User manual for simplyRemote user interface and simplyRide App

neodrives

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Technical changes reserved.

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1 Important instructions

In addition to this user manual, further documents are enclosed with your pedelec. Please observe the instructions and notes contained therein. There is currently no legal obligation to wear a helmet when using a pedelec. Nevertheless, it is advisable to wear a helmet for your own safety.

Intended use of neodrives components

Your pedelec, which is supplied with neodrives components by a specialist dealer, is designed as a trekking or city bike for normal person transport on public roads.

Settings and repairs to the pedelec and the individual components are only considered as intended use if they are explained and permitted in this user manual, in the user manual of the pedelec manufacturer, in the instructions of the component manufacturers or in other documents enclosed with the purchase of the pedelec.

The manufacturer accepts no liability for damage caused negligently by misuse, improper maintenance, improper repairs or improper use. It is the responsibility of the rider to check the pedelec as prescribed, to have any work done on it and to use it responsibly.

This user manual describes exclusively the use of the *simplyRemote* on your neodrives E-bike with neodrives components (compatible with the neodrives systems Z20 as well as Z20S) and is state-of-the-art at the time of printing. The manufacturer reserves the right to make changes resulting from the further development of mechanics, software or legal requirements.

The manufacturer regards the following cases as misuse of the neodrives components attached to your pedelec:

- Use of the drive system contrary to the instructions and recommendations of this user manual
- Exceeding the technical performance limits defined in this user manual
- Technical modifications to the neodrives components
- Changes to the software of the neodrives components
- Unauthorised mounting or unauthorised use of neodrives components on bicycles or on any Pedelec other than the one supplied to you

The manufacturer declines any liability for damage resulting from misuse of the components.

Before starting the journey, familiarise yourself with the safety and hazard notices in the individual chapters of these operating instructions and all other enclosed documents.

While riding, only operate the *simplyRemote* to set the assistance levels or to display the charging status; for further operation, stop and make the respective settings.

Explanation of symbols

Warning note

Warning of possible dangers to your health, indication of possible risks of injury; warning of possible technical problems or damage. Always observe these precautions in order to avoid injury to persons and damage to the product.

Permissible operating conditions / locations for use

The neodrives components can be operated at temperatures of between -20°C and +60°C \rightarrow See *Table 1: technical data simplyRemote*. In addition, observe the information on permissible operating conditions in the operating instructions of the pedelec manufacturer. Its restrictions of the permissible operating conditions (e.g. maximum climbing capability, maximum permissible obstacle height, maximum user weight) must also be observed when using the pedelec. Observe the safety and hazard notices in the individual chapters of these operating instructions.

2 simplyRemote

The new *simplyRemote* (see *Figure 1*) is a user interface for the neodrives systems Z20 (E-bike up to 25 km/h) and Z20 S. It offers intuitive usability due to its simple representation and limitation to the essential functions.

2.1 Scope of supply / components

There are five buttons on the *simplyRemote* (see Figure 1: *simplyRemote*) which are easy to operate due to their size and coating. In addition, there are 5 LEDs in the centre of the *simplyRemote* for easy display, which makes it easier for the user to operate.



Figure 1: simplyRemote

An additional adapter cable is used to connect the *simplyRemote*; this is used to connect the *simplyRemote* to the wiring harness of the E-bike. Depending on the type of battery, a neodrives connector (see *Figure 2* on the left) or a JST connector (see *Figure 2* on the right) is used. The JST connector is used for all integrated rechargeable batteries and the neodrives connector only for the external neodrives V2 rechargeable battery.

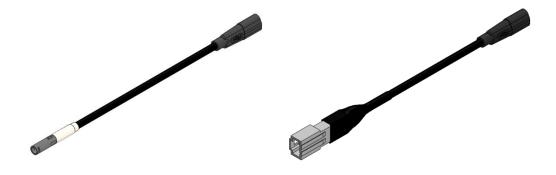


Figure 2: simplyRemote Adapter

SimplyRemote		
Interface	Bluetooth (BLE)	
Operating temperature	-20 to +60°C	
Storage temperature	-40 to + 65°C	
Protection class	IP 65	
Clamping diameter	22.2 mm	
Fastening torque	max. 1 Nm	

Table 1: technical data simplyRemote

2.2 Assembly and commissioning

To start up your E-bike, please read the user manual of the respective system. For proper installation of the *simplyRemote* control unit, please consult a specialist dealer.

To switch on the system, briefly press the "On/Off button" once (1 sec) (see *Figure 3:* simplyRemote representation), when starting up all five LEDs briefly light up white three times. The start-up process takes six seconds.



Figure 3: simplyRemote representation

Please note: with the rechargeable battery version BMZ UR-V2 (top-mounted rechargeable battery), the E-bike must be switched on via the On/Off button on the rechargeable battery. After a standby time of 4 hours, the V2 rechargeable battery switches to the so-called "deep sleep" and must be woken up again by pressing the rechargeable battery button.

Notes:

Please unload the pedal during switch-on. Only pedal when the *simplyRemote* is switched on completely and the white LEDs are permanently lit. Do not switch on the system while riding or apply load to the pedal. If it is switched on while riding, the second lowest LED of the *simplyRemote* lights up orange. Please unload the pedal until the LED no longer lights up, then you can continue your ride with the support of the motor

Please remember to switch off the pedelec after each ride using the local control panel.

2.3 Using the simplyRemote

When the E-bike is switched on, the green LEDs light up first (2 seconds), then the white LEDs light up permanently. The green LEDs indicate the set assistance level, the last selected assistance level is automatically pre-set again. The white LEDs show the charge level of the E-bike rechargeable battery. You can switch between the views using the "SET" button unless connected to the simplyRide app.

"+" button:

- Increase the assistance level (5 LED = 5 assistance levels) by pressing the button
- Activation of the pushing aid (4 km/h): press and hold the button for 4 seconds, release and confirm the forward pushing aid by pressing and holding the "+" button (or "-" for the backwards pushing aid). (Attention: backward pushing aid is only activated with respective motors).

"-" button:

- Decrease the assistance level
- Activation of recuperation (only possible above 6 km/h (blue LED))

LED display

- White flashing LED: switching on the system
- Green LED indicator: assistance levels
- White LED display: rechargeable battery charge status (5 white LED = rechargeable battery fully charged)
- Blue flashing LED Pairing Process
- Failure diagnosis, see 4.4 Error display on the simplyRemote (for dealers and OEM)

"Light" button

You can recognise when the light is switched on by the intensity of the LED display. If the LEDs light up more strongly, no lighting is switched on and if the LEDs of the display light up less strongly, the light of the E-bike is switched on. The dimming of the LED can be adjusted via the *simplyRide* app, e.g. if the LEDs are not visible in sunlight. If the light was switched on the last time the E-bike was switched off, it is also activated again when it is switched on again.

"On/Off" button; switching the E-bike on and off

"SET" button; changing the views, rechargeable battery charge level and assistance level. If the Remote is connected to the app, the displayed values are changed through.

2.3.1 Using a display

The *simplyRemote* does not require an additional screen and displays all relevant information via the LED display, however, the smartphone can be used as a screen for the *simplyRemote*, for this purpose please note 3.2.3 *Display*. You can also use a Sigma bicycle computer as a display to show your speed or similar if you do not want to use your smartphone with the *simplyRide* app as a display. When purchasing, look for the "E-Bike Ready" label.

2.3.2 neodrives system updates

All system updates of your neodrives components, can be carried out using your *simplyRide app*. You will find all information on installation and use in the chapter 3.2.5 neodrives system updates.

2.4 Retrofitting of Z20 and Z20 S by specialist dealers

The new *simplyRemote* is also suitable for retrofitting to E-bikes with Z20 and Z20 S systems that previously had the *neoMMI* with *neoTwistlock* and *neoNode* (or also called "BLOKS" components) installed. To retrofit the *simplyRemote* to these E-bikes, you only need a *simplyRemote* as well as the matching adapter cable. Please use the adapter cable with the JST connector ("square" plug connection, right in the figure) for integrated rechargeable batteries: V7, V8 and V10. For the UR V2 and UR V5 top batteries, please use the adapter cable with the neodrives connector ("round" plug connection, left in the figure) see Figure 4: adapter cable.

For the exchange, remove the *neoMMI* and the *neoTwistlock* from the handlebar. Then remove the *neoNode*, the position of which varies depending on the bicycle model. In the case of integrated rechargeable batteries, the rechargeable battery holder must be removed in order to reach the cable harness with the necessary JST connector (*see Figure 5: example of an installation of an adapter* cable with integrated rechargeable battery).



Figure 4: adapter cable with neodrives connector (left) and with JST connector (right).

Examples for positioning the *neoNode* are on the down tube, in the seat tube, above the gear, etc. The adapter cable is connected directly to the cable harness of the neodrives system and thus replaces the previous *neoNode*. The *simplyRemote* is connected to the adapter cable.

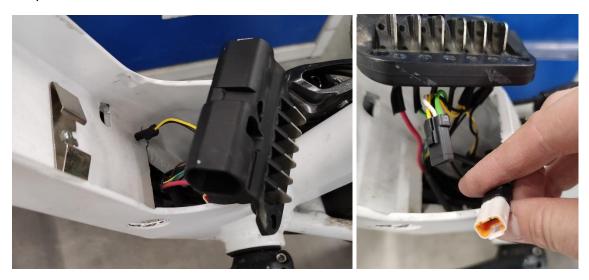


Figure 5: example of an installation of an adapter cable with integrated rechargeable battery

As usual, care must be taken when pulling in the cable, as the defect of a cable will lead to the defect of the *simplyRemote*. In addition, the cable must be routed without kinks and cable ties and similar fixings must not be too tight.

Warning note: the connector of the *neoNode* near the handlebar is an identical connector (green plug connection) to that of the *simplyRemote*. However, this must not be used to connect the *simplyRemote*. If however, you do then the *simplyRemote* will not function and an error will occur. You can easily solve the problem by removing the *neoNode* and mounting the adapter cable and the *simplyRemote* directly on the cable harness. Software is pre-installed on the *simplyRemote* to adapt your neodrives Z20 E-bike to the new *simplyRemote*. All important configuration files are automatically transferred from the motor during the initial installation of the *simplyRemote*. To install the software, start the *simplyRide* app and install the updates see *3.2.5 neodrives system* updates.

3 simplyRide app

As a supplement to the *simplyRemote*, there is the *simplyRide* app, which can be used as a versatile tool. It offers the possibility to use the smartphone as a screen on the bicycle handlebars, individualisation, evaluations and system updates. (The illustrations in the following chapter may deviate depending on the published version of the *simplyRide* app).

3.1 Download and install the simplyRide app

Download the app:



Andriod: Google Playstore → simplyRide



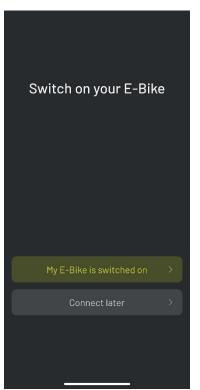
Search for the *simplyRide* app and install it on your smartphone.



Step 1:

Select "Connect E-bike".

Figure 6: simplyRide connect E-bike



Step 2:

Switch on the E-bike and confirm this with "My E-bike is switched on" in the app.

Figure 7: simplyRide switch on E-bike

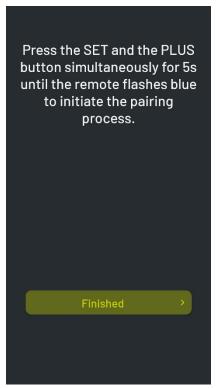
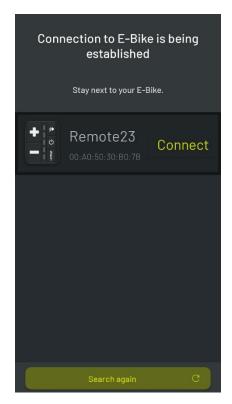


Figure 8: simplyRide start pairing

Step 3:

Press and hold the "Set" and "Plus" buttons on the *simplyRemote* at the same time until their LEDs start flashing blue/white. Confirm the blue/white flashing LED in the app with "Done".

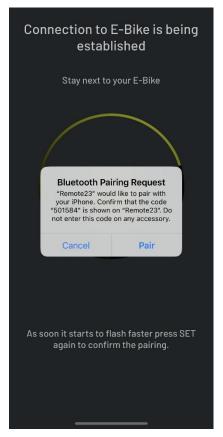


Step 4:

The app searches for available E-bikes and displays them on the screen. Now connect to the desired E-bike and press "Connect" in the app.

Confirm the pairing request of the app with "Yes". The LEDs of the *simplyRemote* will now start to flash faster and you confirm the connection by pressing the "SET" button again.

Figure 9: simplyRide search for E-bike



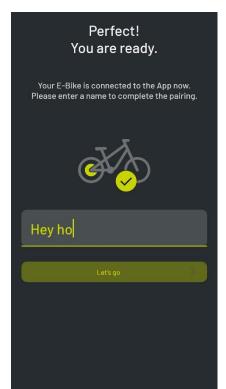
Step 6:

Using the smartphone, now confirm the pairing of the E-bike and the app by confirming "Pair".

(The pin in this figure is not required.) It depends on the smartphone whether it is displayed. Simply press "Pair" to connect.

Press "SET" on the simplyRemote to confirm.

Figure 10: simplyRide pairing



Step 7:

Your neodrives E-bike is now connected to the *simp-lyRide* app.

Enter a name for your bike and thus complete the installation. The name you enter here is not important and will only be saved in the *simplyRide* app.

Figure 11: simplyRide connect E-bike

3.2 Using the

simplyRide app

3.2.1 Pairing an E-bike

If you have already connected your E-bike to the *simplyRide* app, you do not need to add it again as a new device when using it again. When the E-bike is switched on and the *simplyRide* app is opened, the E-bike is automatically connected. All you have to do is tap "Connect" on the start screen of the *simplyRide* app. The Bluetooth and the location of your smartphone must be activated for the app to connect to the E-bike.

3.2.2 Setting options

Assistance levels

Speed

3.2.3 Display

You can use your smartphone as the display of your E-bike by attaching it to the handle-bars using a commercially available holder for smartphones. Operating the smartphone while riding is dangerous and should therefore only be done while stationary. You can change the different displays while riding with the "SET" button on the *simplyRemote*, so you do not have to take your hand off the handlebar and do not take any risks. As soon

as they are paired, you can only change the views in the app with the "SET" button and no longer change the LED display on the *simplyRemote*.

The possible views are:

- Screen: speed, assistance levels/recuperation, pedalling frequency (which is determined by the motor)
- Statistics (average speed, distance, watts motor/human, riding time and mileage)

3.2.4 Pairing of other devices

simplyRemote can pair with up to four Bluetooth devices at the same time and additionally also with broadcast signals (such as the SKS pressure sensor).

- Smartphone
- External display (Sigma EOX View 1300)
- Gears (e.g. pinion)
- Pulse monitor
- Tyre pressure sensor (SKS pressure sensor)

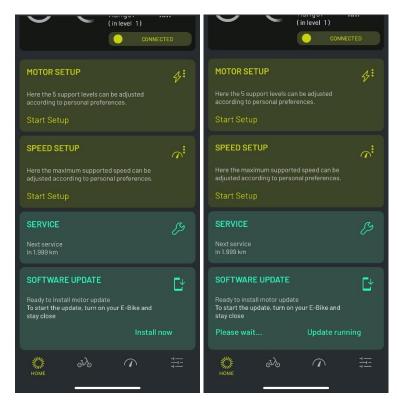
3.2.5 neodrives system updates



Step 1:

The availability of system updates is displayed directly on the start screen. To perform the updates, simply tap on "Install now" and follow the instructions. Now the update is transferred.

Figure 12: display of the availability of an update and transfer of the update



Step 2:

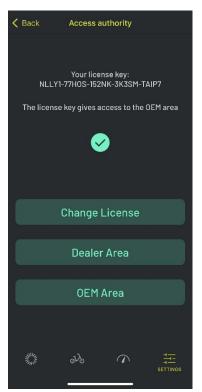
During the update, the simplyRemote flashes. First, the update is transferred. After the successful transfer, you can start the installation with an "OK". The simplyRemote flashes during this time and shows the progress (1 LED = 20 %). The duration of the update depends on how many and which components are included in the update and can take up to 15 minutes.

Figure 13: Performing a software update

During this time you will have no assistance from the motor. Do not move the E-bike during this time.

3.3 Extended access to the simplyRide app

A licence key is required to use the extended access (see Figure 14: simplyRide extended access). This access gives specialist dealers access to the setting options. You can apply for this licence key in the dealer login at neodrives.com/haendler-login or at info@alber.de. The licence keys for neoDiagnostic and the smartDiagnostics tool cannot be used for this purpose.



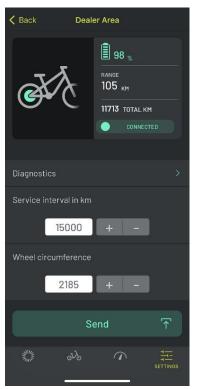
Open Settings and select "Extended Access". Here you can enter the licence key and "activate the licence".

Figure 14: simplyRide extended access

3.3.1 Using the simplyRide app as a specialist dealer

Via the menu item Settings → Extended access, it is possible for specialist personnel to make further settings on the E-bike. The E-bike must be connected to the simplyRide app as described (see 3.1 3.2.1 Pairing an E-bike).

Dealers have the following options:



Setting options:

- Wheel circumference (max. +/-5% of the value entered by the manufacturer)
- · Service interval

Figure 15: simplyRide dealer area



In the diagnostics area, dealers can obtain a clear display of the firmware versions. This therefore enables selective flashing. Dealers can select which of the individual components should receive an update.

Figure 16: simplyRide diagnose

4 Notes and troubleshooting

4.1 Cleaning

Never use benzine, thinner, acetone or similar substances for any cleaning process. Likewise, do not use abrasive or aggressive cleaning agents. Instead, only use commercially available cleaning agents and disinfectants (isopropanol) as used in the household.

The LCD may be cleaned only with a damp cloth. Never use benzine, thinner, acetone or similar substances. Likewise, do not use abrasive or aggressive cleaning agents.

4.2 Transport

The following instructions must be observed when transporting the handlebar-mounted *simplyRemote* on a car:

- Take appropriate measures to protect all components of your pedelec from moisture and dirt.
- Ensure that the cables are not kinked
- After driving, check all contacts of the pedelec for possible foreign objects or moisture. To ensure safe operation, all plug connections in particular must be free of dirt and foreign bodies and completely dry.
- Never place your pedelec on the side of the *simplyRemote* during transport, for example in the boot of a car This could damage it.

4.3 Error symptoms and possible measures

Error pattern	Error correction
The E-bike does not pair with the simp-lyRide app	Close the app, switch off the E-bike via simplyRemote and remove simplyRe- mote/E-bike from your Bluetooth devices on the smartphone. Reconnect to the E- bike as described in 3.1 Download and in- stall the simplyRide app
	Are location and Bluetooth activated?
Bike data such as frame number is not saved	The E-bike is not connected to the app. See 3.2.1 Pairing an E-bike

4.4 Error display on the simplyRemote (for dealers and OEM)

Colour	Display	Solution to problem	
Error	00000	Press the SET button and one of the error messages listed below will appear:	

Red	0•000	Motor error	No communication, make sure that the node is not installed when retrofitting. Check cable connections. Check the update.
Warning			
Flashing orange	0000	Battery charge <5%	Charge battery
Flashing orange	0000	Motor torque sensor	Do not load the pedal for 1 second
Update			
Ascending flashing	0000	Update process	Ascending flashing LEDs (in different colours depending on the component) indicate the update process. During this time, the motor does not assist and the system may not be moved. The update process takes max. 15 min and then you can use your E-bike as usual.