

Introduction to the NXT Sound Sensor

By Sanjay and Arvind Seshan



BEGINNER PROGRAMMING LESSON

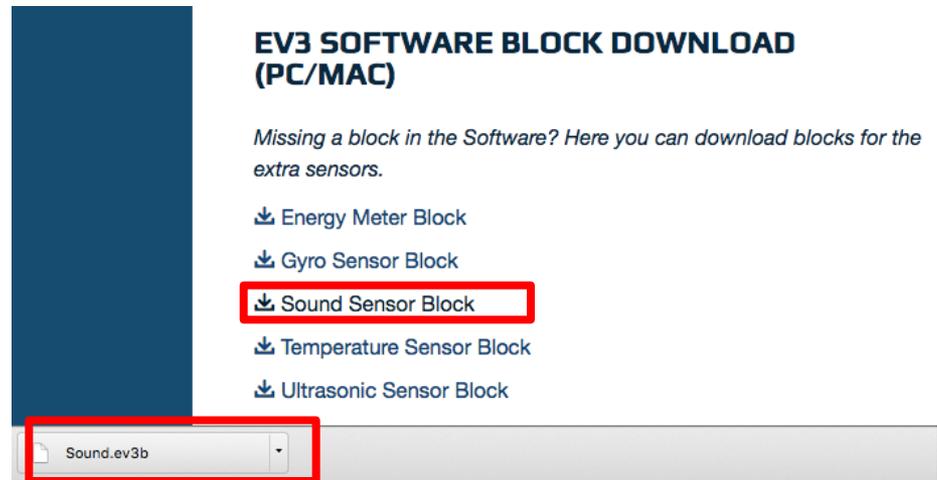
LESSON OBJECTIVES

1. Learn to use the NXT Sound Sensor with the EV3

Pre-requisites: Switches

DOWNLOADING THE SOUND BLOCK

- The Sound Sensor Block is available for download on the LEGO.com site:
 - <http://www.lego.com/en-us/mindstorms/downloads>
- Download the block using the Importing Additional Blocks Lesson in Beginner



SWITCH - NXT SOUND SENSOR

• Compare Mode

- dB
 - Sound level, scaled to a percentage
- dBa
 - Sound level, adjusted to approximate human ear sensitivity, and then scaled to a percentage

• Source: EV3 Help Menu



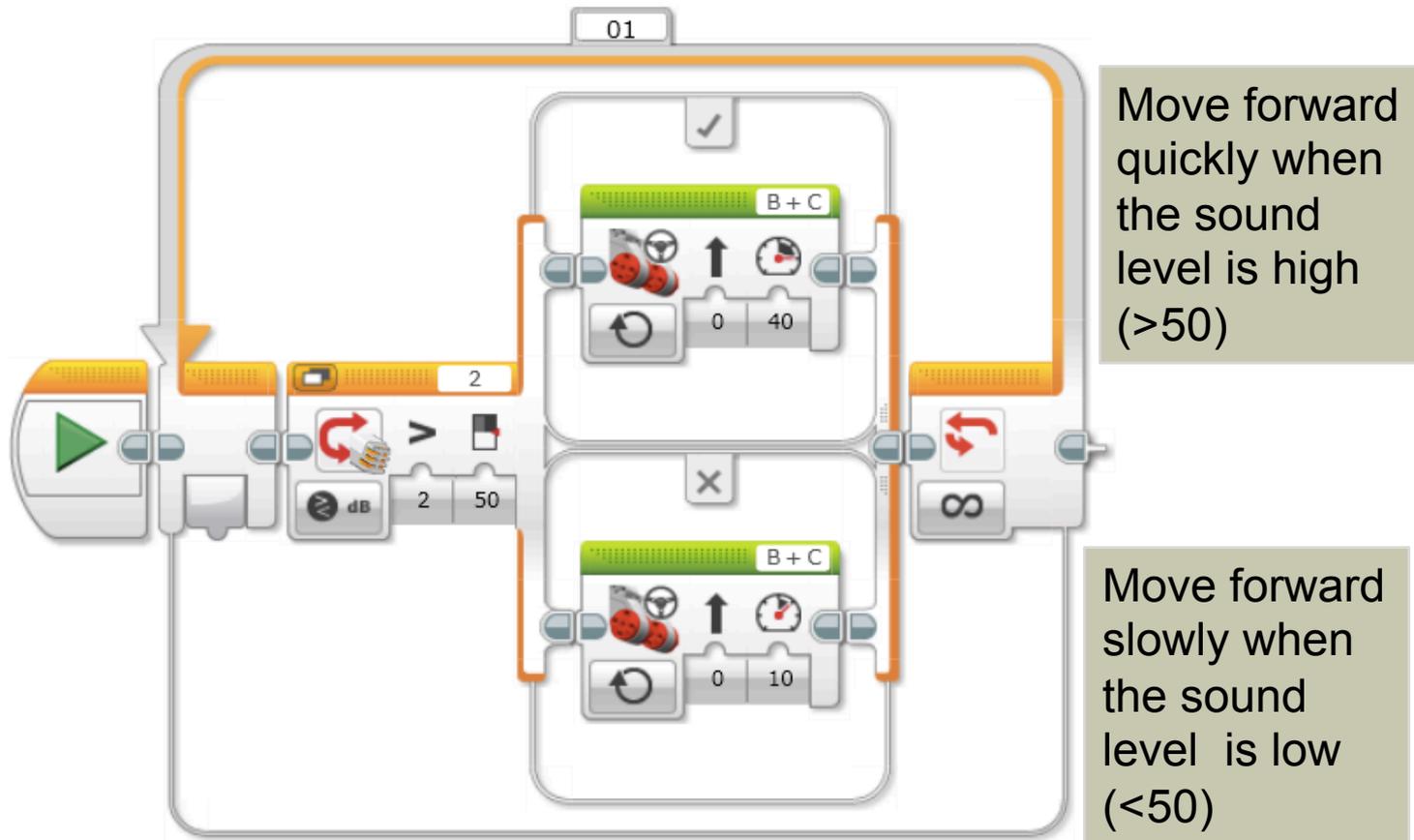
SOUND SENSOR CHALLENGE

- Write a “Celebration” program where the robot moves faster or slower depending on how loud the sound is

- **Hint**

- Switch - NXT Sound Sensor Block will be used
- You can use dB or dBa for this challenge

CHALLENGE SOLUTION



CREDITS

- This tutorial was created by Sanjay Seshan and Arvind
- More lessons are available at www.ev3lessons.com



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