

QuickShifter easy

Install Guide for **QSE Sensor Kit (QSS-1)**

Disclaimer: Please read and follow these instructions carefully!

HealTech Electronics Ltd. and its distributors shall not be liable for any loss or damage caused by improper installation. If in doubt, please consult with your dealer.

The QSE Sensor is designed and manufactured by HealTech Electronics Ltd. Some installation methods shown in this document are patented and licensed from Starlane S.R.L.

1. Mount the QSE Sensor.

There are four typical install positions as shown below.

General mounting instructions for all positions:

- The sensor direction is not relevant. Make sure the sensor is not touching anything when the gearshift lever is operated up and down.
- The sensor has integrated washers. However, you must also use the included conical washers as described and shown on the images.
- When tightened, do not try to rotate the sensor body as it may be damaged.
- Use the supplied 4mm thick spacer ONLY IF the original bolt is recessed in the shift arm or shift lever (typical on some Italian bikes).
- For safety, you may use Loctite 243 Threadlocker (or similar glue) to make sure the nut or bolt won't get loose due to vibrations.

1a. QSE Sensor in the shift rod

Use this method if the bike has a shift rod and shifting to a higher gear pushes (compresses) the rod. Do NOT use when shifting to a higher gear pulls (extends) the rod. Place the conical washers at the two sides of the sensor like this: (0). Tighten the locknut to the washer **by hand fully** and then by **1/4 turn using a wrench**.



1b. QSE Sensor under the bolt of shift arm

Replace the bolt with the one supplied. Place the conical washers at the two sides of the sensor like this: (0). Tighten the bolt in this position by about **5 Nm**. If you do not have a torque wrench, tighten the bolt until the shift arm is tight on the gearbox shaft. In this install position, clutchless downshifts may work (*refer to the User's Guide*).



1c. QSE Sensor under the bolt of gearbox shaft (typically on KTM bikes)

Replace the bolt with the one supplied. Place the conical washers at the two sides of the sensor like this: (0). Tighten the bolt in this position by about **5 Nm**. If you do not have a torque wrench, tighten the bolt until the shift arm is tight on the gearbox shaft. In this install position, clutchless downshifts may work (*refer to the User's Guide*).



1d. QSE Sensor under the bolt of shift lever (typically on off-road bikes)

Replace the bolt with the one supplied. Place the conical washers at the two sides of the sensor like this: (0). Tighten the bolt in this position by about **5 Nm**. If you do not have a torque wrench, tighten the bolt until the shift arm is tight on the gearbox shaft. In this install position, clutchless downshifts may work (*refer to the User's Guide*).



2. Neatly route the QSE Sensor cable to the module and connect the 2-pole plug.

Do not route the sensor cable close to the ignition coils.

Do not route the cable very close to the exhaust pipe or cylinder head.

3. Use the cable ties supplied to secure the QSE Sensor cable.

Keep enough slack in the cable at the sensor for up and downshifts.

Do not over tighten the zip ties to avoid damaging the cable.

4. When the installation is complete, you need to set the *Sensor threshold* parameter through the *QuickShifter easy* app. Refer to the **User's Guide** for setup and troubleshooting instructions.

5. After the first few rides, **check the bolt/nut tightness**. Normally it is needed to retighten by about 25 degrees (only once after the installation). Then verify the sensor value and adjust the *Sensor threshold* if necessary.

For assistance, please contact us: support@healtech-electronics.com