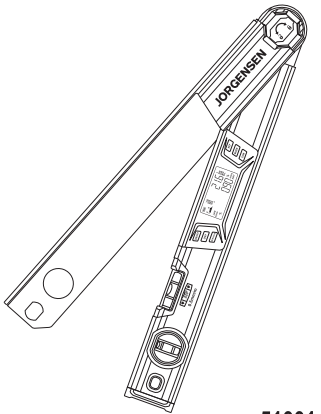


JORGENSEN®

SINCE 1903



51001 MULTI-FUNCTION DIGITAL LEVEL ANGLE FINDER



PONY | JORGENSEN
Saddle Brook, NJ 07663 USA
ponyjorgensen.com

The safety instructions and the user manual should be read through carefully before the product is used for the first time

SAFETY INSTRUCTION:

1. Keep the instrument dry.
2. Keep the instrument and battery out of reach of infants and children.
3. When the symbol " " appears, the batteries are low and should be replaced. Ensure that battery polarity connections are correct when replacing batteries. If you are not using the instrument for a long time, remove the battery.

PROHIBITED USE

- Using the product without instruction
- Using outside the stated limits
- Deactivation of safety systems and removal of explanatory and hazard labels
- Opening of the equipment by using tools (screwdrivers, etc.)
- Carrying out modification or conversion of the product
- Use of accessories from other manufacturers without express approval

CAUTION

Never attempt to repair the product yourself. In case of damage, contact a local dealer.

LIMITS OF USE

- Refer to section "Technical data", the device is designed for using in areas which is habitable for humans.
- Do not use the product in explosion hazardous areas or in aggressive environments.

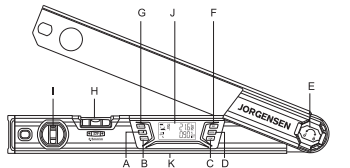
AREAS OF RESPONSIBILITY RESPONSIBILITIES OF THE PERSON IN CHARGE OF THE INSTRUMENT:

- To understand the safety instructions on the product and the instructions in the User Manual.
- To be familiar with local safety regulations relating to accident prevention.
- Always prevent access to the product by unauthorized personnel.

FUNCTION

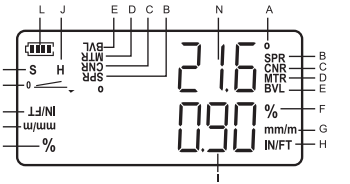
This digital level is a highly versatile tool designed for fast to measure various angles, and calculate simple and compound miter angles.

PRODUCT OVERVIEW



PARTS	DESCRIPTION
A	Angle unit switch("°, %, mm/m and IN/FT)
B	MTR for simple miter/Data hold
C	Compound miter calculation
D	Display mode switch
E	Locking knob
F	Reference button
G	ON/OFF button
H	Spirit level for horizontal alignment
I	Spirit level for vertical alignment
J	LCD
K	battery compartment (rear)

DISPLAY

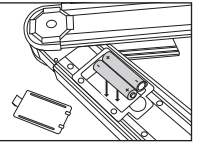


PARTS	DESCRIPTION
A	Angle unit in degree
B	SPR-spring angle indicator
C	CNR-corner angle indicator
D	MTR-miter angle indicator
E	BVL-bevel angle indicator
F	Angle unit in %
G	Angle unit in m/mm
H	Angle unit in IN/FT
I	Level measured value
J	Hold indicator
K	Reference on/off indicator
L	Battery indicator
M	Angle position indicator
N	Miter angle measured value

OPERATION INSTRUCTION

1.INSERT BATTERY

Open battery compartment and insert 2xAA battery according to the installation symbols. Pay attention to the polarity while inserting the battery.



It is necessary to replace new batteries, when the left corner of LCD display show " ".

2. SWITCHING ON

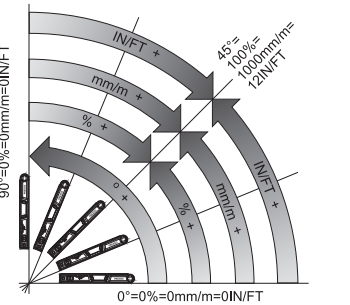
Press **ON/OFF** to switch on the device, and long press it again to switch it off.

Each time the angle finder is turned on, the initial angle value is 0. Before turning on, please close the angle finder to fully closed, and reset the angle zero point automatically before using it.

The backlight will be off automatically in 90 seconds without operation. The device will be off automatically in 30 minutes without operation.

3. LEVEL MEASUREMENT

Turn on the device and place it on the object that needs leveling or measuring. The display will automatically show the measured value on the screen. When the device is rotated, the content of the display will also rotate automatically.

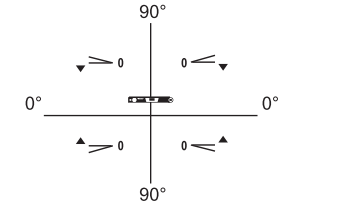


4. UNITS OF MEASUREMENT SELECTION (°, %, mm/m and IN/FT)

After switching the unit on, the screen always shows the actual slope in degrees. By pressing **UNIT** button, the level measured value will be shown with different unit (°, %, mm/m and IN/FT).

UNITS selection is only valid in level measuring mode, not angle measuring mode.

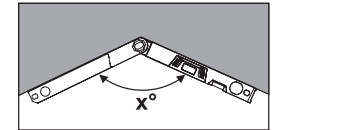
The level measured angle position is indicated by the icon " ".



5. ANGLE MEASUREMENT FOR SIMPLE MITER

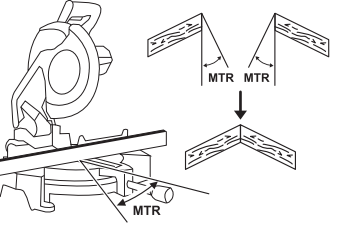
MTR function is used to determine the miter angle for miter cut.

Open the angle finder arm to the desired position. The angle "x°" can be taken between 0°-220° and displayed on the upper of the display.



Short press **MTRHOLD** to calculate the Miter angle "MTR".

Set angle of the miter saw at the MTR to cut the workpiece.



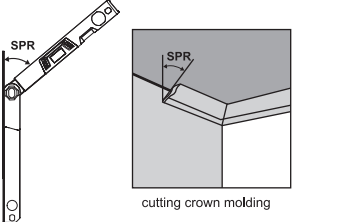
6. ANGLE MEASUREMENT FOR COMPOUND MITER

The "Compound miter" function is used to determine the miter and bevel angle.

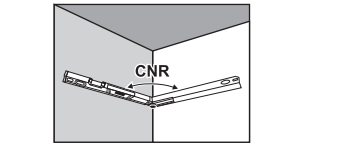
Open the angle finder arm to the desired position. The angle "x°" can be taken between 0°-220° and displayed on the upper of the display.

Short press **COM** to calculate the SPR value

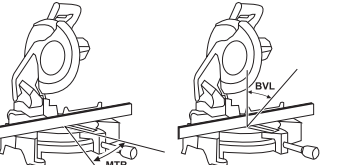
SPR=180°- measured or set angle



Place the angle finder at the corner, and press **COM** at the second time to get CNR value



PRESS **COM** at the third and fourth time, you will get the MTR value and Bevel value.



COMPOUND MITER =
ABS(DEGREES(ATAN(SIN(RADIANS(SPR))/
TAN(RADIANS(CNR)/2))))

COMPOUND BEVEL =
ABS(DEGREES(ASIN(COS(RADIANS(SPR))
*COS(RADIANS(CNR)/2))))

7. HOLD FUNCTION

In a position where the display might not be readable, the actual measured value can then be saved by long pressing the **MTRHOLD** button, the angle value will be frozen on the screen. And the H icon will also show on the screen. By long pressing the **MTRHOLD** button again, the measuring mode will get reactivated.

Hold function is only valid in angle measuring.

8. REFERENCE FUNCTION

If the angle leg is open up, it will display a value on the screen. Press the **REF** button to set the current angle to be zero, after that the angle measuring will enter into new measuring from 0°. This function allows you to set a repetitive angle. Press the REF button again to cancel the function.

9. DISPLAY MODE SWITCH

Short press **MODE** to cycle through angle finding mode, level measuring mode and mixed display mode;



angle finding mode level measuring mode mixed display mode

TECHNICAL DATA

Measurement range	0° ~ 220°
Measuring accuracy	Digital angle ±0.2° Digital spirit level ±0.1°@0°/90°; ±0.2°@1°-89°; Spirit vials 0.029" (5/1000)
Accuracy of angle calculation	0.1°
Measurement System	Imperial & Metric
Operating temperature	-10°C to 50°C (14°F to 104°F)
Storage temperature	-20°C to 60°C (-4°F to 140°F)
Power supply	2 x AA 1.5V alkaline batteries
Battery Life	>25 hours
Automatic switch off after approx.	30 min
Weight (batteries excluded)	990g (2.18lb)
Dimensions	502 x 53 x 62mm (19.8 x 2.1 x 2.4 in)
Material	Aluminum
IP Rating	IP40

DISPOSAL

CAUTION

The battery must not be disposed with household waste. Care for the environment and take them to the collection points provided in accordance with national or local regulations. The product must not be disposed with household waste. Dispose of the product appropriately in accordance with the national regulations in force in your country. Adhere to the national and country specific regulations.

WARRANTY

Two-Year Limited Warranty. This product is warranted to the original purchaser from the original purchase date for two years subject to the warranty coverage described herein. Please retain your receipt. This product is warranted to the original user to be free from defects in material and workmanship. If you believe that the product is defective at any time during the specified warranty period, please contact Jorgensen customer service agent by sending email to customercare@ponyjorgensen.com. This warranty does not cover: (1) Part failure due to normal wear or product abuse; (2) Any parts have been altered or modified by anyone other than an authorized Jorgensen personnel or failure to install and operate equipment

according to the guidelines put forth in the instruction manual.

(3)Any products or parts used for rental purposes, damage resulting from shipping (claims must be filed with freighter), accident, abuse, act of God, misuse, or neglect, Jorgensen will replace or repair the defective unit, at its option, subject to verification of the defect. Any implied warranties arising from the sale of a Jorgensen product, including but not limited to implied warranties of merchantability and fitness for a particular purpose are limited to the above. Jorgensen shall not be liable for loss of use of the product or other incidental or consequential damages, expenses, or economic loss, or for any claim of such damage, expenses, or economic loss. This warranty excludes any accessories. This warranty gives you specific legal rights, and you may also have other rights that vary from state.

