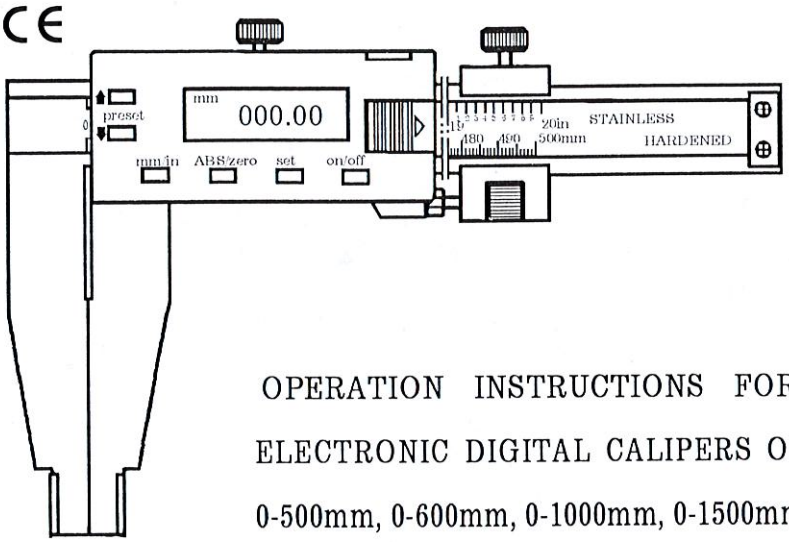
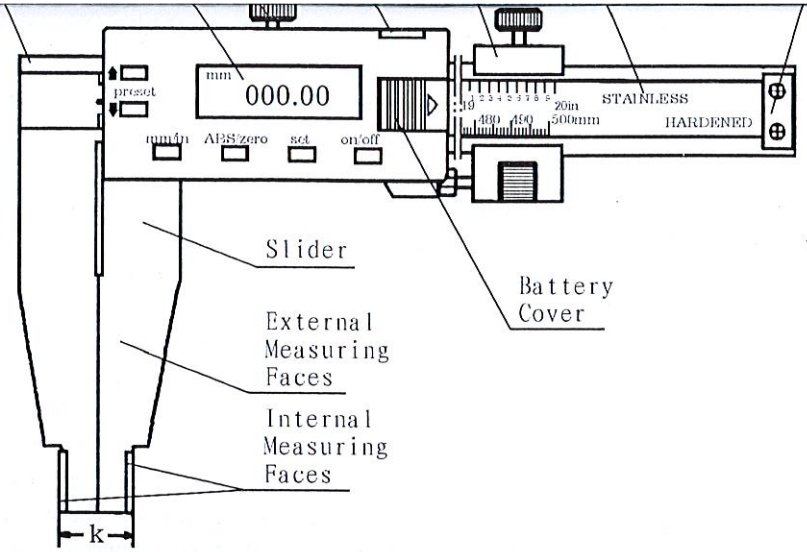


OPERATION INSTRUCTIONS FOR ELECTRONIC DIGITAL CALIPERS OF 0-500mm, 0-600mm, 0-1000mm, 0-1500mm

1. INSTRUCTIONS:
   1) Before using the digital caliper for the first time, wipe the surface of the protective sticker with dry and clean cloth to get rid of the condensed water or with cloth soaked with cleaning oil.
   2) Operating Conditions: Temperature: 5—40℃
      Relative Humidity: Lower than 80%
      Do prevent any liquid that contains water from moistening the protective sticker.
   3) Never apply voltage (e.g. engraving with an electric pen) on any part of the digital caliper for fear of damaging the integrated circuit.
   4) Preset a starting point of measurement correctly(please refer to the application).
      Unless presetting, do not press "set" button purposelessly for fear of measurement error.
2. NOMENCLATURE

Scale | Electronic Parts | Locking Screw | Data Output | Fine Adjustment Slider | Protective Sticker | Cover Clamp



3. BUTTON FUNCTIONS:

on/off: power on/off switch

in/mm: Inch/mm interchange

ABS/zero: Absolute measured value/Relative zero point interchange.

Absolute Measurement: without "INC" characters display. The close of the external measuring faces are usually taken as the starting point of measurement. For external measuring, e.g. measuring the diameter of an axle, the presetted value must be zero. For internal measuring, e.g. measuring the bore diameter, the presetted value must be 20mm. The absolute measured value is equal to the presetted value plus the slider displacement from the starting point of measurement relatively (Positive number to the right, Negative number to the left).

Relative Measurement: With "INC" characters display. Set a relative zero point by pressing "ABS/zero" button. The measured value is equal to the slider displacement from the relative zero point relatively (Positive number to the right, Negative number to the left).

set: Button for presetting.

With one press on this button, the presetted value will be displayed (The value has been presetted to be zero in the factory), Press this button and "▼" or "▲" simultaneously, "SET" will flash on the upper side of the screen, showing

it's ready for presetting value. Keep pressing on "▼" or "▲" button alone, the numerical value will decrease or increase continuously to the wanted value. Then release the pressing. Press "set" button alone again and "SET" will disappear, which means the presetting is finished.

Preset: Consiting of "▼" and "▲" button.

4. DATA OUTPUT:

The data can be input to a computer or a special printer via a special cable.

Working way of the interface: synchronous series

Data: Binary code, 24 bits. Each datum will be sent twice. The cycle is 300ms (20ms in fast reading state). Transmitting time: 0.5ms.

The four wires (from left to right): Positive power (+), Data D, Clock Pulse CP, Negative power (-).

Pulse Range of Data: Datum Level $\leqslant$ 0.2v, Level "1" $\geqslant$ 1.3v

Clock Pulse CP: 90KHZ, effective for high electrical level.

5. TECHNICAL SPECIFICATIONS:

1) Resolution: 0.01mm
2) Repeatability: 0.01mm
3) Accuracy: +/-(0.02+0.00005 x L). L represents the length from the origin to the given position (mm). The accuracy obtains accurately 2nd decimal place.
4) Maximum Measuring Speed: 1m/s;
5) Power: One heavy duty silver oxide button battery SR44, 1.55v.

6. APPLICATIONS:

1) Clean the surface of the protective sticker (please refer to the Instructions above) and all measuring faces.
2) Loosen the locking screw and move the slider. Check to see if the display screen and all the buttons work properly.
3) Preset the starting point of measurement:
The closed measuring faces are usually taken as the absolute zero point for external measurement (without "INC" characters display, the displayed value must be zero, otherwise preset again.) When measuring a bore diameter, the presetted value must be 20mm, since the starting point of measurement is the width K of the two closed internal measuring jaws. If the presetted value is zero, the measured value plus the width K(20mm) of the two closed internal jaws makes the bore diameter.

If measuring the bore diameter frequently, preset the width K (20mm) of the closed internal jaws as presetted value. When the two external measuring jaws close, press "set" button and 20mm must be displayed. Otherwise preset again. By doing this, the value of each measurement can be displayed. directly. Adding K (20mm) each time can be left out. But do change the presetted value before using the external measuring faces (e.g. measuring the diameter of an axle), or error will happen.

4) Relative Measurement:

Usually a certain point of the surface of the workpiece to be measured is taken as the relative zero point for measuring the distance from other surface relative to this zero point. Fix either measuring jaw and press "ABS/zero" button to make the display be zero (with "INC" display) when the other jaw touches the relative zero point. It is ready for measuring the relative length (positive number to the right of zero, negative number to the left of zero). With a second press on the "ABS/zero" button, the absolut value (relative to the absolute zero) of the surface measured can be displayed many times. But the relative value will not be displayed again. Instead, new relative zero point is displayed.

In order to improve the accuracy, please make differential measurement: Take an accurate block gauge, which has similar size as that of the workpiece to be measured, as relative zero point , do measuring as the Relative Measurement shows.

7. BATTERY REPLACEMENT:

when the display keeps flashing or even does not appear, screw the cover open as the arrow shows and replace the battery with a new one (SR44, 1.55V).

If the battery bought from the market does not work satisfactorily (the power may wear down because of the long-term storage and the battery's automatic discharge etc.), please do not hesitate to contact the supplier.

N.B.: 1) The positive pole of the battery must face out.
2) Please preset the starting point of measurement again after the replacement of battery.