# BE CREATIVE WITH LIGHT.

AND WITH SYSTEM.







#### Dear reader

The company founded in 1958, has developed during the last 50 years with its three product brands broncolor, VISATEC and kobold to become a "Global Player" on the international market for professional lighting systems. Today, three business areas are being covered: professional photography, broadcast/TV and event. "50 LIGHT-YEARS AHEAD" was chosen as the company's anniversary slogan in 2008. This statement reflects also our commitment for the future.

The challenge of thoroughly addressing your needs and repeatedly surprising you with innovations is our motivation – and light our passion. Essentially, we have much in common. You face daily challenges, too. Every new assignment calls for different, refined, and surprising photographic solutions. That's where we want to offer our support. We tap every single personal contact with your

colleagues from all over the world and ask them how we can provide assistance in the form of solutions that will ultimately benefit the entire community in the studio and on location. This valuable input inspires our engineers as they push the technology to its limits with a living suite of broncolor innovations that become the global benchmark.

We are proud to present you in this brochure the broncolor Senso power pack: our new most affordable introduction to the broncolor system. Senso delivers genuine studio performance for the price of a compact system. Newcomers can expect total power for a modest investment. Experienced professionals will appreciate the extra lighting capability that is fully compatible with the existing broncolor product line.

Beyond the spirit of innovation, nothing has changed as regards

the legendary quality and dependability that you have come to expect of broncolor products in your everyday work. Every device that leaves our production facility has undergone exhaustive functionality tests. Where possible, innovations are compatible with previous generation products. Over the years, this systematically implemented philosophy has enriched the broncolor product line to such an extent that it leaves nothing to be desired in terms of operating convenience, longevity, value for money, and reliability. The objective stands.

On our website at www.broncolor. com, you can find detailed information on the entire broncolor product line. You're the judge. Let the following pages acquaint you with the current broncolor product line. We look forward to the continued privilege of serving you for many years to come.

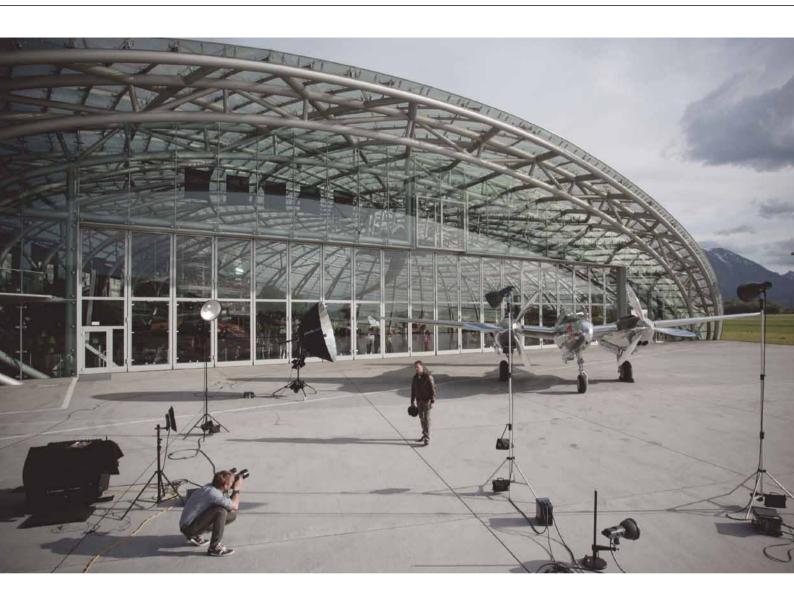
Jacques Bron





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# 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 61, 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 (wattseconds) – 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;  $2 \times 11 =$ 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 statement 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 multishot cameras. The high-end Scoro A 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.



The only effective way to define and compare technical equipment is to develop evaluation criteria that take into account both technical and economic aspects.

# Charging time

A certain amount of electrical energy from the mains (AC or battery supply) is needed to charge the capacitors of a flash unit. The amount of time required for charging is determined by the capacity of the mains or the battery, and by the storage capacity of the built-in capacitors. The larger or more powerful the flash unit, the longer the time required for charging. The time between the beginning of charge and the moment the "ready" light illuminates is called the charging time. According to DIN 19040, the ready light can come on when charging is only 70% complete, although varying results may be expected with such indicators. In broncolor units, the ready light comes on only with a 100% charge. Even the specification of the recycling time refers to 100% charge. This is the true time needed to guarantee the accurate repeatability to the photographer.

### Flash duration

The flash does not have a constant intensity over its entire duration, but instead decreases as indicated by the curve (see sketch). At the beginning of its discharge, the flash emits high-intensity light, which decreases continuously to zero toward the end. A close examination of the

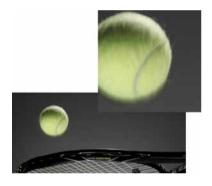
flash discharge curve reveals that although it possesses a fairly well defined beginning, it does not have a distinct end. Artificial definitions are therefore necessary so that curves of different durations can be compared. ISO\* Standard 2827 defines two values for quoting discharge duration:

- The effective flash duration t 0.5 is defined as being the period during which the flash intensity exceeds 50% of its maximum.
   50% of the flash power is produced after t 0.5 has been reached.
- The total flash duration t0.1 is defined as being the period during which the flash intensity exceeds 10% of its maximum. Once t0.1 is reached, the flash capacitor voltage drops and becomes too low to maintain a current in the flash tube, the flash ends.

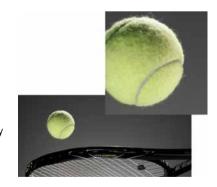
The mathematical meaning of t 0.5 is quite accurate, while the photographic meaning is a little ambiguous. With 50% of the light emitted until t0.5, and still 50% of the power of the flash produced after t 0.5, one can't really say (only with knowledge of t 0.5) how long it needs to produce the total flash

power that impacts the picture sharpness. For this reason the ISO 2827 standard defines t 0.1 as the total flash duration. t 0.1 is significant from the photographic point of view and needs to be considered especially for fashion shootings when the task is to "freeze" motion in the pictures.

The following photographic benchmark test indicates the impact of the insufficient meaning of t 0.5:

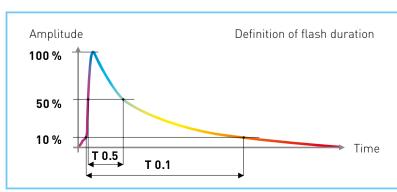


t 0.5 = 1/600



t 0.1 = 1/600

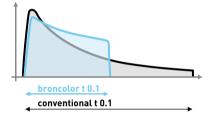
With the same t 0.5 and t 0.1 value, the t 0.1 picture definitely has an advantage in comparison with the one above and shows a frozen movement. Photographers will consider t 0.1 figures when professional pictures are expected. Keeping short t 0.1 by maintaining a constant colour temperature is



<sup>\*</sup>ISO = International Organization for Standardization

the main challenge for power pack manufacturers. broncolor's exclusive flash cut-off technology brings regarding t 0.1 one more added value to the customer: broncolor's technique reduces dramatically t0.1 durations in comparison to conventional flash unit techniques.

The figure below shows with the blue line the behaviour of the flash with the broncolor technique that consists in maintaining all flash capacitors activated and in cutting the flash off as soon as the chosen power level is reached. The blue area under the blue line corresponds to the selected flash power. The dark line corresponds to the behaviour of conventional flash units. The grey area under the dark line has the same size as the blue broncolor one, but is much longer in time.



Unbeatable total flash durations up to t 0.1 = 1/12000 s are reached by the latest power pack Scoro. Thanks to this technique, broncolor units have up to 3 times shorter flash durations than those of other manufacturers. This makes broncolor power packs the favourite units for shooting moving subjects, and provides the photographer with better sharpness and controllability.

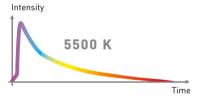
# Colour temperature

Constant colour temperature from one flash to another, and over time, is the first quality criteria of broncolor products. Maintaining the same picture quality over a shooting session is still the most economic way for the photographer to produce his images, despite post-production corrections available today. Having the

right colour temperature at the time of exposure avoids post-production corrections. This is the mission understanding of broncolor.

Constant colour temperature at any power level is also necessary in order to fulfil this mission. Again the technological lead of the broncolor cut-off technique offers the best performance for the customer. The 2nd generation cut-off technique, the patented Enhanced Colour Temperature Control (E.C.T.C) allows a perfect centering of the flash colour temperature around the daylight average value of 5500K.

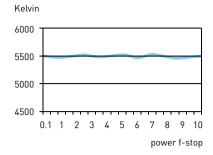
By controlling the amplitude of the blue light part according to the warmer red part allowed by the cutoff, E.C.T.C manages to get within a range of +/- 50K a constant average colour temperature over the whole power setting range.



Thanks to this exclusive technology broncolor offers up to 10 f-stop power variations with a constant colour temperature. There is no other technology that is able to compete with this performance. Such a constant colour temperature can be reached by others over only 4 f-stops.

The blue line illustrates this unique performance. With broncolor the available settings range from 0.1 to 10 f-stops covered by constant daylight colour temperature. Even the fast flash durations up to 1/5000 s (total flash duration t 0.1) are reached without reduction of the colour temperature performance. The economical solution of constant colour temperature is now a reality

with broncolor. By varying the power level, by doing fast photography, by shooting sequences, by using



multiple lamp heads, by working at full power, in any conditions, broncolor assures confidence regarding colour temperature, the professional power pack Scoro assists the photographer.



Now that the technical terms have been explained, it is time to consider which criteria should be applied when evaluating flash units.

# Criterion 1: Perfect photographic results

This is obviously the first priority. The most important prerequisites are:

- correct, controllable and reproducible colour reproduction by means of colour-neutral and UV-corrected flash tubes
- stabilised flash intensity that always ensures the same amount of light
- a "ready" indication at 100 % charge
- an extensive range of lamps and light shapers coordinated with the characteristics of the studio flash unit

# Criterion 2: Service life and quality

These are also critical factors in terms of quality evaluation. The service life of a flash system is determined by:

- the nature and dimensions of the capacitors and other power components that are used
- the charging time, i.e. the duty cycle of the capacitors, which are subject to large temperature fluctuations during charging and discharging. The key issue here is that inexpensive components have a shorter service life and an increased risk of failure after even a brief period of use. This stands in contrast to mechanical systems, where the wear rate determines service life

# Criterion 3: Electrical safety

Any electrical device can theoretically be hazardous if the manufac-

turer does not conscientiously observe every safety regulation. Increasing safety consciousness has naturally led to increasingly detailed and, in some cases, more stringent specifications. Safety is ensured when:

- international safety regulations are complied with,
- controls are protected from mechanical damage by recessed placement and by the use of impact resistant material.

# Criterion 4: Convenience

For flash units, each user's evaluation will depend on the purpose of the unit and the photographer's subjective criteria. What one person regards as a luxury others will consider a necessity they cannot live without. When it is understood that more convenience usually also means more complexity and a higher price, the usefulness of individual convenience features can then be evaluated more objectively. All the same, there are certain attributes about which everyone agrees, including any characteristic that

- · helps shorten working time
- decreases or eliminates poor results or operator errors
- prevents damage

Convenience right down the line broncolor equipment offers even more convenient features.

For instance:

 the illuminated silicone push buttons on power packs with LED displays, which can easily

- be operated even in a darkened studio, the useful extra functions of the Scoro and Grafit A range, the ability to adjust light delivery precisely to within one-tenth of an f-stop, and much more
- broncolor lamps offer convenience that photographers will not want to do without
- the bright halogen / LED modelling light, maximised coordination between flash tube and modelling light coverage angles, plug-in flash tubes, UV-protecting glasses that guarantee neutral colour reproduction, a patented bayonet system that lets the user replace light shapers with one twist of the wrist, a cooling fan in every lamp and a built-in thermal circuit breaker. Convenience is especially appreciated when it does not carry an extra price tag but constitutes a standard feature in a carefully thought-out design. A simple example: the housings whose projecting edges or handles effectively protect the controls from damage

#### Criterion 5:

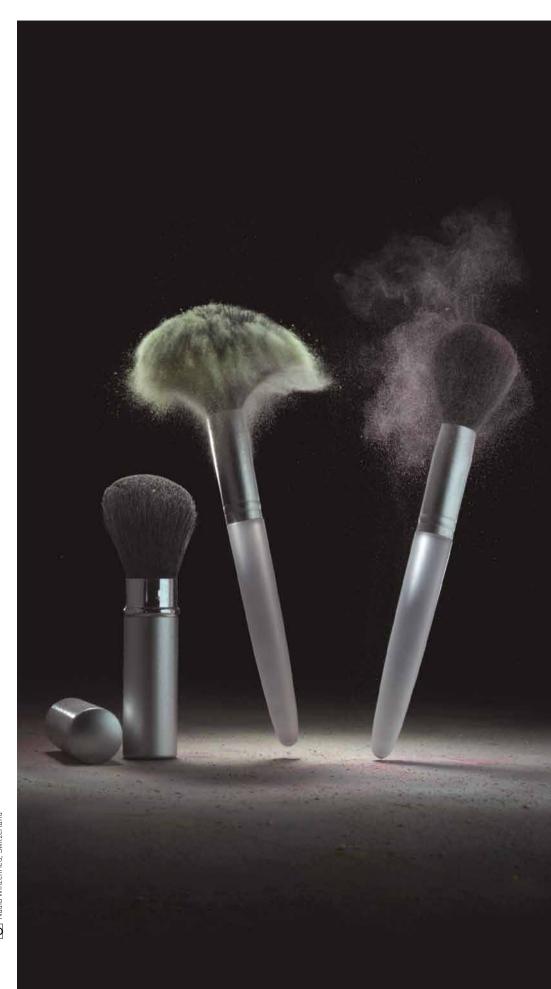
#### Performance of the flash tubes

Generally, the loading degree of a flash tube is determined according to the maximum energy (joules or watt-seconds) for each discharge. A 3200 J flash tube is configured for a maximum discharge of 3200 J. In the last few years, broncolor has developed even more powerful flash systems with shortened charge times. It has therefore become important to be well informed about the maximum load (joules or watt-seconds) of a flash tube during a specific length of time before assessing its performance.

This new approach involves the fact that the lamps and their flash tubes must undergo an exhaustive load test. broncolor takes this factor into account: broncolor flash tubes which are used with high-end flash lighting systems cover the performance demands without any restrictions.

### RFS / RFS 2 technology

RFS stands for "Radio Frequency System", broncolor's radio-based remote control. The RFS / RFS 2 sends radio signals to trigger and remotely control appropriately equipped broncolor power packs and monolights. In this application, RFS / RFS 2 replaces the conventional sync cable and infrared trigger. In combination with a PC or Mac and the appropriate software, the broncolor RFS transceiver lets the user control the operation of studio power packs and monitor the display of their functions. The RFS 2 triggering system allows independent working with up to 99 flash units and 40 coded frequency channels.



[O] Nadia Winzenried, Switzerland

# **POWER PACKS**

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High-powered flashlight systems always consist of a separate so-called power pack and one or more lamps. The advantages as compared with monolights are the ability to connect more than one lamp, a large selection of special lamps (e.g. area lamps, spots, etc.) and an extensive range of accessories. There are many models offering the right solution for every lighting task and every budget. broncolor power packs, lamps and accessories are (with a few exceptions) also compatible with current monolights and offer a power range from 3 J to 6100 J of flash energy.

The top-of-the-line Scoro AS models offer individual power distribution, i.e. each lamp output can be controlled separately. broncolor's patented ECTC (Enhanced Colour Temperature Control) technology ensures absolute control of colour temperature and flash duration over the entire control range. Numerous programmable extra functions provide a very wide range of capabilities.

Scoro is for the first time a power pack that combines all the best features: Scoro is the fastest unit regarding recycling time, about twice as fast as all others. Scoro offers the shortest flash duration at any power level. Scoro offers the widest control range with constant colour temperature.

The Verso A power pack is characterised by fast charging time, short flash duration and individual power distribution. The unit can optionally be powered from a rechargeable battery. The lamp outlets of Topas A precision units are individually controllable.

Automatic colour control stabilisation, an extremely wide control range and programmable flash sequences are the outstanding features of Topas A. The ideal introduction to the broncolor system is the Senso power packs: Senso A unites all the features of a studio flash system in a compact format that is ideal for on location work. The Mobil A2L mains-independent power pack offers light weight and a user-friendly plug-in rechargeable battery. The Mobil A2L is compatible with all broncolor flash units and lamps and can be equipped with lithium as well as lead rechargeable batteries.

With all broncolor studio power packs, the modelling light can be set in proportion to the varying flash output of different power packs, and to the number of lamps. This allows the lighting situation to be evaluated in the correct proportion to the actual flash output. The robust housings protect the electronics during rough everyday use, and fan cooling as well as a safety thermostat prevent damage due to overheating. Modern microprocessor-technology controls the various functions and also monitors the capacitor voltage and modelling light operating voltage. Highly accurate flash voltage control makes broncolor power packs especially suitable for multi-shot digital photography. All models are equipped with a photocell, and offer a wide control range at 1/10 f-stop intervals. Scoro A, Grafit A, Verso A and Topas A are all RFS power packs. Senso A has an integrated RFS 2 as a standard feature. All these power packs are fitted with an RFS interface and can be triggered and remotely controlled with radio signals.



# Scoro A2S | Scoro A4S

- Automatic stabilisation of the colour temperature (ECTC) over the whole control range and up to 6 f-stops
- 3 lamp outlets, individual power output distribution over 3 channels
- Photocell, infrared and RFS receiver for flash triggering (can be switched off)
- Choice of flash duration and triggering delay
- Individual choice of the colour temperature shift
- Can be switched to fast charging (speed mode)
- Additional function flash sequences (serial flashes)
- Powerful modelling light with 8 different proportionality levels
- Modern LCD
- Automatic adaptation to the respective mains voltage
- 8 memory functions
- TIPA Award Winner 2009



		Scoro A2S   31.041.XX Standard mode	Scoro A4S   31.043.XX Standard mode
Flash energy		1600 J	3200 J
F-stop at 2 m (6 ½ ft), 100 ISO,	reflector P70	64 <sup>2</sup> /10	90 <sup>2</sup> /10
Flash duration on max. energy	* t 0.1 (t 0.5)	1/265 s (1/760 s)	1/132 s (1/3900 s)
Variation range of flash duration	on* t 0.1 (0.5)	1/150 - 1/8000 s (1/450 - 1/12000 s)	1/85 - 1/8000 s (1/240 - 1/12000 s)
Charging time	230 V	0,02 - 0,6 s	0,02 - 1,3 s
(min. – max. energy)	120 V	0,02 - 1,0 s	0,02 - 2,0 s
	100 V	0,02 - 1,1 s	0,02 - 2,2 s
		Can be switched to slow charging mode	Can be switched to slow charging mode

		Speed mode	Speed mode
Flash energy		1200 J	2400 J
F-stop at 2 m (6 ½ ft), 100 ISO, reflector P70		45 <sup>9</sup> /10	64 <sup>9</sup> /10
Flash duration t 0.1 on max. energy*		1/535 s	1/285 s
Variation range of flash duration t	0.1*	1/150 – 1/8000 s	1/85 – 1/8000 s
Charging time	230 V	0,02 - 0,4 s	0,02 - 0,8 s
(min. – max. energy)	120 V	0,02 - 0,6 s	0,02 - 1,2 s
	100 V	0,02 - 0,7 s	0,02 - 1,4 s

	100 V	0,02 - 0,7 5			0,02 - 1,4 5		
Ready display		Visual and audible (can be switched off), signals when 100% of selected energy is reached					
Lamp outlets		3 main connec	tors with flash o	cut-off and ECTC			
Power output distribution		Symmetrical and individually asymmetrical					
Controls		Illuminated sili	cone keyboard, r	resistant to dust and	scratches, wirel	ess remote cont	rol of all functions
Control range		over 9 f-stops			over 10 f-stops	5	
		in <sup>1</sup> /10 or whole	e f-stop interval	s. Displayed simulta	aneously in f-sto	ps and joules	
Colour temperature		ECTC technolo	gy (Enhanced C	olour Temperature	Control) for con	sistent	
		but also deliberately modified colour temperature					
Modelling light		Halogen max. $3 \times 650$ W at 230 V / halogen max. $3 \times 300$ W at 120 V					
		Proportional to flash energy and "full" and "low" settings					
		Proportionality	adaptable to ot	her broncolor powe	er packs and mo	nolights	
Additional functions		t 0.1, Sequence	e, delay, interva	l, colour temperatu	re, alternation, s	stroboscopic, m	emory, etc.
Flash release		Manual releas	e button, photod	cell, infrared and RF	S receiver (can	be switched off)	l,
		sync cable, IR>	〈 2				
No. of sync sockets		1			1		
Computer connection for remote co	ntrol	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 (L×W×H)		28,8 × 19 × 29,5	cm (11,3 × 7,5 ×	(11,6") excl. handle	28,8 × 19 × 40 c	cm (11,3 × 7,5 ×	15,7") excl. handle
Weight		9,2 kg (20,3 lbs) 12,5 kg (27,6 lbs)					

<sup>\*</sup>Flash duration and energy automatically regulated for optimum colour temperature. Minimum flash duration can be preselected.

### 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



	Senso A2   31.050.XX	Senso A4   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 <sup>1</sup> / <sub>10</sub>	
- with P70 reflector	45 <sup>8</sup> /10	64 8/10	
	Pulso G lamp	Pulso G lamp	
- with P70 reflector	45 <sup>7</sup> /10	64 <sup>7</sup> /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	6,5 f-stops or 13 J to 1200 J (1 lamp) with activate	ed 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)	$20,3 \times 14,8 \times 21,8$ cm $(8 \times 5,8 \times 8,6)$ excl. handle	$203 \times 148 \times 300$ mm (8 × 5,8 × 11,8"), excl. handle	
Weight	4,6 kg (10,1 lbs)	6,9 kg (15,2 lbs)	

# Kits

Senso kit 21	31.052.XX	(1× Senso A2 power pack, 1× Litos lamp)
Senso kit 22	31.053.XX	(1× Senso A2 power pack, 2× Litos lamps)
Senso kit 41	31.054.XX	(1× Senso A4 power pack, 1× Litos lamp)
Senso kit 42	31.055.XX	(1× Senso A4 power pack, 2× Litos lamps)

In addition, all kits contain: 1× Flex 70 × 70 cm (28 × 28"), sync cable 5 m (16,4 ft), case

# Accessories

# Stand holder

35.117.00





# **Grafit A RFS**

- Automatic regulation of flash duration for optimum colour temperature.
- Constant colour temperature (5500 K) over the complete control range (CTC)
- Preselection of flash duration possible
- High repetitive precision for digital imaging
- Individual power output distribution for each lamp outlet
- Flash release possible via radio and infrared
- Remote control via radio
- Automatic flash release control
- Display in f-stops and joules (joules switchable to %)
- Illuminated silicone keyboard and LED-display, resistant to dust and scratches
- Different additional functions via user-friendly menu operation



	Cmafit A2 DEC   24 4 / 0 VV	Confit A / DEC   04 470 VV	
	Grafit A2 RFS   31.169.XX	Grafit A4 RFS   31.179.XX	
Flash energy	1600 J	3200 J	
f-stop at 2 m (6 ½ ft), 100 ISO, Refl. P70	64 <sup>2</sup> /10	90 <sup>2</sup> /10	
Flash duration t 0.1 (t 0.5)	1/150 – 1/7500 s (1/450 – 1/12'000 s)	1/80 – 1/7500 s (1/240 – 1/12'000 s)	
Charging time (230 V)	0,03 – 1,3 s	0,04 - 2,6 s	
Ready display	visual and audible (can be switched off)		
Lamp outlets	3	3	
Power output distribution	individual (asymmetrical)	individual (asymmetrical)	
Control range flash energy	outlet 1 and 2: over 6 <sup>7</sup> /10 f-stops,		
	outlet 3: over 4 f-stops, alternatively in $^{1}/_{10}$ or $^{1}/_{3}$	f-stop intervals	
Modelling light (230 V)	halogen max. 3 × 650 W, proportional,		
	adaptable to other broncolor flash units with different power		
Flash release	RFS transmitter, RFS transceiver, IR-receiver an	d photocell (can be switched off),	
	manual release button, sync cable, IRX 2		
Sync sockets	1	1	
Remote control	by radio from a computer with integrated 10-cha	nnel RFS interface,	
	up to 20 units per channel, 4 storage spaces for	lighting situations	
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)	
Dimensions (L×W×H)	28,8 × 18 × 31,2 cm (11,3 × 7 × 12,2") 28,8 × 18 × 40,8 cm (11,3 × 7 × 16")		
Weight	8 kg (17,6 lbs) 11 kg (24,2 lbs)		
Power requirements	230 V / 50 Hz switchable to 120 V / 60 Hz */**, 120 V / 60 Hz switchable to 230 V / 50 Hz* 100 V / 50 Hz switchable to 230 V / 50 Hz*		

<sup>\*</sup> longer charging time, no interval-setting possible, \*\* Charging up to max. 9 instead of 10  $\,$ 

# Topas A RFS

- Automatic stabilisation of colour temperature
- Highest repetitive precision for digital imaging
- Individual power output distribution for each lamp outlet
- Wide control range of the flash energy
- Flash release possible via radio and infrared
- Automatic flash release control
- Illuminated silicone keyboard and LED-display, resistant to dust and scratches
- Additional function flash sequences (flash series)
- Automatic adaptation to the respective mains power



<b>Topas A2 RFS</b>   31.173.XX	<b>Topas A4 RFS</b>   31.174.XX
1600 J	3200 J
64 <sup>2</sup> /10	90 2/10
1600 J: 1/300 s (1/1000 s)	3200 J: 1/150 s (1/600 s)
1000 J: 1/400 s (1/1300 s)	2200 J: 1/200 s (1/800 s)
600 J: 1/500 s (1/1600 s)	1000 J: 1/300 s (1/1300 s)
0,4 - 1,8 s	0,4 - 3,4 s
visual and audible (can be switched off)	visual and audible (can be switched off)
2	2
individual (asymmetrical)	individual (asymmetrical)
over 5 f-stops	over 5 f-stops
expandable to 7,3 f-stops	expandable to 8,2 f-stops
halogen max. 4 × 650 W, proportional, adaptable	to other broncolor flash units
with different power	
RFS transmitter, RFS transceiver, IR-receiver an	d photocell (can be switched off),
manual release button, sync cable, IRX 2	
1	1
by radio from a computer with integrated 10-cha	nnel RFS interface,
up to 10 units per channel	
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)	
$28 \times 16,3 \times 27,2$ cm $(11,3 \times 6,4 \times 10,7")$	28 × 16,3 × 32,2 cm [11,3 × 6,4 × 12,6"]
5,8 kg (12,7 lbs) 8 kg (17,6 lbs)	
120 V / 50 – 60 Hz, 100 V / 50 Hz	
	1600 J 64 <sup>2</sup> / <sub>10</sub> 1600 J: 1/300 s (1/1000 s) 1000 J: 1/400 s (1/1300 s) 600 J: 1/500 s (1/1600 s) 0,4 - 1,8 s visual and audible (can be switched off) 2 individual (asymmetrical) over 5 f-stops expandable to 7,3 f-stops halogen max. 4 × 650 W, proportional, adaptable with different power RFS transmitter, RFS transceiver, IR-receiver an manual release button, sync cable, IRX 2 1 by radio from a computer with integrated 10-cha up to 10 units per channel operational distance outdoors up to 50 m (164 ft) operational distance in closed rooms up to 30 m 28 × 16,3 × 27,2 cm (11,3 × 6,4 × 10,7") 5,8 kg (12,7 lbs)

# Verso A2 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 with Power Dock	
Flash energy	1200 J	1200 J	
f-stop at 2 m (6 ½ ft), 100 ISO, Refl. P70	45 <sup>7</sup> /10	45 <sup>7</sup> /10	
Flash duration t 0.1 (t 0.5) at 230 V	1200 J: 1/500 s (1/1500 s)	1200 J: 1/500 s (1/1500 s)	
	600 J: 1/900 s (1/2500 s)	600 J: 1/900 s (1/2500 s)	
	300 J: 1/1200 s (1/3500 s)	300 J: 1/1200 s (1/3500 s)	
Charging time at fast charge (230 V)	0,2 - 0,8 s	0,3 – 1,5 s (fully charged battery)	
Ready display	visual and audible (can be switched off)		
Lamp outlets	3	3	
Power output distribution	individual (asymmetrical)		
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 a total of max. 650 W	
Flash release	RFS transmitter, RFS transceiver (10 channels), IR-receiver and photocell (can be switched off),		
Radio	sync cable, IRX 2, manual release button	ible	
Kadio	operational distance outdoors up to 50 m (164 ft)		
Sync sockets	operational distance in closed rooms up to 30 m	(76,4 It) possible range up to 300 III (764 It)	
Dimensions (L×W×H)	20 10 5 21 5 (11 / 7 2 12 / ")		
·	29 × 18,5 × 31,5 cm (11,4 × 7,3 × 12,4")		
Weight Power requirements	7,5 kg (16,5 lbs)		
	230 V / 50 Hz, 120 V / 50 – 60 Hz, 100 V / 50 Hz		
Number of flashes per battery	fast charge: approx. 350 – 38'000		
charge (max./min. power)	normal charge: approx. 450 – 50'000		

# 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  $30.8 \times 18.5 \times 22.9$  cm  $[12 \times 7.3 \times 9]$  12,3 kg [27 lbs]



# Verso 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
- Modification to RFS version possible



	Verso A4 RFS mains-operated   31.033.XX	Verso A4 RFS with Power Dock	
Flash energy	2400 J	2400 J	
f-stop at 2 m (6 ½ ft), 100 ISO, Refl. P70	64 <sup>7</sup> /10	64 <sup>7</sup> /10	
Flash duration t 0.1 (t 0.5) at 230 V	2400 J: 1/250 s (1/750 s)	2400 J: 1/250 s (1/750 s)	
	1200 J: 1/450 s (1/1250 s)	1200 J: 1/450 s (1/1250 s)	
	600 J: 1/600 s (1/1700 s)	600 J: 1/600 s (1/1700 s)	
Charging time at fast charge (230 V)	0,3 - 1,7 s	0,3 – 3,2 s (fully charged battery)	
Ready display	visual and audible (can be switched off)		
Lamp connections	3	3	
Power output distribution	individual (asymmetric)		
Control range of flash energy	Control range of 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 a total of max. 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		
Dimensions (L×W×H)	29 × 18,5 × 38 cm (11,4 × 7,3 × 15")		
Weight	10,4 kg (22,9 lbs)		
Power requirements	230 V / 50 Hz, 120 V / 50 – 60 Hz, 100 V / 50 Hz		
Number of flashes per battery	fast charge: approx. 180 – 19'000		
charge (max./min. power)	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  $30.8 \times 18.5 \times 22.9$  cm  $[12 \times 7.3 \times 9]$  12.3 kg [27 lbs]



# Mobil A2L

(incl. rechargeable plug-in battery and charger)

- High repetitive precision for digital imaging
- Illuminated silicone keyboard and LED-display, resistant to dust and scratches
- Selectable switch-off time setting of the modelling light
- Simple exchange of rechargeable battery by plug-in procedure
- Slow charge to protect the battery
- Flash release also possible via infrared
- Automatic switch-off of the power pack after selectable waiting time
- 3 different power distributions
- Use of lithium or lead batteries possible
- Selectable modes for modelling light: continuous light or film mode



	Mobil A2L   lithium: 31.013.XX	Mobil A2L   lead: 31.012.XX	
Flash energy	1200 J	1200 J	
f-stop at 2 m (6 ½ ft), 100 ISO, Refl. P70	45 <sup>6</sup> /10	45 <sup>6</sup> /10	
Flash duration t 0.1 (t 0.5)	1 lamp: 1/230 s (1/680 s) 2 lamps: 1/360 s (1/110	00 s)	
Charging time	fast charge: 0,8 – 2,9 s	fast charge: 0,8 – 2,9 s	
Ready display	visual and audible (can be switched off)	visual and audible (can be switched off)	
Lamp outlets	2	2	
Power distribution	symmetrical / asymmetrical 50/50 %, 70/30 %, 80	0/20 %	
Control range flash energy	over 6 f-stops	over 6 f-stops	
Modelling light	LED max. $2 \times 30$ W / halogen (12 V) max. $2 \times 100$ W		
	selectable switch-off time setting to protect the rechargeable battery or continuous light mode		
Flash release	infrared receiver and photocell (can be switched	off), RFS 2,	
	manual release button, sync cable, IRX 2		
Number sync sockets	1	1	
Dimensions (L×W×H)	24 × 15,2 × 29,4 cm (9,4 × 6 × 11,6")	24 × 15,2 × 29,4 cm (9,4 × 6 × 11,6")	
Weight	6,7 kg (14,7 lbs)	9,2 kg (20,3 lbs)	
Power requirements (charger)	100 – 240 V, 50 / 60 Hz	100 – 240 V, 50 / 60 Hz	
Number of flashes per battery	fast charge: approx. 170 / 2600	fast charge: approx. 130 / 2000	
	normal charge: approx. 220 / 3100	normal charge: approx. 170 / 2500	

<sup>\*</sup>Depending on delivery situation

# Accessories

# Charger

for lithium battery: 36.151.XX for lead battery: 36.128.XX



# Rechargeable plug-in battery

lithium battery for Mobil A2L: 36.150.00 lead battery for Mobil A2R and A2L: 36.127.00



# Mobil A2L Travel kit

with lithium battery: 31.023.XX with lead battery: 31.022.XX



# Connection cable

34.113.00 for cigarette lighter for Mobil A2L



### Bag for Mobil A2L Travel kit

36.518.00





# 24 MONOLIGHTS

The Minicom monolight is ideal as an introduction to the broncolor system or as a supplementary unit. It offers a short flash duration, large control range and excellent repetitive precision. The sensitivity of the photocell can also be reduced. Minipuls C 200 is a high-power monolight that is perfect for lighting larger sets. Its features include a continuous control range and a visual flash monitor.

broncolor monolights cover the power spectrum from 10 J to 1500 J, and are also available as kits. They are equipped with a powerful halogen modelling light that is proportional when broncolor power packs are used. Thanks to the integrated

broncolor bayonet with its release catch, light shapers can be rotated 360° and exchanged quickly and securely. Accessories are compatible and can be used with broncolor power packs and lamps. All models are fitted with a photocell and an infrared receiver. Minicom is also available in a RFS version; units equipped with a RFS interface can be triggered and remotely controlled with radio signals.

broncolor 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.

### 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 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 $\frac{1}{2}$ ft), 100 ISO, refl. P70	22 5/10	32 <sup>5</sup> / <sub>10</sub>	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 o	ff)	
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 b	e switched off), sync cable, manual r	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")	$35,5 \times 15,4 \times 19,4 \text{ cm} [13.9 \times 6 \times 7.6]$
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 80 RFS   31.416.XX	Minicom 160 RFS   31.473.XX
Flash release	infrared receiver and photocell (can b	oe switched off), sync cable, manual	release button and by radio
Sync sockets	2	2	2
Remote control	by radio from a computer with integrated 8-channel RFS interface, up to 8 units per channel, 4 storage spaces for lighting situations		
Operational distance outdoors Operational distance in closed rooms	up to 30 m (98,4 ft) possible range up to 300 m (984 ft) 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 1500 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  $53 \times 18 \times 40 \text{ cm} (21 \times 7 \times 15,7)$ 



# Big bag

36.517.00 for 2 – 3 monolights and accessories  $96 \times 45 \times 26 \text{ cm} [37.8 \times 17.7 \times 10^{\circ}]$ 



- High repetitive precision for digital imaging
- High flash power
- Large control range of the flash energy
- Flash release also possible via infrared
- Automatic flash release control
- User-friendly controls



	Minipuls C200   31.449.XX
Flash energy	1500 J
f-stop at 2 m (6 ½ ft), 100 ISO, reflector P70	64
Flash duration t 0.1 (t 0.5)	1/250 s (1/1000 s)
Charging time (230 V)	0,6 - 2,4 s
Ready display	visual
Control range flash energy	continuous over 4 f-stops
Modelling light (230 V)	halogen max. 650 W
Flash release	infrared receiver and photocell (can be switched off), sync cable,
	manual release button
Sync sockets	1
Dimensions (L×W×H)	$49.5 \times 12 \times 19.5$ cm $(19.4 \times 4.7 \times 7.6)$
Weight	4,5 kg (9,9 lbs)

#### Accessories

# Flash tube 1500 J

Power requirements

34.310.00



# **Protecting glass**

34.336.00



# Halogen modelling lamp 300 W / 120 V

34.225.XX with fuse



# Protecting glass, mat

34.337.00



# Halogen modelling lamp 650 W / 230 V

34.226.XX with fuse



# Big bag

36.517.00

for 2 – 3 monolights and accessories  $96 \times 45 \times 26$  cm  $[37,8 \times 17,7 \times 10^{\circ}]$ 

230 V / 50 - 60 Hz, 120 V / 50 - 60 Hz



BATTERY UNIT 27

# Powerbox 900

- A battery solution for mains-independent and mobile work
- makes it possible to work outside in favourable weather conditions with studio equipment
- Maximum energy output of 900 J (charge) and 450 W (power supply)
- Suitable for broncolor monolights
- Easy, fast recharge via normal mains supply within 3 hours



Powerhox	900	56.302.00
LOMEIDOY	700	JU.JUZ.UU

Energy	max. 900 J, for charge
Power output	max. 450 W, for power supply
Voltage	230 V / 50 Hz
	120 V / 60 Hz
Ready display	unit is switched on
Energy outlets	1 for the battery power supply
	1 for the user
Power requirements for broncolor	Powerbox 230 V: unit 230 V / 50 Hz
and VISATEC units	Powerbox 120 V: unit 120 V / 50 – 60 Hz
Power output distribution	after use, 900 J however as maximum
Controls	on/off switch, red and green info LEDs
Number of flashes per fully charged battery	depends on the monolight utilised and on the power level
	(see details in table below)
Dimensions (L×W×H)	21,5 × 14 × 20,5 cm (8,5 × 5,5 × 8")
Weight	7 kg (15,4 lbs)

Standard values with a new battery:			Minipuls C200
	Minicom 40	Minicom 80	Minicom 160
Max. flash energy	300 J	600 J	900 J
Number of flashes without modelling light	240	120	50
Min. flash energy	18 J	37 J	93 J
Number of flashes without modelling light	2900	1450	400

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

31.499.XX

Scope of delivery same as Minicom Location kit, and in RFS version incl. RFS transmitter



#### 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 Pulsoflex C  $60 \times 100$  cm  $(24 \times 40)$ ,

1 IRX 2, 1 sync cable 5 m (16 ft), 1 Big bag, 1 stand bag, 3 stands

### Minicom Expert kit RFS

31.497.XX

Scope of delivery same as Minicom Expert Kit, and in RFS version incl. RFS transmitter (instead of IRX 2 transmitter)



#### 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 Pulsoflex C  $60 \times 100$  cm  $[24 \times 40"]$ ,

1 IRX 2, 1 sync cable 5 m (16 ft), 1 Big bag, 1 stand bag, 3 stands

#### Minicom Pro kit RFS

31.501.XX

Scope of delivery same as Minicom Pro Kit,

and in RFS version incl. RFS transmitter (instead of IRX 2 transmitter)



# Minicom Travel kit

31.491.XX

comprises:

2 Minicom 40, 2 P-Travel reflectors,

1 barn door for P-Travel, 1 sync cable 5 m (16 ft),

1 Big bag, 1 stand bag, 2 stands

# Minicom Travel kit RFS

31.495.XX

Scope of delivery same as Minicom Travel kit, and in RFS version incl. RFS transmitter



# Minipuls Location kit 2

31.454.XX

comprises:

2 Minipuls C200

2 P-Travel reflectors,

1 sync cable 10 m (32 ft),

1 Big bag, 1 stand bag, 2 stands



# Minipuls Location kit 3

31.456.XX

comprises:

3 Minipuls C200

2 P-Travel reflectors,

1 barn door for P-Travel,

1 umbrella reflector,

1 umbrella silver,

1 Pulsoflex C  $60 \times 100$  cm ( $24 \times 40$ "),

1 IRX 2, 1 Big bag, 1 stand bag,

3 stands



The extensive range of lamps meets every photographer's needs for creative light management. The lamp is a 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 reflector, uniform illumination with a defined reflector axis, a good match between the emission characteristics of the flash and modelling light, optimum colour temperature and much more. broncolor Pulso G, Unilite, Pulso Twin and Pulso 8 lamps all have compact dimensions, a bright halogen modelling light, fan cooling, a thermal circuit breaker and plug-in flash tubes. Thanks to the integrated broncolor bayonet with its release catch, light shapers can be rotated 360° and exchanged quickly and securely. Twin lamps allow the energy of two power packs to be concentrated onto one lamp, directing as much as 6100 J to a single flash tube of a Pulso 8 lamp. The Picolite and Mobilite 2 small lamps use 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. Litos has a protective cap that can be quickly converted to be an umbrella or standard reflector.

As one of the first suppliers worldwide, broncolor focuses on LED technology and is presenting in 2011, 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 possibility 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 enable the handling convenience of all broncolor lamps.

broncolor lamps are supplied with flash tube 5900 K, halogen modelling lamp, UV-coated protecting glass 5500 K (guarantees neutral colour reproduction) and transparent protection cap.





# 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)



	·
Flash energy	max. 3200 J
Modelling light (230 V)	halogen max. 650 W
Length lamp cable	5 m (16 ft)
Dimensions (Ø×L×H)	$\emptyset$ 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, <sup>3</sup> /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)	$\emptyset$ 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, <sup>3</sup> /8" thread and bolts 16 mm

#### Accessories

# Flash tube 1600 J

34.322.00 (for Unilite and Pulso G)



# Halogen modelling lamp 650 W / 230 V

34.226.XX Pulso G / 34.235.XX Unilite with fuse



# Flash tube 3200 J

34.324.00 (for Unilite and Pulso G)



### Protecting glass

34.336.00



# Halogen modelling lamp 300 W / 120 V

34.225.XX Pulso G / 34.234.XX Unilite with fuse



# Protecting glass, mat

34.337.00



### Litos lamp

- 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 (serves simultaneously as protective cap for transport)
- 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

- 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 (serves simultaneously as protective cap for transport)
- 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



	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)	$\emptyset$ 12 × 27,5 × 20 cm (4,7 × 10,4 × 7,8")
Weight	4 kg (8,8 lbs)
Stand support	for bolts 12 mm, <sup>3</sup> /8" thread and bolts 16 mm

#### Accessories

# Flash tube 2 × 3200 J incl. protecting glass

34.327.00

for Pulso-Twin



# Halogen modelling lamp 250 W / 120 V

34.221.XX

with fuse



# Halogen modelling lamp 650 W / 230 V

34.226.XX

with fuse



- Corresponding emission characteristics of flash tubes 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 8 lamp** | 32.118.XX

Flash energy	max. 6400 J
Modelling light (230 V)	halogen max. 650 W
Length lamp cable	7,5 m (24 ft)
Dimensions (Ø×L×H)	$\emptyset$ 12 × 31 × 20 cm (4,7 × 10,4 × 7,8")
Weight (with cable)	3,35 kg (7,4 lbs)
Stand support	for bolts 12 mm, <sup>3</sup> /8" thread and bolts 16 mm

### Accessories

Flash tube 6400 J incl. protecting glass	TIE
34.328.00	
for Pulso 8	11

# Halogen modelling lamp 650 W / 230 V

34.226.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)

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, <sup>3</sup> /8" thread and bolts 16 mm

#### Accessories

# Flash tube 1600 J

34.308.00



# Halogen modelling lamp 150 W / 230 V

34.201.00 with fuse



# Halogen modelling lamp 150 W / 120 V

34.202.00 with fuse



34.332.00

Protecting glass mat for Picolite

34.335.00

# Mobilite 2 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

Flash energy
3,
Modelling light (12 V)
Length lamp cable
Dimensions (Ø×L×H)
Weight (with cable)
Stand support

# Accessories

#### Flash tube 1600 J

34.308.00



# Halogen modelling lamp 100 W / 12 V

34.203.00 with fuse



#### Mobilite 2 small lamp | 32.012.00

max. 1600 J halogen 100 W 3,5 m (11 ft)  $\emptyset$  8 × 20,5 × 13,5 cm (3,1 × 8 × 5,3") 1,25 kg (2,7 lbs)

### Protecting glass for Mobilite 2

# Protecting glass mat for Mobilite 2

for bolts 12 mm, 3/8" thread and bolts 16 mm

34.335.00

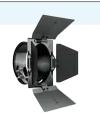






# Barn door with 4 wings

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  $15 - 35^{\circ}$  incl. mat protecting glass (34.335.00)



# **Projection attachment**

33.641.00

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



# Gobo set 8 pieces

33.642.00

for projection attachment



# Picobox

33.128.00 max. 1600 J,

lamp surface  $15 \times 25$  cm  $(6 \times 9.8")$  with integrated spring lock



# Picolite / Mobilite 2 adapter for Satellite Evolution

35.214.00



# Twin articulated arm in 3 parts

35.102.00

Twin articulated arm complete, bolt with  $^5/8^\circ$  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



### Lamp extension cable

34.150.00 3,5 m (11 ft)



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  $\emptyset$  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  $\emptyset$  29,5 × 24 cm (11,6 × 9,4")



# Honeycomb grid extremely narrow for P65 and P45

Honeycomb grids for P65, P45 and PAR

set of 3 pieces (fine, medium, coarse)

33.211.00

33.206.00



# Narrow angle reflector P45

33.104.00 optimised for Pulso G and Unilite lamps Ø 29,5 × 35,3 cm [11,6 × 13,9"]



# 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



# PAR Reflector 33.113.00

light angle 48°, with protecting glass UV, mat  $\emptyset$  29,5 × 18,3 cm [11,6 × 7,2"]





#### **Background reflector**

33.114.00

 $\emptyset$  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  $\emptyset$  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  $\emptyset$  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  $13.8 / 7.6 \times 26.25$  cm  $(5.4 / 2.9 \times 10.3)$ 



# UV attachment

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



#### broncolor offers two types of softboxes

The compact Pulsoflex C series and the more extensive Pulsoflex EM range, comprising softboxes with wide projecting rims that help direct the light more precisely and limit spillage. Both models provide almost completely

homogeneous illumination, which in some sizes can be refined even further with intermediate diffusers. Here as well, a centre emphasis can be achieved and accurately controlled by using focusable Pulso G lamps.

#### **Pulsoflex EM**

33.406.00	50	×	50	cm	20	×	20"
33.407.00	80	×	80	cm	32	×	32"
33.408.00	110	×	110	cm	44	×	44"
33.415.00	35	×	60	cm	14	×	24"
33.416.00	55	×	95	cm	22	×	38"
33.417.00	80	×	140	cm	32	×	56"
33.424.00	30	×	110	cm	12	×	44"
33.425.00	40	×	155	cm	16	×	62"

Incl. diffuser, rods and transport bag, excl. adapter ring. With broncolor HMI F575.800 lamps from edge length 80 cm (32") only.

#### Pulsoflex C

33.441.00	70	×	70	cm	28	×	28"
33.442.00	100	×	100	cm	40	×	40"
33.445.00	150	×	150	cm	60	×	60"
33.443.00	60	×	100	cm	24	×	40"
33.444.00	35	×	120	cm	14	×	48"
33.446.00	80	×	140	cm	32	×	56"

Incl. diffuser, rods and transport bag, excl. adapter ring. With broncolor HMI F575.800 lamps from edge length 80 cm (32") only.

### Softhay Elay

SOILBOX I LCX								
33.448.00	70	×	70	cm	28	×	28"	

Incl. supporting ring, can only be used with Litos and MobiLED lamps.



#### Accessories

#### Adapter ring for Pulsoflex C / EM

33.400.00

(not for broncolor HMI F575.800 lamp)



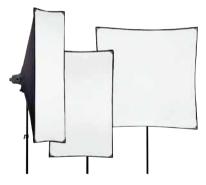
### Adapter ring for Pulsoflex C / EM for operation with broncolor HMI F575.800 lamp

43.100.00

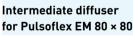
with integrated reflector, for increased centred light concentration (can be defocused with the Pulso G lamp)











33.410.00



UMBRELLAS 39

### The classic lighting device

broncolor offers umbrellas in two sizes (82 cm and 102 cm / 32" and 40" diameter). Umbrellas are available in three different versions: transparent and with white or silver coating.

#### Umbrella silver

33.459.00: Ø 82 cm (32") 33.452.00: Ø 102 cm (40")



#### Umbrella white

33.460.00: Ø 82 cm (32") 33.453.00: Ø 102 cm (40")



### Umbrella transparent

33.454.00 Ø 102 cm (40")



#### Accessories

Umbrella bracket for Pulso-Twin, Pulso G and Pulso 8 lamps with standard reflector P70

33.490.00



Umbrella reflector for Pulso G and Unilite lamps and for Minicom

33.496.00



Para 88 reflector   33.4	3.482.00	
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focused: f:90 (f:22), defocused: f:64 (f:11)

Allowed max. energy 3200 J

F-stop at 2 m / 6  $^{1}/_{2}$  ft (10 m / 33 ft) distance

Inside coating

Weight

open Ø 85 × 64 cm (34 × 24") Dimensions (without stand) closed  $\emptyset$  20 cm  $\times$  83 cm (8  $\times$  33")

2,8 kg (6,2 lbs) without case

Scope of delivery incl. big bag



Allowed max. energy

F-stop at 2 m / 6  $^{1}/_{2}$  ft (10 m / 33 ft) distance

Inside coating

Dimensions (without stand)

Weight Scope of delivery 3200 J

focused: f:64 9/10 (f:22 8/10)

silver

open with focusing system:  $\emptyset$  85 cm  $\times$  107 cm (33  $\times$  42")

closed with focusing system:  $\emptyset$  32 × 107 cm (13 × 42")

5,5 kg (12,1 lbs) without case

Para 88 reflector, focusing system 33.488.00, big bag



Para 170 FB | 33.484.00

Allowed max. energy

F-stop at 2 m / 6  $^{1}/_{2}$  ft (10 m / 33 ft) distance

Inside coating

Dimensions (without stand)

Weight

Scope of delivery

3200 J

focused: f:128 3/10 (45 5/10)

silver

open Ø 170 × 125 cm (67 × 49") closed Ø 28 × 95 cm (11 × 37")

8,7 kg (19 lbs)

incl. bag, suspension ropes



Para 220 FB | 33.485.00

Allowed max. energy

F-stop at  $2 \text{ m} / 6^{1/2} \text{ ft} (10 \text{ m} / 33 \text{ ft}) \text{ distance}$ Inside coating

Dimensions (without stand)

Weight

Scope of delivery

3200 J

focused: f:128 <sup>3</sup>/10 (32 <sup>8</sup>/10)

silver

open Ø 220 × 160 cm (86,6 × 63") closed Ø 28 × 120 cm (11 × 47")

9,1 kg (20 lbs)

incl. bag, suspension ropes



#### Para Soft 220 FB | 33.487.00

Allowed max. energy F-stop at  $2 \text{ m} / 6 \frac{1}{2} \text{ ft} (10 \text{ m} / 33 \text{ ft}) \text{ distance}$ Inside coating

Dimensions (without stand)

Weight Scope of delivery 3200 J focused: f:32 5/10 (11 1/10)

white

open Ø 220 × 160 cm (86,6 × 63") closed Ø  $28 \times 120 \text{ cm} (11 \times 47.3^{\circ})$ 

10,8 kg (23,8 lbs)

incl. bag, suspension ropes



Allowed max. energy

F-stop at 2 m / 6  $^{1}/_{2}$  ft (10 m / 33 ft) distance

Inside coating

Dimensions (without stand)

Weight

Scope of delivery

Para 330 FB | 33.486.00

3200 J

focused: f:90 8/10 (32 9/10)

silver

open Ø 330 × 240 cm (130 × 95") closed  $32 \times 160 \text{ cm} (12,6 \times 63)$ 

12,1 kg (26,6 lbs)

incl. suspension ropes

(without bag)



#### Accessories

#### Diffuser no. 1 (small\*)

Para 88: 33.472.00 / Para 170: 33.479.00 Para 220: 33.464.00 / Para 330: 33.469.00

### Diffuser no. 2 (medium\*)

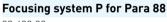
Para 88: 33.473.00 / Para 170: 33.480.00 Para 220: 33.465.00 / Para 330: 33.470.00

#### Diffuser no. 3 (large\*)

Para 88: 33.474.00 / Para 170: 33.481.00 Para 220: 33.466.00 / Para 330: 33.471.00

# Repair set

40.333.00 (Para FB 170, 220, 330) 40.319.00 (Para Soft 220 FB)



33.488.00

includes focusing and adapter\*\*



33.476.00

# Tilt head with crank handle for Para FB

33.477.00

# Bag for 3 diffusers for Para FB

36.551.00





#### Mini-Satellite

33.152.00 f-stop at 2 m (6 ½ ft) distance, 100 ISO with 3200 J: f: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 Evolution

33.150.00 f-stop at 2 m (6 ½ ft) distance, 100 ISO with 3200 J: f:180  $^{7}$ /10, parabolic reflector Ø 88 × 25 cm (35 × 14") incl. bracket, protecting glass mat UV, additional reflector, creates very concentrated light, light angle adjustment range 18° – 30° (2 m | 6 ½ ft distance) 10° – 20° (3 m | 10 ft distance)



#### Satellite Staro

33.151.00 f-stop at 2 m (6 ½ ft) distance, 100 ISO with 3200 J: f: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: f:(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	
Modelling light (230 V)	
F-stop at 2 m (6 ½ ft), 100 ISO	
Cooling	
Dimensions with support (Ø×H×D)	
Maight with cable 5 m (1/ ft)	

Weight with cable 5 m (16 ft)

max. 3200 J

200 W halogen:  $10 \times 20 \text{ W} / 24 \text{ V}$ 

f:45 <sup>1</sup>/<sub>10</sub> (3200 J) with soft reflector: f:45 <sup>6</sup>/<sub>10</sub> (3200 J)

stabilised with 2 fans

 $23,1 \times 28,6 \times 18 \text{ cm} (9,1 \times 11,3 \times 7,1")$ 

2,7 kg (6 lbs)

### Ringflash P (for Para FB)

- 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 | 32.461.XX

Flash energy

Modelling light (230 V)

f-stop at 2 m (6 1/2 ft) distance, 100 ISO

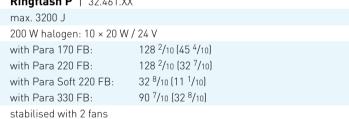
with 3200 J

with Para 330 FB: Cooling

Dimensions with support (Ø×H×D)  $23.1 \times 19.4 \times 14 \text{ cm} (9.1 \times 7.6 \times 5.5)$ 

Weight with cable 5 m (16 ft) 2,2 kg (4,9 lbs)

for Para 170 FB / 220 FB / Soft 220 FB / 330 FB Support



# 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



#### Honeycomb grid for Ringflash C

33.219.00

set of 3 pieces (fine, medium, coarse)



#### Soft reflector for Ringflash C

33.123.00 silver inside coating incl. UV-coated protecting glass



#### Conversion set for Ringflash C

36.125.00

for conversion to Ringflash P



# Beauty reflector for Ringflash C

33.124.00

white inside coating

incl. UV-coated protecting glass



# 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: f: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  $\frac{1}{2}$  ft) distance, 100 ISO: f:22  $\frac{8}{10}$  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: f:45.7 (with reflector), f: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 or max. 575 W with HMI, for Pulso G and Unilite lamps, monolights and HMI F575.800, acrylic glass sphere, opal, Ø 50 cm (20"), with black plastic socket and Pulso bayonet



#### Lightbar 60 Evolution

32.351.XX (5500 K)

Flash energy max. 3200 J

f-stop at 2 m (6 ½ ft) distance, 100 ISO: f: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)  $58 \times 12 \times 13$  cm ( $23 \times 5 \times 5$ ") Weight 3,6 kg (8 lbs)



33.228.00



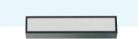
Plexiglas cap mat, for Lightbar 60 Evolution

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  $\frac{1}{2}$  ft) distance, 100 ISO: f:45  $\frac{5}{10}$ with "tunnel-shaped" Plexiglas diffuser, interchangeable tilt head, fan, 4 flash tubes, 20 modelling lamps 20 W, 2 cables  $2 \times 5$  m (16 ft) Dimensions (L×W×H)  $112 \times 12 \times 13$  cm  $[44 \times 5 \times 5]$ 

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: f: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)  $58 \times 12 \times 13$  cm ( $23 \times 5 \times 5$ ")

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  $\frac{1}{2}$  ft) distance, 100 ISO: f: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)



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: f: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: f:45 (3200J) with white inside coating, bracket and ring, for Pulso G and Unilite lamps Dimensions (L×W×H)  $104 \times 104 \times 43$  cm  $[40 \times 40 \times 17"]$ , Weight 16,9 kg (37,3 lbs)



#### Honeycomb grid for Hazylight-Soft

33.215.00



R	FS	2

	KF3 Z	
Number of work stations	99	
Number of frequency channels	40	
Frequency	2,4 GHz	10,00
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)	0 00
Max. trigger sequence per second	100	
Power supply	RFS 2 transmitter: 3 V CR2450 lithium battery	
	RFS 2 receiver: USB power supplier	
Dimensions (L×W×H)	$6.8 \times 3.9 \times 2.5$ cm $(2.7 \times 1.5 \times 1)$	
Weight (incl. battery)	43 g (0,09 lb)	

#### RFS 2 transmitter kit | 36.133.00

Comprises 1 transceiver, 3 lithium button cells 2450, 1 sync cable for camera, 1 sheath

#### **RFS 2 receiver kit** | 36.134.00

Comprises 1 transceiver, 1 base plate, 3 lithium button cells 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, 3 lithium button cells 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	<b>a</b>
Power regulation	in $^{1}/_{1}$ and $^{1}/_{10}$ f-stops	99
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)	$7.2 \times 4.7 \times 5.7$ cm $(2.5 \times 1.8 \times 2.2)$	
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 <sup>1</sup> /1 and <sup>1</sup> /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)	$8 \times 5,6 \times 5,2$ cm $(3,1 \times 2,1 \times 2")$
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



		Monotight Minicom 40 / 80 / 160	Monolight Minipuls C200	Litos lamp / MobiLED	Unilite lamp	Pulso G lamp	Pulso-Twin lamp	Pulso 8 lamp	Picolite / Mobilite 2 lamp with Pulso adapter	Ringflash P lamp	broncolor HMI F200	broncolor HMI F400	broncolor HMI F575.800
Reflectors	Standard reflector P70	•	•	•	•	• 4	0	0	•		•	•	• 5
	Standard reflector P65	● 1	<b>1</b>	<b>1</b>	<b>•</b> 1	● 4	•	•	•		•	•	● 5
	Narrow angle reflector P45	•	•	•	•	● 4	0	0	•		•	•	3
	Narrow angle reflector P50	● 1	<b>1</b>	<b>1</b>	<b>•</b> 1	● 4	•	•	•		•	•	• 4
	Softlight reflector P	•	•	•	•	•			•		•	•	•
	Beauty Dish reflector	•	•	•	•	•			•		•	•	
	Wide angle reflector P120	•	•	•	•	•	•	•			•	•	•
	PAR reflector	0	0	● 13	0	•					•	•	•
	P-Travel reflector	•	•	•	•	•	•	•	•		•	•	•
	Conical snoot	•	•	•	•	•	•	•	•		•	•	
	UV attachment	•	•	•	•	•	● 7	● 7				$\triangle$	$  \triangle  $
	Umbrella reflector	•	•	•	•	•					0	0	
	Spot attachment	•	•	•	•	•					•	•	
	Sunlite-Set	•	•	•	•	•							
	broncolor Flooter	•	•	•	•	•	● 3	•			● 3	● 3	•
	Satellite Evolution	● 11	• 11		<b>1</b> 2	•			● 8		0	0	•
	Mini-Satellite				<b>1</b> 2	•	•	•	● 8		0	0	•
	Satellite Staro	•	•	•	•	•	● 7	● 7	● 1		•	•	10
	Para 170 / 220 / 330 FB			•	•	•	•	•	•	•		$\triangle$	•
	Para 88 P kit			•	•	•	•	•	•	•	<b>1</b> 4	● 14	•
	Para 88 reflector			•	•	•	•	•	•	•	_		•
Pulsoflex EM	50 × 50	•	•	•	•	•	•	•	● 1		<u> </u>		$\triangle$
	80 × 80	•	•	•	•	•	•	•	● 1			<u> </u>	9
	110 × 110	•	•	•	•	•	•	•			<u>∧</u>	<u> </u>	9
	35 × 60	•	•	•	•	•	•	•	• 1				$\bigwedge_{\Delta}$
	55 × 95	•	•	•	•	•	•	•	● 1		_		$\triangle$
	80 × 140	•	•	•	•	•	•	•			$\triangle$	$  \stackrel{\wedge}{\nabla}  $	9
	30 × 110	•	•	•	•	•	•	•			$\triangle$	<u> </u>	$\triangle$
Pulsoflex C	40 × 155	•	•	•	•	•	•	•			$\Lambda$	<u> </u>	<u>A</u>
	70 × 70	•	•					•	• 1		A	<u> </u>	
	100 × 100 150 × 150							•	• 1			\(\frac{\lambda}{\lambda}\)	9
	60 × 100								<b>A</b> 1		$\triangle$	\ <u>\</u>	9
	80 × 140		•					•	• 1		$\bigwedge_{\Lambda}$		9
	35 × 120		•								<u>\\</u>	\ \ \ \	$\triangle$
Softbox Flex	70 × 70			•								<u> </u>	-
	Balloon	•	•		•	•	•	•	•		<u> </u>	\ \ \ \	$\triangle$
Special effect lamps	Hazylight-Soft											<u>^</u>	
	uzyugin son						1		1		$\triangle$	<u>∠:</u> \	

- recommended combination
  ontrecommended combination
  to recommended combination
  ontrecommended combination
  to recommended combination
  to be announced
  to be announced
  to be announced
  to either-focused till uniform
  to be announced
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#### Junior stand AC

35.100.00 air cushioned (AC), with 2 height extensions, adjustable from 90 to 250 cm (3 – 8 ft), and <sup>3</sup>/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 $[\ensuremath{\mathsf{B}}]$

25.210.00

with 3/8" external thread for Junior and Senior stand



#### Pulso lamp holder [C]

35.146.00

for Super-boom



#### Hazylight-Soft holder (D)

35.215.00

for Flamingo stand



#### Striplite holder (E)

35.216.00

for Flamingo stand



#### Bolt for quick change head (F)

35.298.00

with  $^3/8$  external and internal thread for stands of other brands, broncolor fit



# **Bolt for quick change head** [G]

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 (H)

35,409,00

with 3/8" external and internal thread for Mini-Hazylight stand for Unilite and Pulso lamps



#### Threaded bolt []

35.504.00

with 3/8" external thread for pantograph for Unilite and Pulso lamps



#### Threaded bolt [K]

35.505.00

with  $^3/8$ " external thread for pantograph for Pulso-Spot 4 and broncolor Flooter



#### Double bolt [M]

35.297.00

Ø 16 mm



#### Threaded bolt for Junior / Senior stand

35.507.00



Recommended fastening of stand	Para FB 330	Para FB 220 / FB 170	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 / Mobilite 2 Litestick
<b>Junior stand</b> 35.100.00			0	0	•	•	•	•	•	•	0	0	•		•	0	0	•
Senior stand 35.110.00			•	•	•	•	•	•	•	•	•	•	•		•	•	0	•
<b>XXL Stand</b> 35.114.00	•	•	•	•	•	•	•	•	F	•	•	•	•	0	F	F	•	•
<b>Super boom</b> 35.140.00				•				С	С				С		С	0		С
Mini-Flamingo stand 35.170.00		•	•	•		н	н	н	н		н	•				•	•	н
Flamingo stand 35.210.00														D				
Hazylight stand 35.200.00														•				
with <sup>3</sup> /8" thread						F	F	F	F		F	F	F		F	F	F	F
with spigot Ø 16 mm			М	М		I, M	I, M	I, M	ı		ı	ı	ı		I, M	I, M	ı	I, M
with spigot Ø 18 mm						G	G	G	G		G	G	G		G	G	G	G
with spigot Ø 28 mm	•	•	•	•							•	•	•				•	
with <sup>3</sup> /8" (12 mm) spigot					•	•	•	•	•	•	•	•	•					

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.

Minicom 40 / 80 (Page 25)

#### Flash tube 600 J

34.307.00



Unilite, Pulso G (Page 31)

#### Flash tube 1600 J

34.322.00



#### Halogen modelling lamp 300 W / 120 V

34.234.XX with fuse



#### Flash tube 3200 J

34.324.00



#### Halogen modelling lamp 300 W / 230 V

34.233.XX with fuse



### Halogen modelling lamp 300 W / 120 V

34.225.XX Pulso G / 34.234.XX Unilite with fuse



#### Protecting glass

34.336.00



### Halogen modelling lamp 650 W / 230 V

34.226.XX Pulso G / 34.235.XX Unilite with fuse



#### Protecting glass, mat

34.337.00



#### Protecting glass

34.336.00



Minicom 160 (Page 25) Minipuls C200 (Page 26)



# Protecting glass, mat

34.337.00



# Flash tube 1500 J

34.310.00



Pulso Twin (Page 32)



#### Halogen modelling lamp 300 W / 120 V

34.225.XX with fuse



# 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 650 W / 230 V

34.226.XX with fuse



# **Protecting glass**

34.336.00



#### Halogen modelling lamp 250 W / 120 V

34.221.XX with fuse



# Protecting glass, mat

34.337.00



#### Pulso 8 (Page 32)

#### Flash tube 6400 J

34.328.00

incl. protecting glass



### 34.216.00

230 V



#### Halogen modelling lamp 650 W / 230 V

34.226.XX

with fuse



### Halogen modelling lamp 20 W / 12 V

Halogen modelling lamp 20 W / 24 V

Ringflash P / C (Page 44) Lightbar / Striplite (Page 46 - 47)

34.217.00 120 V

#### Picolite / Mobilite 2 (Page 34)

#### Flash tube 1600 J

34.308.00



# Pulso Spot 4 (Page 45)

Flash tube 3200 J

34.344.00



Halogen modelling lamp 150 W / 230 V (Picolite)

34.201.00





34.221.XX

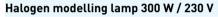
with fuse



Halogen modelling lamp 150 W / 120 V (Picolite)

34.202.00

with fuse



34.223.XX

with fuse



#### Halogen modelling lamp 100 W / 12 V (Mobilite 2)

34.203.00

with fuse



#### Boxlite 40 (Page 47)

# Modelling lamp 40 W

34.211.XX



# Protecting glass

Protecting glass, mat

34.332.00

34.335.00



# MobiLED (Page 33)

#### Flash tube 1600 J

34.308.00



# Litos (Page 33)

Flash tube 2400 J

34.313.00



#### Protecting glass

34.339.00



# Halogen modelling lamp 300 W / 230 V

34.233.XX

with fuse



### Protecting glass, mat

34.340.00



#### **Protecting glass**

34.339.00



### Protecting glass, mat

34.340.00



Continuous light is a special concern for everyone who takes photographs or motion pictures. broncolor HMI is the solution. These continuous light sources function as an alternative, or a powerful supplement, to natural daylight. Pioneering technology and many years of know-how are the special features of broncolor HMI continuous light sources. Ultramodern circuitry and high-quality components guarantee the ultimate in functional reliability even in difficult conditions.

The extremely small dimensions of the arc allow unprecedented lighting precision. The broncolor HMI lamp (bulb) is single-ended. The light is electronically stabilised and completely flicker-free – critical features for slow motion filming and high-speed cameras. The broncolor HMI F575.800 lamp (fixture) is equipped with the time-tested Pulso bayonet with unlocking button. Reflectors can be quickly exchanged and rotated 360°. The wide range of accessories includes most Pulso reflectors, Flooter, Pulsoflex (HMI version) and a number of area lamps.

The adapter, which is included in the scope of delivery of the Starter and Crossover Kits, enables (just like the F575.800 lamp (fixture) direct attachment of a large selection of broncolor reflectors as well as Chimera® Video Pro softboxes.

Photographers, therefore, can use their customary light shapers with this continuous light source, too.

broncolor's HMI system uses commercially available lamps (bulbs). Thanks to broncolor's high-power igniter they can be struck immediately even when hot, so full light output is available at any time and with no waiting. broncolor HMI has three levels of protection: an electronically monitored protecting glass, a safety thermostat and the earthing indicator together guarantee the ultimate in reliability. A broncolor HMI lamp (fixture) emits three times as much light as a halogen lamp (bulb) with the same rating. Despite their intensity, HMI lamps (fixtures) are compact and lightweight. The 200 W version of the HMI ballast and lamp (fixture) together weigh less than 3 kg (6.6 lbs) and are easy to transport.

The broncolor HMI system can be perfectly used for painting with light to illuminate large areas for long exposures. As a continuous light source at daylight colour temperature, it is ideal for designing wipe effects – just like outdoors.

broncolor HMI is the continuous light that delivers the right accents.

### broncolor HMI continuous light lamps







	<b>F200</b>   42.105.XX	<b>F400</b>   42.106.XX	<b>F575.800</b>   42.104.XX
Power output	200 W	400 W	575 / 800 W
F-stop at 2 m (6 $\frac{1}{2}$ ft), 100 ISO, $\frac{1}{60}$	f:8 <sup>7</sup> /10 (Open Face)	f:11 <sup>8</sup> / <sub>10</sub> (Open Face)	f:8 / f:8 <sup>5</sup> /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)	$13 \times 14,2 \times 14,2 \text{ cm } (5,1 \times 5,6 \times 5,6")$	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)

<sup>\*</sup>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):  $23.5 \times 16 \times 8.5$  cm  $(9.2 \times 6.3 \times 3.3)$ 

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):  $26.7 \times 18.4 \times 11.2$  cm ( $10.6 \times 7.2 \times 4.4$ ")

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 (speed ring) Ø 169 mm (6 5/8"),
- 1 softbox "Video Pro XS"  $40 \times 55$  cm  $(15.7 \times 21.6")$ , 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 (speed ring)  $\emptyset$  169 mm (6  $^{5}/8^{\circ}$ ),
- 1 softbox "Video Pro XS"  $40 \times 55$  cm  $(15.7 \times 21.6)$ , 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 (speed ring)  $\emptyset$  169 mm (6  $^5/8^\circ$ ),
- 1 softbox "Video Pro XS"  $40 \times 55$  cm  $(15.7 \times 21.6)$ , 1 bag



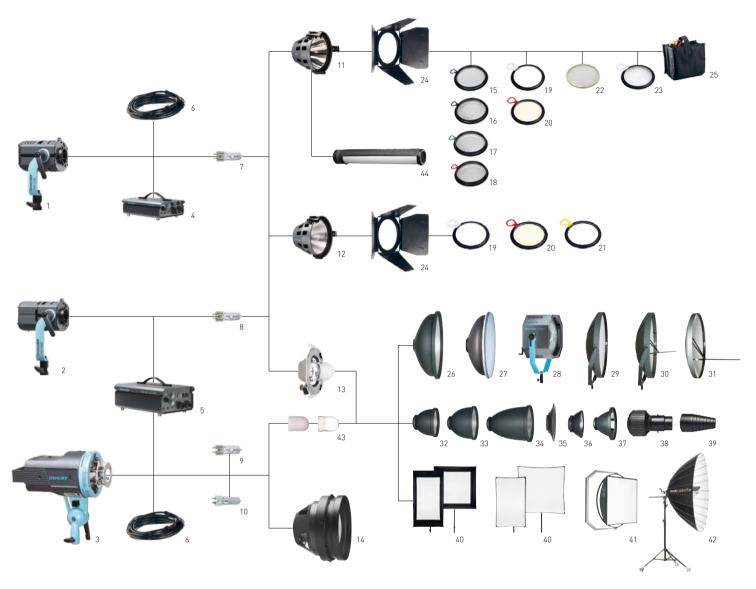
#### **HMI 400 Crossover Kit**

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 (speed ring) Ø 169 mm (6  $^5$ /8"), 1 softbox "Video Pro XS"  $40 \times 55$  cm ( $15.7 \times 21.6$ "), 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	Ballast unit HMI 200	41.103.XX
5	Ballast unit HMI 400.575.800	41.102.XX
6	Lamp extension cable	44.200.00
7	200 W lamp / bulb	44.105.00
8	400 W lamp / bulb	44.106.00
9	575 W lamp / bulb	44.100.00
10	800 W lamp / bulb	44.104.00
11	Reflector PAR F200	43.116.00
	Reflector PAR F400	43.117.00
12	Reflector Open Face F200	43.104.00
	Reflector Open Face F400	43.111.00
13	Adapter for broncolor light shaper	33.502.00
	and Chimera Softbox Video Pro	
14	Reflector PAR F575.800 (5500 K)	43.103.55
	Reflector PAR F575.800 (5900 K)	43.103.59
15	PAR lens NSP	*1

16	PAR lens MFL	*1
17	PAR lens WFL	*1
18	PAR lens VWFL	*1
9	Diffusion filter for F200	43.107.00
	Diffusion filter for F400	43.112.00
0	Conversion filter for F200	43.108.00
	Conversion filter for F400	43.113.00
21	Light schott ring for F200	43.109.00
	Light schott ring for F400	43.114.00
22	Scrim ring for F400	*1
3	Fresnel linse	*1
24	4-leaf barn door for F200	43.106.00
	4-leaf barn door for F400	43.111.00
5	Bag for lenses	*1
26	Softlight reflector P-Soft	33.110.00
7	Beauty-Dish reflector	33.111.00 *2
28	Flooter	32.431.00*2
7	Satellite Staro	33.151.00
0	Satellite Evolution	33.150.00*2

31	Mini-Satellite	33.152.00* <sup>2</sup>
32	P70 reflector	33.107.00
33	P65 reflector	33.106.00
34	P45 narrow angle reflector	33.104.00
35	P120 wide angle reflector	33.112.00
36	Reflector P-Travel	33.103.00
37	Reflector PAR	33.113.00
38	Projection attachment 3	3.640.00 *2
39	Conical Snoot	3.120.00 *2
40	Pulsoflex EM / C	*2
41	Hazylight-Soft	3.513.00 *2
42	Para 88 D kit (without 13)	33.483.01
	Para 170 FB	33.484.00
	Para 220 FB	33.485.00
	Para 220 Soft FB	33.487.00
	Para 330 FB	33.486.00
43	Protecting glass HMI F575.800 clear	44.101.55
	matt	44.102.55
44	Litepipe (for F400)	741-0531

#### Sync cable

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



#### Light bag

36.518.00 for Mobil A2L Travel kit, Senso kit, Minicom Basic kit, Starter kit, Crossover kit, HMI kits  $53 \times 18 \times 40$  cm  $(21 \times 7 \times 16^{\circ})$ 



#### Lamp cable per running meter

34.159.00



#### 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 Mobilite 2 / Picolite

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



### **Extension cable Litos**

34.153.00: 5 m (16 ft) 34.154.00: 10 m (32 ft)



### Bag for 3 Senior stands

36.552.00



# Pulso wall adapter

36.900.00 (with bayonet)



# 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.



COURSES 61

#### broncolor lighting courses – now for digital photography too

Creative lighting, precision, inspiration, style and emotion – 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 solutions that are developed in small groups of two to four participants. Under the guidance of a professional photographer you will realize demanding shots, including photographic topics – such as glass, chrome-plated steel, textiles, atmospheric stills, as well as special effects – such as running water and multiple-light setups.

Experienced difficulties arising from the set tasks, and their solutions, will then be discussed. Classic photographic challenges will be explained along with the latest photographic techniques. Controllable flash durations 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 contribute 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 capabilities and ideas so they can react faster, more efficiently, 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 topic fashion and portrait photography. The instructor will explain the specific aspects, accompanied by demonstrations with a model, or shots in the group.

Our professionally equipped photographic studio (130 m²) 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.





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-theart 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

www.broncolor.com

→ Buy/Rent





