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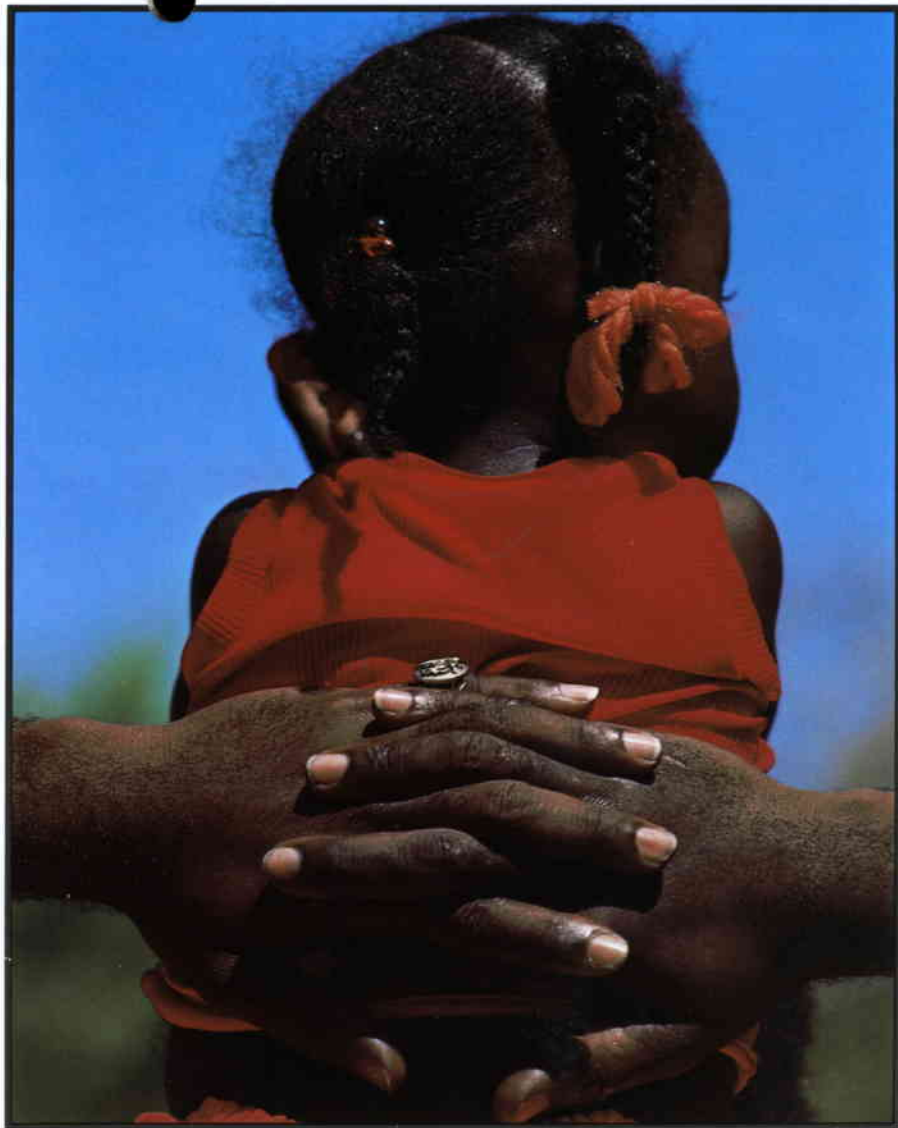
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## TELEPHOTOGRAPHY





[www.orphancameras.com](http://www.orphancameras.com)

400mm



500mm



● For pictures bursting with impact, any one of the 400mm, 500mm, 600mm, 800mm and 1000mm 6x7 ultra-telephoto lenses is ideal. Lenses of such great focal length lend themselves to dramatizing the results. Isolation of the subject, for example, is pronounced because of the shallow depth of field and large magnifications of these lenses. Moreover, compression of the foreground and background, which is typical of their long focal length, also serves to dramatize their effect. The 1000mm reflex lens is especially acclaimed for its compact size and light weight in relation to its extreme focal length. This lens weighs only 6.6% more than the 600mm telephoto lens, yet offers 66% greater magnification. Moreover, the doughnut-shaped, out-of-focus highlights produced by its mirror-lens design add greatly to the interest of pictures taken with this lens. With the 400mm, 600mm and 800mm ultra-telephotos you can economize on focal length and stretch your "reach" even further by employing the Pentax T6-2X Rear Converter to double their magnifications.

Whether you're shooting a rustic old farm house, a distant missile launching, dignitaries arriving for an international conference, or giant suns on the horizon—one of the 6x7 ultra telephotos is certain to be made to order.



**600mm**



**800mm**

**1000mm**

[www.orphancameras.com](http://www.orphancameras.com)

## MACROPHOTOGRAPHY

### ● SMC MACRO TAKUMAR 135mm f/4

135mm



The perfect companion for the macrophotographer. With a focal length exactly midway between standard and moderate telephoto lenses, this macro lens offers the advantages of both worlds. It allows you to work far enough from the subject to obtain pleasing perspective, and leaves ample space for the placement of auxiliary lighting. Moreover, there is little likelihood of the lens being close enough to cast a shadow on the subject or frighten away live specimens such as insects. In spite of this, you remain close enough to the subject to adjust its position when necessary. In addition, the proximity of the lens to the subject makes it possible to work with small apertures for shadowless illumination when using ringflashes or similar units.

As depth of field is of prime importance in macrophotography, the f/32 minimum aperture of the SMC Macro Takumar 135mm f/4 lens is a stop smaller than that of the f/22 minimum aperture of the 150mm and 200mm lenses. Moreover, the maximum aperture of this outstanding optic equals that of most macro lenses in the 35mm format, thus offering the same handling ease and relatively bright viewing.

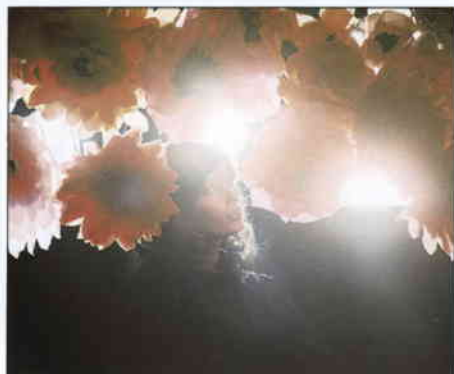
In addition to the above, the 75cm close focusing capabilities of the Macro Takumar are immeasurably extended with the accessory Helicoid Extension Tube, Auto Extension Tube Set, Auto Bellows and Reverse Adaptor. For critical focusing with the macro lens, either the 2X Magnifier (for the Pentaprism Finder) or the 1.6X magnifier of the Folding Focusing Hood is ideal.

## SPECIFICATIONS OF THE 6x7 INTERCHANGEABLE LENSES

6 x 7 INTERCHANGEABLE LENSES		Lens Construction (Groups-Elements)	Diaphragm	Angle of View	Minimum Focusing Distance (m)	Minimum Aperture	Maximum Diameter (mm)	Length (mm)	Weight (g)	Filter Size (mm)
SMC Fish-Eye-Takumar/6x7	35mm f/4.5	7-11	FA	180°	0.45	22	102	73	920	①
SMC Pentax/6x7	45mm f/4	8-9	FA	88°	0.37	22	91.5	57.5	486	82
SMC Pentax/6x7	55mm f/4	8-9	FA	77°	0.40	22	75.5	91.5	615	77
SMC Takumar/6x7	75mm f/4.5	4-5	FA	61°	0.70	22	91.5	81	600	82
SMC Takumar/6x7	90mm f/2.8	5-6	FA	53°	0.85	22	91.5	63	610	67
⊕ SMC Pentax/6x7	90mm f/2.8	5-7	FA	52°	0.65	22	91.5	49	485	67
⊕ SMC Takumar/6x7	105mm f/2.4	5-6	FA	45°	1.00	22	91.5	60	628	67
SMC Macro-Takumar/6x7	135mm f/4	3-5	FA	36°	0.75	32	91.5	95	645	67
SMC Takumar/6x7	150mm f/2.8	5-5	FA	33°	1.50	22	91.5	92	768	67
SMC Takumar/6x7	200mm f/4	4-4	FA	26°	2.50	22	91.5	120	900	67
SMC Takumar/6x7	300mm f/4	5-5	FA	17°	5.00	45	93	186	1,425	82
SMC Takumar/6x7	400mm f/4	5-5	M	12°	8.00	45	115	287	2,570	77
SMC Pentax/6x7	500mm f/5.6	4-4	FA	10°	8.00	45	107	398	3,200	95
SMC Takumar/6x7	600mm f/4	5-6	M	8°	12.00	45	170	370	6,000	77
SMC Takumar/6x7	800mm f/4	6-6	M	6°	20.00	45	236	611	17,700	77
SMC Reflex-Takumar/6x7	1000mm f/8	4-6	②	5°	35.00	—	180	352	6,660	③
SMC Pentax/6x7 Shift	75mm f/4.5	8-9	M	61°	0.70	32	97	106.5	950	82

SMC=Super-Multi-Coated FA=Fully Automatic M=Manual ① UV, Y2, O2 & R2 filters built-in ② ND filter built-in ③ Y2, R2 & ND filters built-in  
 ⊕ = Standard lens. "Length" does not include mount portion.

## SUPER-MULTI-COATING (SMC)

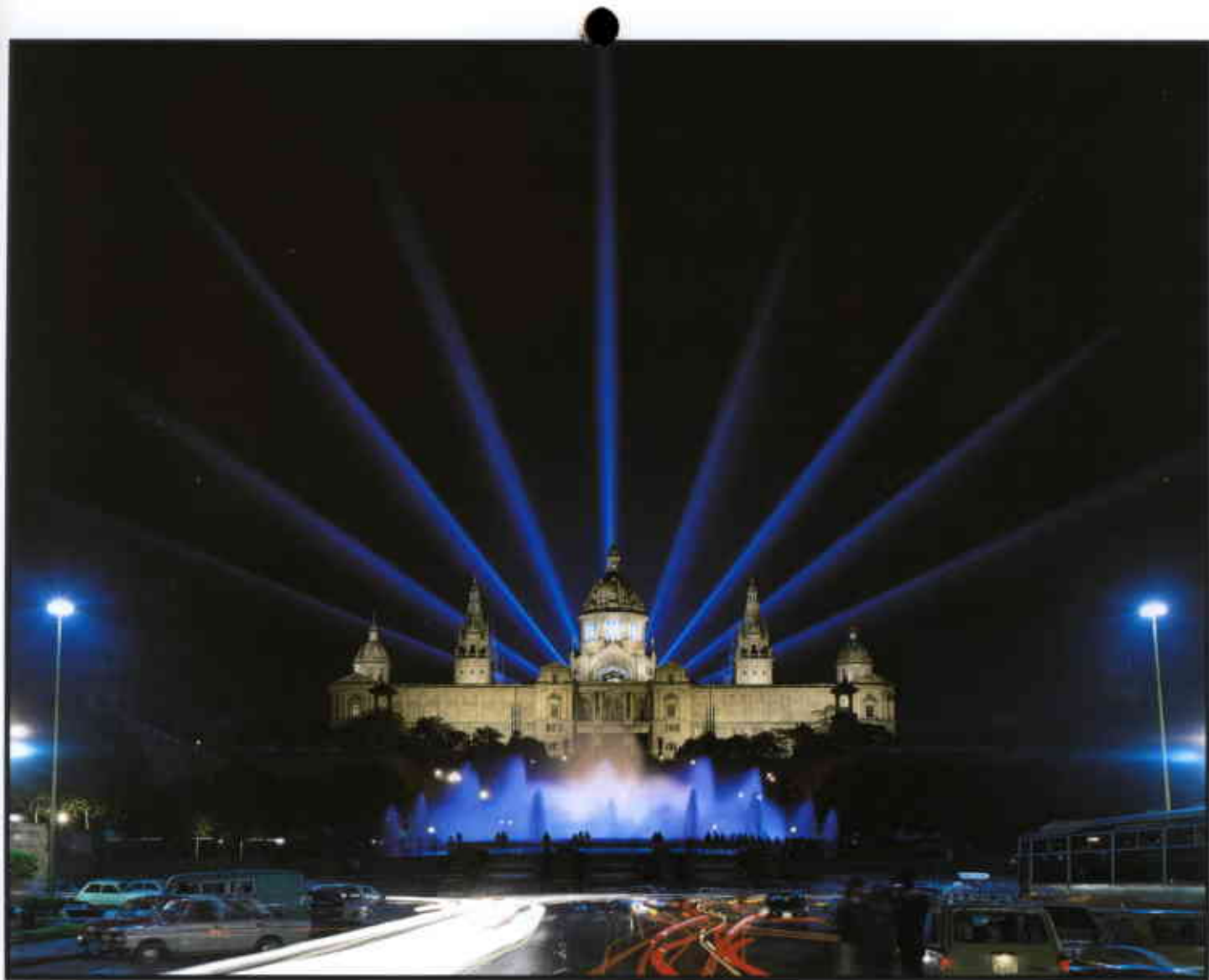


The two photographs were shot directly into the light, both at the same time, both with the same camera. The picture on the right was taken with one of the best conventionally coated lenses available, the one on the left which a Super-Multi-Coated 6x7 lens. More light passes through the Super-Multi-Coating, so color transmission is greater, ghosts and flare are virtually eliminated. Pentax engineers have succeeded in perfecting an anti-reflection layer combination that reduces the reflection ratio to as low as 0.2%. This means 99.8% light transmission. With conventional lenses the reflection ratio is 4% - 7%.









## PENTAX 6x7 ACCESSORIES

### ●MACROPHOTO AND COPYING ACCESSORIES

#### Auto Extension Tube Set

A set of three extension tubes can be used singularly or in combination on the inner bayonet mount of the Pentax 6x7 with lenses from 55mm wide-angle to 500mm telephoto (excluding the 400mm lens). Fully automatic diaphragm action is retained and magnifications greater than life-size can be produced.



#### Extension Tube Set

A two piece extension tube set used on the outer bayonet mount of the Pentax 6x7 to extend the minimum focusing distance of ultra telephoto lenses (excluding the 500mm lens). The tubes can be used in combination with each other or with the Pentax Rear Converter.



#### Auto Bellows

Magnification of 0.5X to 3.3X is possible with the combination of Auto Bellows and standard lens. Diaphragm automation is retained with the aid of a double cable release, even when the lens is mounted in reverse. All lenses from 90mm to 300mm can be used with the Auto Bellows.



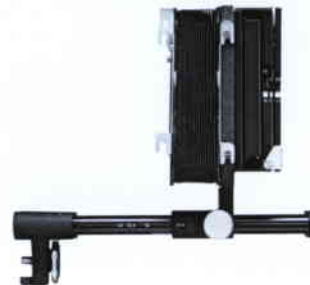
#### Helicoid Extension Tube

This single extension tube, which is used on the inner bayonet mount of the Pentax 6x7, offers continuously variable extension for precise control of the image size. It is equal to the No. 2 Auto Extension Tube at minimum extension, and to the No. 3 Auto Extension Tube at maximum extension. When used in combination with the standard lens, magnification is 0.3X - 0.6X, making it possible to fill the frame with a king-size pack of cigarettes.



#### Slide Copier

The Slide Copier is used in conjunction with the Auto Bellows unit to make copies of mounted or unmounted transparencies, whether of the 35mm or 6x7 format. Life-size or partially cropped duplicates can be made from originals.



### 49mm Reverse Adaptor

This adaptor makes it possible to use 49mm filter size lenses mounted in reverse on the Helicoid Extension Tube for macrophotography. Lenses designed for the Pentax ME & MX (e.g. SMC Pentax-M 28mm, 35mm, standard and macro lenses) and Pentax S Series cameras (SMC Super Takumar lenses) may be used.



### 67mm Reverse Adaptor

The 67mm Reverse Adaptor makes it possible to use the 90, 105, and 135mm lenses mounted in reverse on the Helicoid Extension Tube, Auto Extension Tubes, or Auto Bellows for superior optical performance when working at greater-than-life-size magnification.



### Copy Stand

This deluxe copy stand has double posts, providing rigid support for the Pentax 6x7. When the camera and lens is combined with extension tubes or bellows, the Copy Stand offers convenience and flexibility for copy work and macrophotography.



### Slide Holder K

An extremely handy slide holder unit for copying 35mm transparencies on the 6x7 format. Offers magnifications up to 2x when used with a macro 50mm lens (35mm format) and Helicoid Extension Tube.



### Rear Converter T6-2X

An extremely handy teleconverter unit for use with 6x7 lenses from 135mm thru 800mm (excepting the 500mm lens). Doubles the focal length of the lens in use and also retains the automatic diaphragm action when featured.



## PENTAX 6x7 ACCESSORIES

### ●VIEWFINDER ACCESSORIES

#### Right-Angle Finder

Attaches to the eyepiece of the standard and TTL pentaprism finders for low-angle photography. The image is both laterally correct and unreversed. The entire focusing screen, as well as the exposure meter indicator needle of the TTL Pentaprism Finder, is visible. The adjustable eyepiece accepts the accessory Eyecup.



#### Correction Lenses

They attach to the eyepiece of the pentaprism finder to correct for near and farsightedness. Available in seven strengths: +2, +1, -1, -2, -3, -4, -5.



#### Magnifier

Magnifies the central area of the focusing screen by 2X for critical focusing. The eyepiece of the magnifier has a built-in diopter adjustment for optimum viewing comfort. It is hinged at the top, allowing it to be raised out of the way for a final check of the overall composition.



#### Eyecup

The rubber Eyecup attaches to the eyepiece of the pentaprism and right-angle finders to prevent extraneous light from obstructing the view or adversely affecting the TTL exposure meter.



## ● CAMERA BODY ACCESSORIES

### Grip

The grip can easily be attached or removed with a single hand and has an accessory shoe to accept flash units. Once attached to the camera, this accessory offers a secure grip for the left hand.



### Camera Neck Strap

This robust strap is specifically designed to support the Pentax 6x7 without tangling and attaches to the camera body in a moment. The camera has four strap lugs, to permit attaching an extra strap or hanging the camera vertically.



### Body Mount Cap

Used to prevent dirt from entering into the mirror chamber when the camera body is stored without a lens.



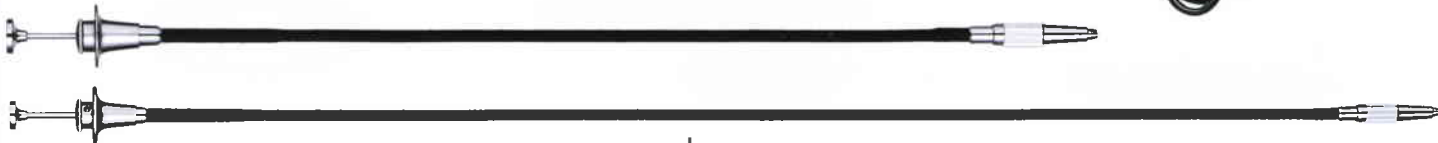
### Remote Battery Cord

When batteries are used at below-freezing temperatures, their voltage may drop, causing malfunction of the electronic shutter. The Remote Battery Cord is designed to eliminate the possibility of this problem occurring with the Pentax 6x7. One end of the cord contains the battery chamber and fits in a warm pocket, while the opposite end of the cord is plugged into the camera.



### Cable Releases

Two are available: Cable Release II (31cm) & Long Cable Release (50cm). Both are provided with locking collars for "time" exposures.



### ● LENS ACCESSORIES

#### Front Lens Caps

Front Lens Caps are available to protect the front element of the lens or a filter from dirt, scratches, and smudges. The caps bayonet into place to prevent accidental removal.

#### Rear Lens Caps

Used to prevent dirt from entering the rear of any lens when it is stored separately.



#### Lens Hoods

Whenever possible, the use of lens hoods is recommended as they help to maintain high contrast and increase color saturation by reducing the amount of stray light striking the lens. They are available for the following lenses: 55mm, 75mm, 90mm, 105mm, 135mm, 150mm. For convenience, telephoto lenses have built-on lens hoods.



#### K & P Mount Adaptors

Adaptors are available for using Takumar 6x7 lenses on 35mm SLR's. K-Mount Adaptor is used with the Pentax K2 DMD, ME & MX, and similar cameras; and the P-Mount Adaptor is used with the Pentax ES II, SP and similar models.



#### Pentax Filters

Two types of Pentax filters (SMC and conventional) are available in four screw-in sizes (67mm, 77mm, 82mm, 100mm).

**Skylight, Cloudy** (correct for excessive bluishness of cloudy and rainy days)

**Morning-Evening** (corrects for excessive reddish)

**Black & White Filters:** UV, Y1, Y2, R2, YG

**Polarizing** (cuts out reflections)



#### Gelatin Filter Frames

Available in three sizes (67mm, 82mm, 100mm) all of which accept standard 75mm gelatin filter squares. The filter frames allow the use of two gelatin filters at a time.





### **Quick Focusing Rings**

With the Quick Focusing Ring in place it is possible to focus the lens with the fingers of the left hand at the same time they grasp the camera Grip.

Quick Focusing rings are available in two types: A-type (for use with 105mm, 135mm, 150mm, 200mm lenses) and B-type (for 35mm, 55mm, 75mm, 90mm lenses).



## **●CAMERA CASES**

### **Soft Lens Case**

Because they occupy less space than hard cases, these soft buckskin cases are ideal for protecting lenses when space is limited.



### **Hard Lens Cases**

These quality hard leather cases offer optimum protection for Takumar 6x7 lenses. They are individually designed for each lens.



### **Professional Trunk Case**

A professional compartment type case designed exclusively for the Pentax 6x7. This strong aluminum case will hold one camera body, 3 to 4 lenses and accessories. Bayonet mounts are provided in the case for securing and rapid attachment of lenses.



### **Carrying Case**

A compact case which will hold camera with standard lens and some accessories such as filters, cable releases, and film. Designed to offer adequate protection for the camera, which easily slides in and out of the case.



## SMC 6x7 Close-Up Lenses

SMC 6x7 Close-Up Lenses are extremely convenient attachments for a wide variety of close-up work. They easily mount by screwing into the standard filter threads of the camera lens and do not interfere with automatic diaphragm action and open-aperture metering. S and T types are available for both standard and telephoto lenses in different model numbers for varied ranges and magnifications. The close-up lenses are lightweight and as handy to use as lens filters; they may also be used jointly with most all Pentax filters.



## EXPOSURE METERS

### Spotmeter V/Spotmeter V-FL

Spotmeter V is a precision instrument for exposure measurement which measures an acute angle of just 1°, enabling highly accurate readings of main subjects and areas of the picture of prime interest. In addition, use of a virtually instantaneous response silicon photo diode ensures utmost precision of exposure readouts. The viewfinder features a scale and pointer with readings given in EV numbers, over an EV range of 1 to 19 with ASA 100 film. Model V-FL is similar to Model V, except that exposure information is given in foot lamberts, making it especially valuable for T.V.



and film metering. Model V-FL also calculates illuminance ratios.

### Digital Spotmeter

Large, bright red LED's illuminate in the viewfinder of the handy compact and lightweight digital spotmeter model, thereby offering maximum visibility regardless of prevailing lighting conditions. The digital model also measures an acute 1° angle via an SPD. Correct exposure is immediately displayed in EV numbers (rounded off to the nearest 1/3 EV). The entire EV range is 1 to 20 with ASA 100 film; weight (245g).



Digital Spotmeter