



# The flash connection<sup>+</sup>


## INSTRUCTIONS FOR USE

1500 MICRO  
3000 MICRO  
6000 MICRO





**BASIC INSTRUCTIONS FOR SETTING UP AND OPERATION**

**SETTING UP**

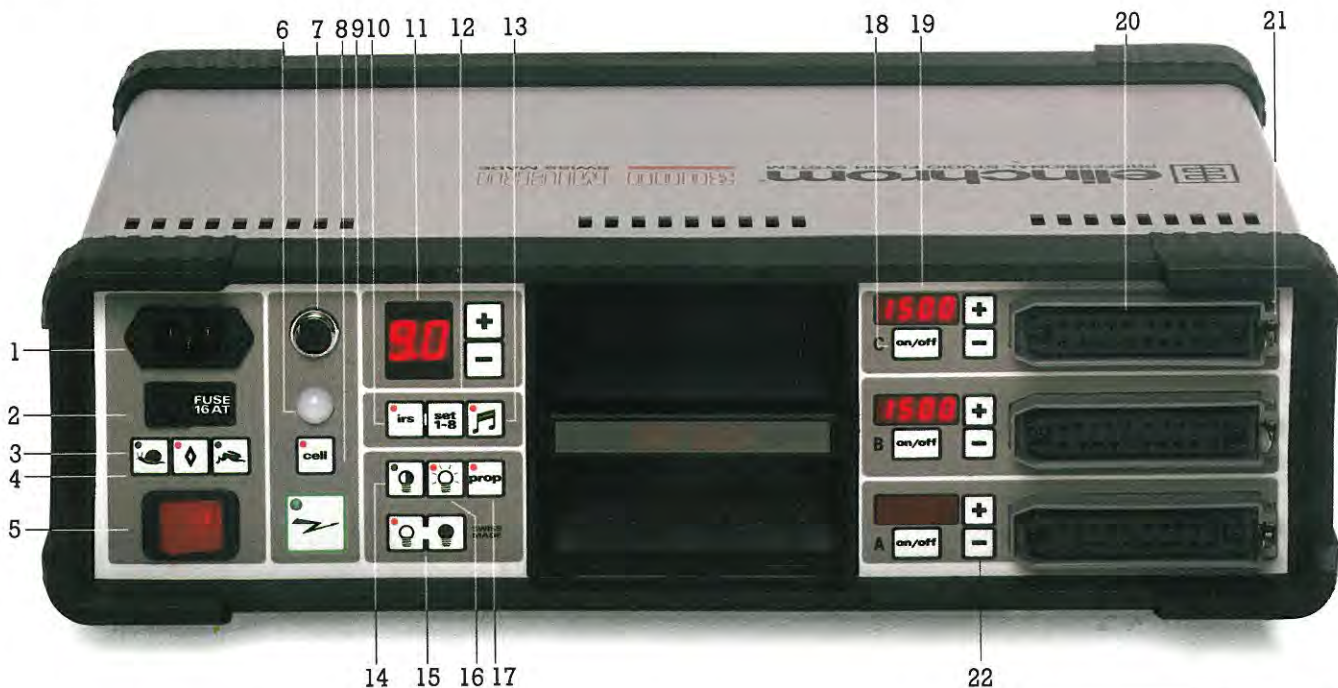
- Connect the mains lead to an earthed AC supply of the correct voltage
- Switch on mains switch (5). LED display (11) will indicate 0.0 and the open flash touch (9) blinks
- Depress the touch  for DIM/BRIGHT modelling lamp charge indicator
- Attach the sync. cord to the synchronising socket (7)
- For use without the sync. cord, depress the touch «cell» (8) and the red LED will indicate that the remote cell (6) is functioning
- Attach the lampheads, toe first, heel last and press firmly.

N.B. If the generator has been used recently, the memory will have retained all the previous information. If any power indicators blink they are simply indicating that it is not yet «set up» to follow the memorised instructions. See below.

**OPERATION**

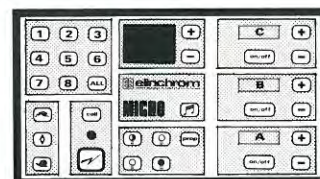
- Depress the touches (18) to connect the lampheads. This will illuminate the appropriate lamphead displays (9) and the total power display (11). If any of the lamphead displays blink it indicates an «overpower or underpower» request. The touches   should be used to correct this.
- The system is now ready but for more detailed information, please read the following pages.

N.B. The touches are operational when the indicator illuminates. The memory accepts no information when the generator power is switched off.



- 1 Power socket
- 2 Fuse
- 3 Charge speed selectors
  - slow charge 6 A
  - normal charge 10 A
  - fast charge 16 A
- 4 Modelling lamps switch off during slow charge when touch 16 is pressed
- 5 Mains switch
- 6 Photocell and IR-Receiver
- 7 Sync socket with security lock
- 8 Photocell ON/OFF
- 9 Open flash with charge indicator
- 10 IR-Remote Control ON/OFF
- 11 LED indication of total power
- 12 Generator selector for IR (1-8 packs)

*IR REMOTE CONTROL*



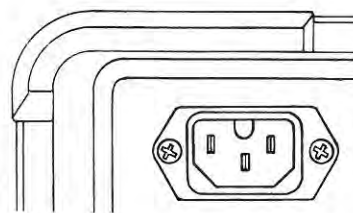
- 13 Multi-purpose acoustic signal
- 14 Half/full power for modelling lamps
- 15 Modelling lamps ON/OFF
- 16 Modelling lamp dimmer/charge signal
- 17 Proportional modelling light
- 18 Lampheads ON/OFF
- 19 LED indication in Ws/Joules
- 20 Lamphead sockets
- 21 Security catches
- 22 Lamphead power variators

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### MAINS SUPPLY

Only connect the generator to an earthed power supply of the correct voltage. Should a mains extension cable be used check carefully that it also has an «earth» and 3-pin connectors. Check that the mains supply fuses are adequate.



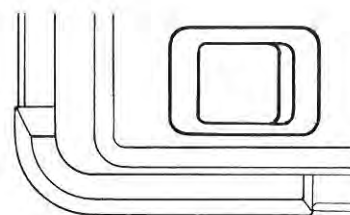
### FUSE

Standard 5 × 20 mm cartridge, 16 AT slow blow. To replace turn anti-clockwise, 30 degrees. If the fuse continues to «blow», contact an ELINCHROM service centre.



### MAINS SWITCH

Illuminated red when switched on. Always switch off the generator before disconnecting the power supply.



### CHARGE SPEED SELECTORS



**RAPID**

This setting allows the generators to charge at maximum speed but the current drawn is very large. If a number of generators with rapid recharge are all connected to one power line, the power line fuses may blow.



**NORMAL**

Average setting. A compromise between power drawn and speed of use.






**SLOW**

Recommended for «suspect» power supplies e.g. very old installations. Use this setting if the mains fuse blows on faster speed settings.

N.B. For even less load on the power supply line use  and  jointly. The modelling lamps automatically extinguish when the generator is charging but illuminate when the charge cycle ends.

PETROL GENERATORS supplying 220 V 50 Hz alternating current may be used. The minimum power required is 1200 VA.

CHARGE SPEED	 6A	 10A	 16A
CHARGE LEVEL	MIN. 1/16    MAX. 1/1	MIN. 1/16    MAX. 1/1	MIN. 1/16    MAX. 1/1
220V ELINCHROM 1500 MICRO	0,9–4,2 S.	0,4–2,1 S.	0,3–1,5 S.
220V ELINCHROM 3000 MICRO	1,7–8 S.	0,8–4 S.	0,6–2,7 S.
220V ELINCHROM 6000 MICRO	3,15–15,4 S.	1,7–8 S.	1,5–5,5 S.

**INITIAL CHARGE**

If the generator has been recently used and the capacitors do not require «reforming», the generator will charge at the speed setting indicated, i.e. fast, normal or slow.

If the generator has not been recently used, to reform the capacitors it will charge slowly. If the desired speed setting is fast or normal, the appropriate indicator will glow, but the slow charge indicator will blink to show that for this one charge sequence it has automatically taken control.



The OPEN FLASH touch operates when:

1. The generator is fully charged, and the indicator glows.
2. You wish to reduce power more rapidly than the auto-discharge system after the touch has been used.



**N.B. Situation 2 as above is the only time when the OPEN FLASH will function while the indicator blinks. At other times, if the indicator blinks, the generator is not ready (still charging or fed with incorrect requests) and will therefore not function.**

**ACOUSTIC SIGNAL**

This functions when the indicator glows and will sound whenever a command has been accepted by the generator (useful when using the IR handset).

Continuous signalling indicates a false request or malfunction. Please check generator and lamphead connections.



**INDICATIONS OF TOTAL POWER – PRINCIPAL**

The power is varied in 1/10 f-stops to coordinate with advanced flash meters. The variation is in single steps or if the touch is held it will run continuously. The first number indicates charges by full f-stops, the second number by 1/10 f-stops. The full range of any MICRO generator is 5 f-stops, i.e. 4 steps.



**RELATION OF CHARGE SETTINGS BETWEEN GENERATORS**

Power indicated	Power stored in Ws or joules			Diaphragm at 1 m 3 1/3 ft., 100 ASA
	1500 MICRO	3000 MICRO	6000 MICRO	
10			6000	256 1/3
9.0		3000	3000	180 1/3
8.0	1500	1500	1500	128 1/3
7.0	750	750	750	90 1/3
6.0	375	375	375	64 1/3
5.0	188	188		45 1/3
4.0	95			32 1/3

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### INDICATION OF POWER – SECONDARY

This number shows the power in Ws/Joules available for the connected lamphead. It varies progressively with the principal power read-out.



## GENERAL FUNCTIONS

### SYNCHRONISATION SOCKET

The Amphenol secure locking ring system with standard 5 m cable is retained. Longer cables may be used.



N.B. Do not link ELINCHROM generators by cable to other manufacturers' generator sync. outlets. ELINCHROM uses low voltage (20 V) for security reasons and other systems higher voltages may cause damage.

Alternatively the ELINCHROM SYNCRON TELE-COMMAND may be used with the FRC-1 unit which releases the flash almost instantaneously — faster than IR — but not quite as fast as direct cable connection.

### SWITCHABLE PHOTOCELL

When switched on, the generator power will be released by any other flashes. If the generator is very remote from other units the EL-remote cell, code N° 11081 may be linked to the synchro socket.



### USE OF IRS

The touch IRS will indicate when the function is operative.

The touch SET 1-8 selects the channel which you wish to use. Keep the touch depressed until the chosen channel appears.



When the generator is delivered the «O» setting is functioning. With this setting the generator will respond to any signal from the IR-handset — channels 1-8 or ALL.

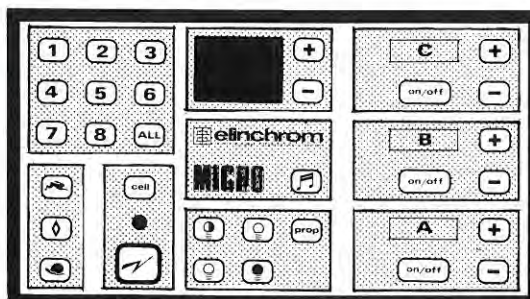
However if a number from 1 to 8 is set, the generator will only respond to that same number on the IR-handset or to ALL.

If any other number is selected on the IR-handset, the IRS indicator will blink to advise that the generator is not accepting the commands.

The Light Captor, code 19315, extends the range of the IR-Remote Control.



IR REMOTE CONTROL



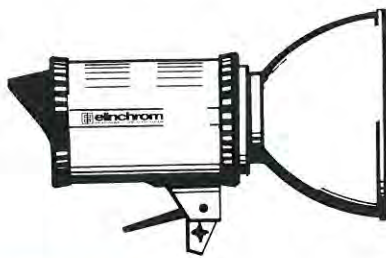
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### MODELLING LAMP CONTROLS

The modelling lamp will only function when the lamphead is switched on (note — there is an over-riding control switch ON/OFF on the lamphead).

- Simple ON/OFF with ON setting indicated. Also incorporated is a slow start system to prolong lamp life
- Half power lamp setting further extends lamp life
- Adjusts the lamp to vary with the flash power.
- DIM/BRIGHT CHARGE INDICATOR  
This setting underpowers the modelling lamps during charging. At full charge they «indicate» by coming to full brightness.
- Used together, the modelling lamp extinguishes during charge.



### LAMPHEADS

To ensure correct fitting of the lampcord connector introduce toe first, heel last and press firmly. Do not connect or disconnect when the lamphead switch is ON.


Connects the lamphead. The ventilator fan functions even in OFF mode. After a studio session, leaving the generator switched on, but the lampheads OFF extends lamp and tube life.


If the power display does not illuminate i.e. ON/OFF appears not to function, the lamphead is incorrectly fitted, the connector is damaged or it is an old lamphead unadapted.



### POWER INDICATOR «BLINKS»

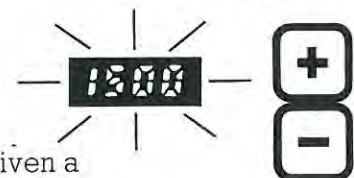
If the power display blinks, the connecting of the lamphead may have given a total Ws/Joules display of all lampheads of more power than the generator can store.

Press the  touch to reduce the totals of the power displayed to the correct figure. Alternatively, switch off a lamphead.

Conversely, if at minimum power, a lamphead is disconnected, the power indicator will blink because there is now more power in the generator than the read-outs in Ws/Joules indicate. Adjust by pressing .

N.B. The display will also blink if lamphead power supply is greater than the flashtube can accept, e.g. an S2000 head fitted to a generator outlet displaying 3000 Ws will not release and the display indicates that there is an incorrect request.

Adding or removing a lamphead does not change the power programmed into other lampheads. It increases or decreases the total power stored.



**LAMPHEAD TYPES**

1. With standard flash duration. Types S, (T) and R (new type)
2. With action (short) flash duration. Types A, (R old type)

**N.B.** The X-head with two flashtubes can be standard or action.

- a) with each cable in a separate generator it gives standard flash duration
- b) with both cables in the same generator it gives short flash duration

**ASYMMETRIC DISTRIBUTION OF THE POWER**

When lampheads of different types are «mixed» asymmetrical light output will be given because A type flashtubes draw power very rapidly.

For approximate output difference, see below:

A	OTHER	A	OTHER	OTHER	A	A	OTHER
75%	25%	60%	20%	20%	40%	40%	20%
A gives 1 ½ f-stop more than the other		A gives 1 ½ f-stop more than the other			A gives 1 f-stop more than the other head		

**N.B.** The generator will read out symmetrical values Ws/Joules but the above table explains the variations obtainable.

All lampheads since October 1986 have been designed to inform these generators. Lampheads before that date will refuse to function until modified. This is a simple modification and will be done by an ELINCHROM service center.

Below is a table listing lampheads made since 1980 which are adaptable and indicating the equivalents in the current 1988 series.

MAXIMUM POWER	COMPATIBLE		ADAPTABLE
	1988	1986	1980
2000 WS	S2000 - R2000	S2 A2 R2	S - -
3000 WS	S3000 A3000	- -	- -
4000 WS	S4000 A4 R4000	T4 A4 R4	T A -
8000 WS	X8000	X8	X

# ELINCHROM METER

Guide aperture based on standard reflector, distance 1 m/ 3 1/3 ft., Film ASA 100. Following these scales you can easily obtain the approximate working aperture.

FLASH UNIT	REFLECTORS DIFFUSORS	DISTANCE	EMULSION
		m. ft.	ASA/DIN
EL 11	REFLECTORS: brilliant 26 + 2/3 standard 21 ● white matt 21 - 1 square 44 - 1 1/3 wide angle 16 - 1 1/2 + diffusing filters: - 1	16.00 53 - 8 11.30 38 - 7 8.00 26 - 6 5.70 19 - 5 4.00 13 - 4	25 15 - 2 32 16 ● 40 17 ● 50 18 - 1 64 19 ● 80 20 ● 100 21 - ●
EL 230-250-250 R	UMBRELLAS: silver - 2/3 white - 1 1/3 translucent - 2 1/3	3.60 ● 3.20 ● 2.85 10 - 3	125 22 ● 160 23 ● 200 24 - + 1 250 25 ● 320 26 ●
EL 500-500 R	SOFT BOX with diffusor - 1 2/3	2.50 8 ● 2.25 ●	400 27 - + 2 500 28 ● 640 29 ●
EL 1000 EL 101 RAPID	QUADRA LITE 145 x 145 with diffusor - 2 - 3	2.00 6 - 2 1.80 ●	800 30 - + 3 1000 31 ● 1250 32 ●
EL 1500 MICRO EL 202	OCTA LITE diam. 190 with diffusor - 2 - 3	1.60 ● 1.40 - 1	1600 33 - + 4 2000 34 ● 2500 35 ●
EL 3000 MICRO EL 404	RECTA LITE 72,5 x 175 with diffusor - 2 - 3 1/3	1.25 4 ● 1.12 ● 1.00 3	3200 36 - + 5 4000 37 ● 5000 38 ● 6400 39 - + 6 8000 40 ●
EL 6000 MICRO and 2 S 3000	STRIP LITE 33 x 175 with diffusor 33 - 2 1/3 with diffusor 18 - 4 - 4 2/3 SPOT S35 + 2/3		

**EXAMPLE:**

3000 MICRO with S 3000 head  
SOFT BOX with 2 diffusors  
Distance 1,6 m  
Emulsion 64 ASA

VARIATION	F-STOP
	180 1/3
- 1 2/3	90 2/3
- 1 1/3	64 1/3
- 2/3	45 2/3

The ELINCHROM METER is a useful guide for studio lighting but it can not replace a professional flashmeter.

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The  
flash  
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PROFESSIONAL STUDIO FLASH SYSTEM