

Modes: There are four modes:

- Constant On (normal)
- Auto Shut-Off (normal only)
- Flashing / Beacon pattern
- SOS code pattern

**Auto Shut-Off:** The product can be enabled to shut-off automatically after approximately 15 minutes with indication to the user prior to shut-off. Enable Auto Shut-Off by increasing brightness to highest level; release the BRIGHT button for at least 1 second, then press and hold the BRIGHT button again for at least 1 second. Product will flicker to indicate Auto Shut-Off is enabled. Adjust to desired brightness.

Auto Shut-Off only functions in the normal mode. After 15 minutes, product will flicker to indicate the Auto Shut-Off sequence has begun. Press either button to

reset 15 minute timer. If no action is taken, the product will turn-off after 3 additional minutes. Adjusting the brightness at any time will reset the 15 minute timer. Disable Auto Shut-Off by decreasing brightness to lowest level; release the DIM button for at least 1 second, then press and hold the DIM button for at least 1 second. Product will flash to indicate Auto Shut-Off is disabled.

**Flashing**: To change modes, press and hold both BRIGHT and DIM buttons simultaneously for at least 2 seconds. Product will change to a flashing pattern. Release buttons and adjust brightness as desired. When the battery is low, the flashing pattern will change from 2 short flashes to 1 short flash followed by 2 short flashes.

To exit flashing mode, press and hold both BRIGHT and DIM buttons. After 1 second, the product will exit flashing mode; after

4 seconds the pattern will change to SOS code. Release buttons and adjust brightness as desired.

**SOS**: The SOS code pattern and performance features of this product do not meet the requirements of Search And Rescue (SAR) organizations such as the U.S. Coast Guard. This product is not a life-saving device and should not be use for life-critical situations.

The SOS mode is entered from the flashing mode. Press and hold both BRIGHT and DIM buttons for 4 seconds while in the flashing mode. Flashing mode will stop and the SOS mode will start after 3 more seconds. To exit the SOS mode, press and hold both BRIGHT and DIM buttons again. After 1 seond, the product will exit the SOS mode.

### CAUTION:

- 1. R-PAL is not a toy for children: Choking and Eye Hazard.
- EXTREMELY BRIGHT light from Light Emitting Diodes (LEDs). DO NOT STARE at LEDs.
- 3. Do not touch LEDs: FRAGILE.
- 4. Use only protected (button-top) 18650 lithium-ion battery. Unprotected and other size batteries **may result in fire**.
- 5. Do not place near a source of heat. Radiated heat can cause a fire.
- Do not taste or ingest anything associated with or inside this product.
- 7. Do not use strong cleaners or harsh chemicals on this product.
- Do not disassemble with screwdriver: This will cause permanent damage and void warranty.

Insert charged battery, button-end first, into product with flat side of battery facing out. Verify the O-ring is INSIDE the cap and on the inner ledge. Place end cap onto body, push and twist clockwise (right). Gently tighten cap, while making sure the O-ring does not slip out as you tighten. When cap and O-ring touch the lens, continue to tighten 1/3 to 1/2 turn until ribs on both caps are aligned. DO NOT OVER-TIGHTEN CAP. FINGER TIGHTEN ONLY.

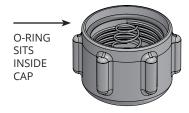
Press the ON-OFF button to turn the LEDs ON or OFF.

**Low Battery Indication**: When the battery charge is low (10%), the product will flicker periodically or change the flashing pattern. (SOS mode does not have low-battery indication.)

When the battery is discharged, the prod-

**Battery**: Use size 18650 Lithium-ion rechargeable battery with built-in protection circuit (button-top). **DO NOT USE UNPROTECTED** (flat-top) battery as this may cause a fire. Do not use other size batteries as this may damage the product or create a fire hazard.

**Battery Replacement**: To open, twist end cap without buttons counter-clockwise (left). Do not remove lens or O-rings. Remove discharged battery or desiccant packing material.



uct will shut-off automatically to protect the rechargeable battery from damage caused by over-discharge. Turning the product on again will result in another low battery indication followed by shut-off. Repeating this will result in momentary on and immediate off (single flash of light).

Recharge the battery with an appropriate charger.Do not leave the R-PAL open while recharging the battery. It should be closed and finger tightened (sealed) to protect its electronics from outside contamination.

**Brightness**: Use the BRIGHT and DIM buttons to change the brightness. Product will retain brightness or mode setting when turned off.

#### **R-PAL MAINTENANCE**

Clean exterior with mild dish soap (Dawn, Ivory, Palmolive) or alcohol (rubbing or drinking) to remove any dirt or stains. Do not use abrasives (Ajax, Bon Ami, Comet), harsh cleaners or chemicals to clean the product. Do not clean in dishwashers. **NEVER USE** camphor or clove oil, methanol, alkaline cleaners, degreasers, ammonia, window cleaner, acetone, finger nail polish remover, lacquer thinner, MEK, Toluene, naphtha, gasoline, kerosene, or brake fluid on this product. **Never touch or clean LEDs**.

Cleaners or preservatives that are specifically made for automotive rubbers and plastics will keep the outside of your R-PAL looking like new.

Keep the lens and O-rings free of any dirt

and debris. Lubricate O-rings with thick, clear silicone grease. If the O-rings are falling out of the cap, re-apply silicone grease to the O-ring and cap ledge. Do not use Vaseline or ChapStick in place of silicone grease. Replace O-rings if they become flat or show wear.

Keep the internal metal ring clean and lightly lubricated (inside) with silicone grease. Never user oils or WD-40 to clean or lubricate the metal or plastic.

Each cap has a 1/4-20 threaded hole to attach accessories. Keep these holes and the attachment threads clean. Lubricate attachment threads with silicone grease and keep the D-Ring snug against the rubber washer to prevent corrosion.

Replacement parts and accessories are available:

R-PAL.RTG.COM

# **R-PAL SPECIFICATIONS**

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Dimensions:	1.65 Dia. X 4.1 inches
	42 Dia. X 104 mm
Threads:	2 holes 1/4"-20 X 0.28"
Weight:	3.0 oz / 86 g (empty)
O ::i:: === (2):	4.7 oz / 134 g (with batt)
O-rings (2):	ĀS568A-024
Battery:	Li 18650 protected
	(not included)
Light output:	300 to 2.3 lumen
Brightness	15
Settings:	(logarithmic)
Modes:	Normal, Flashing, SOS
Auto Shut-Off	Yes
Capable:	18 min
Water & Dust	Yes
Proof:	IP67
Submersible:	3 ft / 1m for 30 min
Temperature:	-4 to 104 F / -20 to 40 C
•	(Limited by battery)
Drop	5 ft / 1.5 m
Resistant:	(Excludes scuffing)

## **BRIGHTNESS SETTINGS & RUN TIMES**

(TYPICAL WITH PANASONIC 18650B)

SETTING	BRIGHTNESS LUMENS	NORMAL HRS	FLASH HRS
1	2.3	300	845
2	3.5	218	734
3	4.7	171	649
4	7.0	120	527
5	9.4	92	444
6	14.1	63	337
7	18.8	48	272
8	28.1	32	196
9	37.5	24	153
10	56.3	16	107
11	75	12	82
12	113	8	56
13	150	6	42
14	225	4	29
15	300	3	22

### **WARRANTY OVERVIEW**

RTG, Inc. warrants that the R-PAL product is free from manufacturing defects in material or workmanship for a period of two (2) years from the date of original purchase. The warranty has limitations and only applies to the original purchaser of the product for personal use. The limited warranty period also applies to any implied warranties that may exist under applicable law. Some States do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply. For a complete description of the limited warranty, please download the R-PAL product warranty at the following URL:

## R-PAL.RTG.COM/pages/documentation

Or contact us:





Industry Canada Industrie Canada

This device complies with United States FCC Rules Part 18 for consumer RF lighting devices; Industry Canada ICES-003B / NMB-003B; and European Union EMC Directive.

This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45-30 MHz.

If the R-PAL product causes interference, the user must move the R-PAL away from the susceptible receiver or discontinue the use

Warranty Dept. RTG, Inc. P.O. Box 3986 Torrance, CA 90510 USA

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of the R-PAL in that location. Replacing or recharging the battery may reduce interference.

For additional information contact: Regulatory Compliance RTG, Inc. P.O. Box 3986 Torrance, CA 90510

#### **R-PAL INCLUDES**

Convenience Kit: 2 O-rings and silicone grease.

D-Ring attachment: 1/4-20 threaded attachment accessory. (0.3 oz / 8 g)