

# HUMMINGBIRD BIT BLOCK DESCRIPTIONS

## BirdBlox

Bit LED 1 ▾ 0 %

Sets a single color LED on port 1, 2, or 3 to a brightness value from 0% to 100%.

Bit Tri-LED 1 ▾ R 0 % G 0 % B 0 %

Sets a tri-color LED on port 1 or 2 to the color specified by red, green, and blue brightness values. The values range from 0% to 100%.

Bit Position Servo 1 ▾ 90 °

Sets a position servo on port 1, 2, 3, or 4 to an angle from 0° to 180°.

Bit Rotation Servo 1 ▾ 0 %

Sets a rotation servo on port 1, 2, 3, or 4 to a rotation speed from -100% to 100%.

Bit Print Hello

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

Bit Display



Displays a pattern on the micro:bit LED display.

Bit Play Note 60 for 1 Beats

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

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Bit Light ▾ 1 ▾

Returns the value of the sensor on port 1, 2, or 3. Values for the distance sensor are given in cm, and values for "Other" are given in volts (0-5 V) . All other readings range from 0 to 100 (no units).

Bit 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.

Bit Screen Up ▾

Returns a Boolean value that indicates whether or not the micro:bit is in the selected position.

Bit Accelerometer ▾ X ▾

Returns the value of the micro:bit accelerometer or magnetometer in the x, y, or z direction.

Bit Compass

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

Bit 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/hummingbirdbit/birdblox/program](https://birdbraintechnologies.com/hummingbirdbit/birdblox/program)