UNAVCO firmware operating manual

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1. STATIC and RAPID STATIC Menu

The menu shows the following submenus for setting the survey parameters.



2. Select the data format.

Two data format are available.

-TPS (Topcon proprietary format)

-BINEX



3. Setting a timer

(1)To set the timer, select "ON" at PROGRAM field.



(2) Once "ON" was selected at PROGRAM, the time input screen will appear at next menu.

The default is Start 00:00:00 and End 23:59:30. The default is showed every time when you come to this screen (Does not show the previous timer setting.).

You can edit these time to your desired time.

You need to select a time with 30 seconds or more time space between End time and Start time.

If a close time is less thirty seconds before the start time input, the time will not be accepted.

Ex. Start : 00:00:00 End 23:59:45. This is not accepted.

Start: 00:00:00 End 23:59:30. This is accepted

STATIC XXXXXX
START: 00 00
END : 23 59 30

4. Logging device selection

There are two modes for data logging device.

- The data is logged to Internal memory only.
- The data is logged to Internal memory and External CF card.

If you select the ON at EXT LOG, the data will be logged to Internal memory and External CF card.

STATIC	XXXXXX	
EXT LOG:		

5. Start data logging.

Press STRT button to start the data logging. And then YES button at confirmation screen.



If the timer was activated (PROGRAM: ON) and the current time is not in between start and end time of timer, the screen changes to timer waiting screen (SURVEY WAITING).



You can exit by holding the F1 and F4 button for few seconds. The timer will be canceled.

If the timer was activated (PROGRAM: ON) and the current time is in between start time and end time of timer, the GB-1000 will start to recording from now.



If you END this session by pressing END (P-->END, the screen changes to timer waiting screen(SURVEY WAITING). The GB-1000 waits to start data logging until next time. If you want to cancel the timer, hold the F1 and F4 key for few seconds at waiting screen.

6. Screen during data logging

The data logging screen is different by the selected format and recording device.

(1) TPS and BINEX format data logging to internal memory only.

The screen shows the all information which is same as general GB-1000.



(2) TPS format data logging to the internal memory and the external CF card.

The LCD show the file name and Logging time. The file is NNNMMDDX.TPS (NNN: File name prefix, MM:month, DD:day, X: session number).

The icon field shows the battery (1 and 2) status, CF memory remaining, the number of GPS and GLONASS satellites.



(3) BINEX format data logging to the internal memory and the external CF card.

The LCD show the file name and Logging time.

The icon field shows only the battery status.



7. File name rule for external CF logging function

If the NAME is entered in STATIC or RAPID STATIC menu, the initial 3 character is used for filename prefix.

If the NAME was not entered, the last 3charactor of the receiver's serial number is used for filename prefix.

- Ex: If the NAME is TOPCON and the logging date is 10/19. The first session's filename is TOP10190.TPS.
- Ex: If the NAME is not entered, the receiver serial number is T221025, and the logging date is 10/19, then the first session's file name is 02510190.TPS.

The session number is started from "0" and increased 1,2,3...9,A,B,C....Z,A0,A1...AZ,B0....ZZ. The 8th place in the file name is used for the day's session name.

When the session number is two digit required by a large number of sessions for that day (A0,A1..), the 7^{th} digit of filename is used.

Ex. TOP10190.TPS......TOP1019Z.TPS, TOP101A0.TPS......TOP101ZZ.TPS

Note: If the 7th digit is used for in session naming, then one of the digits representing the Day will be used. At that time, the last digit or session position is used for the Day digit. This allows for unique file naming with sessions as well as date reference.

Ex. The receiver logged until session number "B5" (TOP101B5.TPS) in Oct.15th.

If, the next day (Oct.16th), the number of sessions requires the session name to exceed "Z", the next session number jumps to B6 to assure no confusion from the previous day's files. TOP10160.TPS TOP1016Z.TPS, TOP101B6.TPS

8. LCD off

The LCD can be turned OFF at any time. The LCD is turned off by pressing the Power button and holding until one beep is heard. The beep sounds one time.

When the LCD is off, a beep sounds by pressing any key without a function called. This is used to check if the receiver is ON even though the display is turned off.

To enable the LCD, press the F1 and F4 button simultaneously until the LCD turns on.

9. Power off (notice)

The GB-1000 receiver is turned off by pressing and holding the Power button for few seconds. When pressing the Power button, first the LCD is turned off after one beep, and then the GB-1000 is turned off after four beeps (total of 5 beeps to power off.)

10. Input power voltage.

Input Voltage: 12 ~ 28VDC

Automatically turn power on at 11.3VDC+/-2%(11.1 to 11.5VDC). Automatically turn power off at 10.5VDC+/-2%(10.3 to 10.7VDC).

11. External CF card

When the external CF card is accessed first time after power on or inserting CF card to slot, it takes around 20 second to recognize the CF card. During this time, the screen freezes.