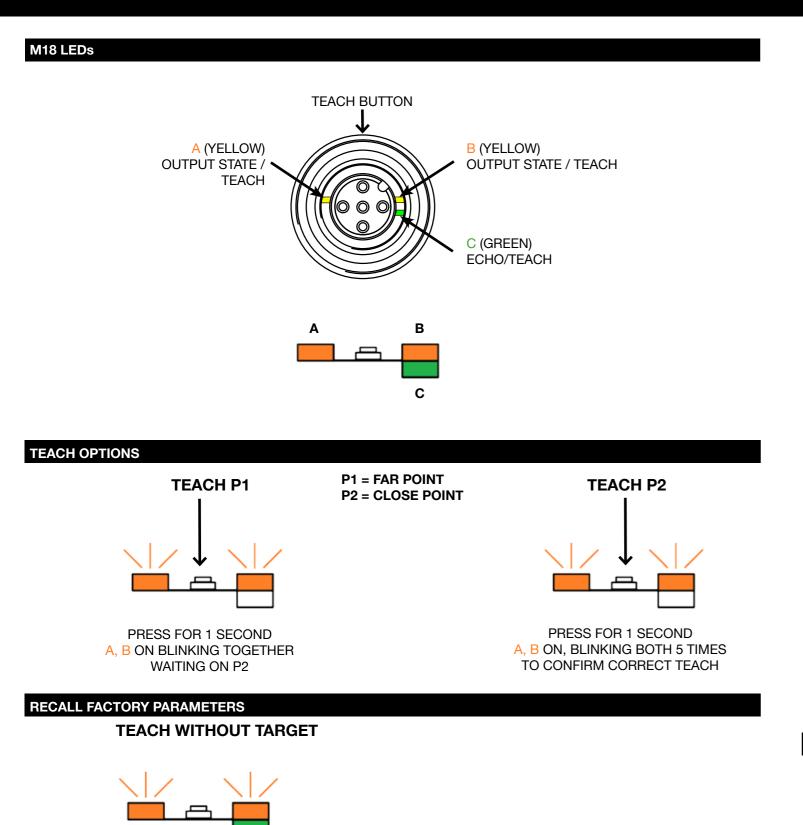
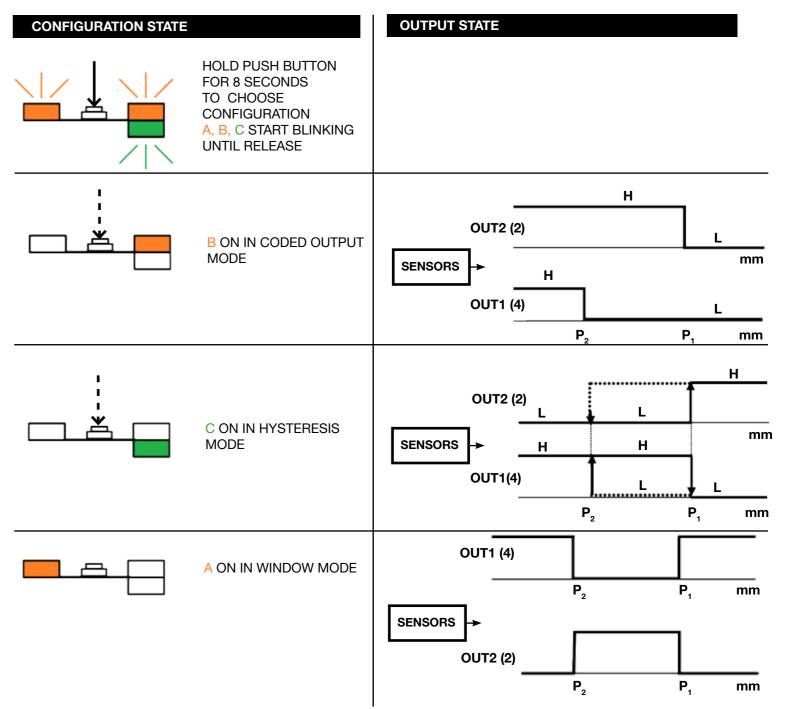
## double digital output

UST-M18#S-#S Created: 12/07/2016

A, B, C ON, BLINKING 5 TIMES TOGETHER





## **SYNCHRONISATION**

SYNC pin allows the possibility to synchronize multiple ultrasonic sensor to avoid cross talk. 2 different way to synchronize sensor are possible:

- 1. SYNCHRONISATION: Link the SYNC pin of all sensors within a limited area to each other. Release floating the sync line at power on. This triggers the measurement of all sensors at the same time. Interference signals which arrive later at the sensor due to their longer sensing distance, will be ignored. Up to 10 sensors can be synchronized via SYNC pin.
  - NOTE: If the target have a non linear shape or the sensor are placed in different positions this way to operate loses its effectiveness
- 2. MULTIPLEXER (MUX): Link the control pin of all sensors to each other. Connect to ground the sync line at power on then after 5 sec release the SYNC line. While the first sensor is measuring, the other sensor are disabled. After the first measurement is completed, the second sensor is allowed to send and receive its signals. After the second sensor the third sensor became active and so on. In maximum 4 sensors can be interconnected. The multiplex function increases the sensor response as follow:

Response\_time= (Response\_time \*N)+ T\_elab where

T\_elab= 25 ms

N= number of the sensor connected

