



**TOOLS<sup>SMART</sup>**  
CONNECTED PRECISION

# DIGITAL ANGLE FINDER

## USER'S MANUAL



### TS02

**Test Equipment  
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Visit us at [www.TestEquipmentDepot.com](http://www.TestEquipmentDepot.com)

Please read this manual carefully and thoroughly before using this product.

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## INTRODUCTION

Thank you for purchasing General Tools & Instruments' (General's) TS02 ToolSmart™ Digital Angle Finder (DAF). Please read this user's manual carefully and thoroughly before using the instrument.

The DAF can be used as a standalone instrument, or with General's free ToolSmart™ app running on your phone. When used in concert with an iPhone® or Android™ smartphone, the DMM can stream—via Bluetooth®—to the phone all measurements it makes. The phone initiates the data transfer using the ToolSmart™ app, which can be downloaded from the iTunes® App Store or Google Play Store. The measurements can then be used to tag photos taken by the phone's camera. For example, the app can apply angle measurements of structures to blueprints developed as part of a home renovation project.

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## FEATURES AND SPECIFICATIONS

- Measures interior and exterior angles up to 225° in seconds with  $\pm 0.3^\circ$  accuracy and 0.1° resolution
- Large (1.6 in. diagonal) LCD
- Horizontal and vertical bubble levels
- Zero button
- 10.5 in. ruler on measuring arm
- 5-minute Auto Power Off
- Hanger hole
- Operating temperature of 32° to 104°F (0° to 40°C)
- Powered by non-rechargeable CR2032 battery (included)

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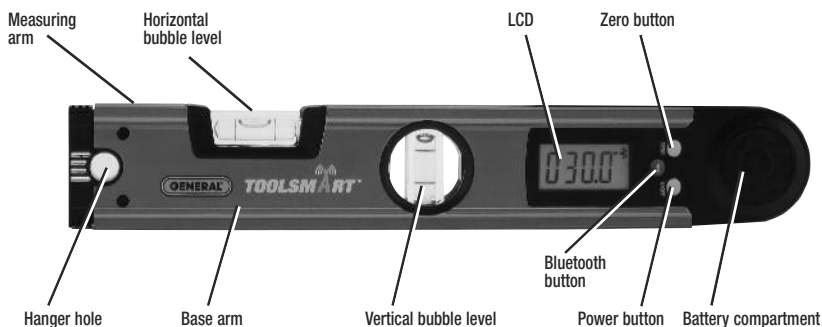
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## PRODUCT OVERVIEW

The figure shows the labels of the DAF's controls, indicators and components. Familiarize yourself with their positions before moving on to the setup and operating instructions.



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## SETUP INSTRUCTIONS

### **INSTALL BATTERY**

To open the battery compartment, place the tips of your thumbs or your thumbnails on the ridged areas of the battery compartment cover (see figure on facing page). Turn the cover in the direction of the **OPEN** arrow. The cover will come loose after rotating counterclockwise by about 15°. After rotating the cover that amount, tilt the DAF and let gravity help dislodge the cover.

Install the included CR2032 battery in the compartment anode (+ side) up. Press firmly until it snaps into the socket.

Replace the battery compartment cover and turn it in the direction of the **CLOSE** arrow until the printing on the cover is horizontal.

Replace the battery when the readout flashes, grows dim or disappears.


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## OPERATING INSTRUCTIONS

**To measure an angle**, begin by pressing the **ON/OFF** button to power the DAF on. Then fold the measuring arm into the base arm and press the **ZERO** button to set the angle between them to zero; the LCD will respond by displaying **000.0°**.

Place the bottom of the DAF's base arm against one side or leg of the structure whose angle you wish to measure, and the top of the DAF's measuring arm against the other side or leg. The LCD will display the angle between the two sides or legs.

In practice, the height of the DAF prevents it from measuring angles less than 13°.

**To use the DAF with your phone**, begin by downloading the ToolSmart™ app from the iTunes Store or Google Play Store and installing it. Then, pair the DAF and your phone by activating Bluetooth on your phone and pressing the  button on the DAF.

A tutorial on the app explains how to save DAF measurements to your phone and overlay them on photos of your project taken by the phone's camera.

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## WARRANTY INFORMATION

General warrants its instruments and accessories, and digital tools products against defects in material or workmanship for one year from the date of purchase unless otherwise stated on the packaging, manual, and/or marketing materials. General also warrants its non-digital tools products against defects in material or workmanship on a limited lifetime term.

General will replace or repair the defective unit, at its option, subject to verification of the defect.

This warranty does not apply to defects resulting from abuse, neglect, accident, unauthorized repair, alteration, or unreasonable use of the product. It also does not cover products purchased from unauthorized distributors. A proof of purchase must accompany each warranty claim.

For more details or to file a warranty claim, contact General Tools & Instruments Technical Support at [techsupport@generatools.com](mailto:techsupport@generatools.com).

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## RETURN FOR REPAIR POLICY

Every effort has been made to provide you with a reliable product of superior quality. However, in the event your instrument requires repair, please contact our Customer Service to obtain an RGA (Return Goods Authorization) number before forwarding the unit via prepaid freight to the attention of our Service Center at this address:

General Tools & Instruments 75 Seaview Drive  
Secaucus, NJ 07094 212-431-6100

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## FCC STATEMENT

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) This device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications.

However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to a different circuit than the one the receiver is connected to.
- Consult your supplier or an experienced radio/TV technician for help.

**Caution:** Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.



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Specifications subject to change without notice

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