Ultrasonic Sensor



The Ultrasonic Sensor function block allows the user to define behavior based on analog signals from the sensor.

The Ultrasonic Sensor uses high-frequency sound waves to detect objects. It emits a sound wave and measures how long it takes the sound wave to bounce back. The measurement is translated into a numeric value from 2 - 100. The closer the detected object the lower the signal value. If the sensor does not detect an object, it will read a high value, around 100.

To see a sample program demonstrating how the Ultrasonic Sensor is used, open the ULTRASONICTEST.ECP Project located in the Test Code folder.

When you drag a Ultrasonic Sensor block into the program window the Ultrasonic Sensor dialog box appears.

Ultrasonic Sensor
Select command:
 Start
C Get
C Stop
Interrupt Port #: 1 (Value Range: 16)
Output Port #: 1 (Value Range: 116)
Code:
StartUltrasonic (1,1);
Comment:
OK Cancel Help

- Select the Start command Level to tell the ultrasonic sensor to start recording sound waves.
- Select the Stop command Select the Stop command Select the Utrasonic sensor to stop recording.
- Select the Get command allows the user to store the feedback from the sensor into a variable.
- Choose the Interrupt Port # that corresponds with the port the encoder is plugged into on the controller. The Interrupt Port number can also be set to a variable for advanced applications.

Note:

- Be sure the cable labeled Output is connected to the corresponding Interrupt port.
- Be sure the cable labeled Input is connected to the corresponding Output port.
- Be sure the corresponding output port is defined as a digital output in the controller configuration.
- Choose the Output Port # to define the port to which the sensor records the signal. The Output Port number can also be set to a variable for advanced applications.
- In the Code area, view a preview of the C code that will be generated with the defined properties.
- In the Comment field, enter comments that will help you read the program and understand the function of the block without knowing all the properties defined by the block.

View the Function Block Tree