

## Reference

# Running a Program

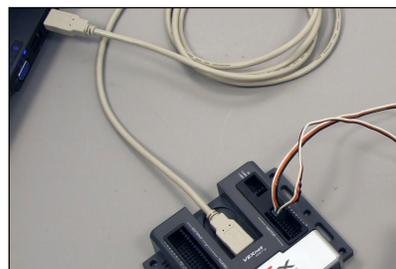
Once a program has been successfully written, it needs to be given to the robot to run. The following steps will guide you through the process of downloading your program to the robot, and then running it remotely or connected to your computer.

1. Verify that your VEX Cortex is **turned off**. Make sure it's not powered by the battery or PC (through the USB cable).



2. If you are programming over USB, connect the Cortex to the PC using the USB A-to-A cable. This will partially power the Cortex, then **turn the Cortex on** to fully power it using the battery.

Note: Your Robot > VEX Cortex Download Method should be set to "Download Using USB Only" if you are not using the wireless VEXnet connection.



If you are programming over VEXnet, turn both the Cortex and VEXnet Remote Control ON and allow them to sync. Make sure the Programming cable is connecting your VEXnet Remote Control to the PC.

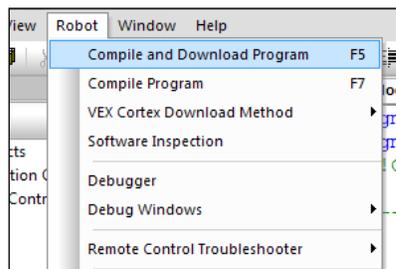
Note: Your Robot > VEX Cortex Download Method should be set to "Download using VEXnet or USB" if you are using the wireless VEXnet connection.



3. Click "**Robot**" on the top menu bar of the ROBOTC window, and select "**Compile and Download Program**".

4. You may be prompted to save your program. If so, save it in the same directory as your other programs.

5. If there are **errors** in your code the compiler will identify them for you and you will need to correct them before a successful download can be completed.



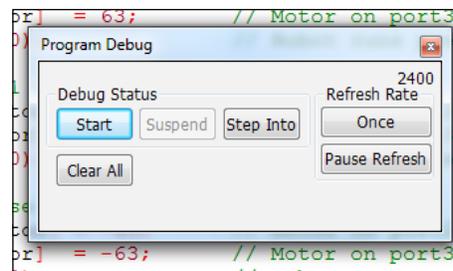
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# Running a Program

Downloading places your program on the robot to be run on command. You can run the program in two different ways.

- **Run Attached**

If your robot is connected to your computer you can run the program which was just downloaded by clicking **“Start”** in the **“Program Debug”** window which automatically appears upon download. This will run your program and because the robot is still connected to the computer, you can obtain live variable and sensor feedback by using such debug windows as **“Global Variables”** and **“Sensors”**.



- **Run Independently**

If you want to run the program while the robot is not connected to the computer, just remove the cable once the program has been downloaded. On the back of the Cortex, toggle the power switch in the **“Off”** position, and then back to **“On”**. The program will run immediately if your **“VEX Cortex Download Method”** is set to **“Download using USB Only”**. The robot will wait until it finds a VEXnet connection if the **“VEX Cortex Download Method”** is set to **“Download using VEXnet or USB”**. Note that if you change this setting, you will need to redownload your program over USB and power-cycle (turn the Cortex off and disconnect it from the computer, then turn it back on) before the change takes effect.

