D5W, INC. BEACON, MODEL BM-1

Use Instructions:

Start-up: Use supplied CR2032 battery. Open battery compartment door and install battery with negative side touching the circuit board. Once a battery is installed the Beacon will begin to advertise to other devices that can communicate using Bluetooth Low Energy.

Pairing: After the battery has been installed, pairing with your phone or tablet can be accomplished. Perform a search from your communication device and identify the Beacon.

Once paired, you will be able to send keyboard like commands to your phone, tablet, or other Bluetooth Low Energy compatible device. These commands include Up, Down, Left, Right and Enter. The directional commands are produced by the joystick while the enter command in initiated by the push button.

◻Up Arrow

◻Down Arrow

◻Left Arrow

◻Right Arrow Return

↵   Push button = Return

Beacon API for developers:

LED Control

LED control is by writing the following byte parameter value as follows;

UUID: 0xFFF1

Handle: 0x0025

Read/Write value: 0xAB

Where A is composed of the following bits;

     1 – Green

     2 – Red

     4 – Yellow

And B is any one of;

0 – OFF

1 – ON

2 – BLINK (single, short duration flash)

4 – FLASH (repeated, medium duration, flash)

8 – TOGGLE (toggles the LED ON/OFF) –

LEDs may be toggled singly, in pairs or altogether. For example, first turn on one LED, then toggle that LED with another to toggle between the two LEDs.
Example:
To turn on the green LED, write 0x11
To blink (single short duration flash) yellow LED, write 0x42
To toggle green/yellow LEDs, write 0x11 (green ON) then write 0x58   (green/yellow toggle)

Key Notification

Enabling key notifications enables key press notification to the app.

UUID: 0x2902

Handle: 0x0037

Write 0x0001 to enable key notifications

With key notifications enabled, the application will be notified of key presses via a single byte as follows

0x01 – SW2

0x02 – Joystick 'B'

0x04 – Joystick 'PB' (push button)

0x08 – Joystick 'A'

0x10 – Joystick 'D'

0x20 – Joystick 'C'

Any simultaneous button press will yield a byte that combines the individual bits corresponding to the buttons pressed. Thus "SW2" pressed with 'A' will give 0x09; 'PB' with 'D' will give 0x14.

FCC INFORMATION:
THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS.
(1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRED OPERATION.

Warning: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that Interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

—Reorient or relocate the receiving antenna.
—Increase the separation between the equipment and receiver.
—Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
—Consult the dealer or an experienced radio/TV technician for help.