



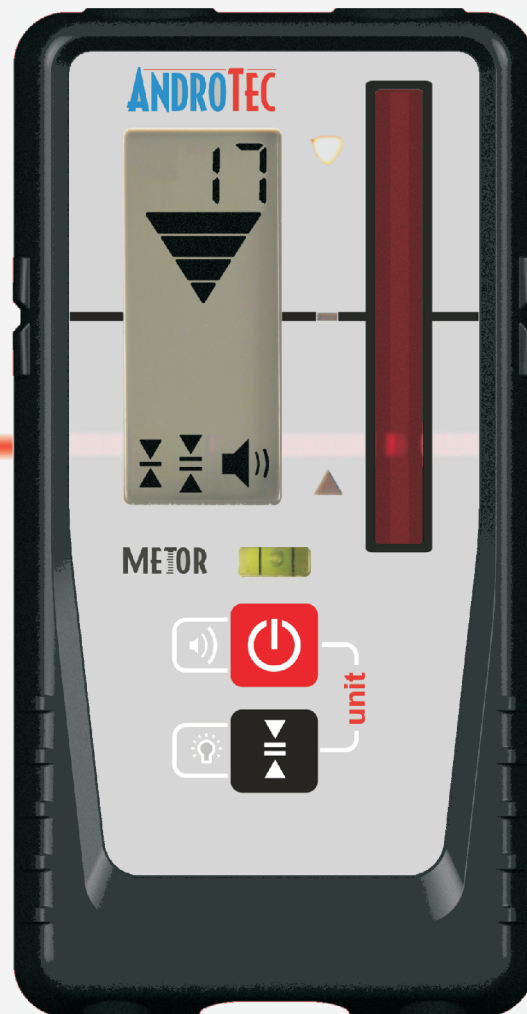
[www.androtec.com/links/detectors](http://www.androtec.com/links/detectors)

Art. 600373

# Digital Laser Receiver Metor

Model: MTR-60R

## Instruction Manual



## For Your Safety



Please read this instruction manual before using the device for the first time and comply with it.

Retain this instruction manual for future reference or for subsequent owners.

This instruction manual is available online under:  
[www.androtec.com/manuals/meter](http://www.androtec.com/manuals/meter)



### CAUTION

Prior to the first start-up, it is definitely necessary to carefully read the **Safety instructions!**

Failure to adhere to this instruction manual and the safety instructions may result in damage to the device and cause dangerous situations for the operator and other people.

In case of transport damage please inform your vendor immediately.

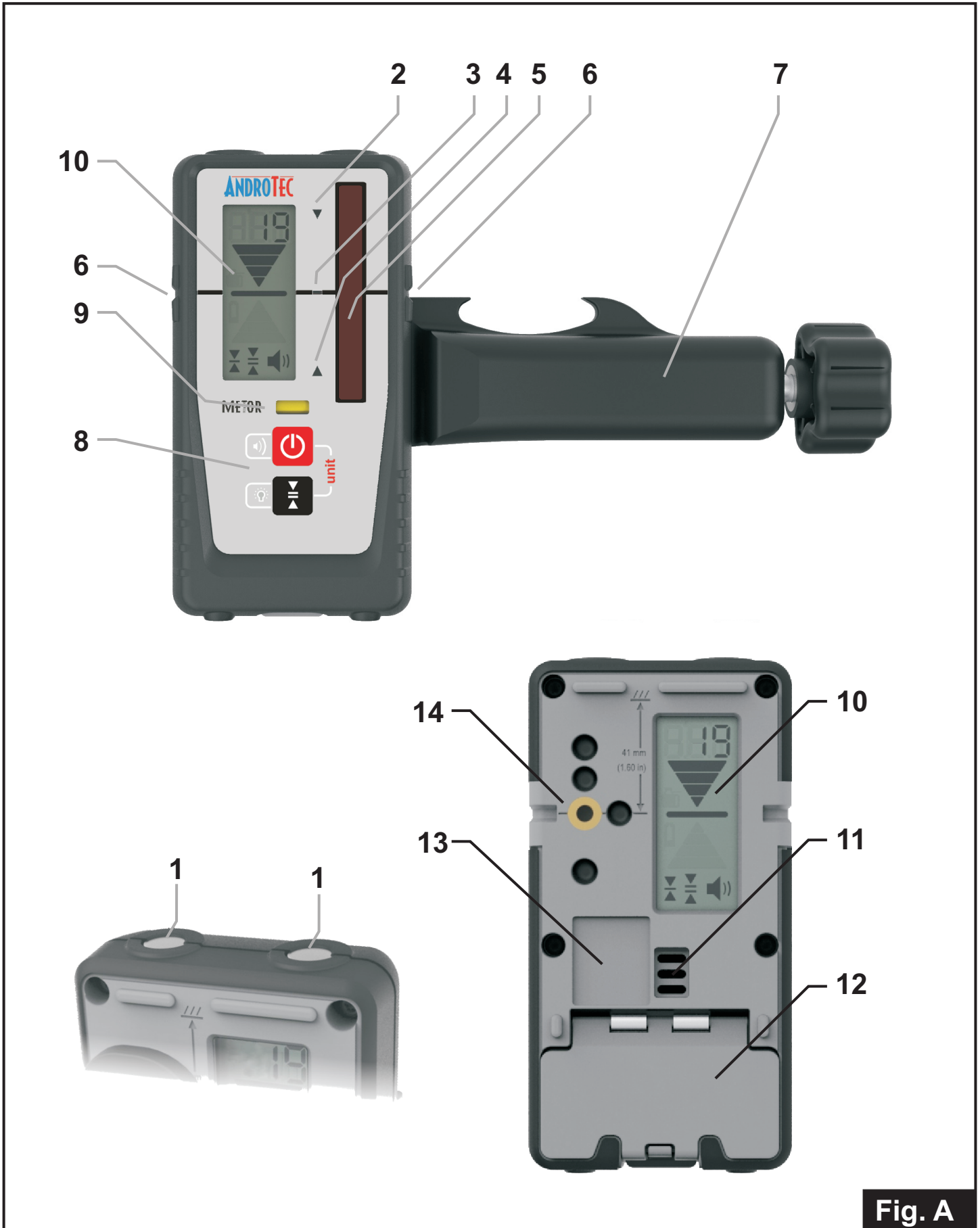
## Safety Instructions



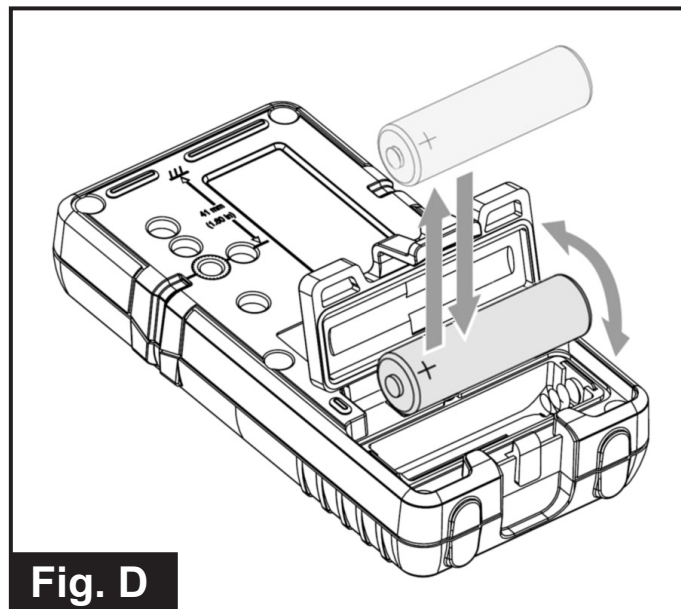
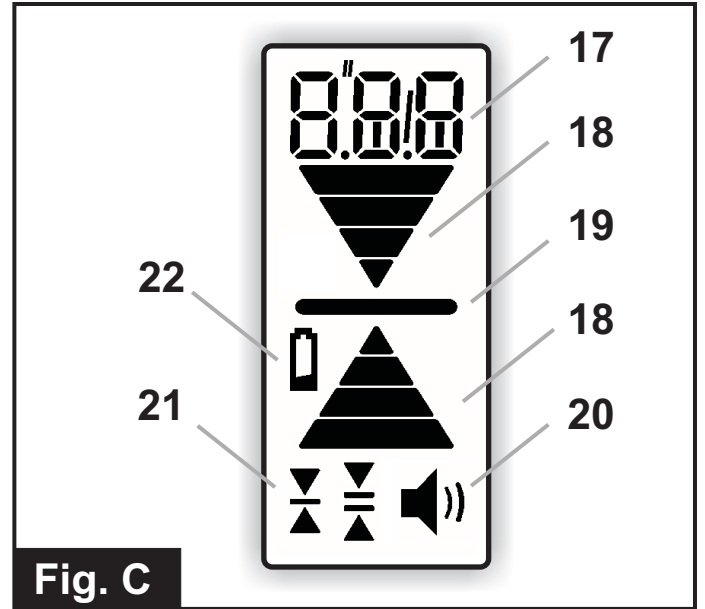
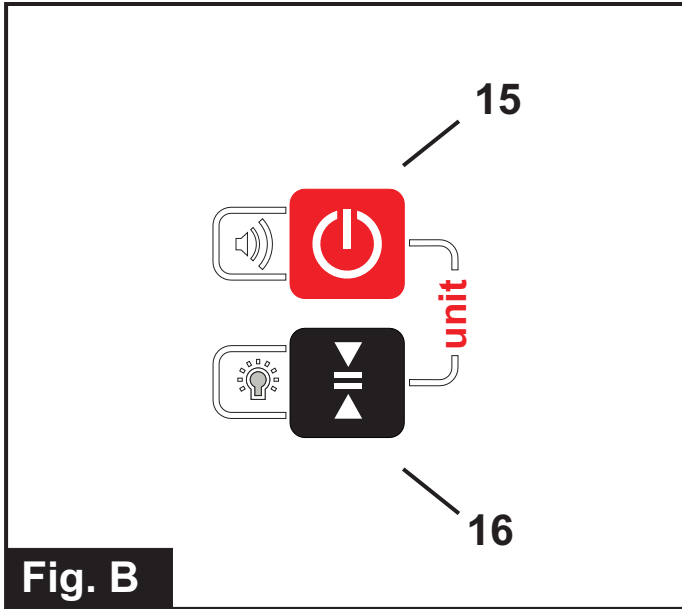
### CAUTION

Do not modify the device. Modifications can cause injuries and malfunctions.

- **Only authorised and trained personnel are allowed to repair the device.** Only use genuine spare parts from AndroTec GmbH. This ensures continuous device safety.
- **Do not look directly into the laser beam.**
- **Laser receiver should not be used in the vicinity of pacemakers.** The magnets produce a field which can affect the function of the pacemaker.
- **Keep the laser receiver away from data media and devices that react sensitive to magnetic force.** Exposure to magnets can result in irreversible data loss.
- **Noise emission**  
The a-rated sound pressure level of the acoustic signal is >80 db (A) at a distance of one meter.
- **Do not hold the laser receiver directly to your ear!**
- **Keep the laser receiver away from children.**
- **Do not use the laser receiver in explosive atmospheres or near flammable liquids, gases or dust.** The device may produce sparks that can ignite vapours or dust.
- Please remove the battery if the device is not in use for a prolonged period of time.
- **Use only genuine AndroTec accessories.** When using non-recommended accessories, you may receive incorrect measuring values.



**Fig. A**



## Technical Specifications

Capture height	60 mm
Numeric readout height	50 mm
Reception angle	± 45°
Detectable spectrum	620nm to 800nm
Working radius	300m (depending on laser transmitter)
Accuracy (Deadband)	See table at page 5
Beeper volumes	High (> 100 dBA) / Low (> 75 dBA) / off
Automatic shutoff	After 30min without key stroke / laser reception
Filter against	Flash / Sun light / LED / Fluorescent lamps
Marking notch	41mm from top edge
Physical dimensions	135mm x 69mm x 25mm
Weight without clamp	0,19kg
Protection class	IP 67 (waterproof)
Power supply	1 x AA
Battery life	> 50h
Operating temperature	-20°C to +50°C
Storage temperature	-40°C to +70°C

## Proper Use

The receiver detects the laser beams of rotating laser transmitters emitting red laser light. Any other use than the described above shall be deemed to be improper use.

**The user is liable for damage resulting from improper use.**

## Device Elements (Fig. A)

- 1 Magnet
- 2 LED grade indicator (yellow)
- 3 LED grade indicator (green)
- 4 LED grade indicator (red)
- 5 Laser-sensitive area
- 6 Marking notch
- 7 Clamp
- 8 Keypad
- 9 Bubble vial
- 10 Display
- 11 Beeper
- 12 Battery door and latch
- 13 Type plate with serial number
- 14 Fixing thread for the clamp

## Keypad (Fig. B)

- 15 On / Off - Beeper volume
- 16 Deadband resolution - LED On/Off

## Display (Fig. C)

- 17 Numeric / text display
- 18 Grade indication arrows
- 19 On grade indicator
- 20 Beeper volume
- 21 Accuracy (Deadband)
- 22 Low battery

### Numeric / text display


Three digits display either the numeric elevation or simple text messages. Numeric elevation can be displayed in *mm*, *cm*, *inch* or *fractional inch*. Resolution and decimal point will be determined by the units of measure and the accuracy selected.

### Grade indication arrows

Four individual levels of grade information for above and below grade. Arrow size increases, as distance from on-grade increases. Arrow bars represent steps of the selected deadband. Horizontal bar indicates on-grade.

## Battery (Fig. A/D)

### Inserting / changing the battery

- Change the battery if  is displayed .
- Open the battery compartment by unlatching the battery door [12].
- Remove the battery and insert a new one (observe correct polarity!).
- Dispose of the used battery (see chapter on environmental protection).

## Operation



**NOTE:** Make sure that the device is in vertical position and that the laser-sensitive area [5] is not partially covered during measurement. This can entail false measuring results.

### Switching the device on / off

- To switch on the device, press the On / Off button [15]. To switch off the device, press and hold the On / Off button [15] for more than two seconds until a confirmation beep sounds.

### Adjusting the volume

- Pressing the beeper volume button [15] cycles through the following options:
  - ▶ High: Beeper symbol permanently displayed; text "Hi" for one second
  - ▶ Low: Beeper symbol permanently displayed; text "LOW" for one second
  - ▶ Off: No Beeper symbol displayed; text "OFF" for one second

### Adjusting the accuracy

- Press accuracy button [16] once to numerically display current accuracy setting on the LCD. Press again, while the accuracy is displayed (within one second), to change the current selection.

	mm	cm	Inch	Fract.In.	Display
Fine	1.0	0.1	0.05	1/8	
Medium	2.0	0.2	0.1	1/4	
Coarse	5.0	0.5	0.2	1/2	

### Activate / deactivate LEDs

Press the LED button [16] for more than two seconds to change the LED display. If activated, the measurements are shown by the LEDs in addition to the display.

### Setting the numeric elevation display unit:

Press the buttons [15] und [16] at once cycles through the display units:

- ▶ mm: Millimetre
- ▶ cm: Centimetre
- ▶ in: Inch
- ▶ F.in: Fractional Inch

## Maintenance and Care

### Keep the device always clean, especially the laser-sensitive area!

- Do not use aggressive cleaning solvents.
- If soiled heavily, the device can be cleaned under running water.
- Do not use high-pressure cleaner.
- Allow the device to dry completely before storing it in a closed container. Residual moisture can result in corrosion of the battery contacts. In this case our warranty expires.
- In the unlikely event of a failure or defect, have the appliance examined and repaired by AndroTec.
- In all your queries and spare part orders, always quote the 8-digit serial number (see type plate) of your device.

## Environmental Protection



Do not dispose of the device with domestic waste. Have the device disposed of by an authorised waste management company or your municipal waste management organisation.

Adhere to the applicable regulations. In case of doubt contact your waste management organisation. Recycle all packaging material in an environmentally friendly manner.

### Batteries:

Do not dispose of batteries with domestic waste, do not expose them to fire or water. Collect and recycle batteries or dispose of them with due care for the environment.

## Warranty

AndroTec Metor and clamp are warranted to be free of defects in material and workmanship according to the statutory warranty regulations.

The user of the product is expected to follow all operating, maintenance and care instructions. Any evidence of misuse, alteration, or an attempt to repair products by unauthorized personnel, or use of parts other than those provided by AndroTec GmbH automatically voids the warranty.

AndroTec grants an extended warranty for a period of three years, if within six weeks from the date of purchase, the warranty registration card is filled out and returned to AndroTec or the product is registered via Internet at [www.androtec.com](http://www.androtec.com). Please make sure that the registration is filled out properly and on file with AndroTec.

This warranty period is thirty-six months from the date the new product is delivered from the dealer to the purchaser or is put into service by a dealer as a demonstration unit or rental unit. Competitor purchased and tested units are excluded from this warranty.

AndroTec may choose to repair or replace, at its discretion, any Metor in the event of a failure for any reason, during the warranty period. In case of a warranty claim, return the product and a proof of purchase to AndroTec.

AndroTec's liability under this warranty is limited to repairing or replacing any product returned to its factory for that purpose. The foregoing states the entire liability of AndroTec GmbH regarding the purchase and use of its product and they shall not be held responsible for any consequential loss or damage of any kind. This warranty is in lieu of all other warranties, expressed or implied, and constitutes all of AndroTec GmbH liability with respect to merchandise sold by it.

Warranty is strictly related to repair or substitution of defective parts according to AndroTec's discretion. The warranty does not cover any other damage that may occur directly or indirectly using defective parts.

## Manufacturer

AndroTec GmbH  
Hauptstraße 186  
67714 Waldfischbach-Burgalben  
Germany  
[www.androtec.com](http://www.androtec.com)

WEEE-Reg.No.: DE37015608

## CE Declaration of Conformity

We herewith declare that this product conforms with the following standards and directives:

### Standards

DIN EN 61000-6-1  
DIN EN 61000-6-3

in accordance with the regulations stipulated in the directives:

### EC Directive

2014/30/EU  
2014/35/EU

Technical Documentation at:  
AndroTec GmbH



Mirko Eßling  
General Manager

AndroTec GmbH  
Waldfischbach-Burgalben, 21.04.2017

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