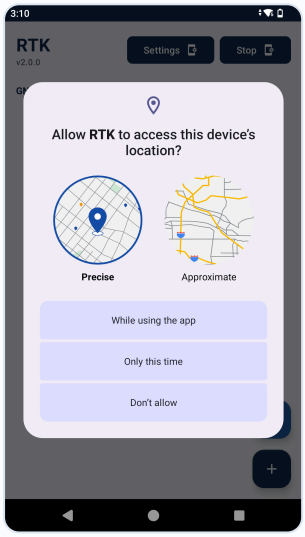
Nordalp RTK

SETUP GUIDE

This guide walks through setting up the Nordalp RTK app for the first time — permissions, connecting your GNSS receiver, adding an NTRIP correction source, and reading the status screens.

1 Permissions

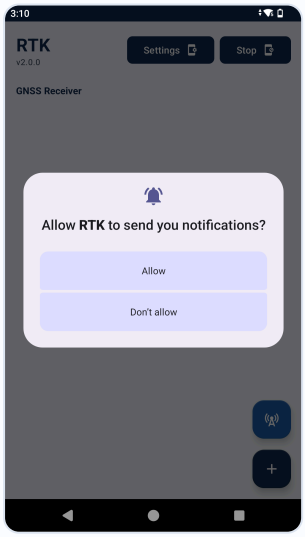
On first launch, Android asks for two permissions the app needs to work correctly.



REQUIRED

Location access

Choose **Precise**, then **While using the app**. The app needs precise location to read and process GNSS position data.



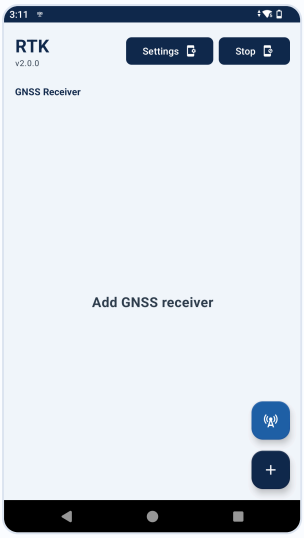
RECOMMENDED

Notifications

Tap **Allow**. This lets the app show a persistent notification with fix status while it runs in the background.

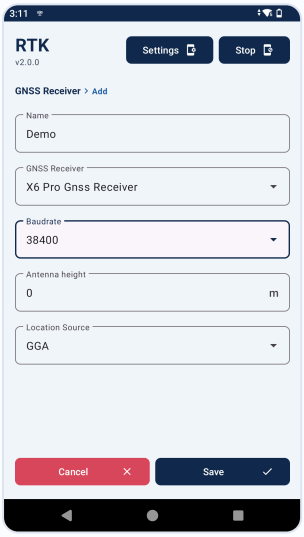
2 Add a GNSS receiver

The GNSS receiver is the physical device that supplies raw satellite data. Add it once — the app remembers it for future sessions.



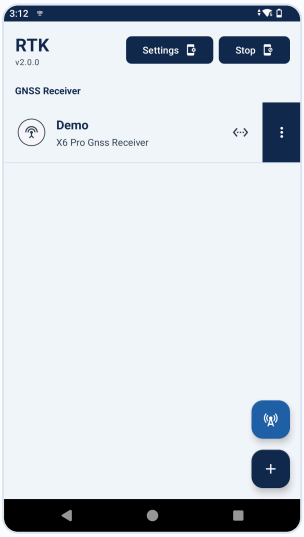
Open GNSS Receiver

The list is empty on first use. Tap **+** to add a receiver. The other button (top right) switches between the GNSS Receiver and Ntrip lists.



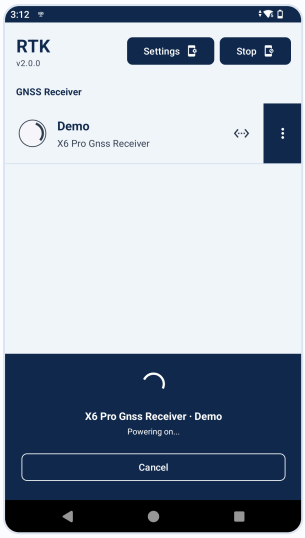
Fill in the receiver details

Give it a **Name**, pick the receiver model, and set the **Baudrate**, **Antenna height** and **Location Source** (GGA is the standard NMEA sentence for position). Tap **Save**.



Receiver added

Your receiver now appears in the list. Tap it to connect.

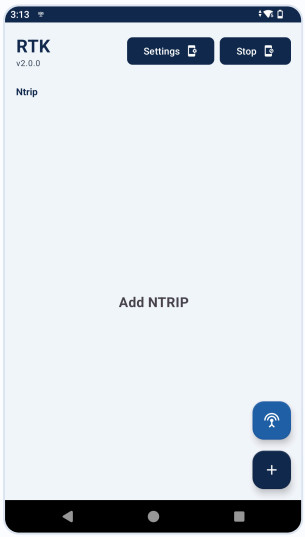


Powering on

Tapping the receiver starts the connection. This takes a few seconds — cancel if it doesn't finish.

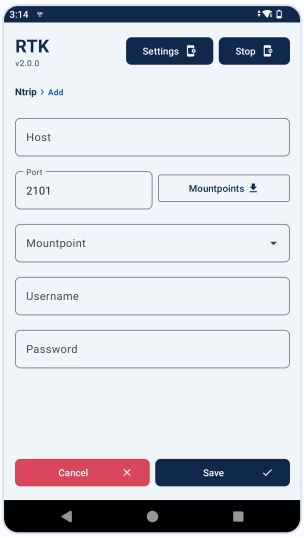
3 Add an NTRIP correction source

NTRIP streams correction data over the internet, upgrading your fix from a plain GPS position to RTK-corrected accuracy.



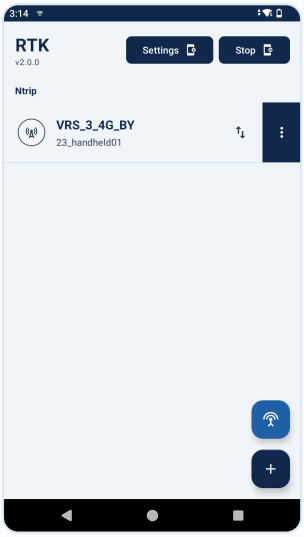
Open Ntrip

Tap **+** to add a correction source. The other button (top right) switches between the Ntrip and GNSS Receiver lists.



Enter caster details

Fill in the **Host** and **Port** (2101 is the NTRIP default) given by your correction provider. Tap **Mountpoints** to fetch the available list, choose your **Mountpoint**, then enter your **Username** and **Password**. Tap **Save**.

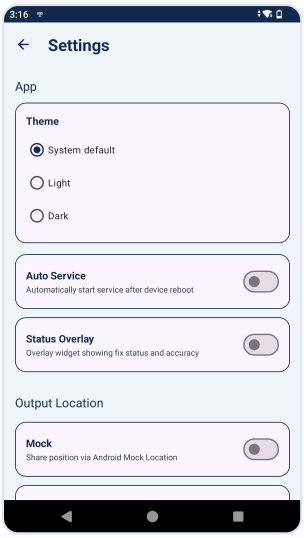


Source added

The correction source now appears in the list, ready to connect.

4 Settings

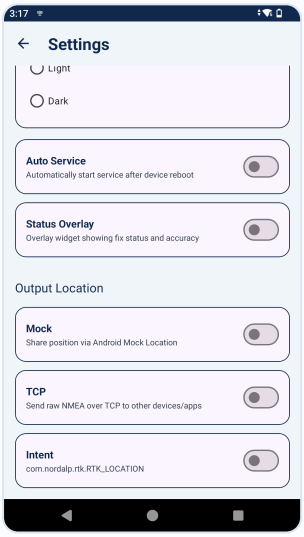
Open **Settings** from the top bar to configure the app and choose how it shares position data with other apps.



App

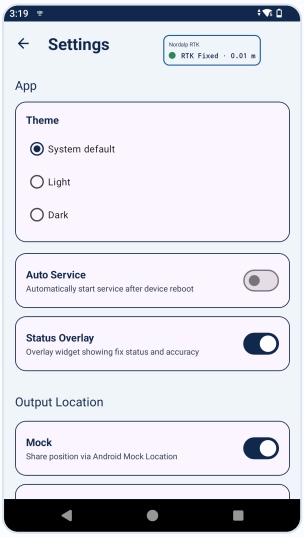
Theme follows the system by default, or force Light/Dark. **Auto Service** restarts positioning automatically after a device reboot.

Both the GNSS receiver and the NTRIP source can also be set to auto-connect — open the ⋮ menu on their entry in the GNSS Receiver or Ntrip list and enable it there.



Status Overlay & Output

Status Overlay shows a small floating widget with fix status and accuracy over other apps. Under **Output Location**, **Mock** shares your RTK position with Android's Mock Location — the way most third-party apps (maps, survey, GIS) pick it up.



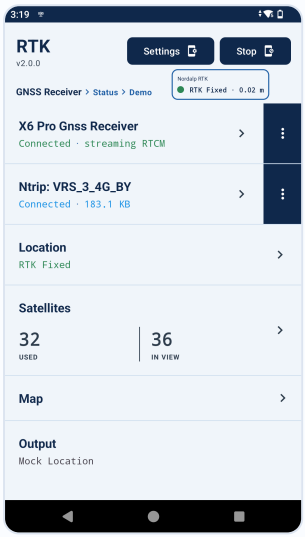
TCP & Intent output

TCP streams raw NMEA sentences over a local TCP connection to other devices or apps that read NMEA directly. **Intent** broadcasts the position as an Android intent (`com.nordalp.rtk.RTK_LOCATION`) for apps built to receive it — useful for custom integrations.

Not sure which output to use? Start with **Mock** — it works with the vast majority of apps without any extra setup. Use TCP or Intent only if your target app specifically documents support for it.

5 Status overview

Tap a receiver from the GNSS Receiver list to open its status overview — the home base for everything below.



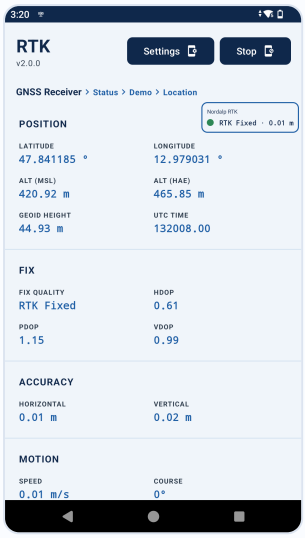
Reading the overview

Each row summarises one part of the system: the **receiver** connection, the **NTRIP** stream, current **Location** fix, **Satellites** in use, the **Map** view and the active **Output** method. Tap any row to see it in detail.

6 Location data

Open **Location** from the status overview for the full numeric readout.

Field	Meaning
Latitude / Longitude	Current horizontal position.
Alt (MSL / HAE)	Altitude above mean sea level and above the ellipsoid.
Geoid height	Local difference between the ellipsoid and mean sea level.
Fix quality	e.g. RTK Fixed — the current correction state.
HDOP / PDOP / VDOP	Geometry quality of the visible satellites; lower is better.
Accuracy (horizontal / vertical)	Estimated position error in metres.
Speed / Course	Current motion, if moving.



Location screen

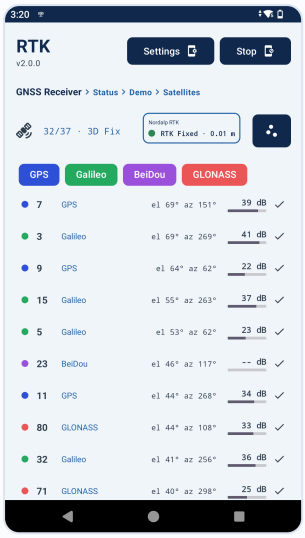
All fields update live as the receiver reports new fixes.

7 Satellites

Open **Satellites** to see what the receiver is tracking, and switch between the skyplot and list view with the button in the top right.

Skyplot

A polar view of the sky with north at the top. The outer ring is the horizon; the centre is straight overhead. Colour marks the constellation — GPS, Galileo, BeiDou, GLONASS.

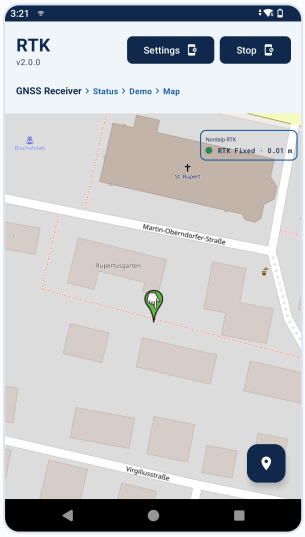


List

The same satellites as a sortable list — PRN, constellation, elevation/azimuth angles, signal strength in dB, and a checkmark for satellites actually used in the fix.

8 Map

Open **Map** to see your live position plotted on a map.



Reading the map

The pin marks your current position; the badge in the top-right shows fix quality and accuracy. Tap the location button in the bottom-right to recentre the map on your position.