



IMEX 66R ROTATING LASERS



OPERATION MANUAL



OPERATING MANUAL ROTATING LASER IMEX 66R

Introduction

Congratulations on your purchase of a quality Imex rotating laser.

These lasers have been designed for the professional and incorporate the latest laser technology with a robust and simple construction for years of trouble-free use.

These instruments are suitable for all interior and exterior general construction leveling applications and feature quick set-up, excellent accuracy and ease of use.

The following operating manual has been designed to assist you in getting the optimum performance from your instrument. Please read carefully before using the instrument, and observe all safety conditions.





OPERATING MANUAL ROTATING LASER IMEX 66R

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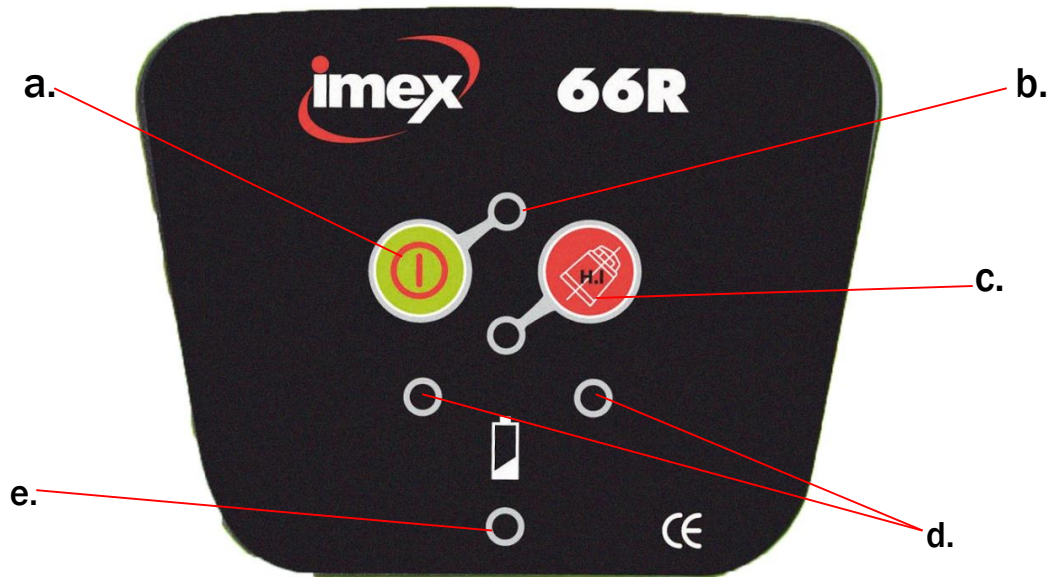
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1. About the Instrument - Functions

1.1 Instrument Overview



1.2 Control Panel



- a) On/Off switch
- b) On/Off light
- c) H.I. Out of level warning button and light
- d) Leveling lights
- e) Battery indication light

1.3 Function

The instrument is equipped with a semi-conductor diode with wavelength of 635nm. The laser beam is clearly visible, and the laser module rotates freely to form a laser scanning surface.

In the upright position, ideally placed on a standard aluminium tripod the laser beam emits a horizontal line which can be detected by the instruments receiver/detector.

2. Basic Operation

2.1 Standard Set-up Leveling

Place unit on tripod and roughly set up so that the instrument is within 5% of level.

Switch the unit on (a).

The instrument will then begin to spin at 600rpm as it levels itself. As the instrument is leveling itself the leveling lights (d) will flash, when leveling lights are constant the instrument is level and ready for use

If the unit is bumped or moved the leveling lights (d) will flash to warn you that the laser is not level. After the instrument has re-leveled itself the leveling light will be constant

2.2 H.I Alert Function

When using your laser it is recommended that you use the H.I function (button c.) to get most accurate results.

Press the H.I button (c) after unit has leveled itself, the H.I light will flash for 30 second as the tool activates the H.I mode.

When H.I begins to flash faster after 30 second this indicates that H.I mode is activated. If tool is bumped or knocked when H.I mode is activated the tool will stop rotating to prevent you from getting inaccurate results. To restart tool, turn off then on again.

2.2 Receiver Set-up

Using the bracket included, mount this onto a staff or grade rod. Turn the receiver on and raise or lower the receiver on staff until it makes a continuous beeping sound. This is the point level with the instrument. The receiver has two settings; a course and a fine setting. The band width and the audio volume can be adjusted using the receiver's buttons.



Standard Leveling Set-up

When set up the instrument will create a laser beam across the entire work site to a radius of 200m and the receiver will give a signal at all points within the instruments rang

3. Batteries

The instrument is powered by 4 DC4.8-6V Nimh rechargeable batteries that allow for approximately 20 hours continuous use in standard conditions (20°-25°)

Alternatively you can use the alkaline battery pack supplied.

3.1 Battery Situation

The battery case is located on the base of the instrument. If changing batteries; undo the cover, replace batteries checking polarity.

3.2 Recharging Batteries

The battery indication light (e) will begin to flash when the battery is low.

To charge NiMH batteries, remove battery pack from instrument and plug charger into charge plug at the base of the battery pack.

DO NOT OVER CHARGE BATTERIES!

3.3 Battery Charging Time

Standard full Charge time is approximately 7 hours.

In some instances a car charger accessory kit is an advantage.

3.4 Using Alkaline Batteries

To use alkaline batteries, remove NiMH battery pack from base of instrument. Insert 4 'C' cell batteries into alkaline battery pack, then insert battery pack into base of instrument

4. Checking Accuracy

Your Imex instrument has been pre-set and calibrated for accuracy before dispatch and should perform within the stated accuracy tolerance in standard conditions. However if the instrument is knocked, poorly transported or mistreated in any way the accuracy may be compromised and unit may need re-calibration.

On commencement of a task it is advisable to carry out a simple control check.

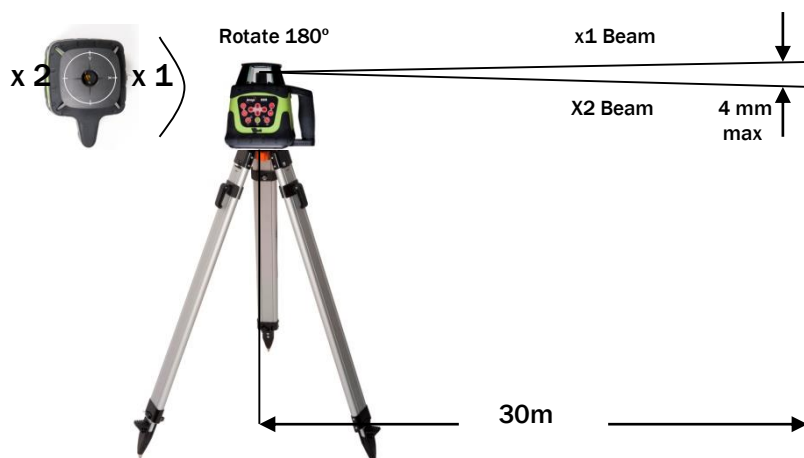
4.1 Level Checking – Horizontal

Place instrument approximately 30m from a blank wall and with X1 axis square to the wall project a line onto the wall and mark line with a fine pencil or similar.

Turn the instrument 180° to X2 and repeat

The value or the difference between the two points should not exceed 4mm

Repeat the process on the Y axis



If values exceeded these by 10% contact your local service centre or 1800 669 110 to organise service and calibration.

5. Trouble Shooting

Problem	Possible Cause/Solution
Out of level alert – unit won't self level	<ul style="list-style-type: none">- Check that instrument is within 5° of level, before switching on- Check that manual level switch is not on- Check that unit hasn't been bumped or moved
Low battery light flashing. No power, unit won't operate	<ul style="list-style-type: none">- Re-charge batteries- If batteries are fully charged and still won't operate, open battery terminals and check terminals are clean and polarity correct- Batteries may need replacing if over charged too often
Out of level and battery light on. Instrument not working properly	<ul style="list-style-type: none">- Environment and direct sunlight may be too harsh and instrument can't operate without damaging the laser- Place unit in shaded area and below 50°C
Receiver not working or functioning properly	<ul style="list-style-type: none">- Check receiver batteries. Change if necessary- Check that receiver is within working range. 250m radius from unit- Check that windows of the laser are not obstructed and are clean and free of dust

6. Warranty Service and Care

6.1 Warranty

The Imex rotating laser range is covered with a 5 year warranty as detailed on the warranty form. For registration please visit:

www.imexlasers.com

6.2 Service and Calibration

It is recommended that in general use, laser equipment should be calibrated by a registered service centre every 6 months. For less frequent use 12 months is permissible.

6.3 Care of Instrument

For optimum results from your instrument care must be taken to prevent damage. Laser instruments contain sensitive optical assemblies and need to be treated carefully.

- **Storage** – Store in an area away from direct sunlight and under the storage temperature limit of 70°C
- **Transport** – Lasers are affected by vibration and shock; never transport loose on the back of a vehicle.
- **Cleaning** – When working in a dusty environment always clean instrument before packing away.
- **If working in wet environment, completely dry unit with dry cloth before packing away, to prevent damage to the unit. **Failure to do this will void warranty.****

7. Technical Specifications

Model	66R Red Beam	Horizontal/Vertical	Horizontal only
Self-Leveling Range	±5°	Water proof	IP64
Accuracy	2mm @ 30m	Power	DC 4.8-6v (Ni-MH) / 4 'C' cell alkaline
Working Distance	Diam 400m with included detector	Working time between charge	20 hours (Ni-MH) 60 hours (Alkaline)
Rotation Speeds	600 rpm	Low Battery Light	Yes, approx 1 hour warning
Scan Mode	NO	Battery Charger	240V
Grade Slope	NO	Working Temperature	-20°C - +50°C
Detector	Double sided operation fine & course setting	Light Source	Red laser diode, 635nm

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