

Instruction Manual for TUMAX® DPT586AFZ Digital Power Zoom Flash

With Wireless TTL and High Speed Synchronization function

Thank you for purchasing TUMAX products

This digital flash is equipped with many advanced features, such as TTL, Wireless TTL, High Speed Synchronization, Manual Mode with Adjustable Power Output., etc. To get the most out of this flash, please kindly read this instruction manual thoroughly before use.

Digital TTL / Auto Focus flash for:

C - Canon Digital E-TTL, E-TTL II cameras & E-TTL film cameras

N - Nikon Digital TTL, i-TTL cameras & TTL, i-TTL film cameras

OP - Olympus & Panasonic Digital TTL cameras

P - Pentax P-TTL Digital & film cameras

SA - Sony Alpha & Minolta Digital ADI, D Lenses cameras & TTL film cameras

FEATURES

- 2" LCD Panel
- Auto and manual zoom from 24-28-35-50-70-85-105mm
- TTL metering
- Wireless TTL function
- 6 level of power ratio 1/1, 1/2, 1/4, 1/8, 1/16 and 1/32
- High speed synchronization
- Automatic shutter speed setting
- Red focus assist beam for low light focusing
- Flash readiness indication in viewfinder
- Front and rear curtain synchronization
- Red eye reduction (for Type N, OP & P)
- Built-in slave function
- Built-in reflecting plate and diffuser
- Power saving function

SPECIFICATIONS

Guide Number (ISO 100)	50(m)/164(ft) at 105mm position
Motor zooming reflector	24 - 28 - 35 - 50 - 70 - 85 - 105 mm
Bounce Position	0°, 45°, 60°, 75°, 90°
Swivel Position	Right 0° - 120°; Left 0° - 180°
Power Source	4x 1.5V AA size alkaline batteries
Flash Duration	1/1,000 - 1/20,000 second
Recycling Time	0.5 - 9 seconds
Manual Mode Power Output	1/1, 1/2, 1/4, 1/8, 1/16, 1/32
Slave Mode	Instant Sync to skipping up to 9 flashes (S0-S9)
Dimensions	Approx. 65 x 100 x 120 mm
Net Weight	Approx. 250 grams (w/o batteries)

* Specifications are subject to change without further notice.

LOADING BATTERIES

- Make sure the main switch at "OFF" position
- Slide the battery compartment cover forward and swing open
- Insert batteries according to the indicated "+/-" symbols
- Close the compartment cover and slide it back to lock in place
- Ensure all batteries must be of same make and have the same charge level, alkaline batteries are preferable

This flash unit may halt and could not function when the battery power is not sufficient. Please switch off the flash unit by its main switch when it is not working correctly. Wait for a few seconds and replace the battery if necessary before switching it on again. The flash unit should work again as normal afterward.

MOUNTING THE FLASHGUN ON THE CAMERA

For Type C, N, OP, P flash: Insert the mounting foot of the flashgun into camera accessory shoe and press "LOCK" to lock the flashgun in place.

For Type SA flash: Make sure the PUSH button is in "NORMAL" state. Insert the mounting foot into the camera's hot shoe. The safety catch can be heard to snap into place onto the hot shoe.

REMOVING THE FLASHGUN FROM THE CAMERA

For Type C, N, OP, P flash: Press both sides of the Lock / Release button towards the directions as indicated then pull the flashgun off backward.

For Type SA flash: Press the "PUSH" button toward the flash unit and at the same time hold it lightly down to set it to "PRESS-IN" state. Then slide it backward, away from the camera. After releasing it from the camera, press the "PUSH" button upward to release it to "NORMAL" state.

ON/OFF SWITCH AND FLASH TEST OPERATION

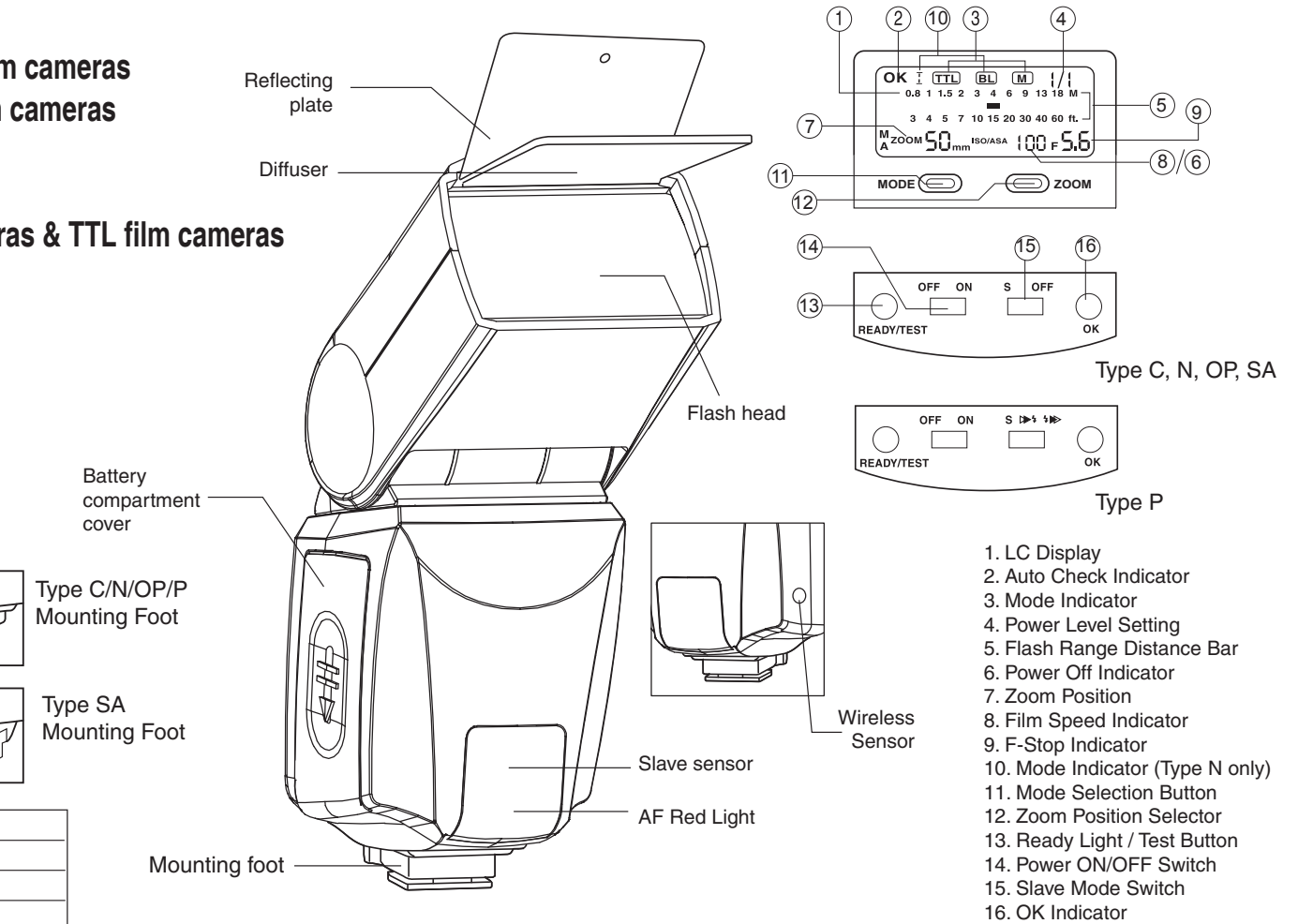
To switch on the flashgun, slide the main switch to "ON" position. The "READY" indicator lights up as soon as the flash is ready for shooting. Press the Test button to ensure the flashgun works properly. If the flashgun discharges completely, wait until the "READY" indicator glows again.

To switch off, slide the main switch to "OFF" position.

TAKING PICTURE, AF / TTL OPERATION

• Automatic flash sync speed control

When the flashgun is ready, the camera will automatically switch it to flash sync speed from program mode or aperture-priority mode selected. The sync speed depends on the camera model and usually ranges between 1/30sec to 1/250sec. When a flash shot has been taken, "OK" symbol flashes shortly on the LCD to confirm correct exposure.



• Auto-focus "AF" measuring flash

The integrated "AF" red light beam of the flashgun supports the automatic focusing of auto-focus TTL cameras. When the prevailing light is insufficient for automatic focusing, the flashgun will project a red light beam onto the subject as soon as the camera's shutter is lightly touched. The camera's auto-focus system then focuses the subject by this spot of red light beam.

• TTL flash control

When you switch on the flashgun, it will set at TTL mode firstly and the "TTL" indicator lights up on the LCD. When the Ready indicator lights up, press the shutter release fully to take the picture. The advanced programming and computerized circuitry of the flashgun fires the correct amount of flash light according to the camera's through-the-lens (TTL) metering data.

For Type N flash: The LC Display will show TTL, I-TTL and BL in different way while connected to different camera models. Please refer to your camera's manual for details.

• Manual flash mode

Manual flash mode is provided in this flashgun, so that you can control the light output on your own. 6 power settings, 1/1, 1/2, 1/4, 1/8, 1/16 and 1/32, are available under this mode. To use the manual mode, please follow the instruction below:

(1) Make sure that the slave mode switch at the back of the flash is set to OFF position (Not in slave mode; See section "Slave Function" for details).

(2) Press the MODE selector button, This switches the flash to manual mode. The "M" indicator shows up on the LCD. By tapping the MODE selector button continuously, you can adjust the output power of the flash in the following sequence: 1/1 --> 1/2 --> 1/4 --> 1/8 --> 1/16 --> 1/32

The LCD automatically shows a flash-to-subject distance required for a correct exposure for manual photography.

SLAVE FUNCTION

This flashgun has optical slave sensor built-in so can be used as a slave unit. It has 10 slave settings to suit your need. These settings work in the following way:

S0 - the flash fires at once when triggered by an external flash source

S1 - the flash skips 1 flash and fires when it detects the 2nd flash.

S2 - the flash skips 2 flashes and fires when it detects the 3rd flash.

S3 - the flash skips 3 flashes and fires when it detects the 4th flash.

S4 - the flash skips 4 flashes and fires when it detects the 5th flash.

S5 - the flash skips 5 flashes and fires when it detects the 6th flash.

S6 - the flash skips 6 flashes and fires when it detects the 7th flash.

S7 - the flash skips 7 flashes and fires when it detects the 8th flash.

S8 - the flash skips 8 flashes and fires when it detects the 9th flash.

S9 - the flash skips 9 flashes and fires when it detects the 10th flash.

The amount of light output at slave mode can be controlled by selecting the power ratio. The instructions below guides you thru how to use the slave function of this flash:

(1) You have to choose the output power of the flash first before you switch the flash to slave mode. To do this,

(a) First set the slave mode switch at the back of the flash to OFF position.

(b) Tap the MODE switch continuously until you have reached the power ratio setting you want for slave mode.

(2) Slide the slave mode switch at the back of the flash to S position. The flash now changes to a slave unit.

(3) By tapping the MODE selector button continuously, you can adjust the slave setting of the flash in the following sequence: S0 --> S1 --> S2 --> S3 --> S4 --> S5 --> S6 --> S7 --> S8 --> S9 --> S0

If multiple flashes are used as slave unit, you must adjust the light output from each flash in order to get the correct exposure for your photos.

When the slave mode is on, the power saving mode will not function.

ADVANCED FUNCTIONS

HIGH SPEED SYNC

This flash can be set for camera with higher shutter speeds up to 1/8000 second. This is convenient when you want to use aperture priority for fill-flash portraits. The operation of this function is different on different camera brands.

For Type N Flash

The High-Speed Sync mode is automatically set when the shutter speed exceeds the camera's sync shutter speed. No special operation on the flash is required.

For Type C | OP | P | SA Flash

Press the Mode and Zoom button firmly together. A "H" and "On" symbol will blink on the LCD for 3 times. The flash now is switched to High Speed Sync mode.

To cancel the High Speed Sync function, press again the Mode and Zoom button together. A "H" and "OFF" symbol will blink on the LCD for 3 times. The High Speed Sync function is canceled.

DIGITAL WIRELESS TTL FLASH

This flash is equipped with advanced wireless TTL flash function. It can synchronize with a master flash's TTL, so you can enjoy creative flash photography with multiple lightings from various directions without having to worry about the pre-flashes from the camera.

Before going thru the operation, you should be familiar firstly with the following nomenclature used in wireless multiple flash photography:

Master flash

The camera's built-in flash, a flash unit mounted on the camera, or the one directly connected to the camera via a extension cord is called the Master Flash. Only one master flash is allowed in a wireless multiple flash photography setting. It controls how the Remote Flashes are operated in Wireless TTL mode.

Remote flash

The flash unit placed off the camera is called "Remote Flash" (Canon calls it "Slave"). There is no limitation on the numbers of remote flash to set in one time.

Groups

In wireless photography, you can assign remote flash units into any one of the three groups (A, B, or C) and set the mode and output level compensation values for each remote flash unit.

Channels

The master and remote flash units exchange data through channels. In this flash, Four channels, 1, 2, 3, 4, are available. You pick the channel you prefer for communication between the master and remote flash units.

If another photographer uses the same type of wireless photography setup nearby, your remote flash units may accidentally fire in sync with that photographer's master flash unit. Therefore, you should choose the channel carefully in order to avoid such situation.

How to use

This flash can be used as a remote flash in wireless multiple flash photography. To do this, please follow the instructions below:

(1) Make sure that the slave mode switch at the back of the flash is set to OFF position
(2) The mode of the flash changes in the following sequence when you tap the MODE button: TTL--> M(1/1, 1/2, 1/4, 1/8, 1/16, 1/32) --> STTL (1A, 1B, 1C, 2A, 2B, 2C, 3A, 3B, 3C, 4A, 4B, 4C) then back to TTL

Tap the button until the STTL icon shows up on the LCD. Continue to tap until you find the desired channel (1, 2, 3, or 4) and group (A, B, or C) for your flash.

You will see a light blinking continuously from the front red lens when the flash is set to wireless TTL mode.

If you are using multiple flashes in your wireless photography setting, you should avoid setting more than 3 flash units in one group in order to avoid interference between flashes.

(3) Set your preferred flash coverage angle by tapping the ZOOM button.

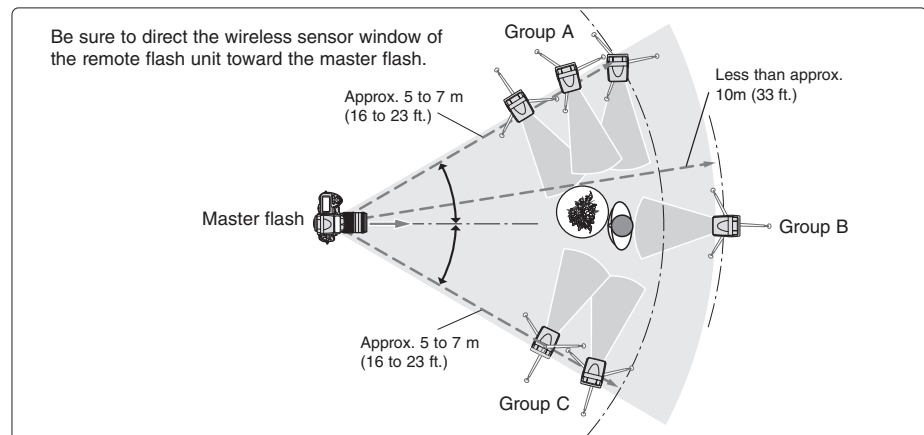
(4) Place your flash unit in consideration to the followings:

a. The flash should not shoot its light directly into the camera lens.

b. The wireless sensor is at the side of this flash. Make sure that it is facing the Master flash and the path is not blocked.

c. In the daylight synchronization, the wireless sensor may possibly be saturated by sunlight and its sensitivity be extremely reduced. It is recommended that you make a shade to cover the sensor in this situation.

Flash setup in wireless photography



Attach a flash to your camera or use the camera's built-in flash as the Master flash. Set up the Remote flash/flashes at any desirable place within the effective shooting range.

The effective shooting distance between the master and remote flash units is approx. 10m (33 ft.) or less in the front position, and approx. 5 to 7m (16 to 23 ft.) at both sides. These ranges may vary depending on the ambient light.

Make sure the channel and the group setting in each remote flash is set correctly. Remote flashes of the same group should be placed together.

ILLUMINATION OF LC DISPLAY

LC display is used to show the general information of camera and the current status of flashgun. It will light up when any of the buttons is pressed. The LCD will be illuminated for about 5 seconds.

POWER ZOOMING

Automatic motor zoom control

If you use a zoom lens, it could transmit focal length information to the camera. The camera will pass this information to the flashgun. The flashgun then automatically adjusts its zoom position to comply with the focal length of the lens.

Automatic motor zoom control is only possible with cameras that allow digital data transmission to the flashgun.

The LCD on the flashgun can indicate a zooming position of 24-28-35-50-70-85-105mm.

When the flashgun is first switched on, the zoom position is set to 35mm. As soon as the camera's shutter is lightly touched, the focal length of the flashgun is automatically synchronized to the focal length of the lens.

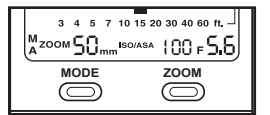
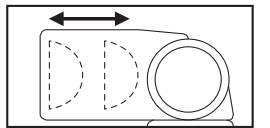
If the flash head is at bounce or swivel position, the zooming position of the flash will be adjusted to 50mm and this is indicated on the LCD.

Manual motor-zoom control

The "Zoom" key allows you to change the zoom reflector's position independently of the focal length of the lens.

By slightly tapping the "ZOOM" key you can select the zoom position in the following sequence:

Auto Zoom → M24 → M28 → M35 → M50 → M70 → M85 → M105 → Auto Zoom



BOUNCED AND SWIVELED FLASH

Using direct flash to illuminate a subject will result in harsh, unnatural and unattractive shadows. This can be avoided by bounce and/or swivel flash. The flash head can be tilted to an angle of 45°, 60°, 75°, or 90° and rotated horizontally 180° to the left and 120° to the right. You can tilt or rotate the flash head to bounce the light off the ceiling or walls.

While shooting indoor, this technique can help to create more natural-looking pictures of people with softer shadows. When using bounce or swivel flash, the zooming position will be locked in 50mm, except in Manual mode.

In order to have your pictures correctly exposed using bounce or swivel flash, the following is recommended to users:

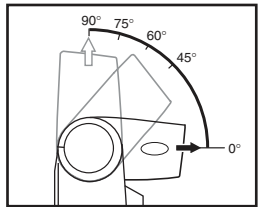
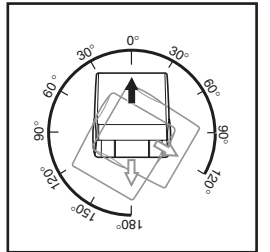
(1) Select white or reflective surfaces to bounce the light off. Otherwise your pictures will come with an unnatural color cast similar to that of the reflecting surface.

(2) Set the camera's exposure mode to Aperture Priority Auto ("A") or Manual ("M")

(3) Use a wider aperture than normally do, as 2 or 3 stops of light can be lost when using bounce or swivel flash

Reflecting plate and diffuser

The flashgun has built-in reflecting plate and diffuser. You can slide out the reflecting plate or diffuser from the top of flash head. Bouncing the flash head and using reflecting plate can produce more professional looking pictures. The diffuser can reduce strong light to create soft effects.



FRONT AND REAR-CURTAIN SYNCHRONIZATION

Some cameras offer the option of rear curtain synchronization (Rear mode) triggering the flash unit at the end of the exposure time. Rear curtain synchronization is particularly advantageous when using slow shutter speeds (slower than 1/30 sec.) or when shooting moving objects that have their own source of light. Rear curtain synchronization gives a more realistic impression of movement because the light streaks behind the light source instead of building up in front of it, as is the case when the flash is synchronized with the front shutter curtain. Depending on its operation mode, the camera uses shutter speeds slower than its sync speed.

For Type P flash: You could select the synchronization mode as either front curtain (☞) or rear curtain (☜) at the back of the flash. The flash will fire according to the mode selected to match with the camera shutter.

For Type C, N, OP, SA flash: The camera controls front or rear-curtain synchronization, therefore no setting is required to be done on the flash.

POWER SAVING FUNCTION

If there is no communication between the flash and the camera for around 3 minutes, the flash will automatically be switched to power saving mode in order to save battery power. A "OFF" sign will appear in the LCD. The Ready light will be off in power saving mode.

To reactivate the flashgun, simply press any buttons at the back of the flash or switch off the flash and on again.

The flashgun is not completely switched off in power saving mode. However, power consumption is drastically reduced. If you are not going to use your flashgun for a while, we recommend you to turn the flash off.

SAFETY INSTRUCTION

- Do not fire flashes from a short distance directly into the eyes of persons or animals. This can cause damage to the retina and may even lead to blindness.
- Use only the power sources specified in this manual. Never attempt to use short-circuit batteries.
- Never expose dry or rechargeable batteries to excessive temperature such as intensive sunlight or fire.
- Always switches off the flashgun before changing the batteries.
- Do not attempt to open the flashgun because the electronic circuit contains high voltage. There are no components inside the flashgun, which can be repaired by the user.
- If in case of the flashgun is so badly damaged that internal components are exposed, remove the batteries from the flash. Contact customer service. Never try to repair the flashgun by yourself.

