Product Overview

Thank you for your purchase of a **NEEWER** product.

The NW-620 is a single contact on-camera flash, supporting M/Multi flash modes, S1/S2 wireless light control modes, manual zoom focus function and more. Below are some of the key features of the product:

- M/Multi Flash modes for more creative photography.

- Supports wireless flash photography.

  S1 / S2 wireless flash control modes with a wireless transmission distance greater than 10m- well adapted for a more flexible multi-light layout.

- Supports bounce flash photography at different angles.

- 81 levels of dimming (1/1~1/256).

- Supports Manual zoom focus.

  20-200mm flash coverage for shooting at all distances.

- LCD dot matrix LCD screen.

  Intuitive display for easier operation.

- Firmware upgrade for trouble free compatibility.

  Software can be upgraded in line with upgrades to the original camera.

Precautions

- Always keep this product dry.
- Keep this product out of reach of children.
- Do not disassemble or modify the product.
- Do not subject to any form of physical shock. The product shouldn't be exposed to fire or an environment where the temperature exceeds 50 Degrees Celsius.
- Do not aim the flash directly into the eyes, as this could result in visual impairment.
- Do not use the product near chemicals, flammable gases or other volatile substances which may cause fire or electromagnetic interference.
- Do not use in the rain or in damp conditions.
- Turn off the product immediately, if it appears to be operating abnormally, and try to troubleshoot the likely cause.
- Failure to comply with the recommendations and warnings listed in the manual will invalidate the warranty.
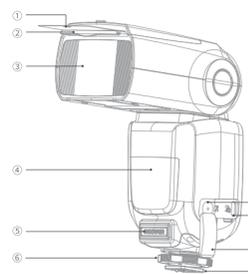
01

Included contents

Flash × 1

Mini stand × 1
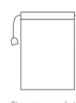
Storage pouch × 1

Manual × 1

Product Illustration

1. Flash body

① Reflector	⑥ Fixed hot shoe knob
② Wide angle diffusion panel	⑦ PC port (synchronization jack)
③ Flash head	⑧ USB Type C upgrade port
④ Optical transmitter	⑨ Soft rubber plug
⑤ External power connector (CP-E4)	⑩ Hot shoe mount

02

Product Illustration
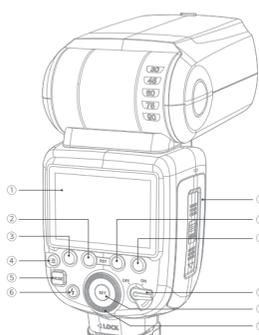
① Display screen	⑦ Battery cover
② Function button 2	⑧ Function button 3
③ Function button 1	⑨ Function button 4
④ Menu key: short press to enter and exit the menu	⑩ On/Off key: power on and off
⑤ MODE key: switch flash mode (M/MULTI)	⑪ SET key: short press to select settings
⑥ ◄ ● ►Test button	⑫ Knob: Adjust the value of the setting.

2. LCD Display

(1) M Manual Flash

M : Manual flash
Zoom : Zoom display
Focal length (Flash light coverage)
Manual flash output
Volume
S1/S2 mode
Low power alert

03
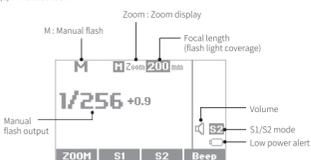
Product Illustration

(2) Multi Strobe Flash

Multi : Multi (strobe) flash
Number of flashes
Flash frequency
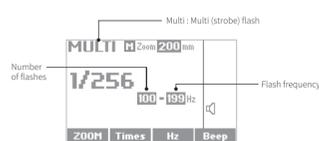
Installation Instructions

1. Inserting batteries

① Open the battery compartment cover

Slide the battery compartment cover in the direction shown in the picture to open the battery compartment.
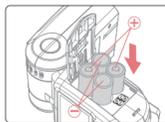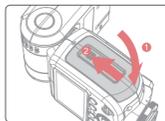
② Insert the correct batteries

Insert four batteries as shown into the battery compartment, respecting the +/- polarity markings as shown.

③ Close the battery compartment cover

Slide the cover in the direction shown in the picture to close the battery compartment.

⚠ Note: ① If you wish to replace the batteries after several consecutive flashes, please take care as the batteries can get hot.
② Please remove the batteries when not in use to reduce the risk of leakage and causing damage to the flash.
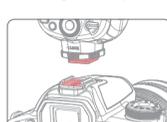
04

Installation Instructions

When replacing the batteries, please use 4 new AA size batteries or fully charged rechargeable batteries. Do not mix old and new batteries, different types or brands of batteries.
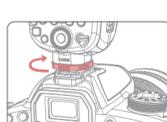
When the battery is low, the battery symbol < ◄━ > will flash, please replace the battery as soon as possible.
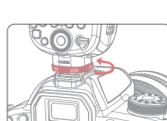

2. Attaching the flash to your camera

① Install the flash

Turn the hot shoe locking ring counterclockwise until it is at the top and then slot the flash into the camera hot shoe.

② Lock the flash

Turn the hot shoe locking ring clockwise until it is secured.

③ Remove the flash

Turn the hot shoe locking ring counterclockwise until it is at the top and carefully remove the flash.
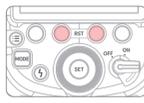
05

Flash Mode: M Manual Flash

You can set the flash output in 0.1 stop increments from 1/256 power to 1/1 full power.

To obtain the correct flash exposure, please use your handheld flash meter to determine the required flash output.
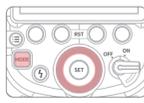
① Press the <MODE> button to display the <M> symbol

② Rotate the adjustment knob to set the flash output power.

Press function button 2 or 3 to select S1/S2 mode.

* S1 Optical control unit setting

In M manual flash mode, the S1 function can be used and the flash unit can function as an optical S2 secondary flash. It will fire in sync with the master flash, giving the same effect as that obtained by the use of radio triggers. This helps the photographer create multiple lighting effects.

* S2 Optical control unit setting

In M manual flash mode, the S2 function can be used and the flash unit can function as an optical S2 secondary flash. In this mode, it will ignore the pre-flash emitted by the TTL flash and will only fire in response to the second flash from the main unit.

Note: S1 and S2 optical triggering is only available in M manual flash mode.

06

Flash Mode: Multi Strobe Flash

The Multi Flash mode will emit a series of rapid flashes used for taking multiple images of a moving object in a single photograph.

You can set the flash frequency (the quantity of flashes fired per second, expressed in Hz), the total number of times the flash will be triggered and the flash output.
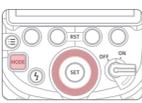
① Press the <MODE> button until <MULTI> is displayed on the screen.

② Rotate the adjustment knob to set the flash output power.

③ Press function button 2 <Times> to select the times of flashes, and rotate the adjustment knob to set the number.

④ Press function button 3<Hz> to select the flash frequency (the interval between flashes) , and rotate the adjustment knob to set the number.

Calculating the Shutter Speed:

During a stroboscopic flash, the shutter remains open until the firing stops. Use the formula below to calculate the shutter speed and set it with the camera.

Number of Flashes / Flash Frequency = Shutter Speed

For example, if the number of flashes is 10 and the firing frequency is 5 Hz, the shutter speed should be at least 2 seconds.

07

Flash Mode: Multi Strobe Flash

* Strobe flashes are more effective when used in front of dark backgrounds with highly reflective subjects.

* It is recommended to use a tripod and remote shutter release.

* Multi Strobe flash cannot be set when the flash output is 1/1 and 1/2.

* "Bulb" can also be used when strobe flash is set

Maximum flash times

Flash Output \ Hz	1	2	3	4	5	6-7	8-9
1/4	8	6	4	3	3	2	2
1/8	14	14	12	10	8	6	5
1/16	30	30	30	20	20	20	10
1/32	60	60	60	50	50	40	30
1/64	90	90	90	80	80	70	60
1/128	100	100	100	100	100	90	80
1/256	100	100	100	100	100	90	80

Flash Output \ Hz	10	11	12-14	15-19	20-50	60-199
1/4	2	2	2	2	2	2
1/8	4	4	4	4	4	4
1/16	8	8	8	8	8	8
1/32	20	20	20	18	16	12
1/64	50	40	40	35	30	20
1/128	70	70	60	50	40	40
1/256	70	70	60	50	40	40

Other Applications

1. External Power Supply Interface

The CP-E4 battery pack can act as an external power supply when it is connected to the external power supply interface of the flash, which can increase the number of times the flash is fired and shorten the recycling time. To use an external power supply, the NW620 flash also needs to have batteries installed.

* CP-E4 battery pack needs to be purchased separately.

08

Other Applications

2. Sync Jack Trigger

Use a flash synchronization cable to connect the camera or trigger to the flash. This will synchronize the shutter to fire the flash.

3. Bounce Flash

By pointing the flash head at a wall or ceiling, the flash light will be reflected off the wall before illuminating the subject. This reduces the shadows behind the subject and gives a more natural photographic effect. It is commonly referred to as a bounce flash.

Rotate the flash head to set the direction of reflection.

-7°~120°
360°
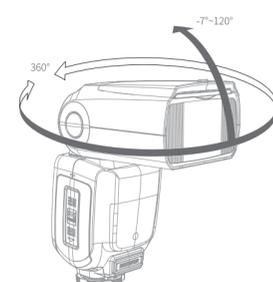
* If the wall or ceiling is too far away, the bounce flash may be too weak and cause underexposure.

* Walls or ceilings should be flat and white to allow for efficient reflections. If the reflective surface is not white, photographs will appear off color.

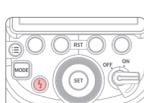### 4. ZOOM: Setting the Flash Light Coverage Range

You can manually set the flash light coverage to match the focal length of the 20-200mm lens lens to ensure that it covers the lens focal length so that photographs will not show shadow edges.
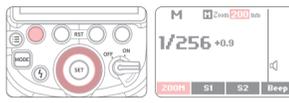
① Press Function Button 1 <ZOOM>.

② Turn the adjustment knob on to change the flash coverage.

09

Other Applications

5. Test Flash

Press the " ● " button to perform a flash test.

6. Sleep Function

① If there is no operation within 90 seconds when used as an on camera flash, the flash will automatically enter sleep mode. Press the shutter button or ● button to wake up the device.

② Slave unit (S1/S2) can set the sleep time: 30 minutes/60 minutes, after the flash goes into sleep mode, press " ● " key to wake it up.

7. Audible Alert

Press function button 4 <Buzzer> to turn Buzzer on or off.

The Buzzer can also be turned on or off in the custom settings.

Alert sound definition:

Beep ~ Beep, beep beep	Failure to recycle the power/overheat protection indication
Beep (long sound)	Flash charging completed
beep, beep, beep	Low power, prepare before shutdown

10

Other Applications

8. Creating an Eye Catchlight

Using the reflector panel to create a catchlight in the subject's eyes to make facial expressions more vivid.

① Rotate the flash head up 90°.

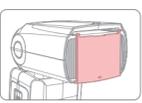② Pull out the reflector and the wide angle panel will pop out at the same time.

③ Push in the reflector.

- Push in the reflector only.
- Follow the same steps mentioned in the section covering Bounce Flash

* Point the flash head forward and tilt it 90° upward. If you rotate the flash head left or right, no catch light will be produced.

* For best eye catchlight results, the subject must not be within 1.5m/4.9ft of the camera.

9. Using the Wide Angle Diffuser Plate

Pull out the wide angle diffuser plate and place it over the flash head to extend the flash range. In doing so, you will obtain a softer and more natural flash output.
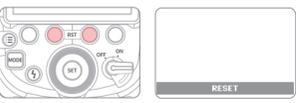

Pull out the wide angle diffuser plate and place it on the flash head. The flash light coverage will be extended to 14mm.

If the reflector has popped out at the same time, please push it back to the original position.

Restoring factory settings

Press the two <RST> keys at the same time until "RESET" appears on the screen to complete the reset.

RESET

Note: This operation cannot be performed in the C.Fn mode

11

Setting Custom Functions

① Press a ▤ ● key to enter the custom function menu.

② Rotate the adjustment knob to select the option.

③ Press a <SET> key to select the setting.

④ Rotate the adjustment knob to adjust the setting.

⑤ Press a ▤ ● or function button ◄ ● ► to exit.

Please complete the custom function settings by referring to the chart below.

Custom Function Symbol	Function	Setting Symbols	Settings and Descriptions
STBY	Auto Sleep Settings	ON	Start
		OFF	Off
SV STBY	Slave Unit Auto Power Off Timer	60min	60 minutes
		30min	30 minutes
		OFF	Shutdown
BEEP	Buzzer	ON	Start
		OFF	Off
LIGHT	Backlight Illumination Time	12sec	Automatically Turns Off after 12 seconds
		OFF	Always OFF
		ON	Always ON
LCD	LCD Display Contrast	-3~+3	7 levels

Firmware upgrade

The firmware of this product can be upgraded through the USB port. The latest software announcements and instructions will be published on the official website.

※ This product does not come with a USB cable for the firmware upgrade. Please purchase separately. The USB port of this product is a Type-C port. Please use only a USB Type-C cable.

※ Upgrading the firmware requires Neewer Firmware software support. Please download and install "Neewer Firmware Update", and then select the corresponding firmware file before updating.

※ As the product is undergoing a firmware upgrade, please refer to the latest electronic version of the manual.

12

Protection Function

1. Protection Against Overheating

① To prevent the flash head from deteriorating and overheating, it is recommended not to fire more than 30 continuous flashes in quick succession at 1/1 full power. After 30 continuous flashes, pause the use of the flash for at least 10 minutes.

② If you fire more than 30 continuous flashes and then fire more flashes in short intervals, the internal over-heating protection function may be activated. The recycling time will be longer (over 7s). If this occurs, the use of the device should be paused for at least 10 minutes for the flash unit to operate as normal.

Number of flashes that will activate the over-heating protection:

Power	Number of Flashes
1/1	30
1/2+0.7	40
1/2 +0.3	50
1/2	60
1/4(+0.3,+0.7)	100
1/8(+0.3,+0.7)	200
1/16(+0.3,+0.7)	300
1/32(+0.3,+0.7)	500
1/64(+0.3,+0.7)	
1/128(+0.3,+0.7)	1000
1/256(+0.3,+0.7)	

2. Other Safety Functions

* The system provides real-time protection to secure the device and your safety. The following lists the prompts for your reference:

Prompts on LCD Panel	Indicates
E1	A fault has developed with the flash's recycle system so that the flash cannot fire. Please restart the flash unit. If the problem still exists, please send this product to a maintenance center.
HOT	The flash will disable when the temperature inside the unit is too high in which case you should stop using the flash for 10 minutes.
E3	The voltage on two outlets of the flash tube is too high. Please send this product to a maintenance center.

13

Specifications

Model	NW620
Flash GN Index	GN60
Power (1/1 level)	76Ws
Flash Light Coverage Range	20~200 mm (Pull out the diffusion panel and the focal length automatically changes to 14mm)
	Manual Zoom Focus
	Flash Head Plan 0~360° / Tilt -7°~120° (flash reflection)
Flash Duration	1/300s-1/20000s
Flash Exposure Control	
Flash Exposure Control System	Manual Flash
Multi Strobe Flash	Set at 100 Times; 199Hz
Power Supply	
Battery	4 x AA Batteries (NiMH Rechargeable Batteries Recommended)
Recycle Time	0.1~2.7s
Synchronous Triggering Method	Hot Shoe, PC Sync Cable
Color Temperature	5600±200K
Size	
Volume	71*55*202 mm
Net Weight (without battery)	368g

Troubleshooting

If you experience a problem with the device, please refer to this Troubleshooting Guide.

1. The Camera Flash does not fire

① The camera flash is not attached securely to the camera.
→Attach the hot shoe base mount of the flash securely to the camera.
② The electrical contacts of the camera flash and camera are dirty.
→Clean the contacts.

2. Auto power off

① After 90 seconds of idle operation, auto power off will have activated if the flash is set as Transmitter (Master).
→Press the Fast Flash button or the Test Flash button fully to wake up the flash.
② After 60 minutes (or 30 minutes) of idle operation, the flash unit will enter sleep mode if it is set as Receiver (Slave).
→Press any flash button to wake up.

3. Photos have dark corners or only parts of the target subject are illuminated.

The focal length of lens exceeds the flash coverage.
→Check the focal length that has been set. This flash unit has the flash coverage between 20 and 200mm, which fits medium-format cameras.

14