

# Digital 1500 AS For DIGITAL PHOTOGRAPHY

**POWER** 

**STABILITY** 

**UNIVERSALITY** 

TOTAL ASYMMETRY



Instructions for use

110V and 230V, Version

English



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P.S: Technical data subject to change.

The listed values are guide values which may vary due to tolerances in components used.

The Elinchrom Digital 1500 As generator is manufactured by Elinca S.A. CH - 1020 Renens/Switzerland

# Dear Photographer,

Thank you for buying your «Digital 1500 AS» flash generator.

All Elinchrom products are manufactured using the most advanced technology. Carefully selected component are used to ensure the highest quality and the equipment is submitted to many controls both during and after manufacture.

We trust that it will give you many years of reliable service.

All flash units are manufactured for the studio and location use of professional photographers.

Only by observance of the information given, can you secure your warranty, prevent possible damage and increase the life of this equipment.

#### SAFETY NOTICE

According to safety regulations, we draw your attention to the fact that these electronic flash units are not designed for use outdoors, in damp or dusty conditions and should not be used after being exposed to sudden temperature changes causing condensation. They must always be connected to an earthed (grounded) mains supply.

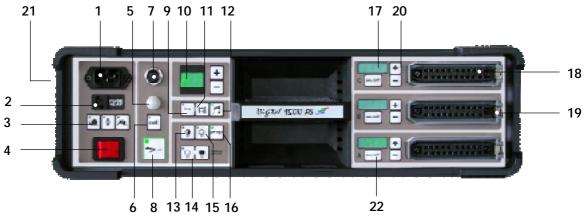
On no account should any objet be inserted into the ventilation holes.

The units may retain an internal charge for a considerable time even though disconnected from the power supply.



FLASH SYSTEMS STORE ELECTRICAL ENERGY IN CAPACITORS BY APPLYING HIGH VOLTAGE. FOR YOUR SAFETY, NEVER OPEN YOUR FLASHES.

ONLY AN AUTHORISED SERVICE ENGINEER SHOULD OPEN OR ATTEMPT TO REPAIR THE UNITS. FOR REPAIRS, BRING THEM TO YOUR ELINCHROM AGENT.



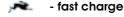
#### **CONTROL PANEL**

- 1. Mains inlet power socket
- 2. Mains fuse (16 AT, slow blow)
- 3. Charge speed selectors



- slow charge





- 4. Mains switch
- 5. Photocell and IR-Receiver
- 6. Photocell on/off
- 7. Sync.-socket with security lock
- 8. Open flash with charge indicator
- 9. IR-Remote On/off

- 10. LED indication of total power
- 11. Generator selector IR (1-8 packs)
- 12. Multi-purpose accoustic signal
- 13. Half/full power for modelling lamps
- 14. Modelling lamps on/off
- 15. Modelling lamp dimmer/charge signal
- 16. Proportional modelling light
- 17. Power output indication in Ws/joules
- 18. Lamphead sockets
- 19. Security catches
- 20. Lamphead power modulators
- 21. Socket accessories
- 22. Lamphead on/off

FOR YOUR SAFETY, NEVER OPEN YOUR POWER PACKS OR YOUR LAMPHEADS. FOR REPAIRS, BRING THEM TO YOUR ELINCHROM AGENT.

# Operating instructions

1) Mains connection

The unit is manufactured to run on 200-240 V, 50/60 Hz. Before connecting them for the first time, make sure that your mains supply and the rating set on the equipment (electrical specification plate) are compatible.

- 2) Check that the mains switch (4) is OFF
- 3) Insert mains cable to the MAINS INLET (1) and connect to a FULLY EARTHED OUTLET
- 4) Using the mains switch (4) and switch the unit ON (switch illuminated)
- 5) Connect lampheads ensuring that lampheads switches (22) are OFF, i.e. display NOT illuminated
- 6) Select charging rate (3) "normal"
- 7) Select modelling lamp setting (16)
- 8) Connect the synchro cord on the socket (7)
- 9) Check that photocell (6) is OFF (not illuminated)
- 10) Switch on the lampheads: the touch (22) switches individually the flash circuits and modelling lamps
- 11) Select the power with the touch (+ or -).
- 12) The green open flash button (8) will light up, indicating that the unit is ready for operation.

According to the safety regulation: we draw your attention to the fact that this equipment should be used only in a dry environment; it must be protected from dripping water and from extremely dusty conditions. The unit must ALWAYS be plugged into an EARTHED electrical socket.

#### **TECHNICAL DATA:**

This power pack Digital 1500 AS (1500Ws) offers three asymmetrical power head outlets. The power levels are indicated in Ws by bright LED display. These displays may be individually varied in 1/10th f-stop to any one of 57 settings on each lamphead (with three lampheads). The variation is continuous on 6.6 f-stops, (diaphram variation 16.7 to 128.3).

### **POWER REQUIREMENTS:**

For version 110/120 V : Mains voltage: 110-140 Vac 50/60 Hz For version 220/230 V : Mains voltage: 210-240 Vac/50 Hz

Dimensions: 49 x 14 x 27 cms

Weight: 8.6 kg

CHARGE SPEED	<b>W</b>	<b>♦</b>	<i>&gt;</i> ≈.
on mains 230 V- 50 Hz	0.8 - 5 s	0.7 - 3.5 s	0.6 - 2.5 s
on mains 115 V- 60 Hz	0.9 - 6 s	0.8 - 4.5 s	0.7 - 3.5 s

#### RELATION OF POWER RANGE BETWEEN THE OUTLETS

Guide aperture is based on the "Digital S" head and the standard reflector, distance 1 m/3.3 ft and film ISO 100/21 DIN.

Display	Ws	f-stop	Power
8	1500	(128.3)	1/1
7	750	(90.3)	1/2
6	375	(64.3)	1/4
5	188	(45.3)	1/8
4	95	(32.3)	1/16
4**	47	(22.3)	1/32 with 2 lampheads
4***	31	(16.7)	1/48 with 3 lampheads

#### 1. MAINS SUPPLY

While the MAINS SWITCH (4) is switched off firmly push in the plug of the original ELINCHROM mains cord into the socket (1).

#### 2. FUSE

Standard type 5 x 20 mm, 16 AT (tempered). Before exchanging a blown fuse, switch off the unit and remove mains cable. Depress and turn the fuse holder anti-clockwise 1/8th and remove it. If the new fuse blows immediately upon reconnection return the pack to an ELINCHROM service centre for a check-up. (N.B. Check correct value of the fuse: 16 AT).



#### N.B. SECURITY FUSE

This unit is protected by an internal security device. Should the unit not work properly, for example because of a defective power component, the internal security fuse of 16AF (fast) would instantly get destroyed, which avoids any recharging. From then on, the power pack requires a check up by a technical Elinchrom service.



#### 3. MAINS SWITCH

The button lights up when the pack is switched on. Switch off before removing the mains cord. Note: the absence of charge, despite the switch being illuminated, indicates a fault.



Select the required charging speed with the selector (3).



FAST: is the standard position recycling, for use in the professional studio. (Position for the digital "one shot") 230 V = 16 A



115 V = 25 A



NORMAL: standard recycling recommended for use in the studio with line 16 A. (Position for the digital "multi-shot")



230 V = 12 A 115 V = 20 A



SLOW: position is recommended when the mains capacity is too limited for the use with the standard charge. (for the digital "multi-shot")

$$115 V = 15 A$$

N.B. For even less load on the power supply line use lamps automatically extinguish when the generator when the charge cycle ends.



and jointly. The modelling is charging but illuminate

#### 5. 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 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.

#### 6. OPFN FLASH «TEST»

Having pressed this button release a flash, the green led «READY» light will appear again once the unit is recharged. If the green light does not appear the charge system could by defective. Please contact and send to an authorized Elinchrom service.



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

#### NOTE:

The "Digital" unit have an integrated discharge system, protected by a thermic switch.

In order to restrict the heating of the unit, we suggest to release a flash with the green button (8) "READY" after each strong reduction of power (more than 2f-stop).

This allows to release the excess of energy in the flash tube. You will gain time and extend the life span of your power packs.

#### 7. AUDIBLE RECHARGE SIGNAL

When the indicator of the touch (12) is illuminated and will sound whenever a command has been accepted by the generator (useful when using the IR handset).

There is an audible signal after each recharge. It indicates that the generator is ready.

Continuous signalling indicates a false request or malfunction.

Please check generator and lamphead connections.



#### 8. TOTAL POWER

This display indicates the total power released through the lampheads.

The variation is a single steps or if the touch is held it will run continuously.

The first number indicates charges by full f-stop, the second number by 1/10 f-stop.

When the total power is increased each individual lamphead increases proportionately.

The ratio never changes and the power in any one lamphead is limited only by the total power in the generator.

When this power is reduced your chosen asymmetry remains, but is always variable at your discretion.



#### 9. INDIVIDUAL POWER OUTPUT

This facility gives subtlety and independence of power control unobtainable in any other way. The Ws/Joules readout enables you at a glance to evaluate the relative power of each lamphead which you may change at any time. It varies progressively with the principal power read-out. The limite are only the maximum power of the pack and the minimum power through one outlet - all steps being in 1/10th f-stops.



#### 10. 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 \$1500N head fitted to a generator outlet displaying 1500 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.

#### 11. SWITCHABLE PHOTOCELL (SLAVE)

When switched ON indicator illuminated, the pack can be remotely triggered by another flash unit in your studio.



In difficult situations e.g. daylight, blinding or obstacles, the additional cell (code 11080) with 5 m cord (extensions available) solves most problems.

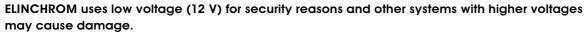
Cell

Alternatively use the FRC-SYNCRON (code 19316) cordless remote flash release.

#### 12. SYNCHRONISATION SOCKET

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







## 12. ACCESSORY SOCKET

Alternatively the ELINCHROM SYNCRON (code 19316), cordless radio may be used with the FRC-1 transmitter (code 19306) which releases the flash instantaneously - faster but slightly slower than by sync cable. Therefore, use 1/60th for focal plane shutters and 1/125th for in lens shutters.



Syncron Set: 19310





Alternatively mount an infrared flash trigger on the camera (e. g. Prolinca IR transmitter : code 40203)



#### 14. MODELLING LAMP CONTROLS

The modelling lamp will only function when the lamphead is switched on (note: there is an overheating control switch ON/OFF in 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.

#### 15. USE OF IRS

To activate the Infra Red System press the IRS Control



Allocate the unit a channel number. First press the channel selector



This will display a channel number 0 - 8. keept this button pressed and when you have reached your chosen number release. This sets the unit to the channel number displayed.

You can either select a different number for every head. If you wish to control two or more heads identically then give them the same channel number, they will then respond to the same signal.

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.



To use the IR-remote: first select a numbered channel on the handset. This will activate the unit(s) allocated to that channel. No other units will respond. To measure the f-stop, this unit can be flashed alone OR, to take an overall reading, ALL units will respond if «O» is pressed on the handset.













IR Remote control code: 19319

#### **USE OF IRS**

The indicator on the IRS will «blink» on the generator when its channel has not been selected. However, selecting its channel «O» will re-activate the units response system.

The units function like and are therefore totally compatible with Micro AS power packs and 750 Micro.



#### 13. LAMPHEADS

# Important:

When plugging in a lamphead connector, first push in the front part, then firmly press in the whole plug, the rear part being secured by the locking spring.

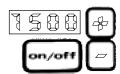


# DO NOT PLUG IN OR UNPLUG LAMPCORDS WHILE THE DISPLAYS ARE ON i.e. ILLUMINATED.

#### 14. LAMPHEADS ON/OFF

Connect 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.

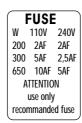


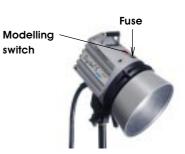
If the power display does not illuminate i.e. ON/OFF appears not to function, the lamphead is incorrectly fitted, the connector is damaged or it is an old lamphead unadapted.

#### 15. FUSES FOR LAMPHEADS

Use only FAST BLOW FUSES, type 5  $\times$  20 mm corresponding to the label on each lamphead.

Different modelling lamps require corresponding fuses. Slow blow fuses will not protect the modelling lamp. The fast blow fuse will protect the triac of the modelling lamp circuit, the lamp and therefore the flash tube.





#### 16. PROTECTIVE PIREX DOME

For use with standard halogen lamp GX 6.35 socket.

Transparent, matt or yellow (400° K colour correction), can be fitted to all lampheads, except R heads (rectangular heads) for which clear or matt security filters are available.

Easy attachment of the protective dome:

- Disconnect the lamphead from the pack
- Loosen the 3 screws of the lamphead reflector
- Fit the clips underneath the screw heads and tighten the screws
- Put the dome in place and hook the springs into the airvent holes.

The security filters for the Digital RE - R 3000 - Mini R, can be put on the lateral accessory holders, matt (code 26254).

security filters

#### 17. LAMPHEAD TYPES

- 1. With standard flash duration: Types S and R (Digital S Digital SE Digital SE Digital RE)
- 2. With action stopping (short flash duration): Type A (X 6000N and Twin X4 with one power pack) For fashion photography, sport applications and just as useful in the studio for photographing fast moving subjects.

NOTE: Due to their relatively high power and short duration, it is probable that the flash tube may be shorter than our standard lampheads.

The X-heads (X6000N -Twin X4 - X8000) has two special flash tubes that focus and maximise the light ouput.

They can be used for standard or action:

- a) with each cable in a separate power pack, it gives standard flash duration.
- b) with both cables in the same power pack, it gives short flash duration.

FOR YOUR SAFETY, USE ONLY ELINCHROM LAMPHEADS ON YOUR GENERATORS









18. LAMPHEAD COMPATIBILITY Below is a table listing lampheads made since 1980 which are adaptable and indicates the equivalent in the current series.

MAXIMUM	Compatible with : Digital 1500/3000 AS and MICRO AS			ADAPTABLE
POWER	From 1992	1988	1986	1980
1500/2400 WS	\$1500 N Mini 1500	\$ 2000 A2000	\$2 A2	s
2400 Ws/2000*	Mini A	R 2000	R2	
2400 Ws/2000*	Mini R			
2400 Ws/2000*	Mini S			
2400 Ws/2000*	Chic \$2			
2400 Ws/2000*	Digital SEE			
2400 Ws/ <b>2000</b> *	Digital RE			
3000 Ws**	Digital S (4000 W) Digital SE R3000			
	\$3000N	S3000		
	A3000N		A3000	
	Spot Lite 3000			
	Box Lite 3000			
	Boxlite 3000N			
	Ringflash RF 3000			
4000 Ws	Digital S			
	\$4000	T4	T	
		A4	A4	Α
		Box Lite 4000	Box Lite 4000	
		R4000	R4	
4800 Ws (2 x 2400)	Twin X4			
6000 Ws (2 x 3000)	X6000N			
8000 Ws (2 x 4000)		X8000	Х8	х

<sup>\* 2000</sup> Ws, with MICRO and Digital AS series.







<sup>\*\* 3000</sup> Ws, with MICRO and Digital AS series

	Accessories overview		94
<b>Reflectors</b> Wide angle ø 16 cm /90°	<b>code</b> 26143	<b>Spots</b> Zoom 12° - 24°	<b>code</b> 26471
Compact ø 18 cm /60°	26144	2001112 24	204/1
Standard ø 21 cm /50°	26141	Mini spot	26420
Mini soft 44 silver Mini soft 44 white	26166 26168	fresnel spot	26450
Will it Coll 44 Willio	All the second	'	
Snoot	26425 ————	<b>Tripods</b> Tripod «Deluxe» 85-200 cm	<b>code</b> 30128B
044		Tripod «Master» 105-385 cm	30149B
<b>Grids</b> Grid set for 18 cm	<b>code</b> 26135	Bags	code
Grid set for 21 cm	26025	Carrying bag for 3 stands +	
Lightshaper carriers	code	umbrellas 105 cm	33222
Carrier for 21 cm reflectors	26034	Bag for medium size Rotalux	33223
Bandoor set for 21 cm	26037	Bag for large size Rotalux	33224
Filters	code	Trigger accessories	code
Set of 10 color/mixed for		and flashmeter	
21 cm x 21 cm Polarizing filter 21 cm	26243 26244	IR flash remote Radio set FRC1	40203 / 19305
· ·			11080
<b>Lightbanks ROTALUX</b> Square 70 x70 cm	<b>code</b> 26178	Additional cell with grip	-Alex
Square 100 x100 cm	26179	<b>Miscellaneous cords</b> Synchro cable 5 m lenght,	code
		caméra to units	11075
Strip 95 x 35 cm Rectangular 130 x 50 cm	26180 26181	Mains cord	11070
Ğ		Modelling lamps (200-260 V)	code
Octagonal 100 cm Octagonal 135 cm	26183 26184	Krypton lamp E27/100 W	23002
Octagorial 155 cm	20104	Halogen lamp E27/ 250 W/2000 hrs	23018
Varistar Umbrellas		Halogen lamp 300 W/GX 6,35	23022
Varistar Umbrella 85 cm Varistar Umbrella 105 cm	26383 26384	Halogen lamp 650 W/GX 6,35	23005
		Modelling lamps (100-140 V)	code
<b>Umbrellas</b> White diam, 105 cm	<b>code</b> 26375	Krypton lamp E27/100 W	23006 23019
Silver diam. 105 cm	26361	Halogen lamp E27/ 250 W/2000 hrs Halogen lamp 300 W/GX 6,35	23030
Translucent diam. 105 cm	26374	Halogen lamp 650 W/GX 6,35	23027
	- I	31 1 p 111 p 111	



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