USB Pendant Button

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Introduction

The "USB Pendant Button" is a handheld button that connects to a workstation or PC via a USB cable.

The USB Pendant Button is recognized by the PC as a "Human Interface Device" (HID). Microsoft Windows and other operating systems have intrinsic support for HIDs. No drivers are necessary.

Specifically, the USB Pendant Button implements a "keyboard" HID function, with only a single key. The key to transmit to the PC is configured via a configuration utility (see the section "Configuring the Pendant Button"). In the factory setting, the button transmits the key "1".

Multiple USB Pendant Buttons may be attached to a PC at the same time, typically with each button configured to transmit a different key code

The USB Pendant Button has a fixed 3-metre USB cable with a braided nylon sleeve. The cable has a standard USB-A connector, for connection to PCs and laptops. Via a converter adapter, the Pendant Button can also be connected to USB host devices with an USB micro socket.

The Pendant Button is available in "natural" colour and in black. The natural version is nickel plated; the black version is powder-coated.

The USB Pendant Button is intended to be connected to USB host devices or USB hubs. Connecting the device to equipment that does not adhere to the USB standard may damage the device.

Configuring the Pendant Button

The configuration utility is available from http://www.compuphase.com/usbkey/.
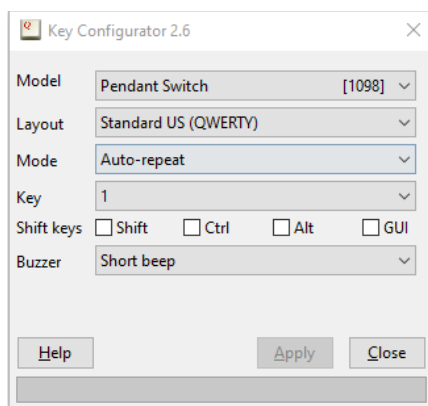
The utility configures only a single button at a time. After changing the configuration, you must click on **Apply** to store the settings in the Pendant button.

If not using a US keyboard layout, please select the appropriate layout of the keyboard (QWERTY/AZERTY).

The mode can be "Auto-repeat", "Pulse", "Toggle key", "Tap or Hold" or "Macro".

In *auto-repeat* mode, the USB button sends a key-down message on a press and a key-up message on a release. When holding the button pressed, the key-down is repeated (just like a key repeats when you hold it down).

In *pulse* mode, the USB button sends a key-up message shortly after the key-down. The button therefore does not repeat.

Toggle key mode is like *pulse mode*, but allows you to select two key codes instead of just a single one. These two codes are transmitted alternately. So the first press of the button transmits key 1, the second press transmits key 2, the third press transmits key 1 again, and so forth.

Tap or Hold mode also lets you define two keys. A short press ("tap") transmits the first key,. When the button is held down, the second key is transmitted after a time-out (¾ second).

In *macro* mode, you can specify a sequence of keys to be transmitted. You can use this to start a command or launch an URL. For the syntax of macro mode, please see the help file in the application.

Buzzer
On models that have a buzzer, this buzzer can be configured to sound a "short" beep or a "long" beep, or to be disabled.

Tactile feedback
On models with a haptic feedback element (vibration), the vibration response can be set to a long or short pules, or be disabled.

Starting programs or commands

In Microsoft Windows, the ⊞ + R key combination shows the "Run" dialog. In "macro" mode, you can pop up this dialog with the key sequence "#R". You can follow this by a command and then "{ENTER}" at the end to execute it. Other operating systems support similar functions, but may require a different key combination to pop up a "Run" dialog.

In addition, the USB Pendant Button supports several consumer control functions, like play, pause and others. These require standard or pulse modes.

Specifications

Mechanical

Dimensions.....................Diameter: 19 mm, length: 77 mm.
Weight:..........................90 g (including cable).
Body..............................Natural: nickel-plated zinc. Black: powder coated zinc.
Mechanical lifespan.......$> 10^6$ operations.
Protection level..............IEC/EN 60529: IP65, IP67
Actuation force...............approximately 5 N.
Cable.............................3 m, braided nylon sleeve.

Operating conditions

Operating temperature..-25 °C to +40 °C.
Humidity........................5% to 95% non-condensing.

Electronic interface

Operating voltage..........4.5 to 5.5 V/DC; USB-powered.
Current...........................15 mA nominal.
Debounce criterion........20 ms stable period.
Switch latency................30 ms maximum, 15 ms average.
USB connector...............Standard A.
USB protocol.................USB 1.1 compatible (low-speed USB device).

Compatibility

Compatible with Microsoft Windows® XP and later, MacOS®, Linux and Android. No client-side software is needed. (Free configuration software requires Windows®, MacOS®, or Linux).

Conformity

EMC..............................Compliant with EU Directive 2004/108/EC: EN 55022 and EN 55024 + A1 (2001) + A2 (2003).
Electrical safety.............Compliant with EU Directive 2006/95/EC: EN 60950-21
RoHS..............................Compliant with EU Directive 2002/95/EC.

Legal disclaimer

CompuPhase shall not be liable for the incidental or consequential losses or damage to tangible property, injury or death of a person in connection with the use of this device.

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