TOKYO DEVICES

IWT1320-USB

General Purpose USB Slider Input Device with integrated LED and Buzzer

Revision 1.0.1

IWT1320-USB is a general-purpose slider input device. It is based on USB HID device and allows you to obtain the position of the slider knob in 256 steps. The knob includes an embedded LED, enabling its use even in dimly lit environments. Built-in buzzer can be used for custom user interaction. The simple control command makes it easy to integrate into customer's application. Both Windows and Linux are supported.

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1. Specifications

項目	値	説明
Model Number	IWT1320-USB	
Communication Specification	USB 1.1 Low Speed	
Connector Type	USB Type B Mini	
Power	5V (USB Bus power)	
Current Consumption	15mA Typ. (30mA Max.)	
Resolution	256 (0～255)	
Integrated LED	Embedded in the knob	Can be controlled by user program
Integrated Buzzer	Embedded in the device	Can be controlled by user program
Slider travel length	60.5 mm	
Dimensions	W:45.6 D:111 H:27.5 mm	
Operation temperature range	0～45℃	
Mounting holes	Φ3.5 ×2	

2. Dimensions

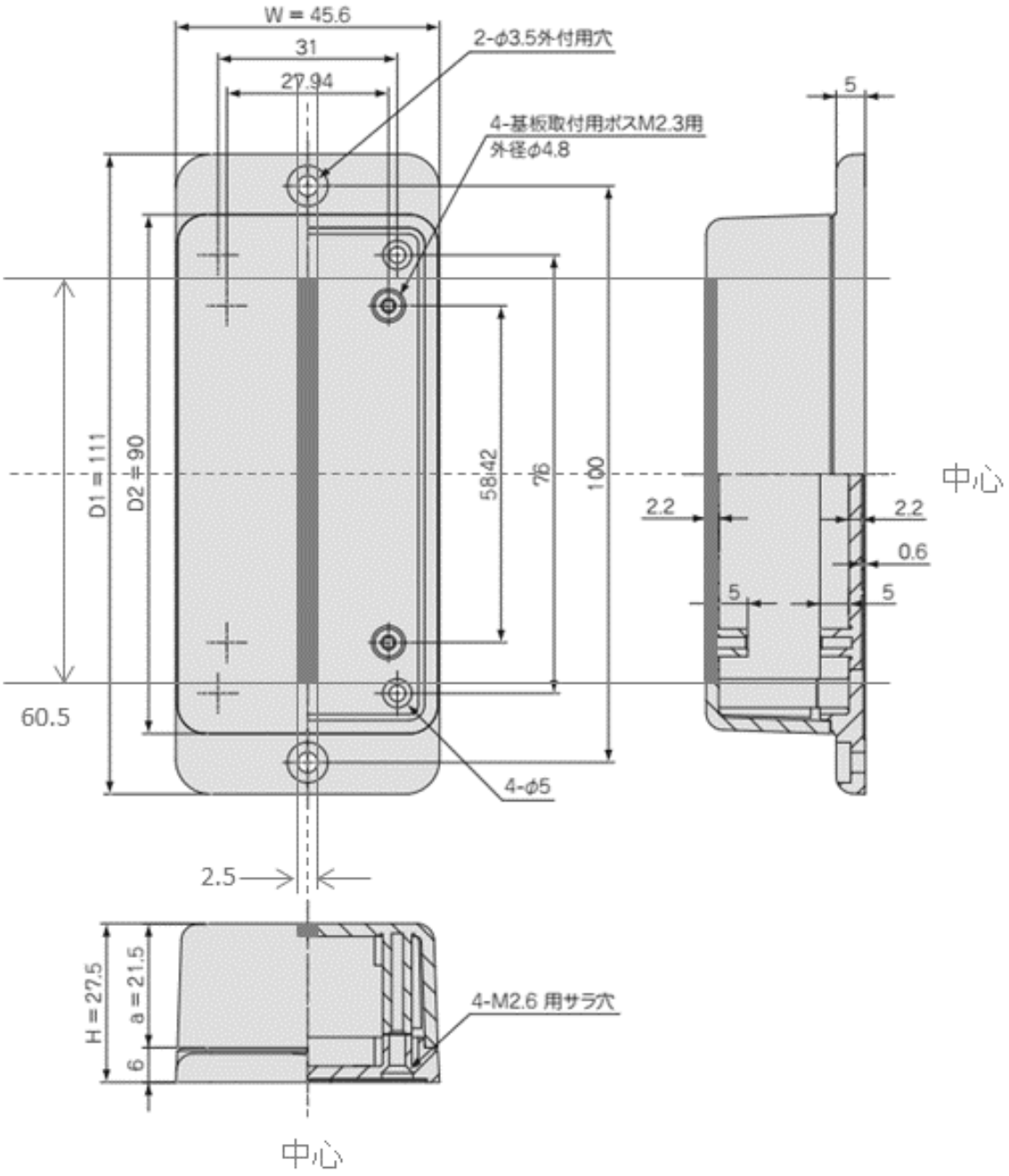

図 1 Device Detentions

3. Control

IWT1320-USB is controlled using the "TD-USB" control command. TD-USB is a command-line program. To obtain TD-USB, please search for the keyword "IWT1320" on the Tokyo Devices website or obtain it from the GitHub repository.

Tokyo Devices Web (In Japanese): https://tokyodevices.com/

TD-USB GitHub Repository: https://github.com/tokyodevices/td-usb/

3.1. Basic usage of TD-USB

The basic usage of the command is as follows:

```
> td-usb iwt1320 (operation) [options]
```

The first argument `iwt1320` is a fixed string (case-sensitive) that represents the target product model for operation. The second argument `(operation)` is a fixed string (case-sensitive) that represents the specific operation. You can add options as needed.

3.2. Obtaining the Position of the Slider

```
> td-usb iwt1320 get
123
```

`get` is a fixed string (case-sensitive) that specifies the operation which reads a value from the device. When the retrieval is successful, it returns a single line with a numerical value to the standard output. The numerical value represents the position of the slider and ranges from 0 to 255, indicating 256 levels of position.

By specifying the `--loop=N` option, you can retrieve values repeatedly. The number N should be a numerical value representing the retrieval interval in milliseconds. The following example reads the position of the slider every 3 seconds and outputs it to the standard output:

```
> td-usb iwt1320 get --loop=3000
123
123
123
…
```

3.3. Identifying Multiple Modules.

```
> td-usb iwt1320 list
XXXXXXXXXXXXXX
YYYYYYYYYYYYYY
> td-usb iwt1320:XXXXXXXXXXXX get
123
```

By using the `list` operation, you can obtain the serial numbers of multiple devices connected to a single computer. The serial numbers will be outputted on separate lines in the standard output, for each recognized device. To specify the target

device, please use the fixed string `iwt1320` followed by a colon character and the serial number.

3.4. Modifying Device Configuration

To modify the settings of the device, you can use the `set` operation:

```
> td-usb iwt1320 set (Name)=(Value)
```

The following table shows the available settings that can be configured with this module:

Name	説明
BUZZER_CONTROL	BUZZER_CONTROL controls the state of the buzzer. Setting it to 0 stops the buzzing, while any non-zero value activates the buzzer. The numerical value represents the inverse of the frequency. When set to 255, the buzzer operates at the lowest frequency. When set to 127, it operates at approximately twice the frequency of 255. The power-on state is 0, which means the buzzer is stop.
LED_CONTROL	LED_CONTROL controls the status of the LED on the knob. Setting it to 0 turns off the LED, while any non-zero value turns on the LED. The power-on state is 0, which means the LED is turned off.

To integrate the IWT1320 control to your own application, please call TD-USB command from the application program. The method for calling an external program varies depending on the programming environment you are using. Please refer to the documentation or manuals specific to your programming environment for guidance on how to call an external program.

4. Product Customization Services

Tokyo Devices offers customization of circuit board exteriors, functionalities, and performance based on customer needs. For more details, please check the "Customization" on the Tokyo Devices website.