

Instrumented IEPE Impact Hammer Range

All dimensions given in mm (L x W x H) not including the connector



IH-01-50

Sensitivity 100mV/N
Measuring Range 50N
Hammer Mass 24gm
Head Diameter 14mm
Hammer Length 130mm
Output Connector BNC

Tips Supplied
 Stainless Steel, Aluminium,
 Nylon, Rubber



IH-01

Sensitivity 25mV/N
Measuring Range 200N
Hammer Mass 120gm
Head Diameter 18mm
Hammer Length 250mm
Output Connector BNC

Tips Supplied
 Stainless Steel, Aluminium,
 Nylon, Rubber



IH-02

Sensitivity 2.5mV/N
Measuring Range 2000N
Hammer Mass 180gm
Head Diameter 16mm
Hammer Length 250mm
Output Connector BNC

Tips Supplied
 Stainless Steel, Aluminium,
 Nylon, Rubber



IH-05

Sensitivity 1mV/N
Measuring Range 5000N
Hammer Mass 220gm
Head Diameter 20mm
Hammer Length 250mm
Output Connector BNC

Tips Supplied
 Stainless Steel, Aluminium,
 Nylon, Rubber



IH-10

Sensitivity 0.5mV/N
Measuring Range 1000N
Hammer Mass 750gm
Head Diameter 32mm
Hammer Length 340mm
Output Connector BNC

Tips Supplied
 Hard tip, Medium tip, Soft tip



IH-20

Sensitivity 0.25mV/N
Measuring Range 20000N
Hammer Mass 950gm
Head Diameter 32mm
Hammer Length 350mm
Output Connector BNC

Tips Supplied
 Hard tip, Medium tip, Soft tip

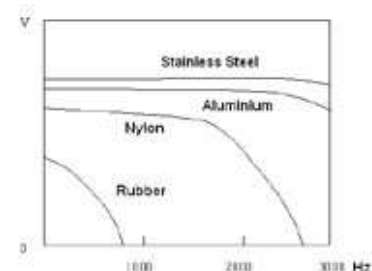


IH-50

Sensitivity 0.1mV/N
Measuring Range 50000N
Hammer Mass 1300gm
Head Diameter 51mm
Hammer Length 390mm
Output Connector BNC

Tips Supplied
 Hard tip, Medium tip, Soft tip

Excitation pulse width and frequency response vary with hammerhead materials. Response curves are for indication only



AF Impedance Head

AF/50/5

Sensitivity - Force 5mV/N
Sensitivity - Acceleration 50mV/g
Weight 30gm
Size (mm) 17 x 28mm
Min-Max. Temp -40°C • 121°C
Connector M5 Microdot
Sensing Element Shear Plate Piezo-Ceramic

AF/100/10

Sensitivity - Force 10m V/N
Sensitivity - Acceleration 100mV/g
Weight 30gm
Size (mm) 17 x 28mm
Min-Max. Temp -40°C • 121°C
Connector M5 Microdot
Sensing Element Shear Plate Piezo-Ceramic

Hand Held Calibrator

VC-01

The VC-01 hand held calibrator is a low cost reference device that allows the user to quickly check the response of accelerometers at a known fixed frequency and level. Ideal for use in the field or in a lab. Its simple one button operation ensures all the user needs to do is fix the test accelerometer to the top of the calibrator either using the supplied stud or via adhesive/petrowax and press the button. The output can be monitored on any signal analyser or scope and the level checked against the known excitation level.

Features:

Battery powered with auto shutdown, lightweight, simple one button operation, stud adaptor included, rugged black anodised aluminium case, battery level indicator.



Acceleration Amplitude (RMS) 9.81m/s² (1g) ±3%

Vibration Frequency 159.2Hz ±0.5%

Output Waveform Sine

Waveform distortion ≤5%

Maximum Load (gms) 120

Working Temperature °C 0 to +55

Storage Temperature °C -45 to +85

Maximum Humidity %RH 95

Weight (approx. gms) 500

Mounting M5 tapped hole
(variety of studs available)

Case Material Aluminium

Dimensions (mm) Ø52 x 148 (H)

Auto Shutdown (s) 50

Power indicator Normal: Green
Low Battery: Orange

Hand Held Vibration Meter

VS1

The VS1 is DJB's new generation of hand held vibration meter. It is a compact, rechargeable, hand held Vibration Meter designed to conform to ISO10816-3 and operates with a constant current IEPE accelerometer providing accurate vibration measurement.

VS1 kit Includes:

- Vibration Meter
- Magnet
- Coiled Sensor Cable.
- USB A to B with Charger and Worldwide Adapters
- Probe
- 4 ¼ - 28 UNF Spike
- Carry Case and Handbook

VS1 Features:

- Storage of up to 100 time-stamped readings.
- Vibrant colour LCD Display.
- Rechargeable Lithium-ion battery with worldwide charger.
- RMS, peak, peak-peak, crest factor readings in acceleration, velocity or displacement modes.
- Bearing condition mode (acceleration and velocity).
- Industrial Rubber Case.
- Adaptive amplifier for high accuracy.
- AC output.
- Audio output for listening to vibration directly.



Charge & IEPE Amplifiers

Charge



CA/04/N, CA/04/NL, CA/04/NH, CA/04/EH

Frequency
Extended Low Frequency Response

Output
Normalised O/P 3.16V/g (max)

Input range
1/110pC/g (CA/04/N)
0.1/11pC/g (CA/04/NL)
10/1100pC/g (CA/04/NH)
100/11000pC/g (CA/04/EH)

Bandwidth
0.1/100kHz

Warning indicators
Overload LED



CA/04/V (Velocity)

Frequency
n/a

Output
O/Ps 100mV/g
& 1V/mm/sec. (max)

Input range
1/110pC/g

Bandwidth
0.7/100kHz

Warning indicators
n/a



CA/04/D (Differential)

Frequency
n/a

Output
n/a

Input range
1/110pC/g (CA/04/D)
10/1100pC/g (CA/04/DH)

Bandwidth
0.7/100kHz

Warning indicators
n/a



DIN Rail Mounted Charge or IEPE Source Amplifier CV1-C, CV1-V

Output
Fixed gain selectable on request

Output Connector
Terminal Block

Input Connector
SMC

Warning indicators
Power on

Please note:
Other options including filters are available on our website.



9 Channel Charge IEPE or Combined Source Amplifier See Page 23 for options

Input connectors
9 x BNC

Output connectors
9 x BNC

Sensor Excitation
(V & CV only) +24VDC,
2-14mA user selectable

Gain
x1, x10, x100
selectable per channel

Bandwidth
0.5/500kHz Max.

Warning indicators
Open/short circuit

IEPE



Single Channel IEPE Source Amplifier VV/04

Output
Normalised O/P
31.6V/g (max)

Input range
1/110mV/g

Bandwidth
3dB Bandwidth
0.4Hz/100kHz

Warning indicators
Transducer O/C and
S/C Fault detection



4 Channel IEPE Source Amplifier V4/04

Output AC

Gain
x 1, 3, 16, 10, 31.6
and 100

Output Connector
n/a

Input Connector
n/a

Warning indicators
Transducer O/C and
S/C Fault detection
O/L Indicator

IEPE Battery Powered



IEPE Battery Supply VB/01

Gain
x 1 only

Output Connector
BNC

Input Connector
BNC

Warning indicators
Transducer O/C and
S/C detection
Power on

Batteries Required
x2 PP3 9V



IEPE Battery Supply VB/02

Gain
x 1, x 10, x 100 user
selectable

Output Connector
BNC

Input Connector
BNC

Warning indicators
Transducer O/C and
S/C detection
Power on

Batteries Required
x2 PP3 9V

Level Alarm



Level Alarm LA/04

Features
High level alarm indicator
Alarm timer eliminates
spurious triggering,
Programmable alarm
Setpoint and timer,
Latching non-latching
alarm mode

Input
Single ended

Portable and Rack Based Housings



DJB's range of modular instrumentation can be supplied in portable and rack base housings suited for use with any of the 04 range of instrumentation modules seen on pages 22,24.

PC/04 - Portable housings with up to 4 single width slots are available with user selectable input and output connectors, usually microdot or BNC. Housings also include power supply, module interconnections for a wide range of module combinations. Power options include standard AC power in addition to DC 12/28VDC.

For input/output connector options contact our sales team sales@djbstruments.com

9 Channel Charge, IEPE or Combined Source Amplifier



As an alternative to the modular solution, DJB also offer a range of 9 Channel rack based Amplifiers, the CV9 range is available in three versions, all offering simple front panel BNC input and output connectors and all available as AC or DC powered racks.

Signal Conditioning and Amplification - Charge

CV9-C: A 9 channel charge amplifier with individually selectable gain (x1, x10, x100) per channel via a three way switch.

CV9-CL: A 9 channel charge amplifier with individually selectable gain (x0.1, x1, x10) per channel via a three-way switch.

CV9DC-C: A DC powered 9 channel charge amplifier with individually selectable gain (x1, x10, x100) per channel via a three-way switch.

Signal Conditioning and Amplification - IEPE

CV9-V: A 9 channel IEPE signal conditioner with individually selectable gain (x1, x10, x100) per channel and user selectable 2-14mA supply.

CV9DC-V: A DC powered 9 channel IEPE signal conditioner with individually selectable gain (x1, x10, x100) per channel via a three-way switch and user selectable 2-14mA supply.

Signal Conditioning and Amplification - Combined Charge & IEPE

CV9-CV: A 9 channel source amplifier, individual channels are switchable from IEPE to charge amplification, with individually selectable gain (x1, x10, x100) per channel and user selectable 2-14mA supply.

CV9DC-CV: A DC powered 9 channel source amplifier, individual channels are switchable from IEPE to charge amplification, with individually selectable gain (x1, x10, x100) per channel and user selectable 2-14mA supply.

Features

- Short circuit/open circuit warning indicator
- IEPE Constant Current Source, user selectable via internal jumpers
- Switchable Gain x1, x10 and x100 for charge and voltage inputs (x0.1, x1 & x10 CV9-CL), Individual channel selectable.
- Front Panel BNC input/output connectors
- 19" Rack Mountable Enclosure

Power

Input connector IEC 320

Input AC: 105-240 V AC

DC: 9-30 V DC

Physical

Weight 2.75kg

Size

H 44.5mm, W 482.6mm, D 348mm

Input connectors 9 x BNC

Output connectors 9 x BNC

Sensor Excitation

(V & CV only) +24VDC, 2-14mA user selectable

Gain x1, x10, x100 selectable per channel (CV9-CL x 0.1, x1, x10)

Bandwidth 0.5/500kHz Max.

Warning indicators Open/short circuit

Inline Converters



Hybrid Two Wire IEPE Source Line Driver QV/02

Weight
20.5g

Dimensions
Ø15 x 47.5

IEPE
Miniature 2 Wire Charge/Voltage Converter

Connector
I/P 10-32 UNF Microdot
O/P BNC

Gain
0.1,1 and 10mV/pC



Hybrid Two Wire IEPE Source Line Driver QV/04

Weight
15g

Dimensions
Ø12.5 x 28.5

IEPE
Miniature 2 Wire Charge/Voltage Converter

Connector
I/P 10-32 UNF Microdot
O/P 10-32 UNF Microdot

Gain
0.1,1 and 10mV/pC

Integrators



Acceleration/ Velocity Converter VM/04

Voltage
Single Integrator
High Pass Filter
Converts Vibration Data from Acceleration to Velocity Format

Output
Configurable for optimum signal/ noise down to min. 2Hz



Acceleration/ Displacement Converter DM/04

Voltage
Double Integrator/
High Pass Filter
Converts Vibration Data from Acceleration to Displacement Format

Output
Configurable for optimum signal/noise down to min. 2Hz

Filters



Bandpass Filter BP/04/N BP/04/W

Frequencies
Fixed Frequency Bandpass Filters
1Hz/15kHz Tuning Rate

High Pass
Customer Selectable

Low Pass
Customer Selectable



DIN Rail Mounted Filter Module CV1-F CV1-VF

Frequencies
Fixed Frequency factory set to customer spec.
Variable Frequency set by DIP switch, 255 steps

High Pass
Range of High pass filters available

Low Pass
Range of Low pass filters available

LHP Filter

Modular Switchable Low/High Pass Filter

Available as a single channel DC powered unit or up to 9 channels in a AC/DC powered chassis. Utilising simple BNC input and output connectors on the front panel, with user selectable AC/DC coupling and IEPE signal source (4mA/20VDC).

For more details visit our website.

Features:

- Input Overload Indicator
- Frequencies: Full range of filter responses available, Butterworth, Bessel, anti-alias & general purpose
- Switchable High/Low Pass
- Single ended/differential input
- Modular System
- 6 Gain steps to x50

