Wirless GamePad V2.0 (SKU:DFR0182)

From Robot Wiki

Introduction

The Wireless Joystick v2 for Arduino is the first gamepad based on Arduino from DFRobot. It support Xbee, Bluetooth, RF and Wifi via the Xbee socket. Makes it possible to custom your own wireless communication for controlling your robots, mobile platforms, UAVs and etc.

Improvements of v2.0:

1.Wireless gamepad v2.0 is compatible with Arduino Leonardo.Compared with v1.1,you don't need to purchase a FTDI programmer for it anymore. Just plugin the Micro USB adapter and program it directly.

2.The v2.2 gamepad supports a new feature. It integrated two-way motor driver circuit and two vibration motors. Then it's available to program and enable the vibration function of your gamepad and get the feedback from your robots!

Specification

- Power supply: "AAA" Battery x3 or Micro USB
- Programmable inputs:
  - 2 analog sticks
  - one D-pad
  - 10 buttons
  - 2 joystick buttons
- Program interface: Micro USB via a small adapter included
- Bootloader: Arduino Leonardo
- Includes a Turbo button used to reset the controller
- Informational LEDs
  - Red one: Power indicator
  - Green one: RX indicator
- Integrate two-way motor driver
- Support vibration function
- Includes a Xbee socket
- Support Xbee series wireless modules,Bluetooth Bee,RF Bee and Wifi Bee

PinOut

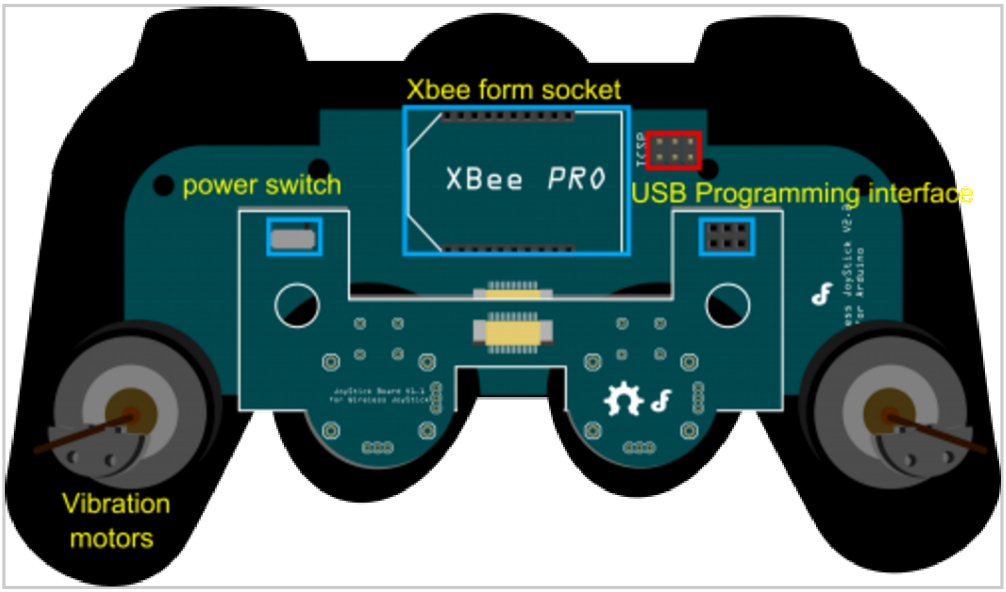

Fig1:GamePad v2.0 Pin Out

Programming Connection

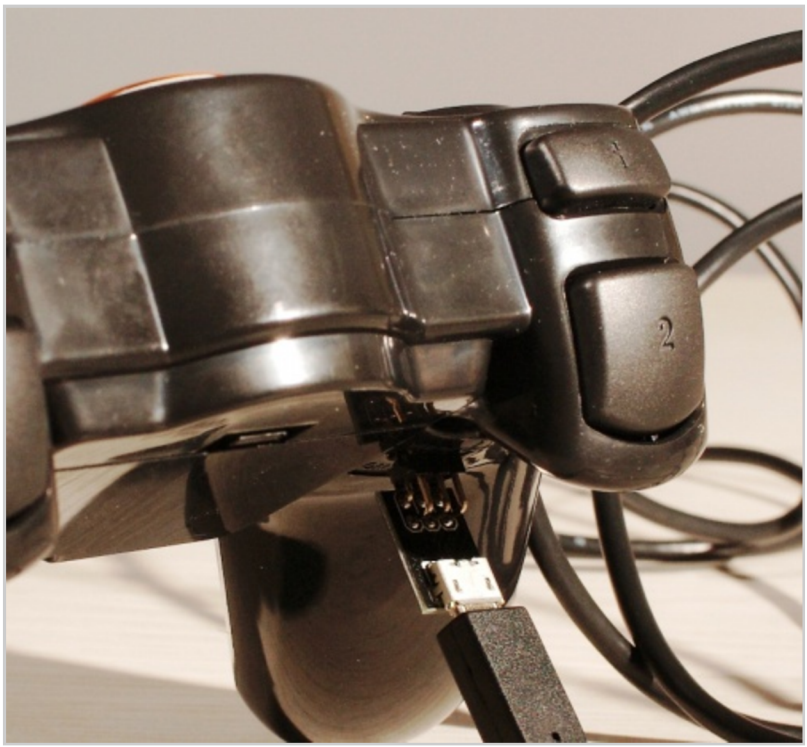

Fig2:Programming Connection

Pin mapping

Direction Buttons

- UP: D5
- LEFT: D6
- DOWN: D7
- RIGHT: D8

Surface Buttons

- SELECT:D3
- START: D4

Joystick Buttons

- Left Joystick: A0
- Right Joystick: A1

Joystick analog inputs

- Left Joystick X-axis: A4
- Left Joystick Y-axis: A5
- Right Joystick X-axis: A2
- Right Joystick Y-axis: A3

Z Buttons

- Left Z1: D15
- Left Z2: D16
- Right Z1: D13
- Right Z2: D14

Other functions

- Wireless communication(Serial1): D0(RX) & D1(TX)
- Vibration Motor driver pin: D2
- Rx LED: D17