

HANDY CALIBRATOR CA-10

INSTRUCTION MANUAL

FOR CALIBRATION OF ACCELEROMETERS

**** Please read this manual before using the product, and keep it handy ****

SAFETY INSTRUCTIONS

CAUTION

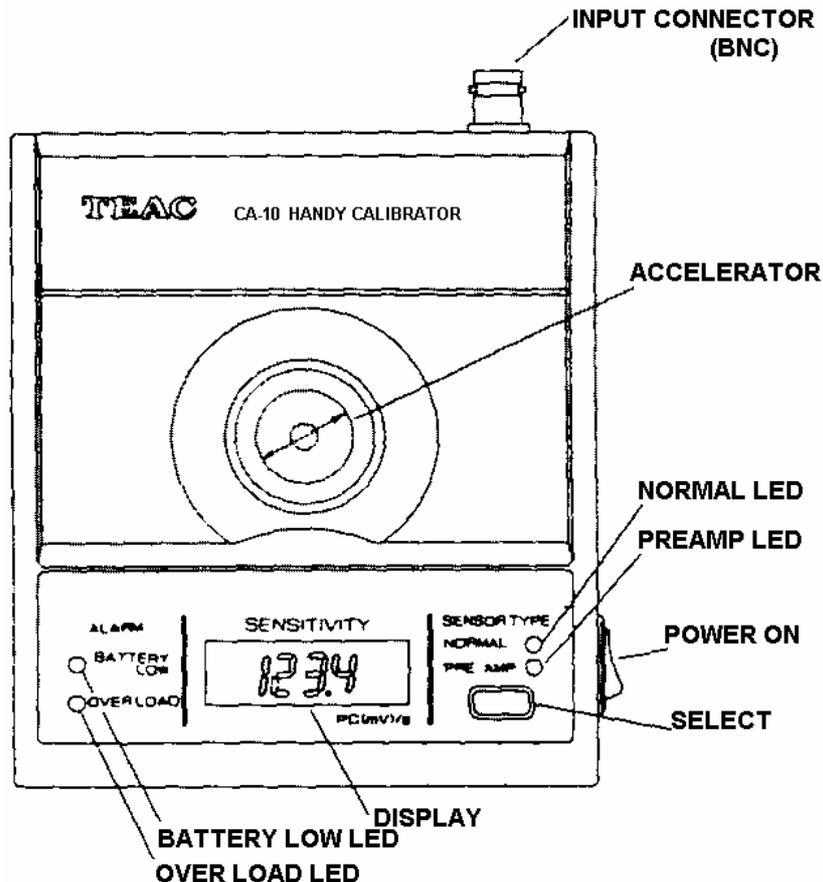
- Read all of these instructions.
- Save these instructions for later use.
- Follow all Warnings and instructions marked on the products.

- This product is not an approved medical device.
- This product is not CE Mark Alliance.

DISCLAIMER

TEAC INSTRUMENTS Corp. disclaims all warranty, either expressed or implied, with respect to this product and the accompanying written materials. In no event shall TEAC INSTRUMENTS Corp. be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information or other loss) arising out of the use of or inability to use this product.

FUNCTIONS



ACCESSORIES

1	50cm low noise cable (BNC – miniature connector)	4	AA size batteries
1	trunk case	1	instruction manual
4	M6 adapter converter {M6 – M4, M6 – No.10-32UNF, M6 – Flat, M6 connecting screw (one each)}		

FEATURES

Handy Calibrator CA-10 is compact, handy size calibrator for accelerometers including piezoelectric type accelerometers. CA-10 is self-contained calibrator which includes amplifier and accelerator in, it makes possible to calibrate both voltage type (preamplifier built-in) accelerometers and charge (normal) types. The unit can be powered by 4 pcs of AA size batteries, it provides easy calibration on the field, and be able to carry anywhere. The test results appear in a moment on its display.

INSTRUCTION

1. Connect an accelerometer to CA-10.
 - ¶ When connecting the accelerometer, set it by hands. In case using spanner, do not set with the torque more than 20kgf.cm.
 - ¶ CA-10's adapter is Metric m6 type, when applying non M6 type, please utilize the converter such as "M6 to flat" in accessory bag.
2. Connect the output of the accelerometer to INPUT of CA-10.
3. Switch the power on.
4. Push the SELECT button to lighten NORMAL LED, when the accelerometer is charge type. If the accelerometer is voltage type, then lighten PREAMP LED.
 - ¶ If the voltage of voltage type accelerometer is different from the voltage which is supplied from CA-10, then there is a possibility that the calibration result would be not precise.
5. Read the value shown on display. The value on display will be stabilized after 6 seconds from calibration. The value unit is pC/g when calibrating charge type accelerometers, the value unit is mV/g when calibrating voltage type accelerometers.
 - ¶ Use CA-10 on stable desks. If using on places where are not static, then CA-10 would not show the precise value or the value would not be settled. In case unable to use CA-10 on the stable places, then please have CA-10 in hands and calibrate carefully.
6. If the voltage is getting lower, the BATTERY LOW LED blinks, then exchange all 4 pcs of batteries to new ones. (Always exchange the batteries 4 pcs at the same time.)
7. If the mass of an accelerometer is more than 130gr, the OVER LOAD LED will blink. When the LED blinks, the calibrated result would not be precise.
8. After the calibration, switch the power off, and take the accelerometer off from CA-10.

SPECIFICATION

Calibration range	0~199.9 (pC/g, mV/g)	Battery Life	8 hours
Sensor mass	less than 130gr		(continuation use)
Calibration accuracy	± (3% + 2 digit)		1500 times calibration
Acceleration of vibration	0.5g ± 3%		(under the condition with
Frequency of vibration	159.2Hz ± 2%		40gr sensor each 30 sec's
Sensor plug type	M6 screw (6.5 depth)		calibration.)
Operation temperature	0 ~ +50 degree	Excitation	DC15V 0.5mA
Storage temperature	-10 ~ +50 degree	Dimensions	120(W) x 140(D) x 50(H)
Battery Type	AA size Battery	Mass	Approx. 1Kg
Power consumption	120mA (Max.)		(including batteries)

Specifications subject to change without notice.