

PENTAX flash

# AF-160 FC

Code no. 30477

Barcode 0027075144705



- > Shadow-free lighting of a subject
- > Ideal for demanding product shots and portrait photography
- > P-TTL, A-TTL compatible
- > GN 16 (ISO 100)
- > Flash correction: +0.5 / -0.5 / -1.0
- > 49, 52, and 58 mm adapter rings included
- > Modelling light
- > Adjustable lightning tubes in pairs

Ring lighting is irreplaceable in many photographic situations. 4 lighting tubes grouped directly around the lens ensure even light without throwing a shadow. The left or right pair of lightning tubes can be switched on independently as required. The pair on the opposite side remains off or can be set to flash at half power when desired. A modelling light simplifies image composition. The most common application of ring lightning is macro photography. Other uses are portraiture and for documentation of dental and medical procedures. The AF-160 FC is compatible with all cameras in the PENTAX system.

Standard Accessories	
Case for Ring flash and accessories	Code no. 30479
Macro lens adapter	Code no. 30481
Adapter ring	Code no. 30480
49mm Adapter ring	Code no. 30484
52mm Adapter ring	Code no. 30483
58mm Adapter ring	Code no. 30482

Type	Electronic flash
GN	16 at 50mm (at ISO 100)
Power range	Flash correction -1.0 to +0.5 EV In 0.5EV steps
Flash function	P-TTL A-TTL Manual (3 steps 1/4 - 1/16)
Flash range	0.18 - 2m at f/8, ISO 100
Power source	4x AA batteries (Alkali, Lithium, Ni-MH or rechargeable)
Flash angle	60°
Compatibility	Digital, 35mm, 645, 67
Dimensions	Controller: 68x83x115mm (WxHxD) Flash unit: 113x29.5mm (DiamxD)
Weight	405g (without batteries)

As of 23.09.08/photokina All data reserved without guarantee.

# PENTAX

## **TTL Auto flash (A-TTL)**

The flash is controlled by the amount of light reflected off the film surface during flash exposure, automatically controlling the flash output to assure correct exposure. This mode of operation functions with all PENTAX autofocus cameras (excluded MZ-S and digital SLR), the 645-Serie and 67II.

## **PTTL Auto flash (P-TTL)**

Prior to the main flash a pre-flash is fired so that the multi-field exposure system can determine the distance to the subject, the relative brightness, back light conditions and other relevant factors. The measured data are used to determine the strength of the flash output for each exposure. This mode of operation offers more precise results than the conventional A-TTL control, preventing imprecise measurements that can lead to poor exposure. This mode of operation functions with the MZ-S, as well as the PENTAX digital cameras.

## **Auto flash (A)**

The flash has a built-in sensor that adjusts the flash output automatically. This mode of operation is used with cameras that do not have a TTL control.

## **Manual flash (M)**

The Guide Number and subject distance determine the correct aperture of the lens that must be set manually.  $\text{Distance} = \text{GN} : \text{aperture}$ . This mode of operation is available with all cameras.

## **AF Spot Beam (SB)**

When using an autofocus camera in weak or low-contrast lighting conditions a red AF light beam is flashed to make optimal focusing possible. The flash is not fired in this function.

## **High-Speed-Synchronisation**

With the appropriate camera a faster shutter speed can be used. This function is very effective for fill-flash in daylight. The GN is reduced for high-speed sync.

## **Modelling Flash**

A rapid series of lower output flashes are fired to allow the photographer to see the shadows surrounding the subject.

## **Zoom - Swivel Reflector/Catchlight panel**

The best light does not always come from the front. Sometimes the situation calls for the light to be reflected from a near-by surface such as a white wall or ceiling. A bounce head flash is invaluable for this purpose, especially one that can both tilt horizontally and rotate vertically. Because the reflective surface used may not be perfect a quantity of light is lost. In order to balance the Catchlight Panel, which sits directly over the reflector, can be used to guide a smaller amount of light directly at the subject.

The motor-zoom reflector in the flash head always provides the angle of coverage. The flash recognizes the focal length of the lens being used and automatically adjusts the position of the reflector, whether you're using a wide angle or telephoto lens. The information displayed on the control panel indicates focal length of the lens. The AF-360 FGZ indicates for both 35mm and medium format focal and the AF-540 FGZ additionally indicates the focal length for the digital SLR format.

## **Second shutter curtain synchronisation**

There are times when a "streaking effect" of the subject is desired. An example would be to use a slow shutter speed to show the motion and speed of a car. To be effective this streaking should be behind the car. With a standard flash, however, the streaking would appear in front. Why? Normally, the flash is triggered by the opening of the first shutter curtain. The flash will sharply illuminate the car and then car will continue to move forward while the shutter remains open, causing the image to streak. Using second curtain sync, the first shutter will open, the car will move past leaving a streaked image and then the flash will fire as the second shutter curtain begins to close causing the "streak" to be behind the car where it is expected to be.

## **Guide Number**

The higher the Guide Number the greater the luminosity and/or range of lightning.

## **Wireless Flash Control**

There are many application that may require multiple flashes. This can be done when the camera's built-in flash is picked up by a photocell in the remote flashes, causing the remote flashes to fire in unison. This is ideal for lighting large areas or for effect light. This process is greatly simplified through P-TTL control. With this system, not only does the built-in flash trigger the remote flash(es), but transfers relevant exposure data as well. The maximum distance for this type of set up would be 4 meters. The control flash may be the built-in flash or a FGZ series mounted on the camera.