# User guide Profoto Pro-11

For other languages visit: Pour les autres langues, veuillez consulter: www.profoto.com



www.profoto.com

### Congratulations on your new Profoto product!

Regardless if you chose a new flash or a new light shaping tool, know that more than half a century's worth of experience was put into its making.

If the years have taught us one thing, it is never to neglect a single detail. We only put our name on a product in which we have the fullest confidence. Before shipping, every one of our products passes an extensive and strict testing program. Unless it complies with the specified performance, quality and safety, it is a no-go.

As a result, we are confident that your new Profoto product will stay with you for years and help you grow as a photographer. But getting the product is only the beginning of that journey. Using it for light shaping is the real adventure for today and into the future. That is why we take pride in providing you such a wide assortment of light shaping tools and continuing to bring you the latest technology to our products, allowing you to shape the light in any way you can imagine across any devices.

The almost infinite possibilities might seem bewildering at first, but we're certain you will soon get the hang of it.

Make sure you download our Profoto app and sign up to MyProfoto account to manage your Profoto devices and stay updated with product news and updates. You'll also receive insights, tips and tricks from leading photographers on how to shape light; because we hope that sharing our experiences from over 50 years of light shaping will inspire you to grow even further.

Enjoy your Profoto product.

Conny Dufgran, founder

### **General safety instructions**

#### **Safety Precautions!**

Do not operate the equipment before studying the instruction manual and the accompanying safety. Make sure that Profoto Safety Instructions is always accompanied the equipment! Profoto products are intended for professional use! Generator, lamp heads, and accessories are only intended for indoor photographic use. Do not place or use the equipment where it can be exposed to moisture, extreme electromagnetic fields, or in areas with flammable gases or dust Do not expose the equipment to dripping or splashing. Do not place any objects filled with liquids, such as vases, on or near the equipment to host pose the equipment to hasty temperature changes in humid conditions as this could lead to condensation water in the unit. Do not connect this equipment to flash equipment from other brands. Do not use flash heads without usplied protective glass covers or protective grids. Glass covers shall be changed if it has become visibly damaged to such an extent that their effectiveness is impaired, for example by cracks or deep scratches. Lamps shall be changed if they are damaged or thermally deformed. When placing alamp into the holder ensure not to touch the bulb with bare hands. Equipment must only be serviced, modified orrepaired by authorized and competent service personnel! Warning - The terminals marked with the flash symbolare hazardous live.

#### WARNING - Electrical Shock Hazard - High Voltage!

Mains powered generators shall always be connected to a mains "socket outlet with a protective earthing connection! Only use Profoto extension cables! Do not open or disassemble generators or lamp heads! Equipment operates with high voltage. Generator capacitors are electrically charged for a considerable length of time after being turned off. Do not touch modeling lamps or flash tubes when mounting an umbrella metal shaft in its reflector hole. Disconnect the lamp head cable between the generator and lamp head when changing the modeling lamp or flash tube! The mains plug or appliance coupler is used as disconnect device. The disconnect device shall remain readily operable. Batteries (battery pack or batteries installed) shall not be exposed to excessive heat such as direct sunight, fire, or the like.

#### WARNING - Loud Noise

There is a risk for exposure to sudden loud noise. Please use hearing protection and/or observe a minimum safety distance of 68 cm (27 in.) between the generator and users/other people present.



#### Caution - Burn Hazard - Hot Parts!

Do not touch hot parts with bare fingers! Modeling lamps, flash tubes, and certain metal parts emit strong heat when used! Do not point modeling lamps or flash tubes too close to persons. All lamps may on rare occasions explode and throw out hot particles! Make sure that the rated voltage for the modeling lamp corresponds with the technical data in the user guide regarding the power supply!

#### WARNING

The mains cable and plug serve as the disconnect device from mains power. When you are done using the equipment, always disconnect from the mains outlet by pulling the plug, not the cable. Never use ordinary household extension cords to elongate the power cable. They may overheat. Always unwind cord reel extension winders fully before use. Contact your Profoto dealer for proper equipment.

#### Note about RF!

This equipment makes use of the radio spectrum and emits radio frequency energy. Proper care should be taken when the device is integrated in systems. Make sure that all specifications within this document are followed, sepecially those concerning operating temperature and supply voltage range. Make sure the device is operated according to local regulations. The frequency spectrum this device is using is shared with other users. Interference cannot be ruled out. Radio Frequency Specifications :24 OHz (24 OH to 2473 SM Hz), e19 OBIM (China < 9 dBm).



#### Final Disposal

When the product reaches end of service, do not dispose of it with your other household waste. Equipment contains battery, electrical and electronic components that could be harmful to the environment. Equipment may be returned to Profoto distributors free of charge for recycling. Follow local legislation for disposal of batteries, electrical and electronic components, respectively.

### **Table of Contents**

General safety instructions	4
Nomenclature	7
Before use	
Mandatory safety instructions	8
Product registration and firmware update	8
Basic operation	8
Connect mains cable and startup	8
Connect lamp heads	9
Turn lamp head on/off	9
Adjust the flash power	9
Turn continuous light on/off	10
Trigger a test flash	10
Switch off and disconnect mains cable	10
Main menu navigation	11
Settings in main menu	12
Group	12
Channel	12
Mode	12
Continuous light	
Speed	
Bluetooth	
Settings	
Settings menu navigation	14
Settings in setting menu	
Air	
Bluetooth	
IR sync	
Ready signal	
Control sounds	
Warning sounds	
Display brightness	
Advanced	17

5

www.profoto.com

Pro-11	Connectivity 1	
LC C	Set up connectivity with Profoto remotes1	8
<u> </u>	Profoto apps1	9
	Additional functions2	0
	Quick burst2	0
	Wrong exposure alarm2	0
	Overheat protection	21
	Use Pro-11 with petrol-electric generators2	2
	Technical specifications2	3
6	General specifications	3
	Credit2	4

### Nomenclature



- 1. Lamp head outlet Left
- 2. Lamp head outlet Right
- 3. Power supply (AC) input
- 4. SYNC port (for triggering via sync cable)
- 5. ON button
- 6. USB port (for service)
- 7. IR sync/Photocell
- 8. Menudisplay
- 9. Energy display Left

- 10. Energy display Right
- 11. Continuous light button Left
- 12. Continuous light button Right
- 13. Settings dial
- 14. Energy dial Left
- 15. Energy dial Right
- 16. Test button
- 17. Lamp head button Left
- 18. Lamp head button Right

Pro-11

### **Before use**

#### Mandatory safety instructions

In addition to this user guide, you are required to read the Quick Start and Safety Guide before you start using your Pro-11. It contains vital information for the safe operation of the product as well as important regulatory information. The Quick Start and Safety Guide is supplied in print with the Pro-11 translated into many languages, it can also be found for download where you download this user guide.

#### 8

#### Product registration and firmware update

Before use, product registration and firmware update are required. When you start the Pro-11 for the first time, a welcome screen with a QR code will appear on the display. Scan the QR code with your smartphone and you will be directed to a web page with instructions on how to set up your Pro-11.

### **Basic operation**

#### **Connect mains cable and startup**

- 1. Connect the included mains cable to the power supply input [3] and to a grounded AC mains supply.
- 2. Push the ON button [5] to start the Pro-11.

#### WARNING

Never use ordinary household extension cords to extend the mains cable. They may overheat. Always unwind the cord reel fully before use. Contact your Profoto dealer for proper equipment.

#### **Connect lamp heads**

1.

With Profoto's lamp head connector, you can safely connect and disconnect the lamp heads even if the Pro-11 is switched on. Only use Profoto lamp heads with the Pro-11.

When connecting the lamp head plug, align the white dots on the plug with the white dot on the Pro-11 panel. Secure by turning the ring on the plug clockwise.

2.

### Turn lamp head on/off

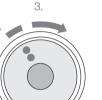
Push the lamp head button [17] or [18] to turn on/off the lamp head. When the lamp head is activated, the flash power setting appears on the display [9] or [10].

#### Adjust the flash power

The flash power (light output) of the lamp head is shown on the display [9] or [10]. The power scale is a relative f-stop scale. If only one lamp head is on, the maximum light output is 10. If two lamp heads are on, the maximum output is shared between them.

Use the energy dial [14] or [15] to change the flash power output:

- Turn the dial to change the output in 1/10 f-stop steps.
- Push down and turn the dial to change the output in full f-stop steps.



#### Turn continuous light on/off

Push the continuous light button [11] or [12] to turn on/off the continuous light. When the continuous light is activated, the light indicator appears on the display [9] or [10].

#### **Trigger a test flash**

The white test button [16] is lit when the Pro-11 is fully charged and ready to flash.

10

Push the test button [16] to release a flash and test the light output settings. After flashing, the test button turns off while the Pro-11 is recharging. When the recharging is completed, the test button turns on again.

#### Switch off and disconnect mains cable

When the Pro-11 is switched off, the current settings are stored and will apply when the Pro-11 is switched on again.

- 1. Push the ON button [5].
- 2. Disconnect the mains cable.

### Main menu navigation

Frequently used settings are accessed directly in the main menu on the menu display [8].



Use the settings dial [13] to navigate the main menu.

- 1. Turn the dial to select (highlight) a setting.
- 2. Push the dial to show the available options.
- 3. Turn the dial to change the setting option.
- 4. Push the dial to set the highlighted option.

### Settings in main menu

#### Group

The group setting (left and right) is used to assign groups (A-F) to the lamp head outlets [1] and [2]. This is part of the Pro-11 setup for use with Profoto remotes.

The group settings are only available when Air is set to ON in the settings menu.

#### 12 Channel

The channel setting is used to select the channel (1-20) for wireless triggering from a Profoto remote.

The channel setting is only available when  $\operatorname{Air}$  is set to  $\operatorname{ON}$  in the settings menu.

#### Mode

The mode setting is used to select how the Pro-11 should prioritize between flash duration and color temperature stability.

- NORMAL: Optimized for consistent color temperature stability across the full flash power range. This is the best mode for most types of shots.
- FREEZE: Optimized for shortest flash duration over the full flash powerrange. This is the best mode for shots where the flash is used to freeze fast action.

#### NOTE

The mode setting is only relevant when using the flash at shutter speeds within the camera X-sync range. When shooting at shorter shutter speeds with High-Speed Sync, there is no difference between the two settings.

For an overview of flash duration and color temperature in NORMAL and FREEZE mode, see section **Technical specifications**.

13

#### **Continuous light**

The continuous light setting defines how the continuous light intensity will be adjusted in relation to the flash power setting.

- MAX: The light intensity will be maximal, regardless of the flash power setting.
- PROP: The light intensity will be proportional to the flash power setting. This setting is recommended if the continuous light is used as modeling light.

#### Speed

The speed setting is used to select how fast the Pro-11 should recycle after flashing. This setting makes it possible to use the mains power supply efficiently, without blowing the mains fuse.

- MAX: The maximum speed. With this setting, only one Pro-11 can be connected to the wall outlet or fuse group.
- 50%: At 50% speed, the recycling time will be doubled. This setting may allow two Pro-11 generators to be connected to the same wall outlet or fuse group.
- 25%: At 25% speed, the recycling time will be four times as long. Select this setting when the Pro-11 is connected to a mains power supply with weak fuse, when you do not know how well the mains power supply is fused, or when a weak petrol electric generator is used to power the Pro-11. This setting may allow three or four Pro-11 generators to be connected to the same wall outlet or fuse group.

#### Bluetooth

The Bluetooth setting opens the Bluetooth submenu where you can:

- Select ON to make the Pro-11 discoverable for the Profoto apps.
- Select OFF to deactivate Bluetooth.

When Bluetooth is activated, the Bluetooth indicator appears on the menu display [8].

#### Settings

The Settings option opens the settings menu.

### **Settings menu navigation**

Additional settings are accessed in the settings menu. Select the Settings option in the main menu to enter the settings menu.

< SETTINGS	
AIR	ON
BLUETOOTH	ON
IRSYNC	OFF
READY SIGNAL	SOUND
CONTROL SOUNDS	ON
< SETTINGS	
CONTROL SOUNDS	ON
WARNING SOUNDS	ON
DISPLAY BRIGHTNESS	МАХ
ADVANCED	>

Use the settings dial [13] and buttons to navigate the settings menu.

- Turn the dial to select (highlight) a setting.
- Push the dial to toggle ON/OFF options.
- Push the dial to open a submenu.
  - Turn the dial to change the submenu option.
  - Push the dial to set the highlighted option.
  - Push one of the buttons [11], [12], [17], [18] to exit the submenu.
- Push the test button [16] or select < and push the dial to exit the settings menu.

## Settings in setting menu

#### Air

The Air setting is used to activate/deactivate wireless connectivity with Profoto remotes.

When Air is set to ON, the channel and group must also be set. For more information, see section **Set up connectivity with Profoto remotes.** 

#### Bluetooth

The Bluetooth setting is used to activate/deactivate wireless connectivity with Profoto apps.

- Select ON to make the Pro-11 discoverable for the Profoto apps.
- Select DISCONNECT to disconnect the Pro-11 from the Profoto app.
- Select OFF to deactivate Bluetooth.

#### **IR sync**

The IR sync setting is used to activate/deactivate the built-in infrared slave sensor.

When IR sync is set to ON, the Pro-11 will slave trigger if another flash is fired or if an IR signal is detected. The **IR** indicator appears on the menu display [8].

#### NOTE

It is recommended to set the IR sync to OFF if other methods of triggering (e.g. Air) is used.

#### **Ready signal**

The ready signal setting is used to select how the Pro-11 will indicate that it is fully recharged after flashing and ready to flash again.

- SOUND: The Pro-11 beeps when it is ready to flash again.
- DIM: The continuous light turns off after flashing and turns on when the Pro-11 is ready to flash again.
- SOUND DIM: The continuous light turns off after flashing. The continuous light turns on and the Pro-11 beeps when it is ready to flash again.

#### NOTE

The white test button [16] always turns off after flashing and turns on again when the Pro-11 is fully charged.

#### NOTE

With low input voltage and the speed setting set to MAX, the continuous light always turns off after flashing, regardless of ready signal setting.

#### **Control sounds**

The control sounds setting is used to enable/disable the tactile sounds for the dials and buttons.

#### Warning sounds

The warning sounds setting is used to enable/disable the sound for the wrong exposure alarm.

#### NOTE

The EXP indicator will always appear temporarily on the menu display [8] in case of a wrong exposure alarm, regardless of the warning sound setting.

#### **Display brightness**

The display brightness setting is used to set the brightness of the displays [8], [9], and [10].

#### Advanced

The Advanced option opens the Advanced settings menu.

#### Auto off

The Auto off setting is used to set if the Pro-11 should automatically turn off after a selectable period of inactivity.

#### Auto on

With Auto on set to ON, the  $\mbox{Pro-11}$  starts automatically when the mains cable is connected.

#### About

The About section displays information such as serial number and firmware version.

#### Regulatoryinfo

The Regulatory info section displays regulatory information.

#### **Factory reset**

The Factory reset option is used to reset all settings to the factory default settings.

18

### Connectivity

Pro-11 comes with built-in Profoto AirX connectivity. AirX is the 3rd generation of wireless Profoto connectivity, after Air and AirTTL.

AirX supports:

- Wireless Air and AirTTL functionality in Profoto Air and AirTTL enabled remotes.
- Dedicated AirX functionality in AirX enabled Profoto remotes and apps.

#### Set up connectivity with Profoto remotes

These instructions only cover the basic setup on Pro-11. For detailed operating instructions, refer to the user guide for your Profoto remote.

- 1. On the Pro-11 settings menu, set Air to ON.
- 2. On the Pro-11 main menu, select the same channel that is set on your Profoto remote.
- 3. On the Pro-11 main menu, assign a group (A-F) to each lamp head outlet.

#### Auto (TTL) with Profoto remotes

Auto (TTL) requires no additional setup on the Pro-11, once the Air channel and group setup is done. Just switch between Auto (TTL) and Manual (MAN) on your Profoto remote to select if you want the remote to adjust the flash automatically or if you want to control it manually.

Pro-11 will keep the flash power set by Auto (TTL) when you switch the remote to Manual (MAN). This makes it easy to use Auto (TTL) as your "light meter" to get a good starting point for manual adjustments.

When Auto (TTL) is activated by the remote, the **AUTO** indicator temporarily appears on the energy display [9] or [10].

When an Auto (TTL) group adjustment is made on the remote, the **AUTO** indicator, including the offset, temporarily appears on the energy display [9] or [10].

#### www.profoto.com

### High-Speed Sync (Hi-S) with Profoto remotes

High-Speed Sync (Hi-S) requires no additional setup on the Pro-11, once the Air channel and group setup is done. High-Speed Sync is activated on your remote or camera.

When High-Speed Sync is activated by the remote, the **Hi-S** indicator temporarily appears on the menu display [8].

#### **Profoto apps**

Profoto apps are continuously updated with new functionality and they also help you to keep your Pro-11 up to date with the latest new feature updates and bug fixes.

Some of the benefits with the Profoto apps are:

- Easy registration and updates. Register ownership and get the latest Pro-11 updates available at your fingertips.
- Smart remote control. Control the Pro-11 from your smartphone screen.
- Smartphone camera. Shape your smartphone images with a real flash.

Profoto apps are available on App Store, Google Play, and Huawei AppGallery. For more information about the Profoto apps, go to profoto.com.

To connect the Profoto app to the Pro-11, you need to activate Bluetooth (see section Main menu navigation). Then start the Profoto app and follow the in-app instructions.

### **Additional functions**

#### **Quick burst**

Quick burst is an automatically activated function that allows a series (burst) of flashes to be fired at a faster pace than the Pro-11 can recharge, without losing light output. The function is only active when the light output is set to less than full. The length of the burst, in number of flashes, depends on the repetition rate and the light output setting. With a lower light output setting, longer bursts can be triggered.

#### 20 NOTE

The accuracy of the light output is slightly less precise when Quick burst is active.

#### Wrong exposure alarm

The wrong exposure alarm is triggered if the output energy of the fired flash does not fully correspond to the set value. This can happen if a flash is fired before the Pro-11 is fully recharged and the Quick burst function cannot compensate for it. While using Auto (TTL), there will be a wrong exposure alarm if the requested flash energy is out of range.

In case of a wrong exposure alarm, the **EXP** indicator will appear on the menu display [8] and there will be a warning sound (if activated on the settings menu).

#### **Overheat protection**

The Pro-11 is equipped with an efficient cooling and safety system. The integrated fan automatically adjusts its speed to the internal temperature and cooling needs. The fan may run even when the Pro-11 is in standby mode and a short while after the mains cable has been disconnected.

A protective system will automatically protect the Pro-11 from damage if it is exposed to extreme conditions, such as high ambient temperatures or if the air vents are blocked. If critical components are getting too heated, the protective system will slow down the recharging intervals and eventually the recharging will stop completely. After a while, when the temperature has decreased sufficiently, the Pro-11 will start operating normally again.

#### NOTE

Do not use a Pro-11 that has been stored in abnormal temperatures until it has adapted to the normal indoor temperature, which can take 1-3 hours due to the large temperature storing mass of the Pro-11. A cold Pro-11 may not work properly or may even fail and will lose capacity (flash output). There is also a risk offailure because of condensation when a cold Pro-11 is moved to a warmer surrounding.

### Use Pro-11 with petrol-electric generators

All petrol-electric generators can produce voltage peaks that may damage electronic devices. Pro-11 is, however, designed to comply with sufficient power rated petrol-electric generators supplying AC-power equal to the specified voltage and frequency (100-127 V or 200-240 V, 50-60 Hz).

One dedicated 6000 W petrol-electric generator is required to power supply one Pro-11 at MAX recharging speed.

To power one Pro-11 at 50% recharging speed, a 3000 W petrolelectric generator is recommended; for two Pro-11 generators, a 6000 W petrol-electric generator; etc.

To power one Pro-11 at 25\% recharging speed, a 2000 W petrol-electric generator is recommended.

#### NOTE

Do not use any other types of flash models simultaneously with the Pro-11 on the same petrol-electric generator. Other flash models can cause the petrol-electric generator to produce high voltages that may damage the Pro-11. Pro-11 itself does not cause high voltages. Under-rated power of a petrol-electric generator will cause various bad results.

### **Technical specifications**

	Flash duration (1/s) NORMAL		Flash duration (1/s)	
ENERGY			FREEZE	
	t0.5	t0.1	t0.5	t0.1
10.0 (2400 Ws)	800	400	1,000	600
9.0 (1200 Ws)	900	700	1,600	1,500
8.0 (600 Ws)	1,300	1,200	3,500	3,000
7.0 (300 Ws)	1,800	2,000	8,000	5,000
6.0 (150 Ws)	2,600	2,400	14,000	7,700
5.0 (75 Ws)	3,700	3,000	20,000	10,000
4.0 (37.5 Ws)	4,600	3,500	26,000	11,400
3.0 (19 Ws)	5,500	3,800	35,000	13,300
2.0 (9.5 Ws)	6,500	4,500	45,000	15,000
1.0 (4.7 Ws)	8,000	5,200	62,000	16,400
0.1 (2.4 Ws)	12,000	6,500	80,000	17,500

### **General specifications**

<b>Max output</b>	2400Ws
<b>Operating temperature</b>	0°C to +30°C /32°F to +86°F
Mains fuse requirement	Automatic fuse characteristic C 13A/200-240V,15A/100-127V
Inputpower	100-127 V or 200-240 V,50-60 HZ Automatic voltage detection
Measurements	29 x 21 x 30 cm / 11.4 x 8.3 x 11.8 in., 13.2 kg / 29.1 lbs.

For more technical specifications, go to profoto.com.

Pro-11

#### F- Credit App Sto

App Store is a trademark of Apple Inc., registered in the U.S. and other countries and regions.

Google Play and the Google Play logo are trademarks of Google LLC.

HUAWEI and AppGallery are trademarks of Huawei Technologies Co., Ltd registered in China and other countries.

24 The Bluetooth word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Profoto is under license.

Other trademarks and trade names are those of their respective owners.

26

www.profoto.com

Technical data and product information are subject to change without notice.

Profoto AB Box 1264, 172 25 Sundbyberg Sweden

+46 (0) 8 447 53 00 info@profoto.com www.profoto.com

