



Acute12
Acute24

Manual



WARNING

Profoto generators and lampheads are part of a complete professional lighting system. Please read the instruction manual carefully before use.

Flash tubes and modelling lamps emit considerable heat and may cause injury if not handled properly.

NOTE! Always unplug the generator before changing flashtube or modelling lamp.

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

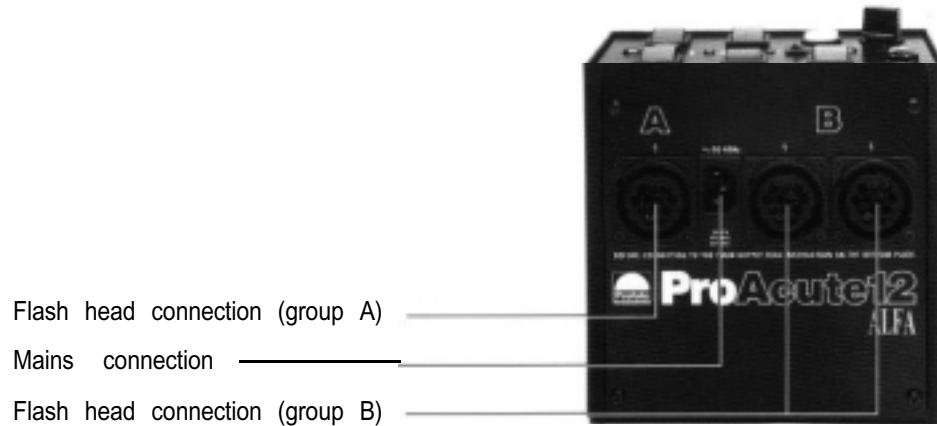
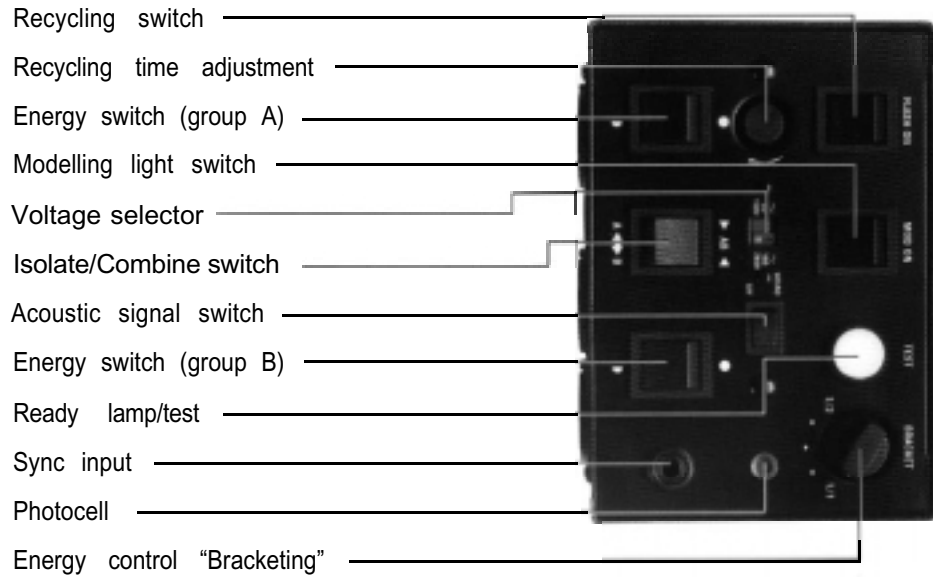
NOTE! Under no circumstances is any part of the equipment to be opened! The equipment is not user-serviceable and there is dangerous high voltage inside!

*Service may only be performed
by an authorised repairstation!*

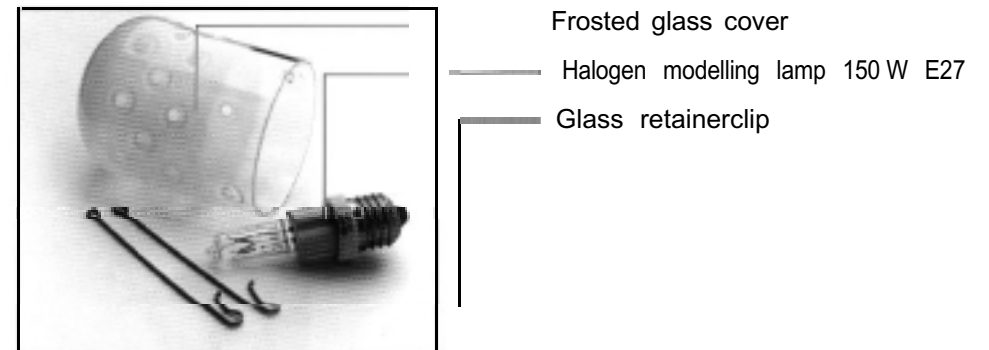
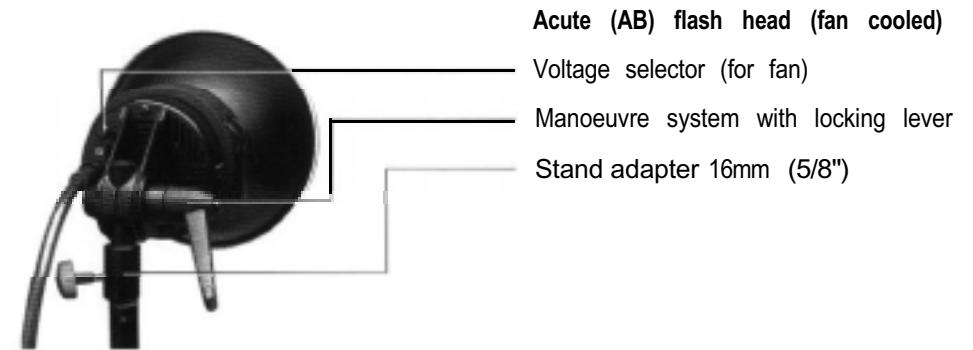
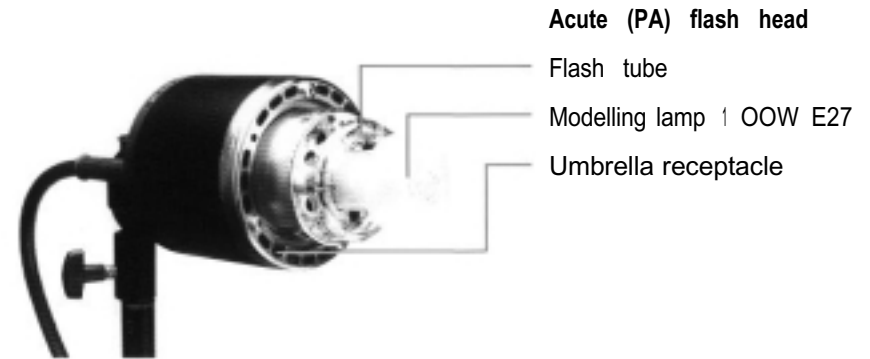
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NOMENCLATURE, GENERATOR



NOMENCLATURE FLASH HEADS

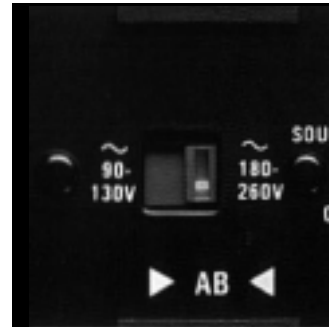


BRIEF MANUAL

- Check that the voltage selector, on generator and flash head, is compatible with the mains supply voltage
- Check that the modelling lamp has the correct voltage
- Connect flash head/s
 - Connect the mains supply cable
 - Choose recycling time
 - Switch on charging (FLASH ON)
 - Switch on modelling light (MOD ON)
 - Choose energy distribution
 - Press the ready lamp/test button for flash
- Connect sync cable

VOLTAGE SELECTION

There are two voltage ranges to choose between: 90-130V. 60Hz or 180-260 V. 50 Hz. Before mains connection make sure that the voltage selector matches the mains supply voltage on generator and flash heads. Check also that the modelling lamp has the correct voltage.



MAINS(AC) CONNECTION

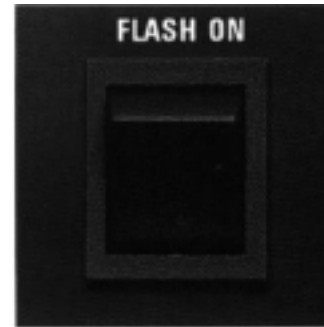
The generator is designed for AC connection only. It can be connected to the most common mains voltages: 90-130 V, 60Hz or 180-260 V, 50 Hz. Before mains connection make sure that the voltage selectors match the mains supply voltage.

Connect the unit to the mains with the cable included in the delivery.

WARNING!

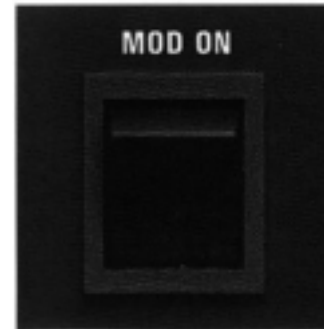
Never use ordinary household extension cords to extend the power cable. They may overheat, Contact your Profoto distributor for proper equipment.

CHARGING



Check that the voltage selectors match the mains supply voltage. Turn on the main switch (FLASH ON).

The recycling time is very short. Variations will occur depending on the selected flash energy and voltage. The shortest recycling time is obtained with low flash energy.



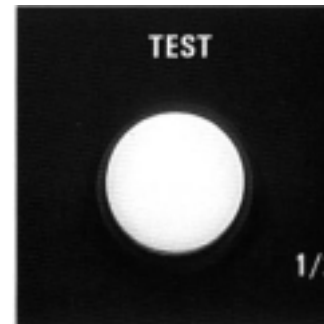
MODELLING LAMP

The modelling lamp can be turned on/off by the switch on generator (MOD ON). In the off position the fan, in the flash head, is also turned off. The modelling lamp is powered directly from the mains. It is therefore important to check that the rated voltage for the lamp corresponds with the mains supply. A 100 Watt medium screw base lamp (E27) is included in standard deliveries. The AB flash head can also be fitted with a Halogen 150-250 Watt medium screw base lamp (E27).

The flash tube and the modelling lamp can be enclosed in a frosted glass cover for a closer matching of modelling light and flash illumination.

NOTE!

ALWAYS UNPLUG THE LAMPCABLE FROM THE GENERATOR BEFORE CHANGING MODELLING LAMP OR FLASH TUBE.



READY LAMP/TEST BUTTON

The ready lamp button has two functions. First, it lights up when the unit is fully recycled. Second, it can be used to manually sync the unit (open flash). When a lower energy setting is chosen, with the "Bracketing" selector, release a flash so that the unit can recycle for the new energy setting.

SYNCHRONIZATION

Synchronise by connecting the synchro cable from the camera to the synchro input. When the synchro cable is connected the built-in photocell will be disabled.

PHOTOCELL

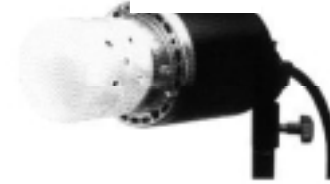
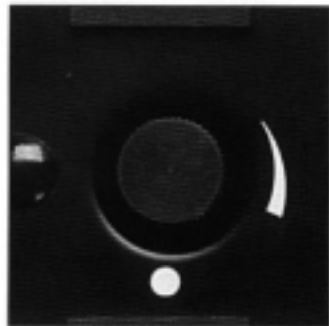
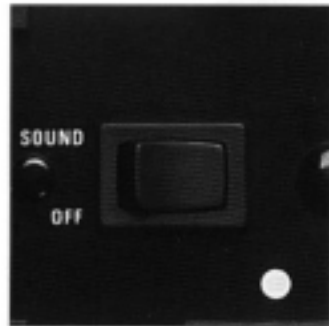
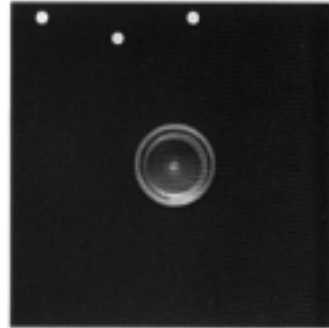
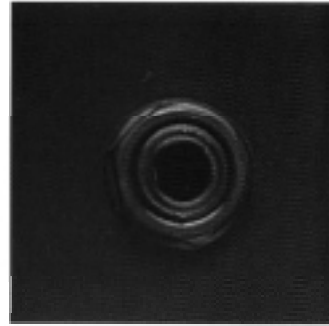
The photocell on the generator panel serves as a slave sync when another flash appears. When a synchro cable is used the photocell is automatically disabled

ACOUSTIC SIGNAL

The units acoustic signal system "beeps" when the unit has fully recycled. If the signal isn't wanted, press the button marked "sound".

RECYCLING TIME ADJUSTMENT

With the recycling adjustment dial the recycling time can be lengthened gradually to help preserve weak fuses or heavily loaded mains supply.



FLASH HEADS

Acute (AB and ABS) flash head

The AB/ABS flash head is fan-cooled. Make sure that the voltage selector matches the mains supply voltage. Check also that the modelling lamp has the correct voltage.

The AB flash head is delivered with the Disc reflector intended for use with an umbrella. When more advanced lighting is desired, we recommend the use of any of Profotos many accessories and reflectors all easily attached directly onto the head.

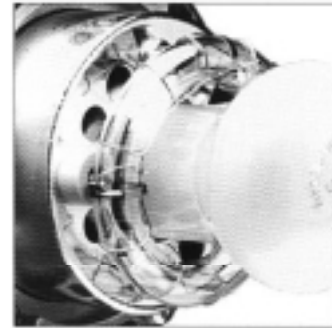
The PA flash head is convection-cooled, i.e. without fan cooling, which puts a limit on the number of flashes that the lamp head can emit without overheating. The maximum output is 4800 Ws per minute which is to a 2400 Ws flash every 30 seconds or 1200 Ws flash every 15 seconds, or 600 Ws flash every 8 seconds, or 300 Ws every 4 seconds, and so on.

The modelling lamp included in the delivery is a 100 Watt medium screw base lamp (E27). The AB head can also be fitted with a Halogen 150-250 Watt medium screw base lamp (E27). The flash tube and the modelling lamp can be enclosed in a frosted glass cover for a closer matching of modelling light and flash illumination.

The ABS flash head is delivered with the Zoom reflector, Halogen modelling lamp 150 Watt and frosted glass cover.

FLASHTUBE

A UV-coated Quartz flash tube is included in standard PA and AB/ABS flash head deliveries. The flash tube has two metal pins for insertion into the unit. 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.



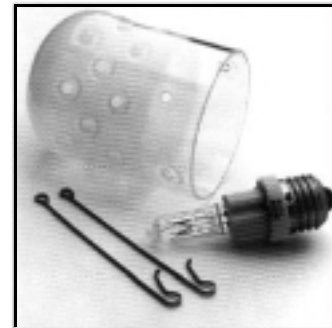
NOTE!

ALWAYS UNPLUG THE LAMP CABLE FROM THE GENERATOR BEFORE CHANGING MODELLING LAMP OR FLASH TUBE.

COLOURTEMPERATURE

A frosted glass cover is included in AB Special (ABS) flash head deliveries. It gives, in combination with the UV-coated flash tube, a recommended colour temperature for daylight type film.

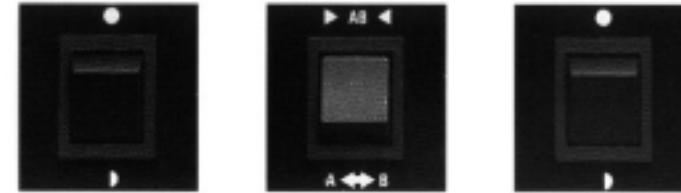
Distinctive colour temperature adjustments can be obtained by combining flash tubes and/or glass covers with different coatings.



ENERGY DISTRIBUTION

The energy is divided into two groups, A and B. The energy in A can be released through ONE flash head and the energy in B can be released through ONE flash head or can be divided equally between TWO flash heads. The two groups (A and B) can be isolated or combined. The energy can be reduced to half in both groups by using the full/half switches. The total energy can additionally be reduced by using the bracketing dial (see Energy control).

The total energy in the Acute12 is 1200 Ws and in the Acute24 2400 Ws. The energy can be divided symmetrically or asymmetrically as follows:



ONE FLASH HEAD

	Acute1 2		Acute24	
	Grupp A	Grupp B	Grupp A	Grupp B
• +AB+	1200 wsd	-	2400 wsd	-
• +AB+	900 wsd	-	1800 wsd	-
• A ↔ B	600 wsd	-	1200 wsd	-
■ A ↔ B	300 wsd	-	600 wsd	-
■ A - B	150 wsd	-	300 wsd	-

TWO FLASH HEADS Symmetrical

• +AB+	600	+	600 wsd	1200	+	1200 wsd
• +AB+	450	+	450 wsd	900	+	900 wsd
■ +AB+	300	+	300 wsd	600	+	600 wsd
• A ↔ B	150	+	150 wsd	300	+	300 wsd
■ A - B	75	+	75 wsd	150	+	150 wsd

TWO FLASH HEADS Asymmetrical

● A ↔ B	600	+	300 wsd	1200	+	600 wsd
● A ↔ B	300	+	150 wsd	600	+	300 wsd

THREE FLASH HEADS Symmetrical

• +AB+	400	+	400 + 400 wsd	800	+	800 + 800 wsd
● +AB+	300	+	300 + 300 wsd	600	+	600 + 600 wsd
■ +AB+	200	+	200 + 200 wsd	400	+	400 + 400 wsd
■ +AB+	100	+	100 + 100 wsd	200	+	200 + 200 wsd

THREE FLASH HEADS Asymmetrical

● A ↔ B	600	+	300 + 300 wsd	1200	+	600 + 600 wsd
• A ↔ B	600	+	150 + 150 wsd	1200	+	300 + 300 wsd
■ A ↔ B	300	+	150 + 150 wsd	600	+	300 + 300 wsd
■ A - B	150	+	75 + 75 wsd	600	+	150 + 150 wsd

ENERGY CONTROL

With the "bracketing" selector the total energy can, irrespective of the energy distribution, be reduced by 50% (1/1 to 1/2 = one f/stop) in 1/4 of one f/stop.

"BRACKETING"

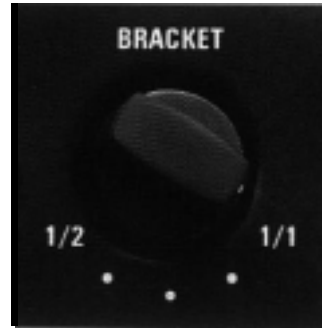
Turn the "bracketing" selector to the middle dot. Find the right f/stop with the flash meter. Make the first exposure.

Turn the selector to 1/1 energy. The Light power increases to a 1/2 stop overexposure. Make the second exposure.

Turn the selector to 1/2 energy. Press the test button. After recycling the light power is decreased to a 1/2 f/stop underexposure. Now make the third exposure.

This results in three different exposures. One is "correct", one is overexposed by a 1/2 f/stop and one is underexposed by a 1/2 f/stop. There have been three different exposures without any change in lighting or depth of field.

It is of course possible to choose only a 1/4 f/stop "bracketing". 1/1 energy to 1/2 energy is one f/stop and between dots is a 1/4 of one f/stop.



AUTOMATIC SAFETY FUNCTION

The first charging cycle, after the mains switch has been turned on, is always in a slow step mode (open charging) to allow the status of the capacitors to be gauged. If the capacitors have developed high leakage current, which happens if the flash unit has not been used for a while, the charging will be aborted. If this occurs, turn the charging off, set the "BRACKET" to 1/2 and wait about 30 seconds before turning it on again, Repeat this a few times, and increase the "BRACKET" setting. If the generator still isn't fully charged, take the unit to qualified repair personnel for service.

If the unit is under intensive use with frequent flashing for a long period of time, the recycling will stop completely. This is to prevent the unit from overheating.

WARRANTY

All Profoto products are guaranteed for a period of 2 years, with the exception of flash tubes and modelling lamps.

TECHNICAL DATA

Guide no. In meter/feet at 100 ASA:	Acute12	Acute24
Magnum reflector 50 degree.	128/422	180/592
Zoom reflector	90/296	128/422
Umbrella	45/148	64/211
Flash duration (t0,5) at:		
2400 Ws	–	1/160 sec.
1200 ws	1/300 sec.	1/300 sec.
600 Ws	1/500 sec.	1/500 sec.
300 ws	1/800 sec.	1/800 sec.
150ws	1/1 400 sec.	–
Recycling speed at:		
240 Volt 50 Hz	0.32 - 1.7 sec.	0.64 - 3.5 sec.
100 Volt 50 Hz	0.40 - 2.8 sec.	0.80 - 5.4 sec.
117 Volt 60 Hz	0.32 - 1.7 sec.	0.64 - 3.5 sec.
Size, generator in cm/inches	13X19X22	13X19X30
(length/width/height)	5 x 7 1/2 x 8 2/3	5 X 7 1/2 x 11 3/4
Weight kg/lb.:	4.2 / 9.2	6.3 / 13.6
Max modelling lamp:	750 Watt	750 Watt