

# PARA FB

Inspiration and Emotion



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### NEW DIMENSIONS IN LIGHT

Para FB reflectors are impressive not only because of their shape and size, but most of all because of their unique light quality and outstanding performance.

The decisive factor for the creative photographer is that a Para FB is not a light shaper in the conventional sense, but a fully-fledged illumination system:

A variety of reflectors' sizes are available; the position of the lamp can be changed; the angle influences the character of the light; three diffusers of different densities are available. Para FB reflectors can also be combined with other accessories.

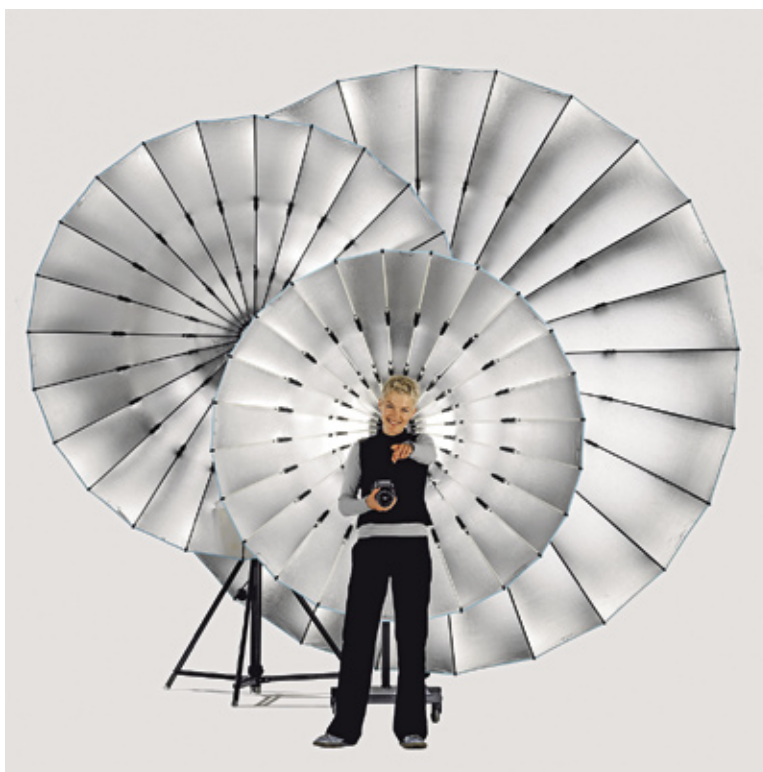
Photographers with a flair for light will find no end of new combinations and characteristics with the Para system: it is an inexhaustible source of inspiration and creativity.

### SIZES

The Paras FB are parabolic reflectors made up of 24 segments covered with a high-gloss tear-resistant textile reflector material. The reflector openings have diameters of 170, 220, and 330 cm. All Para FB models are made mostly of aluminium and carbon or fibreglass (170) and therefore weigh very little despite their gigantic dimensions. Their size also determines the kind of light they produce:

The **Para 330 FB** envelops an entire studio in a wonderful light that remains soft even at great distances without ever becoming «flat». The light is identical and homogeneous over a large area, so the model can move freely and spontaneously. The photographer can in fact stand directly in front of the light source and vary his distance from the model without influencing the light or casting a shadow.

The **Para 220 FB** is more than large enough to produce the typical Para light even at moderate distances of 5 to 8 m. Like its big brother, it can be completely defocused and offers almost the same light characteristics. Although it becomes spot-like (harder) more quickly at long distances, it offers the entire spectrum of variation more readily at shorter distances.





📷 II DANNY SZE, MODEL AGENCY: COSMOPOLITAN MODEL AGENCY SHANGHAI, SILVER DUKE MEDIA CO. SHANGHAI, LOCATION SHOOTING: CREEK ART SHANGHAI

The light from the **Para 170 FB** begins to resemble that of a very large spot. It is slightly more aggressive (so it occasionally requires a supporting fill light), but also more interesting on textures and more brilliant in highlights. The smallest of the three Paras FB cannot be completely defocused to the same extent, i.e. the reflector centre is never completely dark. The residual

light does somewhat reduce the three-dimensional effect, but at the same time counteracts an excessively «hard» lighting mood. Moreover, the 170 has the great advantage that it can be used effectively in smaller studios and at shorter distances.





📷 II ERIC VICTOR, AUSTRALIA

### **FOCUSING**

Next to the size of the Para FB, the most important parameter for light design is the position of the lamp in the reflector (focusing):

The focused position, in which the lamp is located well inside the reflector, creates a parallel, large-area light. It acts like a gigantic spot: powerful and

brilliant on the one hand, but on the other hand (because of its size) soft and almost completely shadowless. Much of the light comes from the optical axis, the centre of the umbrella. Positioning the Para FB behind the camera therefore yields a less delicate and three-dimensional light that is still brilliant.

In eyes or on glossy surfaces, all 24 segments of the reflector are imaged like a diamond.

When the defocused position is used (in which the lamp is positioned almost outside the reflector), reflections from the centre of the umbrella are entirely absent. The Paras FB differ fundamentally in this respect





from other giant umbrellas with a structured reflector material. The subject is illuminated not by one big light source, but by 24 small, hard light sources. Those 24 hard lights, arranged in a soft pattern, generate a fantastically beautiful cloud of light that envelops everything, produces soft and smooth illumination and nevertheless emphasises the

subject's texture (e.g. skin). Since no light comes from the optical axis, positioning the reflector behind the camera means that only shaping side lights exist, modelling every photographic subject with extreme plasticity and three-dimensionality.

### THE LIGHT SOURCE

Para FB can be operated with a Pulso G or Unilite lamp, as well as with a Ringflash P. Using a Ringflash P (recently provided with an UV-protective filter), the effective light source shifts precisely in the centre of the Para FB. Direct reflections (e.g. in the eyes of a portrait close-up) become more homogeneous, the light as such, fractionally softer.

### DIFFUSERS

Diffuser 1 is an almost completely transparent tulle. Only a small portion of the light is diffused and the typical light characteristics of the Para FB are not influenced. The light becomes a tiny bit more delicate, contrast is slightly diminished and the dominance of reflections on the subject is reduced. This makes it a magnificent tool in particular for subtle lighting effects in glamour photography.

Diffuser 2 makes the light denser than number 1. The light becomes softer and more homogeneous but also a little less sculptural. Direct reflections in eyes or on similar surfaces appear as almost homogeneous white areas, and the additional scattered light in the studio reduces contrast. However, some of the light can still pass through the diffuser without scattering, and the typical Para FB light characteristics are retained to a somewhat lesser extent.

Diffuser 3 closes off the reflector completely. The white cloth is not transparent, and all the light is scattered. The result is an extremely homogeneous, very soft and low-contrast light. The properties of this Para FB light are comparable to those of a softbox of the same size.



## ANGLES

The light angle also has an influence on the light. One possibility is not to shine the Para FB directly onto the scene being illuminated. At different angles, the reflections in the reflector are shifted or their size changes. This lets the photographer influence «hardness». Image contrast can also be controlled by moving the reflections farther away from or closer to the camera. If the Para FB is directed away from the subject, this again has a direct influence on the amount of scattered light in the studio, and thus on contrast, colour saturation, and brilliance.



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These are only some of the capabilities that broncolor makes available, and they already offer an incredible spectrum of lighting design possibilities. Many more will occur to you as you work every day with Para FB reflectors in the studio or on location; for example, the lamp need not always be located on the reflector's optical axis. Asymmetrical positions also yield the desired effect. Para FB reflectors can be combined with certain other light shapers from the broncolor product range.

## A SPECIAL TWIST

The great advantage of the FB version is its stretching technology (patent applied for). Using the practical crank on the back side of the giant umbrella, one person can almost effortlessly open up the reflector, move it into any desired position and close it.

## ANOTHER BIG PLUS

Now you can shoot even when the weather is less than ideal: eyelets for guy ropes ensure good stability whether the reflector is mounted on a studio ceiling or secured with tent pegs outdoors.

## «ON LOCATION» TOO

Even this enormous umbrella can be taken along once it has been collapsed and packed into its special carrying case.



## LAMPS FOR PARA FB

Para FB reflectors are designed for use with Ringflash P and broncolor lamps. All three sizes are optimised for use with Pulso G, Unilite, Ringflash P, Pulso Twin\* and Pulso 8\*. Earlier (F generation) lamps require a retrofitting kit.

## CONTINUOUS LIGHT WITH PARA FB

The versatile Para FB reflectors can be combined with the broncolor HMI F575.800 daylight source so they can also be used as continuous light for photography, film and video. The useful adjustment range is slightly restricted when operating with HMI F575.800 lamps.

\* Modification set required

# Technical Data

## broncolor Para FB

### Para 170 FB (Operation with lamps)

Measured values for 3200J, 100 ISO	focused	medium setting	defocused
f-stop at distance of 2 m (6 1/2 ft)	128 3/10	90 7/10	90 2/10
f-stop at distance of 4 m (13 ft)	90 5/10	45 5/10	32 8/10
f-stop at distance of 10 m (32.8 ft)	45 5/10	32	22 5/10
Dimensions – open (without stand)	Ø 170 x 125 cm (67 x 49")		
Dimensions – closed (without stand)	Ø 28 x 95 cm (11 x 37")		
Weight	8,7 kg (19,2 lbs)		



### Para 220 FB (Operation with lamps)

Measured values for 3200J, 100 ISO	focused	medium setting	defocused
f-stop at distance of 2 m (6 1/2 ft)	128 3/10	90 7/10	90 1/10
f-stop at distance of 4 m (13 ft)	90	45 4/10	32 1/10
f-stop at distance of 10 m (32.8 ft)	32 8/10	22	11 5/10
Dimensions – open (without stand)	Ø 220 x 160 cm (87 x 63")		
Dimensions – closed (without stand)	Ø 26 x 120 cm (11 x 47")		
Weight	9,1 kg (20,1 lbs)		



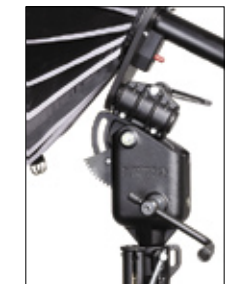
### Para 330 FB (Operation with lamps)

Measured values for 3200J, 100 ISO	focused	medium setting	defocused
f-stop at distance of 2 m (6 1/2 ft)	90 8/10	64 9/10	64
f-stop at distance of 4 m (13 ft)	64 7/10	45	32 8/10
f-stop at distance of 10 m (32.8 ft)	32 9/10	22 5/10	16 3/10
Dimensions – open (without stand)	Ø 330 x 240 cm (130 x 94")		
Dimensions – closed (without stand)	Ø 32 x 160 cm (13 x 63")		
Weight	12,1 kg (26,7 lbs)		



### Accessories

	Para 170 FB	Para 220 FB	Para 330 FB
Diffuser no. 1	Art. no. 33.479.00	33.464.00	33.469.00
Diffuser no. 2	Art. no. 33.480.00	33.465.00	33.470.00
Diffuser no. 3	Art. no. 33.481.00	33.466.00	33.471.00
Tilt head with crank handle	Art. no. 33.477.00	33.477.00	33.477.00
Lamp extension cable 5 m (16 ft)	Art. no. 34.151.00	34.151.00	34.151.00
Lamp extension cable 10 m (32 ft)	Art. no. 34.152.00	34.152.00	34.152.00
Stand XXL AC	Art. no. 35.114.00	35.114.00	35.114.00
Bag for 3 diffusers Para FB	Art. no. 36.551.00	36.551.00	36.551.00
Extension adapter for Para FB	Art. no. 33.476.00	33.476.00	33.476.00
Protecting glass, mat (5500 K) for HMI F575.800	Art. no. 44.102.55	44.102.55	44.102.55
Repair set for Para FB	Art. no. 40.333.00	40.333.00	40.333.00



Tilt head with crank handle

### EXPERIENCE INCLUDED

Para FB reflectors are the result of many years of broncolor experience and advanced technology. Carefully selected components and robust construction ensure the ultimate in dependability even under difficult conditions. Bron Elektronik AG provides a two-year warranty.

**broncolor**<sup>®</sup>  
THE LIGHT

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