



## **UISS Multi Telem Decoder Version 7.16 (r34) by G4DCQ**

### **What the program does**

Uiss MultiTelem decodes the Telemetry strings sent from the PSAT satellite. PSAT also uses the callsign PSAT-1.

PSAT (NO-84) is a packet satellite which incorporates a 1200 baud Digipeater, and like other satellites from the US Naval Academy operates on 145.825 MHz.

During normal operation PSAT transmits Telemetry beacons giving details of the satellite's status and battery condition.

Full details of the satellite's objectives are given on the ParkinsonSat(PSAT) page at:

<http://aprs.org/psat.html>

You are encouraged to read the details of the satellite's objectives, it is very worthwhile and a 'good read'.

### **Summary of Instalation**

After unzipping the files, the Uiss Multitelem.exe file must be copied into the Uiss\ExternalPrograms folder. If you already have a file in the ExternalPrograms folder you will have noticed the menu option 'Launch' on the Uiss Menu bar. If this is the first file to be placed in the External's folder then look for 'Launch' next to Modules on the Menu bar.

Having found 'Launch' click on it and a drop down menu shows what programs are available. Probably just the one at present.

Click on Uiss MultiTelem and the program will activate, and position itself on the right hand side of your screen.

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## **Operation when up and running**

**UISS must be running first for Uiss MultiTelem to work!**

You will see that up to 6 panels are available. The option buttons at the bottom left will allow you to select 2, 4 or 6 panels, to best suite the size of your screen. So up to 6 Telemetry strings can be displayed at once. It is unlikely you will capture 6 strings in a single pass.

However, if you select 2 panels and a third string is captured, it will overwrite panel 1. The same applies if you select 4 panels and a fifth string is captured. So set enough screens for the expected pass. The program can only write to a panel that is showing. Again if 6 panels are showing and a seventh string should be captured during a long monitoring period, that string has no choice but to over write the first panel, and then continue over writing existing panels.

## **Visual Interpretation of the Data**

The left hand column shows the receive port number, callsign used, and details of the 'To' & 'Via' fields, plus the time. The serial number of the Telemetry string is shown, as it's useful to see the sequence to check that you have not missed a string.

The right hand column shows the 8Bit Controls. Like all Telemetry strings they are either a Zero or One. The 8Bit control '6' is the one to watch, because when set to '1' it means the Digipeater is off. So that effects us all.

The middle column is the main source of data.

**Channel 1** is the state of the 8 volt Bus line. Too low and PSAT may get switched off.

**Channel 2** is the Bus current in m/A

**Channel 3** is the +Z Temperature

**Channel 4** is the -Z Temperature

**Channel 5** is the Battery Temperature

Again full Details are given on the PSAT Web Page. Please do consider reading it.

The date and time the packet was received is shown at the bottom of the panel along with a copy of the actual Telemetry string for reference.

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## **Control Options**

### **Save To Logs Check Button**

The Telemetry string is passed from UISS to the decoder panel for display. So UISS must be running first. The program also writes the received Telemetry packets to the Uiss 'Logs' Folder as a permanent record. This allows you to review any previously saved Telemetry string at any time in the future. However for the string to be saved, the option box 'Save To logs' must be ticked. If you do not need to save every Telemetry string then untick the box. The tick/no tick status of the box is remembered by the program, it does not need setting each time you boot-up.

### **Stay On Top Check Button**

When the Telemetry decoder program is launched it sits in the main UISS program window. If any action is taken in the UISS program, (button clicks etc), then UISS takes the front position and the decoder panel disappears to the rear. The term is called 'losing the focus'. If the option box 'Stay on Top' is ticked, the decoder panel will remain on top at all times.

However, if this is a problem, say the Telemetry decoder panel has concealed too many UISS buttons, or screen details are hidden from view, then untick the box. Disabling 'Stay On Top' may be useful when viewing the Help manual for example.

Whether the Telemetry decoder panel is on top, minimised to the task bar or running under the main UISS screen, it will always update. No information will be lost.

### **Load File Button**

As mentioned before, the program saves the received Telemetry string, (if the check box is ticked), to the Uiss\logs folder to view later on. The 'Load File Button' allows you to do that review. Click the 'Load File' Button and a list box appears and shows you what has been save to the logs folder. Select a log file and then select 'Open' and the file is loaded to the decoder in the same way as a string received 'Off Air'.

### **Clear All Button**

If you do not close the program between passes, the 'Clear All' Button allows you to clear all the data from the screens, ready for fresh input.

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**Context Menu**

As mentioned a left mouse click on the file list box selects a file. A right mouse click will bring up a context (alternative) menu. There are only two options on this menu, one is to open a file using NotePad to read its contents. The other option is to delete a file when it's no longer needed.

**Cancel Button**

The option of cancelling out and returning to the main screen, with out making a selection, is provided by the cancel button. The 'Esc' button on your keyboard does the same function.

**View Button**

Sets a Day/Night or light/ dark viewing display, to blend in with the colour settings you have chosen for UISS.

Tool Tips have been provided as a reminder during operation. Hopefully everything has been set out for ease of operation.

Please inform us of any suggestions, comments or bugs through our support group at:

[https://groups.yahoo.com/neo/groups/uiss\\_on6mu/info](https://groups.yahoo.com/neo/groups/uiss_on6mu/info)

Best 73 de  
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