

Logging RAW 'binary' data from a C-Nav2000 unit

C-Nav RAW GPS 'binary' data can easily be recorded using the STARUTIL application on the windows computer that is connected to the 'RAW GPS' RS-232 data port of the CnC D.U.

How to record RAW GPS 'binary' data from the C-Nav2000 using a MS-Windows computer system:-

- 1) Start STARUTIL (Ver: 2.6 or higher) and open the Communications port at 38400 baud to receive the RAW GPS 'binary' data.

Note: Ensure the AUTO BAUD is not checked (if available).

- 2) On the 'logging' menu Uncheck the EPH/ALM boxes and enable the logging SCHEDULE. Start recording, with the STARUTIL application, the RAW 'binary' data to a log file and directory and enable the logging SCHEDULE. Use a logging file name of '<serialnumber>.dat'
- 3) Since STARUTIL cannot control a C-Nav2000 unit. On the CnC D.U. Execute a DUMP EPH/ALM command from the CnC D.U. (Menu ID# 4301) so that the C-Nav2000 sends it's current Ephemeris data to STARUTIL to be included at the start of the current logging file.
- 4) When running the STARUTIL program continually in this scheduled logging mode then every day a new data file will be created in the selected logging 'folder'.
- 5) Every few days you can 'purge' any unwanted data logging files to save disk space.

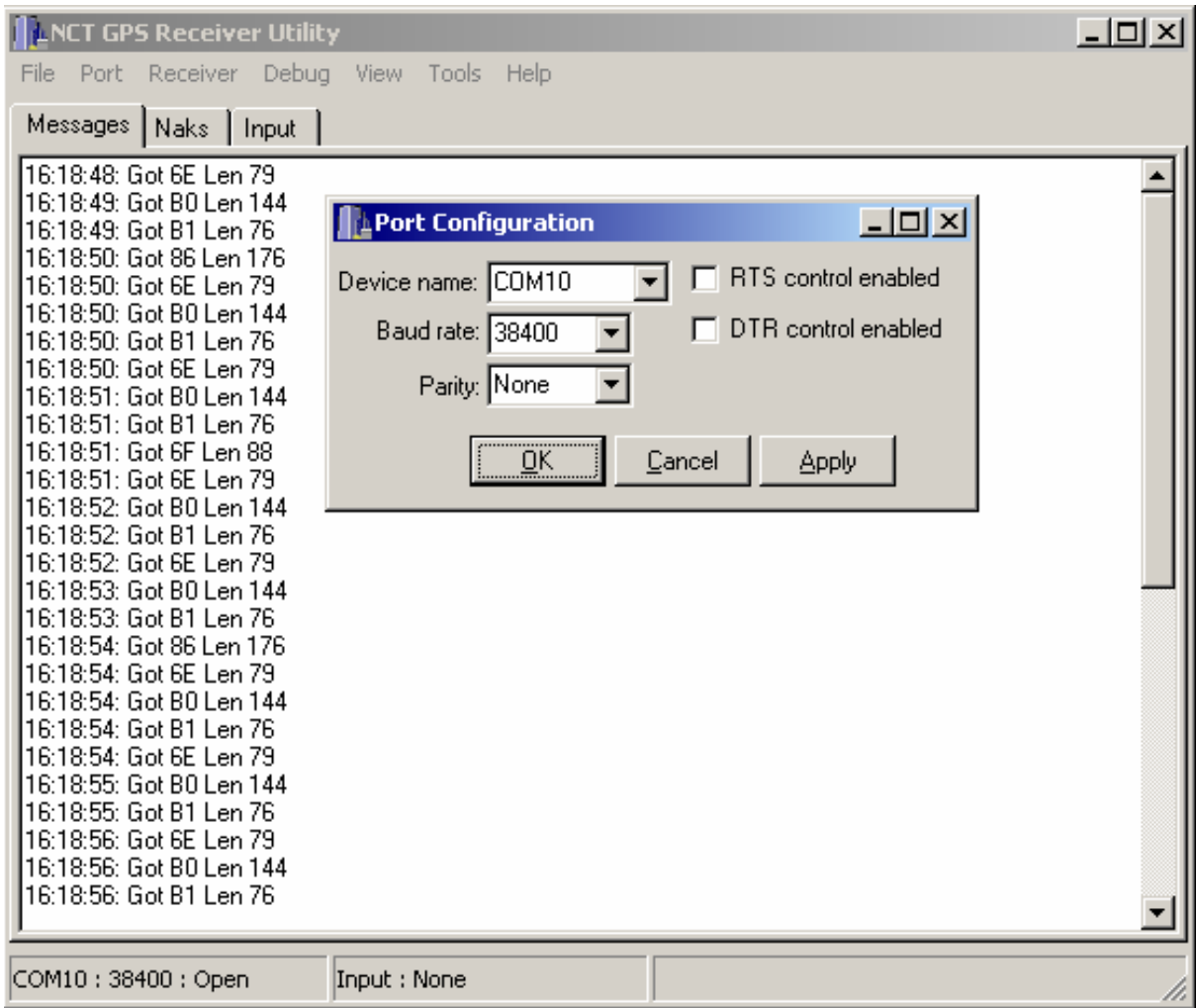
The RAW 'binary' data will be recorded in 24hour data files that can be saved to a CDROM (or WINZIP'd and place on the C-Nav FTP site) and sent to us for analysis. Collecting these data files will allow us to analyze and see exactly what the performance of the C-Nav2000 GPS system.

Note: See the C-Nav FAQ for instructions on how to upload data to the C-Nav FTP site at <http://www.cctechol.com/cnav/faq>.

[How do I send recorded data files to C-Nav Support for help and analysis?](#)

2002-09-04 - RAW GPS 'binary' data files (recorded using STARUTIL) or C-Nav NMEA ASCII data files (with ALL C-Nav NMEA messages enabled) can be sent to C-Nav Support to help resolve . . .

Logging RAW 'binary' data from a C-Nav2000 unit



Logging RAW 'binary' data from a C-Nav2000 unit

Logging File

Current Status

Logging: **Yes**

Schedule: **On**

File Name: C:\logging\Raw_Data\040723\265179.dat

Logging Schedule

Status: Logging file at 0:00 AM GMT every day.

Note: StarUtil will start logging at 0:00 AM GMT if B0 or B1 on.

Get Ephemeris

Get Almanac

Logging Name: 265179.dat

Directory: C:\logging\Raw_Data\

Activities:

Start scheduling at 16:22:33, 07/23/2004.
Logging file at 16:22:36, 07/23/2004.

Enter a 'filename'
using the actual
C-Nav2000
Serial Number with
an extension of **.dat**

Logging RAW 'binary' data from a C-Nav2000 unit

NCT GPS Receiver Utility

File Port Receiver Debug View Tools Help

Messages Naks Input

16:19:42: Got B0 Len 144
 16:19:42: Got B1 Len 76
 16:19:43: Got 6E Len 79
 16:19:43: Got B0 Len 144
 16:19:43: Got B1 Len 76
 16:19:44: Got 6E Len 79
 16:19:44: Got B0 Len 144
 16:19:44: Got B1 Len 76
 16:19:45: Got 6E Len 79
 16:19:45: Got B0 Len 144
 16:19:45: Got B1 Len 76
 16:19:46: Got 86 Len 176
 16:19:46: Got 6E Len 79
 16:19:46: Got B0 Len 144
 16:19:46: Got B1 Len 76
 16:19:47: Got 6F Len 88
 16:19:47: Got 6E Len 79
 16:19:47: Got B0 Len 144
 16:19:47: Got B1 Len 76
 16:19:48: Got 6E Len 79
 16:19:48: Got B0 Len 144
 16:19:48: Got B1 Len 76
 16:19:49: Got 6E Len 79
 16:19:49: Got B0 Len 144
 16:19:49: Got B1 Len 76
 16:19:50: Got 86 Len 176
 16:19:50: Got 6E Len 79

30 - Software Options
 5B - RTK Corrections
 5C - Base Station
 5E - RTK Corrections
 84 - PPS Data
86 - Channel Status
 A0 - Alerts
 AE - Version Information
 B0 - Raw Measurements
 B1 - Solution Plot
 B1 - Solution
 B2 - Satellite Selection
 B2 - Satellite Selection Plot
 B3 - Refractive Measurements
 B4 - Event Latch Data
 B6 - Iono
 D0 - LBM Identification Block
 D1 - LBM License Status
 D3 - LBM DSP Status
 D4 - LBM Status
 D5 - LBM License Cancel History
 EC - 5C, 5E delta time
 EF - Oscillator/Clock Report

COM10 : 38400 : Open Input : None Logging: " 265179.dat " started at 16:22:36

NCT GPS Receiver Utility

File Port Receiver Debug View Tools Help

B1 - Solution B1 - Solution Plot B2 - Satellite Selection B2 - Satellite Selection Plot
 Messages Naks Input **86 - Channel Status** A0 - Alerts B0 - Raw Measurements

Time: SVs visible: Tracked:
 PDOP: Used:

| Ch | SV | State | Elev | Azim | CA | P2 | IDDC | dGPS age |
|----|-----|-------|------|------|----|----|-------|----------|
| 1 | 19 | 255 | 9 | 313 | 44 | 41 | 376 | 7.0 |
| 2 | 21 | 255 | 53 | 144 | 50 | 45 | 366 | 7.0 |
| 3 | 15 | 255 | 72 | 317 | 51 | 46 | 679 | 6.0 |
| 4 | 5 | 0 | | | | | | |
| 5 | 3 | 255 | 20 | 277 | 47 | 42 | 572 | 6.0 |
| 6 | 9 | 255 | 38 | 65 | 49 | 45 | 279 | 6.0 |
| 7 | 18 | 255 | 52 | 43 | 49 | 45 | 10 | 7.0 |
| 8 | 22 | 255 | 54 | 340 | 52 | 46 | 92 | 7.0 |
| 9 | 14 | 255 | 52 | 252 | 51 | 45 | 302 | 6.0 |
| 10 | | | | | | | | |
| 11 | 122 | 194 | 0 | 0 | 43 | 0 | -1024 | 0.0 |
| 12 | 134 | 0 | | | | | | |

Last:

COM10 : 38400 : Open Input : None Logging: " 265179.dat " started at 16:22:36