

B1 Off-Camera Flash

# Profoto



THE B1  
GREAT LIGHT  
MADE EASY



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# THE B1 OFF-CAMERA FLASH

Taking your flash off-camera marks a milestone on your journey to becoming a great photographer. It means you are ready to take control and shape light. You are no longer content simply depicting things. You want to create them yourself.

Now, there are many flashes out there that can be placed off-camera. But there is only one B1. No other flash will make this transition as easy, while at the same time providing you with such creative freedom.

Flip these pages and we will explain why.



Take control and shape light with the B1 off-camera flash.

PHOTO: MICHAEL MUELLER



The B1 makes it easier than ever to take the flash off your camera.



# THE B1 WITH TTL

Profoto was founded on the idea that a photographer's tool is a natural part of the creative process. Like the painter's brush or the sculptor's chisel, its form and function should make it as easy as possible for you to turn your vision into reality.

The B1 and its revolutionary, patent pending AirTTL technology take this idea to the next level. Simply attach the Air Remote TTL to your camera's hot shoe to merge camera and flash into one, point and shoot, and the B1 will automatically adjust its light output to provide you with the perfect exposure. It is as easy as it sounds.



TTL provides perfect exposure without manual metering, making it quick and easy to not only catch the moment but also light it flawlessly.

PHOTO: ANDREA BELLUSO



Attach the Air Remote TTL to your camera's hot shoe to merge camera and flash into one.



# THE B1 WITHOUT CORDS

Do you remember the feeling when you first learned how to ride a bicycle? Remember how the world seemed to open up, how you were suddenly able to go anywhere and do anything?

Then you know what it is like shooting with the battery-powered and wirelessly synced and controlled B1. Shoot indoors or shoot outdoors, miles away from the nearest wall outlet. Place the lights wherever you want. Your imagination sets the limits. Not the length of your cables.



The B1 is a cordless off-camera flash. This means that you are free to place it wherever you want. Here it is mounted on a Gorillapod® by Joby®.

PHOTO: MICHAEL MUELLER



The B1 is powered by an exchangeable, high-capacity battery and wirelessly synced and controlled with the Air system.



# THE B1 WITH POWER

Ever been frustrated by the fact that a clear sky equals bad weather for photography? Or perhaps you have experienced the opposite – not enough light to get the shot you want?

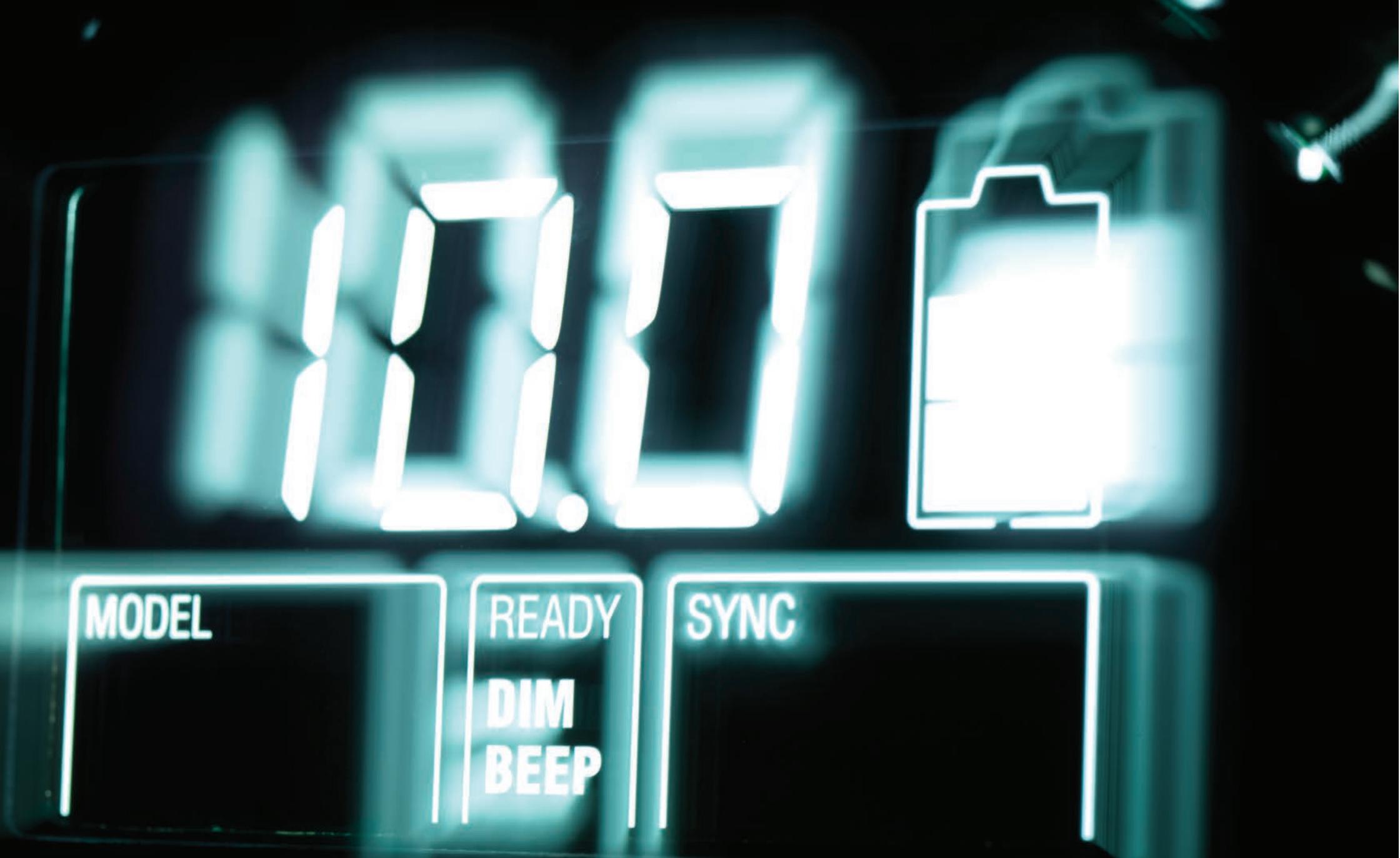
The B1 solves both these issues. Ten times as powerful as the average speedlight, it enables you to overpower the sun on a sunny day as well as light up larger backgrounds and areas. With the B1 you are no longer dependent on the weather or ambient light. You are the one in control. You set the light.

In addition, having that much power at your disposal means that you can add Light Shaping Tools to create a beautiful, soft light even in bright conditions.



Photographers such as Michael Mueller need both power and portability.

PHOTO: MICHAEL MUELLER



The B1 is packed with 500Ws of light, controlled in 1/10 f-stop steps over the entire 9 f-stop power range.



# THE B1 WITH SPEED

Some things are hard to fake. Laughter, genuine smiles or the defining moment of a sport event, to name just a few examples. So, the best thing you can do is to make sure you are prepared when that perfect moment occurs in front of your lens.

That is why speed is important. The B1 was designed with this in mind. At lower power settings it will easily keep up with your camera, blasting away up to twenty flashes per second.

Speed also equals short flash duration. The B1 will provide a much shorter flash duration than a speedlight set to the same output. In other words, you will not only be able to catch the moment but also freeze it in time with absolute sharpness.

Having speed and a short flash duration means that you are always ready to freeze that perfect moment when it occurs in front of your lens.

PHOTO: ANDREA BELLUSO



At lower power settings, the B1 will produce up to twenty flashes per second.



# THE B1 WITH LIGHT SHAPING

Photography is all about light – about controlling and shaping light. Shoot the same thing from the same angle with ten different lighting setups and you will create ten entirely different images.

This is where Profoto's Light Shaping Tools enter the picture. The B1's built-in reflector creates a wide and even light spread that stands well on its own. But you are also free to choose from more than 120 Light Shaping Tools and shape the B1's already beautiful light into almost any light you can imagine.

The powerful modeling light takes the guesswork out of light shaping. Move the B1 or change its output and you will see the effect with your own eyes. In addition, Profoto's unique Zoom Function allows you to shape the light by simply sliding the Light Shaping Tool back and forth along the zoom scale.



The B1 is compatible with more than 120 Light Shaping Tools. Here we see photographer Karolina Henke in action with a Profoto Umbrella.

PHOTO: KAROLINA HENKE



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Profoto's unique zoom function allows you to shape the light by simply sliding the Light Shaping Tool back and forth along the zoom scale.



Built-in reflector

# THE B1 WITH QUALITY IN EVERY DETAIL

50 years as the brand of choice among leading photographers in the tough and demanding fashion industry have taught us to never leave any detail unattended.

That is why the B1 has a built-in reflector that not only maximizes the output but also protects the flash tube. That is why the stand mount is sturdy enough to hold a 7-foot softbox. That is why the LED modeling light is power-efficient enough to also be used as video light. That is why the B1 has an integrated umbrella mount. That is why the crystal clear LCD display is nice on the eyes and the ergonomic grip handle feels good on the skin.

The B1 is full of details such as these – details that make a huge difference.

Some of the unique benefits of the B1 will be apparent the minute you unpack it. Others will be revealed after years of everyday use.

PHOTO: DAVID BICHO



Umbrella mount



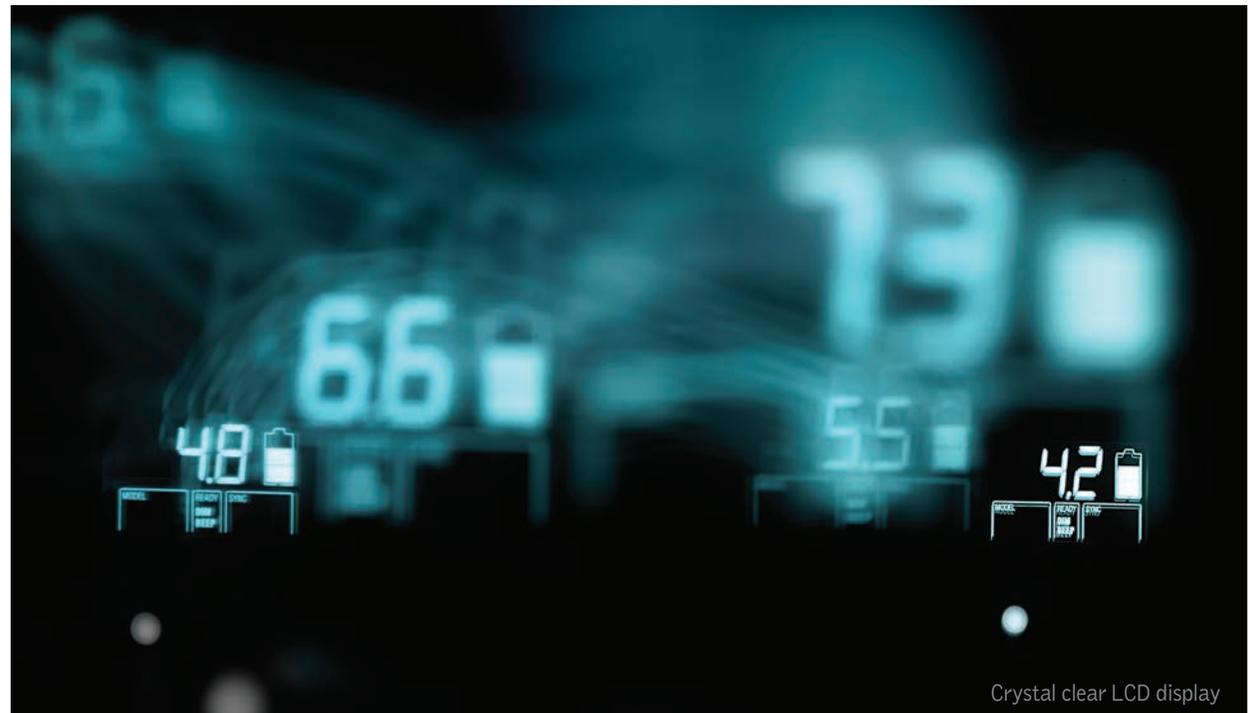
Powerful modeling light



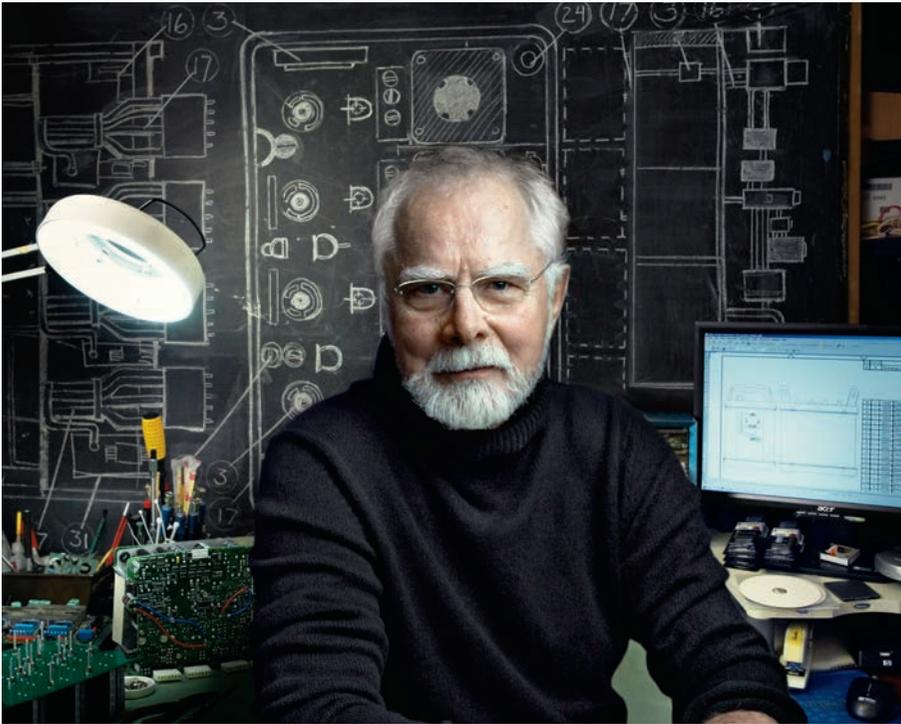
Sturdy stand mount



Ergonomic grip handle



Crystal clear LCD display



# THE B1 BY PROFOTO

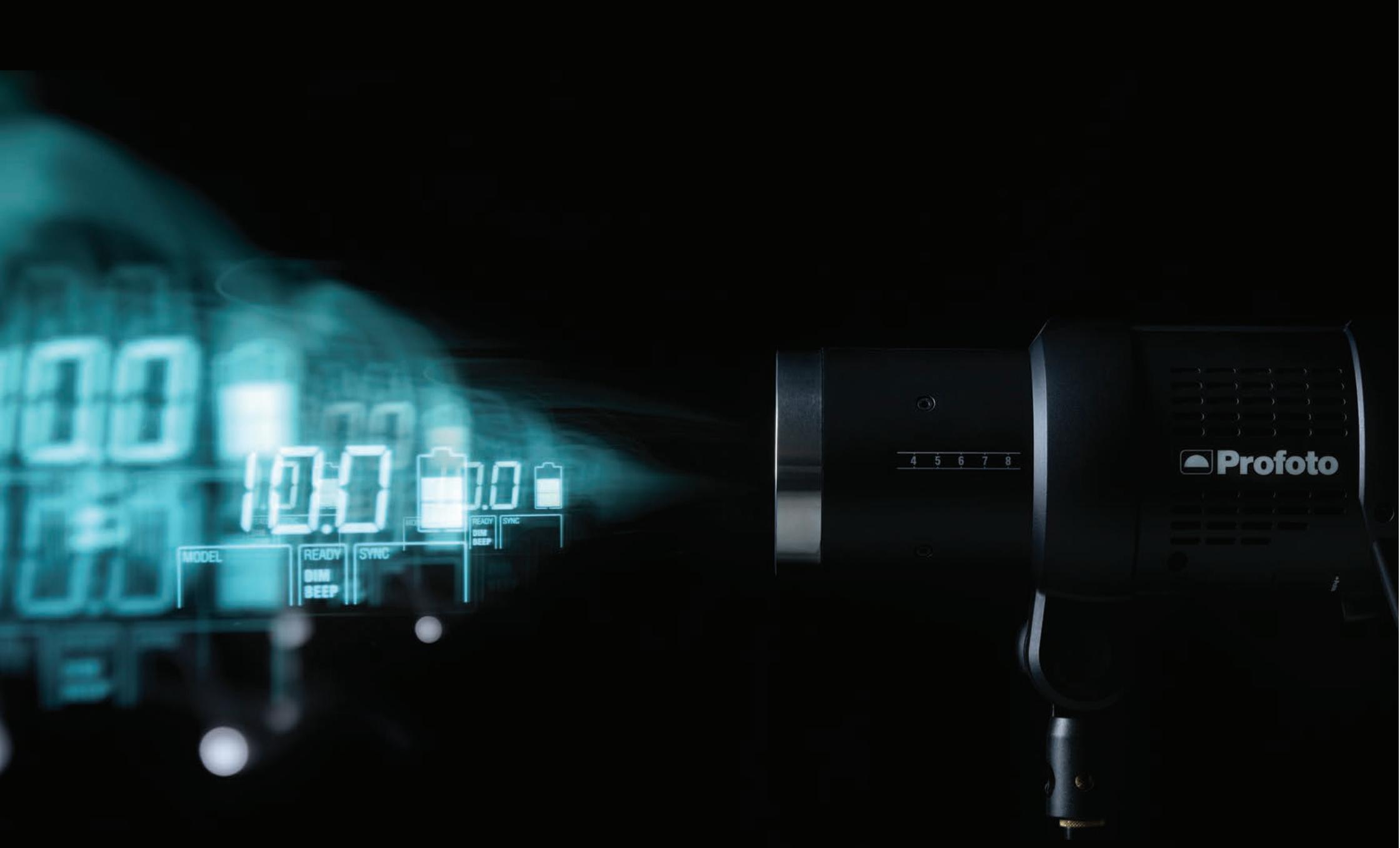
Profoto was born in 1968 in Stockholm, Sweden, when two passionate photographers decided to build the best flash system ever made. Today, our products are used by top photographers all over the world. Whether it is on a billboard or in a fashion magazine, there is a good chance that the image you are looking at was created with the help of our tools.

In other words, almost half a century's worth of experience was put into designing the B1. We know photography, we know light, and we know what is needed to shape it into images that blow your mind.



Conny Dufgran, one of the two founders of Profoto, shot by world-famous photographer and Profoto user Annie Leibowitz.

PHOTO: ANNIE LEIBOWITZ



Almost half a century's worth of experience was put into designing the B1.



# THE B1 PUT TO THE TEST

Richard Walch had long fantasized about combining action photography with rocks colored red and blue with light. But it was not until recently that he and his team discovered a solution for how to do it. Read the story and learn how.

About a year ago, Richard Walch saw a picture of Chefchaouen, the ancient Moroccan city famous for its blue-rinsed stonewalls and alleys. It got him and his partner in crime Marcel Lämmerhirt thinking about doing something similar with light. Eventually they came up with the idea of bringing trial biker Thomas Öhler and flat land BMXer Viki Gomez to the Carrara marble quarry in Italy and color it red and blue with flash lights and color gels.

"The idea was to combine stunning bike action with great scenery," says Richard. "We wanted to do something that would appeal to people who like action photography as well as those who prefer something like landscape or architecture photography."

The challenge with such a shoot is that you need a fast and mobile flash to capture the action, and a powerful flash to light up the scene. There are not many flashes like that. But Richard and his team found a solution.



PHOTO: RICHARD WALCH

“The shoot would not have been possible without the B1,” says Richard. “Speedlights aren’t powerful enough, plus we really needed the Light Shaping Tools. At the same time, we had to follow the bikers around the quarry, so we needed something cordless and portable. Before the B1, there was no flash with all these features.”

### **AT THE CARRARA QUARRY**

Once Richard and his team arrived at Carrara, they were reminded what a bustling environment it is. Huge machines hauling 40-ton blocks of marble were constantly circling around them, and the team had no choice but to stay moving and shoot where there was space.

“Most of the shots were done at one of two locations,” says Richard. “There is a tunnel that leads into this huge, cathedral-like opening in the heart of the mountain. It’s absolutely amazing. This is where all the shots with the blue colored rocks and the portrait were done. The excavators also dig deep into the sides of the mountain, which results in these stunning marble terraces. This is where we did the shots with the red colored rocks, plus all the shots with the valley in the background.”

### **IN THE HEART OF THE MOUNTAIN**

Richard and his team faced a number of challenges in the heart of the mountain – most of which can be summed up in a simple fact: they had to shoot cordless.

“Shooting without cables or cords was an absolute necessity,” says Richard. “First of all, there were obviously no wall sockets there. Secondly, you have to be respectful of the bikers and give them the space they need to perform. In other words, there couldn’t be any cords on the floor. Thirdly, and this is probably the most important thing, the bikers are not standing still. They are constantly moving around, which means that the assistants had to hold the flashes and chase after them with the lights.”





The team used four B1s for these shots. Two lights were mounted on stands and equipped with Magnum Reflectors and blue color gels. These were the background lights, lighting up the marble walls. Assistants, who chased after the bikers with the cordless units in their hands, operated the other two B1s. In the middle was Richard, shooting wirelessly with the Air Remote TTL attached to his camera.

“It was a sensational feeling shooting without any cables or cords,” says Richard. “Honestly, after shooting like that for an hour, you think that’s the way it should always be.”

### MARBLE TERRACES AND METAL MACHINES

As previously mentioned, the team also did a number of shots at the marble terraces out in the open. The setups they used here were in most cases similar to the ones inside the mountain. The red walls were created with two B1s mounted on stands and equipped with Magnum Reflectors and red color gels, while the handheld B1s were equipped with TeleZoom Reflectors to throw the light over long distances.

“This shot would’ve been impossible with a speedlight,” says Richard. “You need a much more powerful flash. To give you some perspective, the two B1s lighting up the stonewall are 160 meters from each other. That means that each flash covers an area of 80 meters! The same goes for the handheld B1s that we used to light up Thomas as he rode around the quarry.”

The fact that the assistants holding the main lights had to move around meant that the amount of light hitting the subject constantly increased and decreased. This would have been an issue if Richard had used a flash without TTL. Luckily this was not the case.

“If it weren’t for the B1’s TTL function, I would have had to constantly stop and manually adjust the power output to get the right exposure,” says Richard. “Now, we didn’t have to do that. The bikers could just do their thing, the assistants did theirs and I did mine – without any interruptions.”



PHOTO: RICHARD WALCH

## THE HERO SHOT

The team rounded off the day by shooting portraits of Thomas and Viki. By now it was getting late and everybody was tired, so Richard decided to use a well-proven setup.

"I call it the hero setup," says Richard. "You need three lights to do it. We had a B1 with a Beauty Dish as our main light, and one B1 with a Softbox RFi 1x4' with Softgrids on each side. This setup gives you a quite soft and flattering main light, while the rim light defines the muscles and the face bones and makes you look strong and powerful ... like a hero.

"So, what I did was that I quickly placed the lights and asked Viki to pose for me. I then set the Air Remote TTL to automatic mode and pushed the release button to get the right exposure. Finally, I switched to manual mode and dialed down the main light two stops and increased the rim light two stops. Click! Bam! I had my shot. It literally only took me a couple of minutes.

"I believe this opens up a world of possibilities for photographers. You can easily go fully automatic and just point and shoot and not have to worry about anything except what is in front of you. But you are also free to go manual and get as creative as you want. It brings you a whole new workflow. Once you try it, it changes everything."

More behind-the-scenes stories can be found at [www.profoto.com/blog](http://www.profoto.com/blog)





B1 500 AIR KIT



AIR REMOTE TTL-C

# THE GEAR GET STARTED

## **B1 500 AIR TTL KIT**

The B1 is delivered in a kit including a soft padded nylon case, a rechargeable Lithium-Ion battery and a battery charger – everything you need to go off-camera!

Product no: 901094

## **AIR REMOTE TTL-C**

Attach this small unit to your Canon camera's hot shoe to wirelessly integrate your B1 with your camera. Shoot fully automatic in TTL Mode or switch to Manual Mode for creative adjustments. Has an operating range of up to 300m (1,000ft) without any cable or cords. Delivered with batteries, hand strap and nylon pouch. Product no: 901039

## **AIR REMOTE TTL-N**

Attach this small unit to your Nikon camera's hot shoe to wirelessly integrate your B1 with your camera. Shoot fully automatic in TTL Mode or switch to Manual Mode for creative adjustments. Has an operating range of up to 300m (1,000ft) without any cable or cords. Delivered with batteries, hand strap and nylon pouch.

Product no: 901040 (Available during 2014)





BACKPACK M



LI-ION BATTERY



BAG XS



BATTERY CHARGER 2,8A



CAR CHARGER 1,8A



FAST CHARGER 4.5A

# THE GEAR HEAD OUT

## BACKPACK M

Grab our handy, high quality backpack and travel with comfort to your on-location shoot. Fits two B1 off-camera flashes plus accessories and two stands. Product no: 330223

## BAG XS

Tailor-made case for protecting the B1 and its accessories during storage and transport. Can also house cameras, lenses and other photographic equipment. Product no: 330224

## LI-ION BATTERY FOR B1

Get yourself a spare battery and save yourself the trouble of having to worry about running out of power. Provides up to 220 full-power flashes. Product no: 100323

## BATTERY CHARGER 2.8A

Standard charger that fully recharges the B1's battery in two hours. Product no: 100308

## FAST CHARGER 4.5A

Optional fast charger that fully recharges the B1's battery in only one hour! Product no: 100309

## CAR CHARGER 1.8A

Plugs into a standard car cigarette connector and recharges your B1 battery in just two hours. Product no: 100330





GRIDS



ZOOM REFLECTOR



SOFTLIGHT REFLECTOR KIT



MAGNUM REFLECTOR



COLLAPSIBLE REFLECTORS

# THE LIGHT SHAPING TOOLS GO FURTHER

Choose from more than 120 compatible Light Shaping Tools and shape the B1's already beautiful light into almost any light you can imagine. Here are some of the most popular.

## GRIDS

Mounts directly on to your B1 to create a more directed light and reduce the fall-off without changing the light characteristics. Available in three versions. Grid 5° Product no: 100795, Grid 10° Product no: 100796, Grid 20° Product no: 100797

## ZOOM REFLECTOR

A 40-year-old favorite still going strong. It takes its name from the fact that it allows you to shape its light by simply sliding the reflector back and forth on the flash head. Product no: 100785

## MAGNUM REFLECTOR

Increases the B1's output by one f-stop compared to the Zoom Reflector, but does so without excessively focusing the light beam. Great for on-location shoots in the sun! Product no: 100624

## SOFTLIGHT REFLECTOR KIT

The Softlight Reflector creates a soft and flattering light with a pristine, natural look. Nicknamed "The Beauty Dish" by leading fashion photographers. Product no: 901183

## RFi SOFTBOXES

An RFi softbox is more than a softbox – it is a Light Shaping Tool. Choose from twelve unique models and four different shapes. Add a Softgrid for even more precise light shaping. Browse all models at [www.profoto.com](http://www.profoto.com)

## UMBRELLAS

When it comes to portability and ease-of-use, there are not many tools that can beat a Profoto Umbrella. Available in twelve models, four sizes, two shapes and three fabrics. Browse all models at [www.profoto.com](http://www.profoto.com)

## COLLAPSIBLE REFLECTORS

Bounce flash light or shape sunlight with one of our ten collapsible reflectors, each equipped with two ergonomically shaped handles that make them easy to hold and fold. Browse all models at [www.profoto.com](http://www.profoto.com)



UMBRELLAS

SOFTGRID  
(Available for all models.)



RFi SOFTBOXES

DIAMETER: 14CM (5.5")

LENGTH: 31CM (12.2")



HEIGHT: 21CM (8.3")

WEIGHT: 3KG (6.6LBS)  
(Including batteries)

# TECHNICAL DATA

## B1 500 AIR TTL

### SPECIFICATIONS

Max energy: 500Ws  
 Energy range: 9 f-stops (2-500Ws)  
 Energy control increments: 1/10 or full f-stops  
 Recycling time: 0.1-1.9 (Quick burst up to 20 flashes/second)  
 Max modeling light (W): 20W LED (Output equivalent to 70W Halogen)  
 Modeling light control: Off, Proportional, Free (5-100%)  
 Mode control: Freeze (shortest flash duration) or Normal (color balanced) mode  
 Flash duration Normal mode (t0.5): 1/11,000s (2Ws) - 1/1,000s (500Ws)  
 Flash duration Freeze mode (t0.5): 1/19,000s (2Ws) - 1/1,000s (500Ws)  
 Energy stability Normal mode: + -1/20 f-stop flash to flash  
 Energy stability Freeze mode: + -1/20 f-stop flash to flash  
 Color stability Normal mode: + - 150K over range; + -20K flash to flash  
 Color stability Freeze mode: + - 800K over range; + -50K flash to flash  
 Guide number @ 2 m, 100 ISO with Magnum Reflector: 45 2/10  
 Input power supply: Exchangeable Lithium-Ion Battery 14.4V/3Ah  
 Battery capacity: Up to 220 full power flashes

### SYNCHRONIZATION AND CONTROL

Sync socket(s): 1  
 Wire sync voltage: Compliant to ISO 10330 standard  
 Wire sync connector: 3.5mm Mini-Phono  
 Photocell/IR-slave and switch: Yes  
 Radio sync & control: Yes, Built in AirTTL supporting wireless sync, control and TTL.  
 (Requires Air Remote TTL. Sold separately.)  
 Radio sync range: Up to 300m (1000ft)  
 MAC/PC control: Yes, via optional Profoto Air USB transceiver and Profoto Studio software.

### MISCELLANEOUS

Function display: Multifunction LCD display  
 Fan cooling: Yes, thermally controlled fan speed for low noise level.  
 Ready signaling: Yes, ready lamp, dim and/or switchable beep sound.  
 Auto dumping: Yes  
 USB interface: Yes, USB Mini port for FW upgrading.  
 Quick burst: Quick burst capability of up to 20 flashes per second.

# AIR REMOTE TTL-C

## SPECIFICATIONS

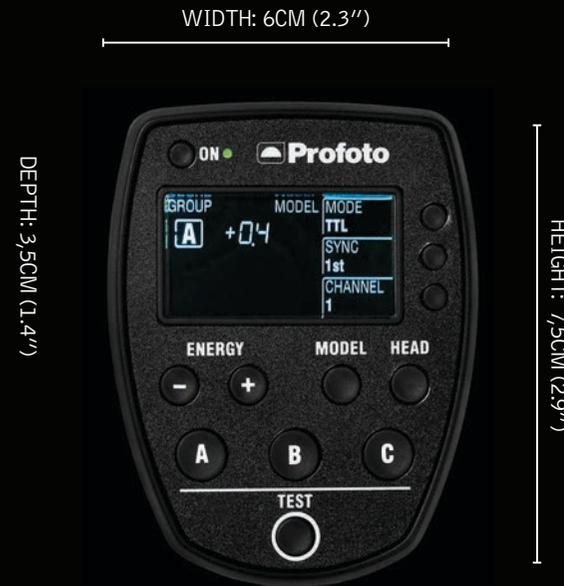
Frequency band: 2.4 GHz  
No of frequency channels: 8  
No of remote/TTL control groups per channel: 3 (A-C)  
Operation modes: TTL & Manual  
TTL compatibility: Canon E-TTL II  
Wireless range: Normal sync up to 300 m (1000 ft), Remote control and TTL sync up to 100m (330ft).  
Battery type: 2 x AAA (Alkaline)  
Typical battery lifetime: 30 hours  
Antenna type: Integrated  
Auto power off: Yes, 30 min of inactivity.

## MOUNT & CONNECTIONS

Camera mount/Sync in: Canon hot shoe only  
FW upgrade: USB Mini

## SUPPORTED AIR FUNCTIONALITY

Sync/Trigger: Yes, triggers Air Remote &, Air Sync transceivers plus all Profoto flashes with AirS, Air or AirTTL support.  
Remote control: Yes, remote/group control for all Profoto flashes with Air or AirTTL support.  
TTL control: Yes, TTL group control for all Profoto flashes with AirTTL support.



WEIGHT: 75G (2.6oz)  
(Including batteries)



Photo: Richard Walch, David Bricho. 10-40-17. Profoto carries out continuous development of its products. Specifications are subject to change without notice. ©2013 Profoto Images on left pages: Gert Jansson

# THE B1 GREAT LIGHT MADE EASY

The Profoto B1 makes it easier than ever to take the flash off your camera. With TTL you set light in a flash. With battery power and without cords, you can take the B1 with you wherever you go and put it wherever you want.

Add to that the power, speed and light shaping possibilities that Profoto lights are known for, and you have an off-camera flash that makes great light easy.

 **Profoto**<sup>®</sup>  
The Light Shaping Company<sup>™</sup>

For more info visit [www.profoto.com](http://www.profoto.com)

 [profoto.com/blog](http://profoto.com/blog)  [facebook.com/profoto](https://facebook.com/profoto)  [twitter.com/profoto](https://twitter.com/profoto)