

Laser Bird Repellent Tool - BR100

Congratulations on purchasing your BR100 Laser Bird Repellent Devices. BR100 is designed to repel and clear birds at the distance of 100 meters to 1000 meters depending on ambience light condition. With easy operation and carry handheld size, built-in microchip to control two operation mode - momentary and strobe with clear indicators, BR100 can repel and clear birds in minutes. Made of aircraft-grade aluminum alloy with robust designed and scratch-free hard anodized finish, BR100 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 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.
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



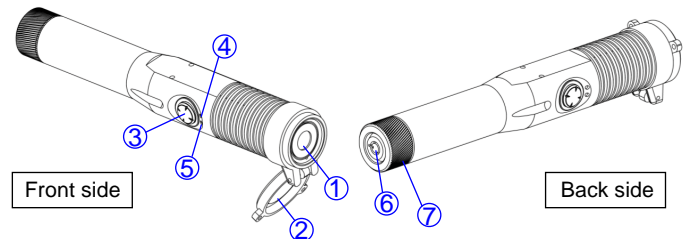
Golf course

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

SPECIFICATIONS

| | |
|-----------------------|--|
| Weight | 230g±15 g |
| Dimensions | 195(L) x 37(W) x 41(H) mm |
| Laser Wavelength | 520±10 nm(Green Laser Diode) |
| Output Power | 100mW (Class IIIb) |
| Construction | Aluminum 6061 T6 with scratch-free hard anodized finish. |
| Range (Day Time) | 100 meters to 1000 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) or 1 x 18650 rechargeable battery (not 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

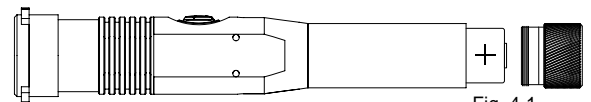


Fig. 4-1

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:

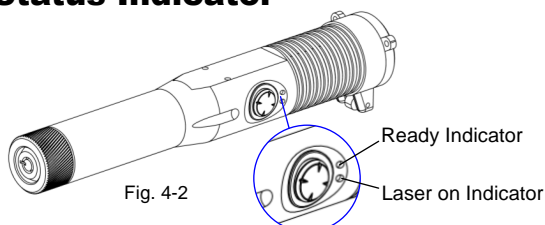
BR100 can be powered by two CR123A lithium batteries or one 18650 rechargeable battery. Please be noted 18650 rechargeable battery isn't included in the package. Recommend buying well known brand with high quality 18650 battery if you like to use rechargeable battery. Please remove batteries from BR100 whenever storage.

CONTENTS OF A SET



| No. | Part Name | QTY | Parts Stock Number(PSN) |
|-----|----------------|-----|-------------------------|
| 1 | BR100 | 1 | 157-BR001G |
| 2 | CR123A battery | 2 | 451-C0103G |
| 3 | Key | 2 | 410-BR001G |
| 4 | Lens cloth | 1 | 499-5B108G |

LED Status Indicator



| 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

- Please be noted, BR100 is Class IIIb Laser Product and it can injure the eyes. Always avoid BR100 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 is on Power OFF status.
2. Remove the battery and close the battery cap.
3. Clean BR100 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 with battery installed.

SAFETY PRECAUTIONS

DANGER

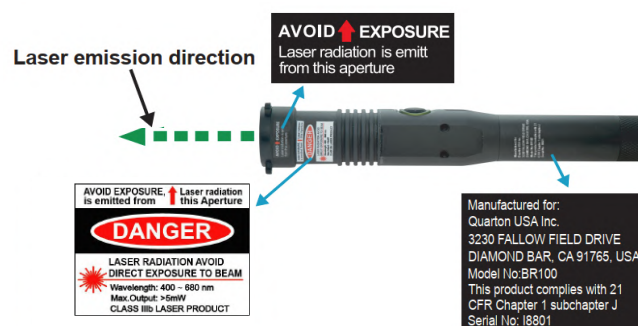
Table S-1:Nominal Ocular Hazard Distances (NOHD) of BR100

| | 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 |

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 is Class IIIb Product and it can injure the eyes. Always avoid BR100 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 is powered two CR123A Lithium batteries (included) or one 18650 rechargeable battery(not included).
- Do not allow water to enter the housing by keeping the battery cap shut.
- Do not store the BR100 with battery installed.
- Do not install a defective battery in the BR100.
- Prior to operating, check to see all batteries for cracks, bulging, and leakage.
- Do not puncture, disassemble, short circuit.