

User manual

Sphygmomanometer Calibrator

ME01



Claim

- The operating instructions are parts of the products and must be kept in the immediate vicinity of the instrument and readily accessible to skilled personnel at any time.
- Skilled personnel must have carefully read and understood the operating instructions prior to beginning any work.
- The manufacturer's liability is void in the case of any damage caused by using the product contrary to its intended use, non-compliance with these operating instructions, assignment of insufficiently qualified skilled personnel or unauthorized modifications to the instrument.
- HUAXIN reserve the rights to change the contents or form of these operating instructions at any time without prior notice having been given.

Safety information

Warning

In order to protect your products, please read this manual carefully before your operation, otherwise it may cause trouble. Huaxin is not liable for any safety problems or damages caused by misuse or incorrect operation.

① Operate by professional



The system must only be operated by trained and authorised personnel who know the manual and can work according to them.

② Use the product only as specified



Any operation not included in the following instructions or outside the specifications must not be attempted.

③ Please use non-damage goods



Don't use the product if it is damaged.

④ No Disassembling



Disassembling may cause physical injury or equipment damage. Only qualified technicians are allowed to fix the equipment. Please call our service staff for repair instruction and guidance if there would be anything wrong.

⑤ Pay attention to CAL



Don't press CAL. That may damage process inside and affect your using (The calibration should be carried out under a standard calibration condition, such as the standard device must be accuracy 3 times of ME01, ambient temperature $(20 \pm 2)^\circ\text{C}$).

⑥ Don't use it out of the range



When the item has alarm sound, that is pressure overload, you should release pressure immediately.

Labelling

Huaxin Instrument(Beijing)Co.,Ltd.		Manufacturer.
Model	ME01	Model.
Product	Sphygmomanometer calibrator	Product name.
Range	(0~40)kPa	Pressure range.
No.	1401097213	Serial number.
Date	2014.01	Date of manufacture.

Claim

Safety

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1. Summary

ME01 is a high-precision single-range calibration instrument, which is composed of high-precision measurement chips, protection circuit of charging battery, black air cell and pressure transducer. It can be used for real-time pressure measurement and calibration sphygmomanometer with double display.

Features

- Microprocessor in ME01 will be able to do adjustment & compensation for nonlinear & zero drift automatically. The high-stability pressure-transducer & 24-bit A/D converter will insure the precision and the stability of the unit.
- Acquisition speed fast, simple operation.
- Smaller in size and built in lithium battery.

2. Technical Specification

Pressure measure range: (0~40)kPa

Accuracy: $\pm 0.05\%$ F.S Work medium: Air

Power supply: Build in rechargeable lithium battery, power adaptor 9Vdc

Weight: 2.2kg

Dimension: 145mm×160mm×130mm

3. Components



① **Power**

Turn on/off the item

② **Light**

Press this key to turn on or turn off backlit

③ **Zero**

Press this key to clear pressure value as its value drifts from zero

④ **Cal**

Press this key for zero point calibration,full scale linearization in order to satisfy accuracy demand

⑤ **F-adjust valve**

To realize the fine adjustment during calibration.(clockwise to increase pressure)

⑥ **Shut-off valve**

Cut off the connection between Air-cell,release valve and pressure system

⑦ **Air-cell**

Provide pressure by manual operation

⑧ **Release valve**

It is used for depressurizing when calibrate standard points. Open it anti-clockwise to release pressure

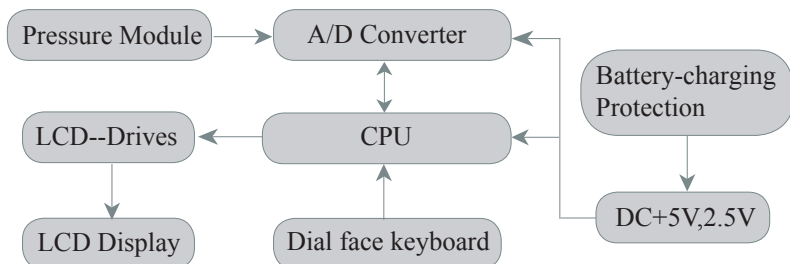
⑨ **Input tube**

Connect Air-cell to item

⑩ **Output tube**

Connect the sphygmomanometer under test to item

4. Work Principle



Apply pressure to the pressure transducer, it outputs a electrical signal. First the corresponding electrical signal will be amplified, and then it will be converted to digital data by A/D converter. Then the microprocessor sequentially collects data to modify and correct, the final result will be displayed on the LCD Display.

5. Troubleshooting

- A** Put ME01 on the level and press Power to start it. Open release valve and shut-off valve and put F-adjust valve in the middle position.
- B** Connect the sphygmomanometer under test with output tube.
- C** Before pressure generating, please close release valve. Provide pressure slowly by the air-cell until the pressure rise to 38kPa, close shut-off valve for lasting 1 minute. then use the F-adjust valve to get exact value.
- D** Open the shut-off valve completely, then open the release valve slowly to depressurize. When the pressure value get to the 32kPa, you should stop and close shut-off valve for lasting 1 minute. Use the F-adjust valve to get exact value. Calibrate other points according to above ways (24kPa, 20kPa, 16kPa, 12kPa, 8kPa, 4kPa).
- E** When you calibrate zero point, please only open the release valve & shut-off valve completely. That is ok.

6. Maintenance

- 6.1. Please confirm whether the display is ok, when you open the item, the screen will display the pressure range instantly.
- 6.2. There is build in rechargeable lithium battery. If it is under voltage, the item will not display normally. When the item is almost out of battery, that will display voltage under in display screen. Please charging. During charging (the battery symbol will flicker). Once finished, the battery will not display. you may pull up the power adapter.
- 6.3. The normal time for charging is 8 hours. It can damage the circuit and battery with long time recharging.
- 6.4. It is forbidden to operate under high temperature and humidity environment.

7. Support

The product specifications and other information contained in this manual are subject to change without notice, if you have any questions, please call our services hotline: 400 611 3558 or Tel: +86-10-62392087

HUAXIN Products series

Digital Pressure Gauge

HX601/HS108

Intelligent Pressure Calibrator

HS602

Pressure Comparator

HS700(-0.5-0.5)bar

HS701(-0.95-6)bar

HS702(-0.95-16/25)bar

HS703(-0.95-40/60)bar

HS720(0-140)bar

HS704 (0-160/250)bar

HS705/HS705A(0-600/700)bar

HS710/HS710A(0-600/700)bar

HS706(0-1600/2500)bar

Electrical Pressure Comparator

HS318L(0-600)bar 5pcs output

HS316L(0-25)bar 5pcs output

HS317L(0-60)bar 5pcs output

HS315(-0.95-0)bar 2pcs output

HS316(0-25)bar 3pcs output

HS318(0-600)bar 3pcs output

Automatic Pressure Calibrator

HS620(-0.1-1)bar,(-0.95-25)bar

Sphygomanometer Calibrator

ME01 & ME02

Temperature Calibrator

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