

SPECIALIZED MISSION CONTROL APP

OVERVIEW

The unique Specialized Mission Control App allows Turbo and Turbo Levo riders to plan and track their rides, control range, adjust motor settings and diagnose their Turbo system. These are the main features to enhance your Turbo ride experience:

Navigation

- turn-by-turn navigation via street maps (primarily for on-road rides)

Smart Control

- no more range anxiety thanks to Smart Control, a custom algorithm that controls motor output based on three options: turn-by-turn navigation, ride time or distance

Motor Tuning

- Turbo: ECO-Mode and acceleration response
- Turbo Levo: customization of ride modes (Turbo / Trail / Eco), motor current and acceleration response

Diagnosis

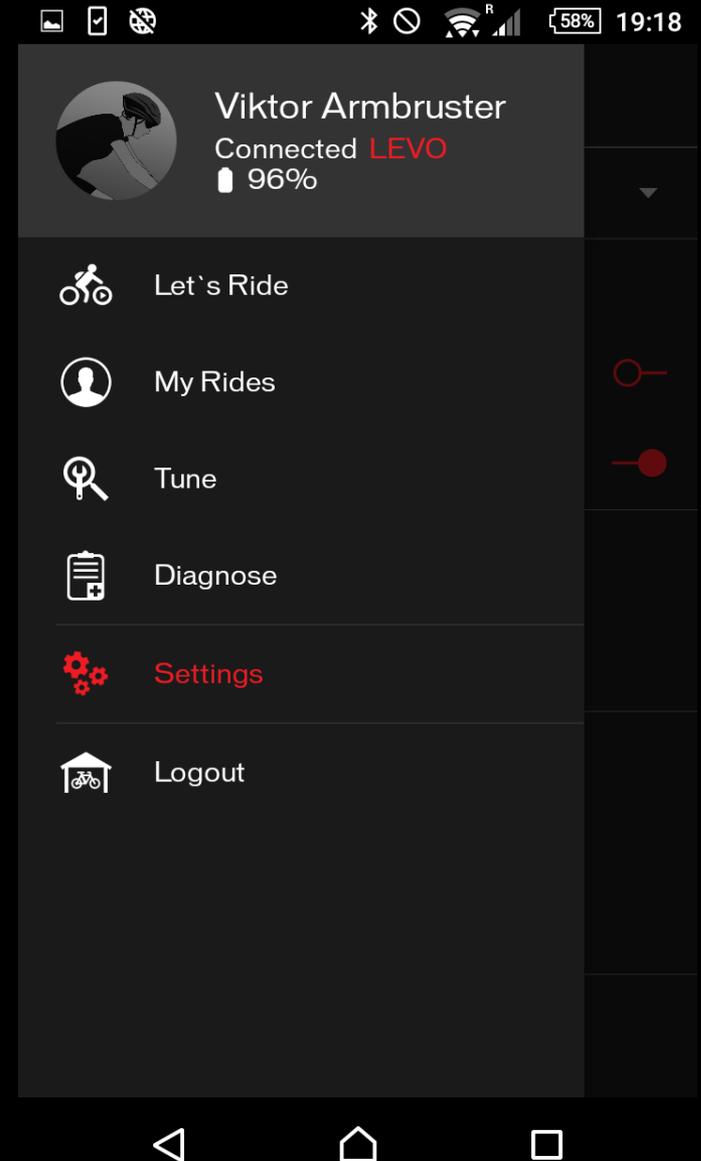
- Turbo health, charge cycles, charge cycles till recommended battery replacement, battery health, motor and battery software

Ride History and Connectivity

- track and evaluate rides (mileage, speed, elevation, consumption, rider input, system power)
- Strava upload into e-bike category

Compatibility

- all Turbo Levos and all Turbos with a 562 Wh or 691 Wh battery (Turbo X/Turbo S MY16)
- iOS and Android smartphones



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GETTING STARTED

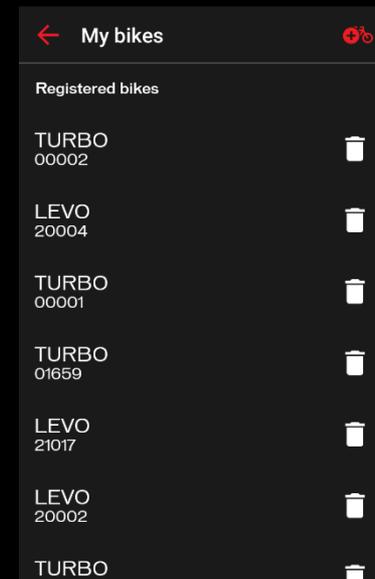
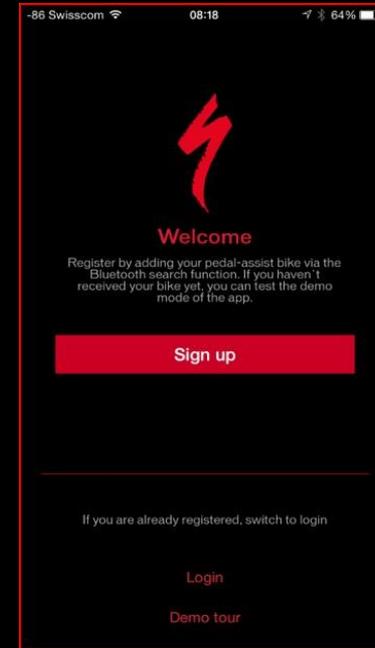
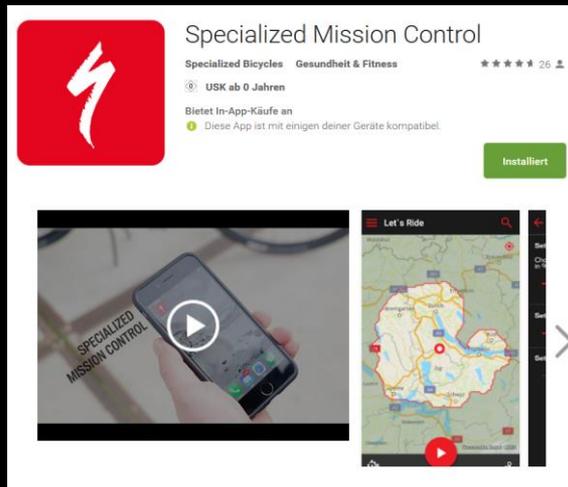
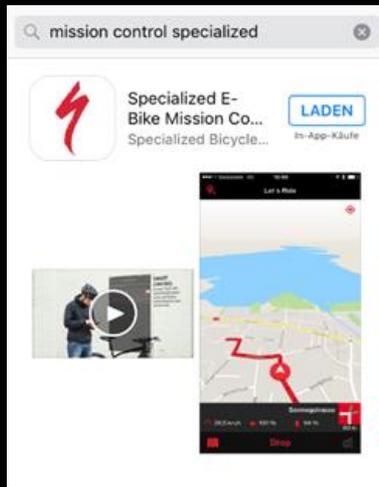
This document explains the most relevant functions and helps you to set up and use the Mission Control App. The shown screenshots represent Android phones.

Download and set up App

- go to the App Store (Apple devices) or the Google Play Store (Android) to download App (search for 'Specialized Mission Control App')
- turn on Bluetooth on your phone, switch on your Turbo bike (without a Turbo bike you can use the demo mode only)
- open app and register

Connect to Turbo (note: one bike can only be connected to one app at the same time)

- turn Turbo on, activate Bluetooth on mobile phone, open the app
- go to 'Settings' --> 'My bikes' and tap on add-bike-symbol in upper right screen
- select the bike you want to connect with
- once you have a bike in your 'my bikes' list, the app will later re-connect to them automatically when starting the app (Bluetooth on, Bike on)



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SMART CONTROL: TURN-BY-TURN NAVIGATION

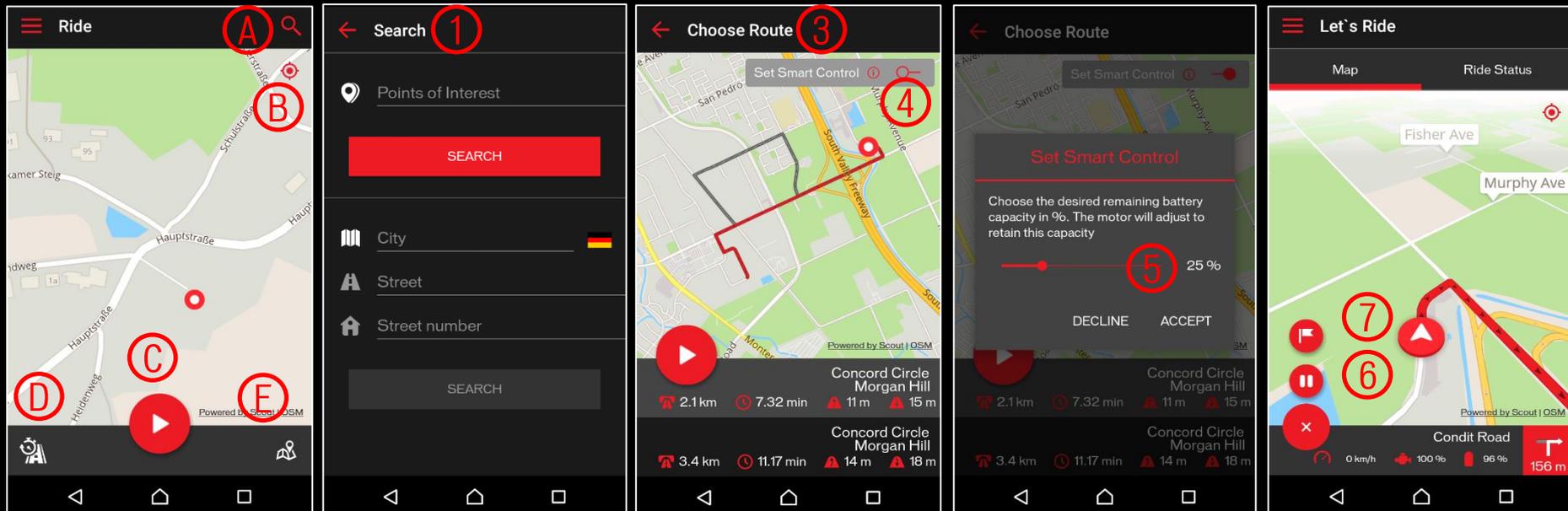
Screen 'Ride': address search (A) - current position on map (B) - track ride (C) Smart Control (D) - search for POI (E)

Street maps: if you want to navigate turn-by-turn, you need to download a map for the desired country (go to 'Settings' -> 'offline maps')

- the amount we charge (0.99 Euros / 0.99 \$) is the minimum amount we have to charge

Using Smart Control

- do address search (A) + (1)
- select one of the three routing options (3) - the selected route is highlighted grey - tapping on another option will show route on map
- activate Smart Control by wiping bar to the right (4)
- set the desired battery capacity at destination and accept setting (5)
- enjoy your ride - Smart Control adjusts the motor output automatically based on your input
- if you want to pause your ride, tap on the '+' symbol in the lower left screen and choose pause (6)
- if you want to end and save your ride, tap on the '+' symbol and the flag symbol (7) - you can then give your ride a name - it is saved in the app automatically - if you want to upload it automatically to Strava's E-Bike section, select automatic synchronization in 'Settings'



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SMART CONTROL: RIDE TIME AND DISTANCE

Activate Smart Control and set desired battery capacity at end of ride (1)

and

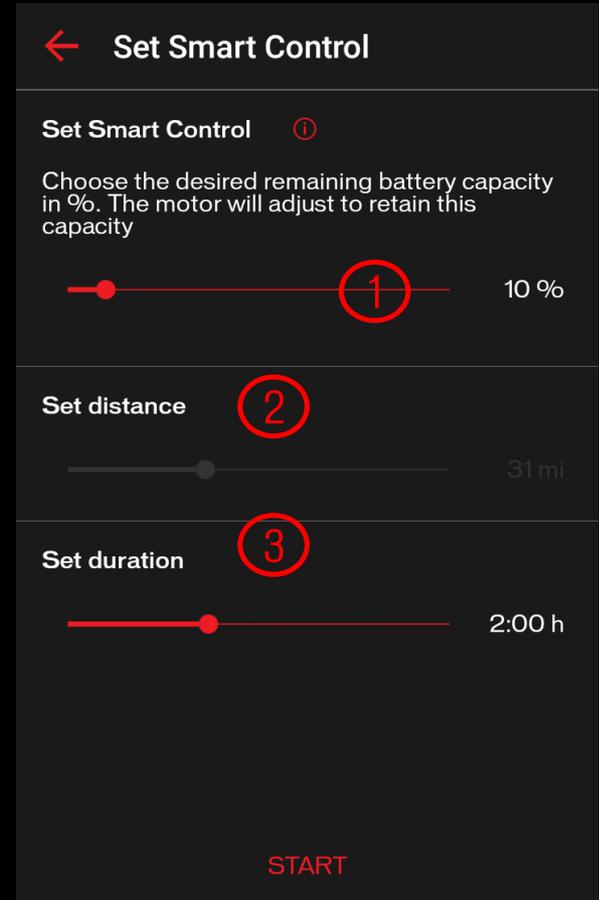
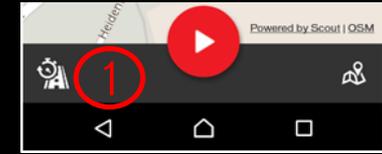
set desired ride distance (2)

or

set desired ride time (3) - this is the preferred mode for Levo riders (most accurate)

Tip: If you want to use the full battery capacity you should allow for a safety margin, e.g. if you want to arrive with 0 % at destination, set Smart Control to 10 %

Please note: a 100 % accurate power control with Smart Control is not possible; Specialized keeps working on further refinements; in the future it will be possible to upload existing gpx-tracks into the app for more accuracy

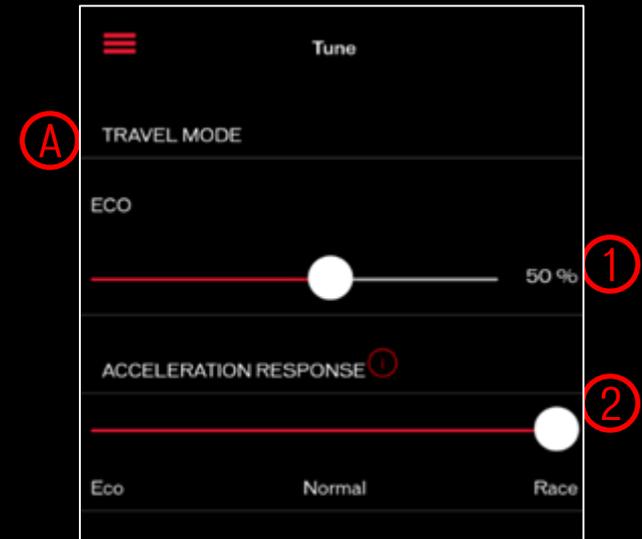


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TUNE: MOTOR SETTINGS

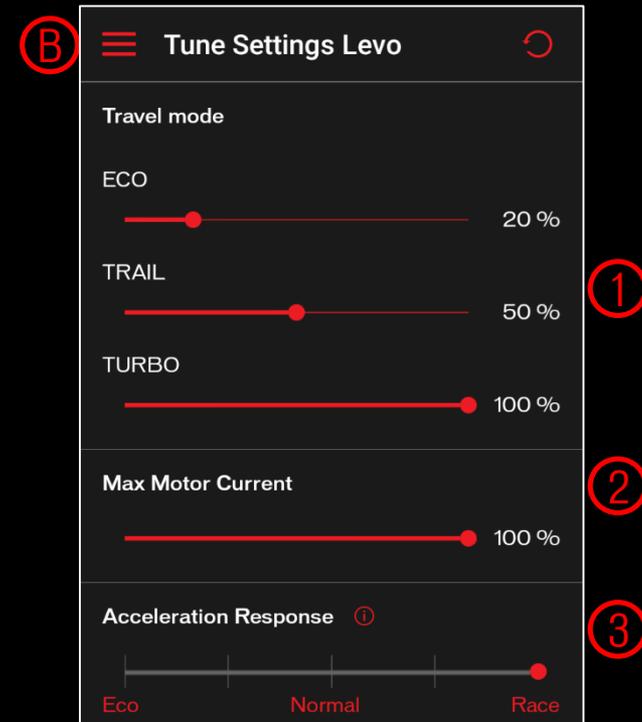
A) Turbo

1. ECO setting from 10-70 % of maximum power (= Turbo)
2. acceleration response from Eco to Race determines how fast the bike speeds off (restart of bike needed to save setting)



B) Turbo Levo

1. individual settings for Eco / Trail / Turbo; higher mode cannot be below setting for lower mode (e.g. setting for Trail cannot be lower than setting for Eco)
2. motor current: limits motor output, increases range (max. speed with motor assistance not affected)
3. acceleration response (how fast the bikes speeds off; restart of bike needed to save setting)



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TUNE: MOTOR SETTINGS

Wheel Circumference (1)

1. Turbo: value has no effect on bike speed with motor assist, but changes what you see on the display
2. Turbo Levo: range goes from 2000-24000 mm

Fake Channel (2) + (5)

Activate Channel and select unused channel to show battery state of charge on any ANT+ device; then search for sensors in your ANT+ device and select found channel

Please note: if you use a Garmin device and select the 'heart rate' rate channel, state of charge in % below 30 will not be displayed; choose other channel, e.g. cadence

Battery beeper (3)

Turn off/on the battery beeper for Levo batteries

Restore Default settings (4)

Use this option if you want to go back the standard settings for motor, wheel circumference, Fake channel and battery beeper

Wheel Circumference (mm) ⁱ	2293	①
Fake channel ⁱ	Disabled	②
Battery beeper	<input checked="" type="checkbox"/>	③

Restore default settings

④



example: cadence-field in Garmin 1000 shows state of charge through fake channel; works with any ANT+ device



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RIDE STATUS: RIDER AND MOTOR OUTPUT

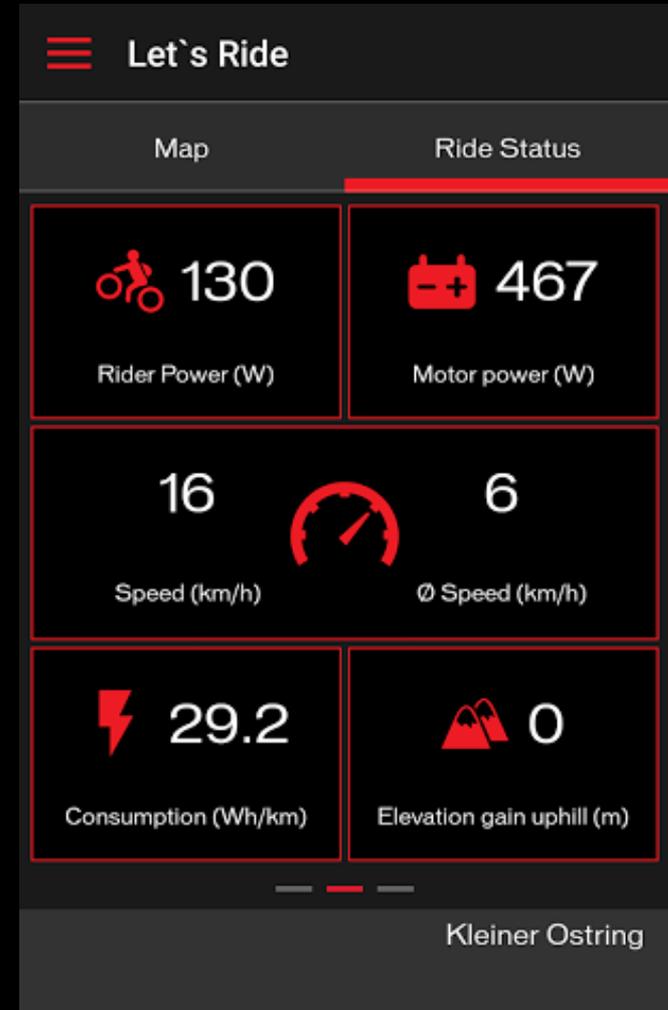
Rider output

1. Turbo: cannot be shown as rear hub motors cannot measure rider output
2. Turbo Levo: app shows rider output in watts (as precise or more precise as any powermeter on the market)

Please note: one needs to distinguish between mechanical and electric output; due to some inevitable loss, mechanical power will be slightly lower than electric power; app shows electric power

Motor output

1. App shows motor output in watts for both Turbo and Turbo Levo
2. Turbo Levo: the ride history shows summary for motor output and system output (bike and rider together)
3. Turbo: app shows statistic for consumption over ride



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SETTINGS

1. Language-Coach: deactivate or activate speech output for audio navigation audio (1)
2. display of mobile can stay on or off, based on your preferences; if you do nightrides, you may want to keep the display on (2)
3. if preferred, automatically sync your rides with Strava by uploading your rides into a dedicated e-bike category; if you want to do so, you need an account with Strava (3)
4. My Bikes: show bikes you once connect to, find new bikes and delete bikes; a bike that is already connected to Mission Control cannot be found and selected by another app user (4)
5. Offline maps: need to be downloaded to use navigation by address; per country we charge you the mandatory amount of 0.99 Euro / 0.99 \$ (5)

