# **QUICKSTART GUIDE - ENGLISH**

## Essential 3D enthusiast tools series

# 3D Model Digital Caliper



#### Overview

The Voltivo 3D Model Digital Caliper is an essential tool for every 3D printing enthusiast. You can create dimensionally accurate models and prototypes from existing objects or measure your pre-printed models for accuracy.

#### **Important Notes**

- Before using the caliper the first time, use a soft cloth to wipe the rust preventive oil from the caliper.
- Keep your Caliper clean using a dry, lint-free cloth and store it in its protection case when not in use.
- The Caliper has an auto on/off feature. The display will go to standby automatically if the caliper is not in use.
- If the Caliper is not used for more than 3 month we recommend to remove the battery, otherwise liquid might potentially leak from the battery and damage the caliper.
- Slider can only be moved after the locking screw is loosened.
- Never apply voltage on any part of the Caliper as the electronics might get damaged.

### **Caliper Overview**

- 1. Inner Measuring Jaws
- 2. Outer Measuring Jaws
- 3. Locking Screw
- 4. Metric / Inch switch
- Zero Settina
- 6. Battery cover
- 7. Thumb Wheel
- B. Depth Gauge

#### Taking your first measurement

Ensure the locking screw is loosened.

The Caliper display will automatically switch on when the measuring jaws are moved.

Press the "in-mm" button to toggle between metric or inch measurement mode.

The "ZERO" button will calibrate the instrument to its origin (0.00) position.

Apply normal measuring pressure on the slider or thumb wheel to close the measuring jaws. Then press the "ZERO" button to reset the display to zero. This function can also be used to make measurements relative to a previous measurement.

You can now take measurements using the different measurement modes as depicted.

- Outer Dimensions
- Inner Dimensions
- Using the depth gauge

Relative measurements are possible in all modes.









Depth Gauge

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#### **Battery Change**

The Caliper's electronics are optimized for low energy consumption to ensure a long, hassle-free battery life.

For your convenience, we have included a spare battery cell in the protective case. In case of the display starting to fade, please replace the battery with a common LR44 button cell battery.

You can open the battery compartment as shown on the picture to the right. Use your thumb to carefully slide the cover downwards in the direction indicated by the arrow.

The positive side (marked +) of the battery must face outwards.

Please only dispose of the empty battery through the locally appropriate collection or recycling channels.



No display

Please try to move the Caliper to switch it on automatically.

Flashing digits, no display or display fading
If after some movement, you still do not see any display,
the battery might be drained. Please follow above
instructions to replace.

Caliper not at 0.00 when fully closed Please use the "ZERO" Button to recalibrate the electronics.









Please visit our internet site at http://voltivo.com/ef-3dcalip-1 for further information and support



Opening the battery compartment



#### **Safety Precautions**

To ensure your safety, use this instrument in conformance with the directions and specifications given in this Quickstart Guide.

If a battery is swallowed, immediately consult a doctor.

The outer and inner measuring jaws of this caliper have very sharp edges. Handle it with great care and when not in use, store the Caliper in its protective case to avoid injury.

## **Specifications**

Characteristic	
Measurement Range	0 mm - 150 mm 0 inch - 6 inch
Measurement Accuracy	0.02mm / 0.001 inch up to 150mm
Significant Figures	4 in Metric units and 5 in English units
Calibration	Adjustable calibration for point-of-origin
Measuring Speed	Up to 1.5m/s
Operating temperature	10° to 40° C
Storage temperature	-10° to 60° C
Relative Humidity	<80%
Display	High contrast 5 digits LCD Display resolution of 0.01 mm / 0.0005 inch
Material	Hardened Steel for mechanical parts directly involved with measurement
Battery	1.55 V Long-life LR44, with one spare provided
Packaging	Sturdy hardcase
Compliances	CE, RohS
Hardcase Size	244mm x 91mm x 27mm
Weight	375g including hard-case and packaging