EV3 Color Sensor

Category	Requires	Version
LEGO® MINDSTORMS® > EV3	API 19, Android 4.4 - 4.4.4 KitKat	1

Overview

A component that provides a high-level interface to a color sensor on a LEGO MINDSTORMS EV3 robot.
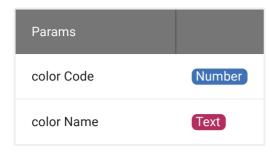
Events

Above Range

Light level has gone above the range.

Below Range

Light level has gone below the range.

Color Changed

Called when the detected color has changed. The ColorChanged event will occur if the Mode property is set to "color" and the ColorChangedEventEnabled property is set to True.

Params	
color Code	Number
color Name	Text

Within Range

Light level has gone within the range.

Methods

Get Color Code

Returns: *Number*

It returns the color code from 0 to 7 corresponding to no color, black, blue, green, yellow, red, white and brown.

Get Color Name

Returns: *Text*

Return the color name in one of "No Color", "Black", "Blue", "Green", "Yellow", "Red", "White", "Brown".

Get Light Level

Returns: *Number*

It returns the light level in percentage, or -1 when the light level cannot be read.

Set Ambient Mode

Make the sensor read the light level without reflected light.

Set Color Mode

Enter the color detection mode.

Set Reflected Mode

Make the sensor read the light level with reflected light.

Properties

Above Range Event Enabled

`Boolean` `Default: False` — `Read` `Write` - `Designer` `Blocks`

Whether the AboveRange event should fire when the light level goes above the TopOfRange.

Below Range Event Enabled

`Boolean` `Default: False` — `Read` `Write` - `Designer` `Blocks`

Whether the BelowRange event should fire when the light level goes below the BottomOfRange.

Bluetooth Client

`Component` — `Read` `Write` - `Designer` `Blocks`

The BluetoothClient component that should be used for communication.

Bottom Of Range

`Number` `Default: 30` — `Read` `Write` - `Designer` `Blocks`

The bottom of the range used for the BelowRange, WithinRange, and AboveRange events.

Color Changed Event Enabled

`Boolean` `Default: False` — `Read` `Write` - `Designer` `Blocks`

Whether the ColorChanged event should fire when the Mode property is set to "color" and the detected color changes.

Mode

`Text` `Default: reflected` — `Read` `Write` - `Designer` `Blocks`

Specifies the mode of the sensor.

Sensor Port

`Text` `Default: 1` — `Write` - `Designer`

The sensor port that the sensor is connected to.

Top Of Range

`Number` `Default: 60` — `Read` `Write` - `Designer` `Blocks`

The top of the range used for the BelowRange, WithinRange, and AboveRange events.

Within Range Event Enabled

`Boolean` `Default: False` — `Read` `Write` - `Designer` `Blocks`

Whether the WithinRange event should fire when the light level goes between the BottomOfRange and the TopOfRange.

Last update: January 26, 2020