12 Instrument - GPS settings GPS

12.1 RTK rover wizard

12.1.1 Overview

Description

Using this wizard, the settings for a real-time rover behaviour are defined at one glance. These settings are stored in an RTK profile.

Access

Select **Main Menu: Instrument\GPS settings\RTK rover wizard**.

If RTK profiles exist, the wizard starts with the screen shown in this section. Otherwise, the wizard starts the process of creating a new RTK profile. In this case refer to "12.1.2 Creating a New RTK Profile".

RTK rover wizard

Key	Description
Next	To accept changes and to continue with the subsequent screen within the wizard.
Fn Quit	To exit the wizard.

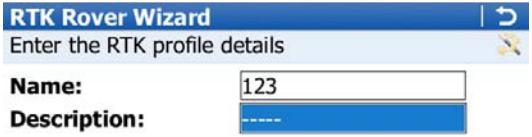
Next step

IF you want to	THEN
create a new set of settings	select **Create a new profile**, press **Next** and continue with "12.1.2 Creating a New RTK Profile".
select a different set of settings	select **Load an existing profile**, press **Next** and continue with "12.1.3 Loading an Existing RTK Profile".
edit an existing set of settings	select **Edit an existing profile**, press **Next** and continue with "12.1.4 Editing an Existing RTK Profile".

12.1.2 Creating a New RTK Profile

RTK rover wizard, Enter a name for the new RTK profile.

Type in the name and a description for the new set of settings.



Key	Description
Next	To accept changes and to continue with the subsequent screen within the wizard.
Back	To return to the previous screen.
Fn Quit	To exit the wizard.

12.1.3 Loading an Existing RTK Profile

RTK rover wizard, Choose an RTK Profile

Select an existing RTK profile from the selectable list. Listed are profiles that match the instrument in use.

Key	Description
Next	To accept changes and to continue with the subsequent screen within the wizard.
Delete	Pressing this key deletes the RTK profile currently shown in the selectable list.
Back	To return to the previous screen.
Fn Quit	To exit the wizard.

12.1.4 Editing an Existing RTK Profile

RTK rover wizard, Choose an RTK Profile

Select the RTK profile to be edited from the selectable list. Listed are profiles that match the instrument in use.

Key	Description
Next	To accept changes and to continue with the subsequent screen within the wizard.
Delete	Pressing this key deletes the RTK profile currently shown in the selectable list.
Back	To return to the previous screen.
Fn Quit	To exit the wizard.

Description of fields

Field	Option	Description
Create a copy	Check box	Creates a copy before the editing process starts.

12.2 Satellite tracking GPS

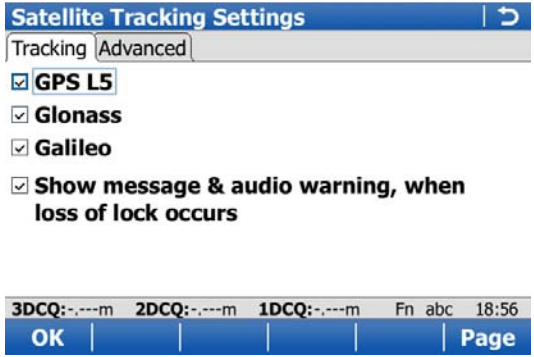
Description

The settings on this screen define which satellite system, satellites and satellite signals are used by the instrument.

Access

Select **Main Menu: Instrument\GPS settings\Satellite tracking**.

Satellite Tracking Settings, Tracking page



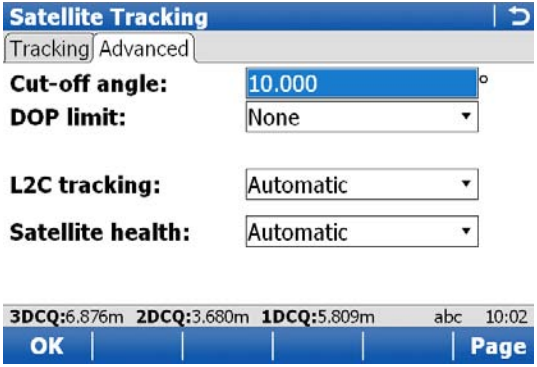
Key	Description
OK	To accept changes.
Page	To change to another page on this screen.
Fn Quit	To exit the screen.

Description of fields

Field	Option	Description
GPS L5	Check box	Defines if the GPS L5 signal will be tracked.
GLONASS	Check box	Defines if GLONASS satellite signals are accepted by the instrument when tracking satellites.
GALILEO	Check box	Defines if Galileo satellite signals are accepted by the instrument when tracking satellites.
COMPASS	Check box	Defines if Compass satellite signals are accepted by the instrument when tracking satellites.
Show message & audio warning, when loss of lock occurs	Check box	Activates an acoustic warning signal and a message given by the instrument when satellites are lost.

Next step
Page changes to the **Advanced** page.

Satellite Tracking Settings, Advanced page



Key	Description
OK	To accept changes.
Hlth..	Available for **Satellite health: User defined**. To configure the satellites used in the survey.
Page	To change to another page on this screen.
Fn Quit	To exit the screen.

Description of fields

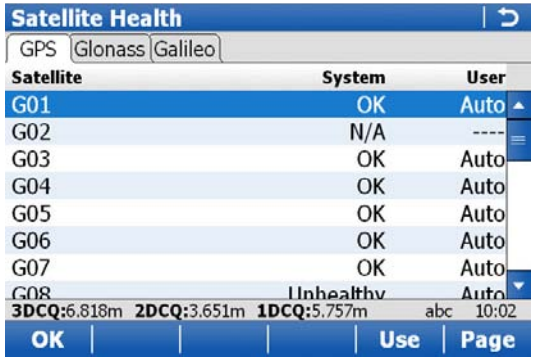
Field	Option	Description
Cut-off angle	Editable field	Sets the elevation in degrees below which satellite signals are not recorded and are not shown to be tracked. Recommended settings: • For real-time: 10°. • For purely post-processing applications: 15°.
DOP limit	**None**, **GDOP**, **HDOP**, **PDOP** or **VDOP**	If activated, the limit defined in **Limiting value** is checked. GPS positions are unavailable when the limit is exceeded.
Limiting value	Editable field	The maximum acceptable DOP value. Available unless **DOP limit: None**.
L2C tracking	**Automatic**	L2 signals which are flagged as unhealthy are not recorded or used for real-time computations.
	Always track	L2C signals are always tracked.
Satellite health		Sets the satellite tracking behaviour. This setting is remembered when the instrument is turned off. It is stored as part of the configuration set.
	Automatic	Incoming satellite signals are monitored by the instrument. Data from signals which are flagged as unhealthy is not recorded or used for real-time computations.

Field	Option	Description
	User defined	Satellites must manually be included/excluded from data recording and real-time computations with **Hlth..**.

Next step
Hlth.. changes to **Satellite Health**.

Satellite Health

This screen consists of the **GPS** page, **Glonass** page and the **Galileo** page. The explanations given for the softkeys are valid for all pages.



Key	Description
OK	To accept changes and return to the screen from where this screen was accessed.
Use	To change between the options in the column **User**.

Key	Description
Page	To change to another page on this screen.
Fn Quit	To exit the screen.

Description of columns

Column	Option	Description
Satellite	**01** to **32**	The Pseudo Random Noise number (GPS, 1 to 32), the Slot ID (GLONASS, 1 to 24) or the **S**pace **V**ehicle number (Galileo, 1 to 30) of the satellites. There is a prefix G for GPS satellites, a prefix R for GLONASS satellites and a prefix E for Galileo satellites.
System	**OK**, **N/A** or **Unhealthy**	Information on the satellite health taken from the almanac. **N/A** stands for not available.
User	**Bad**	Excludes satellite from tracking.
	OK	Includes satellite in tracking.
	Auto	Automatic satellite tracking when satellite is healthy.

Next steps

Step	Description
1.	**Page** changes to the **Glonass** page and to the **Galileo** page, where GLONASS satellites and Galileo satellites used in the survey can be configured.
2.	**OK** returns to **Satellite Tracking**.