ELECTRONIC FLASH : Major Specifications

Model	EF-610 DG SUPER	EF-610 DG ST	EM-140 DG
Guide Number	Guide Number : 61/m (200/fit) ISO100/m (with the zoom head at 105mm)	Guide Number : 61/m (200/fit) ISO100/m (with the zoom head at 105mm)	Guide Number 14 ISO 100/m (when the flash is fired at full power)
TTL Exposure System	SIGMA : SA-STTL, NIKON : NA-iTTL, CANON : EO-ETTL II, PENTAX : PA-PTTL, SONY : SO-ADI	SIGMA : SA-STTL, NIKON : NA-iTTL, CANON : EO-ETTL II, PENTAX : PA-PTTL, SONY : SO-ADI	SIGMA : SA-STTL, NIKON : NA-iTTL, CANON : EO-ETTL II, PENTAX : PA-PTTL, SONY : SO-ADI
Compatible cameras	Digital SLR cameras with the above exposure system.	Digital SLR cameras with the above exposure system.	Digital SLR cameras with the above exposure system.
Power Source	Four AA Alkaline or AA NiCd or Ni-MH (Nickel Metal Hydride) batteries	Four AA Alkaline or AA NiCd or Ni-MH (Nickel Metal Hydride) batteries	AA Alkaline Battery or AA NiCd Battery or AA Ni-Mh Battery x 4pcs
Charging time	Approx 7 seconds (when using alkaline batteries) Approx. 5 seconds (when using NiCd, Ni-MH batteries)	Approx 7 seconds (when using alkaline batteries) Approx. 5 seconds (when using NiCd, Ni-MH batteries)	Approx 4 seconds (when using alkaline batteries) Approx. 3 seconds (when using NiCd, Ni-MH batteries)
Number of flashes	Approx.120 flashes (when using alkaline batteries) Approx. 160 flashes (when using Nicd, Ni-MH batteries)	Approx.120 flashes (when using alkaline batteries) Approx. 160 flashes (when using Nicd, Ni-MH batteries)	-
Illumination angle	Automatically set in accordance with the focal length of the lens, in a range from 24mm to 105mm. Also covers the angle of a 17mm lens when used with the built-in Wide Panel.	Automatically set in accordance with the focal length of the lens, in a range from 24mm to 105mm. Also covers the angle of a 17mm lens when used with the built-in Wide Panel.	Vertical / Horizontal 80 degrees
Bounce angle	Up : 0, 60, 75, 90 degrees Right : 0, 60, 75, 90 degrees Left : 0, 60, 75, 90, 120, 150, 180 degrees Down : 0, 7 degrees	Up : 0, 60, 75, 90 degrees Right : 0, 60, 75, 90 degrees Left : 0, 60, 75, 90, 120, 150, 180 degrees Down : 0, 7 degrees	-
Dimensions (W X H X D)	77mm X 139mm X 117mm / 3.0in. X 5.5in.X4.6 in.	77mm X 139mm X 117mm / 3.0in. X 5.5in. X 4.6 in.	76.7mmX136.2mmX82.4mm/3.0x5.4x3.2in.(Controller) 126.6mmX128.8mmX30.5mm/5.0x5.1x1.2in.(Flash Unit)
Weight	330g (11.6oz.) (without batteries)	320g (11.3oz.) (without batteries)	430g (15.2oz.) (without batteries)
Accessories	Case, Flash Stand(FS-11) included	Case, Flash Stand(FS-11) included	MACRO FLASH ADDAPTER (55mm, 58mm) included
Barcode No.	SA-STTL (SIGMA) 00-85126-92739-4 NA-iTTL (NIKON) 00-85126-92736-3 SO-ADI (SONY) 00-85126-92735-6 PA-PTTL (PENTAX) 00-85126-92737-0 EO-ETTL II (CANON) 00-85126-92738-7	SA-STTL (SIGMA) 00-85126-92744-8 NA-iTTL (NIKON) 00-85126-92741-7 SO-ADI (SONY) 00-85126-92740-0 PA-PTTL (PENTAX) 00-85126-92742-4 EO-ETTL II (CANON) 00-85126-92743-1	SA-STTL (SIGMA) 00-85126-92264-1 NA-iTTL (NIKON) 00-85126-92261-0 SO-ADI (SONY) 00-85126-92260-3 PA-PTTL (PENTAX) 00-85126-92262-7 EO-ETTL II (CANON) 00-85126-92263-4

EF-610 DG SUPER Guide Number table

ZOOM	24mm	28mm	35mm	50mm	70mm	85mm	105mm
G.N.	34	35	36	46	52	56	61

EF-610 DG ST Guide Number table

ZOOM	24mm	28mm	35mm	50mm	70mm	85mm	105mm
G.N.	34	35	36	46	52	56	61

EM-140 DG Guide Number table

Power Level	1/1	1/2	1/4	1/8	1/16	1/32	1/64
1tube-2tubes	14	10	7	5	3.5	2.5	1.8

The appearance and specifications are subject to change without notice.

SIGMA

SIGMA CORPORATION

2-4-16 Kurigi Asao-ku Kawasaki-shi,
Kanagawa 215-8530 Japan
Tel.81-44-989-7437
Fax.81-44-989-7448

SIGMA World Network
Website & Contact Address

Dutch :	http://www.sigmabenelux.com foto@sigmabenelux.com
French :	http://www.sigma-photo.fr sigma@sigma-photo.fr
German :	http://www.sigma-foto.de info@sigma-foto.de
Chinese :	http://www.sigma.com.hk info@sigma.com.hk
Japanese :	http://www.sigma-photo.co.jp support@sigma-photo.co.jp
UK :	http://www.sigma-imaging-uk.com sales@sigma-imaging-uk.com
USA :	http://www.sigma-photo.com info@sigmaphoto.com
Singapore :	support@apds.com.sg

⚠ Caution: To ensure the correct and safe use of the product, be sure to read the User's Manual carefully prior to operation.

2010.12

SIGMA

ELECTRONIC
FLASH
CATALOGUE
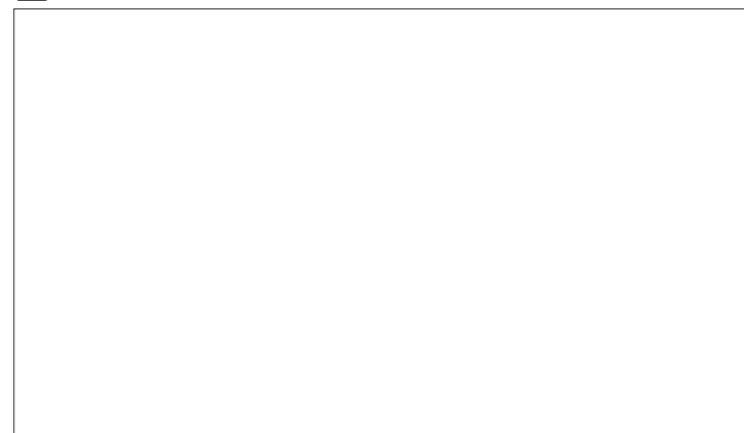
A versatile flashgun with advanced features and a powerful Guide Number of 61

ELECTRONIC FLASH
EF-610 DG SUPER

EF-610 DG SUPER is multifunctional shoe mount type flash, designed to work with digital SLR cameras from most popular manufacturers and features a powerful Guide Number of 61. Among the diverse features of this flash are the Autozoom function, which automatically sets the illumination angle in accordance with the focal length of the lens; TTL exposure control, which automatically regulates the amount of light; bounce and swivel head functions, which come in very handy for bounce photography; Light Catch Panel, which creates a catch light in the eyes of the subject when the bounce flash mode is activated; FP flash, which is capable of synchronizing the flash illumination with high shutter speeds; and Rear-curtain Synchro flash, which makes delayed synchro photography possible. A Wireless Slave function is also available for use with compatible cameras.

Case, Flash Stand(FS-11) included

Automatic Multifunctional macro flash is available

ELECTRONIC FLASH MACRO
EM-140 DG

The ELECTRONIC FLASH MACRO EM-140 DG is designed to work with digital SLR cameras of most popular manufacturers. The EM-140 DG is ideal for photographing subjects in fine detail when the shadowless mode is used and is extremely effective for scientific and medical applications. Dual flash tubes can fire simultaneously or separately. Using only one flash tube creates a shadow which can give a three-dimensional feeling to the subject. The flash features a guide number of14 w/ISO 100.

MACRO FLASH ADDAPTER (55mm, 58mm) included

OPTIONAL ACCESSORIES
MACRO FLASH ADAPTER 52mm : 00-85126-92298-6
MACRO FLASH ADAPTER 55mm : 00-85126-92270-2
MACRO FLASH ADAPTER 58mm : 00-85126-92269-6
MACRO FLASH ADAPTER 62mm : 00-85126-92268-9
MACRO FLASH ADAPTER 67mm : 00-85126-92320-4
MACRO FLASH ADAPTER 72mm : 00-85126-92267-2
MACRO FLASH ADAPTER 77mm : 00-85126-92266-5

Designed to work with new Digital SLR cameras

The ELECTRONIC FLASH MACRO EM-140 DG is fully dedicated with new TTL flash control systems of most popular camera manufacturers. Automatic functions of this flashgun deliver outstanding results and creative possibilities.

Macro Flash Adapter in many different sizes

Both Ø55mm and Ø58mm Macro Flash Adapter rings are provided with this flash unit, Ø52mm, Ø62mm, Ø67mm, Ø72mm and Ø77mm ring adapters can be purchased separately. These Macro Flash Adapter rings make it possible to attach this flashgun to a wide variety of lenses.

Flash tubes can be switched on or off for creative flash control

The two flash tubes can fire together or independently for a wide range of lighting variations. When shadowless mode is used, subjects can be photographed in fine detail, this can be done by firing both flashtubes. Using only one flashtube creates a shadow which can give a three-dimensional feeling to the subject.

Both flash tubes   Single flash tube

Wireless Flash Function

A three-dimensional feel can be created with the addition of the EF-610 DG SUPER ,EF-530 DG SUPER or EF-500 DG SUPER flashgun. This separate flash unit can be located wirelessly above or to the side of the subject to create a more three-dimensional feel.

*Wireless Flash Function is not available with some camera models. For details please refer to the compatibility table.

Equipped with Exposure Compensation Function

Exposure compensation function delivers outstanding creative possibilities to precisely reflect your intention. Lighting of the subject can be delicately adjusted and balanced with the background.

High Speed Synchro (FP) Flash

High Speed Synchro allows you to use a shutter speed faster than the camera shutter's normal synchronization speed.

Modeling Flash Function

The Modeling Flash allows for checking shadows and light balance on the subject prior to shooting.
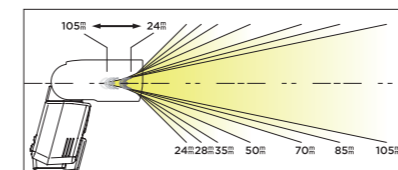
Equipped with New TTL Auto Flash Exposure

The EF-610 DG SUPER is designed to work with the latest TTL auto exposure systems of most popular manufacturers` digital SLR cameras. The camera will control the amount of flash output to achieve the appropriate exposure for the subject.

Autozoom function for changing the illumination angle in accordance with the lens' angle of view.

This function automatically sets the optimum illumination angle in accordance with the lens' focal length in a range from 24mm to 105mm. When the built-in Wide Panel is used, the flash can cover an angle of up to that of a 17mm lens.

*Autozoom function is not available with some camera models. For details please refer to the compatibility table.

Bounce-flash function with movable flash head.

The flash head can be tilted up by as much as 90°, and swivel to the left by 180°, or to the right by 90°. Bounce photography, in which light is reflected off a white wall or the ceiling or a reflector, increases your range of photographic expression. As the flash head can also be tilted down by 7°, the flashgun can also be used for close-up photography.


Catch Light Panel

This flash is equipped with a built-in catch light panel, which can create a sparkle in the eyes of the subject when the bounce flash mode is activated.

TTL Wireless Flash Function

The TTL wireless flash function allows you to obtain the desired lighting effects even if the EF-610 DG SUPER is located away from the camera. It is possible to operate without connecting the flash to the camera. When multiple flash units are used, the camera calculates the correct exposure automatically.

*Wireless Flash Function is not available with some camera models. For details please refer to the compatibility table.
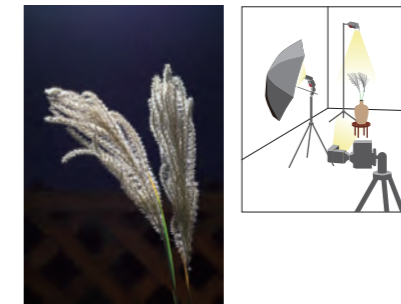
Slave Flash

Slave Flash allows the flash to be fired away from the camera by the master unit. The Designated Slave function allows you to use two or more EF-610 DG SUPER flash units. It is possible to designate which flashguns will fire together by using the channel setting. Since the EF-610 DG SUPER is equipped with this function, it can be used with all camera models. In the Normal Slave mode, it is also possible to use the camera's built-in flash or another flash unit as the Master (Flash Exposure must be adjusted manually).

*Normal Slave flash function cannot be used with Pre-flash type cameras.

Modeling Flash function to check for shadows.

Like a studio flash unit equipped with a modeling lamp, the EF-610 DG SUPER also offers a modeling flash function, enabling the user to check for intense reflections and shadows before taking the flash photograph.

*In the case of Canon fitting flashguns, it can only be used with Canon cameras equipped with a Modeling Flash function.

FP Flash function for high shutter speeds.

Flash synchronization speed is usually limited to coincide with the full shutter opening of focal plane shutters, limiting the use of high shutter speeds with flash. The FP flash function makes flash photography possible at shutter speeds greater than the normal synchronization speed. When the lens diaphragm is set to larger apertures to limit depth of field in synchronized daytime shooting, high shutter speeds can be used to balance the daylight and the flashlight at any shutter speed.

*This function is not available with some camera models. For details please refer to the compatibility table.

Rear-curtain Synchro flash mechanism for natural representation of motion.

When photographing a moving subject, the Rear-curtain Synchro mode allows the flash to be triggered immediately before the rear-curtain of the shutter closes. Unlike front-curtain synchro, this mode records blurred trails behind a moving subject, rather than in front, for a more natural expression of motion. The Rear-curtain Synchro function can only be used with cameras offering Rear-curtain synchronization.

*Rear-curtain Synchro Function is not available with some camera models. For details please refer to the compatibility table.

Front-curtain synchro   Rear-curtain synchro

AF Auxiliary Light for accurate auto-focus in low light conditions.

AF may not work efficiently in dark conditions. However, the AF auxiliary light mechanism of the EF-610 DG SUPER lets you control AF even in situations where autofocusing is difficult.

*AF Auxiliary Light is not available with some camera models. For details please refer to the compatibility table.

Manual flash power level control

The flash power level of the EF-610 DG SUPER can be set from full to 1/128 for Sigma and Canon mounts, and full to 1/64 for Sony, Nikon, and Pentax mounts.

Auto Power-Off function prevents wasted power.

Even if the flash is left with the power on, it automatically shuts off, if it is not operated for a certain length of time. This conserves battery power in flash photography. When the shutter button is depressed halfway, the power turns on again, and charging resumes.

powerful flashgun providing fully automatic flash photography

ELECTRONIC FLASH
EF-610 DG ST

The EF-610 DG ST is a multifunctional shoe mount type flash, designed to work with digital SLR cameras of most popular manufacturers and features a powerful Guide Number of 61. This flash unit provides fully automatic flash photography for digital SLR cameras with automatic TTL exposure control. It combines a convenient array of functions with ease of handling, and include an Autozoom function that automatically sets the optimum illumination angle between 24mm and 105mm, as well as offering bounce and swivel capability.
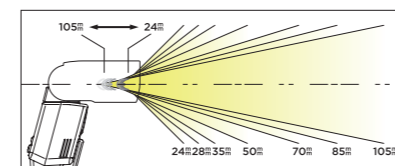
Case, Flash Stand(FS-11) included

Equipped with New TTL Auto Flash Exposure

The EF-610 DG ST is designed to work with the latest TTL auto exposure systems of most popular manufacturers` digital SLR cameras. The camera will control the amount of flash lighting to achieve the appropriate exposure for the subject.

Autozoom function for changing the illumination angle in accordance with the lens' angle of view.

This function automatically sets the optimum illumination angle in accordance with the lens' focal length in a range from 24mm to 105mm. When the built-in Wide Panel is used, the flash can cover an angle of up to that of a 17mm lens.

*Autozoom function is not available with some camera models. For details please refer to the compatibility table.

Bounce-flash function with movable flash head.

The flash head can be tilted up by as much as 90°, and swivel to the left by 180°, or to the right by 90°. Bounce photography, in which light is reflected off a white wall or the ceiling or a reflector, increases your range of photographic expression. As the flash head can also be tilted down by 7°, the flashgun can also be used for close-up photography.

Catch Light Panel

This flash is equipped with a built-in catch light panel, which can create a sparkle in the eyes of the subject when the bounce flash mode is activated.

AF Auxiliary Light for accurate auto-focus in low light conditions.

AF may not work efficiently in a dark place. However, the AF auxiliary light mechanism of the EF-610 DG ST lets you control AF even in situations where autofocusing is difficult.

*AF Auxiliary Light is not available with some camera models. For details please refer to the compatibility table.

Manual flash power level control

In manual flash mode, the flash power level of the EF-610 DG ST can be set at two levels: Full power and 1/16.

Auto Power-Off function prevents wasted power.

Even if the flash is left with the power switched on, it automatically shuts off if left unused for a certain length of time. This conserves battery power in the flashgun. When the shutter button is depressed halfway, the power turns on again and charging resumes.

* Please check the following website for updates of compatibility tables. http://www.sigma-photo.co.jp/english/flash/comp_dg_st.htm