

# D4 1200 Air

# D4 2400 Air

# D4 4800 Air

## User's Guide EN

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## Thank you for choosing Profoto

Thanks for showing us your confidence by investing in a D4 Air generator. For more than four decades we have sought the perfect light. What pushes us is our conviction that we can offer even yet better tools for the most demanding photographers.

Before our products are shipped we have them pass an extensive and strict testing program. We check that each individual product comply with specified performance, quality and safety. For this reason our flash equipment is widely used in rental studios and rental houses worldwide, from Paris, London, Milan, New York, Tokyo to Cape Town.

Professional photographers around the world have come to value Profoto's expertise in lighting and light-shaping. Our extensive range of Light Shaping Tools offers photographers unlimited possibilities for creating and adjusting their own light.

Every single reflector and accessory creates its special light and the unique Profoto focusing system offers you the possibility to create your own light with only a few different reflectors.

Enjoy your Profoto product!

# 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. Do not expose 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 supplied 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 a lamp into the holder ensure not to touch the bulb with bare hands. Equipment must only be serviced, modified or repaired by authorized and competent service personnel! Warning - The terminals marked with the flash symbol are hazardous live.



## WARNING – Electrical Shock – High Voltage!

Mains powered generator shall always be connected to a mains socket outlet with a protective earthing connection! Only use Profoto extension cables! Do not open or disassemble generator or lamp head! Equipment operates with high voltage. Generator capacitors are electrically charged for a considerable time after being turned off. Do not touch modeling lamp or flash tube when mounting umbrella metal shaft in its reflector hole. Disconnect lamp head cable between generator and lamp head when changing 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 sunshine, fire or the like.



## 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 rated voltage for modeling lamp corresponds with technical data of user guide regarding power supply!

### NOTICE

## NOTICE – Equipment Overheating Risk

Remove transport cap from lamp head before use! Do not obstruct ventilation by placing filters, diffusing materials, etc. over inlets and outlets of the equipment ventilation or directly over glass cover, modeling lamp or flash tube!

## 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, especially 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 can not be ruled out.



## Final Disposal

Equipment contains electrical and electronic components that could be harmful to the environment. Equipment may be returned to Profoto distributors free of charge for recycling according to WEEE. Follow local legal requirements for separate disposal of waste, for instance WEEE directive for electrical and electronic equipment on the European market, when product life has ended!

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## System description

The Profoto D4 Air flash generator is extremely versatile and precise. The D4 Air generator offers a flexible, fully asymmetric energy distribution to all four lamp sockets. This means that one D4 Air generator can be used like four separate generators, without the need to plug or un-plug lamp heads for power changes. The 8 f-stop power range in full or 1/10 f-stop increments allows precise light adjustments, the use of high ISO speeds and even large aperture techniques to create pictures with a shallow depth-of-field. At the same time they offer enough power to master jobs with a higher light demand.

The outstanding power and color stability of the D4 Air generator makes it easier to create technically perfect images. A wide range of flexible light shaping tools allows adjustment of the light characteristics precisely to the photographer's style and needs. Despite advanced technology and integrated auxiliary functions, the D4 Air generator is surprisingly easy to use. All settings can be done directly and every adjustment is displayed immediately. It is possible to activate and deactivate each head separately by the push of a button.

The integrated Air system offers a reliable radio sync and comfortable radio remote control – either with a Profoto Air Remote hand unit or with the Profoto Studio software for Mac or PC together with a USB cable or an optional wireless Air USB transceiver.

The D4 Air product family includes the following flash generators:

- D4 1200 Air
- D4 2400 Air
- D4 4800 Air

### Profoto Air

Profoto Air is a system for convenient wireless synchronization and remote control of flash generators and studio lamps. The Profoto Air system is operating on one of eight selectable radio channels on the 2.4 GHz radio frequency band. The Profoto Air system can be used world-wide.

The very short delay of the Air system makes it possible to use the shortest sync times of actual cameras (see camera manual for details).

The Profoto Air radio functionality is integrated in all D4 Air generators and works over distances of up to 300 m.

### Profoto Air Remote

The small and lightweight Profoto Air Remote device offers remote synchronization and control of your generators. The device controls practically an infinite number of generators and heads in up to six groups, either all at once in Master mode or in individual groups.

### **Profoto Air Sync**

The small and lightweight Profoto Air Sync device offers the same remote flash synchronization for an infinite number of generators as the Profoto Air Remote, but without the remote controllability.

### **Profoto Studio**

Profoto Studio is a software solution for both PC and Mac, which gives you full control of all your generators and heads from your computer. You can control each generator individually or group them to control multiple generators at one time. You can save customer lighting setups for use at a later time.

The D4 Air generator can be connected to the PC/Mac either with a USB cable or wirelessly via the Profoto Air USB transceiver.

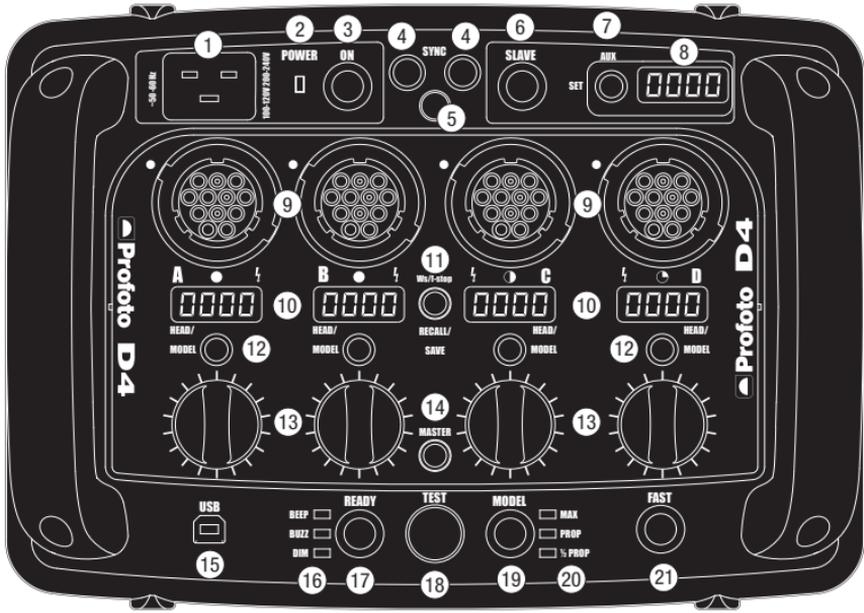
### **Profoto Air USB**

The Profoto Air USB device is a USB 2.0 transceiver that, together with the Profoto Studio software, allows control of your light from as far away as 300 m/1000 ft (free line of sight).

### **Phase One/Mamiya V-Grip Air**

The Phase One/Mamiya V-Grip Air is a vertical camera grip with built-in Profoto Air technology. It enables wireless flash trigger for sync speeds up to 1/1600s with selected medium format camera systems from Phase One and Mamiya.

# Nomenclature



- |  |                                |
|--|--------------------------------|
| 1. Mains Socket                                | 12. Head/Model Buttons (A-D)   |
| 2. Power Indicator                             | 13. Energy Controls (A-D)      |
| 3. On/Standby Button                           | 14. Master Button              |
| 4. Sync Sockets                                | 15. USB Port                   |
| 5. Photocell/IR slave                          | 16. Ready Mode Indicators      |
| 6. Slave Button                                | 17. Ready Mode Button          |
| 7. Set Button                                  | 18. Ready Lamp and Test Button |
| 8. Auxiliary Functions Display                 | 19. Modeling Light Button      |
| 9. Lamp Head Sockets (A-D)                     | 20. Modeling Light Indicators  |
| 10. Energy Displays (A-D)                      | 21. Recharging Speed Button    |
| 11. Ws/f-stop Button and<br>Recall/Save Button |                                |

# Functionality

## Power supply

The D4 Air generator can be connected to 100-240VAC, 50-60Hz. The generator automatically senses and adapts to the voltage and frequency supplied.

### WARNING:

*Never use ordinary household extension cables to elongate the power cable, since they may overheat. Always unwind all cable if an extension cable is used.*

## Lamp head configuration

The D4 Air generator is designed to – by configuration – be compatible with either the Acute/D4 series or the Pro series of heads. The default configuration is compatibility with the Pro series of heads. The configuration is easily changed; see instructions on page 17.

When the D4 Air is configured for the Pro series of heads, there is no need to change the modeling lamp when using Pro heads. The modeling light is powered correctly by the generator – worldwide.

When the D4 Air is configured for the Acute/D4 series of heads, it is important to use modeling lamps that correspond to the local mains voltage: 100V modeling lamps in 100V markets, 120V modeling lamps in 110-120V markets and 240V modeling lamps in 200-240V markets.

**PLEASE CHECK THE CONFIGURATION OF THE GENERATOR, THE MODELING LAMPS AND THE MAINS VOLTAGE BEFORE CONNECTING A FLASH HEAD!**

## Energy distribution

The D4 Air generator offers a flexible, fully asymmetric energy distribution to all four lamp sockets. Non-used sockets are automatically deactivated.

When only one lamp head is used, it should be connected to Lamp Head Socket A or B [9]. These sockets can be used to release the total energy (100%) of the generator to one lamp head. With one head connected to socket C, 50% of the total energy can be released and with one head connected to socket D, 25% can be released.

When two or more lamp heads are connected, the maximal energy level in total for all heads is of course 100%. It is not possible to select a higher energy level setting than the maximal; when the upper limit is reached, the energy level setting shown in the Energy Display [10] will stop at the maximal value even if you try to increase the energy level.



### NOTE:

*Since the D4 Air works with separate capacitor banks for best color and f-stop stability, about 1/10 f-stop of the total energy may not be available at some settings when using two or more lamp heads.*

## Energy control

The selected energy level for each head is shown in the Energy Displays A-D [10].

The energy level is by default displayed in f-stop scale. To show the energy level in Ws scale, press the Ws/f-stop Button [11].

In f-stop scale, the maximal energy (100%) is shown as 10.0. In Ws scale, the maximal energy (100%) is 4800 for D4 4800 Air, 2400 for D4 2400 Air and 1200 for D4 1200 Air.

The Energy Controls [13] are used to adjust the energy levels for the corresponding head:

- Turn the control clockwise to increase the energy in 1/10 f-stop increments and counter-clockwise to decrease the energy.
- Press and hold down the control and turn the control clockwise to increase the energy in 1 f-stop increments and counter-clockwise to decrease the energy.
- To adjust the energy level for all heads at the same time, press and hold down the Master Button [14] and use the Energy Control [10] of any of the active heads.

A double beep indicates that the maximal energy level setting is reached.

Since the generator has auto dump functionality, there is no need to trigger a flash to discharge the generator when the energy level is lowered.

## Modeling light

The Head/Model Buttons A-D [12] are used to turn on/off the corresponding modeling light. The Modeling Light Button [19] is used to turn on/off all the modeling lights at the same time.

The D4 Air generator has a soft start function of the modeling light, which extends the lifetime of the halogen lamps. This means that the modeling lights start with a slight delay.

The Modeling Light Button [19] is used to select one of the following modeling light alternatives:

- MAX: The modeling lamps will get maximal intensity, regardless of the energy level settings of the heads.
- PROP: The intensity of the modeling lights will be proportional to the energy level setting of the corresponding heads.
- MAX PROP: The modeling light for the head with the highest energy level setting will get maximal intensity. The modeling light intensity for the rest of the heads will be proportional to the energy level of the head with highest energy.
- ½ PROP: The modeling light intensity will be proportional to half the energy level setting of the heads. This is useful when mixing generators of different sizes. For example, a D4 4800 Air shall be set to PROP and a D4 2400 Air to ½ PROP when used together.

The Modeling Light Indicators [20] show the current modeling light setting.

## Recharging

The recharging speed is controlled by pressing the Recharging Speed Button [21]:

- When the Recharging Speed Button [21] is unlit, the generator will recycle at normal speed. Select this alternative when the generator is connected to mains supply with weak or unknown fuses.
- When the Recharging Speed Button [21] is lit, the recharging will be faster.

The white Ready Lamp [18] will turn on when the generator is fully charged and ready to flash.

To prevent incorrect exposures, it is not possible to release a flash while the generator is charging. If you try, a long beep will indicate that no flash was released.

## Ready signaling

Ready signaling is used to indicate when the recharging of the generator is completed.

The Ready Mode Button [17] is used to select one of the following ready signaling alternatives:

- OFF: No ready signal.
- DIM: The modeling light will be turned off while the generator is being charged.
- BEEP: A short audible signal will indicate that the charging of the generator is completed.
- BUZZ: An audible signal with several “beeps” will indicate that the generator is being charged.
- BEEP-DIM: The modeling light will be turned off while the generator is being charged and a short audible signal will indicate that the charging of the generator is completed.
- BUZZ-DIM: The modeling light will be turned off and an audible signal with several “beeps” will indicate that the generator is being charged.

The Ready Mode Indicators [16] show the current ready signaling setting.

## Synchronization

The D4 Air generator can be synchronized with the camera in different ways:

- The two Sync Sockets [4] allow the camera and a flash meter to be connected simultaneously. The 5 meter sync cable can without restrictions be elongated with a sync extension cable. Generators can be connected by means of the Profoto sync interconnection cord.
- The Photocell/IR slave [5] will sense other flashes as well as IR signals from most IR sync transmitters. The Slave Button [6] is used to activate (lit button) and deactivate (unlit button) the Photocell/IR slave.
- Synchronization via the Profoto Air radio system, see section *Remote sync and control below*.

## Remote sync and control

The D4 Air generator can be remotely synchronized and controlled either via the Profoto Air Remote device or via a computer running the Profoto Studio software.

By the use of groups, selected lamp heads on one or several generators can be controlled simultaneously. Group selection allows a large light bank with several lamp heads, for example the background light, to be controlled as one light source.

For remote sync/control using the Profoto Studio software, the D4 Air generator can be connected to the computer either via the wireless Profoto Air USB transceiver or with a USB cable. With the Profoto Air USB transceiver multiple generators can be controlled simultaneously. When deactivating the remote radio control and using a USB cable instead, only one generator can be controlled.

For remote flash synchronization only, the Profoto Air Sync device or the Phase One/Mamiya V-Grip Air can be used as well.

## Radio operation

The Profoto Air radio system is fully integrated in the D4 Air generator, allowing wireless remote synchronization and control.

For sync/control via radio, the Profoto Air receiver in the generator must be activated and a radio channel must be selected. See *Remote sync/control setup instructions on page 20*.

The Profoto Air system operates over eight specific frequencies in the 2.4 GHz band. The frequencies are evenly spread over the entire frequency band, to optimize reliable functionality. The large number of radio channels makes it possible to select a channel that is not interfered by other photographers using Profoto Air, or by WLAN and Bluetooth devices and other radio equipment operating on the same widely used 2.4 GHz frequency band.

For best radio operation, pay attention to the following:

- Maintain line of sight between the transmitter (Profoto Air Remote, Profoto Air Sync, Profoto Air USB or Phase One/Mamiya V-Grip Air) and the D4 Air generator whenever possible.
- When hiding the generator from view, try to not place it behind or against metal or water filled objects as this affects radio range.

## Auxiliary functions

The D4 Air generator offers the following auxiliary functions:

- Interval: used for stroboscopic effects
- Sequence: used for multi exposures to increase the flash output
- Delay: used to create wipe effects or for pictures of fast moving objects made with second curtain synchronization
- Radio: used for wireless remote sync/control, see section *Remote sync and control* above

The Set Button [7] is used to enter and exit auxiliary mode. The generator operates as normal also when in auxiliary mode.

In auxiliary mode, the Head/Model Buttons A-C [12] are used to activate/deactivate the auxiliary functions Interval, Sequence and Delay. The Energy Controls A-C [13] are used to select the auxiliary functions settings (for Radio settings, see instructions on page 19):

- Interval: Turn Energy Control A [13] to select the time interval (0.1-60 s) between the flashes. For changes in larger increments, press down the control while turning. To use the Interval function, the Sequence function (see below) must first be activated (min 2 flashes).
- Sequence: Turn Energy Control B [13] to select the number of flashes (2-60). For changes in larger increments, press down the control while turning.
- Delay: Turn Energy Control C [13] to select the delay time (0.1-60 s) before the first flash. For changes in larger increments, press down the control while turning.

If one or several of the auxiliary functions are activated, the Auxiliary Functions Display [8] repeatedly shows the settings for the activated functions.

If none of the auxiliary functions are activated, the Auxiliary Functions Display [8] shows the radio settings.



**NOTE:**

*Always check the optimal time delay by taking test exposures. All cameras have different release delays and the effect depends on the speed and moving direction of the subject. The following list is a rough basis for your own tests to create wipe effects:*

Wipe effect (Rear Curtain) Sync Time	Decimal Equivalent	Recommended Delay
1/1	1 second	0.98 seconds
1/2	0.5 seconds	0.49 seconds
1/4	0.25 seconds	0.24 seconds
1/8	0.125 seconds	0.12 seconds
1/15	0.0667 seconds	0.06 seconds
1/30	0.0333 seconds	0.03 seconds
1/60	0.0167 seconds	0.01 seconds

## Test function

The Test Button [18] is used to test that all light settings are correct and that the functionality is as expected. When the Test Button [18] is pressed, the generator will flash and the Ready Lamp [18] will turn off while recharging. When the recharge of the generator is completed, the Ready Lamp [18] will turn on again.

## Memory function

The current settings (energy level, modeling light, ready signaling, sync/remote and radio settings) are automatically saved in the memory of the generator (memory A). Chosen settings for auxiliary functions are also saved automatically, but they have to be activated again after the generator has been turned off.

In addition to the automatic saving, it is possible to save up to three combinations of settings in memory B-D. This makes it easy to repeat even the most complex setups. When recalling saved settings from memory B-D, auxiliary functions are directly activated.

At start up, the D4 Air generator always applies the settings that were in use before the generator was turned off. To apply the settings in memory B-D, the settings have to be recalled from the memory. For instructions on saving/recalling, see page 20.

## Automatic safety functions

The D4 Air generator is equipped with an effective cooling and safety system. The integrated fan will automatically start running when the generator is operating at higher energy levels or when the generator is used in hot environments.

If there is risk for overheating of the generator, caused by abnormal external influence, the protective system will automatically protect the generator from damage. 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 generator will start recharging at a normal pace. This automatic protection will only interfere under extreme conditions such as when the air vents are blocked.

If a defective flash head—for example with a broken or misfiring flash tube—is used, there will be a long beep signal and “- - -” will be displayed in the corresponding Energy Display [10] after the release of a flash to indicate malfunction/underexposure.



### NOTE:

*The air vents of the generator must never be blocked or covered in any way. Never store your flash equipment in a car on a hot and sunny day. Never use a D4 Air generator that is placed inside a case or transport box. Avoid storing the generator close or below the freezing point, which can lead to loss of capacity (flash output) and risk of condensation when used in a warmer surrounding immediately. Do not expose any flash equipment to wet or humid environments or extreme electro-magnetic fields.*

## Additional information

### Color Temperature

The color temperature of D4 Air is calibrated to neutral daylight. Thanks to Profoto's "Hybrid Flash Technology" the color temperature remains perfectly constant and reliable from flash to flash over the entire power range, regardless of the selected energy levels and the number of flash heads used. This makes the D4 Air generators perfectly suited for all kinds of critical assignments, even with high-resolution digital cameras and backs. In combination with all actual Profoto flash heads and light shaping tools, the D4 Air generator gives neutral and extremely stable color. Please note that other factors, like reflections from the surrounding and lenses with different color characteristic, may also affect the color of the picture.

Combining flash tubes and/or glass covers with different coatings can make distinctive color temperature adjustments if needed.

### f-stop stability

Profoto's "Hybrid Flash Technology" offers constant power output from flash to flash. This ensures stable and repeatable results, which is essential when D4 Air generators are used in combination with Multi Shot backs or for 3D pictures. The power stability of the D4 Air generators is in fact better than the repeat accuracy of most flash meters.

### Flash duration

The flash duration can be shortened by reducing the power output. The shortest flash duration using an Acute/D4 head and a D4 1200 Air generator at lowest energy is 1/7500 s. To shorten the flash duration even more at a given light setting, use an Acute/D4 Twin.

For example, if you connect the two plugs of an Acute/D4 Twin to the Lamp Head Sockets A and B [9] of a D4 1200 Air generator and select 600 Ws on both outlets, the flash duration will be just 1/2600 s instead of 1/1000s at maximum power with an Acute/D4 head.

### Petrol-electric generators

All petrol-electric generators can produce voltage peaks that may damage electronic devices. If a D4 Air generator is powered with a petrol-electric generator distributing 190-240V, a separate Profoto ProGas2 device (protecting against dangerous high voltage) must be used for each connected generator. To power one D4 Air generators, a 3000 W petrol-electric generator is recommended; for two D4 Air generators, a 6000 W petrol-electric generator, etc.



#### NOTE:

*Voltage peaks of petrol-electric generators can shorten the lifetime of the modeling lamps. Because of that it is recommended to use the modeling light in the ½ PROP mode.*

# Operating instructions

## Configuration

Before connecting any heads, the D4 Air generator has to be configured to be compatible with the lamp heads to be used; Acute/D4 series or Pro series of heads.

### Check configuration

While in standby mode, simultaneously press the Slave Button [6] and the Set Button [7] to display the configuration in the Auxiliary Functions Display [8]:

- For connection of Pro series heads, check that “Pro” is displayed (default setting).
- For connection of Acute/D4 series heads, check that “Acu” is displayed.

### Change configuration

1. If connected, disconnect the power cable from the Mains Socket [1].
2. Disconnect any connected heads, as a precaution not to risk any damage.
3. Simultaneously press and hold down the following three buttons: the Ws/f-stop Button [11] and the Head/Model Button B and C [12].
4. While still pressing the three buttons, connect the power cable to the Mains Socket [1] and to AC mains supply.
5. While still pressing the three buttons, wait until first the current configuration is displayed in the Auxiliary Functions Display [8] and then the new configuration.
6. Three beeps will confirm the new configuration setting, which will be displayed as long as the three buttons are being pressed.
7. Release the three buttons.

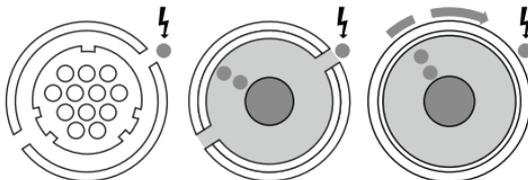
## Lamp head connection

With Profoto’s special lamp head connection, heads can be connected and disconnected safely even if the D4 Air generator is turned on.

Ensure that the configuration setting of the generator is correct. See instructions in section *Configuration above*.

Connect the lamp heads to the Lamp Head Sockets [9]. Always start with socket A, then B, etc.

When connecting the lamp head plug, align the white dot on the plug with the white dot on the generator panel. Secure by turning the ring on the plug clockwise.



## Power connection

1. Connect the power cable to the Mains Socket [1] and to AC mains supply. The Power Indicator [2] will be green, indicating that the generator is receiving power.
2. Press the On/Standby Button [3] to turn on the generator.
3. If necessary, activate the head(s) by pressing the corresponding Head/Model Button [12]. The white Ready Lamp [18] will turn on when the generator is charged.

## Settings

1. Use the Energy Controls A-D [13] to select the energy levels for the active head(s).
2. Press and hold down the Modeling Light Button [19] until the Modeling Light Indicator [20] corresponding to the desired modeling light mode is indicated; **MAX, PROP, MAX PROP** or  $\frac{1}{2}$  **PROP**.
3. Press and hold down Ready Mode Button [17] until the Ready Mode Indicator [16] corresponding to the desired ready mode is indicated; **BEEP, BUZZ, BEEP-DIM, BUZZ-DIM, DIM** or **OFF**.
4. Use the Recharging Speed Button [18] to select **Normal** (unlit button) or **Fast** (lit button) Recharging speed.

## Auxiliary functions settings

1. Press the Set Button [7] twice. The auxiliary function settings are displayed in the Energy Displays [10]; Interval in display A, Sequence in display B and Delay in display C.
2. Press the Head/Model Buttons A-C [12] to activate/deactivate the Interval, Sequence and Display functions. (The Interval function can only be activated if the Sequence function has been activated.)
3. Use the Energy Controls A-C [13] to select the Interval, Sequence and Display settings.

## Sync setup

### Sync via cable

1. Connect a sync cord from the camera or a flash meter to one of the Sync Sockets [4] on the generator.

### Sync via cable + flash meter

1. Connect a sync cord from the camera to one of the Sync Sockets [4] on the generator.
2. Connect another sync cable from the flash meter to the free Sync Socket [4].

### Sync via Photocell/IR slave

1. Activate the Photocell/IR slave in the generator by pressing the Slave Button [6]. Ensure that the button is lit.

## Remote sync and control

The D4 Air generator can be remotely synchronized and controlled either via the Profoto Air Remote device or via a computer running the Profoto Studio software.

For remote synchronization only, the Profoto Air Sync device or the Phase One/Mamiya V-Grip Air can be used.

For remote control using the Profoto Studio software, the D4 Air generator can be connected to the computer either via radio (with an optional Profoto Air USB transceiver) or with a USB cable.

For remote sync/control via radio, the same radio channel as for the Profoto Air device or software has to be selected and the group for each head shall be chosen.



### NOTE:

*Synchronization between the camera and the generator shall always be via radio or sync cord, never via the computer and its software.*

## Remote sync/control setup

1. Press the Set Button [7] once to enter auxiliary mode. The group setting for each head will be displayed in the Energy Displays [10].
2. Turn the Energy Controls A-D [13] to select the group setting for each lamp head.
3. Press the Set Button [7] again. The sync/remote settings will be displayed in Energy Display D [10].
4. Select remote control setting by pressing, holding down and turning the Energy Control D [13] until the first position in the Energy Display D [10] shows “r” for remote control via radio or “c” for remote control via cable; see figure below.



5. Set the generator to sync via radio by pressing the Head/Model Button D [12] until “r” is displayed in the second position in the Energy Display D [10]; see figure below. (If “-” is selected, sync via radio is not activated.)



6. Select radio channel by turning the Energy Control D [13] until the desired channel is displayed in the Energy Display D [10]; for example channel 05 as in the figure above.

## Save and recall settings

It is possible to save up to three combined energy level, modeling light, ready signaling, auxiliary functions, sync/remote and radio settings in the memory of generator.

### Save to memory

1. Press and hold down the Recall/Save Button [11] to enter Memory Mode. The Ready Lamp [18] will turn off and a double beep signal will confirm that Memory Mode is entered.
2. While still holding down the Recall/Save Button [11], press and hold down the Head/Model Button [12] corresponding to the memory you want to use; B, C or D.
3. While still holding down the Head/Model Button [12], release the Recall/Save Button [11].
4. Release the Head/Model Button [12]. The Ready Lamp [18] will turn on again.

### Recall from memory

1. Press and hold down the Recall/Save Button [11] to enter Memory Mode. The Ready Lamp [18] will turn off and a double beep signal will confirm that Memory Mode is entered.
2. While still holding down the Recall/Save Button [11], shortly press the Head/Model Button [12] corresponding to the memory you want to recall from; B, C or D. The stored energy level settings will be shown in the Energy Displays [10].
3. While still holding down the Recall/Save Button [11], it is possible to select another memory to recall settings from, by shortly pressing the corresponding Head/Model Button [12].
4. When the desired memory settings are recalled, release the Recall/Save Button [11]. The Ready Lamp [18] will turn on again and a beep signal will confirm that the settings stored in the memory now will apply.

### Turn off generator

The current energy level, modeling light, ready signaling and sync/remote settings are automatically saved and will be available at start up.

1. Press the On/Standby Button [3] to turn off the generator.
2. The Power Indicator [2] will still be green, indicating that the generator is receiving power but is in standby mode.
3. Remove the power cable.

## Trouble shooting

Symptom	Diagnose	Action
Power Indicator [2] is not illuminated	Bad connection to AC mains supply.	<ul style="list-style-type: none"> <li>Check that the power cable is correctly connected to the Mains Socket [1] and to AC mains supply.</li> </ul>
	Mains fuse defect.	<ul style="list-style-type: none"> <li>Check the fuse. If the problem remains after replacing the fuse, contact your nearest Profoto service station.</li> </ul>
Dimmed modeling light	Wrong head configuration	<ul style="list-style-type: none"> <li>Check the modeling light and the mains voltage.</li> <li>Check and adjust the generator configuration according to the instructions on page 18.</li> </ul>
The fuse of the lamp head and/or the lamp bulb blows.	The generator is not configured to be compatible with the connected head.	<ul style="list-style-type: none"> <li>Configure the generator according to the instructions on page 17.</li> </ul>
One or several modeling lights are not lit.	The lamp socket may be deactivated.	<ul style="list-style-type: none"> <li>Press the Head/Model Button(s) [12] to activate the lamp socket(s). The button(s) should be lit.</li> </ul>
	The modeling light may not be turned on.	<ul style="list-style-type: none"> <li>Check that the modeling light switch at the back of the head is at the "On" position.</li> </ul>
Recharging is slow or has stopped completely.	The generator is overheated.	<ul style="list-style-type: none"> <li>Ensure better ventilation and that the air vents are not blocked.</li> <li>Wait until the temperature decreases. The generator will automatically start recharging at normal pace when the temperature has decreased sufficiently.</li> </ul>

## Technical data

All data is to be considered as nominal and Profoto reserves the right make changes without further notice.

### Specifications

Specifications	D4 1200 Air	D4 2400 Air	D4 4800 Air
Energy	1200 Ws	2400 Ws	4800 Ws
Energy Range	8 f-stops (9-1200Ws)	8 f-stops (18- 2400Ws)	8 f-stops (36- 4800Ws)
Energy Distribution	Socket A 9-1200Ws	Socket A 18-2400Ws	Socket A 36-4800Ws
	Socket B 9-1200Ws	Socket B 18-2400Ws	Socket B 36-4800Ws
	Socket C 9-600Ws	Socket C 18-1200Ws	Socket C 36-2400Ws
	Socket D 9-300Ws	Socket D 18-600Ws	Socket D 36-1200Ws
Asymmetry Range		max 7.8 f-stops	
Recycling time, 120V/60Hz	0.07-1.2 s	0.09-2.2s	0.12-4.4 s
Recycling time, 230V/50Hz	0.07-1.2 s	0.09-2.2s	0.12-4.4 s
Flash Duration t 0.5	1/7500-1/1000 s	1/4500-1/600 s	1/2700-1/350s
Modeling Lamps Total W/Pack (max)		2000 W	
Modeling Lamps W/Head (max)		500 W	
Modeling Light Modes		Max, Prop, ½ Prop, Max Prop, Off	
Energy Control Increments		1/10 and 1/1 f-stops	
Energy/Voltage stability		± 1/100 f-stop	
Guide number @ 2 meters/100 ISO with Magnum reflector	90	128	180
Specified data conditions		Acute/D4 head, 120 or 230V AC	
Input Power supply		100-120V/200-240V, 50/60Hz (nominal)	

**Synchronization and control**

	D4 1200 Air	D4 2400 Air	D4 4800 Air
Sync Socket(s)		2	
Lamp Head Socket(s)		4	
Wire Sync Voltage	Compliant to ISO 10330 standard		
Wire Sync Connector	¼ inch phono plug		
Photocell/IR slave, Switch	Yes		
USB Interface	Yes, remote control and firmware updates		
Radio Sync	Yes (2.4 GHz)		
Radio Remote	Yes, Air Remote (2.4 GHz)		
Radio Range	300m		
Computer Control	With Profoto Studio Software (Mac and PC) via Air USB transceiver or USB cable		
Aux Functions	Sequence, Interval, Delay		

**Miscellaneous**

Digital Display	Yes, f-stops, Ws, Aux functions and radio settings		
Fan Cooled	Yes, temperature regulated		
Automatic Multi-Voltage	Yes, 100-120V/200-240V, 50-60Hz		
Ready Signals	Yes, ready lamp, beep or buzz sound and/or dimmed modeling light		
Auto Dumping	Yes		
Recharge Speed Control	Normal/Fast		
Fuse Requirement for 2 units at max. speed setting	Slow blow 10A/230V, 16A/120V		
Automatic mains fuse type	C, D, E 16A/230V 20A/120V		

**Measurements**

Dimensions	29 x 28 x 20 cm; 11.6 x 11.2 x 8 in	32 x 28 x 20 cm; 12.8 x 11.2 x 8 in	36 x 28 x 20 cm; 14.4 x 11.2 x 8 in
Weight	10 kg; 22 lbs	11.5 kg; 25 lbs	13.5 kg; 29.5 lbs

## Compatible heads

The D4 Air generator is fully compatible with the following heads:

- ProHead
- ProTwin
- ProRing
- ProRing2
- Acute/D4 Head
- Acute/D4 Twin
- Acute/D4 Ring
- Sticklight
- Spots
- Striplights
- StillLights

**NOTE:**

*Before connecting any heads to the D4 Air generator, the generator has to be configured to be compatible with Acute/D4 or Pro heads. See instructions on page 18.*

### Old Profoto heads

The D4 Air generator can be used with old Profoto heads, such as the Acute2 series of heads, PF heads, PB heads, Pro-6 heads and Pro-7 heads. However, Profoto does not recommend use of old Acute PAB and Acute Alfa heads (AB or ABS).

**NOTE:**

*When equipped with a 220-240V/50Hz modeling light, PF, PB, Pro-6 and Pro-7 heads can be used at 220-240V/50Hz. However, Profoto does not recommend the usage of these heads with the D4 Air generator at 100-120V, because the fan will not work properly which may lead to overheating problems.*

## Warranty

All Profoto products are individually tested before they leave the company and guaranteed for a period of two years with the exception of flash tubes, glass covers, modeling lamps, batteries and cables. Profoto is not responsible for technical malfunctions created by improper use or accessories made by other companies. If you have any technical problems please get in contact with an authorized Profoto service station.

# Regulatory information

## World-wide Usage of Radio Spectrum

The Profoto Air system operates on the license-free 2.4GHz ISM band for SRD (Short Range Devices). This band may be used in most parts of the world. Regional restrictions may apply.



### Note:

*Refer to national regulations for the region where the Profoto Air Sync or Profoto Air Remote unit shall be operated and make sure that they are followed.*

## EU Declaration of Conformity

In accordance with the Radio and Telecommunications Terminal Equipment Act and Directive 1999/5/EC (R&TTE Directive)

Manufacturer: Profoto AB

Address: Box 2023, 128 21 SKARPNÄCK, Sweden

Product: 2.4GHz SRD communication module

Type: Profoto Air Remote, Profoto Air Sync, Profoto Air USB

Profoto declares that the product complies with the essential requirements of §3 and the other relevant provisions of the FTEG (Article 3 of the R&TTE Directive) when used for its intended purpose.

Harmonised standards applied:

Air Interface of the radio systems pursuant to article 3(2) EN 300 328

Protection requirements concerning electromagnetic compatibility according to article 3(1)b: EN 301 489-1, EN 301 489-17, EN 61000-4-3

Skarpnäck, 2009-03-02

Bo Dalenius, VP Technology and QA  
Profoto AB

# Unites States and Canada F.C.C. and Industry Canada

Compliance Statement (Part 15.19)

This device complies with Part 15 of FCC rules and RSS-210 of Industry Canada.

Operation is subject to the following two conditions:

- 1) this device may not cause harmful interference and,
- 2) this device must accept any interference received, including interference that may cause undesired operation.

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## Warning (Part 15.21)

*Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.*

Ce dispositif est conforme aux normes RSS-210 d'Industrie Canada. L'utilisation de ce dispositif est autorisée seulement aux conditions suivantes :

- 1) il ne doit pas produire de brouillage et
- 2) l'utilisateur du dispositif doit être prêt à accepter tout brouillage radioélectrique reçu, même si ce brouillage est susceptible de compromettre le fonctionnement du dispositif.

The term 'IC' before the certification/registration number only signifies that the Industry Canada technical specifications were met.

Les lettres 'IC' n'ont aucune autre signification ni aucun autre but que d'identifier ce qui suit comme le numéro de certification/d'enregistrement d'Industrie Canada.

**ProfotoAB**

**Transmitter / Receiver**

**MODEL: Profoto Air Sync**

**PRODUCT NO: PCA5108-0000**

**MODEL: Profoto Air Remote**

**PRODUCT NO: PCA5102-0000**

**MODEL: Profoto Air USB**

**PRODUCT NO: PCA5104-0000**

**FCC ID: W4G-RMI**

**IC: 8167A-RMI**

**Made in Sweden**

# Japan

The module has been granted modular approval for sale and operation in Japan.

特定無線設備の種類

Classification of specified radio equipment:

Article 2, Clause 1, Item 19

2.4 GHz Wide Band Low Power Data Communication

上記のとおり、電波法第38条の24第1項の規定に基づく認証を行ったものであることを証する。

This is to certify that the above-mentioned certification by type has been granted in accordance with the provisions of Article 38-24, Paragraph 1 of the Radio Law.



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

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