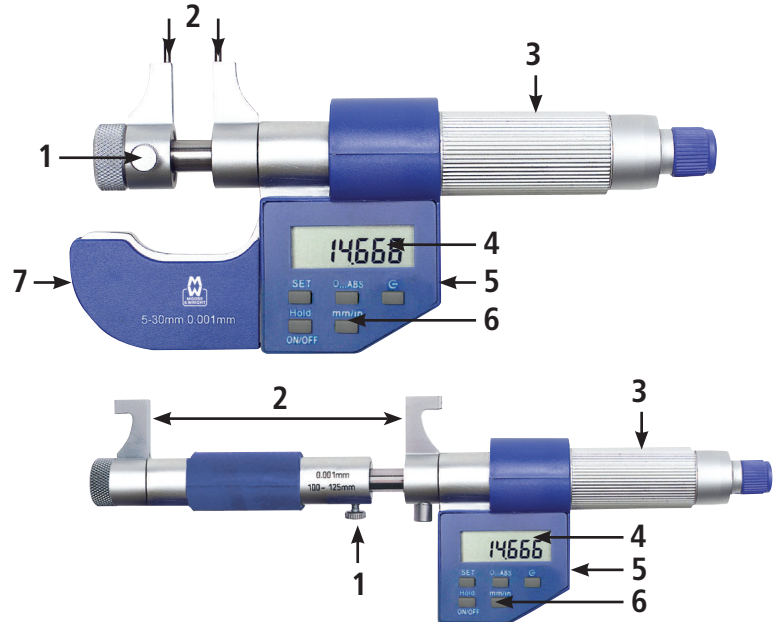# Digitronic Caliper Type Inside Micrometer 280 Series

Please carefully review these instructions to ensure proper and accurate use of your new Digitronic Micrometer.
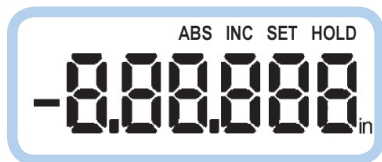
Features

1. Locking screw
2. Anvils/pins
3. Thimble
4. LCD display
5. SPC output
6. Function keys
7. Frame

Note: For the 5-30mm model, if the jaws are closed together the spindle should be rotated in a CLOCKWISE direction to un-do them.

LCD Display

in: Inch measuring mode
INC: Relative measuring mode
ABS: Absolute measurement mode
SET: Set value of setting master
HOLD: Hold displayed value

Operation

• Keys are pressed two ways to execute functions:
  1. Press and immediately release
  2. Press and hold for at least two seconds

On/Off - HOLD Key

• Press and release: HOLD on / HOLD off
• Press and hold: POWER on/ POWER off

mm/in

• Press and release: INCH (in) / METRIC (mm) conversion

SET

• Press and release: Recalls value of setting master. Press again to apply this value

ABS/INC - Unit Key

• Press and release: Switches from ABS to INC mode
• Press and hold: Switches from INC to ABS mode

Data Output

In measuring mode, this is the data output key
• Press and release: The micrometer will output the displayed data
• Press and hold: The micrometer will output the displayed data continually until the button is pressed again

Set and adjust the origin

• Set the origin
    1. Press "SET" key, "SET" flashes and origin is displayed
    2. Press "SET" key again, "SET" disappears and the displayed value is set to the origin
Rotating the spindle will not change the origin when "SET" is flashing

• Adjust the origin
    1. Rotate the thimble until the desired value is displayed (example 26.000). Press "HOLD" key to hold this value
    2. Press "SET" key, "SET" flashes and the displayed value is stored as the origin
    3. Press "SET" key again, "SET" disappears and this value is set to the origin
Rotating the spindle will not change the origin when "SET" is flashing
The origin will go back to the factory setting after replacing the battery

Power

• If the micrometer is not used for five minutes the power will automatically shut off. Powering off the micrometer by pressing the "On/Off" — Zero key to save the battery when not in use is recommended
• Use a SR44 battery and replace the battery when the display begins to flash
• Remove the battery cap by turning it counterclockwise with a coin or the supplied wrench. Insert a new battery with (+) side up. Replace the battery cap by turning it clockwise

Data Output

• The output interface is a RS-232C
• The micrometer can be attached to a PC's serial port by an SPC cable
• To attach the cable, remove the data output cap and insert the cable
• When not using the interface, always keep the data output cap in place

Serial Port Information

• Baud rate: 1200 Kb/second
• Stop bits: 2
• Parity: none
• Data bits: 7

General Specifications

• Measuring force: 5-10N
• Operating temperature: 0-40°C
• Storage temperature: -20-60°C

Precautions

• Do not subject the instrument to blows or shock. Do not drop it or apply excessive force to the thimble
• Do not disassemble the instrument
• Do not press the keys with a pointed object
• Do not use or store the instrument under direct sunlight
• Avoid exposing the instrument to strong magnetic fields and high voltage
• Use a soft cloth to clean the instrument. Never use organic solvents such as acetone or benzene to clean
• Clean measuring faces before use
• If the instrument is to be stored or left unused for extended periods, remove the battery

Troubleshooting

Problem(s)	Cause(s)	Solution(s)
Measuring data incorrect	1. Dirty measuring faces	1. Clean measuring faces
	2. Zero is incorrect	2. Inspect and reset zero
No display on LCD	1. Battery position is incorrect	1. Reset battery
	2. Battery is dead	2. Replace with new battery
1. Flickering display	1. Weak battery	1. Replace battery
2. Display is sporadic	2. Weak battery	2. Replace battery
3. Display remains dead	3. Battery position is incorrect	3. Reset battery
1. Display is blurry	1. Weak battery	1. Replace with new battery
2. Output data is incorrect	2. Weak battery	2. Replace with new battery