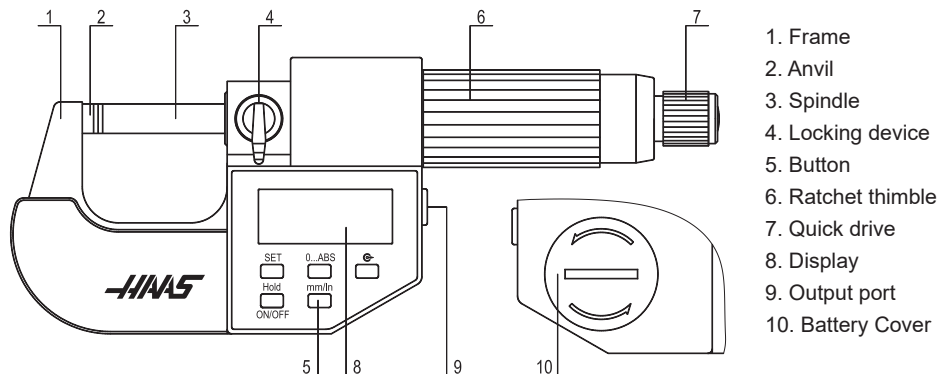
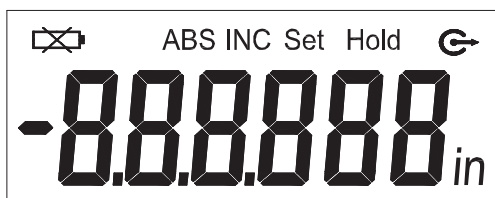


FUNCTIONAL ELEMENTS



1. Frame
2. Anvil
3. Spindle
4. Locking device
5. Button
6. Ratchet thimble
7. Quick drive
8. Display
9. Output port
10. Battery Cover

DISPLAY



- in:** Inch mode
- INC:** Relative measuring
- ABS:** Absolute measuring
- : Low battery
- : Data output to PC
- Set:** Set the origin
- Hold:** Displayed value is stored

KEY OPERATION

1. Two ways of utilizing buttons:

- Press and Release
- Press and hold (~2 seconds)

2. SET: Sets the origin for absolute measurement

- Sets display to zero (0), switch to relative measuring mode.

- Switches to absolute measuring mode (ABS)

- Unit:** Switches between metric and inch measuring mode.

- :Outputs data to PC once. "" icon flashes once.

- :Outputs data to PC continuously. "" icon is steady on the display. Press the key again to stop the data transfer.

SET THE ORIGIN

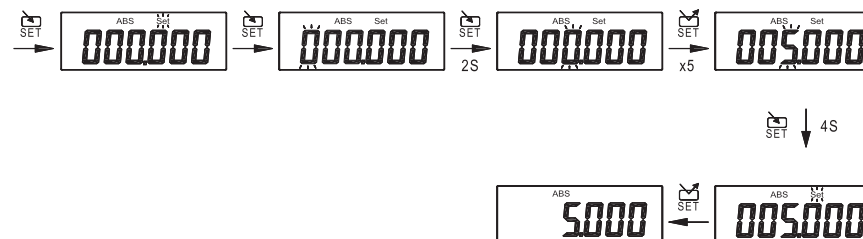
1. Set the origin

Press "SET" button, "Set" flashes once on the display and the factory preset origin is displayed. This value is the origin for absolute measurement at the spindle position.

2. Set a new origin

- a. Press "SET" button, "Set" flashes once on the LCD and the preset origin is displayed. Skip to step "g" if not changing the origin.
- b. Press and hold "SET" button for (~2 Seconds), "Set" stops flashing and the first digit starts flashing.
- c. Press and hold "SET" button, the next digit will flash. Do not release the button until the desired digit displays.
- d. Press "SET" button, the flashing digit increases by 1 each time the button is pressed.
- e. Repeat steps "c" and "d" until all the desired data displays.
- f. Press and hold "SET" button until "Set" flashes.
- g. Press "SET" button, the data on the display will be set to the origin. This value is the origin for absolute measurement at the spindle position.

Note: The origin will not be lost after battery replacement.



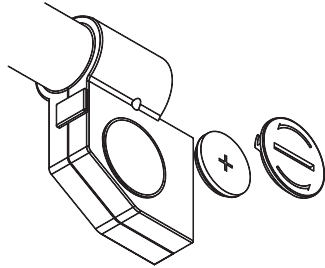
3. Adjust the origin

- a. Rotate the thimble until desired value is displayed. Press and release the "HOLD" button to hold this value; "Hold" appears on display.
- b. Press "SET" button, "Set" flashes once on the display and this value is stored as the origin. This value is the origin for absolute measurement at the spindle position.

Note: The origin will restore to factory setting after battery replacement.

POWER

1. The micrometer will automatically turn off if not used for 20 minutes. The micrometer will turn on when pressing "ON/OFF" key or turning the thimble.
2. Replace the battery (CR2032) when the display is dim.
3. Remove the battery cover by turning it counterclockwise with a screwdriver, or supplied wrench.
4. Insert a new battery with the positive (+) side facing the operator. Replace the battery cover by turning it clockwise.



DATA OUTPUT

1. The output interface is a RS-232C.
2. The micrometer can be attached to a PC USB port by an SPC cable (**not included**).
3. Press the button or switch: Outputs the data to PC once, "Ⓞ" flashes once.
4. Press and hold the button or switch (~2 Seconds): Outputs the data to PC continuously and "Ⓞ" keeps displaying. Press the button again to stop outputting.
5. Series port format: 2400 baud rate, 8 ASCII bits, 1 start bit, 1 stop bit.

Order	1	2	3	4	5	6	7	8	9	10
Metric	S	N1	N1	N	.	N	N	N	CR	LF
Inch	S	N	.	N	N	N	N	N	CR	LF

S: Minus or space

N1: Minus or space or digit 0-9

N: Digit 0-9

SPECIFICATIONS

Measuring force: 5~10N

Operating temperature: 0 to 40°C (32 to 104°F)

Storage temperature: -20 to 60°C (-4 to 140°F)

Power consumption: <40μA

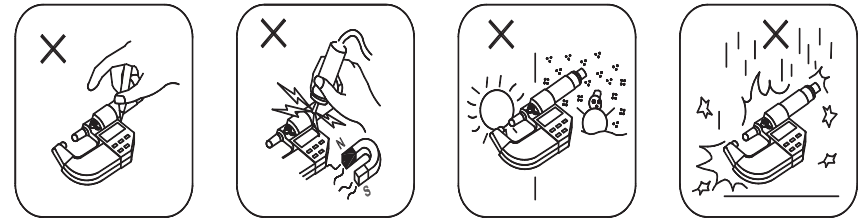
Resolution: 0.001mm/0.00005"

Power: 3V battery CR2032

Protection class: IP54 (protect water splashing)

CAUTIONS

Do not subject the micrometer to misuse or shocks. Do not drop the micrometer or apply excessive force. Do not disassemble the micrometer. Do not press any buttons with a sharp or pointed object. Do not use or store the micrometer in direct sunlight, or in an excessively hot or cold environment. Do not subject the display to strong magnetic fields or high voltage environment. Use dry soft cloth to clean the display. Do not use any harsh solvent such as acetone, etc. The spindle is designed so that it cannot be removed from the inner sleeve. Do not move it past the upper limit of the measuring range. Remove the battery if the micrometer will not be used for a long time.



TROUBLE SHOOTING

Error	Reason	Solution
Display "E 1" Display "Exxxx"	Measuring value over display range.	Reset the origin or convert to relative measuring mode.
Display "E 2"	The origin is out of range.	Reset the origin.
Display "E 3" Display "E 8"	The micrometer faulted. Range sensor faulted.	Remove and replace the battery. Micrometer needs repair.
Measuring value is not correct	Measuring surfaces are dirty. The origin is out of range. Spindle was moved too fast	Clean measuring surfaces. Reset the origin. Move spindle slow and smoothly.
Display shows senseless data	The micrometer faulted.	Remove and replace the battery.
No display Display is dim, or appears The output data is wrong	Battery voltage is low.	Replace battery.

WARNING

The safety information given must be understood by any person using or maintaining these products.