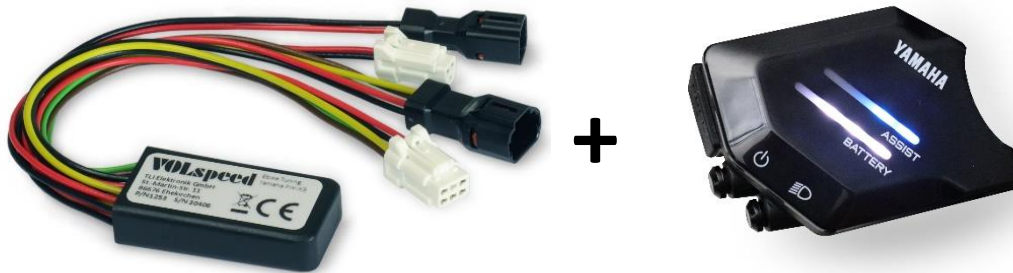


VOLspeed Ebike Tuning

VOLspeed operating instructions for Yamaha PW-X3 V3 with Yamaha Interface X



The following instructions only apply when using the VOLspeed for Yamaha PW-X3 V3 (P/N 1253) together with the Interface X control unit.

With the Interface X, the settings and operating states of the tuning are displayed using the LED display for the battery. This means that tuning can be used without a separate display or smartphone app.

Only for the optional setting of an individual activation code or an individual wheel circumference is an additional display required. For this, an ANT+ LEV compatible display is required that shows the odometer reading in addition to the speed. Successfully tested so far:

- Mahle Pulsar One
- O-Synce Coachsmart (do not confuse with Coachsmart LEV or GoSwiss Drive)
- Giant Ridedash Plus

There are also smartphone apps with support for ANT+ sensors. In most cases, however, the S&C or PWR profile is used instead of the LEV profile. With these profiles it is not possible to display the tuning settings in the app.

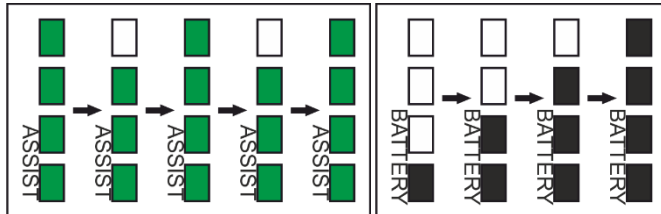
IMPORTANT Observe operating instructions

These instructions only supplement the chapters Speed Mode, Dynamic Mode, Factory Settings and Status Display of the original operating instructions. Please read all other chapters carefully before you start installing the Tuning Module.

Speed mode

When Speed mode is activated, the speed limit for motor assistance is raised. The limit can be freely set in the range 25 to 45km/h (15.5 to 28mph). When the e-bike is switched off, the speed mode is automatically switched off and must therefore be reactivated when the bike is switched on again.

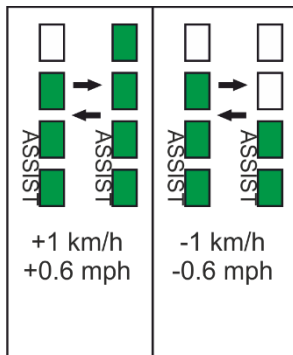
Enable speed mode



Use the arrow keys to change the assist levels as shown. The battery indicator acknowledges the input by the battery indicator LEDs lighting up quickly one after the other.

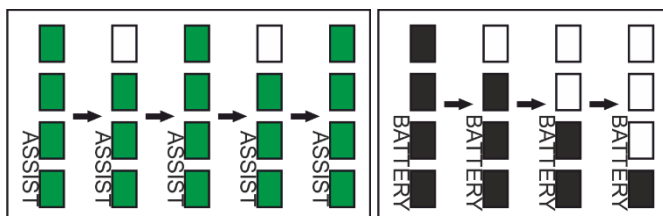
5Hz	2Hz					
25	26 - 29	30 - 34	35 - 39	40 - 44	45	km/h
15.5	16 - 18	19 - 21	22 - 24	25 - 27	28	mph

The speed limit is then symbolised for 5 seconds via the battery indicator.



The limit can be changed by switching back and forth between the levels shown. The set value is saved as soon as you do not press any button for 5 seconds.

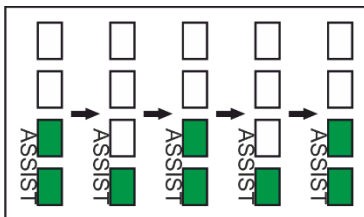
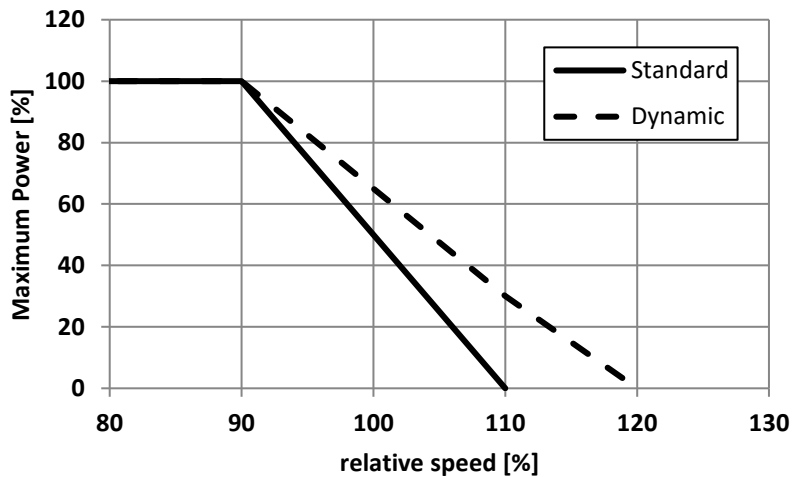
Disable speed mode



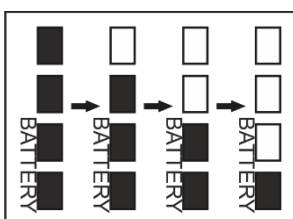
Use the "arrow up" and "arrow down" to change the assistance levels as shown. The battery indicator acknowledges the input by the battery indicator LEDs going out one after the other. The speed mode is off.

Dynamic mode

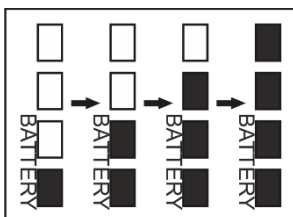
When exceeding the set speed limit, the motor power is reduced very much by default. A higher pedal force then initially no longer results in a higher speed, but in a lower motor assistance. For a more natural riding experience, the dynamic mode spreads the downshift over a wider speed range, reducing the so-called "wall effect".



When speed mode is activated, use the arrow keys to change the support levels as shown.



Dynamic mode off: The battery indicator LEDs going out one after the other.



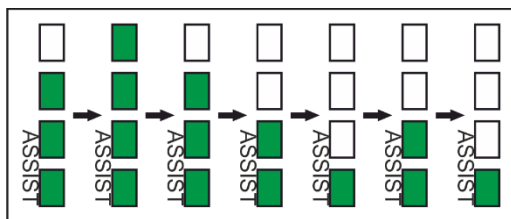
Dynamic mode on: The battery indicator LEDs lighting up quickly one after the other.

Restore factory settings

The tuning module sets itself up automatically. A conversion to another bike or another display is also recognised automatically. Nevertheless, it is possible to reset the tuning module to the factory settings. The following values are reset:

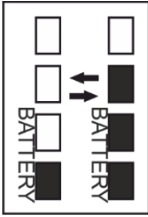

- ▶ The limit is set at 32km/h.
- ▶ Any existing individual activation code will be deleted.
- ▶ The mileage and wheel circumference is taken from the motor.

To restore the factory settings, first activate the speed mode and then enter the following sequence quickly using the arrow keys:



Status display

Certain operating states are symbolised by the tuning module by changing the battery indicator to inform the user.

Battery indicator	Meaning
	Initialisation in progress. The value is displayed for 10 seconds after switching on for the first time or after resetting to factory settings.
	Speed sensor signal faulty. Check wiring.

