. But even if I put the rover next to the reference, why are the L1/L2 numbers sometimes different on the reference to the rover?**

This is because the rover and ref are computing different positional solution types. (The ref is computing a navigation solution while the rover is computing an RTK solution).

The computation of these different solution types uses different algorithms and also has different data screening techniques.

**Q. How can I see on the rover the actual satellites I am tracking, even if they are not being used in the position solution computation?**

Go to the STATUS\Survey\ Satellite panel. This displays information for all tracked satellites. Remember you can also see what satellites the ref is tracking – press **F6(REF)**.

### Radio Status (ref)

This indicates that the sensor is currently configured as an RT (Real Time) reference and RT data is being output through the chosen port. The icon will blink at the rate that the data is output.

**Q. But it blinks even if I do not have the radio attached!**

This is correct. The icon only indicates if data is being output through the port. It DOES NOT indicate if data is being sent by the attached device itself.

### Radio Status (rov)

This indicates that the sensor is currently being used as an RT rover and data is being received through the chosen port. The icon will blink each time a complete RT message is received. Remember, when this icon is blinking, this means the RTK data link is working correctly.

### Remember

Important information is always displayed with the icons along the top of the screen.

(NOTE - A future newsletter will deal specifically with common RTK and RTK data link problems)

