

Programming:

1. Open RobotC Graphical (Free download from VEX website with free login)
2. Open a new program and save it under whatever name you choose
3. Under ROBOT- Platform Type=VEX IQ AND VEX Robotics=VEX IQ
4. Under ROBOT- Vex IQ Controller Mode = "TelOp" for Controller/"Autonomous" for Autonomous
5. Motor and sensor setup button- Identify and name motors and sensors (devices) you are using and what port they are in on the brain (write these in your engineering notebook!!!)

To program your remote:

1. Drag "Repeat Forever" next to the number 1 in the right pane
2. On left scroll down to "Remote Control" and select either "Arcade" or "Tank". Drag that box into the orange space under "repeat forever" in the right pane (probably row 2) ("Tank" control is the better option of the two, if undecided)
3. In the First 2 drop down boxes, choose the motors attached to the wheels
4. Select a "Threshold" value 1-99 in the drop-down box at the end of the row (the default is 10) This is how far you have to move the joysticks before the wheels start to turn. (The joysticks are "analog" meaning, the farther you move them, the faster the motor goes)
5. If you have an arm/claw etc... drag "Arm Control" into the next line (make sure it is within the orange section on the right pane). Identify the appropriate motor port for the manipulator you are programming, the button you want (one button will spin the motor one direction, the other will spin it the other direction, so use both up and down) and the motor speed (faster is NOT always better).

REPEAT AS NEEDED

- When done save the program.
- Connect the brain to the computer with the black USB cable.
- Turn the brain ON (check mark button on robot brain).
- Hit the "Compile Program" button in RobotC then "Download to Robot"
- When done a debugger will pop up, you can usually ignore this.
- Unplug the remote and robot.
- Power cycle the robot by holding down the X button until it turns off, then pressing the Check button to turn it back on.
- Select TelOp programs and then the program you want (remember what you saved it as) NOTE: The remote Control also needs to be on and synched, it may take a second after you turn on the remote.
- Drive. If it doesn't work right go back and check your program.