

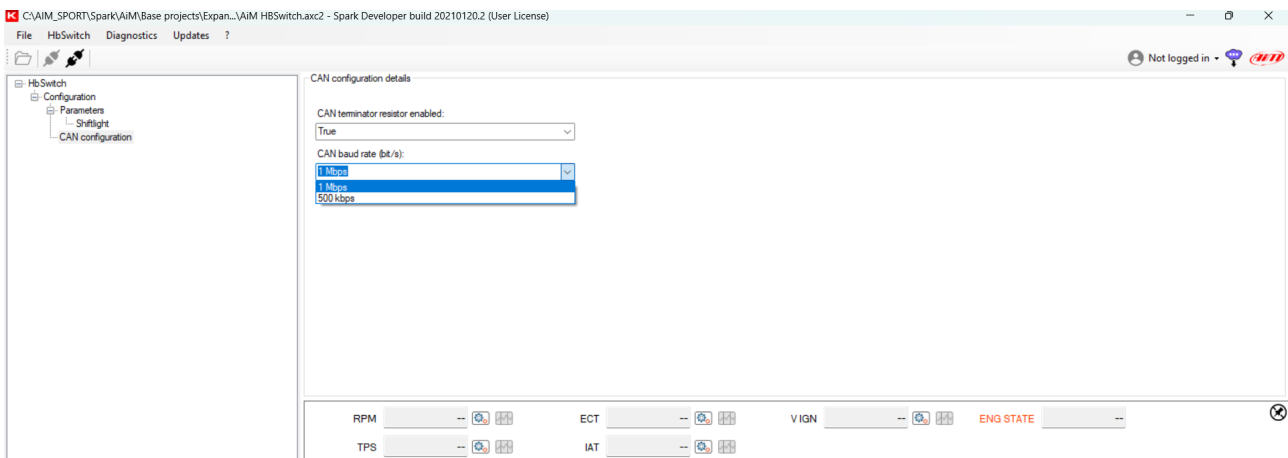
HBS CAN Baud rate programming

Handlebar Switch (HBS) typically exchanges data with the ECU at a baud rate of 1 Mbit/s but it must now operate at 500 kbit/s so to avoid communication issues with the new Taipan K. The OEM wiring of the new 2-stroke motorcycles compatible with Taipan K – unlike all other motorbikes we are compatible with which run at 1 Mbit/s – has a CAN line operating at a baud rate of 500 kbit/s.

In addition, please note that the UC Bridge and its communication with the computer are CAN based with a Baud rate of 1 Mbit/s. Therefore if HBS is configured to 500 kbit/s it will no longer be possible to communicate with Spark unless a recovery procedure is performed to reset the HBS speed back to 1 Mbit/s, as explained in this document.

To manage the baud rate change you need to:

- connect HBS to UC Bridge and
- run Spark software: the software will recognize HBS
- open an Handlebar Switch project
- connect to HBS and
- change the baud rate to 500 kbit/s under CAN configuration, as shown below



Please note: once the configuration with the new bit rate is sent, it will no longer be possible to communicate with the HBS using Spark software but the system will correctly work connected to Taipan K.

To go back to the previous Baud rate configuration you need to hold down both buttons on the HBS and – at the same time – connect it to the PC using the UC-Bridge while still holding down the two buttons.

If the procedure has been correctly performed the 10 blue and red LEDs on the HBS will light up alternately from the "MAP" LED to the "5" LED to indicate that the procedure has been successfully performed and the HBS is back communicating at a baud rate of 1 Mbit/s. You can now reconnect to Spark and adjust the configuration again if needed.



Please note: while now you can communicate with the HBS at 1 Mbit/s, if a configuration with a CAN baud rate of 1 Mbit/s is not written and the device is turned off and back on, it will revert to communicating at 500 kbit/s. Therefore, **to permanently configure the HBS from 500 kbit/s to 1 Mbit/s**, the recovery procedure must be performed as explained earlier, and a configuration for the HBS with a CAN baud rate of 1 Mbit/s must then be written.