BE CREATIVE WITH LIGHT.
AND WITH SYSTEM.

broncolor
THE LIGHT

Dear Reader

Our company, founded in 1958, with its three product brands, broncolor, VISATEC and kobold, has developed over the past half-century into a "global player" in the international market for professional lighting systems. Today we serve three business sectors: professional photography, broadcasting/TV, and events. We chose "50 Light-Years Ahead" as the slogan for our jubilee year in 2008. This statement also reflects our commitment for the future.

The challenge of consistently meeting your needs and repeatedly surprising you with innovations is our motivation – and light our passion. Essentially, we have much in common. Every day and with every new assignment you are challenged to create different, surprising, more refined images. In this we want to offer you our full support. We take advantage of every personal contact with your colleagues all over the world to ask which solutions would help them meet their daily challenges. The latest innovations from broncolor, which regularly achieve worldwide recognition, grow from these valuable inputs and the untiring efforts of our engineers in pursuit of technological development.

But in parallel with this spirit of innovation, the quality and reliability, that you expect in your daily work in the studio or on location, has lost none of its traditional high importance. Every unit that leaves our production facilities undergoes exhaustive functional testing. Wherever possible, new developments are made compatible with earlier models. Systematically implemented over the years, this philosophy has enriched the broncolor product line to such an extent that it leaves almost nothing to be desired in terms of operating convenience, long-term value and reliability. And we stand by that.

On our website, www.broncolor. com, you will find detailed information about the entire broncolor product line. Judge for yourself! On the following pages we present the current broncolor product line. We look forward to counting you among our satisfied customers for many years to come.

Jacques Bron

broncolor®
THE LIGHT

TABLE OF CONTENTS

Sandro Bäbler, Switzerland

Creativity is compelling

In the professional community, the digital image is here to stay. The ability to edit images on computers is now taken for granted. But one factor remains unchanged: light. This factor drives our mission to accompany developments in photography and to advance technological progress in professional lighting. Today, broncolor is the leading brand globally for flash lighting systems, our products can be found in countless studios around the world. Precision, benchmark technology, quality and reliability are the drivers of this success story. Our headquarters and the technology centre are located in Allschwil near Basel, close to where the German, French and Swiss borders meet. At this globally recognised research triangle, committed broncolor employees forge the future. broncolor is an international brand. Our representatives and service centres are qualified partners for our customers in over 60 countries.

The power of innovation

It is the think tank in which pioneering broncolor technologies were invented and are continually being refined. Its unfaltering quest for optimisation is based on a constant involvement at the forefront of electrical engineering as well as the identification of new materials and manufacturing processes. The ongoing dialogue with professional photographers and broncolor equipment users also plays an important role. These discussions have often inspired new generations of equipment, safeguarding continuity in an evolution that addresses genuine user needs. The best technical features are worth very little if they lack operating convenience. For this reason, broncolor also stands for design. Our products are ergonomic, easy to understand, and aesthetically appealing. As people whose perception is quintessentially visual, photographers especially appreciate these attributes.

Quality counts

Imagine a production day with models, makeup artists, hair stylists, assistants, creative directors, and the client assembled in a studio. Everything is in place, everything is ready. And then, at the decisive moment, the flash system fails: a catastrophe for the client, the agency, and the photographer. Apart from fascination and technical progress, what drives us is the meticulous compliance of every broncolor product with the loftiest standards of quality, precision, and dependability. And these standards are defined by the photographer's expectations. Prior to delivery, every single power pack, every monolight, and each lamp is painstakingly tested for unrestricted functionality and flawless quality. Our two-year factory warranty proves that we stand behind our work. This commitment is globally acknowledged.

The world is our home

Quality generates acceptance. The world's most professionally managed studios have embraced broncolor products as the standard for perfect lighting. In return, we emphasise worldwide customer support with more than 100 service centres. In addition to maintenance and repair specialists, every broncolor representative is staffed with competent advisors who can assist photographers in solving lighting problems. At the same time, broncolor's in-house instructors provide training for local service technicians and acquaint them with innovations and new technologies.

In addition to the assurance that they can count on assured support virtually everywhere, photographers also have access to another welcome service at approaching 120 locations around the world: the "broncolor World Light Rental System." broncolor's dedication to quality is also evident by our popular workshops on lighting techniques and the numerous publications we produce. For details, see page 65, or log on to our website at www.broncolor.com.

Once you have made a decision in favour of broncolor, we provide regular software updates to make sure your product retains its functionality as long as possible, in some cases even extending its capabilities. This approach allows us to actively protect your investment in the interest of a long-term partnership – a partnership that lets you and us join forces to shape the future of light in photography.

How important are joules for exposure?

To be able to objectively evaluate and compare technical devices, assessment criteria that include technical and economic aspects have to be considered.

The amount of light reaching the CCD chip is important. The parameter J (joules) – also called Ws (watt-seconds) – quantifies the energy content or storage capacity of the flash capacitors. If a flash unit has a storage capacity of 300 joules, it can operate a 300-watt lamp for 1 second or a 300,000-watt lamp for 1/1000 second. The number of joules or watt-seconds gives no information about the actual amount of light that is emitted and that is crucial for lighting purposes, since it ignores certain important factors that can decrease the conversion of electrical energy to light. For example, the flash tube and the unit must be co-ordinated with one another, the reflector must be adapted to the flash tube and the power cable must be dimensioned appropriately. Losses between the flash capacitors and flash tubes, which would otherwise have a negative effect on efficiency, are thereby minimised.

Guide numbers and f-stops

For amateur and portable flash units, it is common to quote a guide number, which is the product of the f-stop and the distance between the subject and the light source. For example: distance from light source to subject = 2 m, measured f-stop = f/11; 2 × 11 = 22, and the guide number for that unit is therefore 22. If this value is to serve as a parameter for a flash unit, it must be dependably applicable in every case (i.e. constant). This condition is met only when the light intensity decreases as the square of the distance. This is certainly the case when the light source is small in comparison with the distance between it and the subject, a requirement which flash

units for amateurs fulfil very well, but only seldom flash systems. Their light sources are generally not point-like, but instead are often larger than the subject itself or the distance between the light source and subject. Since in this case the light does not diminish proportionally with the squared distance, the expected f-stop cannot be calculated with this method. For flash systems, therefore, the guide number is a purely theoretical value and not a usable parameter. broncolor therefore simply quotes the expected f-stop at a distance of 2 meters for its units. The advantage for photographers is that they get a definite state-

ment about exposure that has already taken into account all the losses and efficiencies not accounted for in the energy rating. The figure also allows users to compare the effects of different reflectors.

**Flash units and
digital photography**
Light quality depends on two factors: first the quality of the light shaper that is used, and second the precision of the flash unit's control system. If the light quantity or light quality of different exposures is not identical, colour shifts are inevitable. broncolor flash systems offer precise control of flash

voltage. This outstanding repetitive precision is especially important for images using multi-shot cameras. The high-end Scoro power pack is moreover equipped with broncolor's patented ECTC (Enhanced Colour Temperature Control) technology, which ensures a constant (or deliberately variable) colour temperature over the entire control range.

For users of digital imaging systems who need completely computer-controlled image acquisition, broncolor offers units that can be remotely radio-controlled from a PC or Macintosh.

Helge Kirchberger, Austria, Client: www.hangar-7.com

Speed meets precision – unbeatable flash times

FLASH CUT-OFF

Cut-off technology
For consistent flash energy, flash durations can be substantially shorter using broncolor cut-off technology than is possible with conventional units:

Light intensity (%)

broncolor cut-off

Same amount of light (power)

100
50
10

shorter flash

longer flash conventional

Time
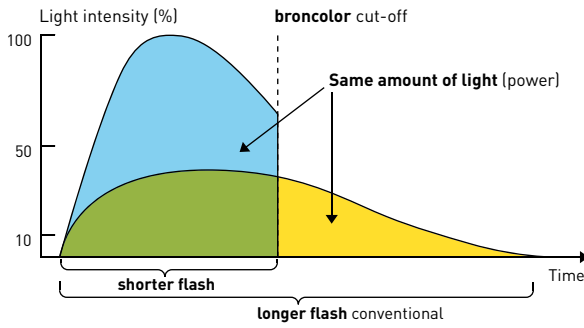
t 0.1 = 1/600 s

Why t 0.1 and not t 0.5?

Comparison without broncolor cut-off technology

Light intensity (%)

100

40% unaccounted light when considering t 0.5

50

10

t 0.5

t 0.1

Time
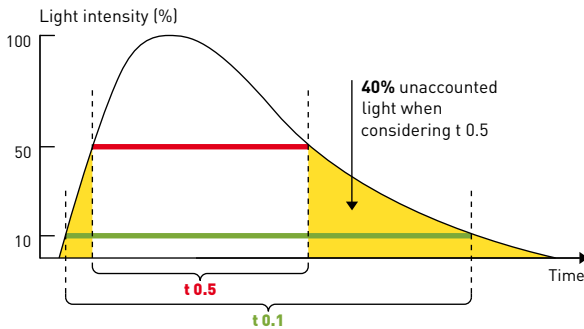
t 0.5 does not measure all light relevant for the complete shooting: light is radiated before and after t 0.5, which can result in blurring.

Comparison with broncolor cut-off technology

Light intensity (%)

broncolor cut-off

100

50

t 0.5 and t0.1 almost identical

10

t 0.5

t 0.1

Time
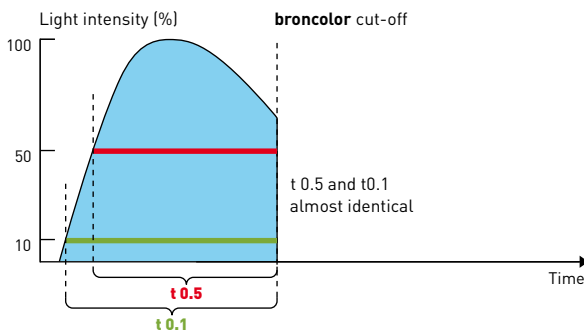
The total quantity of light is taken into account. No blurring, because the flash is cut off.

t 0.5 = 1/600 s

Good to know
There is no generally valid factor for converting t 0.5 to t 0.1. It is therefore not correct to use t 0.5 to compare different flash durations; for comparisons t 0.1 must be known as well.

Absolute colour constancy with ECTC*

**CONSTANT COLOUR
ECTC**

Constant colour temperature
Patented ECTC technology enables a constant average colour temperature over the entire output range.

The colour temperature tolerance band is only +/- 50 Kelvin.

It controls the amplitude of the blue light component according to the warmer red component, which originates at cut-off.

Light intensity (%)

100

5500 K

Time
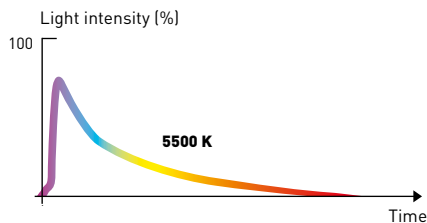
With this unique technology broncolor provides output control over 11 f-stops, or ten f-stop steps, at constant colour temperature. There is no other technology which compares with this performance. With other technologies such a constant colour temperature can only be attained over a maximum of four f-stops.

Kelvin

6000°
5500°
5000°
4500°
   0.1 1 2 3 4 5 6 7 8 9 10
                        Output in f-stops
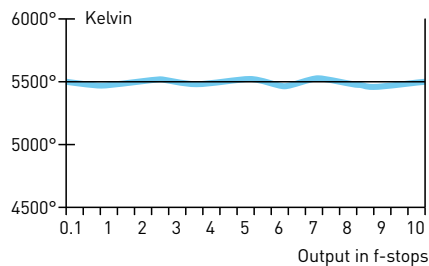
Even for fast flash sequences, constant colour temperature and quantity of light are the primary quality criteria for broncolor products.

*ECTC Enhanced Colour Temperature Control

with broncolor technology

without broncolor technology

Control meets efficiency – enormous control range, individually controllable

CONTROL RANGE

Power distribution
Scoro S units have three lamp outlets, Scoro E and Move have two each. Each lamp outlet has an individual power controller with LED display and is adjustable independently of the other outlets. The unit therefore behaves like three (or two) independent power packs.

The individual power distribution combined with the large control range, at its maximum from 3-3200 Joules, allows the photographer an almost free choice of f-stop.

The required flash output can then be chosen from up to 11 f-stops, or ten f-stop steps. A further power display provides information about the total energy supplied by the power pack. With the buttons beside the display it is possible to change the total energy of all channels simultaneously.

Aperture closed

Aperture open

Record charging times with Speed Mode

SPEED MODE

Speed Mode
In Speed Mode, Move can be operated at optimum colour temperature and maximum output with a minimum charging time of 0,9 s (600 J). The Scoro even manages 0,4 s at 1600 J. The shortest charging time is an unbelievable 0,02 s.

How is that possible?
With the Speed button the maximum energy is reduced by 25 % and, so, the charging time shortened by up to 50 %.

In this way Move, just like its big brother, the Scoro, achieves the world's shortest charging time of 0,02 s.

Using this technology stroboscope shootings can be illuminated with only a single flash unit. For example, in technical and scientific photography motion sequences can be made visible.

By alternately triggering several power packs, the number of flashes per second can even be doubled.

with broncolor technology

without broncolor technology

POWER PACKS

High-performance flash systems always consist of a separate power pack and one or more lamps. Advantages compared to monolights are the ability to connect several lamps, the big choice of special lamps (e.g. diffused-source lamps, spots, etc.), and the comprehensive range of accessories. The extensive range offers the right solution for every lighting assignment and every budget. Power packs, lamps and accessories from broncolor are, with very few exceptions, also compatible with current monolights, and offer an enormous spectrum of flash energies.

Scoro, the top model, features individual power distribution, i.e. all lamp outputs can be individually regulated. broncolor's patented ECTC technology (Enhanced Colour Temperature Control) ensures absolute control of colour temperature and flash duration over the entire output range. Numerous additional programmable functions enable widely differing applications. Scoro is the first power pack to incorporate all significant features: Scoro has the fastest charging time, roughly twice as fast as any of the others; Scoro has the shortest flash duration at every output rating; Scoro features the greatest range at constant colour temperature.

The Verso A power pack is notworthy for its fast charging time, short flash duration, and individual power distribution. An option allows the unit to be operated from a battery. A Senso power pack is a good introduction to the broncolor system: Senso includes all the features of a studio flash unit in a small volume - ideal when you are on the road. The mains-independent power pack Move 1200 L is notable for its light weight, robustness, and user-friendly plug-in battery. Move is compatible with all broncolor flash units and lamps, and can be used both on location and in the studio.

On all broncolor studio power packs modelling light can be adjusted to be proportional to the differing flash outputs of diverse power packs, and to the number of lamps. In this way the lighting situation can be assessed in the correct relationship to the effective flash output. The robust housing protects the electronics in hard daily use, and the cooling fan and thermostat protect against damage from overheating. Modern micro-processor technology controls the various functions and simultaneously monitors the capacitor and operating modelling-light voltages. With their high-precision regulation of flash voltage, broncolor power packs are ideal for multi-shot digital photography. All models are equipped with a photocell and have a large adjustment range in 1/10 f-stop steps. As standard, Verso power packs are equipped with the radio system RFS, while Senso and Move power packs have RFS 2. For Scoro power packs, there is a choice of RFS or RFS 2. With this radio system, a power pack can be triggered by radio and controlled remotely.

Because of the laws in some countries, the use of the broncolor RFS radio system is not allowed.

FLASH CUT-OFF
t 0.1 = 1/10'000 s
t 0.5 = 1/14'000 s

CONSTANT COLOUR ECTC
5500 K

CONTROL RANGE
11 F-STOPS

SPEED MODE
0.02 s

Scoro S

- Ultra-fast flash times down to 1/10'000 s (t 0.1) or 1/14'000 s (t 0.5)
  thanks to innovative cut-off technology
- Extremely powerful lighting – outputs up to 3200 J
- Three lamp outlets, individually switchable and with fully independent control of each
- ECTC (Enhanced Color Temperature Control) technology for constant colour
  temperature, and selective colour temperature changing when required
- Long-life halogen modelling light, up to 3 × 650 W and five proportionality stages
- Robust, easily readable 8 cm LED display (240 × 180)
- Elegant, robust metal housing with carbon-look and massive carrying handle
- Speed Mode
- Memory function
- Further special functions, such as alternation, delay and stroboscopic effects

	Scoro 1600 S RFS | 31.041.XX Scoro 1600 S RFS 2 | 31.044.XX	Scoro 3200 S RFS | 31.043.XX Scoro 3200 S RFS 2 | 31.045.XX
Normal mode		
Flash energy	1600 J	3200 J
f-stop at 2 m, 100 ISO, reflector P70	64 $^2/_{10}$	90 $^2/_{10}$
Flash duration at max. energy* t 0.1 (t 0.5)	1/325 s (1/760 s)	1/160 s (1/390 s)
Variation range for flash duration* t 0.1 (t 0.5)	1/150 – 1/10'000 s (1/450 – 1/14'000 s)	1/85 – 1/10'000 s (1/240 – 1/14'000 s)
Charging time (min. – max. energy) at 230 V	0,02 – 0,6 s	0,02 – 1,3 s
120 V	0,02 – 1,0 s	0,02 – 2,0 s
100 V	0,02 – 1,1 s	0,02 – 2,2 s
	Switchable to slow charge	Switchable to slow charge
Speed Mode		
Flash energy	1200 J	2400 J
f-stop at 2 m, 100 ISO, reflector P70	45 $^9/_{10}$	64 $^9/_{10}$
Flash duration at max. energy* t 0.1 (t 0.5)	1/435 s (1/1600 s)	1/215 s (1/860 s)
Variation range for flash duration* t 0.1 (t 0.5)	1/150 – 1/10'000 s (1/450 – 1/14'000 s)	1/85 – 1/10'000 s (1/240 – 1/14'000 s)
Charging time (min. – max. energy) at 230 V	0,02 – 0,4 s	0,02 – 0,8 s
120 V	0,02 – 0,6 s	0,02 – 1,2 s
100 V	0,02 – 0,7 s	0,02 – 1,4 s
Ready display	Visual and audible (can be switched off), activated when 100% of the selected energy is reached	
Lamp outlets	3 outlets with flash cut-off and ECTC	
Power distribution	Symmetrical and individually asymmetrical	
Control elements	Dust and scratch-resistant, illuminated silicone keypad, setting by radio remote control	
Control range for flash energy	Over 10 f-stops	Over 11 f-stops
	in $^1/_{10}$ or full f-stop intervals. Choice of joules or percent for LCD display	
Colour temperature	ECTC technology (Enhanced Colour Temperature Control) for constant or specifically adjustable colour temperature	
Modelling light	Halogen max. 3 × 650 W at 200 – 240 V / Halogen max. 3 × 300 W at 100 – 120 V Proportional to flash energy, also full and low settings. Proportionality can be adapted to other broncolor power packs and to monolights	
Additional functions	t 0.1, sequence, delay, interval, colour temperature, alternating, stroboscopic, memory, and many more	
Flash release	Manual release button, photocell, infrared RFS or RFS 2 receiver, may be switched off sync cable, IRX 2	
Number of sync sockets	1	1
Computer connection for remote control	1	1
Stabilised flash voltage	+/- 0,3%	+/- 0,3%
Power requirements	16,0 A (230 V) 15,0 A (120 V) 15,0 A (100 V)	16,0 A (230 V) 15,0 A (120 V) 15,0 A (100 V)
Dimensions without handle	28,8 × 19 × 29,5 cm (11,3 × 7,5 × 11,6")	28,8 × 19 × 40 cm (11,3 × 7,5 × 15,7")
Weight	8,9 kg (19,6 lbs)	12,1 kg (26,7 lbs)

*Automatic regulation of flash duration and energy for optimum colour temperature. Preselection of minimum flash duration possible

FLASH CUT-OFF
t 0.1 = 1/8'000 s
t 0.5 = 1/12'000 s

CONSTANT COLOUR ECTC
5500 K

CONTROL RANGE
9 F-STOPS

Scoro E

- Ultra-fast flash times down to 1/8000 s (t 0.1) or 1/12'000 s (t 0.5)
  thanks to innovative cut-off technology
- Extremely powerful lighting – outputs up to 3200 J
- Two lamp outlets with individual cut-off and fully independent control of each
- ECTC (Enhanced Color Temperature Control) technology for
  constant colour temperature of every firing
- Long-life halogen modelling light, up to 3 × 650 W and five proportionality stages
- Robust, easily readable 8 cm LED display (240 × 180)
- Elegant, robust metal housing with carbon-look and massive carrying handle

	Scoro 1600 E RFS | 31.060.XX **Scoro 1600 E RFS 2** | 31.062.XX	**Scoro 3200 E RFS** | 31.061.XX **Scoro 3200 E RFS 2** | 31.063.XX
Flash energy	1600 J	3200 J
f-stop at 2 m, 100 ISO, reflector P70	64 $^2/_{10}$	90 $^2/_{10}$
Flash duration at max. energy* t 0.1 (t 0.5)	1/325 s (1/760 s)	1/160 s (1/390 s)
Variation range for flash duration* t 0.1 (t 0.5)	1/265 – 1/8000 s (1/760 – 1/12'000 s)	1/132 – 1/8000 s (1/390 – 1/12'000 s)
Charging time (min. – max. energy) at 230 V	0,06 – 1,0 s	0,06 – 1,7 s
120 V	0,06 – 1,4 s	0,06 – 2,4 s
100 V	0,06 – 1,5 s	0,06 – 2,6 s
	Switchable to slow charge	Switchable to slow charge

Ready display	Visual and audible (can be switched off), activated when 100% of the selected energy is reached	
Lamp outlets	2 outlets with flash cut-off and ECTC	
Power distribution	Symmetrical and individually asymmetrical	
Control elements	Dust and scratch-resistant, illuminated silicone keypad, setting by radio remote control	
Control range for flash energy	Over 8 f-stops	Over 9 f-stops
	in $^1/_{10}$ or full f-stop intervals. Choice of joules or percent for LCD display	
Colour temperature	ECTC (Enhanced Color Temperature Control) technology for constant colour temperature	
Modelling light	Halogen max. 2 × 650 W at 200 – 240 V / Halogen max. 2 × 300 W at 100 – 120 V Proportional to flash energy, also full and low settings Proportionality can be adapted to other broncolor power packs and to monolights	
Additional functions	t 0.1, sequence	
Flash release	Manual release button, photocell, RFS or RFS 2 receiver, may be switched off, sync cable	
Number of sync sockets	1	1
Computer connection for remote control	1	1
Stabilised flash voltage	+/- 0,5%	+/- 0,5%
Power requirements	16.0 A (230 V) 15.0 A (120 V) 15.0 A (100 V)	16.0 A (230 V) 15.0 A (120 V) 15.0 A (100 V)
Dimensions without handle	28,8 × 19 × 29,5 cm (11,3 × 7,5 × 11,6")	28,8 × 19 × 40 cm (11,3 × 7,5 × 15,7")
Weight	8,7 kg (19,2 lbs)	12 kg (26,5 lbs)

*Automatic regulation of flash duration and energy for optimum colour temperature. Preselection of minimum flash duration possible

POWER PACKS

Senso
- High repetitive precision of the colour temperature
- 3 lamp outlets, control over 2 individual channels
- Photocell, infrared and RFS 2 receiver for flash triggering (can be switched off)
- Internal discharge when the power output is reduced
- Slow charge (selectable)
- Front panel, resistant to dust and scratches with illuminated silicone keyboard and LED displays
- Memory function
- Modelling light with two different proportionality levels
- TIPA Award Winner 2011

CONTROL RANGE 7.5 F-STOPS

	Senso 1200	31.050.XX	**Senso 2400**	31.051.XX
Flash energy	1200 J	2400 J
f-stop at 2 m (6 ½ ft), 100 ISO,	**Litos lamp**	**Litos lamp**
- with Litos reflector	32 $^1/_{10}$	45 $^1/_{10}$
- with P70 reflector	45 $^8/_{10}$	64 $^8/_{10}$
	Pulso G lamp	**Pulso G lamp**
- with P70 reflector	45 $^7/_{10}$	64 $^7/_{10}$
Flash duration t 0.1 (t 0.5) at 230 V	**Litos lamp**	**Litos lamp**
	1200 J: 1/180 s (1/600 s)	2400 J: 1/90 s (1/300 s)
	600 J: 1/360 s (1/1200 s)	1200 J: 1/180 s (1/600 s)
	Pulso G / Unilite lamp	**Pulso G / Unilite lamp**
	1200 J: 1/100 s (1/300 s)	2400 J: 1/50 s (1/150 s)
	600 J: 1/200 s (1/600 s)	1200 J: 1/100 s (1/300 s)
Charging time (100% of selected energy)	0,4 – 1,5 s (230 V)	0,4 – 2,8 s (230 V)
	0,4 – 1,5 s (120 V)	0,4 – 2,8 s (120 V)
	0,5 – 1,9 s (100 V) 900 J	0,5 – 3,9 s (100 V) 1800 J
Ready display	Visual and audible (can be switched off), signals when 100% of selected energy is reached	
Number of lamp outlets	3	3
Power distribution	Free asymmetry up to 5 f-stops in whole and $^1/_{10}$ f-stop intervals	
Control range of flash energy	7,5 f-stops or 13 J to 1200 J (1 lamp) with activated symmetry switch	
Modelling light	100 – 240 V, halogen max. 3 × 300 W (Litos) 230 V, halogen max. 3 × 650 W (Pulso G / Unilite) Proportional to flash energy, full power	
Flash release	Manual release button, photocell, RFS 2 receiver (radio frequency), sync cable	
Radio (2.4 GHz)	99 workstations, 99 unit addresses, 40 selectable frequency channels	
No. of sync sockets	1	1
Dimensions (L×W×H)	20,3 × 14,8 × 21,8 cm (8 × 5,8 × 8,6") excl. handle	203 × 148 × 300 mm (8 × 5,8 × 11,8"), excl. handle
Weight	4,6 kg (10,1 lbs)	6,9 kg (15,2 lbs)

Accessories

Stand holder Senso
35.117.00

Senso kit 21

31.052.XX

comprises:

1 power pack Senso 1200

1 Litos lamp

1 Flex 70 × 70 cm (28 × 28˝)

1 sync cable 5 m (16 ft)

1 bag

Senso kit 22

31.053.XX

Scope of delivery same as Senso kit 21,

but with 2 Litos lamps

Senso kit 41

31.054.XX

comprises:

1 power pack Senso 2400

1 Litos lamp

1 Flex 70 × 70 cm (28 × 28˝)

1 sync cable 5 m (16 ft)

1 bag

Senso kit 42

31.055.XX

Scope of delivery same as Senso kit 41,

but with 2 Litos lamps

Move 1200 L

(including weatherproofed power pack soft case, plug-in lithium battery and charg

- Super-fast flash durations up to 1/8500 s (t 0.1) or
  1/20'000 s (t 0.5) thanks to innovative cut-off technology
- Outputs up to 1200 J
- Two lamp outlets with individual cut-off and fully
  independent control of each
- ECTC (Enhanced Color Temperature Control)
  technology for constant colour temperature
- Speed Mode
- Eco operation for more flashes per battery charge
  (up to 230 flashes at full power)
- Unbelievably small, light and compact
- Robust housing with eight "protection bumpers"
- Variable operating-period limits for modelling light

FLASH CUT-OFF
t 0.1 = 1/8'500 s
t 0.5 = 1/20'000 s

CONSTANT COLOUR ECTC
5500 K

CONTROL RANGE
9 F-STOPS

SPEED MODE
0.02 s

Move 1200 L | 31.016.XX

Flash energy	1200 J
f-stop at 2 m (6 ½ ft), 100 ISO, P70 reflector	64 ^{1}/10 (with MobiLED)
Flash duration t0.1 (t0.5)	fastest: 1/8500 s (1/20'000 s)
	max. energy: 1/350 s (1/1000 s)
Charging time (for 100% of selected energy)	0,02 – 1,9 s (Speed Mode 0,02 – 0,9 s)
No. of flashes per battery charge	approx. 170 / 230 (Eco-Mode) at 1200 J
	approx. 50'000 at 4 J
Lamp outlets	2 outlets with flash cut-off and ECTC
Power distribution	Symmetrical and individually asymmetrical
Controls	illuminated silicone keyboard, resistant to dust/scratches, LCD display
Flash energy control range	9 f-stops in ^{1}/10 or full f-stop intervals
	Display in joules or percent (4,5 – 1200 J)
Modelling light	Max. 2 × halogen 100 W or 2 × LED 30 W
	charge selectable switch-off time setting (10/30/60 s)
	Operatig in continuous light mode over 2 hours
Colour temperature	ECTC technology (Enhanced Colour Temperature Control)
	for constant colour temperature
Flash triggering	Manual release button, photocell, RFS 2, sync cable
Radio release	outdoors up to 50 m (164 ft) (possible range up to 300 m / 984 ft)
	indoors up to 30 m (98 ft) (possible range up to 300 m / 984 ft)
Dimensions (L×W×H) excl. handle	21 × 17 × 23 cm (8,3 × 6,7 × 9")
Weight of power pack	6,2 kg (13,7 lbs)
Lithium battery	14,4 V / 6,6 AH Li-FePo4 with integrated battery status
Accessories	Weatherproofed power pack soft case, rechargeable battery, battery recharger –
	Optional: continuous lighting adapter and outdoor trolley backpack (not included)

Move Outdoor kit 1
31.026.XX
comprises:
1 power pack Move 1200
   (incl. battery)
1 MobiLED lamp
1 Softbox Flex 70 × 70 cm (28 × 28")
1 RFS 2 transmitter kit
1 battery recharger
1 sync cable
1 adapter cable
1 continuous light adapter
1 weatherproofed power pack soft case
1 outdoor trolley backpack

Move Outdoor kit 2
31.027.XX
comprises:
1 power pack Move 1200 L
   (incl. battery)
2 MobiLED lamps
1 Softbox Flex
   70 × 70 cm (28 × 28")
1 umbrella 85 cm
1 RFS 2 transmitter kit
1 battery recharger
1 sync cable
1 adapter cable
1 continuous light adapter
1 weatherproofed power pack soft case
1 outdoor trolley backpack

Move Outdoor Para kit
31.028.XX
comprises:
1 power pack Move 1200 L
   (inkl. battery)
1 MobiLED lamp
1 Para 88 P kit
1 RFS 2 transmitter kit
1 battery recharger
1 sync cable
1 adapter cable
1 continuous light adapter
1 weatherproofed power pack soft case
1 outdoor trolley backpack

Accessories

Weatherproofed power pack soft case
36.520.00

Outdoor trolley backpack
36.519.00

Battery recharger
36.151.00

Lithium battery
36.152.00

Continuous light adapter
36.129.00

Verso A2 and A4 RFS

• Automatic stabilisation of colour temperature
• High repetitive precision for digital imaging
• Mains-independent operation with Power Dock (accessory)
• Individual power output distribution over 2 channels
• 3 lamp outlets
• Wide control range of the flash energy
• Flash release possible via radio and infrared
• Automatic flash release control
• Illuminated silicone keyboard and LCD-display, resistant to dust and scratches
• Sensitivity of the photocell can be reduced
• Additional function flash sequences (flash series)
• Automatic adaptation to the respective mains power

	Verso A2 RFS mains-operated | 31.031.XX **Verso A2 RFS 2 mains-operated** | 31.034.XX	**Verso A4 RFS mains-operated** | 31.033.XX **Verso A4 RFS 2 mains-operated** | 31.035.XX
Flash energy	1200 J	2400 J
f-stop at 2 m (6 ½ ft), 100 ISO, Refl. P70	45 $^7/_{10}$	64 $^7/_{10}$
Flash duration t 0.1 (t 0.5) at 230 V	1200 J: 1/500 s (1/1500 s) 600 J: 1/900 s (1/2500 s) 300 J: 1/1200 s (1/3500 s)	2400 J: 1/250 s (1/750 s) 1200 J: 1/450 s (1/1250 s) 600 J: 1/600 s (1/1700 s)
Charging time at fast charge (230 V)	0,2 – 0,8 s	0,3 – 1,7 s
Ready display	visual and audible (can be switched off)	visual and audible (can be switched off)
Lamp outlets	3	3
Power output distribution	individual (asymmetrical)	individual (asymmetric)
Control range flash energy	channel 1 (without using channel 2): over 7 f-stops, channel 1 and 2 or channel 2: over 6 f-stops	
Modelling light (230 V)	halogen max. 3 × 650 W	halogen max. 3 × 650 W
Flash release	RFS transmitter, RFS transceiver (10 channels), IR-receiver and photocell (can be switched off), sync cable, IRX 2, manual release button	
Radio	operational distance outdoors up to 50 m (164 ft) possible range up to 300 m (984 ft) operational distance in closed rooms up to 30 m (98,4 ft) possible range up to 300 m (984 ft)	
Sync sockets	1	1
Dimensions (L × W × H)	29 × 18,5 × 31,5 cm (11,4 × 7,3 × 12,4˝)	29 × 18,5 × 38 cm (11,4 × 7,3 × 15˝)
Weight	7,5 kg (16,5 lbs)	10,4 kg (22,9 lbs)
Power requirements	230 V / 50 Hz, 120 V / 50 – 60 Hz, 100 V / 50 Hz	230 V / 50 Hz, 120 V / 50 – 60 Hz, 100 V / 50 Hz
Number of flashes per battery charge (max./min. power)	fast charge: approx. 350 – 38'000 normal charge: approx. 450 – 50'000	fast charge: approx. 180 – 19'000 normal charge: approx. 240 – 25'000

Accessories

Power Dock for Verso A2 / A4 RFS power pack

36.124.00
Enables mains-independent operation with Verso A2 and A4
To be docked on the bottom of the power pack
30,8 × 18,5 × 22,9 cm (12 × 7,3 × 9˝)
12,3 kg (27 lbs)

Minicom

The Minicom monolight is ideal as an introduction to the broncolor system or as a supplementary unit. It offers short flash duration, large control range and excellent repetitive precision. In addition the sensitivity of the photocell can be reduced. Minicom 160 is a powerful monolight that is perfect for lighting larger sets. Its features include stepless control range and a visual flash monitor.

broncolor monolights cover the power spectrum from 10 J to 1200 J, and are also available in kits. They have a powerful halogen modelling light, which is proportional to broncolor power pack outputs. With their integrated broncolor bayonet and release catch the light shapers can be rotated through 360° and changed quickly and safely. Accessories are compatible and can be used with broncolor power packs and lamps. All models are fitted with a photocell

and an infra-red receiver. Minicom is also available in an RFS 2 version. Units equipped with an RFS interface can be triggered and remotely controlled by radio signals.

broncolor compact units are supplied with a 5900 K flash tube, halogen modelling lamp, UV-coated 5500 K protective glass (guarantees neutral colour rendering) and a transparent transport cap.

Minicom

- High repetitive precision for digital imaging
- Large control range of the flash energy
- Flash release also possible via radio (optional) and infrared
- Automatic flash release control
- Illuminated silicone keyboard and LED-display, resistant to dust and scratches
- Additional flash sequences (flash series)
- Sensitivity of the photocell can be reduced
- Automatic adaptation to the respective mains power
- Dual voltage unit
- Delivery of RFS or RFS 2 version possible

	Minicom 40 | 31.405.XX	**Minicom 80** | 31.415.XX	**Minicom 160** | 31.474.XX
Flash energy	300 J	600 J	1200 J
f-stop at 2 m (6 ½ ft), 100 ISO, refl. P70	22 $^5/_{10}$	32 $^5/_{10}$	64 $^4/_{10}$
Flash duration t 0.1 (t 0.5)	1/900 s (1/2500 s)	1/420 s (1/1500 s)	1/350 s (1/1100 s)
Charging time (230 V)	0,3 – 0,9 s	0,4 – 1,4 s	0,5 – 2,4 s
Ready display	visual and audible (can be switched off)		
Control range flash energy	over 4 f-stops, in $^1/_{10}$ f-stop intervals, switchable to 5 f-stops		
Modelling light (230 V)	halogen max. 300 W	halogen max. 300 W	halogen max. 650 W
Flash release	infrared receiver and photocell (can be switched off), sync cable, manual release button		
Sync sockets	2	2	2
Dimensions (L×W×H)	28,6×15,4×19,4 cm (11,2×6×7,6")	28,6×15,4×19,4 cm (11,2×6×7,6")	35,5×15,4×19,4 cm (13.9 × 6 × 7.6")
Weight	3 kg (6,6 lbs)	3,3 kg (7,2 lbs)	4,4 kg (9,7 lbs)
Power requirements	230 V / 50 – 60 Hz, 120 V / 50 – 60 Hz		

	Minicom 40 RFS | 31.406.XX **Minicom 40 RFS 2** | 31.407.XX	**Minicom 80 RFS** | 31.416.XX **Minicom 80 RFS 2** | 31.417.XX	**Minicom 160 RFS** | 31.473.XX **Minicom 160 RFS 2** | 31.475.XX
Flash release	infrared receiver and photocell (can be switched off), sync cable, manual release button and by radio		
Sync sockets	2	2	2
Operational distance outdoors	up to 30 m (98,4 ft) possible range up to 300 m (984 ft)		
Operational distance in closed rooms	up to 20 m (64 ft) possible range up to 300 m (984 ft)		

Accessories

Flash tube
600 J for Minicom 40 / 80: 34.307.00
1200 J for Minicom 160: 34.310.00

Halogen modelling lamp 300 W / 120 V
34.234.XX
with fuse

Halogen modelling lamp 300 W / 230 V
34.233.XX
with fuse

Halogen modelling lamp 650 W / 230 V
34.226.XX
with fuse

Protecting glass
clear: 34.336.00
mat: 34.337.00

Light bag
36.518.00 for 1 monolight and accessories
53 × 18 × 40 cm (21 × 7 × 15,7")

Big bag
36.517.00
for 2 – 3 monolights and accessories
96 × 45 × 26 cm (37,8 × 17,7 × 10")

Because of the laws in some countries, the use of the broncolor radio system is not allowed.

broncolor monolights are also available as kits. The complete kits have a large assortment and are also reliable on location, easily transportable and have powerful light sources.

Minicom Location kit

31.498.XX
comprises:
2 Minicom 160, 2 P-Travel reflectors,
1 sync cable 10 m (32 ft),
1 Big bag, 1 stand bag, 2 stands

Minicom Location kit RFS / RFS 2

RFS 31.499.XX | RFS 2 31.502.XX
Scope of delivery same as Minicom Location kit,
and in RFS version incl. RFS transmitter / RFS 2

Minicom Expert kit

31.493.XX
comprises:
3 Minicom 80, 2 P-Travel reflectors, 1 barn door for P-Travel,
1 umbrella reflector, 1 umbrella silver, 1 Softbox 60 ×100,
1 IRX 2, 1 sync cable 5 m (16 ft), 1 Big bag, 1 stand bag, 3 stands

Minicom Expert kit RFS / RFS 2

RFS 31.497.XX | RFS 2 31.503.XX
Scope of delivery same as Minicom Expert kit,
and in RFS version incl. RFS transmitter
(instead of IRX 2 transmitter) rsp. RFS 2

Minicom Pro kit

31.500.XX
comprises:
3 Minicom 160, 2 P-Travel reflectors, 1 barn door for P-Travel,
1 umbrella reflector, 1 umbrella silver, 1 Softbox 60 ×100,
1 IRX 2, 1 sync cable 5 m (16 ft), 1 Big bag, 1 stand bag, 3 stands

Minicom Pro kit RFS / RFS 2

RFS 31.501.XX | RFS 2 31.504.XX
Scope of delivery same as Minicom Pro kit,
and in RFS version incl. RFS transmitter
(instead of IRX 2 transmitter) rsp. RFS 2

Ray Demski, Germany

Because of the laws in some countries, the use of the broncolor RFS radio system is not allowed.

The extensive range of lamps meets every photographer's needs for creative light management. The lamp is the critical element in terms of light quality, but that quality is also influenced by other factors: the shape and coating of the flash tube, the characteristics and surface of the reflectors, the uniformity of illumination along a defined reflector axis, the match between the emission characteristics of the flash and the modelling light, the optimum colour temperature and much more besides. broncolor Pulso G, Unilite and Pulso Twin lamps all have compact dimensions, a bright halogen modelling light, fan cooling, a thermal circuit breaker and plug-in flash tubes.

With their integrated broncolor bayonet and release catch the light shapers can be rotated through 360° and changed quickly and safely. Twin lamps allow the energy of two power packs to be concentrated into one lamp. The Picolite small lamps have their own accessories and, with a Pulso adapter, can also be fitted with lightweight broncolor reflectors and other accessories. Litos, the designer lamp, was especially developed for the Senso power pack, and combines multifunctionality and compactness in one. The Litos scope of supply includes an umbrella or standard reflector. As one of the first suppliers worldwide, broncolor focuses on LED technology and in 2011 introduced

the first flash lamp with LED modelling light – the MobiLED. With 30 W (comparable with 100 W halogen) and 5500 K colour temperature, the MobiLED gives photographers the ability to merge the field of photography with film for the first time. For customised lighting, users can select from a wide range of light shapers with accessories. A variety of accessories and stands are available for all broncolor lamps to ensure ease of handling.

broncolor lights are supplied with a 5900 K flash tube, halogen modelling lamp, UV-coated 5500 K protective glass (guarantees neutral colour reproduction) and a transparent transport cap.

Frank Meyl, Germany / USA

Pulso G lamp

- Corresponding emission characteristics of flash tubes and modelling light
- Can be equipped with 1600 J or 3200 J flash tubes
- Plug-in flash tube and protecting glass (with mechanical safety device)
- Front focusing device
- Quick release bracket
- Automatic locking mechanism of the light shaper (rotatable 360°)
- Integrated tilt head with locking lever for an optimal breaking effect
- Integrated umbrella holder
- Cooling fan and thermal protection
- Automatic adaptation to the respective mains power supply
  (after exchange of the halogen modelling lamp)

Pulso G lamp | 1600 J: 32.115.XX | 3200 J: 32.116.XX

Flash energy	max. 3200 J
Modelling light (230 V)	halogen max. 650 W
Length lamp cable	5 m (16 ft)
Dimensions (Ø×L×H)	Ø 13 × 31 × 20 cm (5,1 × 12,2 × 7,8″)
Weight (with cable)	3,15 kg (6,9 lbs)
Stand support	for bolts 12 mm, $^3/_8$″ thread and bolts 16 mm

Unilite lamp

- Corresponding emission characteristics of flash tubes and modelling light
- Can be equipped with 1600 J or 3200 J flash tubes
- Plug-in flash tube and protecting glass (with mechanical safety device)
- Quick release bracket
- Automatic locking mechanism of the light shaper (rotatable 360°)
- Built-in tilt head with locking lever for an optimal breaking effect
- Integrated umbrella holder
- Cooling fan and thermal protection
- Automatic adaptation to the respective mains power supply
  (after exchange of the halogen modelling lamp)

Unilite lamp | 1600 J: 32.113.XX | 3200 J: 32.114.XX

Flash energy	max. 3200 J
Modelling light (230 V)	halogen max. 650 W
Length lamp cable	5 m (16 ft)
Dimensions (Ø×L×H)	Ø 12,6 × 30 × 17,5 cm (4,9 × 11,8 × 6,9″)
Weight (with cable)	2,8 kg (6,2 lbs)
Stand support	for bolts 12 mm, $^3/_8$″ thread and bolts 16 mm

Accessories

Flash tube 1600 J
34.322.00 (for Unilite and Pulso G)

Flash tube 3200 J
34.324.00 (for Unilite and Pulso G)

Halogen modelling lamp 300 W / 120 V
34.225.XX Pulso G / 34.234.XX Unilite
with fuse

Halogen modelling lamp 650 W / 230 V
34.226.XX Pulso G / 34.235.XX Unilite
with fuse

Protecting glass
34.336.00

Protecting glass, mat
34.337.00

Litos lamp (for Senso)
- Corresponding emission characteristics of flash tube and modelling light
- Built-in pan/tilt head for one-hand operation
- Quick release bracket and integrated umbrella holder
- Including standard and/or umbrella reflector
- Thermal protection (fan only switches on when required)
- Plug-in flash tube and protecting glass (with triple mechanical safety device)

Litos lamp | 32.030.XX

Flash energy	max. 2400 J
Modelling light	300 W halogen (3.15 AF)
Cooling	temperature controlled (fan)
Length of cable	4,5 m (14,8 ft)
Dimensions (Ø×L×H)	Ø 12 × 24,3 × 17,2 cm (4,7 × 9,6 × 6,8")
Weight with cable	2,3 kg (5,1 lbs)
Stand adapter	for broncolor 12 mm (0,47") bolt, $^3/_8$" thread and 16 mm (0,63") bolt

Accessories

Flash tube 2400 J
34.313.00

Protecting glass
clear: 34.339.00
mat: 34.340.00

Halogen modelling lamp 300 W / 230 V
34.233.XX
with fuse

Lamp extension cable
5 m: 34.153.00
10 m: 34.154.00

MobiLED lamp
- Built-in pan/tilt head for one-hand operation
- Quick release bracket and integrated umbrella holder
- Including standard and/or umbrella reflector
- Thermal protection (fan only switches on when required)
- Plug-in flash tube and protecting glass (with triple mechanical safety device)
- LED modelling light with a colour temperature of 5500 K,
  only working with Move 1200 L and Mobil

MobiLED lamp | 32.013.00

Flash energy	1200 J (max. 1600 J)
Modelling light	30 W LED
Length of cable	3,5 m (11,5 ft)
Dimensions (Ø×L×H)	Ø 12 × 24,3 × 17,2 cm (4,7 × 9,6 × 6,8")
Weight (without reflector and accessories)	1,7 kg (3,7 lbs)
Stand adapter	for broncolor 12 mm (0,47") bolt, $^3/_8$" thread and Manfrotto 16 mm (0,63") bolt

Accessories

Flash tube 1600 J
34.308.00

MobiLED Continuous light adapter
36.129.00

Protecting glass
clear: 34.339.00
mat: 34.340.00

Pulso-Twin lamp

• Corresponding emission characteristics of flash and modelling light
• Plug-in flash tube with integrated protecting glass
• Quick release bracket
• Automatic locking mechanism of the light shaper (rotatable 360°)
• Built-in tilt head with locking lever for an optimal breaking effect
• Cooling fan and thermal protection

Pulso-Twin lamp | 32.117.XX

Flash energy	max. 2 × 3200 J
Modelling light (230 V)	halogen max. 650 W
Length lamp cable	2 × 5 m (2 × 16 ft)
Dimensions (Ø×L×H)	Ø 12 × 27,5 × 20 cm (4,7 × 10,4 × 7,8")
Weight	4 kg (8,8 lbs)
Stand support	for bolts 12 mm, $^3/_8$" thread and bolts 16 mm

Accessories

Flash tube 2 × 3200 J incl. protecting glass
34.327.00
for Pulso-Twin

Halogen modelling lamp 650 W / 230 V
34.226.XX
with fuse

Halogen modelling lamp 250 W / 120 V
34.221.XX
with fuse

Picolite small lamp
- Corresponding emission characteristics of flash tubes and modelling light
- Plug-in flash tube and protecting glass (with mechanical safety device)
- Integrated reflector
- Adapter for own accessories with small dimensions (rotatable 360°)
- Adapter for broncolor light shaper available
- Built-in tilt head with locking lever for an optimal breaking effect
- Integrated umbrella holder
- Cooling fan and thermal protection
- Automatic adaptation to the respective mains power supply
  (after exchange of the halogen modelling lamp)

Picolite small lamp | 32.021.00

Flash energy	max. 1600 J
Modelling light (230 V)	halogen max. 150 W
Length lamp cable	3,5 m (11 ft)
Dimensions (Ø×L×H)	Ø 8 × 20,5 × 13,5 cm (3,1 × 8 × 5,3˝)
Weight (with cable)	1,25 kg (2,7 lbs)
Stand support	for bolts 12 mm, $^3/_8$˝ thread and bolts 16 mm

Accessories

Flash tube 1600 J
34.308.00

Halogen modelling lamp 150 W / 120 V
34.202.00
with fuse

Halogen modelling lamp 150 W / 230 V
34.201.00
with fuse

Protecting glass for Picolite
34.332.00
Protecting glass mat for Picolite
34.335.00

Barn door with 4 wings
33.244.00

Pulso adapter
33.501.00
allows to use lightweight reflectors
and accessories of the Pulso range

**Attachment with 3 honeycomb
grids and 2 aperture masks**
33.204.00
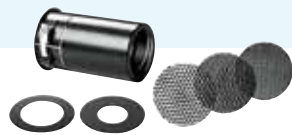
Fresnel spot attachment
33.631.00
light angle adjustment range 15 – 35°
incl. mat protecting glass (34.335.00)

Projection attachment
33.641.00
100 mm, with mat protecting glass,
3 aperture masks, 4 integrated templates

**Lamp extension cable
for MobiLED**
34.150.00
3,5 m (11 ft)

Picobox
33.128.00
max. 1600 J
lamp surface 15 × 25 cm (6 × 9,8˝)
with integrated spring lock

Picolite adapter for Satellite Evolution
35.214.00

Twin articulated arm in 3 parts
35.102.00
Twin articulated arm complete, bolt
with ⁵/₈˝ thread and screw device for
bolt adapter, may only be used with
stand clamp 32.912.00

Stand clamp for twin articulated arm
32.912.00

New light dimensions

It is not just the form and size of Paras that impresses, but above all their unique light quality and phenomenal light output. Decisive for the creative photographer is that a Para is not just a conventional light shaper, but rather an independent lighting system: various sizes of reflector are available; the position of the lamp is always central, on the axis of the reflector; the angle influences the character of the light; the range includes three diffusers with different densities. In addition Paras can be combined with other accessories. Light-thrilled photographers are always finding new combinations and characteristics with the Para system – it offers a never-ending source of inspiration and creativity.

The Big Ones

The Paras are parabolic reflectors; they have 24 segments, covered with a high-gloss, tear-resistant textile reflector material. The reflector openings have diameters of 88, 177, 222 and 330 cm. All Umbrellas are mainly made of aluminium and carbon-fibre or glass-fibre materials, and so are very light despite their gigantic dimensions. The size also determines the resulting light. The Para 330 FB immerses the whole studio in wonderful light. Even over long distances it remains soft, but without ever seeming "flat". The light is identical and homogenous over large spaces allowing the model to move freely and spontaneously. The photographer can even stand directly in front of the light source and vary the distance to the model without influencing the light or throwing a shadow. The Para 222 is easily big enough to create typical Para light, even over medium distances of 5 – 8 m. Like its big brother it can be completely defocused, and it demonstrates substantially the same light characteristics. However, over larger distances it becomes spot-like (harder) earlier, but over short distances provides the entire variation spectrum at an earlier stage.

Light from the Para 177 is gradually approaching that from a giant spot. It is slightly more aggressive (needs a supporting fill-in light more often), but on the other hand is also more interesting on structures and has greater brilliance in the highlights. This version cannot be fully defocused to the same extent, i.e. the centre of the reflector is never completely black. The residual light does reduce the three-dimensional effect somewhat, but at the same time works to counter too hard a light mood. In addition the 177 has the big advantage that it can be realistically used in smaller studios and over shorter distances.

Besides the spectacular light shapers 177, 222 and 330 FB, the Para family includes the 88 version. A lightweight, weighing less than 6 kg, this is a fold-up, super compact design. The new Para 88 is even more mobile - perfect for outdoor shootings and smaller studios.

With the broncolor Para family, every shooting is a success. Unbelievable light variability, light, compact, fully compatible with flash and continuous lighting – unlimited possibilities at the highest level.

Para 88 reflector | 33.482.00

Allowed max. energy	3200 J rsp. 650 W HMI
F-stop at 2 m / 6 $\frac{1}{2}$ ft (10 m / 33 ft) distance	64 $^9/_{10}$ (22 $^8/_{10}$)
Inside coating	silver
Dimensions (without stand)	open Ø 85 × 64 cm (34 × 24")
	closed Ø 20 cm × 83 cm (8 × 33")
Weight	2,8 kg (6,2 lbs) without case
Scope of delivery	incl. big bag

Para 88 P kit* | 33.483.00

Allowed max. energy	3200 J rsp. 650 W HMI
F-stop at 2 m / 6 $\frac{1}{2}$ ft (10 m / 33 ft) distance	focused: 90 (22) defocused: 64 (11)
Inside coating	silver
Dimensions (without stand)	open with focusing system: Ø 85 cm × 107 cm (33 × 42")
	closed with focusing system: Ø 32 × 107 cm (13 × 42")
Weight	5,5 kg (12,1 lbs) without case
Scope of delivery	Para 88 reflector, focusing system 33.488.00 (with Adapter P), big bag

*Para 88 P kit also available for HMI F200/F400, ref. 33.483.01

Para 177 P kit* | 33.551.00

Allowed max. energy	3200 J rsp. 1600 W HMI
F-stop at 2 m / 6 ½ ft (10 m / 33 ft distance)	focused: 128 $^3/_{10}$ (45 $^5/_{10}$)
Inside coating	silver
Dimensions (without stand)	open Ø 170 cm × 95 cm (66,9 × 37,4")
	closed Ø 40 cm × 95 cm (15,7 × 37,4")
Weight	9,5 kg (20,9 lbs)
Scope of delivery	Para 177, Adapter P 33.489.00

*Para 177 P kit also available for HMI F200/F400, ref. 33.551.01
 Para 177 P kit also available without adapter, ref. 33.551.02

Para 222 P kit* | 33.552.00

Allowed max. energy	3200 J rsp. 1600 W HMI
F-stop at 2 m / 6 ½ ft (10 m / 33 ft distance)	focused: 32 $^5/_{10}$ (11 $^1/_{10}$)
Inside coating	silver
Dimensions (without stand)	open Ø 220 cm × 115 cm (86,6 × 45,3")
	closed Ø 40 cm × 115 cm (15,7 × 45,3")
Weight	11,5 kg (25,4 lbs)
Scope of delivery	Para 222, Adapter P 33.489.00

*Para 222 P kit also available for HMI F200/F400, ref. 33.552.01
 Para 222 P kit also available without adapter, ref. 33.552.02

Stands and lamps are not included

Para 330 FB | 33.486.00

Allowed max. energy	3200 J
F-stop at 2 m / 6 1/2 ft (10 m / 33 ft) distance	focused: 90 $^8/_{10}$ (32 $^9/_{10}$)
Inside coating	silver
Dimensions (without stand)	open Ø 330 × 240 cm (130 × 95")
	closed 32 × 160 cm (12,6 × 63")
Weight	12,1 kg (26,6 lbs)
Scope of delivery	incl. suspension ropes
	(without bag)

Stands and lamps are not included

Accessories

Focusing system for Para 88
(for reflector 33.482.00)
33.488.02

**Tilt head with crank handle
for Para / Para FB**
33.477.00
recommended when using light
devices over 5 kg (11 lbs)

Light grid 40°
Para 88: 33.221.00

Diffuser no. 1 (small*)
Para 88: 33.472.00 / Para 177: 33.287.00
Para 222: 33.290.00
Para 220 FB: 33.464.00 / Para 330 FB: 33.469.00

Diffuser no. 2 (medium*)
Para 88: 33.473.00 / Para 177: 33.288.00
Para 222: 33.291.00
Para 330 FB: 33.470.00

Diffuser no. 3 (large*)
Para 88: 33.474.00 / Para 177: 33.289.00
Para 222: 33.292.00
Para 330 FB: 33.471.00

Adapter P
33.489.00

Adapter D
33.489.01

Adapter Profoto
33.489.03

Adapter K5600
33.489.05

Adapter Ringflash
33.489.04

*Diffusion degree

The slightly textured open reflectors are characterised by homogeneous light distribution, although a controlled centre emphasis can be achieved using focusable Pulso G lamps.

The light angle of each open reflector is apparent from its model designation, optical attachments (such as projection attachment) offer a variable coverage angle.

Standard reflector P70
33.107.00
optimised for Pulso G
and Unilite lamps
Ø 23,2 × 18,4 cm (9,1 × 7,2")

Honeycomb grids for P70
33.207.00
set of 3 pieces (fine, medium, coarse)

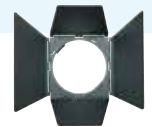**Honeycomb grid extremely narrow for P70**
33.202.00

Barn door for P70
33.227.00
with 2 wings, with 2 clips to fix diffusers, filters and masks

Barn door for P70
33.247.00
with 4 wings, with 2 clips to fix diffusers, filters and masks

Colour filters for P70
33.307.00
set of 12 pieces

Grey and correcting filters for P70
33.317.00
set of 12 pieces
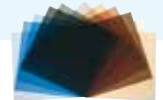
Opal diffusers for P70
33.327.00
set of 12 pieces

Standard reflector P65
33.106.00
optimised for Pulso-Twin
and Pulso 8 lamps
Ø 29,5 × 24 cm (11,6 × 9,4")

Narrow angle reflector P45
33.104.00
optimised for Pulso G
and Unilite lamps
Ø 29,5 × 35,3 cm (11,6 × 13,9")

PAR Reflector
33.113.00
light angle 48°, with protecting glass UV, mat
Ø 29,5 × 18,3 cm (11,6 × 7,2")

Honeycomb grid extremely narrow for P65 and P45
33.211.00

Honeycomb grids for P65, P45 and PAR
33.206.00
set of 3 pieces (fine, medium, coarse)

Barn door with 4 wings for P65, P45 and PAR
33.246.00
with 2 clips to fix diffusers, filters and masks
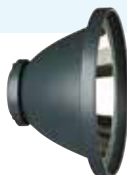
Colour filters for P65, P45, PAR and background reflector
33.306.00
set of 12 pieces

Background reflector
33.114.00
Ø 12,7 / 19 × 30,3 cm (5 / 7,5 × 11,8˝)

Narrow angle reflector P50
33.105.00
optimised for Pulso-Twin
and Pulso 8 lamps
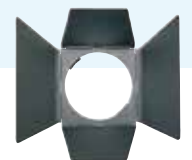Ø 34,5 × 39,4 cm (13,6 × 15,5˝)

Honeycomb grids for P50
33.205.00
set of 3 pieces (fine, medium, coarse)

Softlight reflector P-Soft
33.110.00
silver inside coating
Ø 51.8 × 19,6 cm (20,4 × 7,7˝)

**Diffuser filter for
Softlight reflector P-Soft
and Beauty Dish**
33.310.00

Beauty Dish reflector
33.111.00
with textile diffusor,
white inside coating,
incl. bag (36.516.00)
Ø 51.8 × 19,6 cm (20,4 × 7,7˝)

**Honeycomb grid
for Softlight reflector P-Soft
and Beauty Dish**
33.210.00

P-Travel reflector
33.103.00
light angle 55°
Ø 19,5 × 9 cm (7,7 × 3,5˝)

Barn door for P-Travel
33.243.00
with 2 wings

Wide angle reflector P120
33.112.00
Ø 22 × 4,4 cm (8,6 × 1,7˝)

Spot attachment
33.640.00
with mat protecting glass,
6 aperture masks, 1 gobo holder

Conical snoot
33.120.00
Ø 13,8 / 7,6 × 26,25 cm (5,4 / 2,9 × 10,3˝)

UV attachment
Ø 18,3 × 14,5 cm (Ø 7,2 × 5,7˝)
0,74 kg (1,6 lb)
light angle approx. 50°

The broncolor Softboxes are optimised light shapers in 9 different shapes and sizes. Rectangular, square, octagonal and as a strip. These q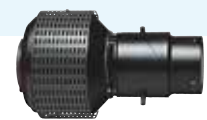uality, high-performance light shapers extend your flash system and offer countless additional lighting effects. The two diffusers included in the scope of supply enable a soft light with very uniform distribution. With optional light grids and additional diffusers, light control can be made even more precise. The highly-effective internal coating ensures a high efficiency. Coloured markings on the tensioning rods and on the Speedring enable simple, quick erection and dismantling. With appropriate Speedrings, Softboxes can also be used with flash units from other manufacturers.

Softbox							
33.560.00	35	×	60	cm	1,1	×	2 ft
33.561.00	60	×	60	cm	2	×	2 ft
33.562.00	60	×	100	cm	2	×	3,3 ft
33.563.00	100	×	100	cm	3,3	×	3,3 ft
33.564.00	30	×	120	cm	1	×	3,9 ft
33.565.00	90	×	120	cm	3	×	3,9 ft
33.566.00	120	×	180	cm	3,9	×	5,9 ft

Octabox		
33.600.00	Ø 75 cm	2,5 ft
33.601.00	Ø 150 cm	4,9 ft

Speedrings for Softbox und Octabox	
33.401.00	broncolor
33.401.01	Profoto
33.401.02	Hensel
33.401.03	Elinchrom
33.401.04	Bowens
33.401.05	Multiblitz-Profilux
33.401.06	Multiblitz-Varilux
33.401.07	Canon/Nikon

Additional diffuser for Softbox								
33.590.00	35	×	60	cm	1,1	×	2 ft
33.591.00	60	×	60	cm	2	×	2 ft
33.592.00	60	×	100	cm	2	×	3,3 ft
33.593.00	100	×	100	cm	3,3	×	3,3 ft
33.594.00	30	×	120	cm	1	×	3,9 ft
33.595.00	90	×	120	cm	3	×	3,9 ft
33.596.00	120	×	180	cm	3,9	×	5,9 ft

Light grid 40° for Softbox								
33.580.00	35	×	60	cm	1,1	×	2 ft
33.581.00	60	×	60	cm	2	×	2 ft
33.582.00	60	×	100	cm	2	×	3,3 ft
33.583.00	100	×	100	cm	3,3	×	3,3 ft
33.584.00	30	×	120	cm	1	×	3,9 ft
33.585.00	90	×	120	cm	3	×	3,9 ft
33.586.00	120	×	180	cm	3,9	×	5,9 ft

Additional diffuser for Octabox		
33.597.00	Ø 75 cm	2,5 ft
33.598.00	Ø 150 cm	4,9 ft

Light grid 40° for Octabox		
33.587.00	Ø 75 cm	2,5 ft
33.588.00	Ø 150 cm	4,9 ft

The classic in lighting composition
broncolor Umbrellas are produced in two sizes and three different versions. Silver, white and translucent, and 85 cm or 105 cm in diameter.

Umbrella silver
33.574.00: Ø 85 cm (2,8 ft)
33.570.00: Ø 105 cm (3,4 ft)

Umbrella transparent
33.575.00: Ø 85 cm (2,8 ft)
33.572.00: Ø 105 cm (3,4 ft)

Umbrella white
33.573.00: Ø 85 cm (2,8 ft)
33.571.00: Ø 105cm (3,4 ft)

Umbrella reflector for Pulso G and Unilite lamps and for Minicom
33.496.00

Mini-Satellite
33.152.00
f-stop at 2 m (6 ½ ft) distance,
100 ISO with 3200 J: 180 $^2/_{10}$,
parabolic reflector Ø 60 × 15 cm (23 × 6˝)
incl. protecting glass mat UV,
additional reflector,
light angle adjustment range
18° – 30° (from 3 m | 10 ft distance)
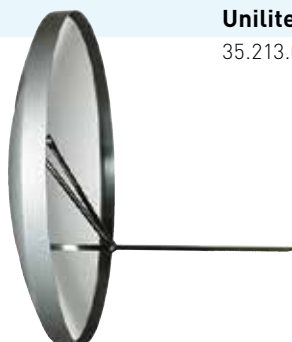
Unilite holder for Mini-Satellite
35.213.00

Satellite Staro
33.151.00
f-stop at 2 m (6 ½ ft) distance,
100 ISO with 3200 J: 45 $^2/_{10}$,
parabolic reflector
Ø 88 × 25 cm (35 × 14˝)
incl. mat Plexiglas diffuser,
bracket

Honeycomb grid for Satellite Staro
33.209.00

broncolor Flooter
32.431.00
max. 6400 J
f-stop at 2 m (6 ½ ft) distance,
100 ISO with 3200 J: (15°) 90 $^2/_{10}$
24 × 46 × 52 cm (9,4 × 18 × 20,5˝)
light angle adjustment range 15° – 70°,
incl. fixing bracket, Fresnel lens

**Honeycomb grid
for broncolor Flooter**
33.208.00

Barn doors for broncolor Flooter
33.225.00
set of 2 pieces

Ringflash C

- Halogen modelling light 200 W
- A honeycomb set (3 pieces) is available for Ringflash C
- High-strength UV-coated flash tube (3200 J)
- Powerful fan cooling and integrated UV-filter
- Operation possible on all mains power supplies worldwide

Ringflash C | 32.462.XX

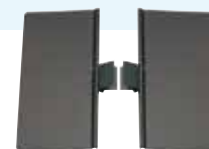|	
Flash energy	max. 3200 J
Modelling light (230 V)	200 W halogen: 10 × 20 W / 24 V
F-stop at 2 m (6 ½ ft), 100 ISO	45 ^{1}/$_{10}$ (3200 J) with soft reflector: 45 ^{6}/$_{10}$ (3200 J)
Cooling	stabilised with 2 fans
Dimensions with support (Ø × H × D)	23,1 × 28,6 × 18 cm (9,1 × 11,3 × 7,1")
Weight with cable 5 m (16 ft)	2,7 kg (6 lbs)

Ringflash P for Para FB / Ringflash P for Para 88 / 177 / 222

- Halogen modelling lamp 200 W
- High-strength UV-coated flash tube (3200 J) and protecting glass
- Powerful fan cooling and integrated UV-filter
- Operation possible on all mains power supplies worldwide
- In combination with Para FB a perfect front focusing,
  which enables different light angles and characteristics

Ringflash P for Para FB | 32.461.XX
Ringflash P for Para 88 / 177 / 222 | 32.463.XX

Flash energy	max. 3200 J	
Modelling light (230 V)	200 W halogen: 10 × 20 W / 24 V	
f-stop at 2 m (6 ½ ft) distance, 100 ISO	with Para 88:	90 (22)
with 3200 J	with Para 170 FB / 177:	128 ^{2}/$_{10}$ (45 ^{4}/$_{10}$) / 128 ^{3}/$_{10}$ (45 ^{5}/$_{10}$)
	with Para 220 FB / 222:	128 ^{2}/$_{10}$ (32 ^{7}/$_{10}$) / 32 ^{5}/$_{10}$ (11 ^{1}/$_{10}$)
	with Para Soft 220 FB:	32 ^{8}/$_{10}$ (11 ^{1}/$_{10}$)
	with Para 330 FB:	90 ^{7}/$_{10}$ (32 ^{8}/$_{10}$)
Cooling	stabilised with 2 fans	
Dimensions with support (Ø × H × D)	23,1 × 19,4 × 14 cm (9,1 × 7,6 × 5,5")	
Weight with cable 5 m (16 ft)	2,2 kg (4,9 lbs)	
Support	for Para 88 / 177 / 222 / 170 FB / 220 FB / Soft 220 FB / 330 FB	

Accessories

Halogen modelling lamp
20 W / 24 V: 34.216.00 (230 V)
20 W / 12 V: 34.217.00 (120 V)
for Ringflash C / Ringflash P

Soft reflector for Ringflash C
33.123.00
silver inside coating
incl. UV-coated protecting glass

Beauty reflector for Ringflash C
33.124.00
white inside coating
incl. UV-coated protecting glass

Honeycomb grid for Ringflash C
33.219.00
set of 3 pieces (fine, medium, coarse)

Conversion set for Ringflash C
36.125.00
for conversion to Ringflash P

Conversion set for Ringflash P
36.126.00
for conversion to Ringflash C

Pulso-Spot 4
32.425.XX (5500 K*)
max. 3200 J
37 × 29 × 25 cm (14,5 × 11,4 × 9,8˝)
f-stop at 2 m (6 ½ ft)
distance, 100 ISO: 90
with fixing bracket, flash tube,
modelling lamp, Fresnel lens
(UV coating), light angle
adjustment range 15° – 40°,
cable 5 m (16 ft)
Weight with cable 8,25 kg (18,2 lb)

Flash tube 3200 J
34.344.00

Halogen modelling lamp 300 W / 230 V
34.223.XX
with fuse

Halogen modelling lamp 250 W / 120 V
34.221.XX
with fuse

**Barn door with 2 wings
for Pulso-Spot 4**
33.224.00

Optical snoot 150 mm for Pulso-Spot 4
33.620.55 (5500 K*)
150 mm (5,9˝)
with 6 masks, gobo holder,
filter with holder

Templates for spot attachment
33.623.00
for Pulso-Spot 4, set of 4 pieces

Gobo set for spot attachment
33.625.00
for Pulso-Spot 4, set of 12 pieces
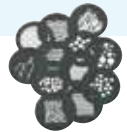
Sunlite Set for Pulso G / Unilite
33.162.00 (5500 K*)
max. 3200 J, f-stop at 2 m (6 ½ ft) distance, 100 ISO: 22 $^8/_{10}$
comprises:
1 U-shaped special flash tube, 1 clear protecting glass,
1 mat protecting glass, 1 barn door with 4 wings,
for effects similar to UV-sunlight

Litestick
32.451.00 (5500 K*)
max. 3200 J, 5,5 × 57 cm (2,1 × 22,4˝), f-stop at 2 m (6 ½ ft) distance,
100 ISO: 45.7 (with reflector), 32 $^7/_{10}$ (without reflector),
with flash tube, removable reflector, stand adapter, cable 3,5 m (11 ½ ft)

Balloon
33.161.00
max. 3200 J
for Pulso G and Unilite lamps, monolights,
acrylic glass sphere, opal, Ø 50 cm (20˝),
with black plastic socket and Pulso bayonet

*guarantees neutral colour reproduction

Lightbar 60 Evolution
32.351.XX (5500 K)
Flash energy max. 3200 J
f-stop at 2 m (6 ½ ft) distance, 100 ISO: 32 $^5/_{10}$
with "tunnel-shaped" Plexiglas diffuser,
interchangeable tilt head, fan, 2 flash tubes,
10 modelling lamps 20 W, cable 5 m (16 ft)
Dimensions (L×W×H) 58 × 12 × 13 cm (23 × 5 × 5")
Weight 3,6 kg (8 lbs)

**Barn doors for Lightbar /
Striplite 60 Evolution**
33.228.00

**Plexiglas cap mat,
for Lightbar 60 Evolution**
33.272.00

**Striplite attachment
for Lightbar 60 Evolution**
33.274.00

Lightbar 120 Evolution
32.353.XX (5500 K)
Flash energy max. 3200 J
f-stop at 2 m (6 ½ ft) distance, 100 ISO: 45 $^5/_{10}$
with "tunnel-shaped" Plexiglas diffuser,
interchangeable tilt head, fan, 4 flash tubes,
20 modelling lamps 20 W, 2 cables 2 × 5 m (16 ft)
Dimensions (L×W×H) 112 × 12 × 13 cm (44 × 5 × 5")
Weight 6,8 kg (15 lbs)

**Barn doors for Lightbar /
Striplite 120 Evolution**
33.229.00

**Plexiglas cap mat,
for Lightbar 120 Evolution**
33.273.00

**Striplite attachment
for Lightbar 120 Evolution**
33.275.00

Striplite 60 Evolution
32.301.XX (5500 K)
Flash energy max. 3200 J
f-stop at 2 m (6 ½ ft) distance, 100 ISO: 32 $^1/_{10}$
with Plexiglas diffuser, interchangeable tilt head,
fan, 2 flash tubes, 10 modelling lamps 20 W,
cable 5 m (16 ft)
Dimensions (L×W×H) 58 × 12 × 13 cm (23 × 5 × 5")
Weight 3,6 kg (8 lbs)

**Barn doors for Lightbar /
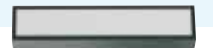Striplite 60 Evolution**
33.228.00

**Lightbar attachment,
Plexiglas cap mat,
for Striplite 60 Evolution**
33.272.00

**Honeycomb grid
for Striplite 60 attachment**
33.217.00

Striplite 120 Evolution
32.303.XX (5500 K)
Flash energy max. 3200 J
f-stop at 2 m (6 ½ ft) distance, 100 ISO: 45
max. 2 × 3200 J, with Plexiglas diffuser,
interchangeable tilt head, fan, 4 flash tubes,
20 modelling lamps 20 W, 2 cables 2 × 5 m (16 ft)
Dimensions (L×W×H) 112 × 12 × 13 cm (44 × 5 × 5")
Weight 6,8 kg (15 lbs)

**Barn doors for Lightbar /
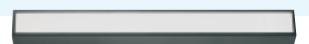Striplite 120 Evolution**
33.229.00

**Lightbar attachment,
Plexiglas cap mat,
for Striplite 120 Evolution**
33.273.00

**Honeycomb grid
for Striplite 120 Evolution**
33.218.00

Accessories

Halogen modelling lamp 20 W / 24 V
34.216.00
for Lightbar / Striplite 60 / 120 Evolution
230 V

Halogen modelling lamp 20 W / 12 V
34.217.0
for Lightbar / Striplite 60 / 120 Evolution
120 V

Boxlite 40
32.341.XX (5500 K)
Flash energy max. 3200 J
f-stop at 2 m (6 ½ ft) distance,
100 ISO: 22 $^3/_{10}$ (1600J)
with 2 flash tubes, 4 modelling lamps,
quick change head, cable 5 m (16 ft)
Dimensions (L×W×H) 30 × 40 × 15 cm (11,8 × 15,7 × 5,9")
(measurements without quick change head)
Weight 4,1 kg (9 lbs)

Modelling lamp 40 W for Boxlite 40
34.211.XX

Hazylight-Soft
33.513.00
f-stop at 2 m (6 ½ ft) distance,
100 ISO: 45 (3200J)
with white inside coating,
bracket and ring,
for Pulso G and Unilite lamps
Dimensions (L×W×H) 104 × 104 × 43 cm
(40 × 40 × 17"),
Weight 16,9 kg (37,3 lbs)

Honeycomb grid for Hazylight-Soft
33.215.00

RFS 2

Number of work stations	99
Number of frequency channels	40
Frequency	2,4 GHz
Transmission time (transmitter to receiver)	0,425 µs
Operating distance outdoors	up to 200 m (656 ft)
Operating distance in closed rooms	up to 50 m (164 ft)
Max. trigger sequence per second	100
Power supply	RFS 2 transmitter: 3 V CR2450 battery
	RFS 2 receiver: USB power supplier
Dimensions (L×W×H)	6,8 × 3,9 × 2,5 cm (2,7 × 1,5 × 1")
Weight (incl. battery)	43 g (0,09 lb)

RFS 2 transmitter kit | 36.133.00

Comprises	1 transceiver, 1 lithium button cell CR 2450, 1 sync cable for camera, 1 sheath

RFS 2 receiver kit | 36.134.00

Comprises	1 transceiver, 1 base plate, 1 lithium button cell CR 2450, 1 sync cable for camera, 1 sync cable for flash unit, 1 USB power supplier for receiver-operation (incl. supplier), 1 car charging cable, 1 USB cable, 1 sheath

RFS 2 transmitter / receiver kit | 36.135.00

Comprises	2 transceivers, 1 base plate, 1 lithium button cell CR 2450, 1 sync cable for camera, 1 sync cable for flash unit, 1 USB power supplier for receiver-operation (incl. supplier), 1 car charging cable, 1 USB cable, 2 sheaths

RFS transmitter | 36.130.00

Comprises	Transmitter with lithium button cell, 1 sync cable
Power regulation	in $1/1$ and $1/10$ f-stops
Number of frequency channels	10
Operational distances: outdoors	30 – 50 m (98 – 164 ft)
Operational distances: in closed rooms	20 – 30 m (65 – 98 ft), possible range up to 300 m (984 ft)
Dimensions (L×W×H)	7,2 × 4,7 × 5,7 cm (2,5 × 1,8 × 2,2")
Weight	55 g (0,12 lbs)

RFS transceiver | 36.131.00

Comprises	Transceiver with base plate, 1 USB connection cable, 1 sync cable, 1 data carrier with software
Power regulation	in $1/1$ and $1/10$ f-stops
Number of frequency channels	10
operational distances: outdoors	30 – 50 m (98 – 164 ft)
in closed rooms	20 – 30 m (65 – 98 ft), possible range up to 300 m (984 ft)
Dimensions (L×W×H)	8 × 5,6 × 5,2 cm (3,1 × 2,1 × 2")
Weight	105 g (0,23 lbs)
System requirements	requires a serial USB interface
Computer requirements	Apple Macintosh with OS 8.6 or higher (OS 9.1 or higher recommended), OS X, approx. 5 MB free memory space, or PC with Microsoft Windows 98 / WinMe / Win2000 / Windows XP / Vista, USB interface, approx. 5 MB free memory space

IRX 2 | 36.116.00

Infrared transmitter with 2 channels for cordless triggering,
range approx. 50 m (160 ft), with 1 sync cable and 2 batteries 1.5 V

RFS 2 is not compatible with RFS

Legend for cells: G = recommended combination (green), Y = not recommended combination (yellow), R = use forbidden (red). Numbers in cells refer to the footnotes below. Empty cells indicate no combination shown.

		Monolight Minicom 40/80/160	Litos lamp / MobiLED	Unilite lamp	Pulso G lamp	Pulso-Twin lamp	Picolite with Pulso adapter	Ringflash P lamp	broncolor HMI F200	broncolor HMI F400	broncolor HMI F575.800
Reflectors	Standard reflector P70	G	G	G	G 3	Y	G		G	G	G 4
	Standard reflector P65	G 1	G 1	G 1	G 3	G	G		G	G	G 4
	Narrow angle reflector P45	G	G	G	G 3	Y	G		G	G	R
	Narrow angle reflector P50	G 1	G 1	G 1	G 3	G	G		G	G	G 3
	Softlight reflector P	G	G	G	G		G		G	G	G
	Beauty Dish reflector	G	G	G	G		G		G	G	R
	Wide angle reflector P120	G	G	G	G	G			G	G	G
	PAR reflector	G 8	G 8	G 8	G 8				G	G	G
	P-Travel reflector	G	G	G	G	G	G		G	G	G
	Conical snoot	G	G	G	G	G	G		G	G	
	UV attachment	G	G	G	G	G 5			G 9	R	R
	Umbrella reflector	G	G	G	G	Y			Y	Y	
	Spot attachment	G	G	G	G				G	G	R
	Sunlite-Set	G	G	G	G						
	broncolor Flooter	G	G	G	G	G 2			G 2	G 2	R
	Satellite Evolution			G 7	G		G 6		Y	Y	G
	Mini-Satellite			G 7	G	G	G 6		Y	Y	G
	Satellite Staro	G	G	G	G	G 5	G 1		G	G	R
	Para 170 / 220 / 330 FB		G	G	G	G	G	G	R	R	G
	Para 88 P kit / Para 88 reflector	G 10	G	G	G	G	G	G	G 9	G 9	G
	Para 177 / 222	G 10	G	G	G	G	G	G	G 9	G 9	G
Softboxes	35 × 60	G	G	G	G	G	G 1		R	R	R
	60 × 60	G	G	G	G	G	G 1		R	R	R
	60 × 100	G	G	G	G	G	G 1		R	R	R
	100 × 100	G	G	G	G	G	G 1		R	R	R
	30 × 120	G	G	G	G	G	Y		R	R	R
	90 × 120	G	G	G	G	G	Y		R	R	R
	120 × 180	G	G	G	G	G	Y		R	R	R
Softbox Flex	70 × 70	R	G	R	R	G	R		R	R	R
Octaboxes	Ø 75	G	G	G	G	G	G 1		R	R	R
	Ø 150	G	G	G	G	G	G 1		R	R	R
Special effect lamps	Balloon	G		G	G	G	G		R	R	R
	Hazylight-Soft			G	G				R	R	G
	Litepipe									G	

● recommended combination
● not recommended combination
● **use forbidden!**
1 centre-focus light
2 non-optimized illumination
3 adjustable illumination, heavily centre-focused till uniform
4 adjustable illumination, centre-focused till uniform
5 up to 3200 J
6 with mat protecting glass and adapter 35.214.00
7 with Unilite holder 35.213.00
8 with mat protecting glass 34.340.00
9 in combination with 33.489.01
10 in combination with 33.489.00

Junior stand AC
35.100.00
air cushioned (AC), with 2 height
extensions, adjustable from
90 to 250 cm (3 – 8 ft),
and $^3/_8$" threaded bolt 16 mm,
weight 1,25 kg (2,7 lbs)

Flamingo stand
35.210.00
stand on casters with platform
for power pack and container
for counter-weight, crank handle
and cable suspension,
arm length 150 cm (5 ft),
max. height 325 cm (10 ft)
weight 43 kg (95 lbs)

Senior stand AC
35.110.00
air cushioned (AC), with 2 height
extensions, adjustable from
110 to 260 cm (3,6 – 8,1 ft),
and $^3/_8$" threaded bolt 16 mm,
weight 2,1 kg (4,6 lbs)

Super boom
35.140.00
boom arm with counter-weight,
length 210 cm (7 ft),
with holder (35.146.00)
for steel stand
weight 9,9 kg (22 lbs)

XXL stand AC
35.114.00
air cushioned (AC), with 3 height
extensions as well as
stand casters, adjustable from
144 – 455 cm (4,7 – 14,9 ft),
stand mount 28 mm (1,1"),
$^3/_8$" threaded bolt 16 mm,
weight 8 kg (17,6 lbs)

Hazylight stand
35.200.00
stand on casters with platform
for power pack, counter-weight
and cable suspension
arm 85 cm (2,6 ft)
max. height 270 cm (9 ft)
weight 38 kg (84 lbs)

Mini-Flamingo stand
35.170.00
stand on casters with platform
for power pack as counter-weight,
crank handle and cable suspension,
arm length 107 cm (3,4 ft),
max. height 260 cm (8,5 ft),
incl. broncolor threaded bolt,
lamp adapter and angle adapter,
weight 24 kg (53 lbs)

Casters for Senior stand
35.111.00
set of 3 pieces

**Bag for stands, empty
for 3 Junior stands**
36.551.00

**Bag for stands, empty
for 3 Senior stands**
36.552.00

Threaded nipple (A)

25.200.00

with $^3/_8$" external and internal thread
for stands of other brands

Threaded bolt (B)

25.210.00

with $^3/_8$" external thread
for Junior and Senior stand

Pulso lamp holder (C)

35.146.00

for Super-boom

Striplite holder (D)

35.216.00

for Flamingo stand

Bolt for quick change head (E)

35.298.00

with $^3/_8$" external and internal thread
for stands of other brands, broncolor fit

Bolt for quick change head (F)

35.299.00

for stands of other brands, Foba fit with spigot inset
of 18 mm diameter and $^3/_8$" external and internal thread

Threaded bolt (G)

35.409.00

with $^3/_8$" external and internal thread
for Mini-Hazylight stand for Unilite and Pulso lamps

Threaded bolt (H)

35.504.00

with $^3/_8$" external thread
for pantograph for Unilite and Pulso lamps

Double bolt (I)

35.297.00

Ø 16 mm

Threaded bolt for Junior / Senior stand

35.507.00

Stands of other brands

Recommended fastening of stand	Para FB 330	Para 177 / 222	Para 88 P kit	Para 88 reflector	Litos MobiLED	Unilite	Minicom 40/80/160 Minipuls C200	Lamps Pulso G and Pulso Twin	broncolor HMI F575.800	broncolor HMI F200 / F400	broncolor Flooter	Pulso-Spot 4	Boxlite	Hazylight-Soft	Lightbar / Striplite 60 Evolution	Lightbar / Striplite 120 Evolution	Satellite Evolution and Staro	Picolite / Litestick
Junior stand 35.100.00			○	○	●	●	●	●	●	●	○	○	●		●	○	○	●
Senior stand 35.110.00			●	●	●	●	●	●	●	●	●	●	●		●	●	○	●
XXL Stand 35.114.00	●	●	●	●	●	●	●	●	E	●	●	●	●	○	E	E	●	●
Super boom 35.140.00				●				C	C				C		C	○		C
Mini-Flamingo stand 35.170.00		●	●	●		G	G	G	G		G	●					●	G
Flamingo stand 35.210.00																	●	
Hazylight stand 35.200.00														●				
with $^3/_8$" thread						E	E	E	E		E	E	E		E	E	E	E
with spigot Ø 16 mm			I	I		H, I	H, I	H, I	H		H	H	H		H, I	H, I	H	H, I
with spigot Ø 18 mm						F	F	F	F		F	F	F		F	F	F	F
with spigot Ø 28 mm	●	●	●	●							●	●	●				●	
with $^3/_8$" (12 mm) spigot					●	●	●	●	●	●	●	●	●					

● No further holder necessary   **A-I** Holder necessary   ○ fastening is not recommended

broncolor lamps and monolights are supplied with flash tube
5900 K, halogen modelling lamp, UV-coated protecting
glass 5500 K (guarantees neutral colour reproduction) and
transparent protection cap.
You will find all the spare parts on www.broncolor.com

Minicom 40 / 80 (Page 27)

Flash tube 600 J
34.307.00

Halogen modelling lamp 300 W / 120 V
34.234.XX
with fuse

Halogen modelling lamp 300 W / 230 V
34.233.XX
with fuse

Protecting glass
34.336.00

Protecting glass, mat
34.337.00

Minicom 160 (Page 27)

Flash tube 1500 J
34.310.00

Halogen modelling lamp 300 W / 120 V
34.225.XX
with fuse

Halogen modelling lamp 650 W / 230 V
34.226.XX
with fuse

Protecting glass
34.336.00

Protecting glass, mat
34.337.00

Unilite, Pulso G (Page 31)

Flash tube 1600 J
34.322.00

Flash tube 3200 J
34.324.00

Halogen modelling lamp 300 W / 120 V
34.225.XX Pulso G / 34.234.XX Unilite
with fuse

Halogen modelling lamp 650 W / 230 V
34.226.XX Pulso G / 34.235.XX Unilite
with fuse

Protecting glass
34.336.00

Protecting glass, mat
34.337.00

Pulso Twin (Page 33)

Flash tube 2 × 3200 J
34.327.00
incl. protecting glass

Halogen modelling lamp 650 W / 230 V
34.226.XX
with fuse

Halogen modelling lamp 250 W / 120 V
34.221.XX
with fuse

Picolite (Page 34)

Flash tube 1600 J
34.308.00

Halogen modelling lamp 150 W / 230 V (Picolite)
34.201.00
with fuse

Halogen modelling lamp 150 W / 120 V (Picolite)
34.202.00
with fuse

Halogen modelling lamp 100 W / 12 V
34.203.00
with fuse

Protecting glass
34.332.00

Protecting glass, mat
34.335.00

Ringflash P / C (Page 46) **Lightbar / Striplite** (Page 48 – 49)

Halogen modelling lamp 20 W / 24 V
34.216.00
230 V

Halogen modelling lamp 20 W / 12 V
34.217.00
120 V

Pulso Spot 4 (Page 47)

Flash tube 3200 J
34.344.00

Halogen modelling lamp 250 W / 120 V
34.221.XX
with fuse

Halogen modelling lamp 300 W / 230 V
34.223.XX
with fuse

Litos (Page 32)

Flash tube 2400 J
34.313.00

Halogen modelling lamp 300 W / 230 V
34.233.XX
with fuse

Protecting glass
34.339.00

Protecting glass, mat
34.340.00

Boxlite 40 (Page 49)

Modelling lamp 40 W
34.211.XX

MobiLED (Page 32)

Flash tube 1600 J
34.308.00

Protecting glass
34.339.00

Protecting glass, mat
34.340.00

Continuous lighting is a very special chapter for everyone active in the photography and film sectors. broncolor HMI is the solution. Continuous light sources are an alternative or a powerful supplement to natural daylight. Game-changing technology and many year's knowledge and experience are the features of broncolor HMI continuous lighting. The latest circuits and high-quality components guarantee high functionality and reliability even under difficult conditions.

The extremely small size of the arc enables light control of hitherto unattainable precision. The broncolor HMI lamp has a fitting on one side only. A crucial prerequisite for slow-motion filming and filming with a high-speed camera is electronically stabilised and totally flicker-free lighting. The same applies for perfect images with electronic scanner cameras. In combination with "WYSIWYG" (What You See Is What You Get), the optimum requirements for perfect digital photography and subsequent image processing. The broncolor HMI F575.800 lamp is equipped with the proven Pulso bayonet fitting with unlocking button. Reflectors can be changed quickly and rotated through 360°. The large range of accessories includes most Pulso reflectors, floodlights, the HMI version of Pulsoflex, and various diffused-source lamps.

With the adapter included in the scope of supply of the F200 and F400 lamps, a large selection of broncolor reflectors and also Chimera® Video Pro Softboxes can be mounted directly, in exactly the same way as with the F575.800 lamp. Photographers can thus use their usual light shapers even with this continuous light source.

broncolor HMI uses normal, commercially available lamps. The broncolor high-power ignition stage ensures that they will fire again immediately, even when they are still hot. This means that full lighting is available at any time - no waiting! broncolor HMI has triple security. An electronically monitored protective glass, a thermal cutout, and a control for the protective earth guarantee the highest operational reliability. A broncolor HMI lamp gives three times as much light as a halogen light with nominally the same power. In spite of their light output, HMI lamps are compact and light. The 200 Watt version of the starter and lamp weigh less than 3 kg together, and are easy to transport.

In photography the broncolor HMI is the ideal chaser light for illuminating larger rooms for long exposures. As a continuous light source with daylight colour temperature, they offer the optimum conditions for creating wipe effects – as if out of doors. broncolor HMI, continuous lighting that sets the tone.

BRONCOLOR HMI CONTINUOUS LIGHT LAMPS

	F200 | 42.105.XX	**F400** | 42.106.XX	**F575.800** | 42.104.XX
Power output	200 W	400 W	575 / 800 W
F-stop at 2 m (6 ½ ft), 100 ISO, $\frac{1}{60}$	8 $^7/_{10}$ (Open Face)	11 $^8/_{10}$ (Open Face)	8 / 8 $^5/_{10}$ (reflector P70)
Focusing	yes	yes	yes
Weatherproof (IP 54*)	yes	yes	–
broncolor light shaper connection	with adapter	with adapter	integrated
Mains voltage	85 – 265 V	90 – 265 V	90 – 265 V
Cable length	5 m (16 ft)	6 m (19,7 ft)	3,5 m (11,5 ft)
Dimensions (L×W×H)	13 × 14,2 × 14,2 cm (5,1 × 5,6 × 5,6″)	13,9 × 14,2 × 16,7 cm (5,5 × 5,6 × 6,6″)	32 × 12 × 19,8 cm (12,6 × 4,7 × 7,8″)
Weight	1,2 kg (2,6 lbs)	1,4 kg (3 lbs)	2,6 kg (5,7 lbs)

*with Open Face and PAR reflector

Electronic Ballast units

HMI 200
41.103.XX
Electronic ballast unit for the daylight lamp / fixture broncolor HMI F200;
flicker-free operation, dimmer 100% – 60%, thermal protection, splash water protection (IP 43),
automatic adaptation to the respective mains voltage from 90 V – 265 V, with mains cable
Output: 200 W
Dimensions (L×W×H): 23,5 × 16 × 8,5 cm (9,2 × 6,3 × 3,3″)
Weight: 1,7 kg (3,7 lbs)

HMI 400.575.800
41.102.XX
Electronic ballast unit for the daylight lamps / fixtures broncolor HMI F400 or F575.800;
flicker-free operation, dimmer 100% – 60%, thermal protection, splash water protection (IP 43),
recognition of the set power level of the connected lamp (fixture), automatic adaptation
to the respective mains voltage from 90 V – 265 V, with mains cable
Output: 400 / 575 / 800 W
Dimensions (L×W×H): 26,7 × 18,4 × 11,2 cm (10,6 x 7,2 x 4,4″)
Weight: 2,6 kg (5,7 lbs)

broncolor HMI daylight units are also available in kits.
The complete kits have a large assortment and are also
reliable on location, easily transportable and have
powerful light sources.

HMI 200 Starter kit

41.111.XX

comprises:

1 lamp / fixture HMI F200 incl. lamp / bulb, 1 electronic ballast unit HMI 200,
1 Open Face reflector, 1 4-leaf barn door for Open Face, 1 diffusion filter,
1 conversion filter, 1 light ˝schott ring˝, 1 bag for 5 lenses or filter,
1 adapter for broncolor light shaper, 1 adapter ring (speedring) Ø 169 mm (6 $^5/_8$˝),
1 softbox ˝Video Pro XS˝ 40 × 55 cm (15.7 × 21.6˝), 1 bag

HMI 400 Starter kit

41.112.XX

comprises:

1 lamp / fixture HMI F400 incl. lamp / bulb, 1 electronic ballast unit HMI 400.575.800,
1 Open Face reflector, 1 4-leaf barn door for Open Face, 1 diffusion filter,
1 conversion filter, 1 light ˝schott ring˝, 1 bag for 5 lenses or filter,
1 adapter for broncolor light shaper, 1 adapter ring (speedring) Ø 169 mm (6 $^5/_8$˝),
1 softbox ˝Video Pro XS˝ 40 × 55 cm (15.7 × 21.6˝), 1 bag

HMI 200 Crossover kit

41.113.XX

comprises:

1 lamp / fixture HMI F200 incl. lamp / bulb, 1 electronic ballast unit HMI 200,
1 adapter for broncolor light shaper, 1 adapter ring (speedring) Ø 169 mm (6 $^5/_8$˝),
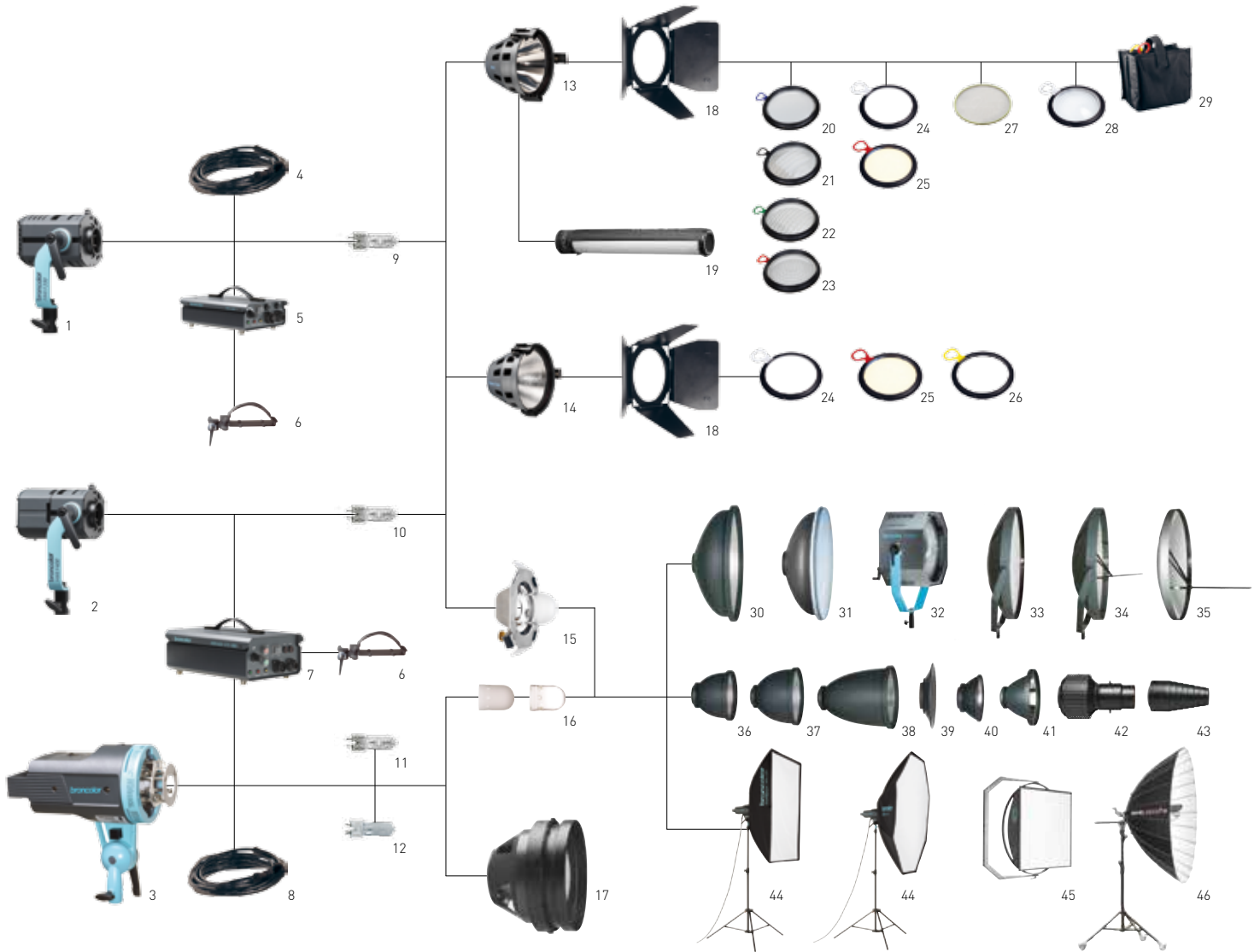1 softbox ˝Video Pro XS˝ 40 × 55 cm (15.7 × 21.6˝), 1 bag

HMI 400 Crossover kit

41.114.XX

comprises:

1 lamp (fixture) HMI F400 incl. lamp (bulb), 1 electronic ballast unit HMI 400.575.800,
1 adapter for broncolor light shaper, 1 adapter ring (speedring) Ø 169 mm (6 $^5/_8$˝),
1 softbox ˝Video Pro XS˝ 40 × 55 cm (15.7 × 21.6˝), 1 bag

1 Lamp / fixture F200	42.105.00	
2 Lamp / fixture F400	42.106.00	
3 Lamp / fixture F575.800	42.104.00	
4 Lamp extension cable for HMI 200	44.201.00	
5 Ballast unit HMI 200	41.103.XX	
6 Stand holder	35.118.00	
7 Ballast unit HMI 400.575.800	41.102.XX	
8 Lamp extension cable for HMI 400.575.800	44.202.00	
9 200 W lamp / bulb	44.105.00	
10 400 W lamp / bulb	44.106.00	
11 575 W lamp / bulb	44.100.00	
12 800 W lamp / bulb	44.104.00	
13 Reflector PAR F200	43.116.00	
Reflector PAR F400	43.117.00	
14 Reflector Open Face F200	43.104.00	
Reflector Open Face F400	43.111.00	
15 Adapter for broncolor light shaper and Chimera Softbox Video Pro	33.502.00	
16 Protecting glass HMI F575.800 clear	44.101.55	
mat	44.102.55	

17 Reflector PAR F575.800 (5500 K)	43.103.55
Reflector PAR F575.800 (5900 K)	43.103.59
18 4-leaf barn door for F200	43.106.00
4-leaf barn door for F400	43.105.00
19 Litepipe (for F400)	43.118.00
20 PAR lens NSP for F200	43.119.00
PAR lens NSP for F400	43.120.00
21 PAR lens MFL for F200	43.121.00
PAR lens MFL for F400	43.122.00
22 PAR lens WFL for F200	43.123.00
PAR lens WFL for F400	43.124.00
23 PAR lens VWFL for F200	43.125.00
PAR lens VWFL for F400	43.126.00
24 Diffusion filter for F200	43.107.00
Diffusion filter for F400	43.112.00
25 Conversion filter for F200	43.108.00
Conversion filter for F400	43.113.00
26 Light schott ring for F200	43.109.00
Light schott ring for F400	43.114.00
27 Scrim ring for F400	43.127.00
28 Fresnel lens for F200	43.128.00
Fresnel lens for F400	43.129.00

29 Bag for lenses for HMI F200	43.110.00
Bag for lenses for HMI F400	43.115.00
Bag for lenses for F200	43.130.00
Bag for lenses for F400	43.131.00
30 Softlight reflector P-Soft	33.110.00
31 Beauty-Dish reflector	33.111.00 *
32 Flooter	32.431.00 *
33 Satellite Staro	33.151.00
34 Satellite Evolution	33.150.00 *
35 Mini-Satellite	33.152.00 *
36 P70 reflector	33.107.00
37 P65 reflector	33.106.00
38 P45 narrow angle reflector	33.104.00
39 P120 wide angle reflector	33.112.00
40 Reflector P-Travel	33.103.00
41 Reflector PAR	33.113.00
42 Projection attachment	33.640.00 *
43 Conical Snoot	33.120.00 *
44 Softbox / Octabox	*
45 Hazylight-Soft	33.513.00 *
46 Paras	*

*1 = on request   *2 = with restrictions (see p. 51)

Sync cable
34.111.00: 5 m (16 ft)
34.112.00: 10 m (32 ft)

Light bag
36.518.00
for Senso kit, Minicom Basic kit,
Starter kit, Crossover kit, HMI kits
53 × 18 × 40 cm (21 × 7 × 16″)

Lamp cable per running meter
34.159.00 Pulso G / Unilite
34.160.00 MobiLED

Big bag
36.517.00
for Minicom Classic / Location / Expert / Pro kit,
Minipuls Location kit 2 / 3 / Para 88
96 × 45 × 26 cm (38 × 18 × 10″)

**Lamp extension cable
for Picolite / MobiLED**
34.150.00: 3,5 m (11 ft)

Beauty Dish bag
36.516.00
54 × 22 cm (21 × 8,5″)

**Lamp extension cable
for lamps up to max. 3200 J**
34.151.00: 5 m (16 ft)
34.152.00: 10 m (32 ft)

**Bag for 3 Junior stands
or 3 diffusers for Para / Para FB**
36.551.00
36.552.00 (3 Senior stands)

Extension cable Litos
34.153.00: 5 m (16 ft)
34.154.00: 10 m (32 ft)

Outdoor trolley backpack
36.519.00

Pulso wall adapter
36.900.00
(with bayonet)

**Weatherproofed
power pack soft case**
36.520.00

Compatibility, getting started, expansion

The broncolor modular system includes monolights, power packs, lamps and accessories, which are mutually compatible. This facilitates the start with the broncolor system, as you always will be able to enlarge it step by step and adopt it to your individual requirements. Combination with earlier broncolor equipment is virtually unrestricted.

The broncolor system

Output, easy to handle, microprocessor control system, and quick flash series – no matter what criterion makes you buy a flash system. Amongst the broncolor system you will find the units completely in line with your lighting requirements. They let you advance into new applications and succeed with motion shots. Various lamps and a wide selection of reflectors, area lights and accessories give you ample latitude in your visions of lighting and creativity.

Warranty

All broncolor equipment is characterised by high quality standards. All equipment – with the exception of flash tubes, modelling lamps, rechargeable batteries, textiles and parts subject to wear – carry a 2-year warranty.

Ordering power supplies

broncolor equipment can be supplied for various voltages and frequencies. Please replace the last two digits "XX" of the item number by the code number for your rated voltage.

Power supply	Code
100 V 50 Hz	.01
100 V 60 Hz	.02
110 V 50 Hz	.03
110 V 60 Hz	.04
115 V 50 Hz	.05
115 V 60 Hz	.06
117 V 60 Hz	.07
120 V 60 Hz	.08
220 V 50 Hz	.10
230 V 50 Hz	.11
240 V 50 Hz	.12
240 V 60 Hz	.13
220 V 60 Hz	.14
200 V 50 Hz	.15
200 V 60 Hz	.16

Special brochures

Please ask your broncolor representative for detailed special brochures relating to individual broncolor products and services.

**broncolor lighting courses –
now for digital photography too**
Creative lighting, precision, inspiration, style and emo-
tion – even in the age of digital photography, none of
these facets have lost in importance. broncolor offers
workshops for professional and semi-professional
photographers, as well as for advanced amateurs.

The broncolor workshops emphasise hands-on solu-
tions that are developed in small groups of two to four
participants. Under the guidance of a professional pho-
tographer you will realize demanding shots, including
photographic topics – such as glass, chrome-plated
steel, textiles, atmospheric stills, as well as special ef-
fects – such as running water and multiple-light setups.

Experienced difficulties arising from the set tasks, and
their solutions, will then be discussed. Classic photo-
graphic challenges will be explained along with the
latest photographic techniques. Controllable flash dura-
tions and colour temperature, as well as a variety of
filter methods are further topics of the course. In short:
you benefit from tips, tricks and techniques for your
everyday work.

In small groups, mutual inspiration and experience con-
tribute to a creative atmosphere. Additionally, you have
the chance to experiment with the extensive range of
broncolor lighting equipment and to become acquainted
with the wide assortment of light shapers. The purpose
of the course is to provide photographers with new ca-
pabilities and ideas so they can react faster, more effi-
ciently, and most of all, more effectively to the everyday
challenges of the profession.

broncolor Creative Workshops – 2 days pure creativity
broncolor offers a 2-day workshop for the areas
"People" and "Product" photography, in which the basic
principle of both is identical. Whilst the "Product"
workshop concentrates on the realization of product
photography, the "People" workshop deals with the top-
ic fashion and portrait photography. The instructor
will explain the specific aspects, accompanied by dem-
onstrations with a model, or shots in the group.

Our professionally equipped photographic studio has
up to four complete workstations. In addition to digital
and analogue medium and large format cameras,
the entire broncolor flashlight assortment is available
to the participants. The concept is being continuously
revised. See our website for the latest version.

The first edition of Light Architecture was published in 2008, the second, revised edition has been available since 2010. The current version is a hardback book; it explains seven new set-ups and has much-improved print quality.

Urs Recher (a commercial photographer since 1993 and employed by Bron Elektronik since 1998) has sub-divided his book into three chapters:

Chapter 1 briefly covers the theory of the photographic properties of light. It makes the photographer's main tool easier to understand, more readily comprehensible, and shows how it can be analysed.

In the second and by far the most comprehensive chapter, a total of 50 different set-ups are explained. The route to the result (shown unretouched) is explained in precise text on the basis of a diagram of the lighting set-up, and the technical data. The following aspects of photography are covered: beauty and portrait, fashion and full-length portrait, nudes, products, mixed light and photography with existing light.

In the final chapter, the characteristics of different light shapers are described. Light Architecture 2 is published in English, Spanish and Chinese, and can be obtained from local broncolor representatives.

A multitude of successful photographers is internationally active and makes demands, at the different shooting locations, to rent a broncolor flashlight system, quickly and without complications. And also, often in combination with a professional rental studio.

Bron Elektronik AG offers, in cooperation with its distributors in the various countries, an international rental service, broncolor worldlight. This network precisely meets those requirements. broncolor flashlight systems can be rented in 34 countries in more than 120 rental locations. In certain countries you also have the possibility of renting a broncolor equipped studio.

broncolor worldlight offers you:

• the possibility to rent the desired broncolor flashlight equipment, quickly and without complications

• to temporarily expand your own flashlight equipment, at short notice – for example for a complex shoot
• to use special effect lamps and light shapers for demanding light effects
• to test broncolor equipment before purchasing
• always the latest and state-of-the-art flash equipment

For further information, please contact your local broncolor dealer or us, directly. A country specific list of our rental studios is available on our website under:

**worldlight**
RENT A SYSTEM BY **broncolor**

www.broncolor.com
→ Buy/Rent

![broncolor]
broncolor®
THE LIGHT