

# NANO THE TALENTED POWER PACK.



# GOOD PRICE, GREAT PERFORMANCE.

THIS BRONCOLOR POWER PACK TALENT OFFERS TRUE STUDIO PERFORMANCE AT A COMPACT PRICE. IT EMBODIES BRONCOLOR'S LEGENDARY RELIABILITY, QUALITY AND TECHNOLOGY, AND IS COMPATIBLE WITH THE ENTIRE BRONCOLOR SYSTEM. BUT NOW ALL THESE ADVANTAGES ARE LESS EXPENSIVE THAN EVER: ENTRY-LEVEL PROFESSIONALS CAN GET FULL-SCALE PERFORMANCE FOR A MODEST INVESTMENT, AND ESTABLISHED PROS CAN ACQUIRE COST-EFFECTIVE BACK-UP PERFORMANCE THAT WORKS SEAMLESSLY WITH THEIR EXISTING BRONCOLOR EQUIPMENT.

## **Affordable.**

Nano does more than it costs. It pays for itself just like your favourite camera, amortizing its purchase price in a flash!

## **Sophisticated technology.**

The new models – Nano 2 and Nano 4 – are power packs loaded with the best of broncolor's technological leadership and know-how. The computer-controlled charging process offers the excellent

repeatability and accuracy needed for digital imaging. Ultramodern circuitry and carefully selected components guarantee outstanding functionality and reliability even under difficult conditions: dependability that starts working for you right away.

## **Easy to use.**

The front panel is well organised, the controls are clearly labelled and the digital LED display is easy to read from across the room. All this makes Nano power packs easy to use and reduces operator errors.

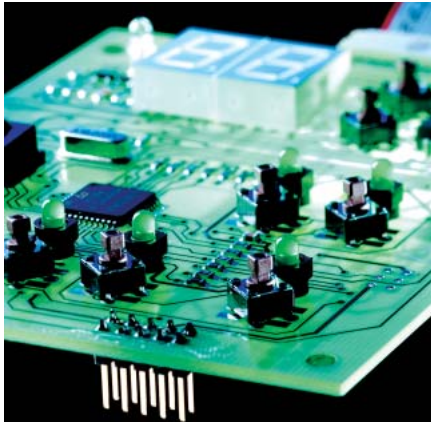
## **Dependability.**

Practically zero-wear keypads, instead of rotary knobs and switches, ensure many years of reliable operation. The front panel is protected by a scratch-resistant plastic film.

Nano power packs discharge internally when output is reduced, so no unnecessary flashes need to be triggered. The built-in data memory ensures that all settings are retained on shutdown or in the event of a mains failure. The microprocessor continuously monitors the temperature of every important component in a Nano power pack.

With their high-performance fan cooling systems, these power packs are also suitable for long flash sequences.





#### Low weight.

Nano 2 weighs 5 kg and Nano A4 weighs 6.4 kg; each power pack is barely as big as a camera bag. That makes location work a pleasure. And to protect the electronics in the studio and on the road, we fitted Nano with distinctive rubber side panels that also have style: perfect for surviving unscathed through bumpy off-road excursions and rough baggage handling at airports.

#### Power variation.

Power can be varied over 4 f-stops in 1/10-stop or whole-stop intervals, and the power range can be extended to 5 f-stops as necessary – with Nano 2 one additional stop, with Nano 4 additional 1.7 f-stops by choice of the corresponding lamp connection; in total up to 6.7 f-stops.

#### Lots of light.

Measuring the light from a Pulso lamp base at 2 meters and 100 ISO with a standard P70 reflector indicates an aperture of 45 7/10 with Nano 2, and 64 7/10 with Nano A4. This demonstrates that the fast Nano contains good capacitors in an optimised configuration: the efficiency is impressive.

#### Nano can be asymmetrical, too.

Nano 2 controls energy distribution through the two lamp base outlets 1 and 2 symmetrically at a 50:50 ratio. With the same equipment but twice the flash energy of Nano 2, Nano A4 offers a wider spectrum of capabilities, with 70:30 asymmetrical power distribution to outlets 1 and 2. Forget about the tiresome “flashing off” of excess energy when a lamp base outlet is not used: when only outlet 2 is in use, flash durations and charging times are shortened. Up to four flashes per second can be produced at the fastest setting. When only outlet 1 is used, full flash energy is available.

## Controls and Display

1. Mains switch
2. Modelling light on/off
3. Test key, ready display green
4. Photocell and IR receiver on/off
5. Buzzer on/off
6. Slow charge on/off
7. Charging dimmer on/off
8. Operating mode modelling light
9. IR receiver cell
10. Digital LED display for flash energy
11. Photocell
12. Energy control up/down
13. Sync socket
- 14.1 Lamp base outlet 1
- 14.1 Lamp base outlet 2
15. Connection socket for mains (AC-line) cable
16. Fuse



# HIGH PERFORMANCE ON EVERY MAINS.

NANO POWER PACKS ARE SO-CALLED BI-VOLTAGE UNITS. THEY AUTOMATICALLY ADAPT TO THE LOCAL MAINS VOLTAGE OF 100-120 V. SWITCHING TO SLOW CHARGING ENSURES FLAWLESS OPERATION EVEN ON POOR-QUALITY ELECTRICAL POWER CIRCUITS.

## Constant colour temperature.

Similar to the lamp base outlets, the flash capacitors in Nano power packs are divided into two groups. This design allows Nano 2 to maintain a constant colour temperature within +/- 100 K of approx. a 3 f-stop range. Nano A4 extends that range to more than 3.7 f-stops (by choice of the corresponding lamp connection.)

## Selectable modelling light.

The modelling light – proportional to flash energy (full power and energy-saver setting) up to a maximum of 650 W (200-240 V) or 300 W (100-120 V) for each lamp connection – can be controlled similar to broncolor power packs, and can be adapted to them.

The “dim” function switches off the modelling light during charging to prevent overloading of poor-quality power supplies and as a visible flash monitor.





COR Sitzmöbel, Rhetta-Wiedenbrück/Germany

#### **Short charging times.**

Short charging times of 0.25 s at minimum power and 1.4 s (Nano 2) and 2.4 s (Nano A4) at maximum flash output make it easy to shoot fast flash sequences of moving subjects. Nano power packs have both audible and visible “ready” indicators. The dim function can also be used as a ready indication; in this mode, the modelling light is dimmed during recharging, and monitors both triggering and flash readiness of the power pack.

#### **No cable tangles.**

Flashes can be triggered wirelessly using either the infrared transmitter or the photocell: both are built into Nano power packs as standard equipment, and are deactivatable.

#### **Extra functions included.**

The microprocessor counts the number of flashes in multiple-flash images. Simply enter the number of flashes desired (from 1 to 8). This function supports shots with up to 8 times the flash energy, so you can either reduce the aperture another three stops (for depth of field) or leave the aperture unchanged and have enough illumination for even very large or distant subjects.

The other additional function is “boosting”: when the modelling light is off in the flash mode, this function switches the modelling light to full output during charging. This allows you to check that all power packs have flashed, and provides a brief opportunity to check framing and focus.

#### **Multi-Voltage.**

Nano power packs are available in two different versions: as a bi-voltage unit for 100–240 V with automatic adjustment to mains voltage (with technical data optimised for 230 V), and in a version for 100–120 V. If there is no mains power at all, the battery adapter lets you work from a 12-volt car battery (for 100–230 V bi-voltage version only).

# INTELLIGENT TECHNIQUE IN A COMPACT DESIGN.



## Technical data.

	Nano 2	Nano A4
Flash energy	1200 J (Japan 1000 J)*	2400 J (Japan 2000 J)*
Aperture at 2 m, 100 ISO, P70 reflector	45 7/10	64 7/10
Flash duration t 0.1 (t 0.5) at each lamp base connection	1200 J (100%): 1/200 s (1/650 s) 600 J (50%): 1/300 s (1/1050 s)	2400 J (100%): 1/150 s (1/400 s) 1700 J (70%): 1/180 s (1/500 s) 700 J (30%): 1/250 s (1/1000 s)
Charging time (for 100% of selected energy)	230 V/50 Hz: 0,25-1,4 s 120 V/60 Hz: 0,25-1,7 s 100 V/50 Hz: 0,25-1,8 s Can be switched to slow charging.	230 V/50 Hz: 0,25-2,4 s 120 V/60 Hz: 0,25-2,9 s 100 V/50 Hz: 0,25-3,3 s
	<b>For Nano 2 / A4 - 230 V version</b> Adjusts automatically to mains voltage <b>Note:</b> The charging times shown above for 100-120 V do not apply to the bi-voltage version.	
"Ready" display	Visible and audible (can be deactivated); signals when 100% of selected energy is reached.	
Lamp base connections	2	2
Power distribution	Symmetrical power distribution	asymmetrical power distribution
Controls	Scratch-resistant keypad and LED display	
Flash energy control range	5 f-stops in 1/10-stop intervals (1:32); switchable to 6 f-stops (1:64)	5.7 f-stops in 1/10-stop intervals (1:52); switchable to 6.7 f-stops (1:104)
Modelling light	Halogen max. 2 x 650 W at 200-240 V Halogen max. 2 x 300 W at 100-120 V Proportional to flash energy, plus full power and energy-saver settings. Proportionality adjustable to other broncolor power packs and compact units, incl. those with different output levels. Nano proportionality: based on one lamp base at outlet 1.	
Additional functions	Flash sequence	
Flash triggering	Manual flash button, photocell and infrared receiver (deactivatable), sync cable, FCM 2, FCC, IRX2, IRQ	
Number of sync sockets	1	
Stabilized flash voltage	+/- 1,5%	
Standards	EC Standard 73/23, UL 122	
Power ratings	200-240 V/50-60 Hz: 10 A 110-120 V/50-60 Hz: 16 A 100 V/50 Hz: 16 A	
Dimensions (L x W x H)	235 x 157 x 270 mm	280 x 162.7 x 272 mm
Weight kg	5	6,5

\*(Technical data for the version available in Japan differ slightly from those shown here.)  
Subject to change in the interest of technical development.

Nano flash units are the result of many years of broncolor experience and industry-leading technology. Generously dimensioned components and robust construction ensure the best possible dependability and

functionality even under difficult conditions. We provide a 2-year factory warranty. A worldwide dealer network with stations for any required repairs ensures reliable service for all broncolor equipment.

broncolor: Your best investment for the long term.

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THE LIGHT

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