## Setup Instructions

- 1. Unzip the "Subaru Wca\_LED\_Color\_Chooser.zip" file to some folder on a local drive of the target machine.
- 2. Plug in the FTDI ttl-232r-3v3 cable into the PC.
  - a. If the computer cannot find a driver for this cable one must navigate to device manager and select the device there. It should be labeled as an unknown device and have a yellow triangle next to the icon.
  - b. Right click on the device and select "Properties".
  - c. Select the "Driver" tab and click on the "Update Driver" button.
  - d. Select the option to browse your computer for driver software.
  - e. Now navigate back to the FTDI USB to TTL Drivers folder and press ok.
  - f. The PC should now find the proper driver for the cable and in device manager the device should be listed under "Ports (COM & LPT)" as "USB serial port (COM#)".
- 3. Double click the "Subaru Wca LED Color Chooser v1.1.2.exe" application
  - a. The only way in which to start the application is by double-clicking on the "Subaru Wca\_LED\_Color\_Chooser v1.1.2.exe".
  - b. The application should never be run from a shortcut as the included "WcaInterfaceLibrary.dll" file must be in the same location that you start the "Subaru Wca\_LED\_Color\_Chooser v1.1.2.exe" application from.
- 4. Ensure that the Wireless Charger is disconnected from power (ACC OFF) and USB serial cable is not plugged into the PC.
- 5. Plug USB Serial cable into the computer.
- 6. Select the new COM port that appears in the ComPorts list box.
- 7. Apply 12 Volts (ACC ON) to wireless charger device.
- 8. Beneath the "Help" button the message should say "Connected".
- 9. The Controls for choosing the default colors for the LED should now be enabled.
  - a. Note: Sometimes the device may not connect after cycling power. Simply cycle power to the device until the prompt below the "Help" button shows "Connected".
  - b. If the message beneath the "Help" button reports "COM port could not be opened", there must be another program currently connected to the COM port you have chosen. Close all other programs which could be making this connection. If it still fails to connect, try restarting the PC.

## **Application Functions**

- 1. The are four slider bars, three of which are disabled but still show color values. The bottom slider bar increases the intensity of any hue according to the ratios of the current color values.
- 2. The bottom six radio buttons are capable of changing the color of the LED to the six preprogrammed colors which represent the operating states of the device.

- 3. On the right are several text boxes which can represent the intensity of each color of our RGB LED in either percentage or hexadecimal numbers. The radio buttons above the four slider bars can be checked or unchecked to change the text boxes to whichever value type is preferred.
- 4. An optional check box on the top left, labeled as "Enable Color Sliders", allows the hue of the LED to be modified to whichever color is desired.
- 5. Colors may be selected or modified using one of the following methods:
  - 1. Select a radio button for one of the "Default Colors",
  - 2. Adjust the red, blue, green and intensity slider bars, or
  - 3. Type raw percentage or hexadecimal values in the text boxes and press the "enter" key.

## **Additional Notes**

- 1. If the serial connection to the device is mistakenly removed, it is possible to restore the connection without interruption to application functionality.
- 2. If power is removed from the device, the "Subaru Wca\_LED\_Color\_Chooser v1.1.2" application must be exited and restarted using the above instructions.