ANATOMY OF THE HUMMINGBIRD™ ROBOTICS KIT

USB Connector

Tri-Color LED Ports (2)

Single Color LED Ports (3)

Battery Status Indicator

Position & Rotation Servo Ports (4)

Power Connector

Power Indicator Light

micro:bit

Buzzer

Sensor Ports (3)

Extension Port

Hummingbird Bit Component Guide

Component	What Does It Do?	Plug It In	Icon
Outputs			
Single Color LED	Program the brightness of the light	Color: + (Positive) Black: - (Ground)	
Tri-Color LED	Program the color of the light	Red: R (Red) Green: G (Green) Blue: B (Blue) Black: - (Ground)	
Position Servo	Program the angle of the motor from 0° to 180°	White: S (Signal) Red: + (Positive) Black: - (Ground)	
Rotation Servo	Program the speed of rotation	White: S (Signal) Red: + (Positive) Black: - (Ground)	
Buzzer	Program different musical tones	micro:bit accessory	
Inputs			
Distance Sensor	Measure the distance to the closest object	Yellow: S (Signal) Red: + (Positive) Black: - (Ground)	
Light Sensor	Measure the light around the robot	Yellow: S (Signal) Red: + (Positive) Black: - (Ground)	
Dial Sensor	Measure how much the knob is turned	Yellow: S (Signal) Red: + (Positive) Black: - (Ground)	
Sound Sensor	Measure the sound around the robot	Yellow: S (Signal) Red: + (Positive) Black: - (Ground)	

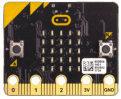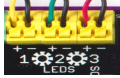|		
Compass	Measure magnetic field strength	micro:bit accessory
Accelerometer	Measure the robot's position in space	micro:bit accessory
A/B Button	Use buttons to get input	micro:bit accessory
Radio	Send and receive messages	micro:bit accessory

Hummingbird Bit Component Guide

Fill in the blanks below.

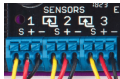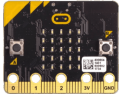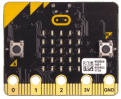| Component	What Does It Do?	Plug It In	Icon
Outputs			
Single Color LED		Color: + (Positive) Black: - (Ground)	
Tri-Color LED		Red: R (Red) Green: G (Green) Blue: B (Blue) Black: - (Ground)	
Position Servo		White: S (Signal) Red: + (Positive) Black: - (Ground)	
Rotation Servo		White: S (Signal) Red: + (Positive) Black: - (Ground)	
Buzzer		micro:bit accessory	
Inputs			
Distance Sensor		Yellow: S (Signal) Red: + (Positive) Black: - (Ground)	
Light Sensor		Yellow: S (Signal) Red: + (Positive) Black: - (Ground)	
Dial Sensor		Yellow: S (Signal) Red: + (Positive) Black: - (Ground)	
Sound Sensor		Yellow: S (Signal) Red: + (Positive) Black: - (Ground)	

Compass

micro:bit accessory

Accelerometer
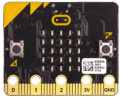
micro:bit accessory

A/B Button

micro:bit accessory

Radio

micro:bit accessory