

USER MANUAL ASA ESPEED KEY

Tested with Haibike Xduro RX 2015 - 250 Watt

// Bosch Intuvia Display // Bosch Nyon Display

ATTENTION: Check connections carefully before plugging them, A FALSE CONNECTION CAN DESTROY THE ELECTRONICS OF YOUR E-BIKE!

--> CONTENT OF DELIVERY

- 1x tuning module ASA eSPEED B25.14/B45.14 including cable set
- 2x heat shrink tube
- 2x cable tie

--> REQUIRED TOOLS:

- Torx 20 screw driver
- 8 mm hex key
- Optional: 3 mm hex key
- Hot air gun
- Cyclos tool crank puller for Bosch drive unit (available in our shop)
- Optional: Torque spanner (operating range 30 to 60-200 $\mbox{Nm})$
- Optional: Flat nose pliers

--> INSTRUCTIONS:

- 1. Remove battery!
- 2. Remove hex socket head screw with 8 mm hex key.



3. Remove crank with Cyclus crank extractor. The optional stone guard underneath the motor can now be removed with a 3 mm hexagon key



4. Remove motor cover by releasing the three Torx screws with a T20 screw driver.



5. Pull the HMI 4-pin plug and the speed sensor 2-pin plug from the motor with flat nose pliers very carefully. Be aware to pull on the plug and not on the cables



7. Pull the HMI 4-pin plug and the speed sensor



- 8. Place the heat shrink tube over the cables.
- 9. Now connect the plug of the HMI to the plug of the ASA module. The line of co lours must be identical, meaning red-to-red, black-to-black, yellow-to-yellow and green-to-green. Press plugs together as far as they can go. Interchanging would cause reverse ploarisation and destroy the electronics of your bike



10. Heatshrink the tube



11. Place cables adequate, use cable binder to fasten the ASA eSPEED tuning module into the motor. Be careful, don't let the cables interfere with operating functions or be jammed in by the motor cover.

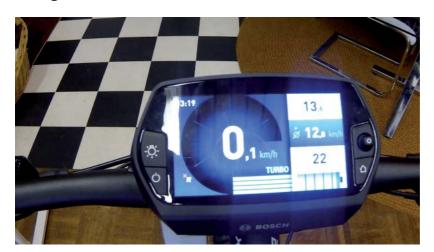
--> INITIAL STARTUP

Reconnect the battery. Switch on the HMI. A speed indication will appear briefly, like 10.6 km/h for example. The .6 stands for the software version 6 of your module. Afterwards the speedometer should show a speed of 99.9 km/h for approx. 3 minutes.



This is the calibration of the electronics, the electronics are determining the parameters in order to work correctly, depending on your e-bike. If the electronics show otherwise, check the connections.

After calibrating the electronics you should set your HMI on SPORT or TURBO mode as a test; the green LED should go on, indicating that the tuning is active. Also when the tuning is activated the HMI will show 0.1 km/h instead of 0.0 km/h during standstill.



This is the basic setting for SPORT and TURBO. In the Eco and TOUR mode the HMI will show 0,0 since the tuning isn't active then.

After the calibration, the e-bike should be switched on and off briefly so the data can be stored.

--> BASIC FUNCTIONS

Switching on/OFF

The tuning is activated if you set the mode to SPORT or TURBO (or SPEED). In the other modes the tuning is deactivated.

Calibration

The electronics calibrate to the tyre size of the e-bike automatically. The calibration can be restarted at any time.

Average speed/Trip mileage

When you drive faster than 25 km/h there will occur deviations in the average speed and in the odometer. The module has an synchronization function that can update the trip recorder. This can be done at any time during standstill and is activated by selecting a mode with deactivated tuning, like the ECO or TOUR mode. During standstill, the HMI signals the update track information by displaying 0.3

km/h and you can also observe that the odometer continues to run during standstill.

The synchronization can be ended by switching off your e-bike.

The synchronization can be performed automatically (see user-specific programming). The advantage of this is that the kilometre synchronization can be done during standstill automatically. The disadvantage is that while the update is applied, the motor only switches on after the first pulse comes from the speed sensor. This may take some getting used to when starting, and the e-bike will behave differently with the tuning module. The manual synchronization is set as standard

Quick deactivation

Selecting the OFF-mode will deactivate the tuning until the next powering on of the ebike.

The behaviour during powering on is then oriented towards the programmed parameter of the general tuning. It is activated again after the switch-on by default. The stored data is also deleted during the OFF-mode. This function can be deactivated by user specific programming so that tuning is also activated during OFF-mode.

User-specific Programming of electronics

Programming can only occur directly after the e-bike has been switched on. If a new code is to be entered, the e-bike must be switched off again first.

Parameters are entered by selecting 3 modes and briefly pressing the WALK-button for about 2-4 seconds.

The key codes are always listed by function. Note: The Walk button at the left operating unit must be kept pressed until the display shows the speed in form of a 8. You will get 0.8 for the acceptance of the first code, 8.8 for the acceptance of the second code and 88.8 for the third code.

--> FOR E-BIKES WITH A BOSCH DRIVE UNIT

Restarting the calibration

Eco -> Walk -> Tour -> Walk -> Sport -> Walk

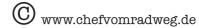
! Switch bike on and off after calibration.

General deactivation of the tuning

Turbo -> Walk -> Sport -> Walk -> Tour -> Walk

Activation of the tuning (default)

Tour -> Walk -> Sport -> Walk -> Turbo -> Walk



ECO/TOUR with tuning support

Off -> Walk -> Eco -> Walk -> Tour -> Walk

Using this function the tuning can be activated in the TOUR mode and after re-entering the same code also in the ECO mode

ECO/TOUR without tuning support (default)

Tour -> Walk -> Eco -> Walk -> Off -> Walk

Max. speed display during standstill (default)

Off -> Walk -> Eco -> Walk -> Turbo -> Walk

Maximum speed display switched off

Turbo -> Walk -> Eco -> Walk -> Off -> Walk

Switching off the synchronization function generally

Sport -> Walk -> Tour -> Walk -> Eco -> Walk

The general synchronization function of the trip mileage can be switched off in this setting. During the switch-off, neither the trip mileage nor the original average speed function will be correct. The advantage of this setting is that time for the synchronization will no longer be needed. To switch it on again, switch the max. speed either on or off

General tuning activated after the switch-off

Off -> Walk -> Sport -> Walk -> Turbo -> Walk

General tuning deactivated after the switch-off (default)

Turbo -> Walk -> Sport -> Walk -> off -> Walk

Viz. after switch-off, the tuning option must be reactivated every time.

Automatic synchronization activated during standstill

The kilometre synchronization will be done automatically during bicycle standstill.

ECO -> Walk -> Sport -> Walk -> Turbo -> Walk

Automatic synchronization deactivated during standstill (default)

The kilometre synchronization is conducted during bicycle standstill only when the tuning is deactivated using a mode without tuning support (ECO and TOUR by default).

Turbo -> Walk -> Sport -> Walk -> ECO -> Walk

Increasing the wheel circumference

The function increases the wheel circumference in increments of 2 cm up to a maximum of 20 cm. This makes manual fine calibration of the speed indicator and the kilometre measurement possible. After entering the code, the correction value is displayed briefly as speed. 2.0 means + 2 cm wheel circumference.

ECO -> Walk -> Tour -> Walk -> Turbo -> Walk

Reducing the wheel circumference

Turbo -> Walk -> Tour -> Walk -> Eco -> Walk

The function reduces the wheel circumference in increments of -2 cm up to a maximum of -20 cm. This makes manual fine calibration of the speed indicator and the kilometre measurement possible. After entering the code, the correction value is displayed briefly as speed. 2.1 means - 2 cm wheel circumference.

OFF-mode deactivates tuning (Default)

Off -> Walk -> Tour -> Walk -> Sport -> Walk

The OFF-mode deactivates the tuning. After switching on the ebike the functionality will be in accordance to the setting of the general tuning parameter. The tuning will be activated again by default. The stored data for the synchronization will be erased.

OFF-mode without functionality

Sport -> Walk -> Tour -> Walk -> Off -> Walk

In this mode the OFF-mode doesn't effect the tuning mode. This mode is recommended if the tuning is also activated in TOUR- and ECO mode and the manual synchronization is conducted without deactivated tuning.

-- > FAO

I have a maximum speed of more than 100 km/h.

- Unfortunately this happens because of the high speed the compensation is conducted at. Use the maximum speed function of the module. The maximum speed is briefly displayed during standstill.

My trip mileage is clearly too low.

- The synchronization was not conducted. Switch to a mode without tuning (ECO or TOUR) during standstill. The missing kilometres will be updated.

Even though I am standing, my trip mileage is counted up.

- The synchronization mode is activated and the electronics are compensating the difference to the actually driven kilometres. The synchronization ends when the data is identical (actually driven route and displayed distance).

I would like to activate the tuning also for the TOUR and ECO modes.

- Enter the described key code according to operating instructions directly after switch-on. Attention, in doing so the manual synchronization can only be conducted in the OFF-mode; the tuning is deactivated at the same time by default.

I can't program the electronics.

- Programming only functions once directly after the e-bike has been switched on.
- Press the WALK-button for 3-4 seconds until the 8 appears on the HMI (repeat if necessary until 8 appears).
- Do not move you ebike during programming

The LEDs do not flash after the installation.

- Check the connections thoroughly.
- If Connections are proper the module is not working and should be replaced
- You have acquired the wrong version of the device for your e-bike and it must be replaced.

I have disarranged everything and would like to reset to factory settings

- Start the calibration again.

My speedometer is imprecise

- Perform a manual fine calibration for your tyre circumference.
- Have your e-bike dealer correct the tyre size with the Bosch service tool and perform the calibration again afterwards.

--> DISPOSAL

Disposing this device must be handled pursuant to European Directive 2002/96/EC in order to be recycled or dismantled to minimize its impact on the environment. For further information, please contact your local or regional authorities This device must be disposed separately from household waste.

More informations? -> www.ChefvomRadweg.de

Movie english undertitle -> Installation ASA eSpeed YouTube.