Laser Bird Repellent Tool - BR100 / BR400

Congratulations on purchasing your BR100 / BR400 Laser Bird Repellent Devices. BR100 / BR400 Designed to repel and clear birds at the distance of 100 to 2000 meters depending on ambience light condition. BR400 improves optics system and increase 4 times laser power from BR100. With easy operation and carry handheld size, built-in microchip to control two operation mode - momentary and strobe with clear indicators, can repel and clear birds in minutes. Made of aircraft-grade aluminum alloy with robust designed and scratch-free hard anodized finish, BR100 / BR400 is a water proof product and it can work under all weather and temperature environments. Using state of art high power direct green laser diode technology, not DPSS laser (Diode-Pumped Solid-State Laser), they have broad operating temperature range from -40°F to 149°F (-40°C to 65°C) and 10,000 hours life time. BR100 / BR400 consumes much less power consumption than DPSS laser to ensure longer battery-operating time and minimum operation cost.



FEATURES

1. Repel and clear birds from long range in minutes. The BR400 has 4 times laser power output than BR100 with improve optics system for much longer working distance.
2. With easy operation and carry handheld size, it uses microchip to control two operation mode - momentary and strobe with clear indicators.
3. Using state of art high power direct green laser diode, it has broad operating temperature range from -40°F to +149°F (-40°C to +65°C) with 10,000 hours life time.
4. Made of aircraft-grade aluminum alloy with robust designed and scratch-free hard anodized finish, it is a water proof product and it can work under all weather and temperature environments.
5. Low power consumption, longer product life time and wider operation temperature range compare to all others which are made from DPSS green laser.
6. Use at: Airport, Agriculture, Poultry farming, Fishing farming, Golf course, Stadium, Solar Power Plant, Recycling plants, Factory, Building.



Airport


Agriculture


Poultry farming


Fishing farming


Solar power plant

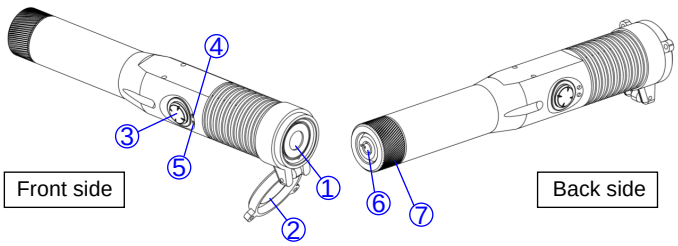

Golf course

Also at: Stadium, Recycling plants, Factory, Building…etc.

SPECIFICATIONS

	BR100	BR400
Weight	240±15 g	275±15 g
Dimensions	200(L) x 37(W) x 41(H) mm	220(L) x 37(W) x 41(H) mm
Output Power	100mW (Class IIIb)	400mW (Class IIIb)
Wavelength	520±10 nm(Green Laser Diode)	
Construction	Aluminum 6061 T6 with scratch-free hard anodized finish.	
Range (Day Time)	100 to 1000 meters	400 to 2000 meters
Range (Night Time)	Above 10 KM	
Operation	ON/OFF button	
Operating Temperature	-40°F ~ 149°F (-40°C ~ +65°C)	
Water Proof	IP67	
Battery	2 x CR123A batteries (included)	

CONSTRUCTION



No.	Description
1	Laser Point Aperture
2	Front cap
3	ON/OFF button
4	Ready Indicator
5	Laser on Indicator
6	Keylock switch
7	Battery Cap

Battery Installation

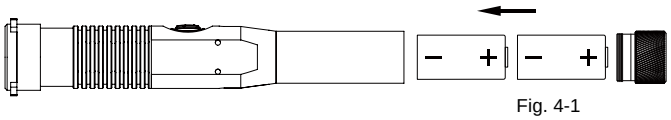


Fig. 4-1

Unscrew battery cap, insert two CR123A batteries, positive pole face outside as Fig. 4-1.
After the battery is installed, screw battery cap and please make sure keylock switch is at “OFF” position.

Note:
BR100 / BR400 can be powered by two CR123A lithium batteries. Please remove batteries from BR100 / BR400 whenever storage.

CONTENTS OF A SET



No.	Part Name	QTY	Parts Stock Number(PSN)
1	BR100	1	257-BR001G
	BR400		257-BR003G
2	CR123A battery	2	451-C0103G
3	Key	2	410-BR001G
4	Lens cloth	1	499-5B108G

LED Status Indicator

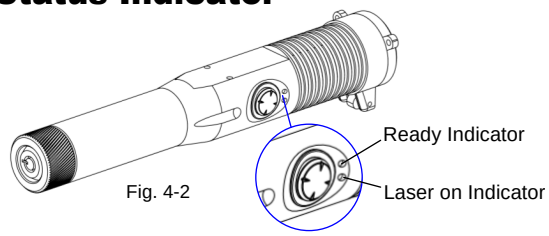


Fig. 4-2

LED Indicator	LED Color	Status
Ready Indicator	Green	Laser is ready
	Red	Low battery
Laser on Indicator	Red	Laser is emitting
	Red Strobe	On strobe mode

Normal Operation



1. Unlock keylock switch, the “READY” Indicator will show green light.
2. Open front cap.
3. Press ON/OFF Button Switch, Laser will be turned on. Release it and the laser will be off.
4. Double tap on ON/OFF Button Switch and hold, Laser will be strobing.
5. Whenever Laser is on, release Button Switch, Laser will be off.

Note

- **BR100 / BR400 is Class IIIb Laser Product and it can injure the eyes Always avoid BR100 / BR400 to point at anyone at any time.**
- **Do not direct the laser beam at anyone operating a boat, vehicle or aircraft.**

BASIC MAINTENANCE

1. Make sure the BR100 / BR400 is on Power OFF status.
2. Remove the battery and close the battery cap.
3. Clean BR100 / BR400 with a soft cloth.
4. Wipe laser-emitting apertures with a dry lens cleaning tissue. Brush off all loose dirt from the apertures carefully.
5. Wipe dust and dirt from all components with a soft dry cloth.

CAUTION

- Do not allow water to enter the housing by keeping the battery cap shut.
- When not in use, always keep the power on OFF mode, Including when in storage.
- Do not store the BR100 / BR400 with battery installed.

SAFETY PRECAUTIONS

DANGER

Table 1:
Nominal Ocular Hazard Distances (NOHD) of BR100

	Green Laser Point
Class	Class IIIb
NOHD(m)	148.41
NOHD(5-cm aided)(m)	1244.37
NOHD(8-cm aided)(m)	2009.00
NOHD(12-cm aided)(m)	3028.50

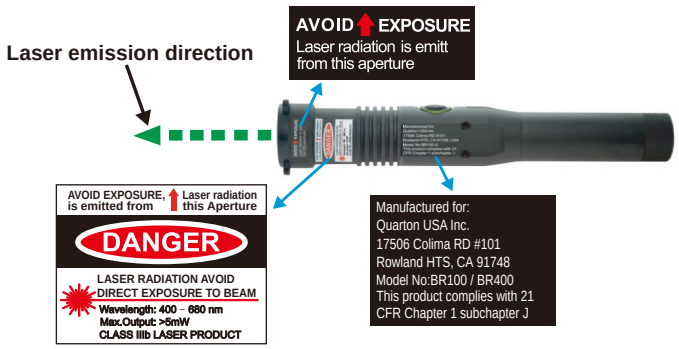
Table 2:
Nominal Ocular Hazard Distances (NOHD) of BR400

	Green Laser Point
Class	Class IIIb
NOHD(m)	1106.83
NOHD(5-cm aided)(m)	8458.76
NOHD(8-cm aided)(m)	13588.02
NOHD(12-cm aided)(m)	20427.03

Exposure to the laser beam inside the NOHD minimum safe range can cause permanent damage to the human eye.



- **CLASS IIIb LASER PRODUCT.**
- Laser radiation when open.
  AVOID DIRECT EYE EXPOSURE.



DANGER

- Use of controls or adjustments, or performance of procedures other than those specified herein may result in hazardous radiation exposure.
- This laser product is classified as Class IIIb for Visible point according to 21 CFR 1040.
- BR100 / BR400 is Class IIIb Product and it can injure the eyes. Always avoid BR100 / BR400 to point at anyone at any time.
- Do not direct the laser beam at anyone operating a boat, vehicle or aircraft.
- Avoid all eye contact. Never look directly into the laser lens even if the laser is off.
- Do not stare into the laser beams and laser aperture.
- Do not look into the laser beam through binoculars or telescopes.
- Do not point the laser beam at reflective surfaces.
- Never aim the laser beam at people’s eyes.
- This unit must be used by experienced technical personnel only.
- Do not leave the laser beam unattended.
- Do not target vehicles or aircraft with the laser beam when the unit is used outdoors.
- Do not look directly into laser beam with optical instrumentation unless adequate protective filters are used to protect the eyes.
- Avoid aiming the laser beam at mirror- likes surfaces. Remove any unnecessary mirror-likes surface from the vicinity of the laser beam path.
- The warranty will no longer exist once the product been taken apart.

CAUTION

- Front cap and keylock switch are two protection devices to prevent laser to fire accidentally. Please always close front cap and lock the keylock switch after use. Please read user manual carefully before operation.
- When not in use, always keep the power on OFF mode, Including when in storage.
- **Battery :** The **BR100 / BR400** is powered by **two CR123A Lithium batteries (included).**
- Do not allow water to enter the housing by keeping the battery cap shut.
- Do not store the **BR100 / BR400** with battery installed.
- Do not install a defective battery in the **BR100 / BR400**.
- Prior to operating, check to see all batteries for cracks, bulging, and leakage.
- Do not puncture, disassemble, short circuit.