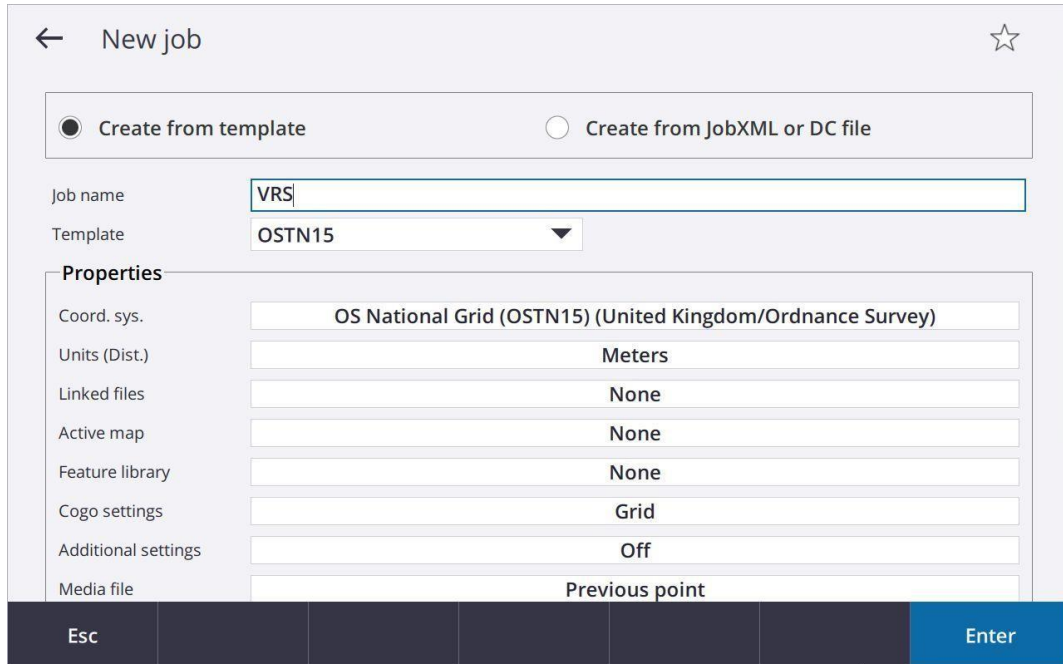


Creating a VRS Survey Style and GNSS Contact in Trimble Access Using an R10 as the Modem

1. Before starting, make sure the R10 is switched on and present. A T-Mobile Portal 2 SIM card is used in this guide. If you are using a different SIM card you must use the appropriate details for that SIM.
2. Start by creating a new job using the OSTN15 template and select *Enter*.



← New job ☆

☒ Create from template ☐ Create from JobXML or DC file

Job name: VRS

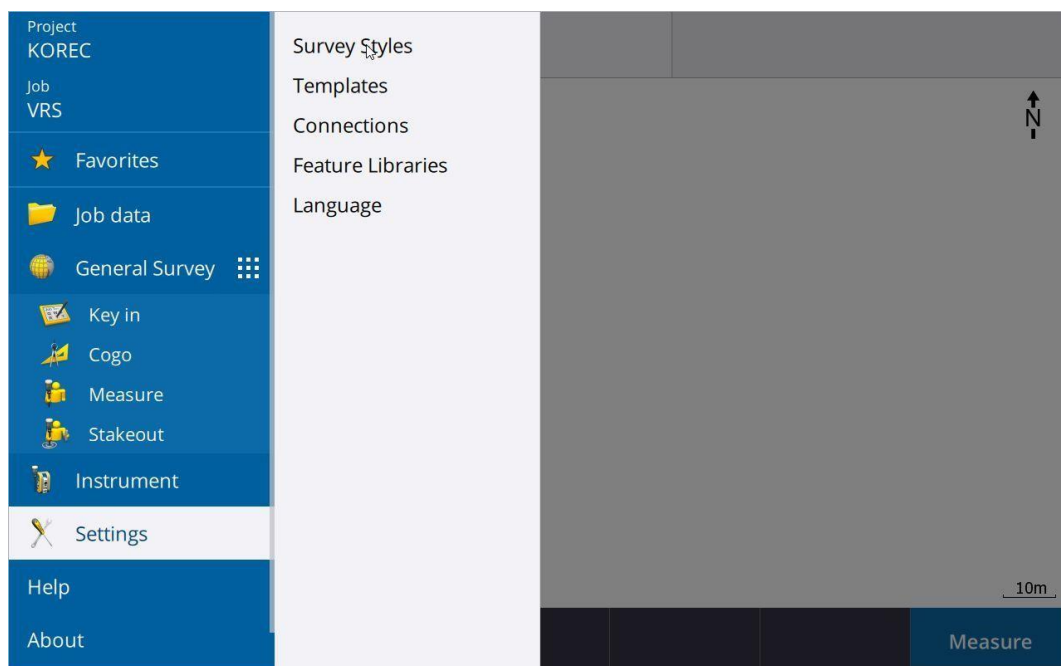
Template: OSTN15 ▼

Properties

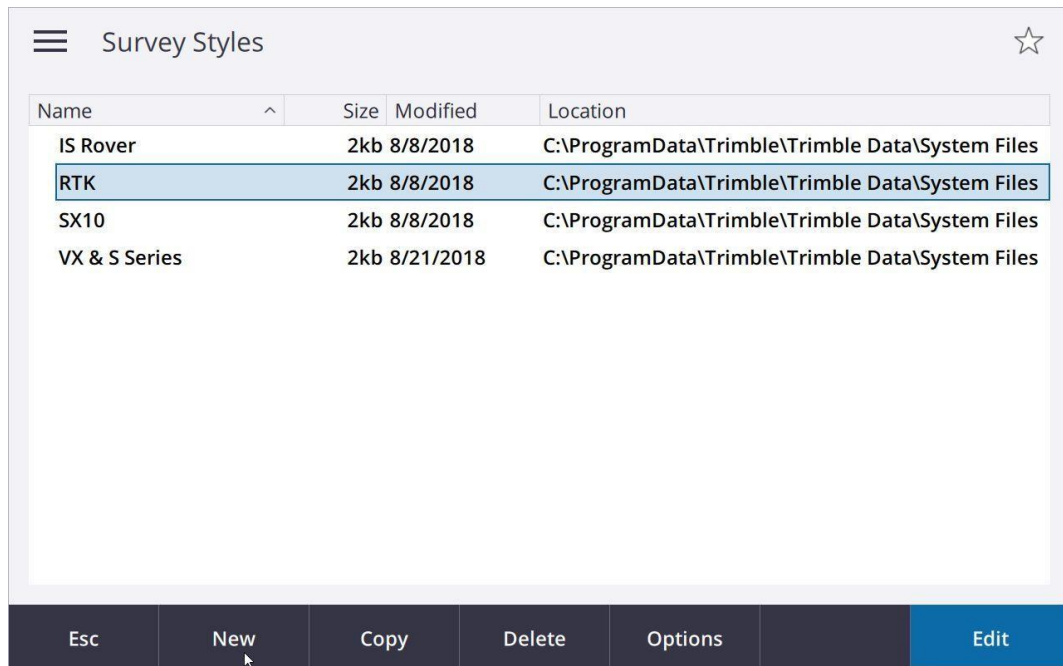
Coord. sys.	OS National Grid (OSTN15) (United Kingdom/Ordnance Survey)
Units (Dist.)	Meters
Linked files	None
Active map	None
Feature library	None
Cogo settings	Grid
Additional settings	Off
Media file	Previous point

Esc Enter

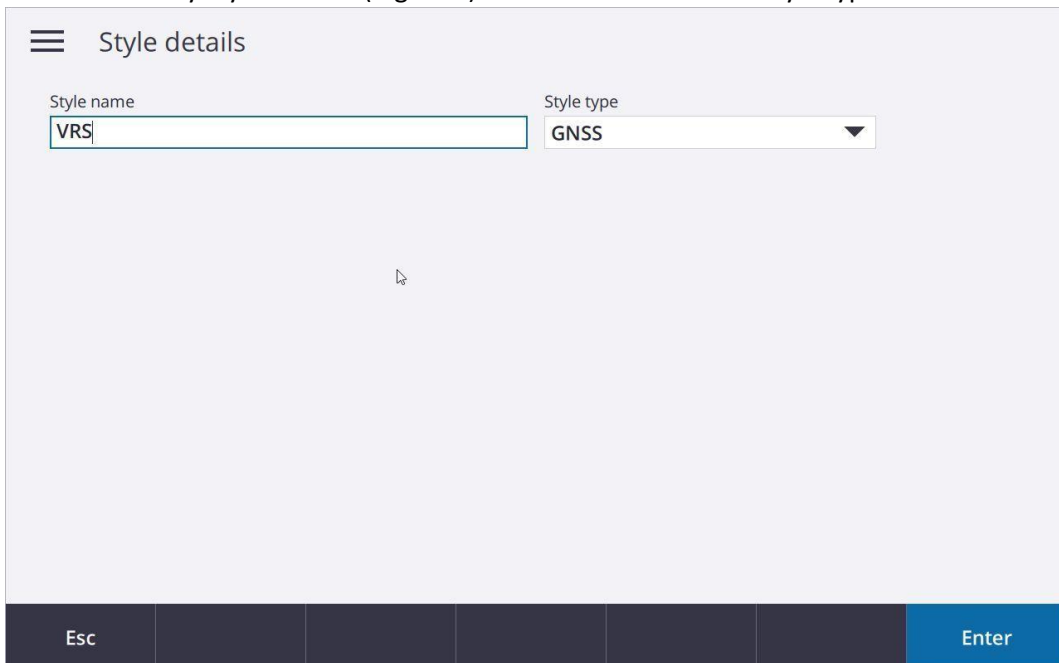
3. Go to Settings > Survey Styles



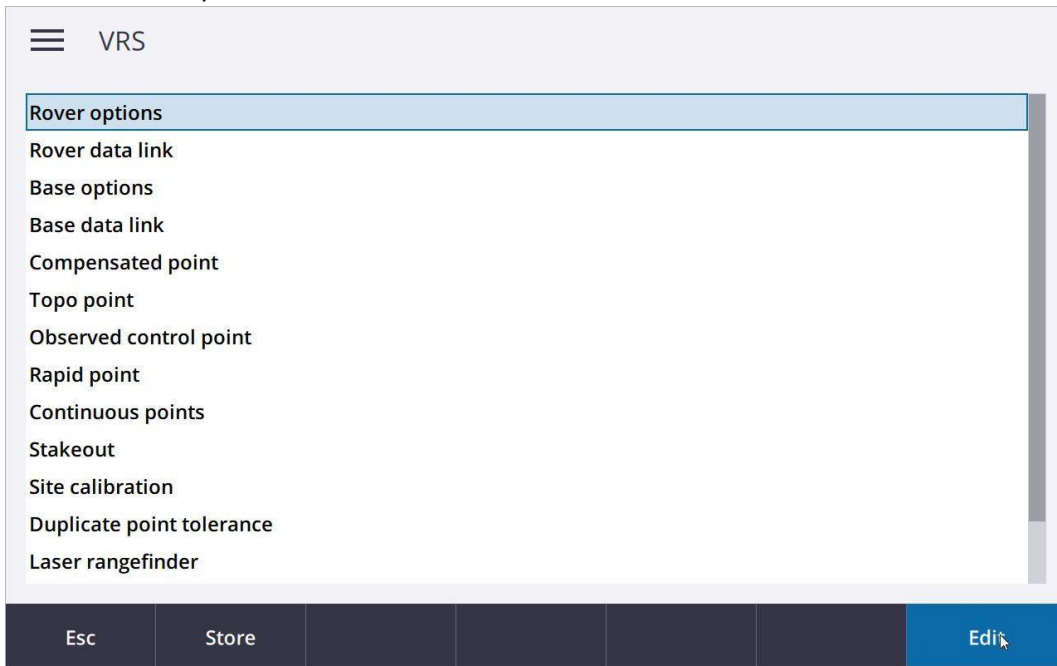
4. Select *New*.

A screenshot of the 'Survey Styles' window. It has a title bar with a hamburger menu icon, the text 'Survey Styles', and a star icon. Below the title bar is a table with four columns: 'Name', 'Size', 'Modified', and 'Location'. The table contains four rows of data. The 'RTK' row is highlighted with a blue selection bar. At the bottom of the window is a dark blue toolbar with buttons for 'Esc', 'New' (with a mouse cursor over it), 'Copy', 'Delete', 'Options', and 'Edit'.

5. Give the survey style a name (e.g. VRS) and select *GNSS* as the Style type.

A screenshot of the 'Style details' window. It has a title bar with a hamburger menu icon, the text 'Style details', and a star icon. Below the title bar are two input fields: 'Style name' and 'Style type'. The 'Style name' field contains the text 'VRS'. The 'Style type' field is a dropdown menu with 'GNSS' selected. Below the input fields is a large, empty light blue area. At the bottom of the window is a dark blue toolbar with buttons for 'Esc' and 'Enter'.

6. Select *Rover options*.

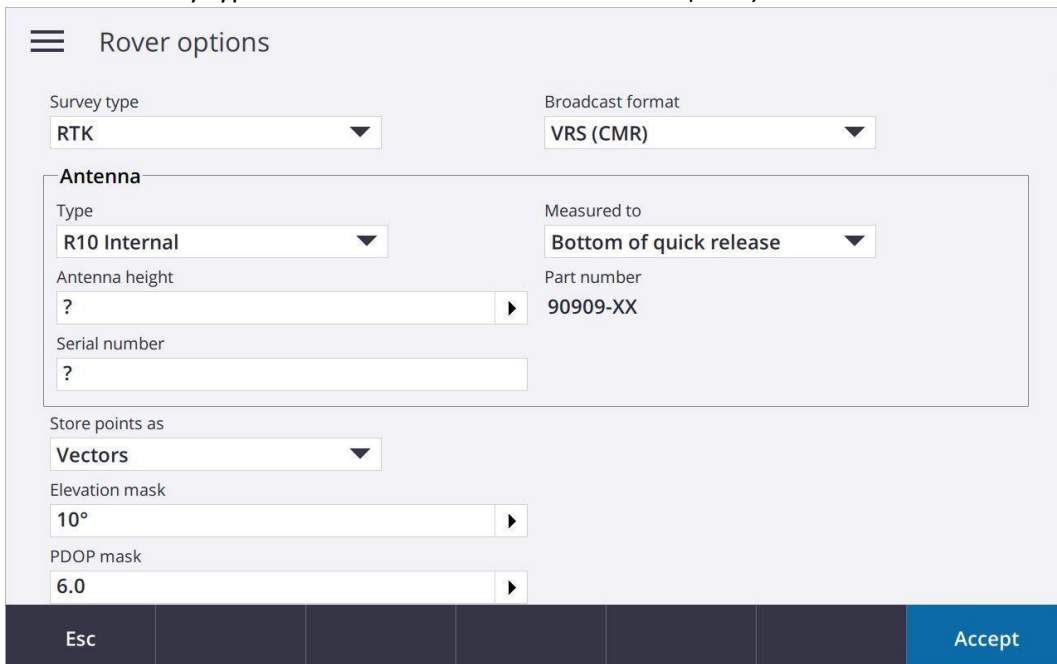


Menu: VRS

- Rover options
- Rover data link
- Base options
- Base data link
- Compensated point
- Topo point
- Observed control point
- Rapid point
- Continuous points
- Stakeout
- Site calibration
- Duplicate point tolerance
- Laser rangefinder

Buttons: Esc, Store, Edit

7. Ensure survey type is *RTK* and broadcast format is *VRS (CMR)*.



Menu: Rover options

Survey type: RTK

Broadcast format: VRS (CMR)

Antenna

Type: R10 Internal

Measured to: Bottom of quick release

Antenna height: ?

Part number: 90909-XX

Serial number: ?

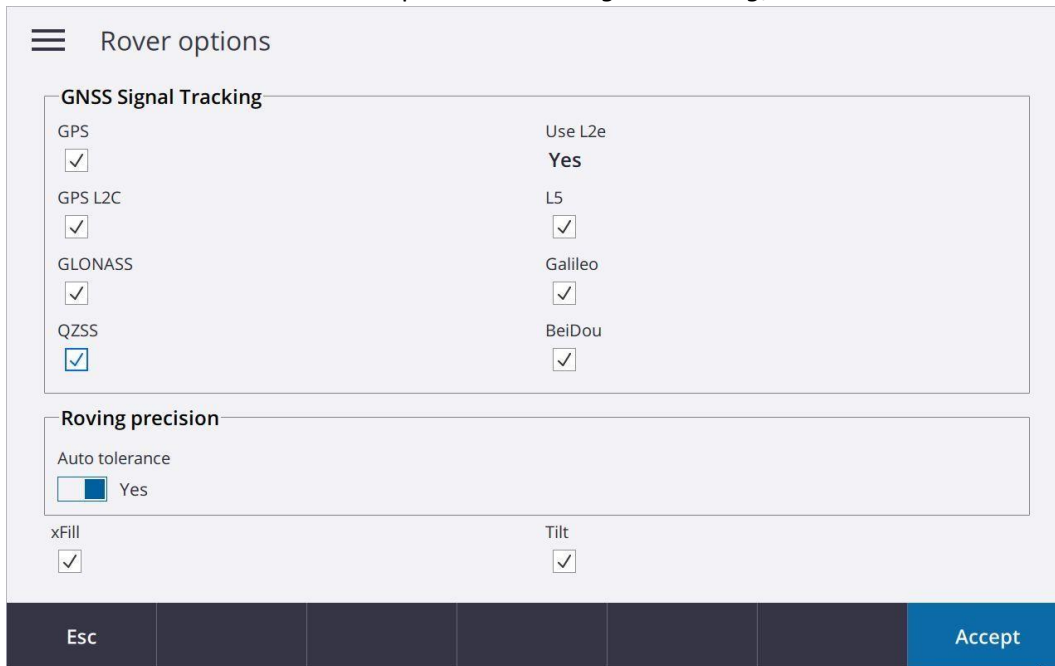
Store points as: Vectors

Elevation mask: 10°

PDOP mask: 6.0

Buttons: Esc, Accept

8. Scroll down and tick all the options in *GNSS Signal Tracking*, turn *xFill* and *Tilt* on.



The screenshot shows the 'Rover options' menu. It has a hamburger menu icon on the top left. The title 'Rover options' is at the top. There are two main sections: 'GNSS Signal Tracking' and 'Roving precision'. The 'GNSS Signal Tracking' section contains two columns of checkboxes. The first column has 'GPS', 'GPS L2C', 'GLONASS', and 'QZSS', all of which are checked. The second column has 'Use L2e' (set to 'Yes'), 'L5', 'Galileo', and 'BeiDou', all of which are checked. The 'Roving precision' section has a label 'Auto tolerance' and a checkbox that is checked, with the word 'Yes' next to it. Below this section are two more checkboxes: 'xFill' and 'Tilt', both of which are checked. At the bottom of the screen is a dark bar with several buttons; the leftmost is labeled 'Esc' and the rightmost is labeled 'Accept'.

☰ Rover options

GNSS Signal Tracking

GPS	Use L2e
<input checked="" type="checkbox"/>	Yes
GPS L2C	L5
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
GLONASS	Galileo
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
QZSS	BeiDou
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Roving precision

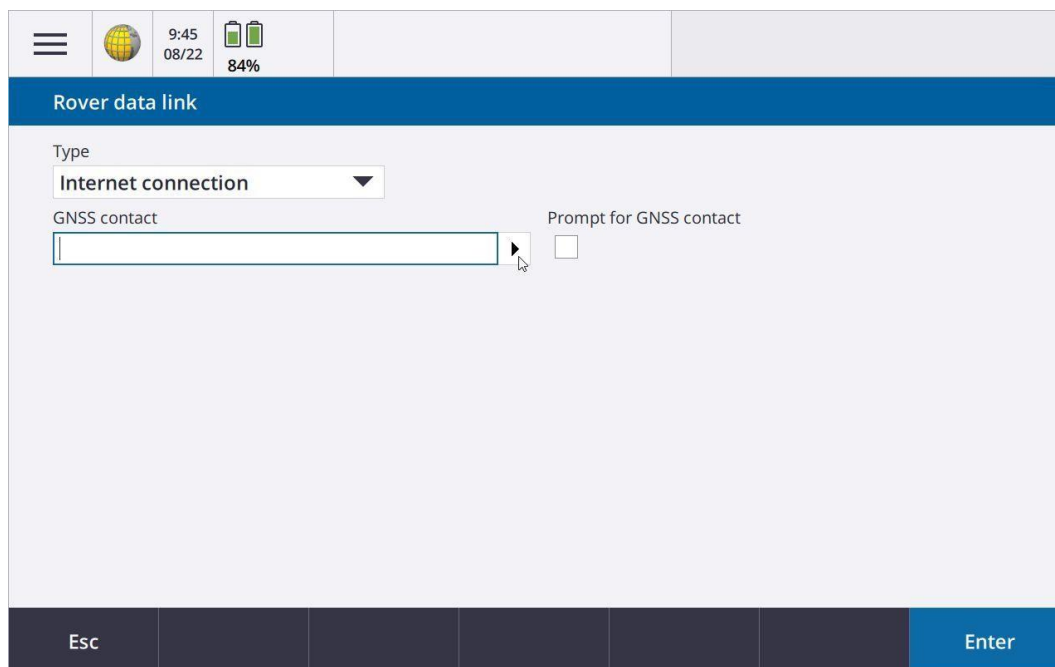
Auto tolerance

☒ Yes

xFill ☒ Tilt ☒

Esc Accept

9. Select *Accept* and then select *Rover data link*, choose type *Internet connection* and then click the arrow next to *GNSS contact*.



The screenshot shows the 'Rover data link' screen. At the top is a status bar with a hamburger menu, a globe icon, the time '9:45' and date '08/22', and battery status '84%'. Below the status bar is a blue header bar with the title 'Rover data link'. The main area has a 'Type' dropdown menu set to 'Internet connection'. Below this is a 'GNSS contact' text input field with a right-pointing arrow button next to it. To the right of the input field is a checkbox labeled 'Prompt for GNSS contact', which is currently unchecked. At the bottom of the screen is a dark bar with several buttons; the leftmost is labeled 'Esc' and the rightmost is labeled 'Enter'.

☰ 9:45 08/22 84%

Rover data link

Type

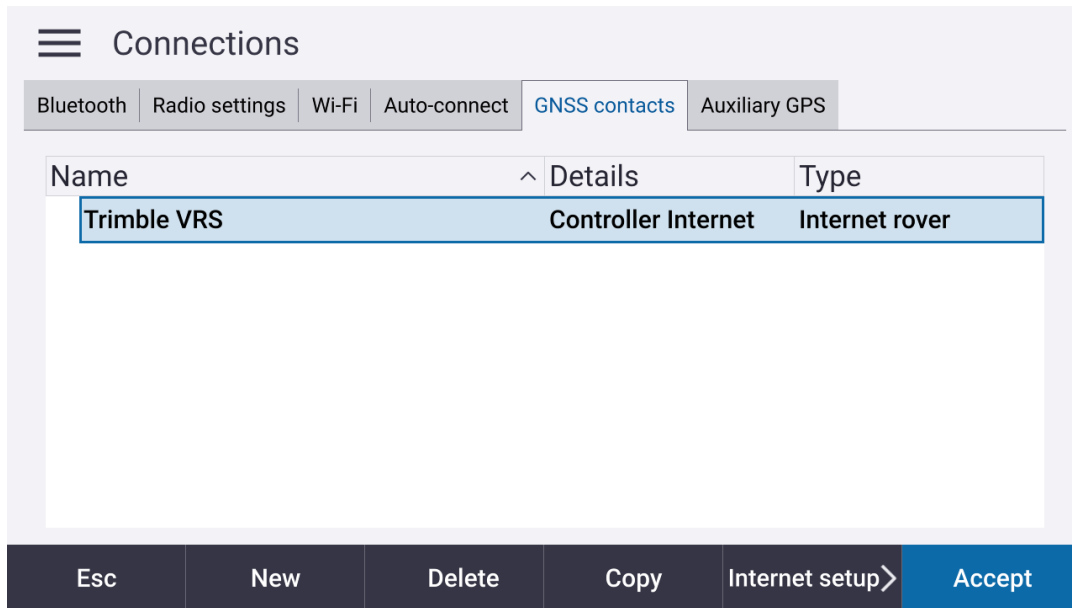
Internet connection ▼

GNSS contact ▶

Prompt for GNSS contact ☐

Esc Enter

10. Select *New* to create a new GNSS contact.



Name	Details	Type
Trimble VRS	Controller Internet	Internet rover

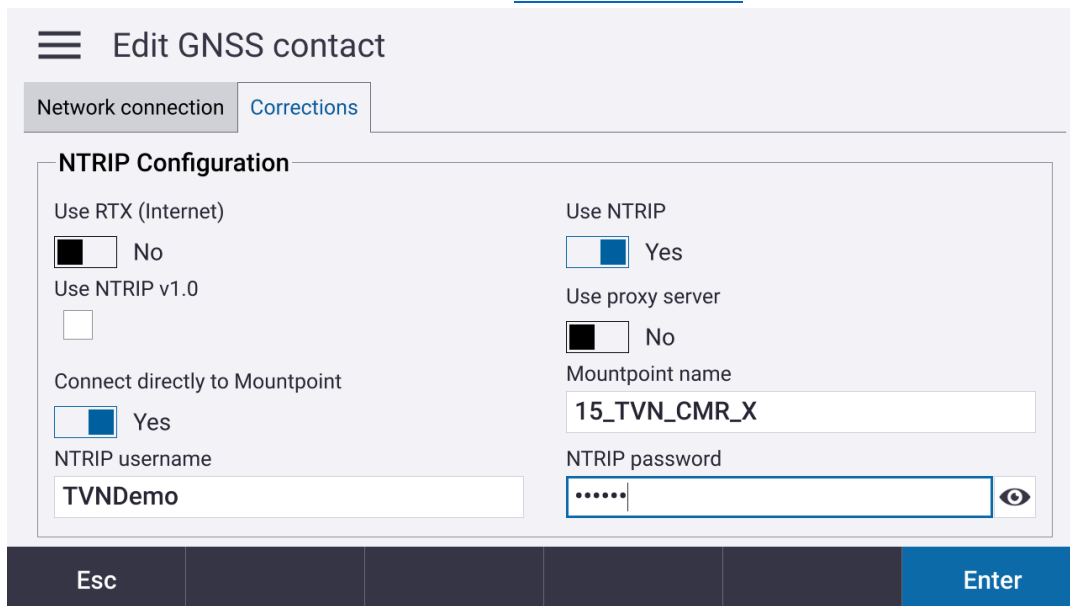
Esc New Delete Copy Internet setup> Accept

11. Select Corrections.

Enter your VRS username in the *NTRIP username* field and password in *NTRIP password* field.

Select *Connect directly to Mountpoint* and set the Mountpoint name as 15_TVN_CMR_X.

Scroll down and set the IP address as www.vrsnow.co.uk and *IP Port* as 2101.



NTRIP Configuration

Use RTX (Internet) ☐ No

Use NTRIP v1.0 ☐

Connect directly to Mountpoint ☒ Yes

NTRIP username: TVNDemo

Use NTRIP ☒ Yes

Use proxy server ☐ No

Mountpoint name: 15_TVN_CMR_X

NTRIP password:

Esc Enter

☰ Edit GNSS contact


Network connection Corrections

☐ ☒ No

Connect directly to Mountpoint
☒ Yes

Mountpoint name
15_TVN_CMR_X

NTRIP username
TVNDemo

NTRIP password
..... 

IP Address
www.vrsnow.co.uk

IP Port
2101

Send user identity info
☐

Esc Store


12. Select Network Connection for a new network connection with R10

☰ Edit GNSS contact

Network connection **Corrections**

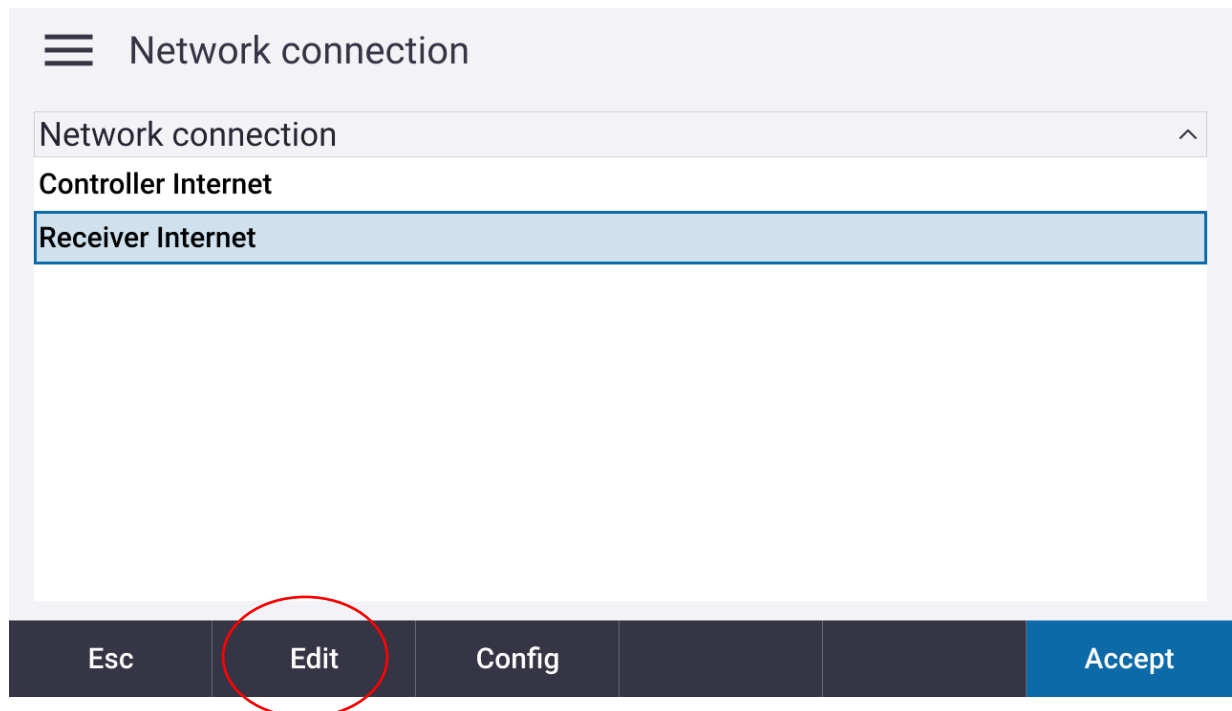
GNSS contact name
Trimble VRS

Network connection
Receiver Internet ▶

Modem PIN
..... 

Esc Enter

Select Receiver Internet and edit



Network connection

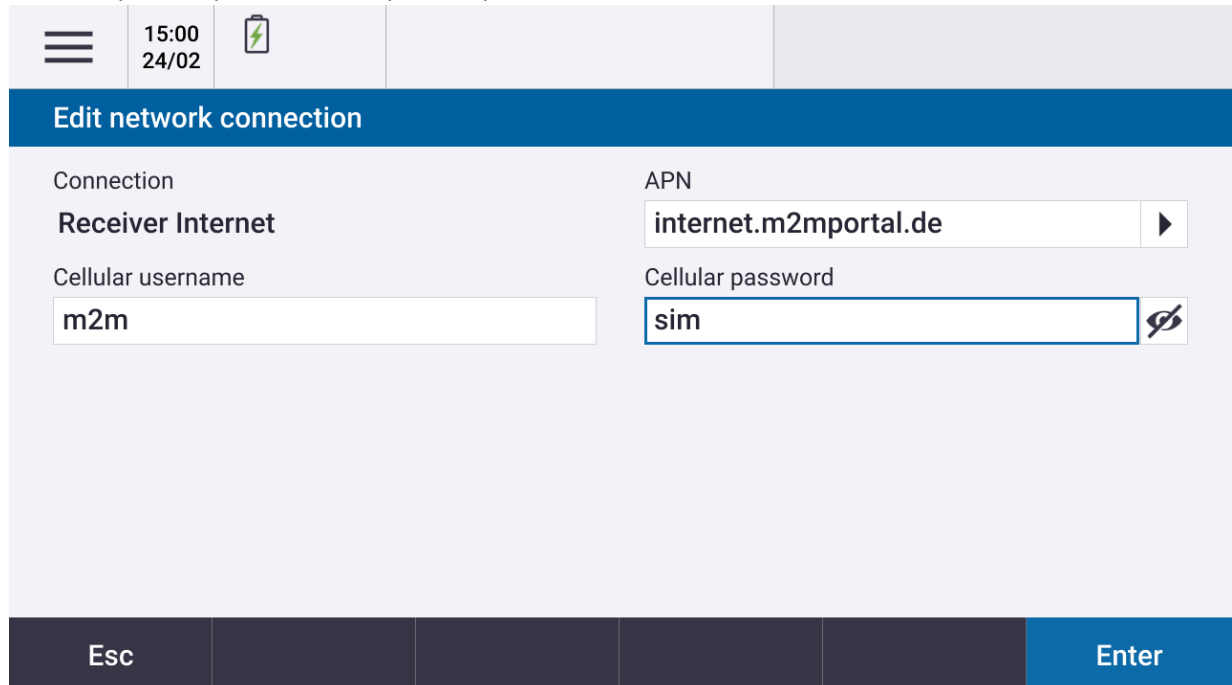
Controller Internet

Receiver Internet

Esc Edit Config Accept

The screenshot shows a 'Network connection' menu. At the top is a hamburger menu icon and the title 'Network connection'. Below is a list with two items: 'Controller Internet' and 'Receiver Internet'. 'Receiver Internet' is highlighted with a blue background. At the bottom is a dark navigation bar with five buttons: 'Esc', 'Edit', 'Config', an empty button, and 'Accept'. The 'Edit' button is circled in red.

13. Fill APN: internet.m2mportal.de, Cellular username: m2m, Cellular password: sim, tap Enter and Accept, Accept, Store, Accept, Accept



Edit network connection

Connection
Receiver Internet

Cellular username
m2m


APN
internet.m2mportal.de

Cellular password
sim

Esc Enter

The screenshot shows the 'Edit network connection' screen. At the top is a status bar with a hamburger menu, time '15:00', date '24/02', and a battery icon. Below is a blue header 'Edit network connection'. The main area has two columns. The left column has 'Connection' with 'Receiver Internet' below it, and 'Cellular username' with 'm2m' in a text field below it. The right column has 'APN' with 'internet.m2mportal.de' in a text field with a right arrow icon, and 'Cellular password' with 'sim' in a text field with a visibility icon. At the bottom is a dark navigation bar with 'Esc' and 'Enter' buttons.

14. When in list with Rover Options, Rover Data Link, tap Store

 VRS

Rover options

Rover data link

Topo point

MultiTilt point

Observed control point

Rapid point

Continuous points


Stakeout


Site calibration

Esc

Store

Edit

 Survey Styles



Name	Modified
IS Rover	18/2/2022
RTK	18/2/2022
SX10 & SX12	18/2/2022
VRS	24/2/2022
VX & S Series	18/2/2022

Esc

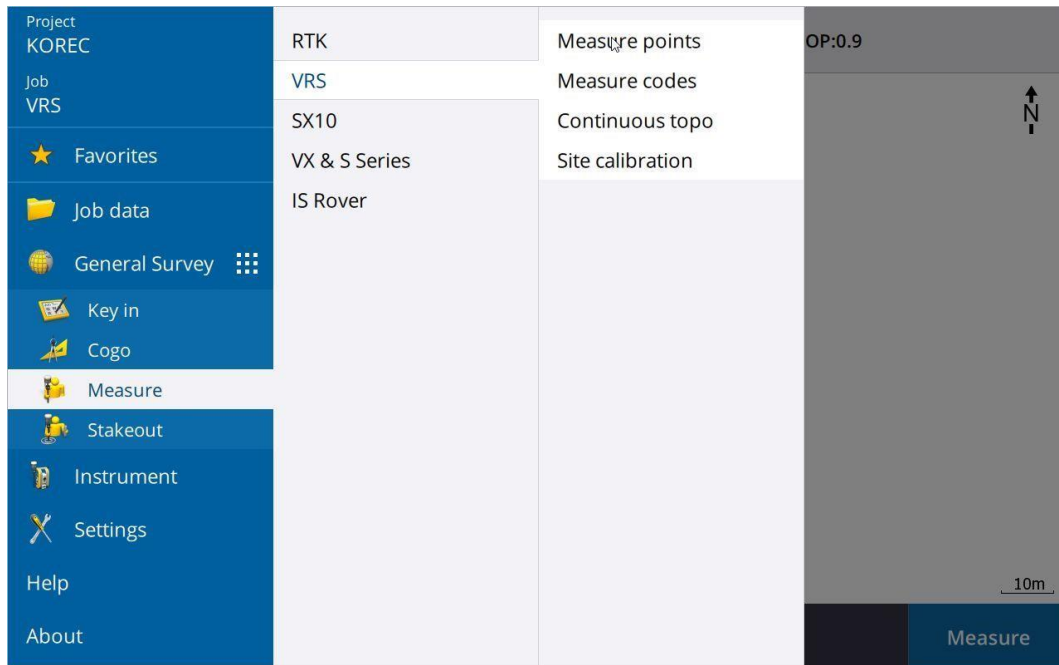
New

Copy

Delete

Edit

15. Go to Measure > VRS > Measure points to start the VRS survey.



If required, please contact support@korecgroup.com for assistance.