



Pro-6 Manual

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NOMENCLATURE

Pro Head (PB Head)

1. Modelling light on/off
2. Fan intermittent/continuous
3. Umbrella holder

WARNINGS

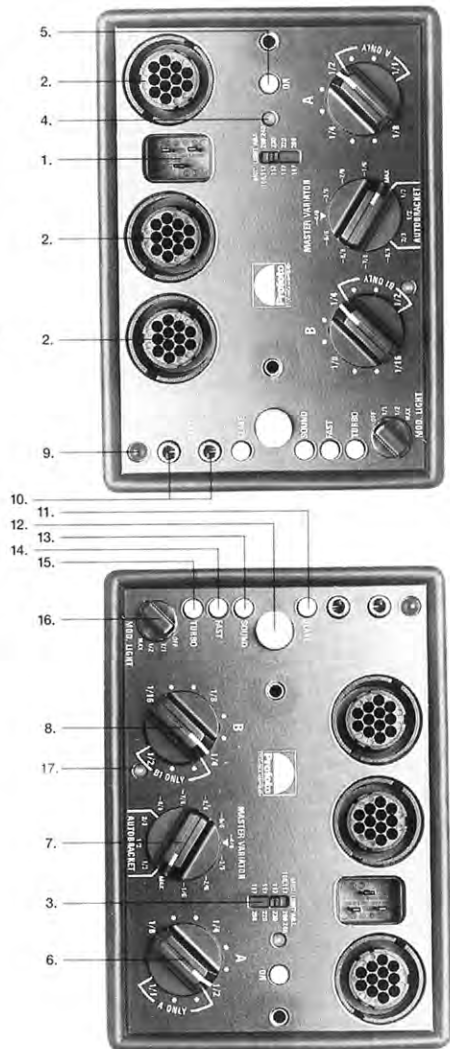
Profoto generators are part of a complete professional lighting system. Read the instruction manual carefully before use. Flash tubes and modelling lamps emit considerable heat and can be dangerous if not used properly. Always unplug the lamp cable from the generator before changing modelling lamp or flash tube.

- Do not touch hot metal parts.
- Do not obstruct ventilation.
- Do not connect lamp head to generator with the protective cap in place. Additionally, when using the heads, do not place filters, diffusing materials, or any other obstructions directly onto the glass covers, flashtubes or modelling lights.
- Never position the light extremely close to people.
- When mounting umbrella reflector, do not touch flash tube or modelling lamp with the metal shaft - there is the risk of high voltage.

**UNDER NO CIRCUMSTANCES IS ANY
PART OF THE EQUIPMENT TO BE OPENED!
THE EQUIPMENT IS NOT USER-SERVICEABLE
AND THERE IS DANGEROUS HIGH VOLTAGE INSIDE!
IN THE EVENT OF DIFFICULTY
NOTIFY YOUR DEALER FOR PROMPT SERVICE.**

NOMENCLATURE

1. Mains (AC) connection
2. Lamp head sockets A, B1 and B2
3. Modelling light voltage adjuster
4. Indicator for mains (AC) connection
5. Mains (AC) power on/off
6. Energy dial for lamp socket A
7. Master Variator - energy control & bracketing
8. Energy dial for lamp socket B1 and B2
9. Photocell
10. Sync sockets
11. Photocell button on/off
12. Ready lamp/Test button
13. Audible signal on/off
14. Slow/fast recharging button
15. Turbo recharging button on/off
16. Modelling light control
17. Indicator for switch position



CONDENSED MANUAL

- Connect the generator to the mains supply with the enclosed power cable (1). The green lamp (4) should now light up indicating acceptable AC current to the generator.
- Connect the desired lamp heads to the sockets A, B1, B2 (2).
- Slide the modelling light voltage adjuster to correspond with your mains supply voltage (3).
- Use the control (16) marked MOD. LIGHT. to choose modelling light mode.
- Press the button (5) marked ON to start charging. The white ready lamp (12) will light up when the generator is fully charged.
- Choose how much energy should be distributed to each lamp head socket. Use energy dial A (6) for socket A. Use energy dial B (8) for socket B1 and B2.
- Choose the desired energy level with the Master Variator (7) . For full energy choose MAX.
- Connect sync cord and/or flash meter to the sync sockets(s) (10) marked SYNC.
- Activate the photocell by pressing the button (13) marked SLAVE.
- Activate the audible signal by pressing the button (13) marked SOUND.
- For normal recharging speed, press the button (14) marked FAST.
- For extra fast recharging, press the button (15) marked TURBO.



1. MAINS (AC) CONNECTION

Use the included power cable for connection to the mains power supply. The Pro-6 can be connected to all common mains voltages; 90-240 Volts, 50-60 Hz. The generator automatically senses which voltage range is supplied.

The green lamp (4) underneath the handle indicates that the generator is receiving power from the mains. If the lamp fails to light up, check the mains fuse for faults.

WARNING: Never use ordinary household extension cords to elongate the power cable. They may overheat. Contact your Profoto distributor for proper equipment.

2. CONNECTING LAMP HEADS

One, two or three lamp heads can be connected to the sockets marked A, B1 and B2. When connecting the lamp head plug, align the dots on the plug with the white dot on the generator panel.

Secure by turning the locking ring on the plug clockwise. The plug is especially designed for flash use and can be connected or disconnected at any time before, during or after charging.

3. ENERGY DISTRIBUTION

When only ONE lamp head is in use, use the A socket. Only socket A can be used to release the generator's total energy to ONE lamp head. Use dial A to adjust energy in 1/3 f:stop increments from full energy (1/1) down to one eighth (1/8) energy, which is equivalent to 4 f:stops.

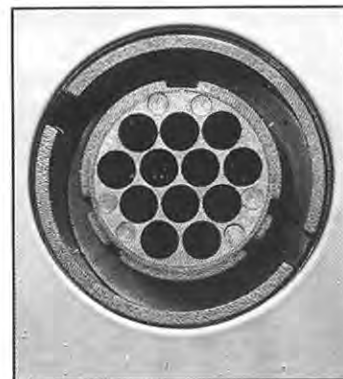
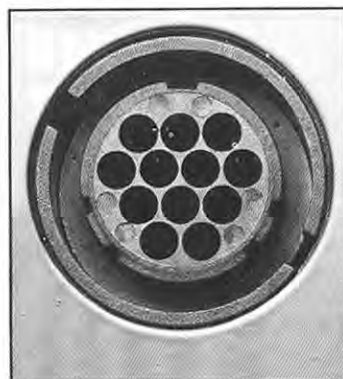
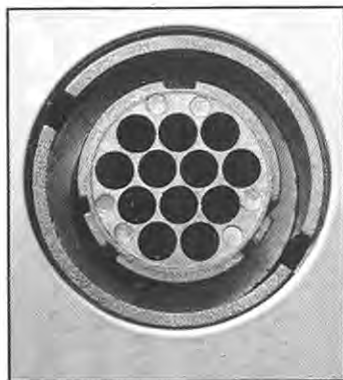
NOTE: When the dial is positioned to release more than 1/2 energy (within the area marked A ONLY) always point dial B towards the red indicator (17). If this is not done, the indicator lamp will light up, the audible signal will sound and flash release will not be possible.

When the dial is pointed within the (A ONLY) area, the flash is only released to the lamp head connected to socket A, even if other lamp heads are connected to the B-socket(s).

A SECOND lamp head is connected to socket B1. Use dial B to adjust energy in 1/3 rd f:stop increments, from half energy (1/2) down to one sixteenth energy (1/16), equivalent to 4 f:stops.

When the dial is pointed within the (B1 ONLY) area, the flash will not be released through B2 even if lamp head is connected.

NOTE: To release a flash through B-socket(s), dial A must be pointed to less than



CONDENSED MANUAL

- Connect the generator to the mains supply with the enclosed power cable (1). The green lamp (4) should now light up indicating acceptable AC current to the generator.
- Connect the desired lamp heads to the sockets A, B1, B2 (2).
- Slide the modelling light voltage adjuster to correspond with your mains supply voltage (3).
- Use the control (16) marked MOD. LIGHT. to choose modelling light mode.
- Press the button (5) marked ON to start charging. The white ready lamp (12) will light up when the generator is fully charged.
- Choose how much energy should be distributed to each lamp head socket. Use energy dial A (6) for socket A. Use energy dial B (8) for socket B1 and B2.
- Choose the desired energy level with the Master Variator (7) . For full energy choose MAX.
- Connect sync cord and/or flash meter to the sync sockets(s) (10) marked SYNC.
- Activate the photocell by pressing the button (13) marked SLAVE.
- Activate the audible signal by pressing the button (13) marked SOUND.
- For normal recharging speed, press the button (14) marked FAST.
- For extra fast recharging, press the button (15) marked TURBO.



1. MAINS (AC) CONNECTION

Use the included power cable for connection to the mains power supply. The Pro-6 can be connected to all common mains voltages; 90-240 Volts, 50-60 Hz. The generator automatically senses which voltage range is supplied. The green lamp (4) underneath the handle indicates that the generator is receiving power from the mains. If the lamp fails to light up, check the mains fuse for faults.

WARNING: Never use ordinary household extension cords to elongate the power cable. They may overheat. Contact your Profoto distributor for proper equipment.

energy. The audible signal will sound if dial A is not positioned correctly.

A THIRD lamp head is connected to socket B2. Use dial B to adjust energy in 1/3rd f:stop increments, from one quarter energy (1/4) down to one sixteenth energy (1/16). The B1 lamp head will follow. (i.e. both B1 and B2 will receive 1/8 energy when the dial is positioned for 1/8 energy).

NOTE: The energy output is determined by energy dials A and B. The energy output will remain consistent, regardless of which lamp sockets are used or the number of lamp heads connected to them.

Energy "dumping" is not necessary when the Master Variator control (7) is turned to MAX.

4. ENERGY CONTROL

The generators total energy is regulated with the control (7) marked MASTER VARIATOR. The total energy can be adjusted in one sixth (1/6) f:stop increments, from (MAX) down to eight sixth (8/6) f:stop increments. (Equivalent to 1 1/3 f:stop.) See also (9) Manual bracketing, (10) Auto-bracketing and (15) Colour temperature.

5. ADJUSTING MODELLING LIGHT

The modelling light voltage adjuster (3) marked MOD. LIGHT ADJ. should be set to correspond with the mains supply. This will proportionally align the modelling light intensity and the flash energy. If an incorrect setting is chosen, the modelling light will not comply completely with the flash energy and the life expectancy of the modelling lamp will be shortened.



6. CHOICE OF MODELLING LIGHT

The control (16) marked MOD.LIGHT is used to choose the following alternatives:

- OFF modelling light off. NOTE: The ready lamp (12) will also be turned off.
- 1/1 modelling light is receiving the designated proportional energy at full intensity determined by the positions of dial A, B, and the MASTER VARIATOR.
- 1/2 modelling light is receiving the designated proportional energy at one-half intensity determined by the positions of dials A, B, and the MASTER VARIATOR.
- MAX modelling light is at maximum light output, regardless of energy settings.

Half proportional modelling light (1/2) is chosen when a Pro-6/1200 and Pro-6/2400 are used together. To keep the modelling light proportionally aligned between the two generators, the Pro-6/1200 is set to a 1/2 modelling light position as the flash energy is half of the Pro-6/2400.

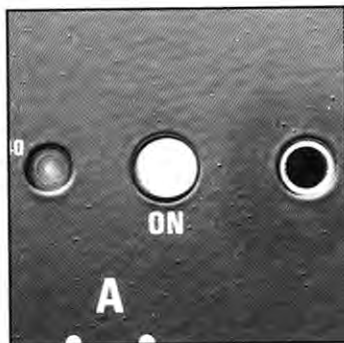
7. CONNECTING CAMERA AND FLASH METER

The two sync sockets allow the camera and flash meter to be connected simultaneously.

NOTE: The photocell is automatically disabled when the sync cord is connected to either of these sockets.

8. RECHARGING

The recharging starts when the ON button is pressed down. Slow, fast or turbo-recharge can be chosen. When both buttons (14 & 15) marked FAST and TURBO are released, the generator will recharge slowly. Choose this alternative when the generator is connected to a mains supply with weak fuses, or if you are



which then recharge to the setting indicated.

- Set the lighting as you would normally and determine the appropriate f:stop. Take the first exposure.
- Turn the Master Variator to the desired position of overexposure: 1/6 - 4/6 of an f:stop. Take the second exposure.
- Turn the Master Variator to the desired position of underexposure: 1/6 - 4/6 of an f:stop.
- Press Test button (12) to "dump" excess power. Take the third exposure, and so on...



11. AUTO-BRACKETING

The generator can also be set to deliver an automatic three exposure bracket:

- Turn the Master Variator vertically towards the arrow and release an "open" flash by pressing the Test button (12).
- Set the lighting as you would normally and determine the appropriate f:stop.
- Turn the Master Variator to AUTOBRACKET choosing 1/3, 1/2 or 2/3 of an f:stop.
- Start the auto-bracketing sequence by pressing the Test button (12).
- The generator will now recharge for a "normal" exposure which is indicated by the steady blinking of the ready lamp (12). Take the first exposure.
- The generator will now recharge for an overexposed picture, which is indicated by the ready lamp lighting up for longer periods. Take the second exposure.
- The generator will now recharge for an underexposed picture, which is indicated by the ready lamp lighting up for shorter periods. Take the third exposure.
- The generator will now recharge for a normal exposure, and so on...

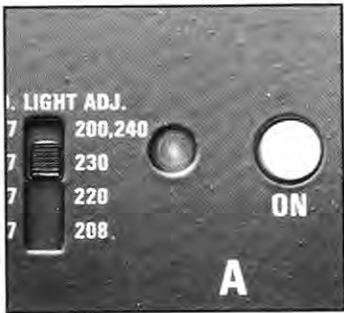


Turn the Master Variator towards the arrow each time new light readings are made.

Auto-bracketing with more than one generator.

After all the generators have been set up and prepared, the auto-bracketing sequence is started by pressing the ready lamp button on the generator that the sync cord is connected to.

If unsynchronised flashing occurs on any generator, rectify by first disconnecting the lamp cable and then pressing the ready lamp button until the "right" blinking rhythm is obtained.



12. SIGNALS - VISIBLE & AUDIBLE

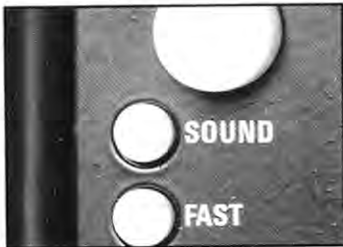
The green indicator (4) underneath the handle will light up, when the generator is connected and receiving power from the mains supply.

The white, ready lamp button (12) will light up when the generator is fully (re)charged. NOTE: the button will not light up when the modelling light control (16) is turned OFF. This button will light up in rhythmical patterns when certain functions are used. (see 10. auto-bracketing).

When the generator is fully (re)charged a short "beep" will be heard. This signal can be turned off by releasing the button (13) marked SOUND.

The red indicator (17) will light up and the "beep" will sound if the energy dial A (6) is in the A ONLY area and dial B is not pointed towards the red indicator. Point dial B towards the red indicator and the red light and the "beep" will be turned off.

If a flash is released before the generator is fully charged a long "beep" will sound, indicating underexposed picture.



13. AUTOMATIC SAFETY FUNCTIONS

If the generator overheats for any reason a protective system will automatically start up. The generators recharging intervals will slow down 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 start up under extreme conditions when the air vents are blocked for some reason.

WARNING: The air vents on the generator must never be blocked or covered in any way.

14. RELIABILITY TESTING **- The R-test**

The Profoto R-test guarantees that all products leaving the factory meet the very high standards required of professional equipment for professional photographers. The R-test is a rigorous performance test that Profoto's generators are put through - 720 full power flashes are released during one hour, equivalent to 20 rolls of 36-frame film. After the test the equipment is examined to see that all parts have kept a normal operating temperature and are not malfunctioning in any way.

All of Profoto's newly developed products are subjected to the R-test before being released for production.

15. COLOUR TEMPERATURE

The colour temperature is constant and reliable regardless of the energy output chosen with dial A, B1 and B2. The colour temperature can be adjusted with the en-

ergy control (7) marked MASTER VARIATOR. Each 1/6 increment reduces the colour temperature by approx. 50° Kelvin which means a total down-scale of approx. 400° Kelvin.

NOTE: Even more distinctive colour temperature adjustments can be obtained by combining flash tubes and/or glass covers with different coatings.

16. FLASH DURATION

The flash duration can be shortened by reducing the energy output of energy dials A and B. The shortest flash duration using a Pro-6 1200 with 1/16 energy output and a PB lamp head, is 1/7500 sec.

NOTE: Reducing the energy output with the MASTER VARIATOR control (7), will not affect flash duration.

17. THE PB LAMP HEAD

The on/off turn-switch at the back of the lamp head controls the modelling light.

The fan inside the lamp head is thermostat-controlled. For continuous cooling of the lamp head, turn the blue switch (2), which will turn the thermostat function off.

WARNING: ALWAYS UNPLUG THE LAMP-HEAD CABLE FROM THE GENERATOR BEFORE CHANGING MODELLING LAMP, FLASH TUBE OR GLASS COVER.

The modelling lamp is mounted in a "mini-can" screw base. The flash tube has two metal pins for insertion into the lamp head. When removing a flash tube, pull it straight out of the sockets. When inserting a flash tube, check that the trigger-wire connection clasps properly around the flash tube.

When mounting a glass cover, check that both locking clips are securely through the holes of the glass cover.



18. TECHNICAL DATA

Guide no. in meters/feet at 100 ASA Magnum reflector 50°	Pro-6 1200 140/460	Pro-6 2400 201/660
Flash duration ($t_{0.5}$)	Pro-6 1200	
1/1 1200 Ws	1/1600 sec.	
1/2 600 Ws	1/2200 sec.	
1/4 300 Ws	1/3200 sec.	
1/8 150 Ws	1/5300 sec.	
1/16 75 Ws	1/7500 sec.	
		Pro-6 2400
1/1 2400 Ws		1/1000 sec.
1/2 1200 Ws		1/1600 sec.
1/4 600 Ws		1/2200 sec.
1/8 300 Ws		1/3200 sec.
1/16 150 Ws		1/5300 sec.
Recharging time (Turbo)	Pro-6 1200	Pro-6 2400
240V / 50Hz	0.11 - 0.70 sec.	0.12 - 1.35 sec.
230V / 50Hz	0.12 - 0.75 sec.	0.15 - 1.45 sec.
220V / 50Hz	0.13 - 0.85 sec.	0.16 - 1.60 sec.
200V / 50Hz	0.14 - 1.00 sec.	0.17 - 1.80 sec.
200V / 60Hz	0.14 - 0.80 sec.	0.17 - 1.50 sec.
117V / 60Hz	0.12 - 0.80 sec.	0.15 - 1.55 sec.
100V / 60Hz	0.14 - 1.10 sec.	0.17 - 1.80 sec.
Current consumption (Turbo mode)		
200-240V, 50/60 Hz 10A		
100-120V, 50/60 Hz 15A		
The Pro-6 can be powered by most gasoline-powered generators with an effective output of at least 3000W. Contact your dealer for further information.		
Maximum modelling light		
Max 500W per lamp head, (total of 1500W)		
Generator size and weight	Pro-6 1200	Pro-6 2400
Length x width x height	32 x 24 x 17 cm (13 x 9 x 6")	40 x 24 x 17 cm (15 x 9 x 6")
Weight	9 kg (21 lbs)	12 kg (26 lbs)
Lamp head size	Pro Head	
Length (glass cover incl.) x diameter	28 x 10 cm (11 x 4")	