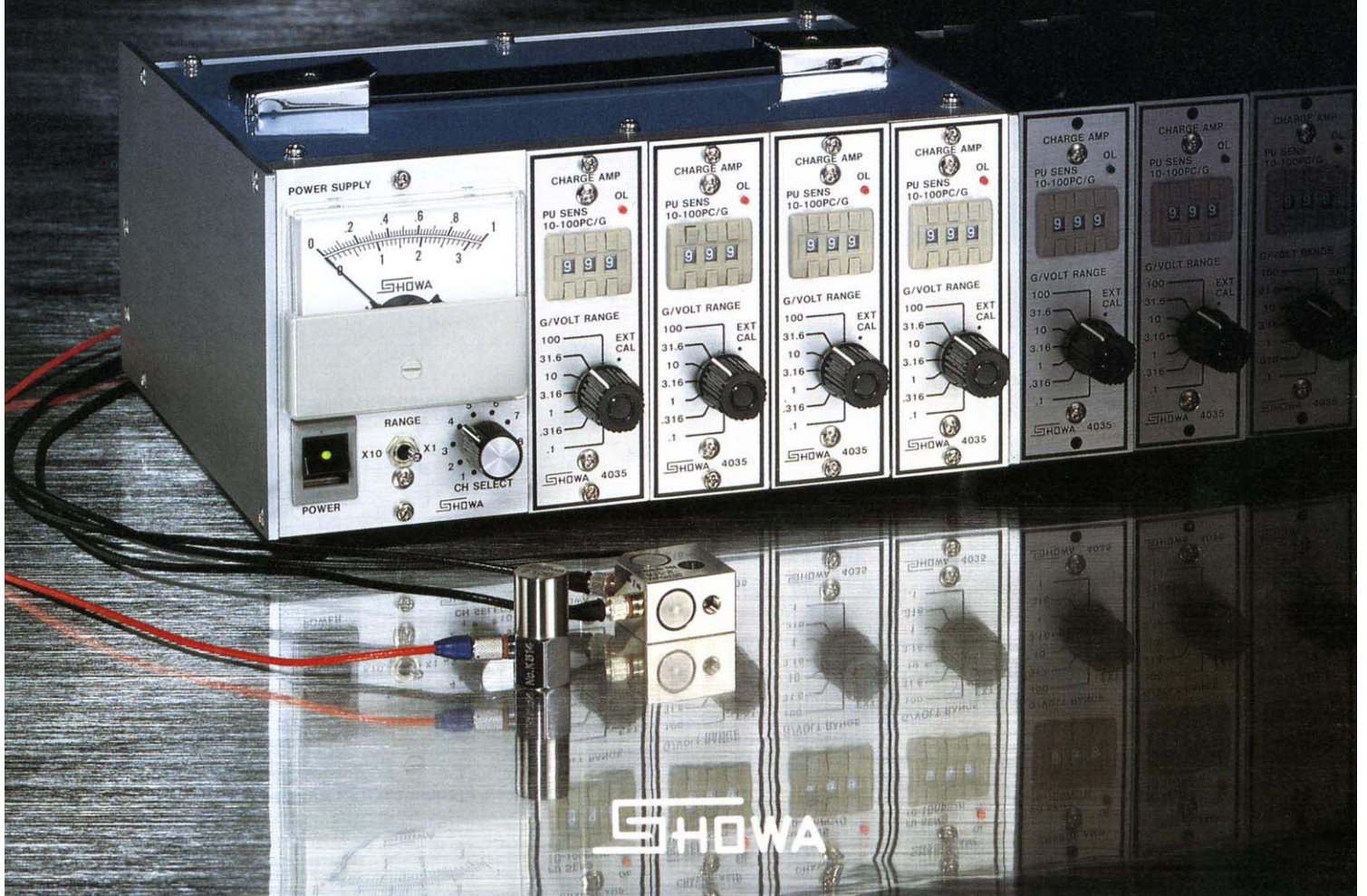


ULTRA-MINI CHARGE AMPLIFIER SERIES for Vibration Measurement

Model-4035



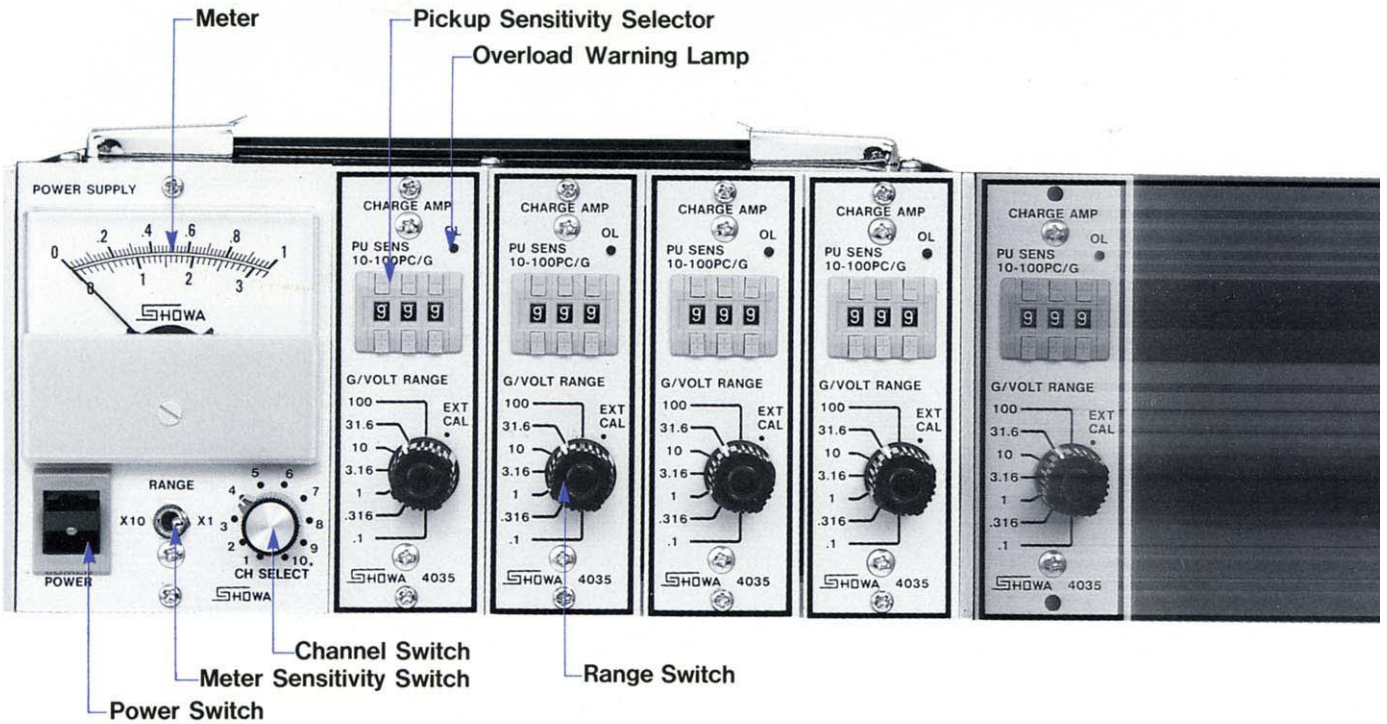
SHOWA



ULTRA-MINI CHARGE AMPLIFIER SERIES for Vibration Measurement

Model-4035

Model 4035 Charge Amplifier is to directly amplify output signals transmitted from piezo-electric type pickups for precise measurement of vibration.



Modern charge amplifiers are aiming at small size and light weight, with simple operation and easiness in use. These requirements are perfectly met by our Model 4035 Charge Amplifier.

■ MODEL 4035 IS MOST SUITABLE FOR ANY APPLICATIONS WHERE A HIGHER S/N IS REQUIRED.

■ MODEL 4035 IS MOST SUITABLE FOR A COMBINED USE WITH PRECISE ANALYZING SYSTEMS.

■ ON ACCOUNT OF ITS COMPACT DESIGN, MODEL 4035 EXHIBITS EXCELLENT MOBILABILITY IN VIBRATION MEASUREMENT OR DATA LOGGING .

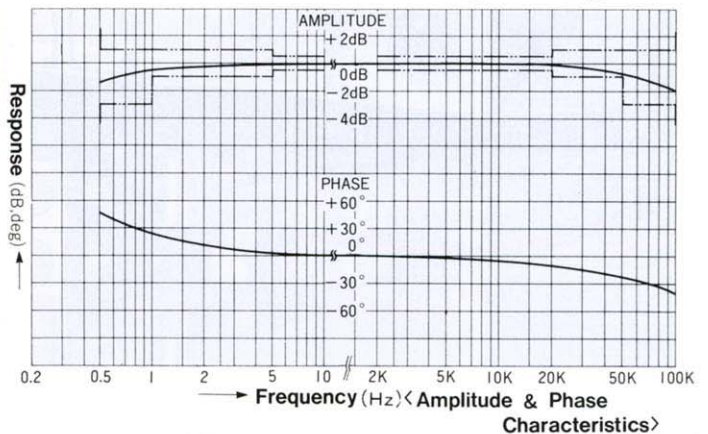
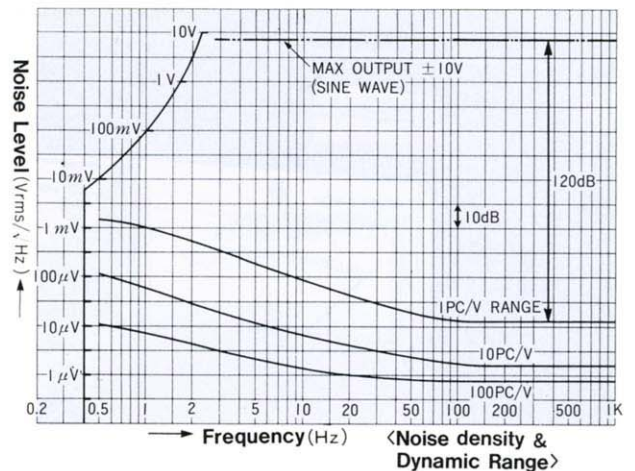
■ A GAIN STABILITY OF 0.02%/°C (TYPICAL) IS NOW ACCOMPLISHED IN MODEL 4035 ON ACCOUNT OF THOROUGH QUALITY CONTROL THROUGHOUT WHOLE PROCESSES STARTING FROM SELECTION OF COMPONENTS AND ENDING AT DESIGN AND PLANNING.

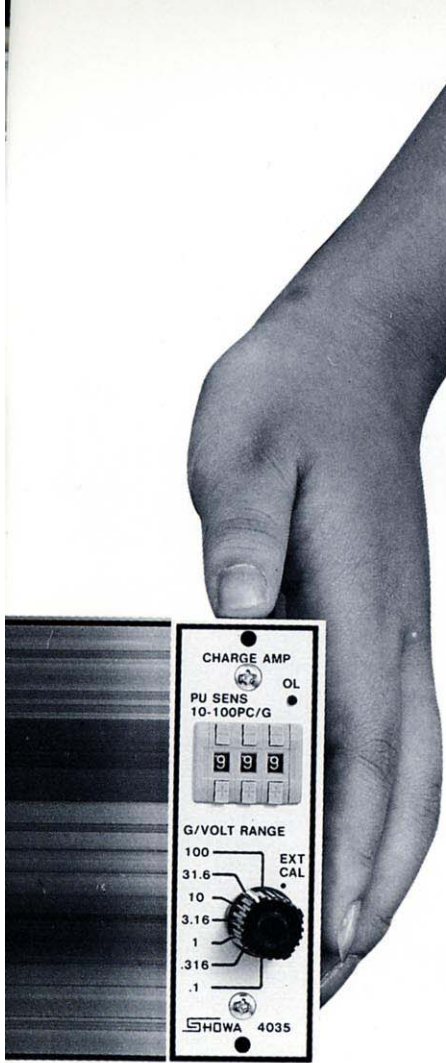
LARGER DYNAMIC RANGE ATTAINED BY HIGHER S/N.

Dynamic range of Model 4035 is extended to 100 dB or more on account of a higher signal to noise ratio brought about by its new and unique design (See the graph on the right).

WIDER FREQUENCY BAND MEETING WITH VERSATILE VIBRATORY PHENOMENA.

Model 4035 has such a wide frequency band of 0.5 Hz to 100 KHz and is therefore able to measure almost all sorts of dynamic phenomena (See the graph on the right).





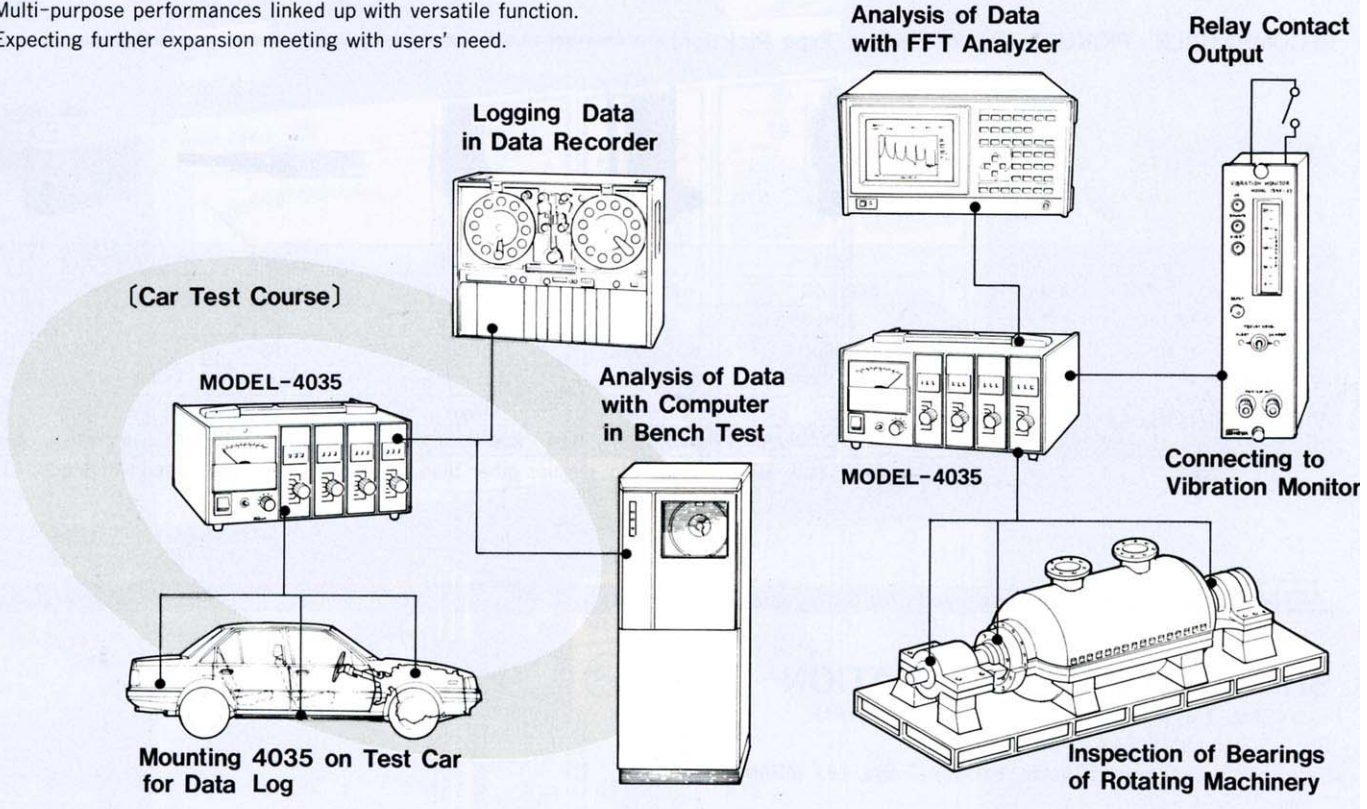
SPECIFICATIONS

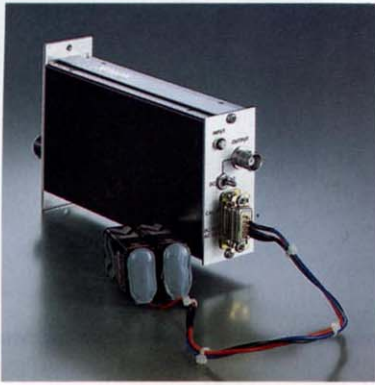
- Frequency Characteristics : 0.5 Hz to 100 KHz ± 1 , -3 dB
 1 Hz to 50 KHz ± 1 dB
 5 Hz to 20 KHz ± 0.5 dB
- Full Scale Sensitivity
 Model 4035 (Standard Version) : 1V/1PC to 10,000 PC
 ● Model 4035-01 (High Sensitivity Version) : 1V/0.1 PC to 1,000 PC
 ● Model 4035-02 (Large Input Version) : 1V/10 PC to 100,000 PC
 ● Model 4035-03 (Ultra-Large Input Version) : 1V/100 PC to 1,000,000 PC
 Full-Scale Range of Model 4035 (Standard Version) is as follows :
 1.00 to 9.99 PC/G : 1, 3, 10, 30, 100, 300, 1,000 G/FS.
 10.0 to 99.9 PC/G : 0.1, 0.3, 1, 3, 10, 30, 100 G/FS (in Indicated Values on the Panel).
 100. to 999 PC/G : 0.01, 0.03, 0.1, 0.3, 1, 3, 10 G/FS.
- Output Characteristics
 A.C. Output : ± 1 V/FS.
 Non-Distortion Max. Output Voltage : ± 10 V (Loaded Resistance : Larger than 10 K-Ohms).
 Non-Distortion Max. Current : ± 5 mA.
 D.C. Output : ± 1 VDC/FS, 5 mA Max. (To call "Model 4035-XX-D" when ordering).
- Noise Level : 0.008 PCrms plus 0.005 PCrms per 1,000 pF of source capacitance referred to input or 5 mVrms referred to output, which is greater.
- Accuracy : Within $\pm 1.5\%$ throughout the whole range at 1,000 Hz and at 1,000 pF or lower in input capacity.
- Overload Indication : The overload warning lamp lights up when exceeding the linear sphere.
- Temperature/Humidity Range : -20°C to $+60^{\circ}\text{C}$ ($0.05\%/^{\circ}\text{C}$),
 90% RH or lower.
- Power Supply : ± 9 V to ± 15 V, 20 mA Max.
- Dimensions and Weight : 34.5 (W) \times 99 (H) \times 152 (D) mm, 300 gr.
- Accessories :
 Power Supply Units : Dimensions and weight : 69 (W) \times 99 (H) \times 152 (D) mm, 1,000 gr.
 Model 4035-10M : For 100 VAC, complete with CAL signals and 10-CH Switching AC Meter, for 10-CH Max.
 ● Model 4035-11M : For 200 or 220 VAC, for 10-CH Max.
 ● Model 4035-12M : For 12 VDC, for 10-CH Max.
 ● Model 4035-13M : For both 100 VAC and 12 VDC, for 5-CH Max.

REMARKS: 1. Items marked (●) are optional items.
 2. Specifications given above are those of Model 4035 (Standard Version) unless otherwise specified.

EXPANDED MERITS IN PERFORMANCES

Multi-purpose performances linked up with versatile function.
 Expecting further expansion meeting with users' need.





USE AS A SINGLE UNIT

Single Unit of Model 4035 can operate on 2 pcs. of 006P (9V) battery. Long term measurement can be made on a stabilized voltage power supply of $\pm 15V$.

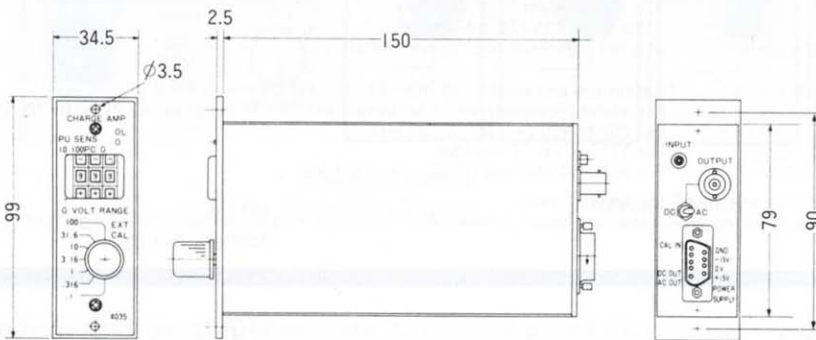
As AC output and DC output (Option) can be led out through the connector on the rear side, versatile applications, including use as a pre-amplifier to be left on the spot, or level recording to be directly made on a pen recorder, are possible.



ENRICHMENT OF PERFORMANCES THANKS TO ULTRA-MINIATURIZATION

Miniaturization has been successfully accomplished in Model 4035 as panel dimensions and volume of this Model are almost 1/3 and 1/5, respectively, of customary charge amplifiers.

DIMENSIONS OF MODEL 4035 (STANDARD VERSION)-(Unit: mm.)



COMPATIBLE PICKUPS (Piezo-Electric Type Pickups)



Models	2300	2304	2309	2305	2302	2313
Sensitivity	45PC/G	45PC/G	180PC/G	9PC/G	35PC/G	9PC/G
Resonance Frequency	25KHz	20KHz	10KHz	32KHz	2KHz	40KHz
Max. Acceleration	1000G	1000G	500G	5000G	100G	1000G
Dimensions	14φ × 27mm	14φ × 28.5mm	17φ × 33.5mm	12φ × 16mm	5□ × 11.5mm	25.5□ × 16mm
Weight	32gr	33gr	68gr	14gr	1gr	75gr
Notes	General Use	With Top Connector	High Sensitivity Type	Shock Measurement	Light Weight Version	3-direction Measurement

N.B. Any piezo-electric pickups other than the above listed can be used with Model 4035.

SHOWA Always satisfying needs for Safety and Comfortability.

SHOWA SOKKI CORPORATION

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Factory: 1-8, Sanda-cho 5-chome, Hachioji, Tokyo, 193 JAPAN.

Phone: 0426-64-3232