



# **OPERATING INSTRUCTIONS | BRONCOLOR SIROS L**

#### Before use

We are pleased you have chosen a broncolor Siros L, which is a high-quality product in every respect. If used properly, it will render you many years of good service. Please read all the information contained in these operating instructions carefully. They contain important instructions for use, safety and maintenance of the appliance. Keep these operating instructions in a safe place and pass them on to further users if necessary. Observe the safety instructions.

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# IMPORTANT SAFETY INSTRUCTIONS $\wedge$

Before start-up of your flash equipment, please read all the information contained in these operating instructions carefully. The safety instructions they contain must be strictly followed!

- > Remove all transport protection and packing materials!
- > Take special care of your equipment, particularly when there are children present! Never leave the flash equipment unattended!
- Like sunlight, flash light contains a certain amount of UV radiation! Using flash tubes or protective glasses that provide UV protection considerably reduces the undesirable side effects on skin and eyes! Nevertheless, when taking pictures at close range, avoid exposing unprotected skin and eyes to flashes! Avoid looking directly into the light source! The maximum permitted daily exposure to UV radiation according to IEC 60335-2-27/DIN 5031-10 is: 50 J/m². This value must not be exceeded.
- > The distance between a lamp and a person, or a lamp and an inflammable or heat-sensitive surface must be at least 1 m to prevent injury or damage due to thermal radiation!
- > Remove the battery before you clean or service the unit! Allow at least 10 minutes for the lamp to cool before replacing the flash tube!
- broncolor flash light systems should only be used with original broncolor flash tubes, original broncolor bulbs and fuses, original broncolor accessories, and original broncolor spare parts.
- > broncolor monolights and accessories comply with extremely high safety standards! However, if equipment from other manufacturers is used with broncolor monolights, the built-in safety measures may be rendered ineffective. Our guarantee is invalidated by the use of such unauthorised combinations, and we accept no liability for damage arising from such use.
- > To minimise the risk of fire, electric shock, or injury to persons, use exclusively accessories recommended by the manufacturer!
- > The flash equipment is designed for use in dry conditions and in an ambient temperature between -10°C and +60°C. Protect the flash equipment from moisture, condensation, from dripping and splash water, high humidity, dirt, sand, metal chips and the effects of dust!
- > Protect the flash equipment from electromagnetic fields, shock and vibration!
- Protect flash equipment from heat and frost! If the monolight is subject to prolonged exposure to sub-zero temperatures, a permanent loss of power output and serious technical damage may result!
- Sudden temperature differences may result in condensation forming inside the unit. In such situations allow the equipment to stand for at least one hour in a well-ventilated place to acclimatise to the new temperature before start-up!
- > Do not operate the flash equipment in places where there is an explosion hazard!

- > Do not use the power pack in or on water! Attention: High voltage danger of fatal injury!
- > For safety reasons, never operate the monolight without the safety glass in place! To protect eyes from UV radiation, either a UV-coated safety glass or a UV-coated flash tube must be used. If the safety glass is defective, remove the battery immediately. Do not touch any parts on the front face.
- > Before start-up, the monolight must be mounted on a stand or suspended from a suitable mounting. When a lamp is suspended, it must be secured to the stand adapter by tightening the retaining screw. Use only the correct stand with a 16mm pin.
- > Filters or diffusers should not be fastened directly on to flash tubes, LED modelling lamps, or safety glasses!
- > Make sure the cooling slots on the monolight are not covered or obstructed!
- > After use, allow the monolight time to cool before packing it!
- > The battery must not be left in a location where the temperature is constantly below -10° C.
- > Remove the battery before you clean or service the unit!
- > Monolights that have fallen over or been damaged must be checked by a competent specialist before they are put back into service!
- > To avoid danger from electric shock, never open a monolight! There may still be dangerous voltages inside the unit. Units should only be opened, and all service and repair carried out by authorised broncolor service stations. Incorrect assembly can cause dangerous contact voltages, even on connected units.
- > When using Siros L in conjunction with a stand, use a sandbag if the stand is extended more than 2 metres.
- > Remove the protective cover before use!
- Never put the unit in its case when it is hot!

#### Shipping instructions:

When transporting a monolight, use the original broncolor packing. Before shipping flash tubes, halogen lamps and safety glasses, fit the transport protection elements (protective covers) supplied by us. If the transport protection elements are not all available, remove the flash tubes, halogen lamps and safety glasses from the lamps, and pack and ship them separately!

# 1. SCOPE OF SUPPLY

Siros 400 L - 31.710.XX / 31.750.XX Siros 800 L - 31.720.XX / 31.751.XX

Check that all the following items have been delivered:

Siros monolight battery battery charger operating instructions (BA112.00)









## Kits

Siros L Single Kit	Siros L Outdoor Kit 2		
1 × Siros 400 L or 800 L	2 × Siros 400 L or 800 L		
1 × Battery charger (36.151.XX)	1 × Umbrella 85 cm (33.574.00)		
1 × Flash Bag 1.1 (36.536.00)	1 × Softbox 60 × 60 (33.561.00)		
	1 × Adapter ring (33.401.00)		
	1 × Synchro cable (34.111.00)		
	1 × Outdoor Trolley Rucksack for Siros L (36.519.00)		

# 2. FIRST START-UP

# 1. Remove the protective cover

## 2. Press the "on/check" button





# 3. Install the battery

4. Switch the unit on at the main switch





# 3. CONTROL ELEMENTS

Element		Function
0	Rotary controller (1)	Switches the unit on and off (stand-by mode). Pressing the rotary controller for 3 s switches the unit to standby.
		In menu: menu navigation and confirmation of menu items. There is an explanation of menu navigation in Section 5.
		In operation: changes the flash energy. Turning anti- clockwise reduces the flash energy, turning clockwise increases it. Turning slowly changes it in 1/10 th. f-stop steps, turning fast ("twisting") in 1/1 f-stop steps.
5.7	Infodisplay (2)	Shows the flash energy selected, or the menu options.
mod eco	Mod / Eco on / off (3)	A short press switches the modelling light on or off. A long press switches between Normal and Eco modes.
test	Test initiation (4)	Test initiation: the "Ready" display around the rotary controller changes to blue as soon as the charge/discharge operation has been completed. A long press switches the unit back to the default settings.
Menu function		
speed	Speed (5)	For fast charging and flash times. See explanation in Section 7.
WiFi	WiFi (6)	Shows whether WiFi is switched on or off.
st/ch	Studio/Channel (8)	Is the menu item for selecting the current studio channel (RFS 2.1).
lamp	Lamp (9)	Is the menu position to select a certain lamp channel (RFS 2.1).
seq	Sequence (10)	Is the menu position to select a certain number of flashes.
beep	Beep (11)	Shows if the acoustic "Ready" warning is switched on or off.
sync	Sync (12)	Permits the selection of different methods of release (photocell, radio, photocell and/or radio).
_	Sync socket / Micro USB (13 / 14)	For release via the sync cable, or software update via Micro USB.
0 -	On/Off (15)	To switch the unit on and off. After switching the unit on, it is only possible to switch it off again after a delay period of 4 seconds.

## 4. OVERVIEW OF THE MAIN MENU FUNCTIONS

- 1) To enter the main menu, press the rotary controller (1).
- 2) Turn the rotary controller clockwise or anti-clockwise to reach the required menu item.
- 3) To confirm your selection, press the rotary controller (1) again. The selected menu item starts to blink.

Display Options Descri		Description
Speed	on off	Controlling flash times, see Section 8.2
WiFi	on off sync	Wifi settings
st/ch	1 – 99	Assignment of studio address / channels from 1–99
lamp	1 – 40	Setting the lamp address / zone from 1 – 40
seq	off 2 – 50	Selection of a certain number of flash releases from $2-50$ .
beep	on off	Switches acoustic "Ready" signal on or off
sync	rf ce all	Selection of different methods of release. (photocell "ce", radio "rf", photocell and radio "all")

# 5. MENU NAVIGATION

#### Overview of menu functions

	Siros 400 L	Siros 800 L	
Speed	•	•	
WiFi	•	•	
st/ch	•	•	
lamp	•	•	
seq	•	•	
beep	•	•	
sync	•	•	



# Please note: if a menu item cannot be selected, the unit does not support this function!

Example: Set a sequence of 15 flashes per release

- Press the rotary controller (1) to enter the main menu. The menu item last selected will be displayed. The main display changes from showing the output power to the selected menu item.
- 2) Turn the rotary controller (1) until you reach the menu item "seq".
- 3) Press the rotary controller (1), to confirm this function. The "seq" display begins to blink.
- 4) Turn the rotary controller (1) until "15" appears in the main display "15".
- 5) Confirm this selection by pressing the rotary controller (1). After this confirmation, the unit switches to its normal state. If the selection is not confirmed within 5 s, the unit switches to its normal state without changing its setting.

1) 2) 3)







4) 5)





## 6. BATTERY

#### 6.1 Description of the battery display



- Battery display illuminated
- Battery display blinks
- Error message

During operation	1	2	3	
	1			Battery fully charged (100%)
				Battery half-full (ca. 50%)
				Battery almost empty (ca. 20%)
			<b>₩</b>	Battery empty, please recharge (ca. 5%)

During charging	1	2	3	
	<b>₩</b>	<b>₩</b>	**	Battery empty and is being recharged
	<b>:</b> ₩	<b>₩</b>		Battery is 50% charged
	<b>₩</b>			Battery is 80% charged
				Battery is fully charged*

<sup>\*</sup> The battery is only fully charged when the charge indicator lamp on the charger turns green.

Error message at battery	1	2	3	
	*		*	Battery temperature is too high. Allow battery to cool down.
	*			Voltage too low. Charge the battery again.
		**		Voltage too high. Use the battery normally; if the message appears again, send the battery for servicing.
	*	**		Current draw too high. Send monolight and battery for servicing.
			*	Short circuit. Send monolight and battery for servicing.
		<b>₩</b>	*	Battery temperature is too low – allow it to warm up.
	*	<b>:</b> ₩	**	FET temperature is too high - allow it to cool.  If it happens again, send the battery for servicing.

#### 6.2 Care of the lithium battery

During storage and when charging the battery, the ambient temperature should be in the range  $5^{\circ}$  C –  $35^{\circ}$  C. Use of the battery at very low temperatures (below -10° C) can result in a substantial loss of output.

After 500 charging cycles the battery still has at least 80% of its original capacity.

#### 6.3 Charging the battery

The battery must be removed from the unit to start recharging, so operation is not possible during charging.

The battery has built-in protection systems that operate autonomously. When the unit is used a lot or is operating in a very warm environment, the battery may reach a temperature that causes it to shut down in order to protect it.



Please note: a battery has a limited working life from the point of view of the number of charging cycles it can withstand, which will vary with the type of use and the settings. Depending on how the monolight is used, the actual working life of the battery may be shorter than given. The manufacturer offers no guarantee regarding the number of flashes and charging cycles. You will find further instructions under "Battery care and maintenance".

#### 6.4. Transporting batteries

The lithium ion batteries employed in the unit may be transported as hold luggage in aircraft provided approval is obtained from the airline.

Replacement batteries must be taken as hand luggage (max. 2 per person); they must be individually packed and protected against short circuits.

#### 6.5. Eco mode

Activating Eco mode helps conserve the battery; the temperatures in the battery and the unit are reduced. Operation of the unit in Eco mode extends the working life of the battery. A larger number of flashes per battery charge can be expected. On the other hand, the charging time will be longer.

# 7. CONTROLLING FLASH TIMES

With Siros, you can control the flash time in two different ways:

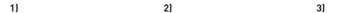
### Controlling flash time using the "speed" setting in the main menu

In the main menu you can set the flash time of the monolight to "speed". This setting calculates the fastest possible flash time for the chosen energy level. This also causes the flash colour to shift slightly towards the blue region.

- 1) Press the rotary controller (1) to enter the main menu.
- 2) Turn the rotary controller (1) until you reach the menu item "speed".
- 3) Confirm this selection by pressing the rotary controller (1).
- 4) Use the rotary controller (1) to select the option "on" or "off".
- 5) Confirm this with the rotary controller (1).

"see p.39"

When the "speed" function is switched off, the unit is in "Optimum" mode.









4) 5)





### 8. RELEASE

Siros monolights are supplied with the RFS 2.1 module built in.

#### 8.1 RFS 2.1 module (radio frequency system)

For RFS 2.1 flash control, the channel (studio address) must correspond to the transmitter's RFS 2.1 channel. The studio address is set in the menu at position "st". The lamp channel is defined in the menu under "lamp". See Section 9.3 for more information about changing the colours of the cognition lights.

With the RFS 2.1 Transceiver, you can define and set the individual lamps as you wish. To learn how to do this, please see the operating instructions for the RFS 2.1 Transceiver. The RFS 2.1 Transceiver is not included in the scope of supply as standard.

#### 8.2 Photocell (cell)

The photocell can be switched on and off using the menu function "sync" (11). When it is active, the blue LED beside the "cell" label is illuminated. After the first flash of a sequence, the active photocell is deactivated, and the blue LED beside the "sync" button (11) blinks. Pressing the "test" button switches it on again.

#### 8.3 Synchro socket (12)

The sync cables, 5 m (Art. No. 34.111.00) or 10 m (34.112.00), can be fitted to the socket for cable release (12).

#### 8.4 "test" button (4)

Using this button, the monolight can be triggered manually. The flash can be triggered as soon as 90% of the set energy level is reached. The visual "Ready" indicator, on the other hand, only illuminates when 100% is attained.

### 9. SPECIAL FUNCTIONS

#### 9.1 Reset (works settings)

Press the Test button (4) for 4s. This resets all functions to the works settings. Resetting is acknowledged with a double beep.

#### 9.2 broncontrol app and WiFi settings

To control your Siros L monolight, you can also download the "bronControl" app, or purchase the "bronControl pro" app for additional functions. To find the app, search for "bronControl" in Apple's App Store, or in Google's Play Store.

#### 9.2.1 Operating modes

#### 9.2.1.1 Operation in "private" mode (works setting)

If the WiFi mode is activated on more than one monolight, these units all link up automatically with the same studio address to form a private network. A smartphone or tablet must then be connected to this network in order to control it. To use this, activate the WiFi function on your smartphone or tablet. Your device will then automatically search for available WiFi networks. Connect your smartphone or tablet to the appropriate Bron-Studio network. The connection password is: broncontrol. Now start the bronControl app on your device. Add the appropriate studio number under "add new studio" and connect the app with this studio. For further instructions about operation, please use the help function "?" in the app.

#### 9.2.1.2 Operation in "enterprise" mode

If there is an existing WiFi network (router), the unit can be integrated into this network using a smartphone or tablet. To achieve this, in the "bronControl" app, under Settings, go to "Network Setting" and enter your router's settings in "Infrastructure Mode". Make sure the units are set to the correct studio address. Siros saves the last type of connection and tries to connect to the last network the next time it starts.

#### 9.2.2 Menu settings

on / off / sync (on / -- / sy)

- on WiFi module is activated. The unit tries to connect to a network.
- -- WiFi module is deactivated.
- sy When "sy" is selected, the unit reverts to a "Private" mode. This means that the unit looses its network setting and connects to the private network.

#### 9.2.3. WiFi display (9) on unit

Symbol	Description
Dark	WiFi is not activated.
Blinking	WiFi is activated, but not connected to a network.
Permanently on	WiFi is activated and connected to a network (enterprise or private).

#### 9.3 Cognition light

When the various lamp channels are selected (zones), the cognition light on the top surface of the unit changes colour. The purpose of this is to better differentiate between individual units when they are controlled by the "bronControl" app. The light on the unit changes colour when the app is activated on a smartphone or tablet, or when the rotary controller on the unit is pressed; it changes back to blue on leaving the menu.

The lamp channel colours are as follows:

Lamp channel 1 blue

Lamp channel 2 green

Lamp channel 3 violet

Lamp channel 4 yellow

Lamp channel 5 turquoise

From lamp channel 6, the colours repeat in the same order (starting with blue).

#### 10.1 Acoustic signals

Beep sound: end of charging or discharging

Double beep: energy demand above or below energy control setting via RFS 2 transmitter

### 10.2 Message in display

#### Fault 1 (F1)

No flash on release

→ Is the ignition wire correctly connected? Is the flash tube correctly installed? Otherwise replace flash tube

#### Fault 2 (F2)

Afterglow

→ Switch the unit off and then on again. If this fault occurs repeatedly, the flash tube is defective

#### Fault 3 (F3)

Electronic defect

→ Unit must be sent to Service for repair.

#### Fault 4 (F4)

Over-voltage in flash capacitor

→ Unit must be sent to Service for repair.

#### Fault 5 (th)

Thermal alarm, capacitors overheated

→ A cooling phase of approximately 20 minutes is started. Do not switch the unit off!

<sup>\*</sup>Error messages are always also indicated by the red cognition light

## 11.1 Changing flash tubes

- 1) Switch the unit off and remove the battery.
- 2) Wait for one minute for the flash capacitor to discharge. Remove the safety glass by pulling it out of its retaining clips.
- 3) Press the contact spring downwards and pull the flash tube out carefully.

1) 2) 3)







## 11.2 Changing light modifiers

- 1) Turn the light modifier in either direction to its stop.
- 2) Pull the release backwards and, at the same time, turn the light modifier until it is free of the bayonet fitting.
- 3) Remove the light modifier carefully to the front. Take care not to damage the safety glass.

1) 2) 3)







### 11.3 Mounting an umbrella

1) Insert the umbrella in the opening provided beneath the unit.

1) 2) 3)







# 12. ACCESSORIES

Normal reflector L40
Honeycomb grids for L40, set of three
Barn door with four flaps for L40
Assortment of colour filter for barn door for L40, set of nine
Colour correction and diffusion filters for barn door for L40, set of eight
Flash tube 400/800 J for Siros L
Flash Bag 1.1 for Siros L
Outdoor Trolley Rucksack for Siros L
Umbrella Ø85 cm silver/black
Umbrella Ø 105 cm silver/black
Focus 110 umbrella Ø 110 cm silver
RFS 2.1 transmitter
Sync cable 5m
Adapter ring, broncolor
Softbox 60×60
Battery charger for Siros L
Li-ion battery for Siros L
Basic M Stand

# 13. MAINTENANCE / REPAIRS

Your broncolor monolight is a precision instrument and will give many years trouble-free operation if treated with the appropriate care. However should a fault occur, please do not try to open the unit and repair it yourself. Even when the unit is switched off, there may still be dangerous voltages inside it. Therefore, for maintenance and repairs always send the unit to your broncolor service point.

# 14. ENVIRONMENTAL PROTECTION INFORMATION

At the end of its useful life, this product may not be disposed of as normal household waste, but should be taken to a collection point for the recycling of electrical and electronic appliances. The materials are recyclable according to their markings. By re-use, recycling, or other form of using old appliances you are making an important contribution to the protection of our environment. Please ask your local authorities or our sales partner for the appropriate disposal point.

## 15. GUARANTEE

All broncolor power packs, lamps, monolights and accessories have a high quality standard. We offer a two-year factory guarantee from the date of purchase (for the first owner) on the above broncolor products. Excluded from this guarantee are flash tubes, halogen lamps, safety glasses, cables, batteries and textiles. Faults resulting from non-observance of safety instructions, incorrect handling, use of accessories from another manufacturer, or unauthorised intervention/modification are excluded from the factory guarantee. We assume no liability for damage resulting from non-observance of safety instructions, incorrect handling, use of accessories from another manufacturer, or unauthorised intervention/modification. In the event of technical problems, please contact the nearest authorised broncolor service station immediately. Article numbers, product descriptions, and the scope of supply can vary from one country to another. For more detailed information please contact your broncolor sales partner. Errors and misprints excepted.





		Siros 400 L   31.710.XX	Siros 800 L   31.720.XX		
Flash energy		400 J	800 J		
f-stop at 2m, 100 ISO	with reflector L40	22 <sup>5</sup> / <sub>10</sub>	32 <sup>8</sup> / <sub>10</sub>		
	with reflector P70	32 <sup>5</sup> / <sub>10</sub>	45 <sup>6</sup> / <sub>10</sub>		
Flash duration t 0.1 (t 0.5)	min. energy	1/6'200s (1/11'300s)	1/4'400 s (1/7'400 s)		
	max. energy	1/400 s (1/1°200 s)	1/250 s (1/700 s)		
Charging time (at 28.8 V)	Eco mode	0.04 – 1.9 s	0.05-4.3s		
(100% of selected energy)	Normal	0.03 – 1.2 s	0.03-2.7s		
Number of flashes per battery charg	je	440	220		
Setting range for flash energy		Over 9 f-stops, in steps of 1/10 or full f-sto 1.5–400 J	ops 4-800J		
Colour temperature Max. energy / P70		5'500 K	5'500 K		
Colour temperature of modelling light		25 W LED 3'000 K	25 W LED 3'000 K		
Flash release		Manual trigger button, photocell, sync cab	Manual trigger button, photocell, sync cable, with integral broncolor RFS 2.1		
Remote control		Using "bronControl" app for mobile device	es or RFS 2.1 transmitter		
Ready indicator		Visual and acoustic (can be switched off)	Visual and acoustic (can be switched off)		
Extra functions		Speed mode for fastest flash times USB c Thermal monitoring of power electronics I	Sequences (flash series) up to 50 flashes Integral umbrella mounting and integral umbrella reflector Speed mode for fastest flash times USB connection for software updates Thermal monitoring of power electronics Internal discharge for output reduction ECO mode conserves the battery and extends its working life.		
Cooling		Temperature-controlled fan			
Standards		EN60065 / EN61000-4-2 EN55015 EN 301489-1 / EN 301489-3 IS010330			
Dimensions (l×w×h)		32×13×18 cm (12.6×5.1×7.1")	36×13×18 cm (14×5.1×7.1")		
Weight of monolight (without battery)		3.1 kg (6.8 lbs)	3.7 kg (8.2 lbs)		
Dimensions of battery (l×w×h)		8.5×11×5.5 cm (3.3×4.3×2.2")	8.5×11×5.5 cm (3.3×4.3×2.2")		
Weight (battery)	Weight (battery)		0.6 kg (1.3 lbs)		
Li-ion battery		28.8 V / 2.5 Ah / 72 Wh	28.8 V / 2.5 Ah / 72 Wh		
Operating temperature range		-10° C bis +60° C	-10° C bis +60° C		