How to make BLUNO-Bee and Wireless Gamepad into BLE-Keyboard (Oct 2017)

These are the instructions for making a BLE keyboard with a BLUNO-Bee card in installed in the DFRobot Wireless Gamepad v2

1. The instructions for enabling HID mode in the BLUNO-Bee comes from here. But I will summarize the steps below:
    1. (See instructions here) Move switch to AT mode on BLUNO-bee.
    2. Set up ARDUINO Serial monitor to "No line editing"
        1. Type: "+++" and hit Send.
        2. Wait for reply "Enter AT mode"
        3. Set Serial monitor to "Both NL & CR"
        4. Type: "AT+SETTING=DEFAULT" or "AT+ROLE=PERIPHERAL".
        5. Type: "AT+FSM= FSM_HID_USB_COM_BLE_AT".
        6. Do **NOT** end with "AT+EXIT" because I want to keep the BLUNO-Bee in AT mode.
    3. Keep the switch at AT mode because the Arduino program will program the BLUNO-Bee using AT instructions.
2. The ARDUINO program gamepad.ino requires libraries/DFBLE subdirectory. I have replaced Serial with Serial1 in DFBLE.cpp because the Wireless Gamepad is connected to Serial1.
    1. The DFBLE subdirectory will have to be placed in the correct place for the ARDUINO program. On the Mac it is in ~/Documents/Arduino/libraries
3. On Mac, IPad and Iphone just pair and when the any of the buttons are pressed, and a keyed letter will appear.
    1. When paired and connected, although not visible because everything is closed up. Both LEDs on the BLUNO-Bee will light up.

On Raspberry PI (running RetroPI)

Raspberry PI 3 running reptropie 4.9.35-v7+ #1014 is incompatible with BLE keyboards as of this writing. Unfortunately, updating to the latest Bluez stack 5.47 (using these instructions) I am able to pair and connect but not talk to the RP. Note after the upgrade of the Bluez stack, the retropie_setup is no longer able to connect to the Wireless Gamepad, so I have to do it in bluetoothctl

Here's an addendum to the linked instructions:

1. Use "sudo bluetoothctl" to ID the Bluno device
    1. The MAC address as of my Bluno is: 20:CD:39:93:C7:7B. Yours will be different.
    2. Run the following:
        1. check to see if the bluetooth hci0 card is running.
            1. Can be checked with hciconfig on the command line.

    2. If not running in bluetoothctl, type “power on” or “hciconfig hci0 up” on the command line.
2. connect 20:CD:39:93:C7:7B (use your MAC address found above) and it should automatically both connect and pair.
3. Check that it is connected and paired with info
4. If it is not paired. Just type pair.
5. If it is not trusted. Just type trust.
6. Run info again to be sure.
7. quit.