QuickShifter easy (iQSE)

User's Guide

For the most current version of this document, please visit:

www.healtech-electronics.com/QSE

1. Foreword

Congratulations on your purchase of a *HealTech QuickShifter easy* (iQSE) - next generation standalone quickshifter module.

The iQSE is the only quickshifter module on the market which utilizes Bluetooth technology for setup and function tests. Can even be disabled with a few taps to restore factory condition e.g. for servicing the bike.

The unit comes with a special ring sensor which is extremely simple to install and works on all motorcycles (also with reverse/race shift pattern). It's a robust design, has no moving parts and works in every situation. Sensitivity (threshold) can be adjusted precisely to your riding style.

The iQSE comes with the widest range of Plug 'n go harness kits which suit hundreds of different motorcycles.

2. Device compatibility

iOS devices:
Made for iPhone 4s, iPhone 5, iPhone 5s, iPhone 5c, iPhone 6, iPhone 6 Plus, iPhone 6s, iPhone 6s Plus, iPad 2, iPad Retina, iPad Air, iPad Air 2, iPad Pro, iPad Mini, iPad Mini 2, iPad Mini 3, iPad Mini 4 and iPod touch running iOS 8.1 or later.

"Made for iPhone" and "Made for iPad" mean that an electronic accessory has been designed to connect specifically to iPhone or iPad, respectively, and has been certified by the developer to meet Apple performance standards.
iPhone, iPad and iPod touch are trademarks of Apple Inc. registered in the U.S. and other countries.

Android devices:
All phones and tablets running Android 2.3 or later.

The QuickShifter easy (QSE) Android app is NOT compatible with the iQSE module. If you have installed this app earlier, MAKE SURE to update to the latest app version (1.9.1 or later), otherwise a connection attempt to the iQSE module will destroy its firmware. A new Android app for iQSE will be released in January, 2016.

3. How to Setup unit

1. **Install the module and sensor** as per the supplied Install Guide.

2. **Install the *QuickShifter easy* (iQSE) free app** on your device.
   In the App Store, search for **HealTech** to find the app.
   If you do not find it yet, please contact us for a download link.

3. **Turn the ignition key ON**.
   The iQSE LED light should light up in GREEN color then change to solid RED. This confirms that the unit has power and ready for use.
   If the LED turns off in a short while or does not light up, you need to have the engine running to establish the Bluetooth connection.

4. Start the iQSE app and connect to the module as instructed.

5. **Start the engine and let it idle**.
   Open the *RPM setup* menu and verify the **Engine speed**.
   Adjust the parameters here if necessary.
   Make sure the iQSE LED light turned to solid GREEN, which means the unit receives the RPM signal correctly.

6. Under the *Sensor setup* menu, adjust the *Sensor threshold* parameter.
   If the signal is weaker than 30% for an upshift motion, change the bolt or nut tightness and check the signal level again. If the signal is still weaker than 30%, remove the washers (leaving the sensor only) and check the signal level again.

4. LED status codes

Solid RED	Unit is powered up. Engine is not running or RPM signal is not received.
Solid GREEN	Unit is powered up. Engine is running (RPM signal is received).
Flashing RED	Error detected. Connect to the application to see the problem.
Flashing GREEN	Bluetooth interface is in standby (typically, while riding). Stop the engine if you wish to connect.
Alternating color	Shift signal detected, data is sent to the module or firmware update is in progress.

5. Frequently Asked Questions

Please read our iQSE FAQ before sending a question:
http://www.healtech-electronics.com/app/iqse/faq_en/

6. Troubleshooting

In case of problems or concerns, please check out our Troubleshooting Guide:
http://www.healtech-electronics.com/app/iqse/trb_en/

7. Warranty

Disclaimer: Do not attempt to install the product if you don't have basic mechanical skills. HealTech Electronics Ltd. and its distributors shall not be liable for any loss or damage caused by improper installation or setup. Please read the instructions carefully. If the gearshifts are not smooth, do not force the shift lever but use the clutch until you fine tune the settings.

To ensure trouble-free operation from the start, all units have been extensively tested prior to shipment. For this reason, please make sure you followed the install steps carefully and check the connections and settings before you report a problem.

The product is covered by our 2-year replacement warranty from the date of purchase.

The warranty does not apply to product that has been subjected to misuse, fitted incorrectly or there's a visible damage e.g. from a crash.

Web: ***www.healtech-electronics.com***

Email: *support@healtech-electronics.com*

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.
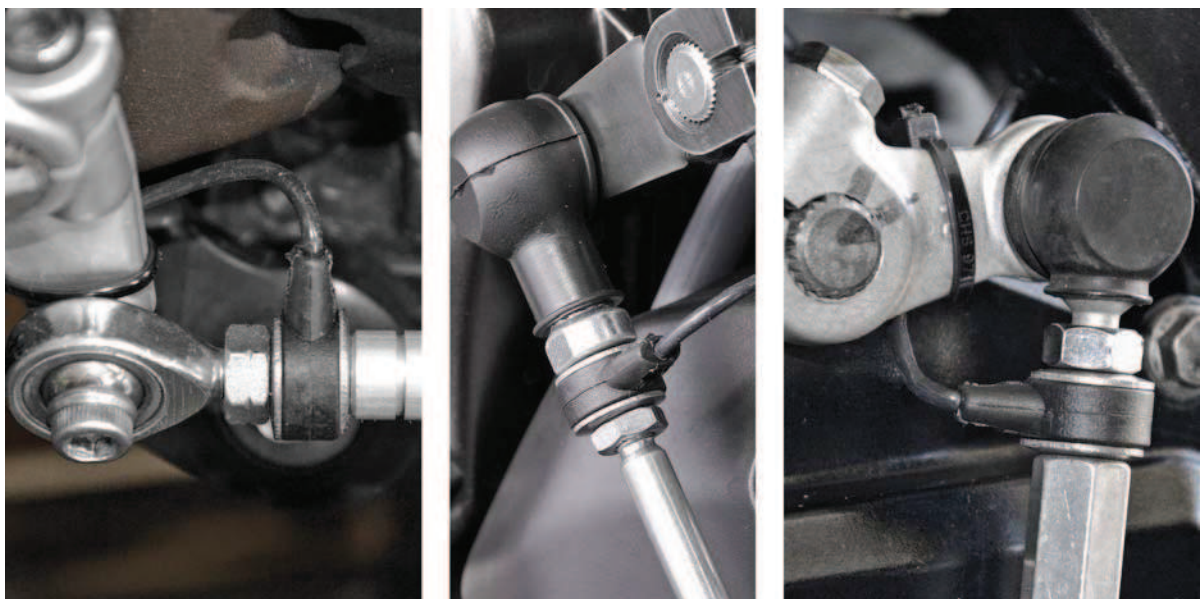
1. **Mount the QSE Sensor.**
   There are four typical install positions as shown below.

   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 tighten by about 1/8 turn (only once after the installation).

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