HOW to use

# bluecoin preparation

## BlueCoin can be powered by a battery connected to the specific connector on the cradle or via a USB cable. If it is powered with the provided battery then this one must be connected before continuing to the next points

## BlueCoin cradle must be screwed into the provided plastic case

## BlueCoin must be connected to the cradle and screwed into the same plastic case

## SD Card must be inserted into the BlueCoin cradle

# bluecoin logging on sdcard

## BlueCoin can be switched on by pressing the PWR button for 3 seconds

### If no SD card is inserted, a led will be solid red (Fig. 1)

### If an SD card is recognized, 4 led will be solid red and one will blink twice (Fig.2, Fig. 3)

## If the SD card is correctly recognized, BlueCoin is ready. A led will keep blinking throughout the operation (Fig. 4, Fig, 5)

## To start logging data just press SW2 button

## BlueCoin will wait 2 seconds and then it will start writing data on the SD card

## While logging, one led will be solid red (Fig. 6, Fig. 7)

## Logging will stop automatically after 10 seconds, or it can be stopped by pressing SW2 button again

# model creation

## The good state motor log must be put in LOGS folder

## When launching the program for the first time or if MODELS folder does not contain the model files, it will take the log specified in the variable **GoodFile** and will use it to identify and save a model for each sensor axis

## All models can be found in the MODELS folder

# fault detection

## All the logs must be put in LOGS folder

## After launching the program, each log will be analyzed and a window will show a plot for each sensor and a description of the result of the analysis

### The description is contained in a square which will visually show the result: green background (all sensor axes follow the model), yellow background (more than 4 sensor axes follow the model) and red background (less than 4 sensor axes follow the model).

### Each value is followed by a X (sensor axis does not follow the model) or a ✓ (sensor axis follows the model)

# ../../../Downloads/WhatsApp%20Image%202017-12-19%20at%2014.10.23.jpe../../../Downloads/WhatsApp%20Image%202017-12-19%20at%2014.10.46.jpe../../../Downloads/WhatsApp%20Image%202017-12-19%20at%2015.13.20.jpe

Fig. 3

Fig. 2

Fig. 1

# ../../../Downloads/WhatsApp%20Image%202017-12-19%20at%2015.13.42.jpe

Fig. 7

Fig. 6

Fig. 5

Fig. 4