



VOLSPEED Ebike Tuning

Giant Syncdrive
Sport / Pro / Life / Core
from model year 2017

V3

Operating Manual Installation Guide



Attention!



Read these instructions completely before using the device, keep the instructions and pass them on when handing over the device to other persons.

Product Features

After installation in E-Bikes / Pedelecs with Giant Syncdrive Sport, Pro, Life or Core drive system (20 / 25 / 32 / 45 km/h) the device offers the following functions:

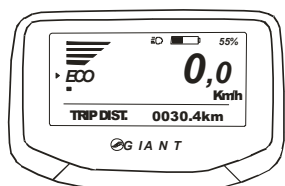
- Speed limit freely adjustable via handlebar control buttons
- Adjustable dynamic mode with reduced "wall effect"
- Correct display of speed and distance
- Correct total distance after removal of the tuning module
- Wheel circumference adjustable with handlebar control buttons

All settings are made via the operating unit on the eBike.

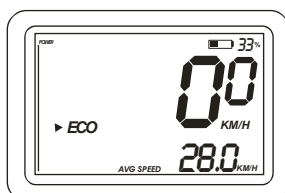
The electronic is encapsulated in the housing and thus safely protected against moisture.

Intended Use

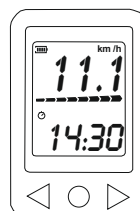
The device is only suitable for installation in e-bikes / pedelecs with Giant Syncdrive Sport, Pro, Life or Core from model year 2017 in combination with the RideControl EVO, CHARGE, ONE, ERGO-SG, ERGO 2-SG and ONE ¹.



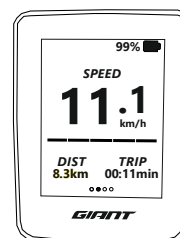
EVO



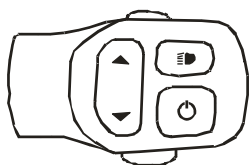
CHARGE



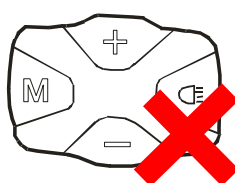
PLUS



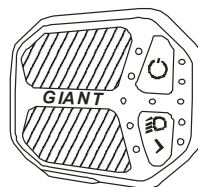
EVO-SG



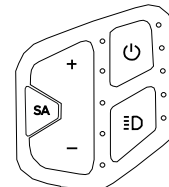
Remote ab 2017



Remote bis 2016



ONE / ERGO-SG ¹



ERGO 2-SG

¹ A display (e.g. PLUS or EVO-SG) or alternatively an ANT+ app for speed display is required for the initial setup of the tuning and for setting the speed limit.



Legal and Safety Notes / Product Liability

- **Operation of the eBike in public traffic is no longer permitted after installation of the module. The use is only allowed on private areas or designated test and race tracks.**
- **Damage caused in conjunction with the operation of the eBike will no longer be covered by private liability insurance after installation.**
- **Liability and warranty claims against the dealer or manufacturer of the eBike expire or are constricted.**
- **The eBike is subject to higher mechanical stress when operating at higher speed for which it is not designed. This results in additional safety risks.**
- **The installation and operation of the module is at your own risk. The manufacturer accepts no liability for damage that is connected with the operation of the device.**
- **Please inform yourself about possible further technical and legal consequences before installing the device.**

Technical Data

Housing dimensions:	37mm x 19mm x 9mm
Cable length:	approx. 140mm
Weight:	0,025kg
Power consumption:	0,1W
Supply voltage:	5VDC

Installation (Example: Giant Full E+ 0 Pro)

Required tools:

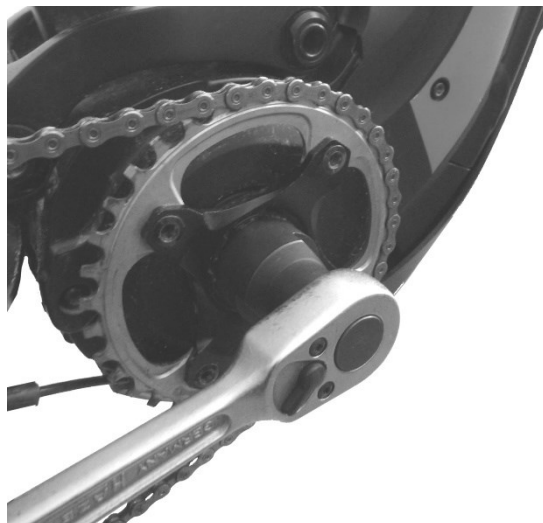
- Torx TX20 / TX25 / TX30 keys
- Allen key 6mm
- ISIS crank puller
- Lock ring tool for Giant / Yamaha PW-X
- Chain whip tool (optional)

Procedure:

1. Remove battery
2. Remove both cranks with Allen key 6mm and crank puller.

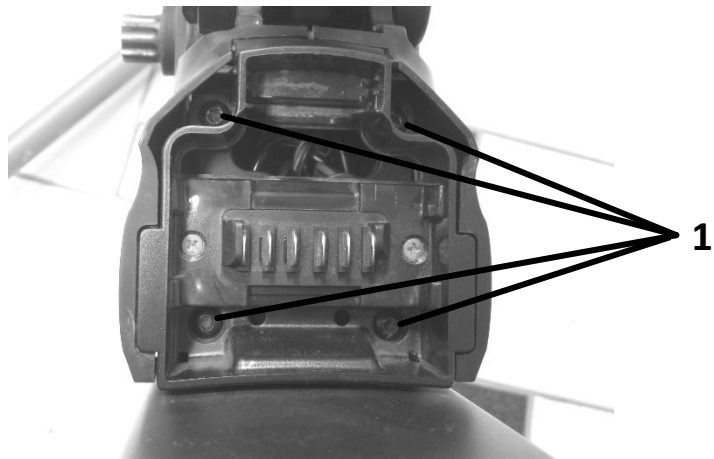


3. Remove lock ring from the chain ring with special tool. Attention: left-hand thread!
Remove chain ring.

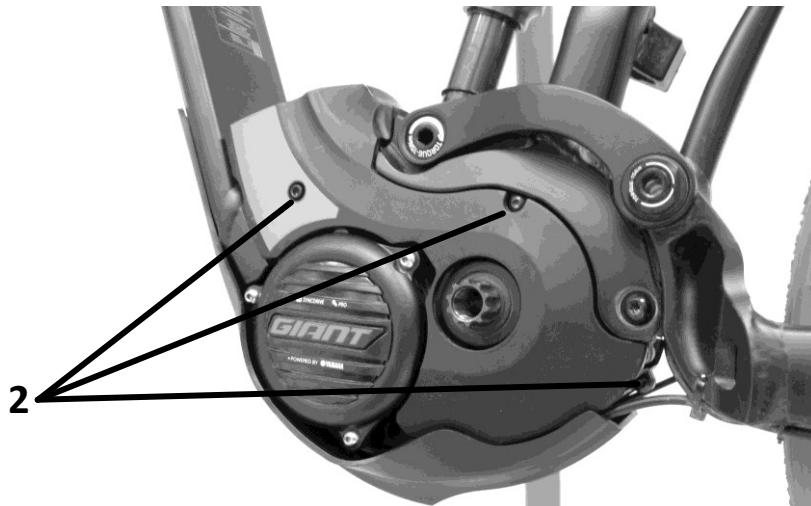




4. Remove screws (1) on the battery holder.



5. Remove screws (2) and left motor cover.

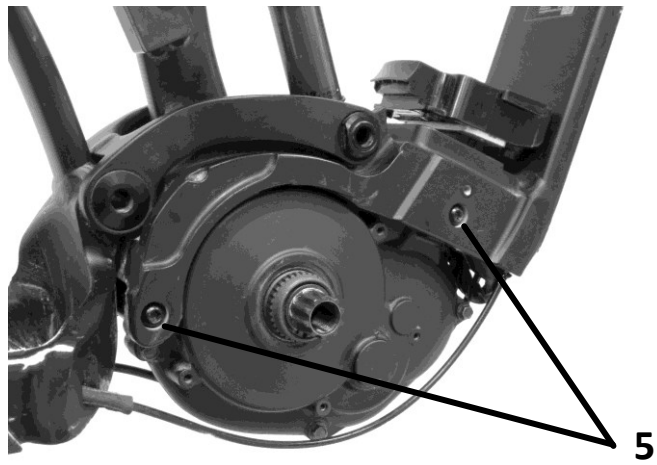


6. Unscrew screws (3) and remove skid plate. Then remove the right motor cover by loosening the screws (4).





7. Remove the motor mounting screws on the right (5).



8. Remove the left front motor mounting bolt (6) and loosen the rear (7).

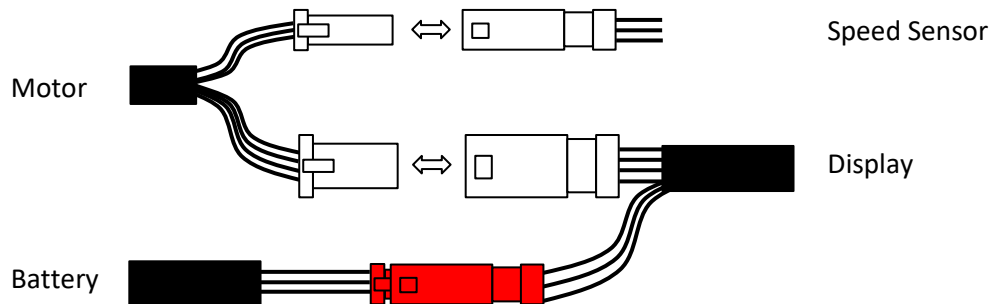


9. Lower the motor as shown.

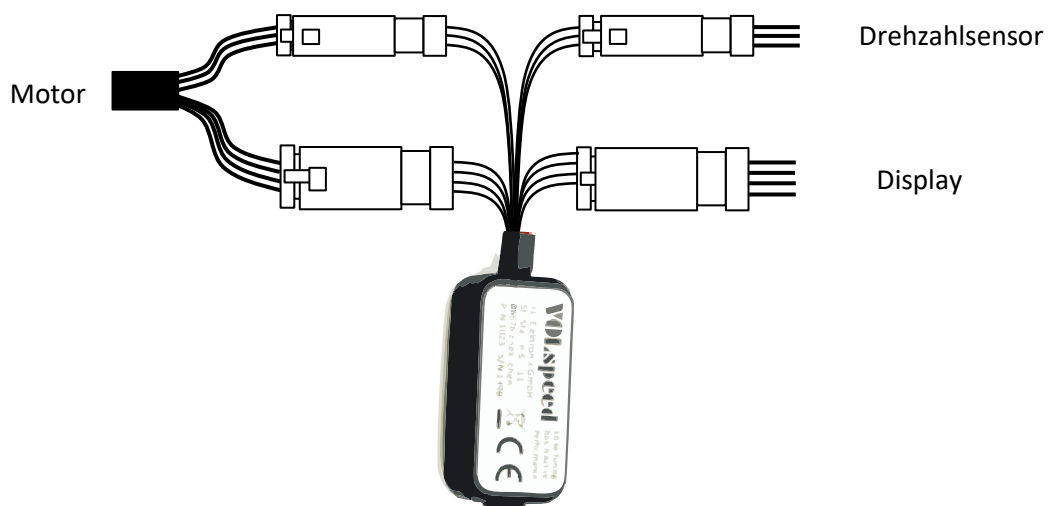




10. Remove the cables from the down tube and disconnect the white 8-pin connector to the display and the **white** 3-pin connector to the speed sensor. **Do not disconnect the red connector to the battery.**



11. Plug in the tuning module as shown



12. Insert the battery and carry out the initialization, see separate point setup.
13. If setup succeeds, remove the battery again.
14. Place the tuning module in the down tube and route the cable so that the motor can be fully folded up again.
15. Fold up the motor and reassemble the screws (6) and (7). Do not squeeze any cables. Then screw in the motor mounting screws (5) again.
16. Reassemble the skid plate and the side covers with the screws (2), (3) and (4).
17. Reassemble the battery holder with the screws (1).
18. Insert battery.

Setup

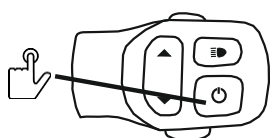
Before the first use of the tuning module or after conversion to another bike the setup must always be carried out first. Even in the case of malfunctions, a defined state of the module can be restored by executing the setup.



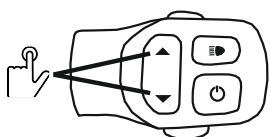
The following illustrations show the RideControl EVO. The operation of the other displays is identical, but not shown here.

If the display is set to mph, change the unit to km/h for the setup. For the EVO display, press the "I" button for 5 seconds.

If there is no display for speed indication, you can also use an app that shows the speed via ANT+.

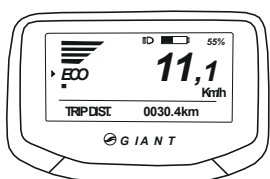


Turn on the eBike.

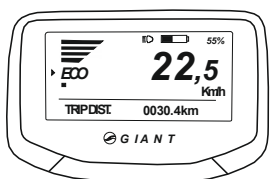


Press „arrow down“ twice, afterwards „arrow up“ twice and „arrow down“ twice again.

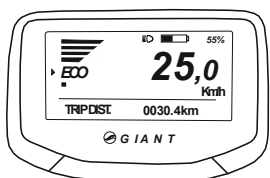
↓ ⇒ ↓ ⇒ ↑ ⇒ ↑ ⇒ ↓ ⇒ ↓



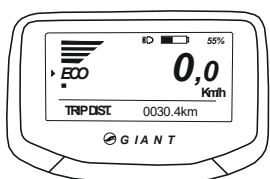
Speed 11.1 km/h is displayed for 10 seconds.



The wheel circumference stored in the drive unit is displayed for 5 seconds in centimeters. If necessary, adjust with the "arrow up" and "arrow down" buttons. Normally no adjustment is required.



Selection of bicycle type. Here you can set the maximum support speed of the bike without tuning with the arrow keys. Possible values: 20, 25, 32 and 45km/h. Default value: 25km/h



As soon as 0.0 km/h is displayed, the setup is finished.

Speed Mode

When speed mode is activated, the speed limit for the motor assistance is increased. The limit can be set freely.

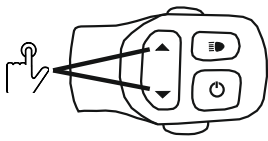
Turning off the eBike automatically turns off speed mode and must be reactivated after the bike is turned on.



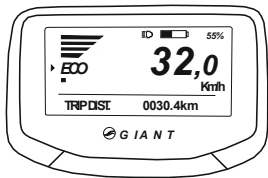
If there is no display to show the speed, an app that shows the speed via ANT+ can be used.

The limit can of course also be set without a display, simply by feeling.

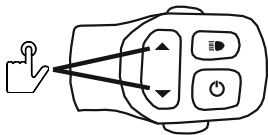
Activation / Limit adjustment



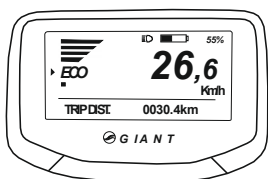
Press alternately "arrow down" and "arrow up" twice in quick succession.



Speed limit is displayed for 5 seconds.

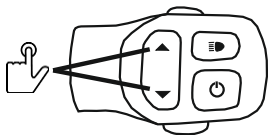


If desired, adjust the limit with the arrow keys. Possible values: 25..99km/h, S-Pedelec 45..99km/h. Default value 32km/h, S-Pedelec 52km/h. The set value is saved.

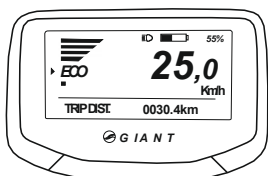


Display shows the normal driving speed again. Speed mode is active.

Deactivation



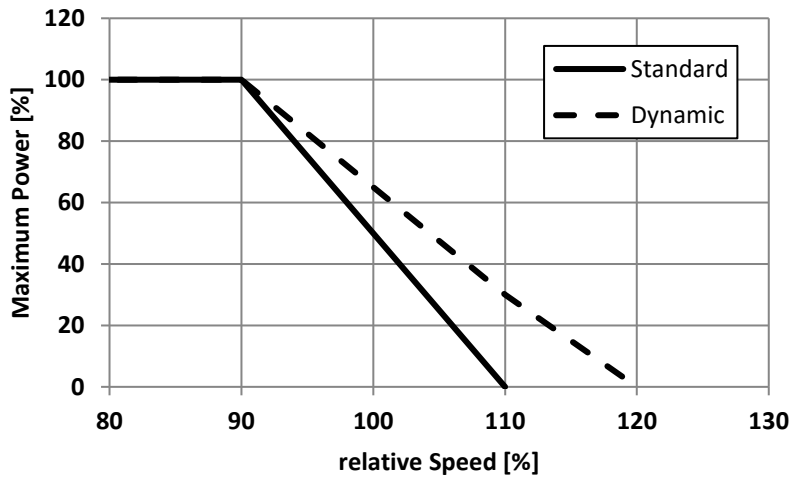
Press alternately "arrow down" and "arrow up" twice in quick succession.



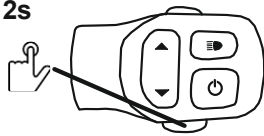
Display shows 25.0km/h for 2 seconds. Speed mode is off.

Dynamic Mode

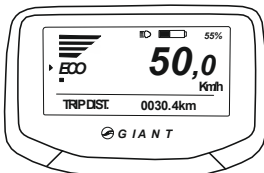
Exceeding the speed limit the motor power is reduced by default very much. A higher pedal force then results no longer in a higher speed, but in a lower motor assistance. For a more natural driving emotion in the dynamic mode the reduction is spread over a larger speed range, the so-called "wall effect" is significantly reduced and it can be driven with much more constant pedal force. The dynamic mode can only be activated when the speed mode is activated.



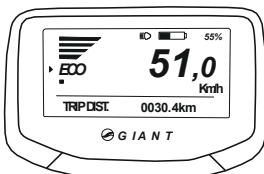
2s



While driving (> 10km/h), press the walk assist button for 2 seconds



Dynamic mode off: 50.0 km/h is displayed for 2 seconds.



Dynamic mode on: 51.0 km/h is displayed for 2 seconds.



FAQ

After installing the tuning, the error "Energy Pak Error" or "A4 error" appears on the display.

The two small 3-pin connectors of the tuning module were probably connected to the wrong mating connector. The red-painted connectors are the communication lines to the battery. If the tuning is plugged in there, the error appears. Put the red plugs back together and look for another white 3-pin connector and plug in the tuning there.

Is the total mileage correct even after removing the module?

Yes. The total km measured by the drive unit are not changed by the tuning. This is ensured by a continuously working compensation function in the tuning module. However, before removing the module, the bike should remain switched on at standstill with the speed mode switched on until it shuts off by itself. This will ensure that the compensation function has correctly adjusted the mileage. However, any wheel circumference adjusted during the setup does not affect the mileage of the drive unit and there are deviations after removing the module.

The displayed distance (Odometer, Trip) or the speed is not correct. What can I do?

Run the setup again. As a result, the current mileage is taken over from the drive unit in the tuning module and you have the opportunity to re-adjust the wheel circumference if necessary.



Technical Support

For questions, suggestions or problems please email or phone.

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86676 Ehekirchen

info@volspeed.de

phone: +49 (0) 8253 / 9279902

In addition to your request for support inquiries, please include the following information:

- Serial number and purchase number of the tuning module (S/N, P/N)
- eBike manufacturer, type and year of manufacture
- Display type (e.g. Charge)
- Drive unit type (e.g. Syncdrive Sport)

To ensure that you always have the device data, you can enter it here before installing the device:

Purchase number (P/N): _____

Serial number (S/N): _____

Disposal

The tuning module should be disposed of in an environmentally correct manner.

For EC countries:



Electronic devices are valuable materials and do not belong in the household waste.

Dispose of the product at the end of its life in accordance with applicable legislation.

