

Thank you for purchasing the S-Line Digital Micrometer.
Please read this manual thoroughly before use for proper operation.

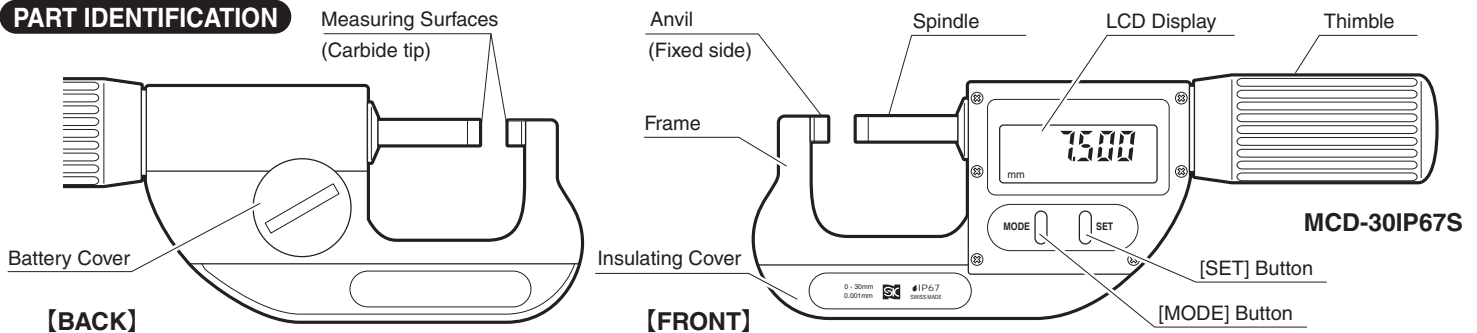
FEATURES

- Waterproof protection grade: IP67
- Adjustable measuring force (5N / 10N) [MCD-30IP67 only]
- Spindle moves 12mm with one rotation allowing quick measurement of objects of different dimensions.
- Wide measuring range. Only three sizes needed to cover 102mm measuring range.
- Constant Force Mechanism: Thimble Ratchet
- Measuring Surfaces: Flat Carbide Tip
- Spindle : Straight Feed, ϕ 6.5mm Cylindrical Spindle
- Preset Function
- Sleep Mode Function (approx. 20 min.)
- Locking Function
- Made In Switzerland

SPECIFICATIONS

Part Number	MCD-30IP67S	MCD-66IP67S	MCD-102IP67S
Measuring Range	0-30mm	30-66mm	66-102mm
Resolution	0.001mm		
Accuracy	0.003mm	0.004mm	0.005mm
Measuring Force	5N/10N(switchable)	10N	
Flatness	0.6 μ m		
Parallelism	2 μ m		3 μ m
Repeatability	0.002mm		
Waterproof Protection Grade	IP67		
Operating Temperature Range	5~40		
Weight	280g	440g	560g

PART IDENTIFICATION



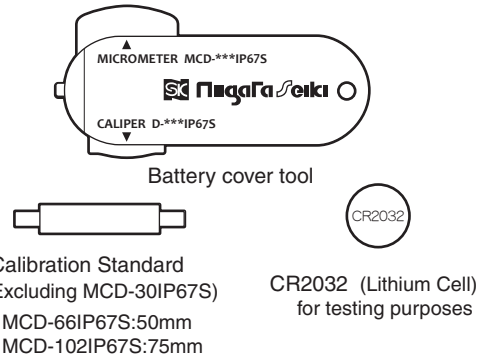
IP CODE SUMMARY

IP rating for electrical equipment defined by IEC standard for water and solid body protection.

I P 6 7
 2nd Digit : Water proof rating
 1st Digit : Direct contact-protection rating for ingress of solid foreign object

1st Digit	Description	Degree of Protection	Test Method
6	Solid Ingress Protection	No ingress of dust allowed. Dust tight.	Complete protection from dust intrusion
2nd Digit	Description	Degree of protection	Test Method
7	Liquid Ingress Protection	No harmful effect when immersed in water for specified period and pressure.	Submersion for 30min. at depth of 1m (for devices of height less than 850mm)

ACCESSORIES



TROUBLE SHOOTING

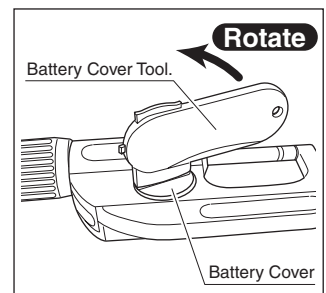
ERROR CONDITION	CORRECTIVE ACTION
LCD display reads "ERR0"	Reading Error. Please reset zero-point.
LCD display reads "ERR3"	Internal Calculation Error. Please reset zero-point.
LCD display reads "ERR8"	Memory error during storage of preset data. Please retry saving preset data. ※ If error persists, the memory may be damaged - please contact distributor or place of purchase for service.
LCD display reads "ERR9"	Memory error. Please contact distributor or place of purchase for service.
Measured value is wrong	<ul style="list-style-type: none"> ● Clean measuring surfaces with cloth. ● Check to insure zero-point is correct and re-set zero-point.
<ul style="list-style-type: none"> ● LCD does not display ● Displayed value is unstable ● Display is not clear 	<ul style="list-style-type: none"> ● Cycle power by removing and replacing battery. ● Replace battery with new one.

※ If issue does not resolve, or if you have any questions, please contact distributor or place of purchase.
 ※ Please note, manufacturer is unable to respond to inquires or provide service directly. Please contact distributor or place of purchase.

BATTERY REPLACEMENT

With the battery cover tool, unscrew the battery cover using the side marked as "MICROMETER MCD-***IP67S".
 Insert the new battery with the (+) side outward.
 Replace the cover using the Battery Cover Tool.

Caution
 Use CR2032 battery.



POWER

【POWER ON】

Power is turned on by pressing either the [MODE] or [SET] buttons one time.

【POWER OFF - Sleep Mode】

Press and Hold the [SET] button to enter sleep mode. Continuing to hold the button will power off the unit.

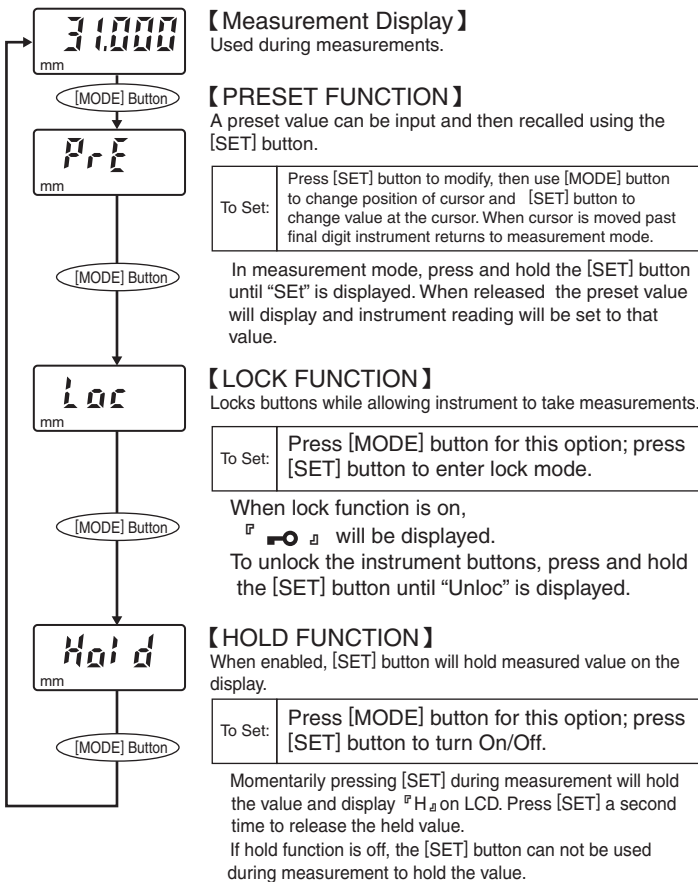


Sleep mode is activated automatically after approximately 20 min. of no activity. In sleep mode, pressing any button or turning the spindle returns unit to normal operation. When battery power is low, B indicator appears. Please replace the battery.

SETTING FUNCTIONS

Pressing the [MODE] button switches the display in the following sequence.

Pressing the [SET] button allows modifying the displayed function.



When changing functions, after five seconds of inactivity the instrument will return to measurement mode. While inputting preset value, there will be an error if there is no operation for 15 seconds.

ZERO POINT SETTING

Wipe measuring surfaces of anvil and spindle with clean cloth to remove any grease or contamination.

Turn spindle to bring measuring surfaces together until thimble "clicks" 2~3 times.

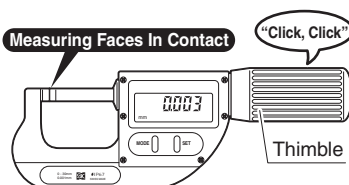
Excepting MCD-30IP67S, please use supplied calibration standard between measuring surfaces.

Press the [SET] button until "SET" is displayed. When released, the following values will display.

If appropriate value does not display, please refer to "PRESET FUNCTION" above. Enter the proper value from the following list, and repeat steps ~ .

MCD-30IP67S 0.000 MCD-66IP67S 50.000
MCD-102IP67S 75.000

Instrument is now ready for measurement.



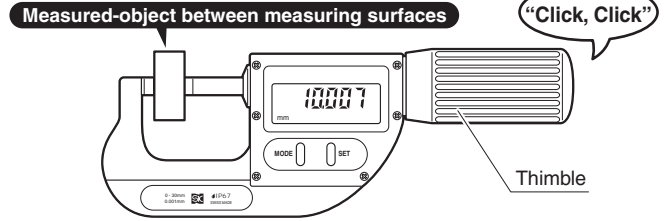
OPERATION

Remove any grease and dust from the measuring surfaces with a clean cloth, such as lens cleaning cloth. Make sure no foreign objects are adhered to the surfaces.

Place object to be measured between the anvil and spindle.

Turn the thimble to capture the measured-object between the measuring surfaces. Please stop after 2~3 "Clicks" from the spindle ratchet.

The measured value is displayed on the LCD display.



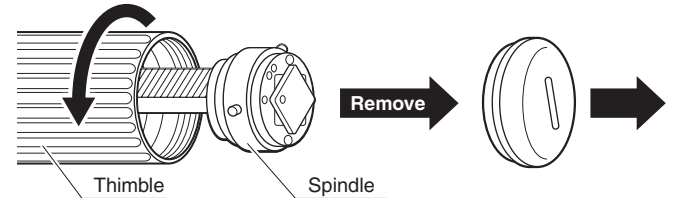
MEASUREMENT FORCE ADJUSTMENT

For MCD-30IP67 only (Measurement force can be set to 5N or 10N.)

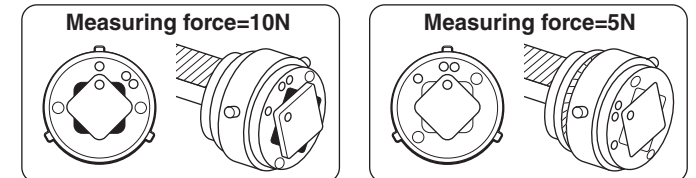
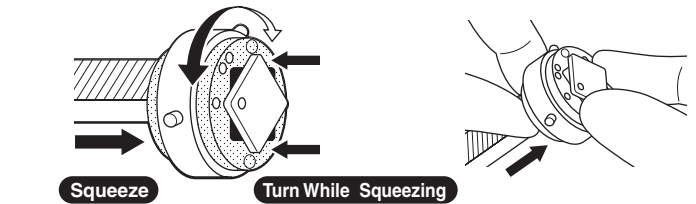
Please wear dust free gloves for this operation.

With power off, open thimble cap with coin or similar tool.

Turn thimble as shown to remove spindle.



While squeezing spindle end from both sides, rotate outer plate under square plate as shown in diagram to the desired setting. Reinstall spindle to thimble and replace thimble cap.



CAUTION

Always remove dirt from measuring surfaces with lens cloth before use.

Do not turn spindle more than 3mm above upper measurement range.

This is a precision instrument. Handle with care. Do not drop or subject to excessive forces.

Keep away from high voltage and strong magnetic fields. Instrument damage may result.

Keep instrument away from direct sunlight or high temperatures such as in a car, or near a stove or heat source.

When not in use keep spindle 1-2mm from closed position.

Please do not disassemble or modify.

Remove dust and cutting chips after use and apply rust preventative oil to metallic surfaces. Please keep out of reach of children.

Please do not use organic solvents to clean the body of the instrument.

When not being used for long period of time, please remove battery. Only use as directed. Improper use may cause accident or injury.

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