

# FINCH ROBOT 2.0 BLOCK DESCRIPTIONS

## BirdBlox

Finch Move Forward ▾ 10 cm at 50 %

Moves the Finch forward or back for a given distance at a given speed (0-100%).

Finch Turn Right ▾ 90 ° at 50 %

Turns the Finch right or left a given angle at a given speed (0-100%).

Finch Beak R 0 % G 0 % B 0 %

Prints letters and numbers on the micro:bit LED display.

Finch Tail all ▾ R 0 % G 0 % B 0 %

Sets one or all of the tri-color LEDs in the Finch tail to the color specified by red, green, and blue brightness values. The values range from 0% to 100%.

Finch Wheels L 0 % R 0 %

Sets the rotation speeds of the left and right Finch wheels to values from -100 to 100%.

Finch Stop

Stops the Finch wheels.

Finch Print Hello

Prints letters and numbers on the micro:bit LED display.

Finch Display



Displays a pattern on the micro:bit LED display.

Finch Play Note 60 for 1 Beats

Plays a MIDI note (32-135) for a given number of beats using the buzzer in the Finch.

# FINCH ROBOT 2.0 BLOCK DESCRIPTIONS

## BirdBlox

Finch Distance

Returns the value of the Finch distance sensor in cm.

Finch Right ▾ Light

Returns the value of the right or left Finch light sensor from 0-100.

Finch Right ▾ Line

Returns the value of the right or left Finch line tracking sensor from 0-100.

Finch Right ▾ Encoder

Returns the number of rotations that the right or left wheel has turned.

Finch Reset Encoders

Sets the value of the left and right encoders to zero.

Finch Button A ▾

Returns a Boolean value that indicates whether the selected micro:bit button (A, B, or Logo) is pressed. The Logo button is only available for the micro:bit V2.

Finch Screen Up ▾

Returns a Boolean value that indicates whether or not the Finch is in the selected position.

Finch Accelerometer ▾ X ▾

Returns the value of the Finch accelerometer or magnetometer in the x, y, or z direction.

Finch Compass

Returns the value of the Finch compass. Before using this block, be sure to calibrate the compass in the BlueBird Connector.

Finch Sound ▾

Returns the value of the micro:bit sound sensor from 0-100 or the value of the micro:bit temperature sensor in degrees Celsius. This block can only be used with a micro:bit V2.

You can access free BirdBlox programming tutorials at...

[birdbraintechnologies.com/finch2/birdblox/program](https://birdbraintechnologies.com/finch2/birdblox/program)