

# 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](mailto:support@healtech-electronics.com)