GageWay KW™
Keyboard Wedge for Digital Gages

User's Guide

MICRORIDGE

Measurement Collection Specialists
Connect Any Gage into Any Software

GageWay KW Keyboard Wedge

Copyright © 2011-2017 MicroRidge Systems, Inc.

Printed: Thursday, May 11, 2017 at 1:11 PM in Sunriver, Oregon.

Table of Contents

1   Introduction

GageWay KW is a hardware keyboard wedge that allows you to transfer gage measurements into any application that supports keyboard input. GageWay KW looks like a standard HID (human interface device) peripheral to a PC. Other HID peripherals that we are all familiar with are the USB keyboard and mouse. Since GageWay KW looks like a standard HID peripheral to your PC, you do not need to install any drivers for this wedge. GageWay KW is simple to use and normally does not require any configuration steps by the user.

Keyboard wedges are often used with applications such as Excel, Access and other database applications. The information sent from GageWay KW looks like data entered from the keyboard attached to your PC. All of the data packets sent from GageWay KW are terminated with a carriage return (Enter key).

Features

The key features of GageWay KW are as follows:

- Compact size: 2.16" x .80" x .40".

- No driver installation required; product looks like a standard HID peripheral.

- Includes 6' USB cable.

- LED indicates gage reading sent to PC.

- Supports single and continuous read modes.

- Read switch connector (2.5 mm subminiature phone jack).

- Supports gages manufactured by CDI, Federal, Mitutoyo and Ono Sokki.

- Supports any gage that has a standard Mitutoyo output.

- Automatically detects type of gage when GageWay KW is connected to USB port on PC.

Gages Supported

Gages supported by GageWay KW fall into the following groups:

- Any gage with standard Mitutoyo output. This includes gages manufactured by Mitutoyo, Accurate Technology, Component Engineering, Federal (uMaxim gage), LMI, etc.

- Federal gages that uses a cable with a built-in Mitutoyo output converter.

- Federal Maxum gages. Cables for these gages must be purchased from MicroRidge Systems.

- CDI (Chicago Dial Indicator) gages. Cables for these gages must be purchased from MicroRidge Systems.

- Ono Sokki gages. Cables for these gages must be purchased from MicroRidge Systems.

Supported Characters & Data Output

GageWay KW will send the measurement string received from the gage to the PC. At the end of each gage reading GageWay KW will add a carriage return. The data received from the supported gages always consists of the following characters:

- Measurement digits 0 to 9

- - (minus sign)

- . (decimal point)

The GageWay KW Keyboard Wedge is in compliance with the European Union Directive on the restricted use of certain hazardous substances (RoHS/RoHS2 Directive). For more information review the ***RoHS Declaration of Compliance*** document on the MicroRidge web.

2   Using GageWay KW

Typically GageWay KW requires no configuration before you start to use the wedge. When you plug GageWay KW into a USB port on your PC, the PC will automatically install the necessary drivers within a few seconds. You may or may not hear a beep from your PC when GageWay KW is ready to use. The default factory settings for GageWay KW are single read for a gage with the Mitutoyo output format. If you are using a different type of gage or want to do continuous read, follow the instructions discussed below.

Caution! When GageWay KW is connected to a PC and you press the gage read button, data will be sent to the application that currently has the focus. Be sure you have the focus set to where you want the data to be sent. Remember, GageWay KW looks like just another keyboard to your PC.

Gage Read LED Blinks

When you press the read switch and GageWay KW successfully gets a reading from the gage, the LED will turn on for 1/4 second. If GageWay KW could not get a gage reading, the LED will blink 3 times.

Gage Detection

When GageWay KW is plugged into a USB port, GageWay KW goes through a procedure to determine the type of gage it is connected to. If GageWay KW does not detect a gage, it configures itself to use the type of gage it was previously connected to.   When GageWay KW ships from the factory, it is configured for a gage with a Mitutoyo compatible output. It you want to use a different gage, you must turn on your gage, connect the gage to GageWay KW and than plug GageWay KW into a USB port.

When you plug GageWay KW into a USB port, the LED will turn on. After GageWay KW completes the gage identification procedure, it will blink the LED 4 times.

Switching between Single & Continuous Read Modes

The default GageWay KW mode of operation is for a single read for each press of the read switch. You can change to a continuous read which will provide a continuous stream of readings while the read switch is pressed. The number of readings/second will depend upon the rate that the gage actually sends readings.

To switch from single to continuous or continuous to single readings, follow the steps below:

- Plug GageWay KW into a USB port.

- After GageWay KW has completed the gage detection process, turn the gage off or unplug the gage from the gage cable.

- Press and hold the read switch. This read switch could be the read button on the gage cable or the external read switch connected to GageWay KW.

- The LED will blink twice and then stay on for about 5 seconds. Continue to press the read switch.

- After the 5 second on period, the LED will turn off for 2 seconds. While the LED is off in this 2 second interval, release the read switch.

- GageWay KW will now have switched from single to continuous or continuous to single read mode.

Displaying Copyright & Setup Information

GageWay KW can send copyright and setup information to the PC. If you are going to request this information, we suggest that you put the focus to an application such as notepad. To display the copyright and setup information, follow the steps below:

- Follow the steps outlined above for switching between single and continuous read modes.

- When the LED turns off for the 2 second period, continue to press the read switch.

- At the end of the 2 second LED off period, the LED will turn on for 2 seconds.

- While the LED is on, release the read switch. The copyright and setup information will be sent to the PC.

- If you do not release the read switch when the LED is on, the LED will turn off after 2 seconds. Once the LED turns off, continuing to hold or releasing the read switch will have no effect on the GageWay KW.

Read Switch

You must use a read switch to tell GageWay KW to get a reading from the gage. If you are using a caliper or micrometer, there will be a read button on the gage or the gage cable. If you are using a digital indicator, typically there will not be a read button on the gage or cable. For a digital indicator type of gage, you must use a read switch connected to the read switch port on the side of the GageWay KW. You can purchase hand and foot switches from MicroRidge Systems. Refer to the Accessories section for more details.

3   Accessories

Several accessories are available for use with GageWay KW.

Purchase On the Web

These items are available for purchase directly from the MicroRidge web site at the following stores:

GageWay Interface Store

GageWay Gage Cables Store

Hand Switch

The hand switch is connected to the read switch connector on the side of GageWay KW. If you are using GageWay KW with a gage that does not have a read button (i.e., digital indicator, etc.), you must connect a read switch to the GageWay KW. Gages such as calipers and micrometers, will have a read button on the gage or on the gage cable.

The cable length on the hand switch is 6'

P/N: HNDSW-MPLG

Foot Switch

The foot switch is used for the same functions as the hand switch.

The cable length on the foot switch is 6'

P/N: FTSW-MPLG

Gage Cables

*No Photo
Available*

Gage cables for all of the gages supported by GageWay KW are available from MicroRidge Systems. Contact us or go to the GageWay Gage Cables Store for more information.

4   Warranty Information

The standard MicroRidge warranty for products it manufactures and resells is described below:

- MicroRidge warrants that equipment manufactured by MicroRidge to be free from defects in material and workmanship, when properly maintained under normal use, for a period of twelve (12) months from date of purchase of the product (the "warranty period"). Some products sold and distributed by MicroRidge are warranted by the manufacturer of the products.

- Warranty for gage and RS-232 interface cables is 30 days from date of shipment.

- Products which do not conform to their description or which are defective in material or workmanship will, by MicroRidge decision, be replaced or repaired, or, at MicroRidge's option, credit for the original purchase price may be allowed provided that customer notifies MicroRidge in writing of such defect within thirty (30) days of discovery and returns such products in accordance with the MicroRidge instructions. No products may be returned without MicroRidge prior written authorization.

- This warranty does not apply to any product which has been subjected to misuse, abuse, negligence or accident by the customer.

- MicroRidge makes no other warranty or representation of any kind with respect to the products, either express or implied, including without limitation, that of merchantability or fitness for a particular use. Failure to make any claim in writing, or within the thirty (30) day period set forth above, shall constitute an irrevocable acceptance of the products and an admission by the customer that the products fully comply with all terms, conditions and specifications of customer's purchase order. MicroRidge shall not be liable for direct, indirect, incidental, special or consequential damages, under any circumstances, including, but not limited to, damage or loss resulting from inability to use the products, increased operating costs or loss of sales, or any other damages. To make a claim under this warranty, customer must notify MicroRidge in writing within the warranty period.

- Customer will pay all shipping charges (and duty and taxes) for equipment returned to MicroRidge for warranty service. MicroRidge will pay shipping charges for equipment returned to customer in North America. Customers outside the USA are responsible for duty and taxes on equipment returned to them.

- Software developed by MicroRidge is warranted to operate in accordance with the software documentation on the hardware specified in such documentation, for a period of six (6) months from date of shipment. During the warranty period, MicroRidge will at no charge correct any programming error in the software that interferes with normal operation of the software provided that MicroRidge is able to reproduce such error on MicroRidge computer.

5   Contact MicroRidge

Email:

Support:	support@microridge.com
Sales:	sales@microridge.com
Information:	info@microridge.com

Phone:

Support:	541.593.1656
Sales:	541.593.3500
Main office:	541.593.1656
Fax:	541.593.5652

Mailing Address:

MicroRidge Systems, Inc.

PO Box 3249

Sunriver, OR 97707-0249

Shipping Address:

MicroRidge Systems, Inc.

56888 Enterprise Drive

Sunriver, OR 97707

Note: There is no mail delivery to this address. This address should only be used for package delivery services such as UPS, FedEx, etc.

Web: www.microridge.com