elinchrom®

ELC
125/500

User manual

ELC
125/500

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Introduction

Dear photographer,

Thank you for buying the Elinchrom ELC 125 / 500 compact flash unit. All Elinchrom products are manufactured using the most advanced technology.

Carefully selected components are used to ensure the highest quality and the equipment is submitted to many tests both during and after manufacture. We trust that it will give you many years of reliable service.

Please read the instructions carefully before use, for your safety and to obtain maximum benefit from many features.

Your Elinchrom-Team

This manual may show images of products with accessories, which are not part of sets or single units. Elinchrom set and single unit configurations may change without advice and may differ in other countries. Please find actual configurations at www.elinchrom.com

For further details, upgrades, news and the latest information about the Elinchrom System, please regularly visit the Elinchrom website. The latest user guides and technical specifications can be downloaded in the "Support" area.

Technical data, features and functions of Elinchrom flash units, accessories and the Skyport system may change without advice. The listed values can differ due to tolerances in components, or measuring instruments. Technical data, subject to change. No guarantee for misprints.

Keep this user manual for later information and reference.

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ELC 125, 500 characteristics

The ELC units offer Manual, Action, HSS and TTL modes. The TTL (Through the Lens Metering) mode allows you to access fully automatic exposure setups according to your digital camera capabilities. If you wish to work in the manual mode or combine both modes, the unit enables you to save the TTL exposure parameters as a starting point when passing to the manual mode.
The unit supports Skyport radio remote control and HSS. It offers fast flash durations at lower power levels.

Characteristics:

- Two ELC versions are available with 125 and 500 Ws with Manual, TTL and HSS modes.
- 7 f-stops power range for the ELC 500.
- Action mode for optimised flash duration.
- Daylight LED modelling lamp power in 40 adjustment levels.
- HSS and TTL is supported on the Transmitter PRO, with the latest firmware update.
- The dedicated Group colour is visible at the illuminated Elinchrom side logos.
- USB socket for firmware updates and Sync socket 3.5 mm.

- Elinchrom standard mount for accessories.
- 7/8 mm umbrella shaft.
- New ergonomic design with large OLED colour display.

Elinchrom TTL mode

- 7 f-stop flash power range for the ELC 500.
- TTL +/- 3 f-stops adjustable in 1/3 steps.
- LED modelling lamp is adjustable in 40 power steps.
- Compatible with Canon, Nikon, Fujifilm, Sony, Olympus /Panasonic and Pentax.

Manual mode

- Compatible with all Skyport Transmitters.
- Flash power in 1/10 f-stop steps.
- Saves the TTL power as a starting point for the manual mode.

Before you start
GENERAL USER SAFETY INFORMATION

- Flash units are powerful light sources. Please be aware of the danger, or inconvenience, that they may present to some persons and children.
- Keep flash units out of reach of unauthorised persons whenever possible.
- Keep flash units away from children!

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- According to safety regulations, we draw your attention to the fact that electronic flash units are not designed for extreme outdoor use, in damp or dusty conditions and should not be used after being exposed to sudden temperature changes causing condensation. The humidity protection conforms to the norms of IP20.

- Do not use without permission in restricted areas (such as hospitals, laboratories, etc.).

- Do not use near flammable / explosive material. Keep minimum 1m or more distance to any object.

- Never flash into the eyes of a subject without warning. Close use may affect eyesight.

- The ambient temperature whilst the unit is in use: min. -20°C (-4°F) up to max. 35°C (95°F). Storage temperature: -10°C up to 60°C.

- There is high voltage and there can be high currents, so please apply all the usual safety precautions when handling the unit.

- Do not connect the flash unit to the mains without a mounted and working flashtube due to high voltage at the exposed terminals!

- Flash systems store electrical energy in capacitors by applying high voltage.

- The units may retain an internal charge for a

considerable time even though disconnected from the battery. Internal defective charge capacitors may explode whilst the unit is in use, so never switch on a flash unit, once it has been found to be faulty.

- For your safety, never open or disassemble your flashes. Only an authorised service engineer should open or attempt to repair this unit.
- Always switch off the flash unit before changing accessories.
- The unit, the flashtube and accessories may become very hot during and after use! To avoid injuries, handle with an insulating cloth or wait until parts have cooled down. Avoid direct sunlight, which might heat up the flash unit and affect the photocell efficiency. Protect the flash unit when used in humid conditions, but ensure ventilation for cooling!
- On no account should any object be inserted into the ventilation holes.
- Use only original Elinchrom Accessories. Damaged cables, glass domes and cases must be immediately replaced by customer service.

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WARNING: PHOTOSENSITIVITY / EPILEPSY / SEIZURES
A very small percentage of individuals may experience epileptic seizures or blackouts when exposed to certain light patterns or flashing lights. These conditions may trigger previously undetected epileptic symptoms or seizures in persons who have no history of prior seizures or epilepsy. If you, or anyone in your family, has an epileptic condition or has had seizures of any kind, consult your physician before using the EL unit.

IMMEDIATELY DISCONTINUE use and consult your physician before resuming use of your EL unit if you or any person experiences any of the following health problems or symptoms:

- Dizziness
- Eye or muscle twitches
- Disorientation
- Any involuntary movement
- Altered vision
- Loss of awareness
- Seizures or convulsion

OUTDOOR USE
CAUTION! PROTECT THE ELC AGAINST HUMIDITY!
This product is designed for dry use and should not come into contact with water or dust. In humid conditions cover or otherwise protect the unit.

Do not immerse the ELC unit in water / seawater and do not allow it to get wet. The humidity protection conforms to the norms of IP20.

TEMPERATURE PRECAUTIONS
To prevent overheating the product should not be covered whilst in charge mode or in general use! Do not use or leave the unit near a heat source (+60°C or higher) such as an open fire, a heater or direct sunlight. If the ELC unit has been exposed to very cold conditions, sudden exposure to warm or humid air may cause condensation and malfunction.

FLASH TUBES AND LED-MODELLING LIGHT SAFETY NOTICE

- Flashtubes and the LED-Reflector dishes may become very hot during and after use!
- Never touch a flash tube or exchange it before the unit has cooled down and is disconnected from the pack.
- Do not fire flashes from short distances directed towards a person.
- Do not look into the bright LED modelling lamp.
- Do not use near flammable / explosive material.

Operating instructions

- The ELC 125, 500 compact units are multivoltage and are adapted for operation on 100 - 240V / 50 – 60 Hz.

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- Insert the mains cable into the MAINS INLET (undersurface) and connect this to a FULLY EARTHED OUTLET.
- Turn the unit ON.
- DO NOT operate the unit without first removing the black protective cap.
- Follow the instructions for fitting accessories.

Fitting Accessories

- Always switch the unit off before attaching accessories.
- Disconnect the mains cable.
- Mount the flash unit to a tripod and lock the security screw.
- Shift the locking knob (on the top of the unit) of the reflector bayonet to the OPEN position.
- Insert an accessory and turn it clockwise until you hear it click into place.
- Shift the locking knob (on the top of the unit) of the reflector bayonet to the CLOSE position.
- Check if the Reflector is correctly fitted.
- Reconnect the mains cable and switch the unit on.

Please use only original Elinchrom accessories and reflectors. The warranty does not cover damage caused by third party accessories and reflectors.

Control panel

1. Umbrella Support 7/8 mm
2. 4.3'' coloured OLED Display
3. Favourit button, configure a specific unit feature as quick access
4. Modelling Lamp button: short push (on/off) / long push (menu access)
5. Menu navigation button (right / exit) Menu navigation button (left / back)or power increase by 1 f-stop
6. Scroll button multifunctional (Test flash, power, navigation)
7. Menu navigation button (left / back) or power decrease by 1 f-stop
8. Menu access
9. On/Off (red illumination indicates the stand-by mode)
10. Photocell

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ELC Inputs (undersurface)

1. Sync plug 3.5 mm jack
2. USB Micro for updates only
3. Fuse 10 A / 250 V, to replace the fuse, use a tool to pull out the fuse drawer
4. Mains plug 100 - 240V / 50 – 60 Hz

DISPLAY PANEL – DASHBOARD
The main dashboard displays essential information about the settings. The colours of the upper bar correspond to the group number :
Blue for Group 1
Yellow for Group 2
Red for Group 3
and Green for Group 4.
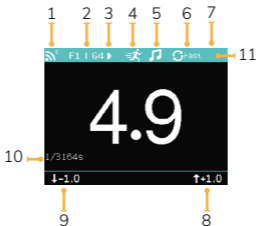The dedicated Group colour is visible at the illuminated Elinchrom side logos and on the display.
It is possible to switch between black or white menu background colour in the Extras settings.

DASHBOARD INFORMATION
Settings that are not enabled are not displayed in the dashboard. For example, if the modelling lamp is switched off, the modelling lamp symbol does not appear on the dashboard.

1. **Skyport synchronisation n-Normal, s-Speed. For better compatibility and max. distance range use always n-Normal sync modes**

2. **Skyport frequency channel and group number**

3. **Photocell status**

4. **Action mode (fast flash duration over the entire power range)**

5. **Ready beep**

6. **Fast mode (fast recycling)**

7. **LED modelling lamp status**

8. **Increase flash power by 1 f-stop**

9. **Decrease flash power by 1 f-stop**

10. **Flash Duration value. The flash duration is only visible at normal x-sync shutter speeds (1/125 or 1/250s depending on the DSLR camera)**

11. **The colour in the upper bar indicates the Group**

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TTL MODE
The TTL (Through the Lens Metering) mode allows you to access fully automatic exposure setups according to your digital camera distance, add an empty space. The TTL values are automatically saved when passing to the manual mode. To operate the unit in the TTL mode, please use the radio remote Elinchrom Pro and activate the TTL function.

FIRMWARE UPDATES
The functionality is constantly extended and improved, always use the latest firmware for the Transmitter Pro and the ELC flash unit.

LED MODELLING LAMP
Modelling lamp settings are accessible through a dedicated modelling lamp button.
Controlling THE LED / MOD LAMP MENU ACCESS

- A short press on the modelling lamp button turns on the LED lamp of the ELC compact flash unit.
- A long press on the modelling lamp button opens the modelling lamp setup menu.

LED MODELLING LAMP MENU FEATURES

Enter the modelling lamp setup menu with a long press on the modelling lamp button. You can directly adjust the power of the modelling lamp by turning the scroll button. To exit the menu press the (right) button.

LED MODELLING LAMP SETTINGS

To access modelling lamp mode prop/free, VFC (visual flash control) and the mod. lamp timer press the (left) button. With the scroll button go to the feature (turning) you want to modify. Now press the scroll button to activate the option and select (turning) the option and press to confirm.

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MENU OPTIONS		DESCRIPTION	HOW TO
Mode		Please choose between the free or the proportional mod. lamp value setting.	Short press on the left button, change and confirm with the scroll button
	Free	Power value of the modelling lamp is independent of the flash power value.	Use the scroll button to set the value, the setting will be automatically stored.

To modify settings here, press the left button to enter into the menu option. |
	Proportional	Power value of the modelling lamp changes with the flash power values.	
VFC	On / Off	Visual Flash Confirmation.	
Timer	On / Off	The mod. lamp switches off after the timeframe set by the timer value.	
	Timer value	Modelling lamp timer, in sec.	

Radio	Mode	Off	Normal	Speed
	Group	1-4		
	Frequency	1-20		
Flash mode	Flash mode	Standard	Action	
	Recycling time	Fast	Eco	
	Flash before ready	Yes	No	
Photocell	Mode	On	Off	
Extras	Auto stand-by	Off	1-59 min.	
	Auto-off	Off	1-60 min.	
	Auto-on	Yes	No	
	Favourite function	Flash mode, Recycling time, Flash before ready, Skyport Group, Photocell Mode, Background		
	Logo mode	Low, High, Off, Low on ready, High on ready		
	Logo colour	Group colour	White	
	Ready tone	1-12		
	Ready volume	Off, Min, Low, Default, High, Max		
	Error volume	Off, Min, Low, Default, High, Max		
	Keyboard click	Off, Min, Low, Default, High, Max		
	Background	Black	White	
Info	Friendly name	"ELC XXX -1" by default (set through computer), XXX = 125 / 500 depending on the model		
	Firmware rev.	*******		
	Skyport ID	*******		
	Lifetime	In hours (hhhh:mm)		
	Power-on count	How many times the units has been turned on		
	Flash count	Total flash number		

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RADIO FEATURES & SETUP
The ELC 125/500 unit supports the Transmitter PRO, ensure that both, the unit and the Transmitter Pro are operating with the latest Firmware.

SKYPORT SYNC MODE
The Skyport options allow you to select the pulse speed (Normal or Speed Sync mode) of the synchronisation signal and to define group and channel settings.

RADIO SETUP		
Radio	Mode	Speed
	Group	4
Flash	Frequency	2
Photocell		
Extras		
Info		
BACK	SELECT	EXIT

The "normal" synchronisation mode is good for long distances and is the standard sync mode to use. The "speed" sync mode might be needed for future cameras which may require a faster communication. The distance range reduces by approximately 50% in speed sync mode. Any change in these settings must be applied also to the EL-Skyport Transmitter to enable communication between the devices!

Note: The Speed sync mode is not to confuse with HSS or HS options! We suggest using the Normal sync mode, which is compatible with most DSLR camera.

Finally you can choose in which group and frequency you would like to work. Change group settings to have better control for example between main light and second lights. Change frequency channel to avoid interference.

FLASH MODE SETUP

ACTION MODE
When the Action mode is
activated, the unit offers a fast
optimised flash duration, to
freeze motion.

FLASH MODE SETUP		
Radio	Flash mode	Action
Flash	Recycl. time	Fast
	Flash before	Yes
Photocell		
Extras		
Info		
BACK	SELECT	EXIT

RECYCLING TIME
The flash mode menu enables you to set the recycling
time to fast or to default.

Flash before ready: If flash before ready is activated,
a flash can be released before the flash unit is 100%
recharged, for fast shooting sequences. Deactivated, the
unit will only release a flash when 100% recharged, for
exact exposures at any power level.

EXTRAS
The Extra menu offers individual
programmable unit settings:
Auto stand-by, Auto-off, Auto-
on (to switch the unit on, when
the mains is connected), Ready
tone, Ready volume, KeyBoard-

EXTRAS SETUP		
Radio	Auto stand-by	off
Flash	Auto-off	59
	Auto-on	Yes
Photocell	Favorite-K	Flash mode
	EL logo mode	High on ready
Extras	EL logo Color	Group color
Info	Ready tone	12
	Ready volume	DefMax
	Error volume	Default
BACK	SELECT	EXIT

click and Background black or white. With the Favourite
Button, configure a specific unit feature as quick access.
The illuminated side EL-Logos can show the Group
colour or set to white or can be dimmed or switched off.

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INFO

The Info section allows you to see the friendly name of the unit and a number of current usage statistics, such as lifetime of the unit and the use of the flashtube.

SETUP MENU		
Radio	Friendly name	ELB500-1
Flash mode	Firmware rev.	2.62
	Serial number	00004
Extras	Life time	0289:10
Info	Flash count	0226961
BACK		EXIT

If you want to personalise the name of your unit, use the Elinchrom App for IOS or the WIN / MAC computer software.The name will appear in the Info section (friendly name).
Shortcut: to see the friendly name of the unit when working with the dashboards (outside of the setup menu), use a long press on the Scroll button (7).

Note: This feature is available with the new Elinchrom software release planned for 2019/20.

REPLACING THE FLASHTUBE

1. Switch the unit off and remove the mains cable.

2. Wait 30 min., whilst the internal discharging is in progress. Flashtube and internal reflector dish can be hot!

3. To remove the glass dome, you require a Torx TX10 screw driver. Remove the three screws which holds the glass dome with the metal ring on the inner reflector dish.

4. Never touch flashtubes, please use gloves. Pull the flashtube carefully out. HIGH VOLTAGE! Never touch broken flashtubes or electrodes! In this case remove the flashtube with an isolated clamp!

5. Insert a new flashtube, please use gloves.

6. Use only the original Elinchrom flashtube for this unit, third party flashtubes may damage the flash unit.

7. Please check that the trigger contact fork firmly grips the flashtube.

8. Re-mount the glass dome with the metal ring by using the 3x TX10 screws.

9. Ensure that all parts are in place and test the unit.

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TROUBLESHOOTING
SOFT RESET

To reset settings to default values, push the LEFT and RIGHT buttons at the same time and hold for at least 5 seconds. The unit will reboot and will clear working parameters. This will not reset the counter in the "Info" menu.

Warning Messages

Wait until the unit has cooled down. The unit will switch back to the normal operation as soon as the temperature decreases.

overheat
system needs cooling

ERROR TABLE

Error number	Description	Solution
1	Capacitor overvoltage	Switch the unit off, wait 2 minutes and switch the unit on again. If the error shows up again the unit requires a check-up at an authorised Elinchrom Service Centre.
4	Charge timeout	
6	Voltage unstable (Charge hold error)	
18	Discharge circuit error	
32	Head board type unknown	
33	14 VDC error	

MAINTENANCE

The ELC 125/500 compact flash unit require only very little maintenance. To ensure secure operation please check the following points regularly before using:

- The mains cable should not have any marks or cuts. The voltages carried can be dangerous!
- Ensure that the plug-in flash tube is correctly fitted.
- Do not use water to clean dust and dirt from the unit.
- Ventilation grids must be clean and free of any tape, etc.
- The functionality is constantly extended and improved, please check at www.elinchrom.com if a new firmware is available.

CAUTION!

Under no circumstances open any part of the equipment. The ELC unit is not user serviceable and contains dangerous high voltage. In the event of difficulty contact your Elinchrom Service partner.

REGULAR CHECK

National safety regulations require frequent safety checks of the electrical equipment. The ELC unit should be checked once a year. This check not only guarantees safety; it also protects the value of the unit.

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RETURN TO CUSTOMER SERVICE

To achieve maximum protection of the unit when sending it in for service, the original packaging should be kept. For service and sales, please contact your local ELINCHROM Distributor. http://elinchrom.com/distrib.php

TRANSPORTATION

Use only the original cartons or cases when you travel or ship flash units to avoid transportation damages. Try to avoid condensation related problems, acclimatise flash units before using them.

Ideally discharge flash units before transporting them and wait 30 minutes after the mains cable has been removed so the unit has cooled down. Never drop a flash unit; the flashtube and internal components could break.

DISPOSAL AND RECYCLING

This device has been manufactured to the highest standards from materials which can be recycled or disposed of in a manner that is not environmentally damaging. The device may be taken back after use to be recycled, provided that it is returned in a condition that is the result of normal use.

Any components not reclaimable will be disposed of in an environmentally acceptable manner.

If you have any question on disposal, please contact your local office or your local ELINCHROM distributor (please visit our website for a list of all ELINCHROM distributors worldwide).

TECHNICAL DATA ELC 125, 500

Specifications	ELC 125	ELC 500
Energy (Ws/J.)	131	522
F-stop (1m, ISO 100, Reflector, 26cm, 48°)	45.4	90.4
F-stop (2m, ISO 100, Reflector, 26cm, 48°)	16.9	32.8
Power range F-stop	5	7
Power range Ws	7-131	7-522
Power range Display	0.1-4.3	0.1-6.3
Power increments in F-stop, Manual mode	1/10th	
Power increments in F-stop, TTL mode	3/10th from -0.3 to +0.3 with Transmitter Pro	
Flash duration t0.1 max. power	1/625 s	1/250 s
Flash duration t0.1 min. power	1/7750 s	1/9430 s

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Shortest flash duration at power	1/7750 s	1/9430 s
Flash Mode	TTL (with Transmitter Pro) and Manual	
Action Mode	Faster flash duration over the power range	
TTL Mode	Yes (with Transmitter Pro)	
HSS Mode	Yes (with Transmitter Pro)	
Recycling Fast 230V in s. min. / max.	0.06 - 0.45	0.06 - 1.1
Recycling Fast 120V in s. min. / max.	0.1 - 0.8	0.09 - 1.9
Recycling Eco 230V in s. max.	0.7	1.7
Recycling Eco 120V in s. max.	1.25	2.95
Colour temperature in K° at max. power	5600	5600
Colour stability over the power range, K°	+/- 150K	+/- 200K

Auto power dumping	Adjusts power settings automatically in real time	
Power stability	±0.5%	
Voltage	AC 100 - 240V	
LED Modelling lamp mode	On/Off, free, proportional, VFC	
LED Modelling lamp	20W LED / equivalent to 120W / 3000 lm / 5700K / CRI 92	
LED CRI value	91	91
Flash tube, Plug-in, user replaceable	Article code: 24091	Article code: 24092
Glass dome transparent	Screwed with 3x Torx TX10	
Skyport (built-in)	20 frequencies, 4 Groups, TTL and Manual	
Skyport Distance range with Transmitter Pro	Indoor: up to 60m Outdoor: up to 200m	
Sync voltage	5 V (compatible with all cameras)	

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Sync socket	3.5 mm jack	
Fan cooled	Yes, smart proactive cooling	
Humidity Protection	Conforms to IP 20	
Umbrella fitting	Centred umbrella fitting 7 – 8 mm	
Power consumption 230 V / 50 Hz	max. 300W 3W@standby	max. 460W 3W@standby
Power consumption 115 V / 60 Hz	max.180W 2W@standby	max.260W 2W@standby
Dimensions (with protective cap) cm / inch	H: 26.3 x W: 16.7 x L: 23 cm H: 10.35 x W: 6.57 x L: 9.05"	H: 26.3 x W: 16.7 x L: 28 cm H: 10.35 x W: 6.57 x L: 11.22"
Weight kg / lbs	2.0 / 4.41	2.5 / 5.51
Product Article No.	20618.1xx	20619.1xx

LEGAL INFORMATION
FCC CLASS B COMPLIANCE STATEMENT

Product name	ELC 125 (20618.1.x) ELC 500 (20619.1.x)
Trade name	ELINCHROM
Name of responsible party	ELINCHROM LTD Avenue de Longemalle 11 1020 Renens VD / Switzerland
Phone	+41 21 637 26 77
Fax	+41 21 637 26 81
Email	elinchrom@elinchrom.ch

This device complies with Part 15 of the FCC rules.
Operation is subject to the following two conditions:
1. This device may not cause harmful interference.
2. This device must accept any interference received, including interference that may cause undesired operation.

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This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorientate or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into a power outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/television technician for help.

Modifications: Changes or modifications not approved by ELINCHROM LTD can void the user's authority to operate the equipment.

DECLARATION OF CONFORMITY USA AND CANADA

Industry Canada (IC) Compliance Notice

This device complies with Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:

1. This device may not cause interference, and
2. This device must accept any interference, including interference that may cause undesired operation of the device
3. Avis de conformité aux normes d'Industrie Canada (IC).
4. Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. Son exploitation est autorisée aux deux conditions suivantes:
5. Il ne doit pas produire de brouillage; et
6. Il doit accepter tout brouillage radioélectrique subi, même si celui-ci est susceptible d'en compromettre le fonctionnement.

CE MARKING

The shipped version of this device complies with the requirements of European Directives related with it, therefore it is marked with the CE conformity logo. For more information and to download the European Declaration of Conformity of this product, please, visit our website http://www.elinchrom.com/support_downloads.php

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DOWNLOAD THE ELC 125/500 USER MANUAL
Please get the complete user guide at this link:
http://www.elinchrom.com/support_downloads.php

DOWNLOAD CONFORMITY
Please find the declaration for EC conformity and USA
& Canada conformity on the Elinchrom website. Please
check all security documents before use!
http://www.elinchrom.com/support_downloads.php