

Setting the antenna height correctly for NMEA output

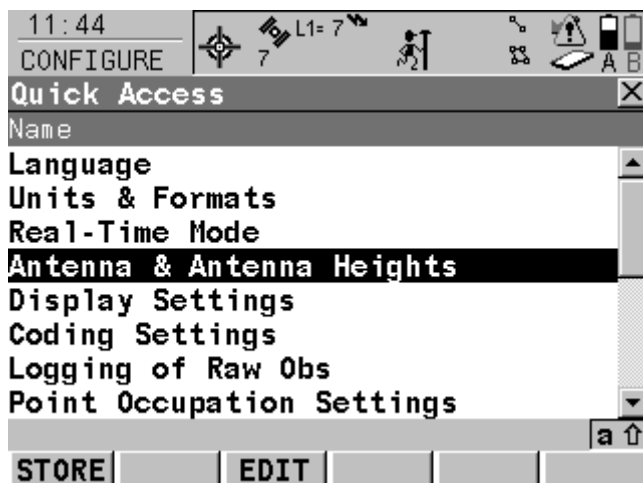
Leica Firmware v6.02

This document details the correct method for specifying the antenna height when outputting NMEA data to other instruments.

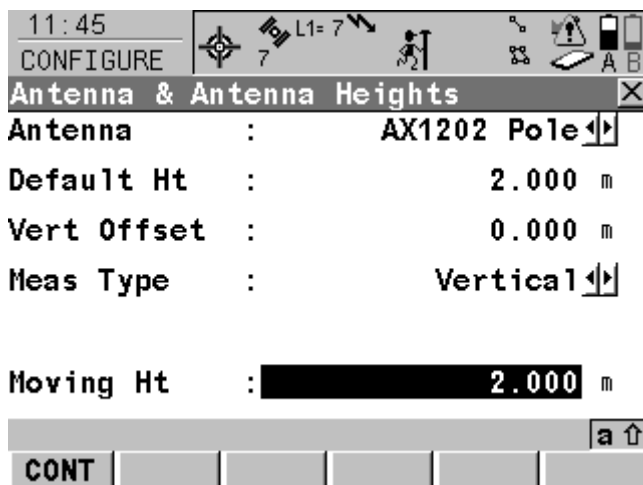
The NMEA output only uses the MOVING HEIGHT when calculating the output height. The moving height can be set in the configuration set or overridden in the survey screen as detailed below.



NMEA data, once configured, is sent out as soon as the receiver has satellite lock. This means that the unit can be switched on and left in the main menu as pictured without having to start a survey. In this scenario, the moving antenna height must be specified in the configuration file as shown in the following step.

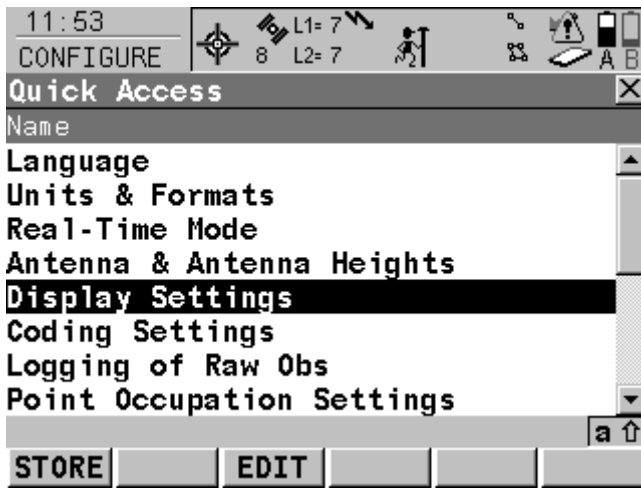


From the Main Menu select 3 *Manage*, then 5 *Configuration Sets*. Highlight your chosen configuration set and press **F3 (EDIT)**. Press **F6 (LIST)** and highlight *Antenna & Antenna Heights* before pressing **F3 (EDIT)**.



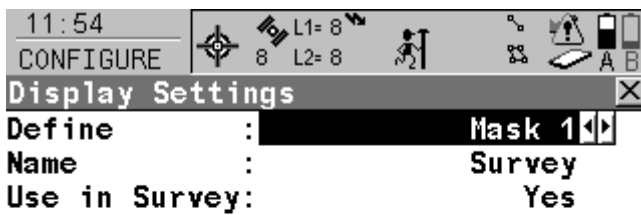
Make any changes necessary to the *Moving Ht* value and then press **F1 (CONT)**. Press **F1 (STORE)** to store these changes into the configuration file and finally press **F1 (CONT)** again to select the configuration file and return to the Main Menu.

NMEA data will now take this height into account when outputting data. If you have no need to change this height during the survey itself, you do not need to take any further steps.



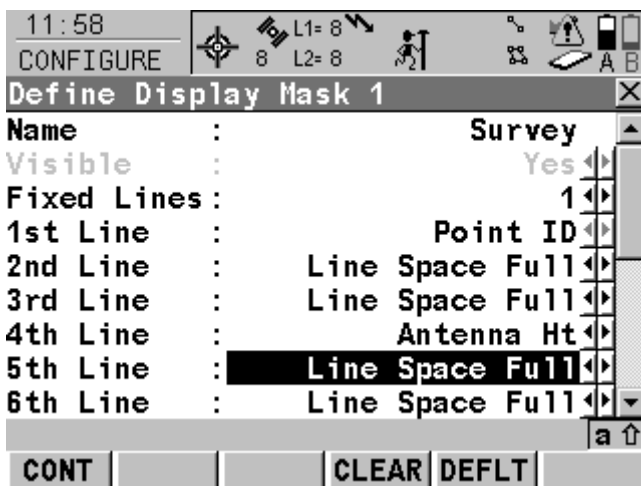
If you wish to be able to quickly change the height during a survey, it is best to set the display mask to show the moving height in the survey screen. Any changes made here will immediately take effect and temporarily overwrite the default value from the configuration set.

To edit the display mask, again choose 3 *Manage* and then 5 *Configuration Sets*. Highlight your chosen configuration set and press **F3 (EDIT)**. Press **F6 (LIST)** and highlight *Display Settings*. Press **F3 (EDIT)**.



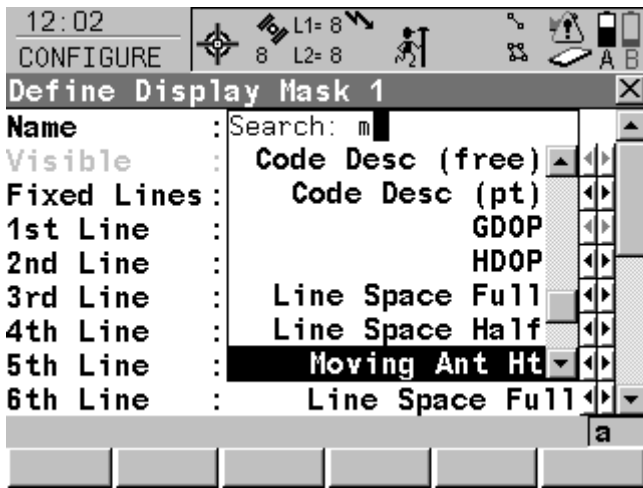
By default we are using Mask 1 as our display mask, to edit it press **F3 (DMASK)**.

Position and
Screen Update: 0.2s

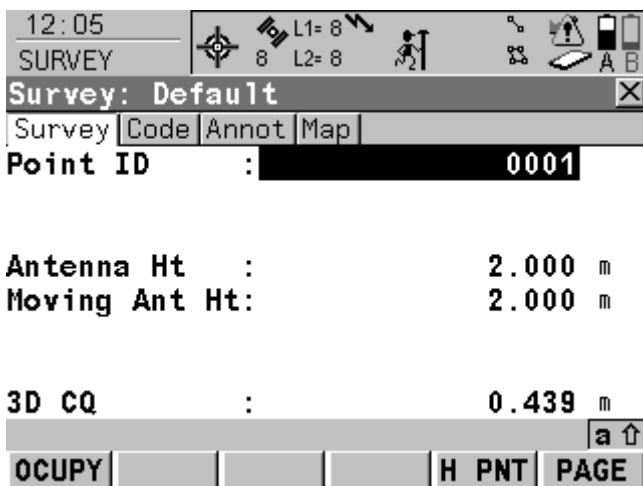


The default display mask will usually only display the antenna height for static points, as indicated here on the 4th Line (Antenna Ht).

To add the moving height to this mask, highlight any free line (indicated by Line Space Full, such as the 5th Line in this example) and press the **ENTER (↵)** key to show the drop-down list of options.



Press the “m” key to quickly find the *Moving Ant Ht* option and press **ENTER (↵)** to select it.



You can now press **F1 (CONT)** then **F1 (CONT)** again and finally **F1 (STORE)** to save this change. Press **F1 (CONT)** again to select this configuration set and return to the Main Menu.

To make use of this ability to change the height, you must now start a survey instead of staying in the main menu.

Any changes you make to the Moving Ant Ht value will take effect immediately when calculating the height that is output from the NMEA port.

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