

# QuickShifter easy

## User's Guide

### 1. Foreword

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

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

The unit comes with a unique 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.

### 2. Installing the app and making the initial settings

1. **Install the module** as per the supplied Install Guide.
2. **Install the *QuickShifter easy* free app** on your Android phone or tablet.  
In the Google Play Store, search for **HealTech** to find the app.  
Alternatively, follow this direct link:  
<https://play.google.com/store/apps/details?id=com.healtech.quickshiftereasy>
3. **Turn the ignition key ON.**  
The QSE LED light should light up in GREEN color then change to solid RED. This confirms that the unit has power and ready for use.
4. Press **Menu** → **Connect** to connect to a new QSE module. The code for Bluetooth pairing: **4325**  
If, for some reason you can not pair with the module from the app, try it under the phone's Bluetooth connections. If you are a dealer and have more QSE modules paired, you can remove them with a long press, when the (x) sign appears.
5. When the module is connected for the first time, it is advised to **tap the *Reset to defaults* button** under the Settings screen as it sets the typical values.
6. **Start the engine and let it idle.**  
Press **Menu** → **Settings** and setup/verify the **Engine speed**. Refer to chapter 4.  
Make sure the QSE LED light turned to solid GREEN, which means the unit receives the RPM signal correctly.
7. The main screen shows nine RPM ranges. Go to Settings and **set the First RPM and Last RPM values** to suit your bike.  
There is no ignition cut-off below the First RPM, so we recommend setting it well above idle speed to ensure the engine won't stall when you put the gearbox in first gear.
8. **Adjust the Sensor threshold.**  
Refer to chapter 4.

9. **Set the engine cut-off times on the main screen** for different RPM ranges. Start with the default cut-off times and adjust if necessary. If your bike has less than 4 cylinders, typically larger values are needed. If the gearbox makes a strange noise or does not take a gear, increase the values. If the gearshift is smooth but not quick enough, reduce the values.  
Do NOT go below the default cut-off times unless you are a racer and you know what you are doing. It is safer to use larger values than smaller.
10. After making the desired changes and you wish to store it in the module, press **Menu** → **Upload**. When the module is connected next time, the settings will be loaded automatically to the app from the module (even if you replace your phone). You can store and recall your favorite settings by pressing **Menu** → **File**.  
*Note: While the module is connected, it always responds to a change in the application. However, if you turn off the ignition key before tapping on Upload, the module will revert back to the previous settings.*

### 3. LED status codes

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

### 4. Settings menu in the app

#### **Bypass mode (disable QSE):**

Check this option if you wish to disable the QSE module.

#### **Engine speed:**

Shows the actual RPM detected by the module. Check and make sure it is in sync with the tachometer of your bike. Otherwise, change the **Pulses per rev** number here.

#### **Sensor current / maximum value:**

Shows the current and maximum readings from the QSE sensor.  
The harder and quicker you make a gearshift, the larger number you see.

*Note:* This parameter is not available when an NC/NO switch is used.

#### **Switch status:**

Shows the status (*On* or *Off*) when a standard (*Normally Closed* or *Normally Open*) switch is used.

*Note:* This parameter is not available when the QSE sensor is selected.

**Sensor threshold:**

Sensitivity (threshold) can be adjusted precisely to your riding style. Adjust this number to cut the ignition at the optimal force on the gearshift lever.

Use the **Sensor logging** feature to find the optimal value (follow the instructions on the screen, or see the *Troubleshooting* chapter, step 6).

When riding the bike with QSE enabled and doing full throttle clutchless upshifts:

- If the shift lever is too hard, adjust the threshold LOWER.
- If you experience unwanted cut-offs e.g. when touching the shift lever lightly, adjust the threshold HIGHER.

*Note:* Engine cut-off is disabled under the First RPM value. When using an NC/NO switch, refer to the instructions received with your sensor.

**First RPM:**

This will be the first RPM number on the main screen.

Engine cut-off is disabled under the First RPM value, so we recommend setting it well above idle speed to ensure the engine won't stall when you put the gearbox in first gear.

**Last RPM:**

This will be the last RPM number on the main screen.

Enter the RPM number where the red zone starts on your tachometer.

The ignition will be cut-off for the duration set by the last RPM row if the shift occurs above that RPM.

**Cut-off delay:**

Increase this value only if the cut-off happens too quickly AND you can't adjust the Sensor threshold further. Normally leave it at zero.

**Cut-off test:**

When the engine is running, you can test whether the engine cut-off function works normally or not.

**Allow cut-off when RPM is falling:**

If checked, you may do clutchless downshift with partial throttle from the higher gears.

The sensor must be installed under the bolt (not in the rod) to detect both directions.

Caution: Use with care! If the downshift is not smooth on your bike, use the clutch!

**Use normally open output:**

If you connect the QSE to the ignition coils or injectors, leave this option unchecked.

*Note:* This parameter is available only with the QSE-2 module.

**PIN code:**

You can setup a personal PIN code (1 to 4 digit long) to make sure no one else has access to your module. If you replace your phone or connect from another phone, you'll have to enter the PIN code at the first connection.

Beware, if you forget your personal PIN code, you'll have to return the module to us to clear it.

If you wish to disable the PIN code protection, enter the current PIN and leave the new PIN fields blank.

*Note:* The PIN code is not related to the Bluetooth pairing code.

**Sensor type:**

Select whether you use the QSE sensor or a standard push or pull QuickShifter sensor from a different manufacturer, such as the *Nextup* switch.

You may also use a handlebar mounted switch, like the passing light switch to trigger the cut-off when racing rules do not allow a foot operated QuickShifter.

## 5. Troubleshooting

1. Make sure you are running the **latest app** version (**Menu** → **About**). Otherwise, update from the Google Play Store.  
On some phones, you need to press a button longer to open the menu.
2. **Start the engine** and let it idle.  
Make sure the QSE LED light turned to solid **GREEN**.
3. **Connect to the module** and make sure the app shows "**Connected**".  
Check whether the **RPM indication** under *Settings* is correct.
4. Press the **Reset to defaults** button (at the bottom of the Settings screen).
5. Under the Settings, set the **Cut-off test** to 140ms.  
Press the *test button* and see if the engine stops for a short time or not.  
The engine should stop momentarily (or even completely) when you push the *Cut-off test* button. This proves the module's output is working.  
Otherwise, disconnect the module and connect the supplied 4-pole **Jumper-plug**.
6. Under the *Settings* menu, start the **Sensor logging** and follow the instructions on the screen:
  - Put the bike on a rear stand and have the side stand UP.
  - Put the gearbox in TOP gear. Sit on the bike normally.
  - Without the engine running, or with the engine running at idle and clutch pulled in, do a SHIFT UP motion 6 times with your normal shift speed and force.
  - See the average value of the six shifts and divide by two.
  - Set this number for the **Sensor threshold**. E.g. if you see the six shifts ranging from 35 to 45, then set 20 for *Sensor threshold*.
7. Press **Menu** → **Upload** to store the changes in the module.
8. **Road test** the bike and do **full throttle clutchless upshifts**. Fine tune the Sensor threshold if necessary:
  - If the shift lever is too hard, adjust the threshold LOWER.
  - If you experience unwanted cut-offs e.g. when touching the shift lever lightly, adjust the threshold HIGHER.
  - If you still experience a problem with the shifts, mount the sensor in an alternative position. Refer to the sensor install guide.

## 6. Warranty

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.

Our dealers are offering a 30-day money-back guarantee on HealTech products if the product does not fulfill your expectations. (*All parts must be returned in original condition for full refund.*)

Furthermore 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.

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