

# PENTAX

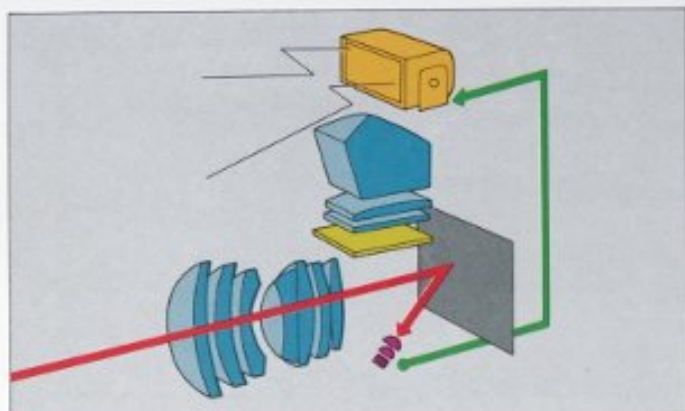
ELECTRONIC FLASH SYSTEM



# AF400T



**FLASH UNITS AND ACCESSORIES:  
A COMPLETE SYSTEM  
FROM PROFESSIONAL POWER  
TO COMPACT CONVENIENCE.**



The AF400T is one of the most sophisticated flash units on the market. With the Pentax Super A, 645 or LX, the AF400T provides TTL Auto Flash operation. TTL Auto Flash is an advanced system in which a metering cell built into the camera body measures the amount of ambient and electronic flash light reaching the film plane. When the proper light dosage has been achieved, the cell instantly and automatically terminates flash discharge. The TTL system eliminates bothersome calculations for bounce flash, hand-held flash, multiple flash and close-up work. It also gives you the freedom to shoot at any aperture within the electronic flash range. The TTL system achieves superior results in general flash photography and helps you create special flash effects with automatic ease.

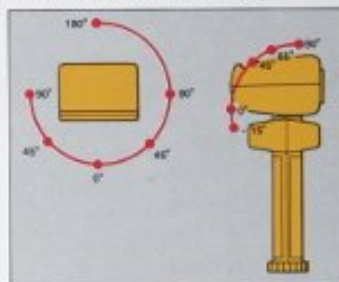
The AF400T features a rotating flash head which helps you produce more varied and pleasing effects by using bounce and indirect flash lighting. Rotation is 270° horizontal and 90° vertical, with a -15° setting for close-up work. No matter which angle



- 1 manual light intensity selector
- 2 viewfinder auto check switch
- 3 external power socket
- 4 power switch
- 5 distance scale
- 6 ASA/ISO film speed scale/indices
- 7 aperture scale
- 8 auto exposure check lamp
- 9 test button/flash ready lamp
- 10 flash mode selector lever



you choose, there's no need for extra calculations if you use the TTL Auto Flash system. In addition to TTL Auto Flash, the AF400T provides conventional auto flash with three output levels and dedicated flash operation with recent Pentax cameras. Dedicated flash features include automatic setting to the flash sync speed, viewfinder display of flash readiness and viewfinder indication of successful flash exposures. In the manual mode, the AF400T offers four output levels. A professional-type unit, the AF400T has a highly versatile flash accessory system, including three DC power source options, an AC adaptor, brackets for attachment to the Pentax camera of your choice and sequential synchronized operation with motor drive and auto winder units.



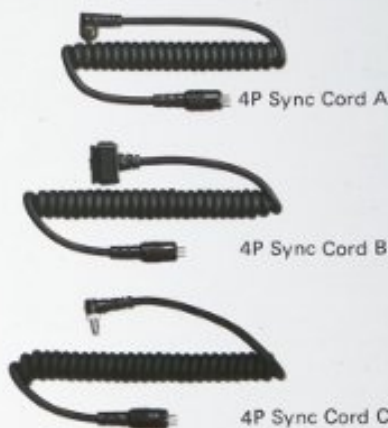
Power Pack 510V



TR Power Pack



AC Adaptor II

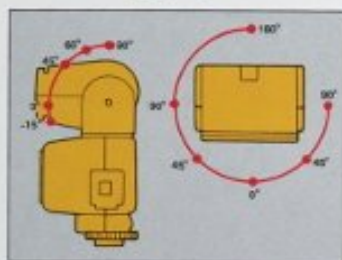


4P Sync Cord A

4P Sync Cord B

4P Sync Cord C

# AF280T



- 1 ASA/ISO film speed scale
- 2 L distance scale
- 3 auto flash range indices
- 4 test button
- 5 distance scale
- 6 flash mode selector lever
- 7 auto exposure check lamp
- 8 viewfinder auto check switch
- 9 aperture scale
- 10 flash ready lamp
- 11 power switch

# AF200T



This compact and versatile unit offers TTL Auto Flash operation with the Pentax Super A, 645 and LX. It also provides two-level auto flash and dedicated operation with recent Pentax cameras. Dedicated functions include automatic setting to the flash sync speed, viewfinder display of flash readiness and audible confirmation of successful flash exposures. Four-level manual flash operation is also possible with the AF200T.

- 1 aperture scale
- 2 ASA/ISO film speed scale
- 3 flash mode selector lever
- 4 test button/flash ready lamp
- 5 power switch/auto exposure check sound switch
- 6 manual light intensity selector
- 7 distance scale
- 8 auto flash range indices



*TTL Auto Flash is the automatic way to take striking flash photos with a perfect balance of electronic flash and ambient light.*



The AF280T slides right into the hotshoe of your camera and provides an exciting range of advanced features. It offers all the advantages of TTL Auto Flash when used with the Pentax Super A, 645 and LX. It also offers two-level auto flash operation and two-level manual control. With recent Pentax cameras, the AF280T offers such dedicated functions as automatic setting to the flash sync speed, plus flash readiness and successful flash exposure displays in the viewfinder. The AF280T has a rotating flash head which turns 270° horizontally, 90° vertically and has a -15° setting for close-up work. The rotating head lets you create varied effects with indirect or bounce lighting, and there is no need to make extra calculations if you use the TTL Auto Flash system.



## Flash Adaptors: Wide Angle and Telephoto

The discharge angle of Pentax flash units is calculated to cover most normal shooting situations. However, there may be occasions when you want to extend flash range or angle by using a telephoto or wide-angle adaptor. The telephoto adaptor concentrates flash for use with lenses in the 85-200mm range. The wide-angle adaptor spreads coverage for lenses down to 24mm.

# AF200S



The AF200S is a very compact unit which slips into the hot-shoe of your Pentax camera. It offers high and low flash output in both its automatic and manual modes. With recent Pentax cameras, it offers all the benefits of dedicated flash operation.

- 1 ASA/ISO window
- 2 test button
- 3 flash ready lamp
- 4 power switch
- 5 auto/manual selector
- 6 auto flash range indices
- 7 distance scale
- 8 aperture scale

# AF160



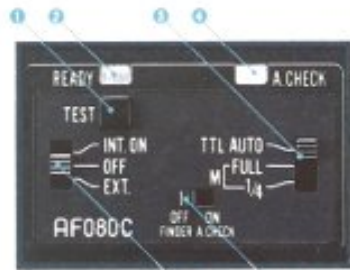
This pocket-size unit slips into the hotshoe of your Pentax camera. It provides high and low flash output in both its auto and manual modes. With recent Pentax cameras, it offers dedicated functions including flash readiness display in the

- 1 auto flash range indices
  - 2 power switch
  - 3 flash ready lamp/test button
  - 4 ASA/ISO film speed scale
  - 5 aperture scale
  - 6 distance scale
- viewfinder and automatic setting to the flash sync speed.

# AF080C RING LIGHT SET



- 1 test button
- 2 flash ready lamp
- 3 mode selector
- 4 auto check lamp
- 5 power switch
- 6 viewfinder auto check switch



The AF080C Ring Light is a sophisticated electronic flash unit specifically designed to facilitate close-up and macro-flash work. The flash unit features a 360° circular flash head that fits over the front of your lens. It provides direct, shadowless light that maximizes subject detail. When used with the Super A or LX, the Ring Light offers TTL Auto Flash operation. That means you can take perfectly illuminated macro-flash photos without any extra calculations, knowing that light will be automatically controlled at the film plane. With other recent Pentax cameras, the AF080C offers dedicated manual operation—automatic setting to the flash sync speed and viewfinder flash ready indication.



Specifications

● AF400T

Type: Grip-mount type; TTL Auto, Built-in sensor Auto, four-level dedicated Manual and Manual modes.  
 Guide Numbers: 40 at full output, 20 at 1/4 output, 10 at 1/16 output, 8 at 1/25 output (in meters at ASA/ISO 100).  
 Auto Flash Range: 0.45 – 3.6m at Yellow, 0.65 – 5m at Green, 1.25 – 10m at Red setting (at ASA/ISO 100, f/22 – f/1.2).  
 TTL Auto Range: 0.25 – 33m (at ASA/ISO 100, f/22 – f/1.2).  
 Auto Sensor Reception Angle: 20°

Power Source:	Grip Battery Pack (Six AA-Size batteries)		TR Power Pack		Power Pack 510V	AC Adaptor II
Power Supply:	Alkaline	NiCad	Alkaline	NiCad	510V Laminated	AC current
Number of Flashes:	70	45	210	150	300	indefinite
Recycling Times:	11 sec.	9 sec.	7 sec.	6 sec.	2 sec.	–

Color Temperature: Equivalent to daylight.  
 Flash Duration: 1/30000 – 1/1500 sec.  
 Size & Weight: 86(W) x 260(H) x 92mm(D), 770g without batteries.

● AF280T

Type: Clip-on type; TTL Auto, Built-in sensor Auto, Two-level dedicated Manual and Manual flash modes.  
 Guide Numbers: 28 at full output. 8 at low output. (in meters at ASA/ISO 100)  
 Auto Flash Ranges: 1 – 7 meters at red setting, 0.5 – 3.5 meters at green setting.  
 TTL Auto Range: 0.25 – 20 meters (at ASA/ISO 100, f/1.4 lens)  
 Auto Sensor Reception Angle: 20°

Power Source:	Four AA-size batteries	
Power Supply:	Alkaline	NiCad
Number of Flashes:	100	80
Recycling Times:	8 sec.	6 sec.

Color Temperature: Equivalent to daylight  
 Flash Duration: 1/30000 – 1/1500 sec.  
 Size & Weight: 80(W) x 116(H) x 68mm(D), 300g (without batteries)

● AF200T

Type: Clip-on type; TTL Auto, Built-in sensor Auto, four-level dedicated Manual flash modes.  
 Guide Number: 20 in meters at ASA/ISO 100  
 Auto Flash Ranges: 0.6 – 3.5m at Green, 1.4 – 7m at Red setting  
 TTL Auto Ranges: 0.6 – 16.7m (f/22 – f/1.2)  
 Auto Sensor Reception Angle: 20°

Power Source:	Four AA-size batteries	
Power Supply:	Alkaline	NiCad
Number of Flashes:	200	90
Recycling Times:	8 sec.	4 sec.

Color Temperature: Equivalent to daylight  
 Flash Duration: 1/1500 – 1/30000 sec.  
 Size & Weight: 62(W) x 97(H) x 58mm(D), 175g (without batteries)

● AF200S

Type: Clip-on, Built-in sensor Auto and Manual modes.  
 Guide Number: 20 in meters at ASA/ISO 100.  
 Auto Flash Ranges: 0.6 – 3.5m at Green, 1.4 – 7.1m at Red setting.  
 Auto Sensor Reception Angle: 18°

Power Source:	Four AA-size batteries	
Power Supply:	Alkaline	Manganese
Number of Flashes:	250	60
Recycling Times:	6 sec.	8 sec.

Color Temperature: Equivalent to daylight.  
 Flash Duration: 1/30000 – 1/1500 sec.  
 Size & Weight: 67(W) x 105(H) x 60mm(D), 285g (without batteries)

● AF160

Type: Clip-on, Built-in sensor Auto and Manual modes.  
 Guide Number: 16 in meters at ASA/ISO 100.  
 Auto Flash Range: 0.5 – 4m at Green, 1 – 6m at Red setting with both ASA/ISO 100 and 400.  
 Auto Sensor Reception Angle: 18°

Power Source:	Two AA-size batteries	
Power Supply:	Alkaline	Manganese
Number of Flashes:	200	40
Recycling Times:	8 sec.	10 sec.

Color Temperature: Equivalent to daylight.  
 Flash Duration: 1/30000 – 1/1500 sec.  
 Size & Weight: 66(W) x 81(H) x 41mm(D), 102g (without batteries)

● AF080C

Type: Electronic Flash; TTL Auto and two-level dedicated Manual modes.  
 Mounting: Ring light screws to standard 49mm lens threads (52mm threads with adaptor). Control Back mounts to camera hotshoe.  
 Guide Numbers: 8 at full output, 4 at 1/4 output.  
 Usable lenses: SMC Macro 50mm f/4, Macro 100mm f/4, Bellows 100mm f/4 (also wide angle lenses shorter than 40mm focal length with reversed).

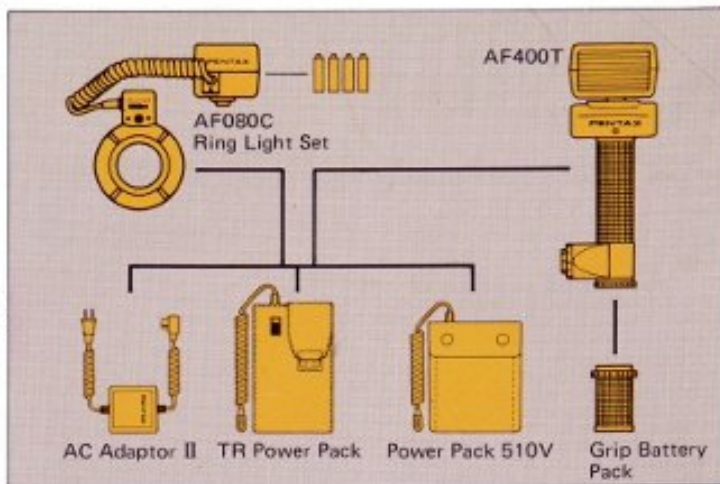
Power Source:	Four AA-size batteries		TR Power Pack		510V Pack	AC Adaptor II
Power Supply:	Alkaline	Manganese	Alkaline	NiCad	510V Laminated	AC Current
Number of Flashes:	200	50	600	90	800	indefinite
Recycling Times:	8 sec.	12 sec.	3 sec.	5 sec.	1 sec.	–

Color Temperature: Equivalent to daylight.  
 Flash Duration: 1/15000 – 1/1000 sec.  
 Size & Weight: Control Pack: 70(W) x 70(H) x 82mm(D), 235g (without batteries)  
 Ring Flash: 93(W) x 122(H) x 22mm(D), 135g

Note: Subject to change without notice. Data based on new batteries.

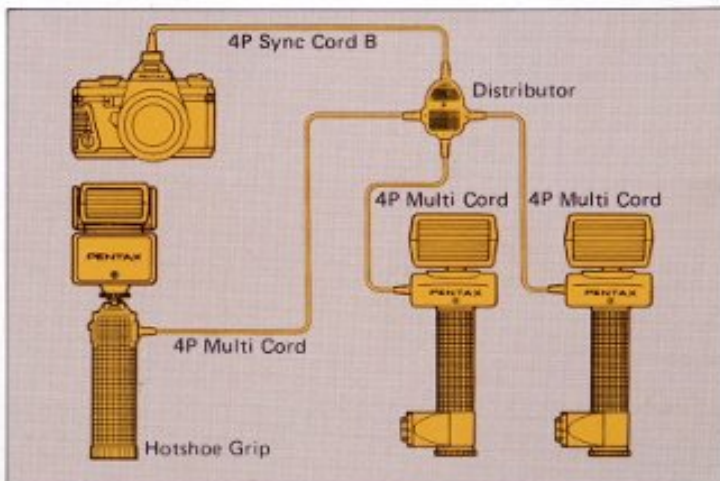
### Power Source System

To give you maximum freedom in using the AF400T and the Ring Light AF080C, Pentax provides a choice of four power sources. There are two belt-mounting power packs, one of which offers a full 510V. There is also a very compact battery grip for the AF400T, and an AC Adaptor that lets you plug into normal household current.

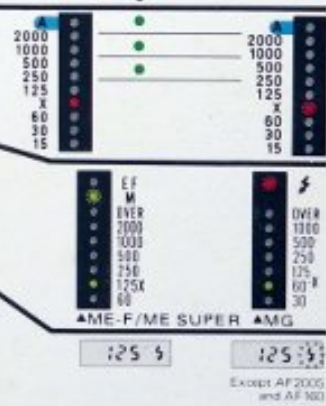


### Multiple Flash System

To create precisely the lighting you want, use up to three flash units simultaneously. A hotshoe grip lets you use clip-on flash units (such as the AF280T) even when they are separated from the camera body. A multi-flash distributor lets you combine up to three units. And if your camera has TTL Auto flash system, there is no need for extra calculations even when you're using extra units.



Camera	Flash Unit	TTL Auto Flash	Auto Flash	Manual	Automatic Shutter Sync	Automatic Flash Prevention at High Shutter Speeds	Auto Exposure Check by PVC	Viewfinder Flash Ready	Viewfinder Flash Confirmation
LX	AF400T	●	●	●	●	●	●	●	●
	AF280T	●	●	●	●	●	●	●	●
	AF080C	●	●	●	●	●	●	●	●
	AF200T	●	●	●	●	●	●	●	●
	AF200S/AF160	●	●	●	●	●	●	●	●
ME-F/ME SUPER/MG	AF400T	●	●	●	●	●	●	●	●
	AF280T	●	●	●	●	●	●	●	●
	AF080C	●	●	●	●	●	●	●	●
	AF200T	●	●	●	●	●	●	●	●
	AF200S/AF160	●	●	●	●	●	●	●	●
Super A/645	AF400T	●	●	●	●	●	●	●	●
	AF280T	●	●	●	●	●	●	●	●
	AF080C	●	●	●	●	●	●	●	●
	AF200T	●	●	●	●	●	●	●	●
	AF200S/AF160	●	●	●	●	●	●	●	●
MX/K1000	AF400T	●	●	●	●	●	●	●	●
	AF280T	●	●	●	●	●	●	●	●
	AF080C	●	●	●	●	●	●	●	●
	AF200T	●	●	●	●	●	●	●	●
	AF200S/AF160	●	●	●	●	●	●	●	●
Program A	AF400T	●	●	●	●	●	●	●	●
	AF280T	●	●	●	●	●	●	●	●
	AF080C	●	●	●	●	●	●	●	●
	AF200T	●	●	●	●	●	●	●	●
	AF200S/AF160	●	●	●	●	●	●	●	●



Remarks: Automatic aperture setting possible with AF400T, AF280T, AF080C, and AF200T.

Except AF200S and AF160

# PENTAX®

Asahi Optical Co., Ltd. C.P.O. 895, Tokyo 100-91, JAPAN  
 Pentax Europe n.v. Weveltoelaan 3-5, 1930 Zaventem Zuid-7, BELGIUM  
 Pentax Handelsgesellschaft mbH, 2000 Hamburg 54, Julius-Vosseler-Straße 104, Postfach 540169, W. GERMANY  
 Pentax U.K. Limited Pentax House, South Hill Avenue, South Harrow, Middlesex HA2 0LT, U.K.  
 Pentax France S.A., Z.I. Argenteuil, 12 rue Ambroise Croizat, 95100 Argenteuil, FRANCE  
 Pentax (Schweiz) AG Industriestrasse 2, 8305 Dietlikon ZH, SWITZERLAND  
 Pentax Svenska AB Box 650, 75127 Uppsala, SWEDEN  
 Pentax Nederland Sprinveid 25, 4815 HR Breda, THE NETHERLANDS  
 Pentax Norge A/S Stenersgt. 18, Oslo 1, NORWAY  
 Pentax Corporation 35 Inverness Drive East, Englewood, Colorado 80112, U.S.A.  
 Pentax Canada Inc. 1760 West 3rd Avenue, Vancouver, B.C. V6J 1K5, CANADA  
 Asahi Optical Brasileira Ind. e Com. Ltda. Rua Capitão Antonio Rosa, 376 - Sala 121 Ed. PBK São Paulo-SP, BRAZIL