Your Global Automation Partner

TURCK

Ultrasonic Sensors
Programming Instructions

Manual

High-End Series Programming

Single switch point
Output 1;

1. Press and hold teach button 1 (2-7 seconds) until the LED's are flashing green at 1 Hz for output 1. Once the LED's are flashing at the correct frequency release button 1.
2. Set the transmitter at the desired switch point distance.
3. Press and hold teach button 1 (2-7 seconds) until the LED's are flashing yellow at 1 Hz. Once the LED's are flashing at the correct frequency release button 1.
4. If the LED's flash Green at 5 Hz after you let go of teach button 1, teach was accepted.

Output 2; (output 2 must be setup for a switch point factory configured 4-20mA)

1. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing green at 2 Hz for output 2. Once the LED's are flashing at the correct frequency release button 1.
2. Follow steps 2-4 above.

Retro-reflective teach

1. Press and hold button 2 (20-25 seconds) the LED's will flash yellow at a frequency of 1 Hz, Once LED's are flashing yellow depress button
2. If the LED's flash Green at 5 Hz teach was accepted.

Changing output logic (N.O. / N.C.)
Output 1;

1. Press and hold teach button 1 (2-7 seconds) until the LED's are flashing green at 1 Hz for output 1. Once the LED's are flashing at the correct frequency release button 1.
2. Press and hold teach button 1 (14-19 seconds) until the LED's are flashing yellow at 3 Hz. Once the LED's are flashing at the correct frequency release button 1.
   A. If the LED's flash Green at 5 Hz after you let go of teach button 1, unit has been set for N.O.
   B. If the LED's flash Yellow at 5 Hz after you let go of teach button 1, unit has been set for N.C.

Output 2;

1. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing green at 2 Hz for output 2. Once the LED's are flashing at the correct frequency release button 1.
2. Follow step 2 above.

Changing Dual switch points (Window / Hysteresis mode, note if setting up a Hysteresis it is easier to setup in window and change to hysteresis mode.)
Output 1;

1. Press and hold teach button 1 (2-7 seconds) until the LED's are flashing green at 1 Hz for output 1. Once the LED's are flashing at the correct frequency release button 1.
2. Set the transmitter at the desired start point (window) / set point (hysteresis).
3. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing yellow at 2 Hz. Once the LED's are flashing at the correct frequency release button 1.
4. Set the transmitter at the desired end point (window) / reset point (hysteresis).
5. Press and hold teach button 1 (2-7 seconds) until the LED's flash green at 1 Hz. Once the LED's are flashing at the correct frequency release button 1.
6. If the LED's flash Green at 5 Hz after you let go of teach button 1, teach was accepted.

High-End Series Programming (continued)

Output 2;

1. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing green at 2 Hz for output 2. Once the LED's are flashing at the correct frequency release button 1.
2. Follow steps 2-6 above.

Changing dual switch point logic (Window / Hysteresis, factory default mode is window.)
Output 1;

1. Press and hold teach button 1 (2-7 seconds) until the LED's are flashing green at 1 Hz for output 1. Once the LED's are flashing at the correct frequency release button 1.
2. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing yellow at 2 Hz. Once the LED's are flashing at the correct frequency release button 1.
3. Press and hold teach button 1 (8-13 seconds) until the LED's flash green at 8 Hz. Once the LED's are flashing at the correct frequency release button 1.
4. If the LED's flash Green at 5 Hz after you let go of teach button 1, output logic has been changed.

Output 2;

1. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing green at 2 Hz for output 2. Once the LED's are flashing at the correct frequency release button 1.
2. Follow steps 2-6 above.

Changing output 2;

1. Press and hold teach button # 2 until the desired LED frequency is meet. Once the LED's are flashing at the correct frequency release button 2.
   A. 1 Hz Yellow LED = Current output (4…20mA)
   B. 2 Hz Yellow LED = Voltage output (0…10 V)
   C. 3 Hz Yellow LED = Switch point

Factory Reset;

1. Press and hold teach button 1 (14-19 seconds) until the LED's are flashing green/yellow at 2 Hz.
2. Press and hold teach button 1 (2-7 seconds) until the LED's flash green at 8 Hz. Once the LED's are flashing at the correct frequency release button 1.
3. If the LED's flash Green at 5 Hz after you let go of teach button 1, transmitter was reset to factory configurations.

Standard Series Programming

Single switch point
Output 1;

1. Press and hold teach button 1 (2-7 seconds) until the LED's are flashing green at 1 Hz for output 1. Once the LED's are flashing at the correct frequency release button 1.
2. Set the transmitter at the desired switch point distance.
3. Press and hold teach button 1 (2-7 seconds) until the LED's are flashing yellow at 1 Hz. Once the LED's are flashing at the correct frequency release button 1.
4. If the LED's flash Green at 5 Hz after you let go of teach button 1, teach was accepted.

Output 2;

1. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing green at 2 Hz for output 2. Once the LED's are flashing at the correct frequency release button 1.
2. Follow steps 2-4 above.

Retro-reflective teach

1. Press and hold button 2 (2-7 seconds) the LED's will flash yellow at a frequency of 1 Hz, Once LED's are flashing yellow depress button 2.
2. If the LED's flash Green at 5 Hz teach was accepted.

Changing output logic (N.O. / N.C.)
Output 1;

1. Press and hold teach button 1 (2-7 seconds) until the LED's are flashing green at 1 Hz for output 1. Once the LED's are flashing at the correct frequency release button 1.
2. Press and hold teach button 1 (14-19 seconds) until the LED's are flashing yellow at 3 Hz. Once the LED's are flashing at the correct frequency release button 1.
   A. If the LED's flash Green at 5 Hz after you let go of teach button 1, unit has been set for N.O.
   B. If the LED's flash Yellow at 5 Hz after you let go of teach button 1, unit has been set for N.C.

Output 2;

1. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing green at 2 Hz for output 2. Once the LED's are flashing at the correct frequency release button 1.
2. Follow step 2 above.

Dual switch points (Window / Hysteresis mode, note if setting up a Hysteresis it is easier to setup in window and change to hysteresis mode.)
Output 1;

1. Press and hold teach button 1 (2-7 seconds) until the LED's are flashing green at 1 Hz for output 1. Once the LED's are flashing at the correct frequency release button 1.
2. Set the transmitter at the desired start point (window) / set point (hysteresis).
3. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing yellow at 2 Hz. Once the LED's are flashing at the correct frequency release button 1.
4. Set the transmitter at the desired end point (window) / reset point (hysteresis).
5. Press and hold teach button 1 (2-7 seconds) until the LED's flash green at 1 Hz. Once the LED's are flashing at the correct frequency release button 1.
6. If the LED's flash Green at 5 Hz after you let go of teach button 1, teach was accepted.

Standard Series Programming (continued)

Output 2;

1. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing green at 2 Hz for output 2. Once the LED's are flashing at the correct frequency release button 1.
2. Follow steps 2-6 above.

Changing dual switch point logic (Window / Hysteresis, factory default mode is window.)
Output 1;

1. Press and hold teach button 1 (2-7 seconds) until the LED's are flashing green at 1 Hz for output 1. Once the LED's are flashing at the correct frequency release button 1.
2. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing yellow at 2 Hz. Once the LED's are flashing at the correct frequency release button 1.
3. Press and hold teach button 1 (8-13 seconds) until the LED's flash green at 8 Hz. Once the LED's are flashing at the correct frequency release button 1.
4. If the LED's flash Green at 5 Hz after you let go of teach button 1, output logic has been changed.

Output 2;

1. Press and hold teach button 1 (8-13 seconds) until the LED's are flashing green at 2 Hz for output 2. Once the LED's are flashing at the correct frequency release button 1.
2. Follow steps 2-6 above.

Factory Reset;

1. Press and hold teach button 1 (14-19 seconds) until the LED's are flashing green/yellow at 2 Hz.
2. Press and hold teach button 1 (2-7 seconds) until the LED's flash green at 8 Hz. Once the LED's are flashing at the correct frequency release button 1.
3. If the LED's flash Green at 5 Hz after you let go of teach button 1, transmitter was reset to factory configurations.

Compact Series Programming

Single switch point
Output 1;

1. Set the transmitter at the desired switch point distance.
2. Press and hold Pin 2 to Ground (2-7 seconds) until the LED's are flashing yellow at 1 Hz. Once the LED's are flashing at the correct frequency release Pin 2 from Ground.
3. If the LED's flash Green at 5 Hz after Pin 2 was released from Ground, teach was accepted.

Changing output logic (N.O. / N.C.)
Output 1;

1. Press and hold teach Pin 2 to V+ (2-7 seconds) until the LED's are flashing yellow / green at 1 Hz for output 1. Once the LED's are flashing at the correct frequency release Pin 2 from V+.

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