

# VEX IQ Distance Sensor on Byte

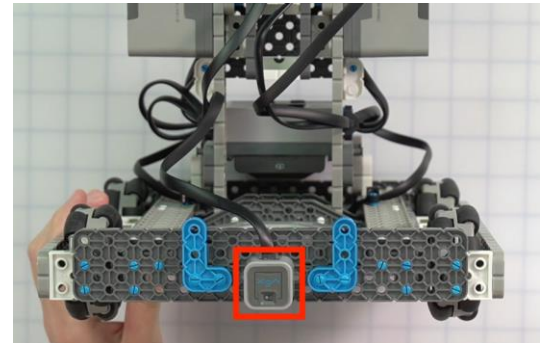
In this Lesson: You will learn about the Distance Sensor on Byte so that you can see how it can be used in a project for the Full Volume game.

## Notes:

- The Distance Sensor can report the proximity of an object, the distance the sensor is from that object, the size of the object, and an object's velocity (the sensor moving towards the object, or vice versa).
  - The Distance Sensor has an icon with arrows pointing to an object on the top.



- **The Distance Sensor is located in the front of Byte, behind the intake.**
  - This image from the video shows the Distance Sensor in front facing view, with the intake raised.
  - The intake and arm will block the Distance Sensor when in their lowered position. The arm must be raised in order for the Distance Sensor to be able to detect objects on the Field.



- This location means that the Distance Sensor on Byte can be used to detect game elements on the Full Volume Field.
  - You can use the Distance Sensor to detect objects or Goals on the Field, and measure the distance from the sensor to the object.
  - You can code Byte to stop a set distance from an object on the Field to enable it to gather the object in the intake.
- Using sensor feedback in Full Volume projects enables you to code Byte to interact with its environment, so that it can use sensor feedback to make decisions even if objects or the robot moves on the Field.