



# ATD-8656

## 6" Electronic Digital Caliper

### Owner's Manual



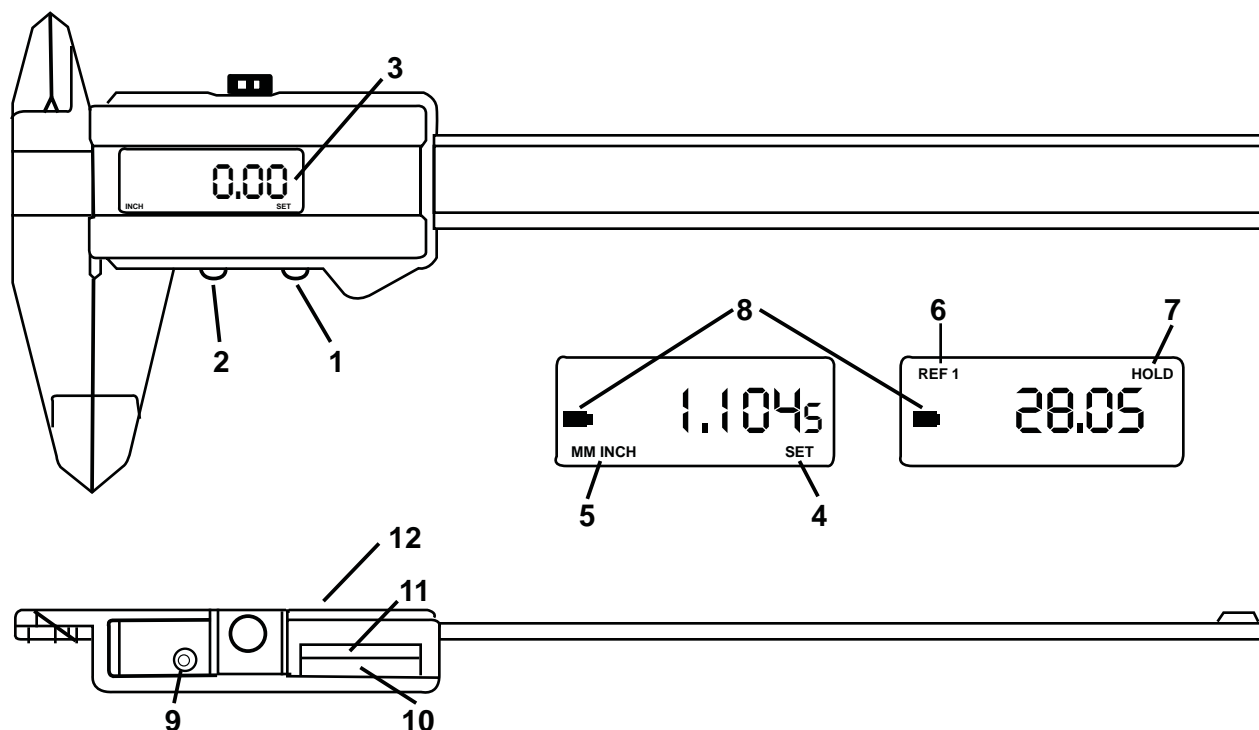
#### Features:

- 0-6" (0-150mm) range, .001" (.01mm) graduations
- Easy-to-read digital display with SAE/Metric conversion
- 4 measurements - inside, outside, depth, and step
- Stainless steel with satin chrome finish
- Measuring surfaces are precision ground and lapped
- Powered by (1) SR44/357/303 battery

#### **WARNING**

**WARNING:** This product contains chemicals, including lead, known to the State of California to cause cancer, birth defects or other reproductive harm. **Wash hands after handling.**

# Instructions for operating your ATD-8656 Digital Caliper

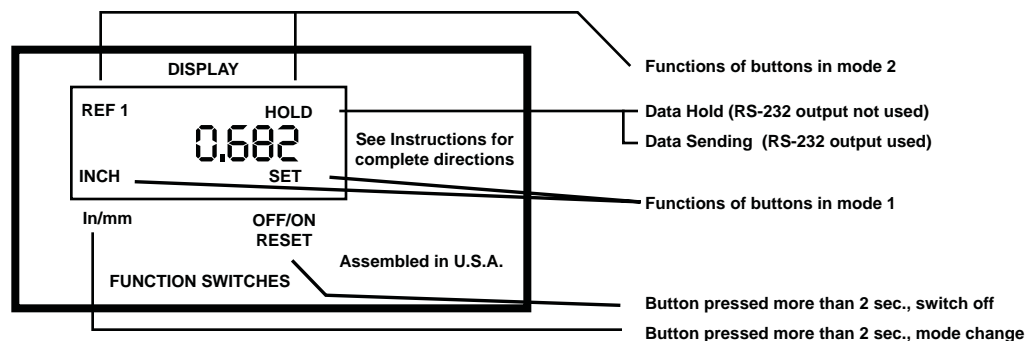


1. Pushbutton for ON/OFF, zero set and memory ("HOLD")
2. Pushbutton for mm/inch conversion and mode selection
3. Display
4. "SET" indicator
5. Measurement units indicator
6. "REF 1" indicator
7. "HOLD" (memory) indicator
8. Low battery indicator
9. Reset port
10. Port for optional RS232 computer interface cable (not available from ATD Tools, Inc.)
11. Battery compartment
12. (rear) Abbreviated instruction plate

## Turning the Display On/Off

A brief press of button #1 will switch ON the display. A prolonged press of button #1 will switch OFF the display.

# Explanation of Short Instruction Plate



## Technical Specifications:

<b>Measuring range:</b>	Internal	0-150 mm, 0-6"
	External	0-150 mm, 0-6"
	Depth	0-150 mm, 0-6"
	Shoulder	0-150 mm, 0-6"
<b>Resolution:</b>		0.01 mm / 0.0005"
<b>Accuracy:</b>		30 µm / 0.001"
<b>Repeatability:</b>		10 µm / 0.0005"
<b>Operational Speed:</b>		1.5 m/sec. / 60"/sec
<b>Measuring Units:</b>		Metric or English (mm/inch), true conversion
<b>Measuring System:</b>		Capacitive measuring system (patented)
<b>Display:</b>		LCD, minus sign (-), 6 digits (+0.5 mil in inch) height of digits 6mm / 0.24"
<b>Power Supply:</b>		One lithium battery 3V, type SR44/357/303 Capacity: 200 mAh
<b>Battery Life:</b>		2 years when normally used (2000 work hours per year). When (B) is displayed, the remaining battery life is more than one day. To protect the environment, please dispose of the dead batteries in an appropriate manner.
<b>Working Temperature:</b>		5°C to 40°C / 41°F to 104°F
<b>Interface:</b>		RS232 compatible interface cable with optoelectronic coupler
<b>Construction:</b>		Hardened and ground stainless steel
<b>Weight:</b>		150g / 5.3oz

## Modes

The ATD-8656 unit has two functional modes. The first is the normal measuring mode, and the second allows a reading to be held on the display. To change between modes, press and hold button #2.

**The word “SET” in the lower right corner of the display indicates the normal measuring mode is selected.**

**The word “REF 1” in the upper left corner of the display indicates the memory mode is selected.**

## Normal Measuring Mode - Inches and Millimeters

The word “SET” should appear in the lower right corner of the display which indicates the normal measuring mode is selected. Prior to taking a measurement, the calibration of the caliper should be checked as follows: Completely close the jaws, and briefly press button #1 to reset the display to zero (0).

To switch the measurement units between inches and millimeters, briefly press button #2. The display changes between inches and millimeters each time the button is depressed. This button may be pressed at any time. Once a measurement has been taken, pressing button #2 will convert between millimeters and inches.

## Memory Mode

The memory mode may be used to hold a particular measurement on the display. (Note that the tool cannot be recalibrated to zero while in memory mode, so, it is usually best to begin in the “Normal Measuring Mode” - see above). Enter the memory mode after the tool has been reset to zero, as explained above. The memory mode is useful, for example, when a measurement must be taken where it is difficult to read the display directly. In such a case as this, the measurement can be “frozen” on the display and read the tool has been removed from the difficult position.

To enter memory mode, press and hold button #2 until the word “REF 1” appears in the upper left corner of the display. It is now possible to perform a measurement and a brief press of button #1 will cause the measurement to be held on the display. “HOLD” will be displayed in the upper right corner of the display.

If the jaws are moved while a value is being held on the display, the display will not change however, once the memory is cleared with another brief press of button #1, the display will update with the correct new value based on the new position of the jaws.

## Battery Replacement

When the low battery indicator (#8) appears on the display, the battery should be replaced. Carefully pry off the two slender, rectangular, rubber plugs (#10 and #11) on the upper surface of the display cover. The old battery may be removed by *carefully* prying it out with the accessory tool provided, a jeweler’s screwdriver or the like. When inserting a new battery, be sure the positive (+) pole is facing outward. (If the battery is inserted backwards, it will not cause damage however the unit will not function). The unit will automatically reset itself - the word “RESET” will flash very briefly on the display. Replace the two rubber plugs.

## Troubleshooting

If the tool does not seem to be operating correctly - digits not responding to jaw movement, “Err”, “Mode” or other unfamiliar messages on the display, it can be reset as follows: Simultaneously press and hold both buttons. After a few seconds the display will go completely blank. At this point, release both buttons. The word “RESET” will flash very briefly on the display and normal operations will be restored.