



CALIBER MEASURING TOOL FOR MITER SAWS



MODEL NO.
5511

If you have any questions about this product,
please feel free to contact us via:

contact@vloxo.net

CALIBER MEASURING TOOL

VLOXO caliber measuring tool is mainly used when cutting long objects such as wooden strips and aluminium profiles. It needs to be used with a cutting machine to measure the cutting length when cutting. When the device is working, the clamp can be clamped on the support plate of the cutting machine. The clamp can be adjusted according to the thickness of the support plate. Generally, the thickness can be from 4 mm to 12 mm. When cutting material moves, scroll wheel can roll on its surface, output rolling distance and read measurement results on backlit LCD screen.

Caliber Measuring Tool



PREPARATION BEFORE USE

BATTERY INSTALLATION

Insert 2 AA batteries into the unit as shown (they are not inserted in the battery compartment when the unit leaves the factory), correctly matching the positive and negative markings on the side of the battery compartment. The supply voltage of the unit is 3V, incorrect installation may cause the unit unusable.



MEASURING TOOL INSTALLATION

Install the caliber measuring tool on the left side of the cutting machine support plate in the position shown in the figure. Before installation, first turn the clamp handle away from the human body, place the supporting surface of the base against the top of the support plate, and then turn the clamp handle towards the human body until the cutting machine support plate is clamped and cannot be released. The length of the clamp can be adjusted or eliminated depending on the thickness of the support plate. The position of the clamp can also be adjusted according to the length of the support plate.



Remove the
Clamp Handle



Clamping
Method 1



Clamping
Method 2



Clamping
Method 3



Factory Setting
of Clamp Position



Clamp Position
is Left (Front View)



Clamp Position
is Right (Front View)

MEASURING ARM

- When the caliber measuring tool is completely fixed, push the arm downwards by hand to separate the arm from the base shell of the device. The arm will automatically lower and press the measuring wheel on contact the surface of the cutting machine base.
- When the caliber measuring tool is completely fixed, lift the arm upwards by hand and away from the surface of the cutting machine base. The arm of the device contacts the base shell and the arm will automatically stop.

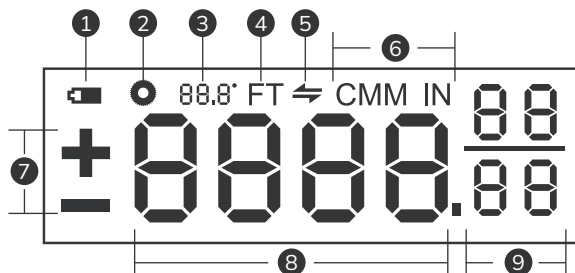
PRODUCT PARAMETERS



Range: 30m (reset to zero beyond 30m)

Resolution: 0.05mm

Accuracy: $\pm 1.5\text{mm}/\pm 0.04\text{in}$



1. BATTERY LEVEL
2. BLADE SETTINGS
3. ANGLE
4. UNITS Ft
5. COMPARING FRACTIONS

6. UNITS: mm|cm|m|in
7. POSITIVE/NEGATIVE
8. INTEGER DIGITS
9. DECIMAL/FRACTIONAL DIGITS

FUNCTION OF THE BUTTON



ON

Short Press: Turn On

"+" and "-" are direction exchanges, from left to right.

After Turn On

The first short press: "+", pushes the measuring material from left to right, and the screen displays a positive number.

The second short press: "-", pushes the measuring material from left to right, and the screen displays a negative number.

Long Press: Turn Off



UNIT

Unit exchange (Metric and Imperial)



LIGHT

Set Screen Light and Angle

First long press: Screen light turns on.

Second long press: Screen light turns off.



ZERO

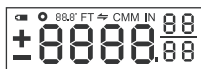
Zero set

Short press: Screen is zero

GET CUTTING

The caliber measuring tool is calibrated at the factory. On-site calibration is recommended before use. You can use a tape measure and the device's measuring wheel to make precise cuts.

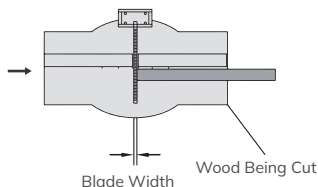
1. After short pressing the ON button, the LCD displays the data. Click the UNIT button to select the display unit.



Click

2. Set Blade Width

a. Press and hold "UNIT" to enter the blade width setting interface (● is lit);



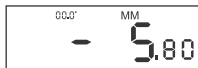
Press



b. Rotate the wheel until the LCD display reaches the thickness of the blade (the thickness should be measured with a vernier caliper. Or the thickness provided by the manufacturer). This thickness value will be automatically calculated into subsequent measurements. Click the "LIGHT" button to confirm.




Click



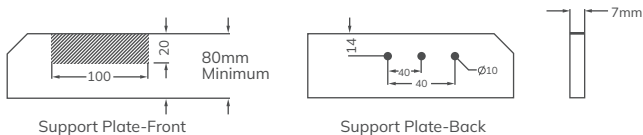
- c. Release the arm until the measuring wheel is in close contact with the material to be measured.




- d. Slide the material to be measured until the material is close to the left edge of the blade, and click "  " to set the position and display a negative value (blade width).
- e. Lift the blade, slide the material to be cut to the position where it needs to be cut, start the cutting machine, press the cutting machine blade, and the material to be cut is cut. (Be sure to reset the meter to zero each time you start a new measurement)

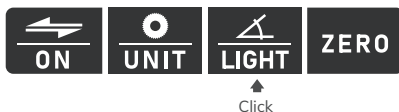
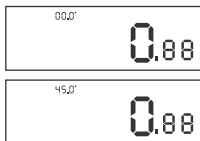
3. Clamp

VLOXO caliber measuring tool is designed with a clamping mechanism that can be used directly with various cutting support plates of cutting machines. Our standard clamping mechanism can directly clamp the support plate with a thickness of less than 7mm. By adjusting the nut of the ejector rod or removing the ejector rod, the clamping range can be extended to the support plate within 23mm. The installation space is as shown below:

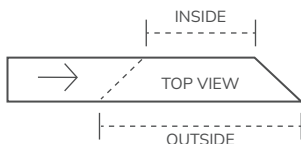


4. Angle Cutting

- a. Short press the " LIGHT" key to select the cutting angle (0°, 15°, 30°, 45°, 60°, 75°). Set the saw blade of the cutting machine to zero normally at the required angle. The angle is displayed in the upper left part of the screen.



- b. There are two options at this time. Bevel measurements are measured from the inside or outside edge(zero position). Please refer to the picture below to make your right choice.



Start With An Angle Cut



Start With A Straight Cut

- c. Push the material into place and cut.

Note: When moving, make sure the material is close to the plate; there is no speed limit when moving the material, but do not move the material back and forth at a high speed, which may easily cause inaccurate data; when using the wheel, the key parts for measurement must be ensured that there are no debris on the surface of the roller, which will also cause inaccurate measurement data.

Working principle: The caliber measuring tool converts rotation into distance through the rolling of the wheel. The thickness of the blade, set to a negative value, reaches the zero position as the official starting measurement of the material.

5. Explanation of Fractional Units

In imperial measurement units, for the convenience of users who are accustomed to using fractional units, we have added the accurate rounding of " ⇄ " for fractional units to help display the difference between the current measurement value and the given fractional value.

" → ": Indicates that the current value is on the right side of the fractional value (i.e. greater than the fractional value)



" ← ": Indicates that the current value is to the left of the fractional value (i.e. smaller than the fractional value)

6. Direction Setting



The device measures from left to right by default. If you need to measure from right to left, short press the "  " button to change the measurement direction.

Note: First install the device on the right side of the cutting machine at the support plate and clamp it; after the material is put into the support plate from the right side, lift the arm, put it down, and press it on the cutting machine. On the upper surface of the material, the movement distance of the material can be measured after rolling.

7. Power Supply

- a. Automatically shut down after 5 minutes of no operation.
- b. In the power-on state, press and hold the "  " button to turn off the device; In the power-off state, press the "  " button briefly to turn on the device (the data will be reset to zero after power-on).
- c. When the battery voltage is lower than 2.7V, the LCD battery icon flashes to remind the user to replace the battery.

8. Backlight

Long press the "  " button to light up the LCD backlight. If there is no operation for 30 seconds or long press the "  " button, the device will automatically turn off the backlight to save battery power consumption and increase the standby time.

CALIBRATION PROCEDURE

Before you begin please make sure of the following:

- a. The device is turned off.
- b. The device is securely clamped on the support plate.
- c. At least 6 feet (2m) of flat, smooth, straight material is available.
- d. A reliable tape measure, at least 6 feet (2m) long.
- e. A pointed pencil or marker can be used for marking.

While all VLOXO Caliber measure Tools come with a factory calibration, an onsite calibration is recommended when first receiving it to ensure the most accurate cuts possible and match your specific tape measure.

Tape measures may vary based on manufacturer and class rating, making it essential to perform a calibration to match the specific tape measure blade printing. The following procedure allows the VLOXO to accurately convert the wheel's rotary motion to linear measurements that match a particular measure of tape.

The following demonstration is made using wood but any material may be used should it meet the proper requirements and should match what you plan to most frequently cut with the VLOXO Caliber measuring tool to ensure the most robust calibration.



1. The VLOXO caliber measuring tool is properly secured to the fence.

Note: The caliber measure tool remains closed.



2. Hold down UNIT and LIGHT at the same time, until a CRL is displayed. Then release the two buttons.



3. Short press "LIGHT". The screen for setting the CRL to zero is displayed.



4. Slide the measuring material under the VLOXO caliber tool until it touches the saw blade.

Note:

1. The measured material should match the material you plan to cut most often, as some materials are calibrated differently than others.
2. This step does not need to cut measure materials, and the accuracy of the measuring instrument reaches about 1mm.
3. Measuring material should be as straight and flat as possible for the best results.



5. Use a tape measure to mark 3 feet or 1 meter on the material.

Note:

1. Make sure that the tape measure you are using is the one you plan to use most often with your VLOXO caliper gauge, as the calibration will best match the tape measure you are using.
2. Make sure the mark is as clean and accurate as possible.
3. When calibrating in "ft" mode, mark exactly 3ft (36 inches) OR When calibrating in "m" mode, mark exactly 1m (100cm).



6. Slide the material until the mark is directly below the blade.

Note:

1. Slide the measuring material from left to right.
2. When sliding the measuring material, ensure that the back of the board is always in contact with the fence.
3. Be sure your saw is unplugged or has its battery removed before observing the saw blade location.



7. Lower the blade until it touches the mark. No cutting material is required.



8. Short press "LIGHT" again to zero the screen, and the calibration is complete.

Note:

Verify your calibration to ensure it was completed successfully Move the material back to the position where the material touches the blade. The screen should display very close to "0" confirming the calibration was successful.

Some very small differences are normal and will not affect the cut.

If not successful, carefully repeat the above steps.

If you are having difficulties Calibrating your caliber measuring tool, please view our Calibration Video for more details and steps to try. Contact our support team (contact@vloxo.net) if you have any questions or concerns and we would be happy to assist!



SAFETY WARNING

1. To reduce the risk of injury, please read this manual carefully before using the product.
2. The VLOXO caliber measuring tool is designed for professional cutting applications on miter saws, cut off saws, and band saws.
3. DO NOT use with unspecified tools.
4. DO NOT use in wet conditions or in the presence of flammable liquids or gases
5. DO NOT replace any component of the caliber measuring tool components not supplied by VLOXO.
6. Please do not disassemble the device without permission to avoid damage to the device.
7. To avoid accidents, please do not let children operate the device alone.
8. When operating, please keep a distance from the cutting blade to avoid injury.
9. For best performance, device should be operated and stored in cool, dry conditions.

Disposal & Recycling



You must properly dispose of caliber measuring tool according to local laws and regulations. Since this machine contains electronic components, it should be discarded and separated from household waste. When it reaches the end of its life, contact local authorities to learn about disposal and recycling options. You can help protect the environment! Please remember to respect local regulations and dispose of non-working electrical equipment at an appropriate waste disposal center.