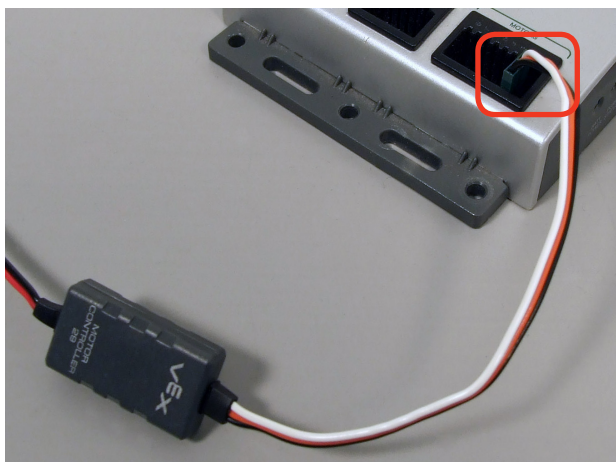# Using the VEX Motor Controller 29

This document contains instructions and tips when using the VEX Motor Controller 29.

The VEX Motor Controler 29 allows you to connect the powerful VEX 2-wire Motors to any of the standard 3-wire ports on the VEX PIC and VEX Cortex.
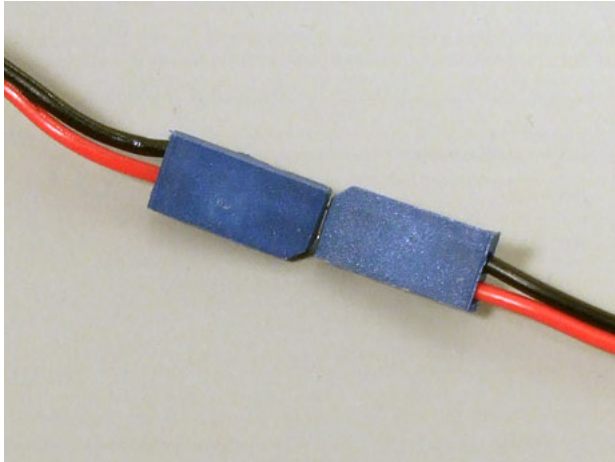

1. To use the VEX Motor Controller 29, plug the 3-wire end into one of the MOTOR ports on your VEX PIC or VEX Cortex Microcontroller.

Using the VEX Motor Controller 29 *(cont.)*

2. Connect the other end of the VEX Motor Controller to the 2-wire Motor. **Be sure to align the black and red wires as shown.**

3. Motors connected to your robot using the VEX Motor Controllers are programmed using the same commands and power levels as the 3-wire motors.

```
1   #pragma config(Motor, port2, rightMotor, tmotorNormal, openLoop, reversed)
2   #pragma config(Motor, port3, leftMotor,  tmotorNormal, openLoop)
3   //*!!Code automatically generated by 'ROBOTC' configuration wizard   !!*//
4
5   task main()
6   {
7       //Move forward at full speed for 2 seconds
8       motor[rightMotor] = 127;  //Turn on the right motor at full power
9       motor[leftMotor] = 127;   //Turn on the left motor at full power
10      wait1Msec(2000);          //Wait here for 2000 milliseconds
11
12      //Stop for 1 second
13      motor[rightMotor] = 0;    //Turn off the right motor
14      motor[leftMotor] = 0;     //Turn off the left motor
15      wait1Msec(1000);          //Wait here for 1000 milliseconds
16
17      //Move in reverse at half speed for 2 seconds
18      motor[rightMotor] = -63;  //Reverse the right motor at half power
19      motor[leftMotor] = -63;   //Reverse the left motor at half power
20      wait1Msec(2000);          //Wait here for 2000 milliseconds
21  }
```

Using the VEX Motor Controller 29 *(cont.)*

Building Tip:

To prevent the 2-wire Motor and Motor Controller wires from accidentally separating while the robot is running, use the supplied wire tie to secure the two ends, along with any excess wire.