Q5X BASICS

1. With 2000 mm models on black/dark targets and highly reflective targets, set the "SPd" to 50ms
2. With 5000 mm models on black/dark targets set "GAin" to "Blac" and for highly reflective targets, "ShnY"
3. If using a reflective target, put a 5-15° tilt on the sensor to avoid specular reflection
4. Always try and make sure the green "STB" light is solid on the display of the sensor
5. Locking and Unlocking The Sensor - Press and hold the "+" button and tap the "-" button four times. This can both lock and unlock the Q5X sensor and the display with flash the condition ("Loc" or "uLoc").

Q5X Factory Default Reset

1. Press and hold the MODE/- button for more than 2 seconds until "out" shows up on the display.
2. Press the MODE/- button once. The display will read "rSEt" for Reset.
3. Press Select/TEACH button to enter the Reset submenu.
4. The display should read "no". Press the "-" button once. The display will read "yes".
5. Press the SELECT/TEACH button to reset the sensor to factory defaults and return to Run mode.
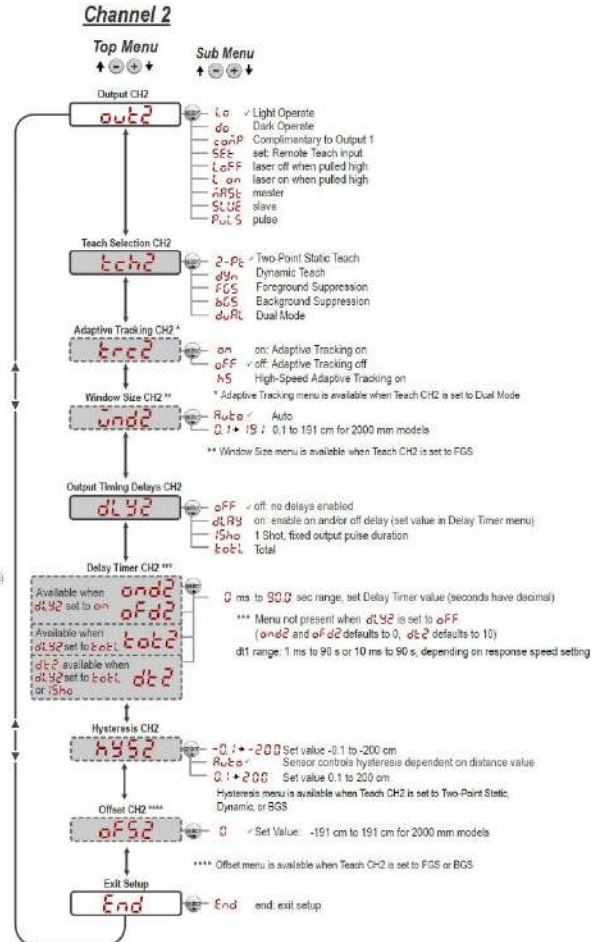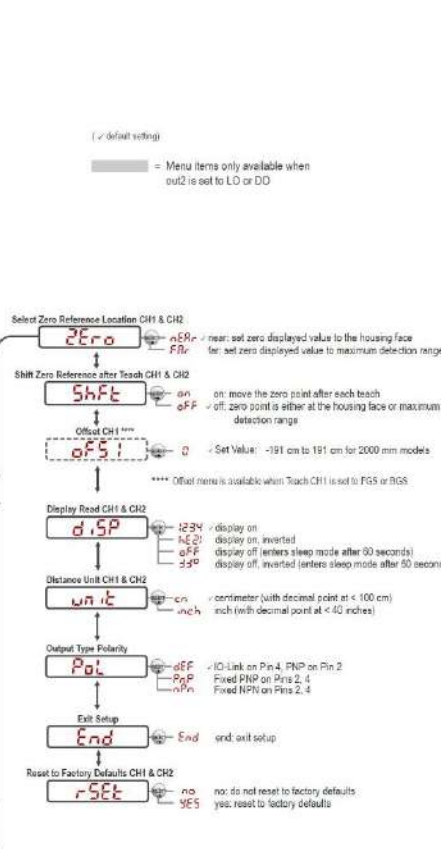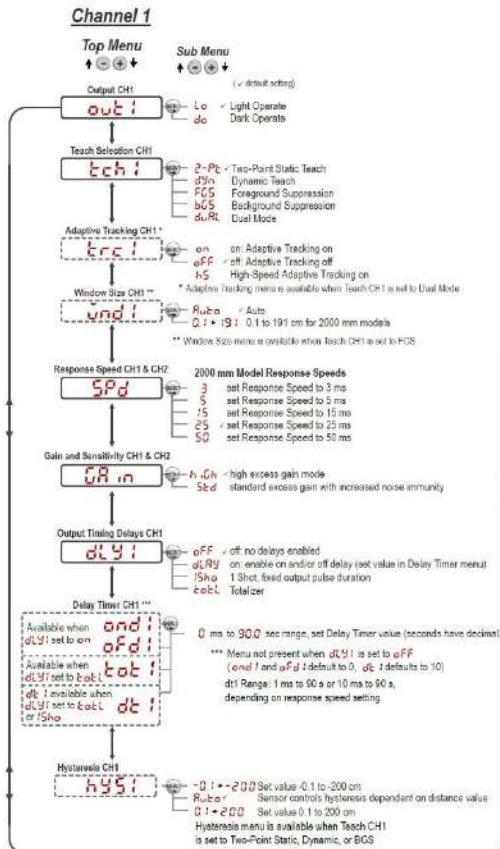
Q5X Adjust Switch Point/ Window Size

1. In run mode click + or – button (momentary). Current switch point will display (flashing slowly)
2. Use + and – buttons to in adjust position.
3. Click SELECT/TEACH to confirm the adjusted switch point

Q5X Active TEACH Indicators (DYN, FGS, and BGS)

1. Two-point TEACH mode selected (default) – DYN, FGS, and BGS all off
2. Dynamic TEACH mode selected – DYN on
3. Foreground suppression TEACH mode selected – FGS on
4. Background suppression TEACH mode selected – BGS on
5. Dual TEACH mode selected – DYN, FGS, and BGS all on

Channel 1 / Channel 2 menu navigation diagrams
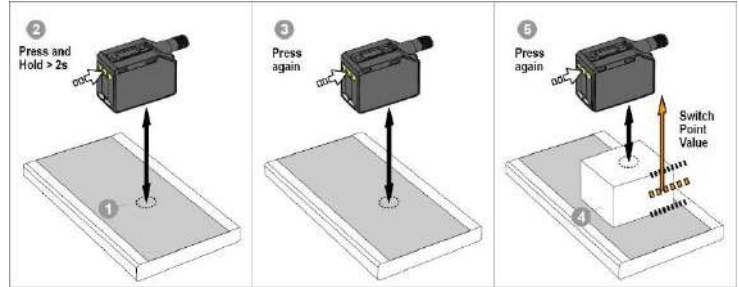
Q5X – Set Teach Mode

The Q5X has 5 teach modes, Two Point Teach (**2-Pt**), Background Suppression (**BGS**), Foreground Suppression (**FGS**), Dynamic Teach (**DYn**), and Dual Mode (**duAL**). These can be accessed with the following steps

1. Press MODE for 2 seconds ("out" will show in display, press + to get to "tch")
2. Click SELECT / TEACH
3. Click + / - until the desired teach mode appears on the display (see above for abbreviated names)
4. Click SELECT/TEACH to select mode
5. Press and Hold SELECT/TEACH for 3 seconds to exit menu and return to run mode.

Q5X-TWO POINT TEACH ("2-pt" MODE on sensor) Sets a single switch point midway between two targets

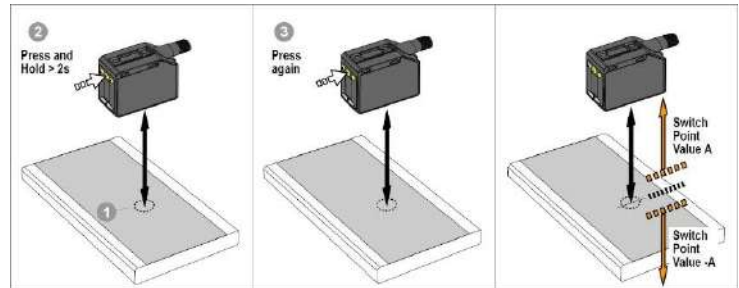**TO PROGRAM THE SENSOR FOR THE APPLICATION**

1. Press TEACH for longer than 2 seconds:
2. The display will flash between SEt and 1St.
3. Focus laser on target
4. Press SELECT / TEACH to teach first point
5. The display will flash between SEt and 2nd.
6. Place 2nd part under laser.
7. Press SELECT / TEACH to teach second point

THE DISPLAY WILL FLASH THE SWITCH POINT THEN
THE SENSOR WILL RETURN TO RUN MODE

Q4X-Contrast + Distance Detection ("DuAL" MODE on sensor) Sensor will switch off at less than 75% of reference intensity and distance (Teach reference target on fixture (on / 100)

TO PROGRAM THE SENSOR FOR THE APPLICATION

1. Press TEACH for longer than 2 seconds (sensor will flash between SEt and on)
2. Focus laser on surface that is fixed where the object will pass through
3. Press SELECT / TEACH to teach 100% intensity, display will flash and read 100P
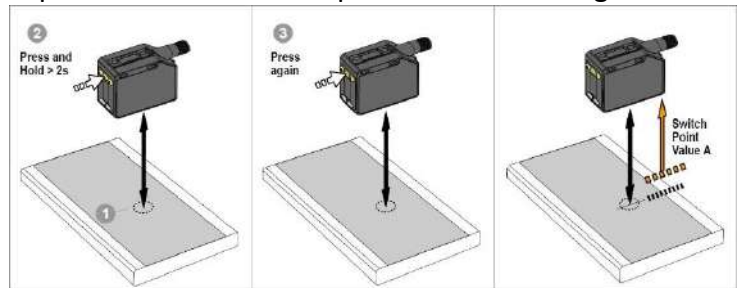
THE SENSOR WILL RETURN TO RUN MODE

Q4X-BACKGROUND SUPPRESSION ("BGS" MODE) switch point set based on the position of the background

TO PROGRAM THE SENSOR FOR THE APPLICATION

1. Press TEACH for longer than 2 seconds
2. Focus laser on target (part)
3. Press SELECT / TEACH to teach the part position

THE DISPLAY WILL FLASH THE SWITCH POINT THEN
THE SENSOR WILL RETURN TO RUN MODE

Q4X-WINDOW DETECTION ("FGS" MODE on sensor) Sets a window around a target.

TO PROGRAM THE SENSOR FOR THE APPLICATION

1. Press TEACH for longer than 2 seconds
2. Focus laser on target (part)
3. Press SELECT / TEACH to teach the part position

THE DISPLAY WILL FLASH THE SWITCH POINT THEN
THE SENSOR WILL RETURN TO RUN MODE