

MilliKey 1000 Hz USB Response Boxes

Feature Details

1000 Hz USB Keyboard

A MilliKey button box is automatically detected as a 1000 Hz USB Keyboard when connected to the USB port of a computer.

Pressing a button on a MilliKey generates a standard Keyboard press event with a one millisecond reporting rate and average delay. No debounce period is applied to press events.

When a MilliKey button is released, the corresponding USB keyboard release event is generated after a 15 millisecond debounce interval. The debounce duration should be subtracted from keyboard release time stamps to achieve accurate key press durations within experiment software.

The key that is used for each MilliKey button (up to 8) is easily changed using the MilliKey Manager application.

OS and Software Compatible

MilliKey Button Boxes work on Windows 7 / 10, OS X 10.7+, and Linux.

Connect MilliKeys' USB cable to your computer and immediately start collecting MilliKey generated keyboard events from within DirectRT, Experiment Builder, E-Prime, Presentation, Psychopy, PsychophysicsToolbox, PsyScope, SuperLab, or any other Psychology experiment software.

The MilliKey USB Serial interface is plug-and-play on Windows 10 and OS X; get up and running on Windows 7 and Linux easily too.

MilliKey Timing Validation

Millisecond accurate MilliKey Timing Validation procedures are integrated into every MilliKey Button Box. No additional hardware required.

MilliKey Hardware Timing: Use the MilliKey Manager application to easily gather statistics about MilliKey event latency on the computer being tested.

Software's Keyboard Time-Stamping Accuracy: Test the time-stamping accuracy of your experiment software for MilliKey Keyboard events by programmatically instructing the MilliKey device to generate keyboard events with millisecond accuracy.

MilliKey DeLux Upgrade

The MilliKey DeLux Light Sensor allows the MilliKey to read the brightness of the computer monitor being used and generate a keyboard or serial event when display brightness crosses a configurable threshold level. The MilliKey DeLux upgrade includes an analog input port on the MilliKey enclosure and a DeLux Light Sensor connected to a 2 meter cable.

LabHackers Device Manager

LabHackers Device Manager is an application that makes it easy to adjust MilliKey response box settings. Change button to keyboard key mappings and button release debounce time.

MilliKey hardware timing can also be evaluated by using the MilliKey Timing Validation dialog within Device Manager.

1000 Hz USB Serial

Every MilliKey button box can also be accessed via a USB Serial interface. No additional cables are needed. The MilliKey USB Serial interface can be used in a command or data streaming mode:

Command Mode: Send commands to the MilliKey device to configure device settings or to instruct the MilliKey to generate a keyboard press and release event with millisecond accuracy.

Streaming Mode: Switch the MilliKey Serial interface into a 1000 Hz button state data stream that gives the state of all MilliKey buttons exactly once a millisecond. This is a good way to accurately access MilliKey button data when using software that does not reliably time stamp keyboard events.

Specifications are subject to change without notice.



LabHackers Research Equipment

www.labhackers.com

782-414-5169
info@labhackers.com

8 Redwood Ave.
Halifax, Nova Scotia, B3P1Y4