



# Dynalite Baja Portable Electronic Flash

USER MANUAL

**dynalite**  
dynamic lighting



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## ☀ Introduction

Hi. I'm Kevin Ames and I don't work for Dynalite. I am a working commercial photographer with a studio in Atlanta, Georgia. I am a Dynalite user and have been for many years.

This is the part of the “normal” instruction booklet where you are congratulated for choosing (insert what you bought here,) the finest blah-blah-blah and so on. I am not going there. Ever. Rather than take that path, let me welcome you instead. If you are a first time Dynalite customer, thank you. You have joined a community of hard working pros and advanced amateurs that understand how important dependable lighting gear is to their careers and hobbies—yes to their passion--photography. A lot of us have decades of experience shooting photographs lit with Dynalite.

Thanks to you too, if you are one of the established Dynalite users and have added this gear to expand your lighting capabilities.

User's guides have all of the personality of a box of bricks. I'd like to break out of that with this one. I want it to be readable, understandable, conversational and even fun. All of the information is here. In plain English. If I spoke Spanish it would be in plain Spanish as well. I don't. It isn't. Continuing to step out of the technospeak I'll explain the terms of each part and what those terms mean. Personally I really hate having to search the web for what a flux-capacitor is when the directions tell me to install it into socket B. What is socket B anyway? I want this guide to be clear and complete. Turn the page and get started using your new Dynalite B-4...

# Safety

**There are only a few important things to know about handling any electronic flash systems when it comes to doing it safely. This section is hyper-important for you to be safe and stay well while using your Dynalite Baja B-4. Most of this is common sense. Which we all know isn't common at all. So, please read them anyway.**

1. Water and electricity don't mix well. When power packs, heads, and their cables are operating they have a lot of high voltage electricity in them. Using a Dynalite Baja B-4 that's wet or standing in water can cause very serious injuries like death. Really.
2. The Baja flashtube gets outrageously hot while it is being used. Avoid betting burned. Don't touch the pyrex cover over the flashtube. After shooting ten full power flashes in fast succession, let the flashtube cool down for a couple of minutes. Don't look directly at the flashtube close up when you fire it to avoid possible damage to your eyes.
3. Never fire the Baja B-4 with the protective cover over the flashtube.
4. Don't fire the Baja B-4 near flammable liquids like gasoline or gases like propane or natural gas.
5. Baja B-4 portable electronic flash units are lousy basketballs. It is a really bad idea to use one if it has been dropped. Send it back to Dynalite to be checked instead.
6. Only use the battery charger that comes with your Baja B-4 to recharge the battery. Once the battery is fully charged disconnect the charging cord from the Dynalite Baja B-4. It's never a good idea to leave batteries charging indefinitely.  
  
Overcharging the Baja B-4's battery can damage the cells; possibly leading to an explosion. Don't overcharge the battery.
7. Excessive heat can cause the battery to explode. Don't leave your Baja B-4 in direct sun for long periods of time. Let the unit cool before using it.
8. Dynalite Baja B-4 portable electronic flash units have a lot of electrical energy inside the case even when they are turned off. Leave opening them to a qualified Dynalite technician or send them back to Dynalite. There are no user fixable parts inside, just a lot of current waiting to shock those (like me and I'm guessing, you) who don't know what they are doing. Seriously.

# The Dynalite Legacy



Dynalite began in 1971 when Paul Schwartz, an electronic engineer, teamed with photographer Ed Lambert and silent investor John Poremba to create a rugged, dependable and portable electronic flash power pack and heads. Paul designed the original electronics including the non-arching connectors that allow heads to be added or removed from a powered up pack safely. That circuit was so robust that, while it has been updated with modern technology, it remains the basis for every pack Dynalite makes today. While the insides of Dynalite packs and heads have evolved, the control layout has been mostly the same for over three decades. A photographer buying a new pack today knows it will work the same way one that has been in the studio for twenty years or more.

Dynalite was instantly popular with location photographers. Whether the subject was a celebrity or politician destined to grace a magazine cover or an ocean side beach resort showcasing its architectural interior elegance, Dynalite was likely on the scene. Photographers across the country adopted the super light packs that easily stood up to the rigors of the road. Whether piled in the back of a van or checked as luggage on airlines, Dynalite gear stood up to the abuse travel wreaks on equipment that can be delicate.

Realizing that photographers want powerful, lightweight electronic flash systems Dynalite is proud to continue its legacy of innovation with the new Baja B-4.



# The Dynalite Baja Portable Electronic Flash

The Dynalite Baja B-4 is a self contained 400 watt / second portable monolight flash. Powered by an internal Lithium Ion rechargeable battery and controlled with the optional BRT616 or BRT616c radio transmitters, there are no cords or cables to clutter a set in the studio or at a location.

The Baja B-4 is light in weight while remaining strong in features including adjustments in one tenth of a stop increments over a six f/stop range, high speed sync, short duration flash and stroboscopic flash modes.

1. **Flash Power Control Dial** — Turn it clockwise to increase the power output. Moving the dial counter clockwise lowers the power.
2. **Modeling Light Power Control Dial**
3. **RPT Button** engages C or HSS modes. Press and release for C mode. It also cycles the C mode for five, ten or fifteen stroboscopic flashes. Press and Hold for HSS (High Speed Sync.)
4. **Mode** controls the flash duration. This button switches between Normal mode and T mode-- short duration flashes
5. **Cell Button** switches the flash tripping sensor on or off.
6. **Sound Button** toggles an audible tone when the Dynalite Baja B-4 is fully charged.
7. **Test Button** fires the flash without having to take photograph with the camera.
8. **Power Switch** turns the Baja unit on or off.
9. **1/4 inch sync cord socket** for wired or Pocket Wizard sync with a camera.
10. **Charging Socket**
11. **Battery Power Level Indicator**
12. **Battery Status** — Bottom Amber = Charging, Middle Amber = Empty, Top Amber = Battery Fully Charged
13. **Main Display** shows Power Output Setting, Short Duration Setting, Stroboscopic Mode selected. Red LED lights show (top to bottom) RPT, Mode, Cell, Sound and Test
14. **BRR616** — 6 group 16 channel receiver included with the Dynalite Baja B-4
15. **Remote Trigger Sensor** detects the flash from another Dynalite Baja, head or speedlite to fire the unit's flash.
16. **Easy Carry Handle**
17. **Battery Cover Release**
18. **Accessory Release**
19. **Umbrella Socket** — Push the umbrella's shaft into the socket. No tightening knob needed.
20. **L.E.D Modeling Light** — Note that the light is always on when Baja is powered up.



# Getting Started

Dynalite Baja Portable Electronic Flash units ship with a hard plastic cover that protects the flashtube. Press the Accessory Release (18) at the top front of the unit then twist the flashtube cover counterclockwise. When it stops after about an eighth of a turn, pull the cover away from the unit.

## Charging the Baja

Connect the charger's output cord to the Charging Socket (10.) Plug its AC cord to 110 / 240 volt outlet. Turn the Power Switch ( 8 ) Off.

The indicator light on the charger glows Red while the Baja is charging. It turns to Green when the battery is full.

Fully charge the battery before using your Dynalite Baja B-4. This takes about three and a half hours. When the battery is fully charged; the Battery Status (12) will show Full. The Dynalite Baja's battery can be augmented by connecting the charger to the Charging Socket (10) while the unit is being used increasing the number of full power flashes to 800.



# Flash Modes

The Dynalite Baja B-4 offers four flash modes: Normal, High Speed Sync (HSS) Short Duration and Stroboscopic. Here's a detailed explanation of each one.

## Normal

Normal is the mode used most often. It provides a six f/stop range of power in one tenth of a stop increments from 1.0 (lowest power) to 7.0 (six f/stops brighter.) The chart below shows the power ratings on the Main Display (13) (top row) with the watt / second (w/s) output for each setting (middle row) and the color temperature.

f/stop range of power	1.0	2.0	3.0	4.0	5.0	6.0	7.0
watt/sec output	6 w/s	12 w/s	25 w/s	50 w/s	100 w/s	200 w/s	400 w/s
color temperature	5420°k	5480°k	5560°k	5600°k	5590°k	5500°k	5500°k





## High Speed Sync (HSS)

Digital Single Lens Reflex cameras have focal plane shutters. These allow for amazingly fast shutter speeds – up to 1/8000th of a second in most modern cameras. The high speed is achieved by using a thin slit formed by the rear shutter starting to close before the first curtain is fully open. This limited the fastest shutter speed to between 1/160 & 1/250th of a second depending on the camera model. Both Canon & Nikon offer speedlites that can synchronize with those thin slits. Good news! The Baja can too with its optional **BRT616c** transmitter that enables high speed sync with most Canon DSLR cameras. Nikon will be added soon.

Enter **HSS** by pressing the **+** button on the **BRT616c** transmitter. Next, power on the Baja, then hold down the **rpt** button (3) until the main display (13) reads **H.1**. Adjust the Flash Control Dial (1) for **H.1 - H.7**.



## Short Duration

Short Duration or **t** mode shortens the flash duration to stop motion. Use this mode for freezing action like a drop hitting a saucer full of milk or for pouring liquids. Enter this mode by pressing the Mode button. The Main Display now shows a digital **t** followed by a number. **t.1** is the fastest duration and lowest power output while **t.7** is the longest duration and the highest power output. Change the duration by turning the Flash Control Dial. The chart below shows the settings (top row) the speeds (middle row) and the color temperature (bottom row.)

setting	t.1	t.2	t.3	t.4	t.5	t.6	t.7
speed	1/12,800s	1/6,400s	1/4,000s	1/2,500s	1/1,250	1/640s	1/500s
color temperature	6200°k	5700°k	5500°k	5450°k	5450°k	5300°k	5300°k

The Dynalite Baja stores extra power in the Short Duration mode. After switching back to Normal mode, discharge the Baja two or three times with the Test button.



## Stroboscopic (C-Mode)

Stroboscopic Mode offers three preset flash rates five, ten and fifteen flashes in one second. Begin by setting the Flash Power Control Dial (1) to one of these Normal mode settings: **1.0** or **1.9** or **2.0** to **2.9** In the **t**-modes use **t-1** or **t-2** then press the **rpt** button (3) for Stroboscopic mode. The Main Display (13) will show **C.1** or **C.2** The first press is five flashes in one second, the second press is ten flashes in one second and the third press is fifteen flashes in one second. **C.1** is a lower power setting than **C.2**. The flash duration and color temperature for **C.1** or **C.2** are similar to those of **t.1** and **t.2** in the chart above.



## ★ Adding / Removing Modifiers

The Dyalite Baja B-4 uses the very popular Bowens style accessory mount. Reflectors, speed rings, snoots and many other modifiers are available either directly from Dyalite or from other manufacturers.

Press the Accessory Release (18) at the front of the Dyalite Baja B-4 back toward the Easy Carry Handle (16), twist the cover clockwise an eighth of a turn to remove it. Mount a modifier by twisting it counter clockwise until the tab locks it in place.



## ★ In the box...

Here are all the goodies that come installed in or with your new Dyalite Baja B-4 Battery Powered Flash.

- Protective Flashtube Cover
- Pyrex Flashtube Protector (installed)
- Lithium Ion Battery
- AC Battery Charger with Power Cord
- BRR616 Radio Receiver
- External Battery Charging Cable



## ★ Accessories...

- **BRT616 Radio Transmitter** controls up to 6 groups Dyalite Baja B-4 flashes on one of 16 channels.
- **BRT616c Canon HSS Radio Transmitter** adds High Speed Sync for Canon DSLRs. Nikon version coming soon.
- **B4-Li Battery** The Dyalite Baja B-4 delivers five hundred full power flashes on a single charge. An extra battery doubles that. Spare batteries are good!



**BRT616c**  
HSS Transmitter  
for Canon



## Specs

- 400 w/s of Portable Strobe Power
- 550-800\* Shots @ Full Power
- 6 f-stop Range
- 1/10 f-stop adjustment
- 3.7 Recycle Time
- High Speed Sync
- Fast Flash Duration Mode
- Stroboscopic Mode
- Digital Display Screen
- 16 Channel Wireless Control
- AC/DC Power Options

Model	Baja B4
Flash Power (w/s)	400 w/s
f-Stop (Max) (ISO 100, RSH 165H, m)	32
Variable Range of Flash	6.0 f-stops in 1/10 stop increments
Color Temperature	5500(±200)
Flash Duration (0.5ft) @ min:max	1/12800 : 1/500
Recycling Time	3.7 sec
Modeling Lamp	5W LED
Flash Count (Full Battery @ Max Power)	550-800* (*while charging)
Weight	6.1lbs
Dimensions (L x W x H, inches)	13.5" x 4.75" x 8.625"
Battery Power	Rechargeable 11.1V 8.8 Li-ion

\*800 flashes with A/C charger plugged into the Baja







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