

M-SURE Digital Scales

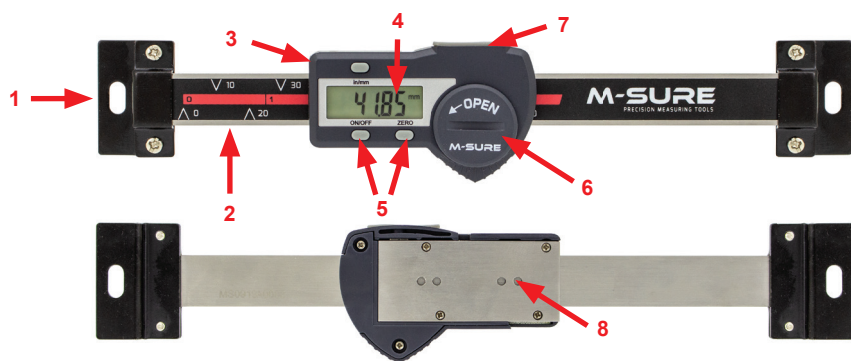
Part No: MS-270 & 272 Series

Doc V: 1.0

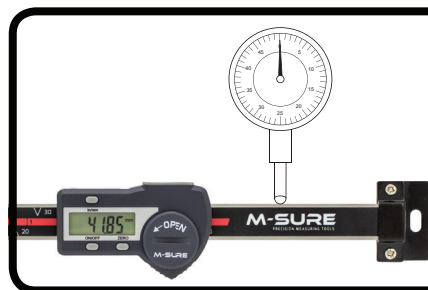
Precautions

- Before using the Linear Scale for the first time, wipe with a clean cloth ideally soaked with cleaning oil.
- This M-SURE Linear Scale is a precision measuring instrument. Avoid using excessive force, and treat with care.
- The fitted battery is intended for the factory test procedure and therefore may not meet the specified battery life.
- Avoid exposure to all liquids, excessive humidity or temperature.
- Avoid exposure to bright sunlight.
- Never apply voltage on any part of this Linear Scale or electric engrave.
- Remove the battery if the Scale is not being used for a long period of time.
- Never use solvents to clean. Only use a soft cloth with cleaning oil.
- Ensure the Linear Encoder is mounted parallel and in correct alignment to the machine axis.

Linear Digital Scale

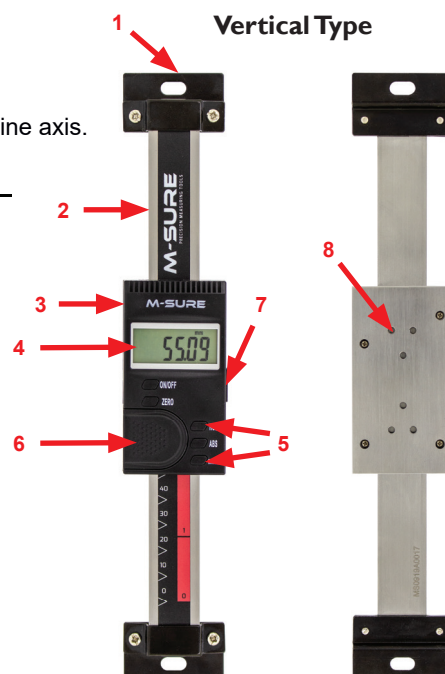


Horizontal Type



The Linear Scale must be aligned parallel to the machine travel. Use a Dial Gauge or DTI to set parallel.

The travel of the reading head must also be aligned correctly to the Scale beam, otherwise damage will occur.



Vertical Type

1. Beam clamp
2. Beam
3. Reading head
4. LCD display
5. Function button
6. Battery cover
7. Data output cover
8. Reading head fixing - M3

Battery Replacement (MS-270 Series only)



1. Insert the key into the battery cover.
2. Twist to unlock. DO NOT use excessive force.



3. Lift out the battery cover.



4. Remove the battery. (A magnet tip tool can be used)
5. Locate the side spring battery contact.



6. Insert the replacement battery with its edge against the side battery contact.
7. Press down on the opposite edge.



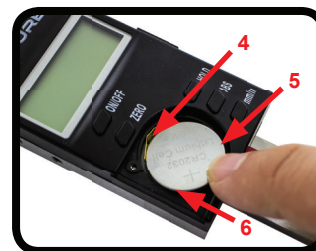
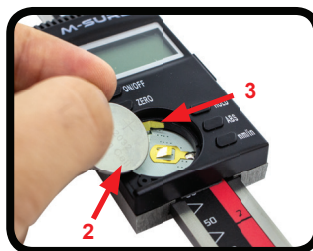
8. Locate the two lugs on the battery cover with the two slots on the Scale. Insert the battery cover.



9. Twist to lock. DO NOT use excessive force.

Side Type Battery Replacement (MS-272 Series only)

1. Slide open the battery cover.
2. Remove battery. (A magnet tip tool can be used)
3. Locate side spring contact.
4. Insert replacement battery edge against side contact.
5. Press down on other edge.
6. Slide battery cover closed.



How to zero a Linear Scale

0.00 mm

ZERO

Press ZERO to clear.

Metric/Inch conversion

25.40 mm

in/mm

Press in/mm to convert from inch to metric display.

1.000 in

in/mm

The display will indicate which units are being displayed.

Scales with ABS Function (MS-272 Series only)

0.00 mm

ZERO

Close Scale. Press ZERO button.

10.00 mm

Measure workpiece, for example 10mm.

ABS mm

5.00

ABS

Press the ABS button once to change between ABS mode and INC mode. (Not displayed)

15.00 mm

ABS

Press ABS to switch back to Absolute display.

Trouble Shooting

Problem	Possible Cause	Solution
Flashing display	Low voltage Poor contact	Replace battery Clean contact
No display	Dead or weak battery Poor contact	Replace battery Clean contact
No change to display	Internal error "H" shown on display	Remove battery for 1 hour Remove battery for 5 minutes
Can't zero	Hold function active	Switch off function
Erratic or frozen display	Contamination between beam & head low voltage	Wipe clean Replace battery
Erroneous reading	Low voltage Contamination between beam & head Scale not parallel to travel Low ambient temperature	Replace battery Wipe clean Adjust parallel with dial gauge/DTI Store at normal room temperature