METSYS

RS2-RG MANUAL

TABLE OF

CONTENTS

ON THE COVER

Metsys RS2-RG MM Receiver.

INTRODUCTION

The receiver detects the laser beams of rotating laser transmitters emitting red or green 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.

MAINTANCE 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 Metsys.**
- **In all your queries and spare part orders, always quote the 8-digit serial number (see type plate) of your device.**
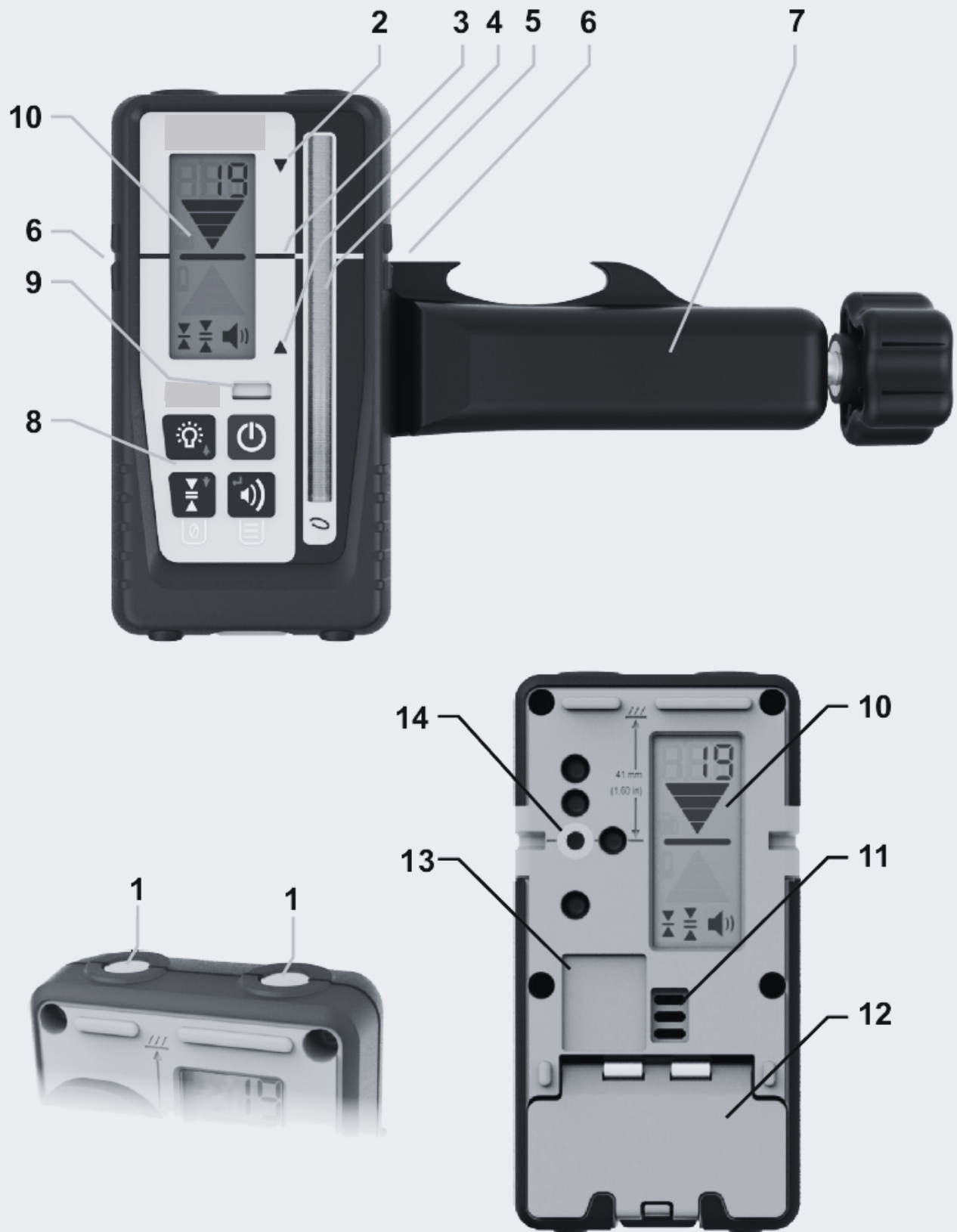
FIGURES AND ICONS
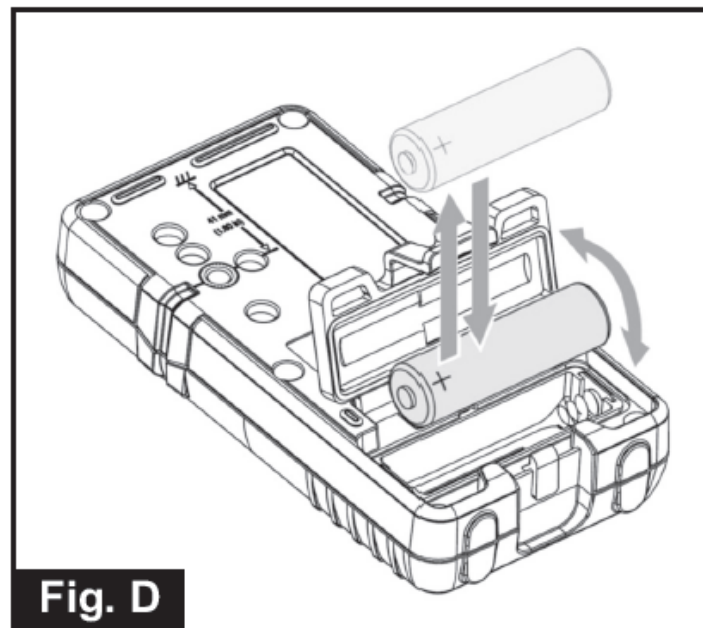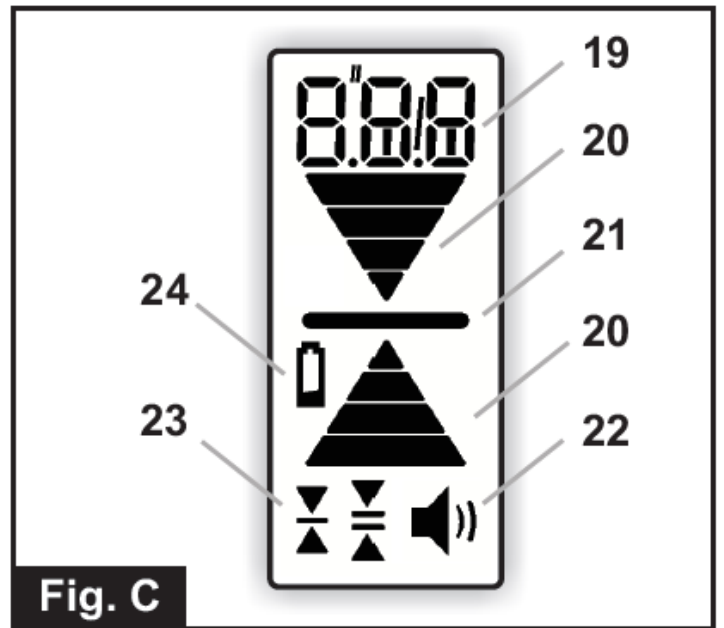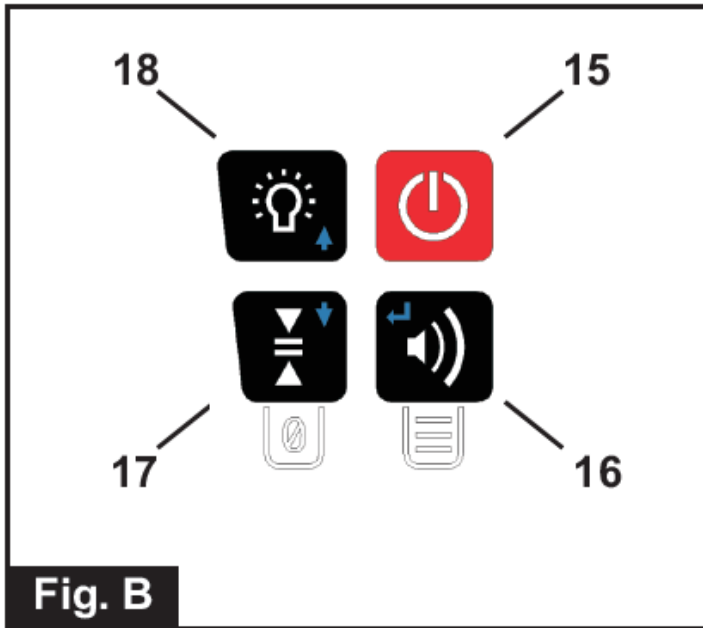

Fig. A

FIGURES AND ICONS

Fig. B

Fig. C

Fig. D

CAUTION

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

CAUTION

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

DEVICE ELEMENTS (FIGURE 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 (FIGURE B)

15 On / Off

16 Beeper volume

17 Accuracy (Dead band)

18 Grade LEDs

DISPLAY (FIGURE C)

19 Numeric digits / text display

20 Grade indication arrows

21 On grade indicator

22 Beeper volume

23 Accuracy (Dead band)

24 Low battery

Numeric digits / 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 dead band. Horizontal bar indicates on grade. Out-of-beam display: A sequence of arrows indicates if the receiver has moved beyond the vertical reception range and will indicate in which direction to move to get back to the laser beam.

SAFETY INSTRUCTIONS

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.
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.

- Only authorized and trained personnel are allowed to repair the device. Only use genuine spare parts from Metsys 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 vapors or dust.
- Please remove the battery if the device is not in use for a prolonged period of time.
- Use only genuine Metsys accessories. When using non-recommended accessories, you may receive incorrect measuring values.

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

- **Press the On / Off button [15]**

Adjusting the volume

- **Pressing the beeper volume button [16] cycles Low / High / Off**
    - **> 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 [17] 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.**

Subsequent presses will cycle through four accuracy options Fine / Medium / Coarse / Ultra coarse.

	mm	cm	inch	Fract.In.	Display
Fine	1.0	0.1	0.05	1/8	non-flash.
Medium	2.0	0.2	0.1	1/4	non-flash.
Coarse	5.0	0.5	0.2	1/2	non-flash.
Ultra coarse	10.0	1.0	0.5	-	Flashing

Activate / deactivate LEDs

Press the LED button [18] to change the LED display. If activated, the measurements are shown by the LEDs in addition to the display.

OPERATION

User defined on-grade level:

An arbitrary level within -10 and +40mm around the marking notch can be used as on-grade level. The user defined on-grade level is set by pressing the accuracy button [17] for two seconds while the device is in the laser beam. If successful, you will hear a confirmation beep and an asymmetric arrow symbol is shown on the display. Outside the allowed area you will hear an error beep and error code E30 is shown.

When the accuracy button [17] is pressed for two seconds while out of beam, the on-grade level is reset to default. If the device is switched off, the on-grade level is automatically reset to default. If you want to save the user defined on-grade level permanently, you can choose this option in the menu (see Menu Entries - .OFS).

Using the menu

The menu functions can be used to edit various options. For most applications the factory defaults are best choice. We recommend to change settings only in special applications.

- Pressing the volume [16] key for more than two seconds enters the menu functions.
- Menu items (e.g. SEn are shown non-flashing and may be browsed by using the ARROW keys [17] and [18].
- Menu items are selected by pressing the ENTER key [16]
- Item values (e.g. On) are shown flashing and may be browsed by using the ARROW keys [17] and [18].
- Exit the Menu by pressing the ESC key [15].

OPERATION

Menu Entries:

- **Sen - Sensitivy:** Hi(gh)/Low

  > Default: High. Set it to Low if you have problems with
disturbing sources like fluorescent or strobe lights.

AvG - Averaging: Hi(gh) / Low

  > Default: Low. Set it to High if you need to have more
stable readings under difficult atmospheric conditions.

- **Unt - Unit:** mm / cm / in(ch) / f(ract). in(ch)

  > Default: mm. Choose desired numeric elevation display
unit.

- **o.o.b - Out of beam display:** On/OFF

  > Default: OFF. Switch Out-of-beam display on and off.
For a description see chapter Display.

- **User-defined on-grade level:** OFF / tmP (temporary) / PEr(manent)

  > Default: temporary. To deactivate the function, choose
OFF. To save the user-defined on-grade level permanently,
choose PEr.

- **InF - Device Information** Find Information about Firmware Version
  (Fw), Device Code (dc) and Serial Number (Sn) here.

NOTE: All menu settings will be retained when the receiver is turned off.

PRODUCT SPECIFICATIONS

FEATURE	SPEC'S
Capture Height	90mm
Numeric Readout Height	80mm
Reception Angle	± 45°
Detectable Spectrum	450nm to 800nm
Working Radius	300m (depending on laser transmitter)
Accuracy (Dead band)	See page 2. Table
Beeper Volumes	
- High	> 100 dBA
- Low	> 75 dBA / off
Automatic Shutoff	After 30 min
Filter Against	Flash / sunlight / LED / fluorescent lamp
Marking Notch	41 mm / Top edge
Physical Dimensions	135 x 69 x 25 (mm)
Weight without clamp	0.19 KG
Protection Class	IP 67 (waterproof)
Power Supply	1 x AA battery
Battery Life	> 45h
Operating Temperature	-10°C to +50°C
Storage Temperature	-40°C to +70°C

BATTERY

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).**

Note: Appearance and specifications may differ due to product improvement. Working distance varies depending on the operating environment. Battery life depends on battery capacity and quality, it is recommended to use a large capacity battery.

ENVIRONMENTAL PROTECTION

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

Adhere to the applicable regulations. In case of doubt contact your waste management organization. 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.

PRODUCT INCLUSIONS

1. MM Receiver
2. Clamp suited to MM receiver

WARRANRTY

All Metsys mm receivers have Warranty for up to 1 year,

CONTACT US

ADDRESS 14 STEPHENSON ROAD,
BAYSWATER NORTH,
VICTORIA 3153

PHONE: 03 9720 6222

EMAIL: support@metsys.com.au

PRODUCT DESIGNER

Justin Davis

PURCHASE ONLINE

www.lightwavetechnology.com.au

EXTENDED WARRANTY SUBMISSIONS

http://www.metsys.com.au/warranty/4594309423

FOLLOW US

METSYS_LASERS   @METSYSLASERS