

Operating Manual

Ranger RX Battery Power Pack



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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.

Introduction

The Elinchrom Ranger RX is manufactured by Elinca S.A. CH -1020 Renens/Switzerland

Dear Photographer,

Thank you for buying your Ranger RX autonomous flash unit.

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.

Ranger RX

The quality of light and exceptional performance is the result of long research, application of demanding principles, the long experience of ELINCHROM in lighting products for the studio and the utilization of the latest technology in this area.

Totally integrated to the range of the ELINCHROM flashes, the Ranger RX units maintain the traditional look and function that is ELINCHROM.

FCC Class B Compliance Statement

Note:

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 and meets all requirements of the Canadian Interference-Causing Equipment Regulations. 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 instruction manual, 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 not cause harmful interferences to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to correct the interferences by one or more of the following measures:

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

ELINCA S.A. is not responsible for any radio or television interference caused by unauthorised modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by ELINCA S.A. The correction of interference caused by such unauthorised modification, substitution or attachment will be the responsibility of the user.

Declaration of conformity

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, and
2. This device must accept any interference received, including interference that may cause undesired operation.

Product name:	Professional Studio Flash unit
Trade name:	ELINCHROM
Model number(s):	Ranger RX
Name of responsible party:	Elinca S.A Av. De Longemalle 11 1020 Renens / Switzerland
Phone :	+41 21 637 26 77
Fax:	+41 21 637 26 81

We, ELINCA S.A., hereby declare that the equipment bearing the trade name and model number specified above was tested conforming to the applicable FCC rules, and that all the necessary steps have been taken and are in force to assure that the production units of the same equipment will continue to comply with the Comissions requirements.

Disposal and recycling



This device has been manufactured to the highest possible degree from materials which can be recycled or disposed of in a manner that is not enviromentally damaging. The device may be taken back after use to be recycled, provided that it is turned in a condition that is the result of normal use. Any components not reclaimed will be disposed of in a environmentally acceptable manner.

If you have any question on disposal, please contact your local office or your local ELINCHROM agent (check our website for a list of all ELINCHROM agents world wide).

CE marking



The shipped version of this device complies with the requirements of ECC directives 89/336/ECC «Electromagnetic compatibility» and 73/23/ECC «Low voltage directive».

Notational Conventions

The meaning of the symbols and fonts used in this manual are as follows:



Pay particular attention to text marked with this symbol.
Failure to observe this warning endangers your life, destroys the device, or may damage other equipment



Supplementary information, remarks, and tips follow this symbol.
Text which follows this symbol describes activities that must be performed in the order shown.

«Quotation marks» indicate names of chapters or terms

User Safety Information

- Do not use in restricted areas (like hospitals, etc.)
- Do not use in explosive environments

Travelling by Air (as well as any other transport option)

Due to strict security regulations, please note :

- Remove the 30 A fuse from the top side of the Battery Box, this deactivates the internal «Lead-Gel-Battery»
- Remove the Battery Box from the Ranger RX unit and store separately in your luggage.
- The sealed lead acid battery confirms to the special provisions of **UN No. 2800/238**. Also this battery is satisfied with the special provisions **A67** prescribed in **Non-Dangerous Goods Regulations** by **IATA**

Outdoors

- A thermal cut out protects internal electronic components. At high ambient temperatures or after rapid or frequent use, the thermal cut out may interrupt the capacitor charge. The display will show "ER" .
After cooling down, the Generator restarts automatically. A Beep signal announces that the unit is ready for operation, but note that it will only sound if the acoustic signal is switched on.
- The Ranger RX power pack is designed to keep out humidity and dust. When it is possible, sockets should be sealed with the supplied caps and please ensure the Battery Box is secure inside the Ranger RX housing.
- Never exchange the Battery under damp/humid conditions - look for a dry and clean area!!
- Avoid condensation related problems.
- Take care that the battery is well locked

Flash Tubes and Modelling lamps

- Flashtubes and modelling lamps in use are very hot!
- Never touch a flash tube or lamp before the unit cooled down and is disconnected from the mains.
- Do not fire flashes from short distance (less than 1m) directed to a person and avoid looking directly into the flashlight!
- Keep distance to flammable materials.
- Keep generally distance to operating units.



- Flash systems store electrical energy in capacitors by applying high voltage.
- For your safety, never open or disassemble your flashes.
- Only an authorised service engineer should open or attempt to repair the units.
- For repairs, take them to your elinchrom agent.
- Internal defect charge capacitors may explode whilst the unit is in use, never switch on a not proper working flash unit.

Before you start !

Because a portable unit is frequently used "on location" please be aware of the danger, or inconvenience, which it may represent to others for example children.

- Before you travel or transport the unit: Select the function "Auto Off" (indicated by the green Led illuminated) and switch Off the unit.

This will give a maximum of security and no loss of battery supply until transport.

- If you travel by airplane remove the battery box and the fuse. (page 9)
- Keep flash units out of reach whenever possible.
- Switch off when not in use and disconnect flashheads.
- Cover or otherwise protect in humid conditions.
- If the unit has been exposed to very cold conditions, sudden exposure to warm or humid air may cause condensation. Flashing a number of times first will help to internally warm the unit.
- There is high voltage and can be high currents, so please apply all the usual safety precautions when handling the unit, changing fuses, modelling lamps etc, as you would with mains powered electronic flash.
- Do not use near flammable/explosive material.
- Do not open the unit. In the event of damage or apparent failure, contact a repair service or any Elinca agent or email: elinca@elinca.ch
- Always switch off unit before connecting flashheads
- Check always if battery is plugged in correctly
- Check always if flashheads connections are plugged in correctly and locked with the bayonet!

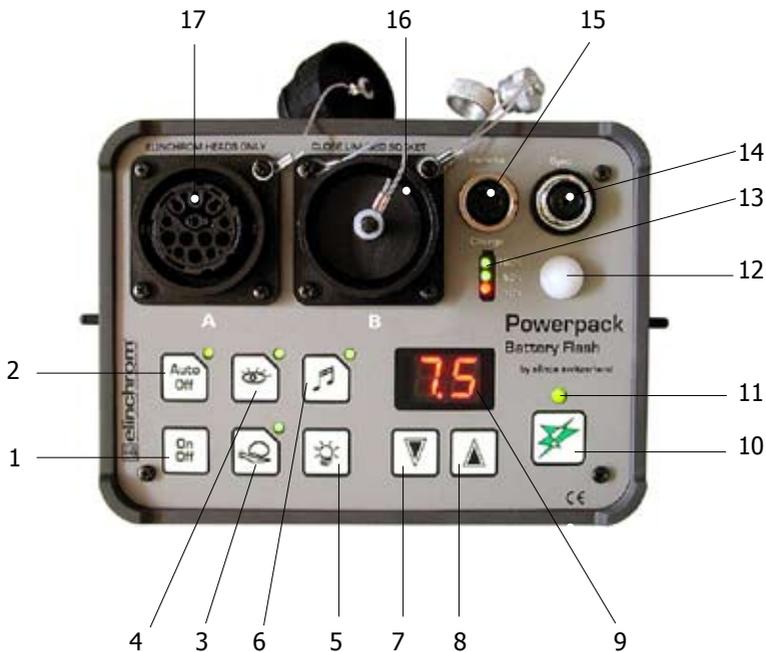
Battery

With a flattened battery in place, the Ranger RX may be used with the charger connected. However, the recycle time between full power flashes will be 50/60 seconds due to limited charging current. Battery charging will only re-commence when the Ranger RX is switched off.

- The charging time is approximately 3 h to full charge.
- The Battery may be re-charged at any time. "Topping up" will not damage it.
- We suggest a spare Battery Box. Whilst one is in use, the other can recharge.
- To recharge the Battery externally, release the Battery Box, and connect the charger to the battery.
- Before changing the Battery Box, please ensure the Elinchrom Charger is disconnected and switch off the unit.



- Always switch off the unit before connecting or disconnecting flashheads!
- The head connector must always be locked with the bayonet before any use.



Overview of Controls

Setup

1. On/Off switch.
2. Automatic Off switch with LED indicator, if no Control is operated, the unit will switch off after 5 min.. Maximises number of flashes.
3. Slow charge with LED indicator. Saves the battery and increases the lifetime of the battery.
4. Photocell on/off switch with Led indicator.
5. Modelling lamp switch, three functions.
6. Charge Ready Beep on/off, with LED indicator.

Power

7. - Power adjustment with ADF (Auto Dump Function) in 1/10 f-stops.
8. + Power adjustment in 1/10 f-stops.
9. Digital power display (7 f-stops in 1/10 positions).

Test

10. Open flash.
11. Flash ready light.

Charge/Sync

12. Photocell on/off.
13. Battery charge indicator (100%, 50% and 10%).
14. Synchro-socket, traditional Elinchrom socket, weatherproofed.
15. Battery charge socket and Remote control, weatherproofed.

Flashhead sockets

16. Flash head socket, with weather proof cover.
17. Flash head socket, with weather proof cover.

On/Off Switch (1)



By pressing this touch button the Ranger RX power pack is switched on or off.

Note: In the unlikely case of malfunction, please check the charge and modelling lamp fuses.

Auto OFF – Function (2)



If this function is switched on (indicated by the green LED) the Ranger RX power pack will switch off after 5 min with not in use.

Any re-use of the unit restarts the 5 minutes waiting time, before shutting down.

This Auto Off function is to save battery power! 4 Beep signals (if the function is on) indicate that the unit is switching off.

Slow Charge (3)



The green LED indicates that the slow function is selected. In slow mode approx 40 % more flashes are available. (About 110 full power flashes in normal charge mode and approx. 140 flashes with slow charge).

The slow charge mode also increases the battery life, but the recharging time is doubled!

Photocell On/Off (4)



The Photocell (12) is activated when the green LED (4) is illuminated. When switched on, the pack can be remotely triggered by another flash unit! The Ranger RX Photocell is specially designed to work under ambient light situations, but direct sunlight (or other strong lights) may reduce the sensitivity of the cell.

Modelling Lamp (5)



By pressing this touch button once, the modelling lamp functions for 15 seconds.

By pressing the touch twice in 2 seconds, the modelling lamp will switch off after 30 seconds. To switch off the modelling lamp earlier, just press the button again (after two seconds).

The modelling lamp is only available, when using the Free Lite S and A heads. The maximum modelling lamp for the power pack is 100 W / 12 V for only one connected flashhead or 50 W / 12 V each for two connected flashheads.

The modelling lamp fuse 10 AF (quick acting) is inside the housing of the Ranger RX pack. The Battery Box must be released before the fuse can be exchanged.

Charge Ready Beep (6)



This touche button activates the BEEP acoustic signal. When the LED is illuminated, 1 x Beep signal indicates that the unit is ready for operation.
3 x Beep signals indicate overheating (or defect in the charge circuit), the display (6) will show "ER"
4 x Beep signals indicate that the unit is shutting down.

Digital Power Regulation (7 and 8)



To select the desired power (in 1/10 f-stops), use the touche buttons. Minimum power is 1.5 (approx 17 Ws) and maximum power is 7.5 (approx 1100 Ws). Pressing continuously, the quick mode is activated for fast power changing. One second later, the electronics will start to charge or discharge the unit. The Auto Dump Function (ADF) discharges the unit to precisely the displayed power. Frequent auto dumping may cause overheating and activate the charge "cut-off". This risk may be limited or avoided by "open flash" reduction but please note that the consequent re-charging will reduce the total number of "available" flashes
N.B. Power indicator (6) "flashes" during charging and discharging.

Digital Power Display (9)



The actual flash power is shown in an f-stop compatible format, from 1.5 (17 Ws) to 7.5 (1100 Ws). The power range is 7 f stops. During charging or discharging the display "flashes". In the case of overheating or malfunction the display shows "ER".

Open flash (10)



When the green LED is illuminated the flash may be released manually. The release blocks during charging, but not during discharging.

Battery Status Indicator (13)



Approx 10 % power is still available when the last green LED goes off (at red) about 10 flashes at max. power.
In emergency, switching off the unit and waiting for some minutes will permit a few extra flashes (at slow charge).
The "intelligent" electronics saves the battery from over discharging. An "Auto Battery Save" system switches off the Ranger RX pack immediately after 4 Beep signals.

Wireless Remote Control and Flash Triggering

The charge socket is as well the interface for the EL-Skyport Trigger and Remote System.

With the **EL-Skyport RX Trigger Set** 19362, the Ranger RX can be triggered wireless, up to approximately 100 m distance. Apart from triggering, the Transmitter offers modelling lamp on/off settings and flash power control in 1/10th steps.



By using the **EL-Skyport Computer Remote / Trigger Set** 19361, all Ranger RX functions can be controlled and operated with a Mac^o or Windows^o computer.



Note :

To connect the Transceiver RX 19353, the Remote Adapter 19374 is required.

For details of the most advanced wireless system please visit : [www.elinchrom.com/products/RX Multi Remote/EL-Skyport](http://www.elinchrom.com/products/RX%20Multi%20Remote/EL-Skyport)



Synchronisation Socket (14)

Connect the Sync lead with the traditional EL-synchro socket 14.

To protect the synchronisation circuits of your camera, Elinchrom uses only 5 Vdc.

Use only Elinchrom synchro leads, code: 11075.

Charge Socket and Remote control (15)

To charge the Battery, use only the Elinchrom charger Code 19293.

The Ranger RX offers two charging possibilities: Connect the EL charger to the charge socket 15, or to recharge the battery externally, release the Battery Box, and connect the charger to the charge socket on the Battery Box.

How to change the Battery Box:

1. Place the Ranger RX pack on a flat and clean surface.
2. Press simultaneously the two push buttons (on each side of the Ranger RX pack).
3. Lift up the Ranger RX pack approx 5 cm and keep pressing the push buttons.
4. The Battery Box slides out by its own weight.
5. Place the new, charged Battery Box on a clean surface.
6. Place the Ranger RX housing over the Battery Box.
7. The Battery Box locates inside the Ranger RX housing.
8. Press down on top of the Ranger RX pack to activate the locking mechanism.
9. Check, that the Battery Box is secure inside the unit!



Push button

Battery Charging / Fuses

Use only the Elinchrom Rapid Charger Code 19283. Any alternative charger may damage the unit!! The EL Rapid Charger is universal voltage. To charge the battery while it is inside the unit, connect the charger to socket 15.

The charger has a coloured LED indicating:

Red: the unit is charging (approx. 3 hrs min. to full).

Green: charging is completed (but if not disconnected no damage will occur, the charge rate stabilizes almost at zero).

Yellow: will indicate if the battery is over discharged or if a battery has been incorrectly replaced in the Battery Box (reversing polarity).

19293



The Ranger RX battery can be recharged whilst the unit is in use !

Note:

The 12 V/ 7Ah Gel Electrolyte Battery can be recharged from any charge level, there is no Memory-Effect.

The number of flashes may vary from Battery to Battery (due to aging, recycling speed etc.)

Even new Batteries may vary, the full capacity of the Battery is available only after some charge cycles.

Used batteries may need to be recycled Check your local regulations!

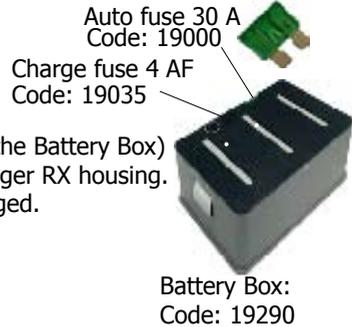
Use only the original batteries from Elinchrom.

Replacement of fuses for Ranger RX

1. 30 A Auto fuse (on the top side of the Battery Box).
2. 4 AF (Quick acting / 5 x 20 mm) charge fuse (on the top side of the Battery Box)
3. 10 AF (Quick acting / 5 x 20 mm) modelling lamp fuse inside Ranger RX housing.

The Battery Box must be removed before the fuse can be exchanged.

4. An additional modelling lamp fuse is in every Free Lite flashhead!



Fuse 10AF
Code: 19038

Standard type 5 x 20 mm, 10 AF (quick-action).

For exchanging a blown fuse: 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. (Check correct value of the fuse: 10AF).

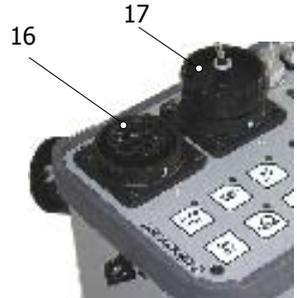
Ranger RX Sockets (16, 17)

To connect flashheads, switch off the unit.

Remove the security cover.

Insert the flashhead plug into the flash socket 16, or 17, (the plug fits only in one position) and turn the bayonet locking ring clockwise!

The unused socket must be closed with the security cover.



- Always switch off the unit before connecting or disconnecting flashheads!
- The head connector must always be locked with the bayonet before any use.

Ranger/Free Lite S and A Flashheads

Ranger/Free Lite S and A heads are designed specifically for the Ranger RX battery pack. The special flashhead bayonet plug with locking ring protects against dust and humidity. The modelling lamp can be activated for 15 or 30 seconds.

By pressing the switch (-on the rear of the head-) once, the modelling lamp switches off after 15 seconds, when pressing the switch twice within 2 seconds, the modelling lamp will switch off after 30 seconds.

To switch off the modelling lamp earlier, (after two seconds) just press the touch button again.

- The maximum modelling lamp power for the pack is 100W / 12V for one connected flashhead or two 50 W / 12 V for two connected flashheads.
- The standard Elinchrom reflector fitting with bayonet and breech lock accepts all Elinchrom/Prolinca accessories manufactured since 1974.
- The Ranger/Free Lite S is a universal flashhead for all general studio and location work.
- The Ranger/Free Lite A head comes with a special, short flash duration flashtube, for action freezing photography (One A head 1/2300 s two A heads 1/4310 s, t 0.5 at full power).
- Flashheads are fitted with 3.5 m heavy duty cable.



Safety Precautions



- The Ranger/Free Lite flashheads cannot be insulated against humidity and dust.
- Only use them with suitable protection if wet or similiary dangerous circumstances.
- Do not use near flammable/explosive material (min. 1m distance of any object)
- Do not open the unit. In the event of damage or apparent failure, contact a repair service or any Elinca agent or email: elinca@elinca.ch
- For your safety, use only elinchrom flashhead.

Technical Data		Ranger RX		Flashhead Ranger/Free Lite	
		Power Pack	Type S	Type A	Ringflash 1500
Maximum power	J/Ws	1100	2400	2400	1500
Power range	J/Ws	17 - 1100	-	-	-
Control range	f-stop	1,5 - 7,5	-	-	-
F-stop, 1m, 100 ISO, with reflector 48°		-	64	64	32,5
Recycling time fast @ Min/Max power	s	0,5 - 5,5	-	-	-
Recycling time slow @ Min/Max power	s	0,9 - 14	-	-	-
Flash duration @ t 0,5; 1 A and 2 A heads	s	-	1/1150 1/2250	1/2300 1/4310	1/675 1/1680
Flashes, out of one charged Battery @ Min/Max Power, slow/fast, recycling		3800-2600 140-110	-	-	-
Modelling light output 12V	W	2x 50	50/100*		-

*optional 100W halogen lamp, but only one head can be used. (code 23046)

Voltage across sync cable	-	5	-	-	-
Stabilisation	V	+/- 1%	-	-	-
Battery lead acid	V/Ah	12V / 7Ah	-	-	-
Battery recharge time, approx.	h	3	-	-	-
Dimension	cm	19 x 14 x 24	22 x 13,5	22 x 13,5	22 x 13,5
Weight	kg	6,5	2,4	2,4	2

Tolerances and specifications conforming to IEC and CE standards. Technical data subject to change without notice.

Troubleshooting

- | | |
|--|---|
| <p>E.R. => overheating</p> <p>=> Discharged Battery</p> | <ul style="list-style-type: none"> • Switch off the unit and let it cool down for at least 10mn • Needs recharging • Battery charging fuse is broken, replace fuses (page 10) • Charger is broken • Battery is out of lifetime |
| <p>- ● - => Internal defect</p> | <ul style="list-style-type: none"> • Do NOT open the unit yourself! • Bring your Ranger RX (with charger, heads, battery & cables) to an Elinchrom service. |

Elinchrom Accessories

		code	
Reflectors	Wide angle ø 16 cm /90°	26143	
	Compact ø 18 cm /60°	26144	
	Standard ø 21 cm /50°	26141	
	Mini soft ø 44 cm silver	26166	
	Mini soft ø 44 cm white	26168	
	Snoot & Grid	26061	
	Grid for snoot	26427	
Grids	Grid set for reflector 18 cm	26135	
	Grid set for 21 cm	26051	
Filters	Set of 10 color/mixed filters for 21 cm x 21 cm	26243	
	Polarizing filter 21 cm	26244	
Lightbanks ROTALUX	Square 70 x70 cm	26178	
	Square 100 x100 cm	26179	
	Strip 95 x 35 cm	26180	
	Rectangular 130 x 50 cm	26181	
	Octagonal 100 cm	26183	
	Octagonal 135 cm	26184	
Umbrellas	White diam. 85 cm	26372	
	Silver diam. 83 cm	26350	
	Translucent diam. 85 cm	26371	
Spots	Zoom Spot 18° - 36°	26481	
	Mini Spot	26420	
Stands	Stand 85-235cm	30101	
	Stand Master 109-385 cm	30149B	
Trigger accessories	Universal Set (1x Transmitter, 1x Universal Receiver and cables)	19360	
	EL-Skyport Computer remote set	19361	
	EL-Skyport RX Set (need adaptor)	19362	
	EL-Skyport RX Adaptor for Ranger RX	19374	
Accessories for Ranger RX (only)			
Ranger RX	Battery Box, including battery	19290	
	Charge adaptor for external car battery	11094	
	Adapter cable Ranger RX pack to EL standard flashheads	11095	
	Shoulder strap for Ranger RX	19289	
Heads	Ranger S Standard FI ashhead	20100	
	Ranger A Action Flashhead	20101	
	Ringflash 1500	20493	
	Ranger/Free Lite extension cable 4m	11096	
Modelling lamps (12V)	Quartz Halogen, GX 6,35 - 12V / 50 W	23044	
	Quartz Halogen, GX 6.35 - 12V / 100W	23046	

GUARANTEE

This ELINCHROM product will be repaired free of charge by the vending agent if during a period of 24 months from date of purchase its working order is impaired through a manufacturing or material defect. The faulty product should be immediately sent to the authorized dealer or ELINCA agent. This guarantee is not valid for equipment which has been misused, dismantled, modified or repaired by persons not belonging to the ELINCA distribution network. It does not cover flash tubes, lamps and the normal ageing of capacitors. No responsibilities can be accepted for damage resulting from unsatisfactory operation of the equipment, such as wasted film or other expenses.



Please „register“ your Elinchrom product online, under
www.elinchrom.com > Downloads > Product Registration

In case you cannot register your Elinchrom unit via internet, please fill in the Guarantee card and post it to Elinca.

Please return this registration card directly to	:	elinca sa
Diese Registrierkarte bitte direkt zurücksenden an	:	P.O. Box 458
Veuillez retourner cette carte d'enregistrement directement à	:	Avenue de Longemalle 11
Vi preghiamo di far pervenire questa cartolina di iscrizione direttamente a	:	CH-1020 Renens
Por favor envie esta carta de registro directamente	:	Switzerland

Elinchrom model	:	
Elinchrom modèle	:	
Elinchrom modell	:	
Modello di Elinchrom	:	
Modelo de Elinchrom	:	N°

Date of purchase	:	Dealer	:
Datum des Kaufs	:	Händler	:
La date d'achat	:	Négociant	:
La data di acquisto	:	Il distributore	:
La fecha de la compra	:	El comerciante	:

Your full name and address	:	
Ihr voller Name und redet an	:	
Votre nom complet et adresse	:	
Il suo nome pieno ed indirizza	:	
Su nombre y apellidos y dirige	:	



www.elinchrom.com