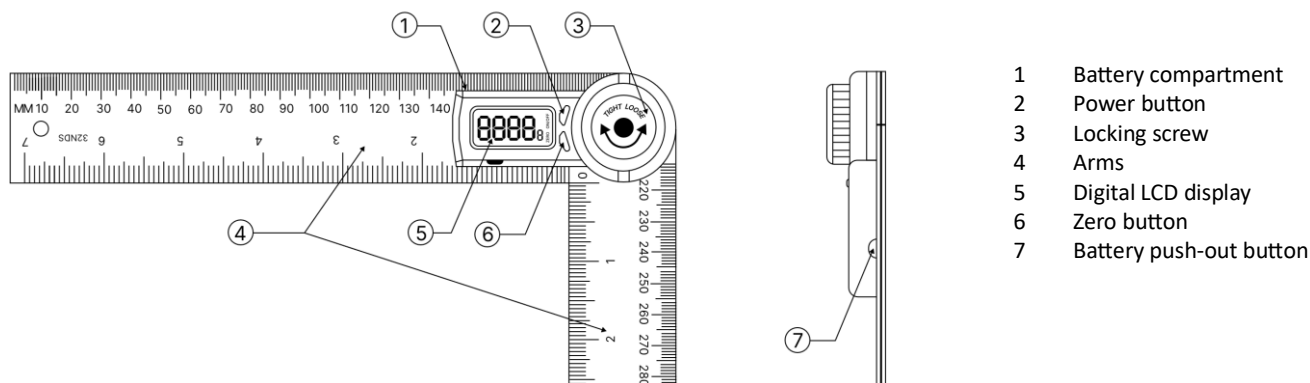


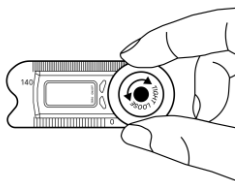
Preface

Congratulations on purchasing the Gemred 82305-200D Digital Angle Measure.

Parts and components



Instructions below assume you have the screw (and screen) facing towards you with the upper ruler arm pointing to the left.

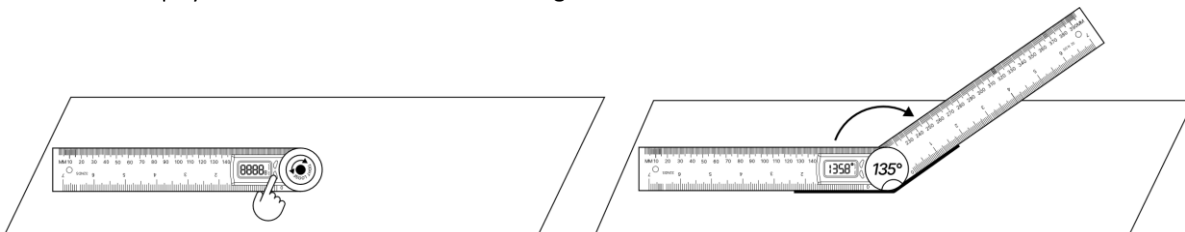


Buttons

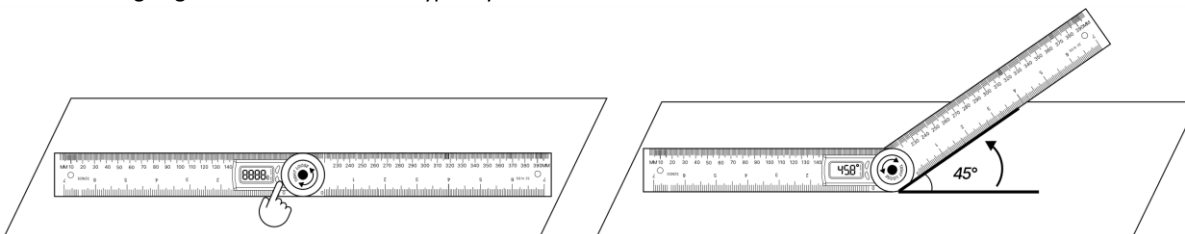
- ON/OFF button: This is the small uppermost button between the screen and the locking screw. Press it to switch on the LCD display ON or OFF. Hold for more than 3 seconds to shut down the angle measure.
- Zero button: This is the small uppermost button between the screen and the locking screw. Click it to set the measurement to zero.
- Battery push-out button: Push to access the battery compartment

Operation

1. Inside corner angle measurement: Fold both arms together and place the tool firmly against the surface. Press ZERO button to calibrate. Open one arm — the display will show the **measured internal angle** between the arms.



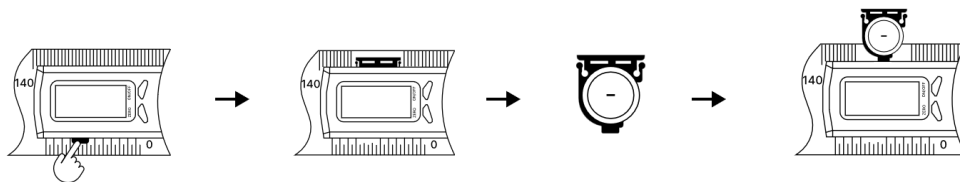
2. Outside Corner: Open both arms flat and place the base of the tool firmly against the surface with the locking screw facing towards you. Press **ZERO button** to calibrate. Moving the right arm counter-clockwise as shown in the image will now provide the **external angle**. This mode also allows measuring angles from the x-axis as is typically done in mathematics.



Battery replacement

If the display behaves incorrectly, for example the values are flashing, or display is fuzzy or nothing is shown, it indicates that the battery power is low and should be replaced. Follow the steps shown below to reinstall the battery.

1. Push the protruding battery removal button on the bottom of the LCD display.
2. Pull out the edge of the battery tray from the upper side of the LCD display.
3. Replace the battery in a way that the positive pole is facing downwards in the battery tray.
4. Push the battery container back inside the angle measure.



Using Angle Measure with IKONN Controller and the Mobile App

This angle measure connects with the **IKONN Controller** or **myIKONN App** for audio feedback in your chosen language, supporting users who can't view the screen. The app also supports large-font display of values in real time for low-vision users who prefer this to audio.

To pair, turn on the tool and select the **Add product** function of the IKONN Controller or Digital App. Use the help function on your controller/app or the manual for the controller if you are unsure how to do so.

You'll hear an announcement once paired, and IKONN will confirm the product name. The angle measure function will then be available for operation in your App or on your controller menu — select it to begin. Make sure the angle measure is on when using it with IKONN.

For more help, use the IKONN controller's help feature or visit ikonn.info/support

Technical specifications

Resolution	0.1°	Working conditions	0°C to 50°C / 32°F to 122°F
Accuracy	0.3°	RF TX Power	-3.22 dBm
Weight	89g	Dimensions	218x20x35
Working range	0.0° ~ 360.0°	Source of electricity	1*CR2032 battery, voltage 3.0V
Power supply	CR2032 3V lithium battery	Humidity at work	≤ 80%
Operation frequency	2402MHz to 2480MHz	Bluetooth protocol	5.0 BLE

Handling and Safety

Warning: Read all safety instructions before use and keep this manual. Misuse may result in injury, fire, electric shock, or damage. Not for commercial or industrial use.

General Handling:

Handle with care — contains sensitive electronics. Check for visible damage before use. Do not open, repair, or modify without authorization. Avoid drops, shocks, high heat, humidity, dust, vibration, liquids, and insects. Use within specified temperature ranges. Rotate the ruler arms only clockwise or counterclockwise — do not force them up or down. Do not shake, hit, or disassemble the product. Clean only with a mild cleaning solution or anhydrous alcohol using a damp, soft cloth, then dry immediately. Never use acetone and never immerse the device in water. This is a precision tool — do not treat it as a toy or weapon. Be cautious of sharp edges to avoid scratches. For long-term storage: remove the battery, store in a dry and non-humid environment, and wipe with anti-rust oil if necessary. Never leave outdoors in wet conditions.

Battery Safety:

This product contains a lithium button/coin cell battery (CR2032, 3V). If swallowed or inserted into the body, batteries can cause severe internal burns and death in as little as 2 hours. Always completely secure the battery compartment. If it does not close properly, stop using the product, remove the battery, and keep it away from children. Keep new and used batteries out of reach of children. Even used cells can cause injury or death. If ingestion is suspected, seek immediate medical attention and contact a poison control center. Ensure batteries are installed with correct polarity (+/-). Remove batteries from equipment not used for extended periods and recycle/dispose of them according to local regulations.

Tips and troubleshooting

Phenomenon	Possible reason	Solution
Display blur/flicker or ambiguous	Low or no battery, incorrect placement	Replace or reinstall the battery
Erratic display	High vibration or strong swing	Set zero value
Numbers skip or display freezes	Internal fault	Remove the battery, wait 1 minute and reinstall it

You can find a list of solutions for the most frequently occurring issues at: ikonn.info/products/angle-measure

If you experience further problems with operating your product, please contact the retailer where you purchased it. If you are unable to make contact with them, contact the manufacturer at: ikonn.info/support

Support and warranty

This product is warranted against defects in materials and workmanship for a period of two years from the date of original purchase. This warranty does not cover damage caused by misuse, accident or unauthorized modifications. For parts subject to wear and tear, including the battery, the warranty is six months. Please retain your proof of purchase.

Disposal of electronic appliances



Do not dispose of this product or its batteries with household waste. At end of life, take them to a designated collection point per local regulations. Contact your local authority or retailer for proper disposal guidance. In the EU, this follows Directive 2012/19/EU (WEEE).