

Operating manual
Digital Angle Finder
Model: AngleMeter 45



ENG**Table of contents**

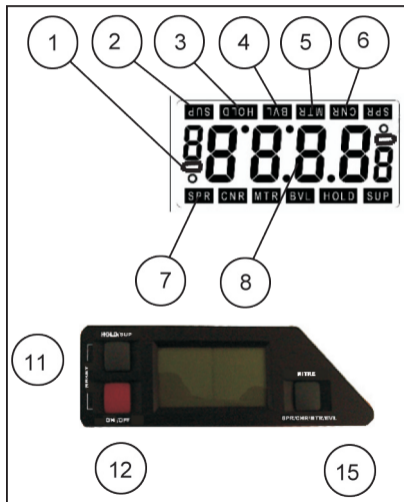
1. Display	3
2. Appearance	4
3. Installing batteries	4
4. Operating instructions	5
5. Technical data	9
6. Warranty/Exceptions from responsibility	10

Appendix 1. Warranty card

Appendix 2. Certificate of acceptance and sale

DISPLAY

1. Battery life icon
2. SUP indicator
3. HOLD indicator
4. BVL indicator
5. MTR indicator
6. CNR indicator
7. SPR indicator
8. Angle display



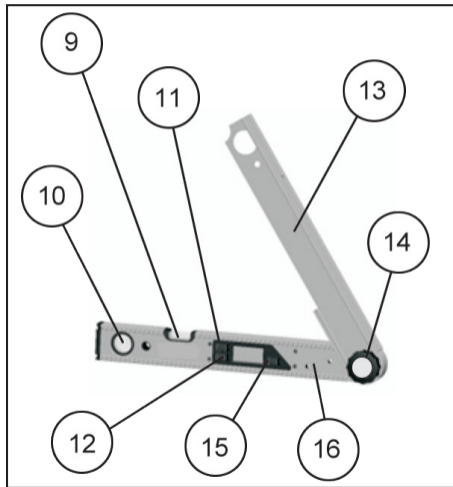
pic. 1

APPEARANCE

9. Level vial
10. Plumb vial
11. HOLD/SUP button
12. ON/OFF button
13. Adjustable arm
14. Tension knob
15. MITRE button
16. Level arm

INSTALLING BATTERIES

- 1) Lift arm to expose battery compartment which is located on the back of the product
- 2) Remove cover
- 3) Insert 2xAAA batteries
- 4) Replace cover and snap in place



pic. 2

OPERATING INSTRUCTIONS

Power

Press the ON/OFF button (12) for ~1 sec to turn on the display and backlight.

The angle (8) which represents the angle between the arms (13 and 16) will be displayed in degrees (°).

The display will automatically power off after ~5 min of non-use.

The backlight will automatically power off after ~1 min of non-use. Any button press or angle change will cause the backlight to power on if the display is powered on.

The battery life icon (1) will appear when there is ~2 hours of battery life remaining.

Press the ON/OFF button (12) for ~2 sec to power off the display.

Invert Display

With the display powered on, press the ON/OFF button (12) for ~1 sec to invert the display. Press again for ~1 sec to return display to normal position.

Re-calibrate

If the unit is dropped or you suspect inaccuracy of the product, you can re-calibrate the zero point. With the power on and the arms (13 and 16) closed together, press the ON/OFF (12) and HOLD/SUP (11) buttons simultaneously for ~1 sec to reset the angle to 0°.

Hold

Press the HOLD/SUP button (11) for ~1 sec to lock the current angle shown on the display. The HOLD indicator (3) will appear and flash on the display. Press (11) again for ~1 sec to unlock the displayed angle.

Supplemental angle

Press the HOLD/SUP button (11) for ~2 sec to change the display to the supplemental angle. The supplemental angle is 180° minus the current angle between the arms (13 and 16). The SUP indicator (2) will appear and flash on the display. Press (11) again for ~2 sec to return to normal angle.

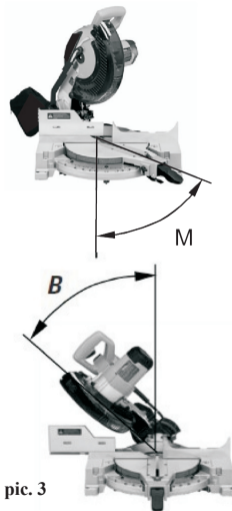
Easy Mitre Angle

With the arms (13 and 16) set to the desired angle, press the MITRE button (15) for ~1 sec. The mitre angle ($90^\circ - \frac{1}{2}X$) will be shown. The display will be locked on that angle and the MITRE indicator (5) will appear and flash on the display. To set the mitre saw, see pic.3, setting M.

Compound Angle Mode

For compound angles such as cuts for crown molding, you will need to enter compound mitre mode and store two angles into memory; the Spring (SPR) and Corner (CNR) angles (see pic. 4 and 5). The unit will then calculate the Mitre and Bevel angles needed to set a compound mitre saw. See pic. 3, settings M (mitre) and B (bevel).

Note: If you do not know the spring angle of the item you are working with, it is easier to get that angle before starting. The spring (SPR) angle is usually 38° or 45° for crown molding. See pic. 4.



pic. 3

This is done by placing the molding as shown in pic. 6. Once the arms are set to matching the angle of the item, press the HOLD/SUP button (11) for ~2 sec to get the supplemental angle. That will be the spring (SPR) angle.

EX: Angle between arms = 135°

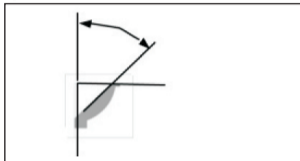
Supplemental angle = 45°

Step 1: Start compound mitre mode. Press the MITRE button (15) for ~2 sec. The SPR indicator (7) will flash and the SPR angle that was last stored into memory will be shown for ~2 sec.

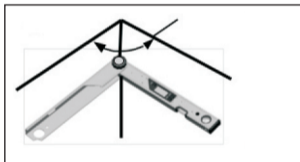
Step 2: The SPR indicator (7) will stop flashing and the display will again show the active angle. If the stored SPR angle needs to be changed, adjust the arms (13 and 16) until the displayed angle matches the known spring angle (typ. 38° or 45°). Then press the MITRE button (15) for ~2 sec. The displayed angle and SPR will flash once and the spring (SPR) angle is now stored in memory.

If the stored spring angle does not need to be changed, press MITRE button (15) for ~1 sec to move to the next step.

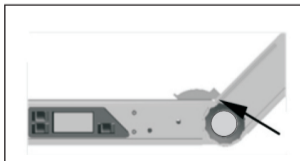
Step 3: If you do not already have the CNR indicator (6) shown in the display, press the MITRE button (15) for ~1 sec. The CNR indicator will flash and the CNR angle that was last stored (6) into memory will be shown for ~2 sec. The CNR indicator (6) will stop flashing and the display will again show the active angle. If the stored CNR angle needs to be changed, adjust the arms (13 and 16) as shown in pic. 5. To store the corner angle into memory,



pic. 4



pic. 5



pic. 6

press the MITRE button (15) for ~2 sec. The displayed angle and the CNR indicator (6) will flash once and the corner (CNR) angle is now stored in memory.

If the stored corner angle does not need to be changed, press MITRE button (15) for ~1 sec to move to the next step.

Step 4: If you do not already have the MTR indicator (5) shown in the display, press the MITRE button (15) for ~1 sec. This is the calculated mitre angle for setting the saw. See pic. 3, angle M.

Step 5: Press the MITRE button (15) for ~1 sec to change the display to the bevel angle. The BVL indicator (4) will be displayed. This is the bevel angle for setting the saw. See pic. 3, Angle B.

Press the MITRE button (15) for ~1 sec to cycle back through the stored spring angle, the stored corner angle and the calculated mitre and bevel angles.

Press the ON/OFF button (12) at any time for ~1 sec to exit compound angle mode.

TECHNICAL DATA

Power	3VDC 2xAAA Batteries (included)
Measuring range	0-225°
Digital angle accuracy	±0.1°
Vial(s) accuracy	0.057 ° (1 mm/m)
Operating temperature	-10°C to 50°C
Storage temperature	-20° to 70°C
Battery life	~100 Hrs
Shock resistance	up to 1 m drop on concrete
Water resistance	water resistant, but not waterproof

Warranty

This product is warranted by the manufacturer to the original purchaser to be free from defects in material and workmanship under normal use for a period of two (2) years from the date of purchase.

During the warranty period, and upon proof of purchase, the product will be repaired or replaced (with the same or similar model at manufacturer's option), without charge for either parts or labour.

In case of a defect please contact the dealer where you originally purchased this product. The warranty will not apply to this product if it has been misused, abused or altered. Without limiting the foregoing, leakage of the battery, bending or dropping the unit are presumed to be defects resulting from misuse or abuse.

Exceptions from responsibility

The user of this product is expected to follow the instructions given in the operator's manual.

Although all instruments leave our warehouse in perfect condition and adjustment the user is expected to carry out periodic checks of the product's accuracy and general performance.

The manufacturer, or its representatives, assumes no responsibility for results of a faulty or intentional usage or misuse including any direct, indirect, consequential damage, and loss of profits.

The manufacturer, or its representatives, assumes no responsibility for consequential damage, and loss of profits by any disaster (earthquake, storm, flood ...), fire, accident, or an act of a third party and/or a usage in other than usual conditions.

The manufacturer, or its representatives, assumes no responsibility for any damage, and loss of profits due to a change of data, loss of data and interruption of business etc., caused by using the product or an unusable product.

The manufacturer, or its representatives, assumes no responsibility for any damage, and loss of profits caused by usage other than explained in the user's manual.

The manufacturer, or its representatives, assumes no responsibility for damage caused by wrong movement or action due to connecting with other products.

WARRANTY DOESN'T EXTEND TO FOLLOWING CASES:

1. If the standard or serial product number will be changed, erased, removed or will be unreadable.
2. Periodic maintenance, repair or changing parts as a result of their normal runout.
3. All adaptations and modifications with the purpose of improvement and expansion of normal sphere of product application, mentioned in the service instruction, without tentative written agreement of the expert provider.
4. Service by anyone other than an authorized service center.
5. Damage to products or parts caused by misuse, including, without limitation, misapplication or negligence of the terms of service instruction.
6. Power supply units, chargers, accessories, wearing parts.
7. Products, damaged from mishandling, faulty adjustment, maintenance with low-quality and non-standard materials, presence of any liquids and foreign objects inside the product.
8. Acts of God and/or actions of third persons.
9. In case of unwarranted repair till the end of warranty period because of damages during the operation of the product, its transportation and storing, warranty doesn't resume.

WARRANTY CARD

Name and model of the product _____

Serial number _____ date of sale _____

Name of commercial organization _____ stamp of commercial organization

Warranty period for the instrument exploitation is 24 months after the date of original retail purchase.

During this warranty period the owner of the product has the right for free repair of his instrument in case of manufacturing defects.

Warranty is valid only with original warranty card, fully and clear filled (stamp or mark of the seller is obligatory).

Technical examination of instruments for fault identification which is under the warranty, is made only in the authorized service center.

In no event shall manufacturer be liable before the client for direct or consequential damages, loss of profit or any other damage which occur in the result of the instrument outage.

The product is received in the state of operability, without any visible damages, in full completeness. It is tested in my presence. I have no complaints to the product quality. I am familiar with the conditions of warranty service and I agree.

purchaser signature _____

Before operating you should read service instruction!

If you have any questions about the warranty service and technical support contact seller of this product

Certificate of acceptance and sale

_____ **No** _____

name and model of the instrument

Corresponds to _____

designation of standard and technical requirements

Data of issue _____

Stamp of quality control department

Price

Sold _____ Date of sale _____

name of commercial establishment