

Quick Start Guide

MODEL DKSW5484E



SW5484E DEMO KIT - DESCRIPTION

Metrix SW5484E Demo kit will allow you to demonstrate and test the features of the SW5484E. When the kit is properly connected, you will be able to demonstrate the SW5484E capabilities. It is assumed that the owner of this kit also has access to a Hardy Shaker.



This demo kit can be used for Metric or English Unit Measurements.

Visit the webpages below for more information on the Metrix SW5484E:







www.metrixvibration.com/products/switches/electronic-vibration-switches/sw5484e-compact-switch#tab-bordered-documentations

www.metrixvibration.com/resources/videos/sw5484e-switch-videos





SW5484E DEMO KIT - DESCRIPTION

Component	Purpose	Metrix P/N
SW5484E Demo Kit Bundle	Demonstrate the versatility and functions of the SW5484E.	DKSW 5484E


INCLUDED IN KIT

Component	Purpose	Metrix Model	Qty	Image
SW5484E Demo Kit Bundle	Demonstrate the functions of the SW5484E	SW5484E-001 (English Units)	1	
SW5484E Demo Kit Bundle	Demonstrate the functions of the SW5484E	SW5484E-002 (Metric Units)	1	
SW5484E Test Box	Demonstrate accuracy and alarm values of the SW5484E	TB-SW5484E	1	
Transducer Cable (1.5M)	8 conductor cable to connect the SW5484E to the Test Box	8978-811-0010	1	
Communications Cable Adapter	Connects Test Box to the Dongle	100983	1	
Dongle	Connects to computer and Communications Cable	1009831	1	

INCLUDED IN KIT (Continued)

Component	Purpose	Metrix Model	Qty	Image
24 Volt Power Supply (240V/120V AC to 24 V DC)	Provide power to SW5484E Test Box	96002-048 (Digikey part # T1253-P6P-ND)	1	
Carrying Case	Case to secure all demo equipment	99540-028	1	
Quick Start Guide	Setup demo instructions	1966252	1	
SW5484E Software	Configure the SW5484E	Follow the link: www.metrixvibration.com/products/switches/electronic-vibration-switches/sw5484e-compact-switch	1	

NOT INCLUDED IN KIT (Needed for Demonstration)

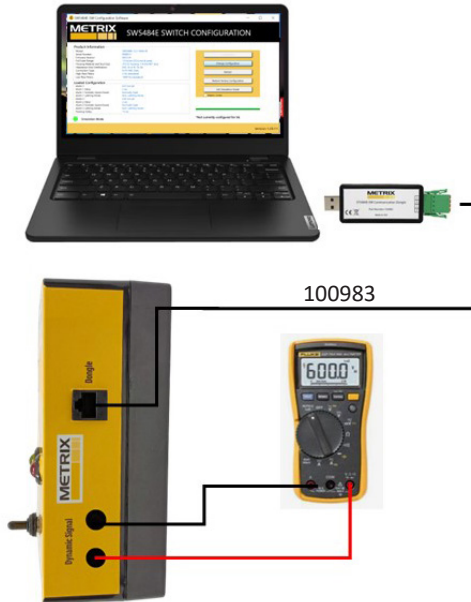
Component	Purpose	Metrix Model	Qty	Image
HI-903/913 Shaker	Demonstrate Acceleration and Impact on the SW5580	HI-903/913	1	

DEMO SET UP



SW5484E Demonstration (Alert and Danger Alarms)

SW5484E Test Box



CONNECTING DEMO HARDWARE

1. Layout the equipment per the illustration on pages 4 and 5.
2. Mount the SW5484E on the HI-903/HI-913 Shaker (hand tighten using counter torque to not stress the shaker mounting structure).
3. Connect the Transducer Cable (8978-811-0010) to the SW5484E that is mounted on the HI-903/HI-913 Shaker.
4. Connect the RJ45 Jack on the other end of the Transducer Cable to the SW5484E Test Box (TB-SW5484E) using the RJ45 receptacle on the right-hand side.
5. Connect the Communications Cable Adapter (100983) RJ45 Jack to the SW5484E Test Box (TB-SW5484E) using the RJ45 receptacle on the left-hand side.
6. Connect the other end of the Communications Cable Adapter (100983) to the Dongle (1009831).
7. Connect the Dongle to the Computer using the USB connection.
8. Connect the Volt Meter to the + and - Jacks located on the right side of the Test Box. Use the millivolt (mV) or volt setting to see the RMS output from the sensor (the raw output is from the 100 mV/g sensor). This mV output is integrated, amplified and converted to a 4-20 mA output.
9. Connect the power supply with the round outlet to the 24 VDC Jack on the left side of the Test Box. Confirm that the power supply is properly connected to the SW5484E Test Box by plugging it in and seeing the SW5484E screen illuminate. If it does not illuminate, move the switch on the front of the SW5484E Test Box to the “Transmitter” position.



DEMONSTRATING THE SW5484E CAPABILITIES

Given: Download the free SW5484E Configuration software from the website.

1. Move the switch on the front of the SW5484E Test Box to the “Configure” position.
2. Start the SW5484E configuration software. It should automatically connect to the SW5484E mounted on the shaker. Verify that the serial number shown in the software matches the serial number on the connected SW5484E switch. If the software fails to connect, check all your connections, ensure you have power to the Test Box, and you hear the USB from the Dongle connect to the Computer. If the unit continues to fail to connect, check with technical support.
3. For this demonstration, show the customer that the serial numbers match and that the current configuration for the SW5484E is currently in the software. Note the alarm levels, time delays, and units. For this demonstration, use “Normally Open” relays and don’t have any alarms set to “Latching”. This will allow the lights to illuminate on the Test Box when the alarm levels are exceeded.
4. Switch the Test Box from “Configure” to “Transmitter”. At 0 vibration, you should see close to 0 +/- 5% on the screen of the Test Box. No lights on the Test Box should be illuminated. Close down the software.
5. Set the Hardy Shaker to 0 ips (0 mm/sec) at 100 Hz. Have the customer increase the vibration amplitude to just below the Alert setpoint. Notice that the alarm indicating light does not come on. Have the customer increase the vibration level to slightly greater than the Alert setpoint, wait the required time delay and notice that the Alert light is illuminated.
6. Have the customer increase the vibration amplitude to just below the Danger setpoint. Notice that the Danger alarm indicating light does not come on. Have the customer increase the vibration level to slightly greater

DEMONSTRATING THE SW5484E CAPABILITIES (Continued)

- than the Danger setpoint, wait the required time delay and notice that the Danger light is illuminated.
7. Have the customer reduce the vibration levels, noticing that both the Danger and Alert relays change state immediately when the vibration level goes below the Danger and Alert setpoints.
 8. Change the switch on the Test Box from “Transmitter” to “Configure”. Open the SW5484E software to the configuration screen. Have the customer change the alarm levels, time delays and “Latching” to values they would typically see on sight. Have the customer switch the Test Box back from “Configure” to “Transmitter”.
 9. Allow the customer to test the new configuration using the Hardy Shaker.
 10. Discuss with the customer the versatility of the SW5484E. Please note the following features that are recommended by the Cooling Tower Institute, namely:
 - Two independent relays (Alert and Danger)
 - Adjustable alarm setpoints
 - Configurable Latching Operation
 - Power-Up Alarm Inhibit capabilities
 - Analog 4-20mA output standard
 - Field configurability
 - RFI/EMI Immunity
 - IP68 - Excellent Moisture Resistance
 - Hazardous Area Approvals
 - Dynamic Signal Available
 - Connection Options
 - Rugged, Industrial Design
 - High- and Low-Pass Filter Options
 - Multiple Mounting Options
 - 24 VDC Loop-Powered
 - RMS Amplitude Detection
 - Numerous Full Scale Ranges

Note: Metrix is continuously improving our products. Please refer to our website to download the latest version of this document. All trademarks used in this document belong to Metrix.

© 2024, Metrix Instrument Company, L.P. All rights reserved.

Metrix Instrument Co.

8824 Fallbrook Dr., Houston, TX 77064
281-940-1802 | info@metrixvibration.com