



Product Information

Signal Injector - WB 1292 MK2



The WB 1292 MK2 is a small portable battery powered instrument for installation, testing and fault-finding on vibration monitoring equipment.

Description of WB 1292 MK2

WB 1292 MK2 consists of an all programmable sine-generator, attenuator and a output conditioning system.

The output type is selectable between DeltaTron™, Charge, Voltage and Voltage with Offset thus making it usable for both voltage, charge and constant current line drive amplifiers as well as proximity probe inputs and process logic inputs.

Two outputs sockets are available. A single ended voltage output and a differential voltage/charge output plus a DeltaTron™ output.

The differential output may be enabled in 4 ways to test voltage/charge amplifiers: noise, common mode rejection and positive or negative signal pass through.

The output amplitude may be selected with mV resolution and it is possible to get calibrated outputs in acceleration, velocity and displacement either in metric or imperial units.

The sine-generator features 1 Hz resolution over a wide range extending it's use for other applications.

The unit can provide a self controlled sweep with programmable setup.

A programmed setup may be stored in 10 output setups and 10 frequency setups. This memory is non-volatile and provide the user with the flexibility of selecting all his needed measurements in the workshop place before entering the site.

All communication with the unit is done with an easy to learn menu system controlled by 4 arrow keys.

Readout is on an easy to read alphanumeric display with adjustable intensity.

The unit is powered by a single standard 9 Volts battery and is provided with a battery ok/low indication. Despite its complexity and vast functions it has been possible to archive a low power consumption due to power control technology and thereby ensuring a good battery life.

Extensive features has built-in to assure reliability and ease of use - Selftest, Operator controlled calibration without opening the unit, battery voltage check and the possibility to monitor the operating parameters of the DeltaTron™ accelerometer (constant current and bias voltage).

Specifications WB 1292 MK2

Power supply:.... Internal battery only
Battery type: 9 Volts Block
 – ENDA 1604, 6F22 or 006P
Power consumption:.....Max 15 mA
 (no display activity, no load)
Battery life:> 20 hours
 (typical use – alkaline battery)
Signal ground: Signal ground is
 Internally connected to chassis via a
 1µF capacitor
**Recommended period between
 calibration:**..... 3 months

Controls:

Rubber push buttons (power on/off,
 arrows + Enter keys), sealed switches
 (diff. output selection) and 10 position
 toggle switches (Output & Frequency
 memory setups)

Display:

10 alphanumeric character LED type
 with adjustable display intensity

Audible Alarm:

Buzzer alarm gives warning of mal
 control

Memory:

Non-volatile memory type with 10+
 years storage time

Capability:

10 Output definitions
 10 Frequency definitions
 + system setup (intensity etc.)

Differential Output:

Through chassis mounted female
 Lemo-connector
Diff. output balance:< 0.5%
Output impedance:
Voltage output:..... 500 Ω
Charge output:1 nF

DeltaTron™ Outputs:

Shared through chassis mounted
 female Lemo-connector
**Difference between the DeltaTron™
 output and the single-ended
 output:** < 0.2 dB

Single-ended Output:

Through chassis mounted BNC
 connector. Only Voltage Output
Output impedance:.....500 Ω

Generator: Sine

Frequency range:..... 1 - 60000 Hz
Frequency resolution: 1 Hz
Frequency accuracy: <0.1%
Harmonic distortion:..... <50 dB

Output Attenuator:

Amplitude accuracy: <0.5 dB
Output stable time: <1 second
Noise:..... <100 µV (2 Hz to 20 kHz)

Common mode rejection ratio:

..... >80 dB (50 to 400 Hz)
 The entered output use the closest
 possible level as output.

Output Offset:

Programmable range: ±10.000 Volts
Offset accuracy: ±5 mV


Dimensions:

Length:..... 134 mm (5.3 inches)
Width:..... 66 mm (2.6 inches)
Height:..... 48 mm (1.9 inches)
Weight:.....Approx. 400 grams

Accessories Included:

- 1 Carrying bag..... KE 0189
- 1 Alkaline battery.....QB 0016
- 1 Mini screw driver.....QA 0001
- 1 Cable (Differential) EL 2050
- 1 Cable (DeltaTron™) EL 2051
- 1 Quick Reference GuideER 2004

Compliance with Standards

	CE-mark indicates compliance with: EMC Directive and Low Voltage Directive
Safety	EN 61010-1 (1993) and IEC 61010-1 (1990): Safety requirements for electrical equipment for measurements, control and laboratory use.
EMC Emission	EN 50081-1 (1992): Generic emission standard. Part 1: Residential, commercial and light industry. CISPR 22 (1993): Electromagnetic disturbance characteristics of industrial, scientific and medical (ISM) equipment. Class B Limits. FCC Class B limits.
EMC Immunity	EN 50082-2 (1995): Generic immunity standard. Part 2: Industrial environment. <i>Note 1:</i> Susceptibility to radiated electromagnetic field: Noise increase max. 33 dB <i>Note 2:</i> Susceptibility to conducted RF-disturbances: Noise increase max. 37 dB
Temperature	IEC 60068-2-1 & IEC 68-2-2: Environmental testing. Cold and Dry Heat. Operating Temperature: 0°C to +50°C Storage Temperature: -25°C to +70°C
Humidity	IEC 60068-2-3: Environmental testing. Damp heat. Operating: 90% RH (non-condensing at 30°C). Storage: 90% RH (non-condensing at 40°C).
Mechanical	Non-operating: IEC 60068-2-6: Vibration: 0.3 mm, 20 m/s ² , 10 - 500 Hz IEC 60068-2-27: Shock: 750m/s ²
Enclosure	IEC 60529 (1989): Protection Provided by Enclosure: IP 20

Brüel & Kjær Vibro reserves the right to change, without notice, all specifications and accessories quoted in this document

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