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VILTROX
Your Smart Choice

JY610 II
SPEEDLITE

User manual

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Before using the product, please read this manual carefully.
Keep this manual safety in case you need to check during your usage.
Operate this product on base of your full understand of this manual.
For more information, please visit www.viltrox.com

Caution

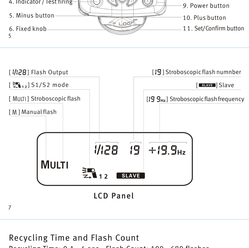
1. If corrosive liquids seep from the batteries and get in your eyes, immediately wash your eyes with running water and consult with a doctor.Your eyes could be seriously damaged if they are not treated quickly.
2. If corrosive liquids seep from the batteries and come in contact with your skin or clothes, wash immediately with running water Prolonged contact could injure your skin.
3. Never attempt to disassemble or repair the flash by yourself,as this could result in you receiving an electric shock and could also cause the flash to malfunction; such malfunction could lead to personal injury.
4. If the flash is dropped and damaged,do not touch any exposed interior metal parts. Such parts,especially the speedlight's capacitor and associated parts,could be in a high-charge state and if touched could cause an electric shock.Disconnect the power or remove the batteries and be sure that you do not touch any of the product's electrical components.
5. If you detect heat,smoke or notice a burning smell,immediately stop operation and remove the batteries to prevent the flash from catching on fire or melting. Allow the flash to cool down so that you can safely touch it and remove the batteries.

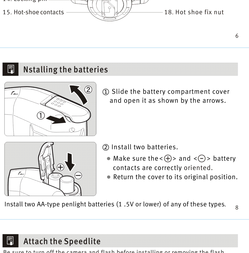
6. The flash should never be submerged in liquid or exposed to rain,saltwater or moisture unless it is properly protected from the liquids and moisture. Underwater use requires a certified underwater housing.If water or moisture gets inside the flash,this could cause the flash to catch on fire or cause an electric shock. In such instances you should immediately remove the batteries from the flash. Note: electronic devices that are penetrated by water or moisture are often not economically repairable.
7. Do not use the flash in the presence of flammable or explosive gas.If the flash is operated in areas where there is a flammable gas,including propane, gasoline and dust, it could cause an explosion or fire.
8. Do not fire the flash directly at the driver of a moving car.
9. Do not fire the flash directly into the eyes of someone.This is at close range, as it could damage their eyes'retinas. Never fire the flash closer than 1 meter from infants.
10. Do not fire the flash while the flash is touching a person or object.Such use can result in the person being burned, and/or their clothes igniting from the heat of the flash's firing.
11. Keep small accessories out of the reach of children to avoid the possibility of the accessory being swallowed. If an accessory is accidentally swallowed, immediately consult with a doctor.

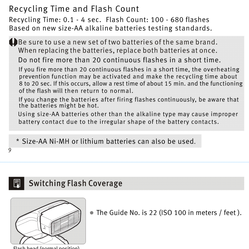
12. Use only the batteries specified in this instruction manual.Batteries other than those specified could leak corrosive liquids, explode or catch on fire or otherwise not perform satisfactorily.
13. Do not mix battery types,brands or old and new batteries,as the batteries could leak corrosive liquids, explode or catch on fire. When using more than one battery in a product, always use identical batteries that were purchased at the same time.
14. Non-rechargeable batteries such as manganese,alkaline-manganese and lithium batteries should never be charged in a battery charger because they could leak corrosive liquids, explode or catch on fire.
15. When using standard size (AA,AAA,C,D) or other common rechargeable batteries such as NiCd and Ni-MH battery types,or when recharging them,be sure to use only the battery charger specified by the battery maker and read the instructions thoroughly.
Do not recharge these batteries with their terminals reversed in the charger or before the batteries have cooled off sufficiently because they could leak corrosive liquids, explode or catch on fire. The same caution applies to using the rechargeable batteries that may be supplied by the photo product's manufacturer.

Attention

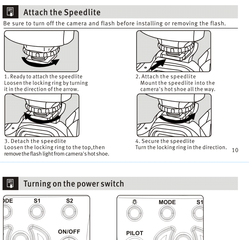
1. Do not touch the flash with wet hands,as this could cause an electric shock.
2. Keep the flash away from children to prevent them putting the flash in or near their mouth,or otherwise touching a dangerous part of the product, as suchcontact could cause an electric shock.
3. Do not apply strong physical shocks to the flash,as this could cause a malfunction that could cause the flash to explode or catch on fire.
4. Never use active agents that contain flammable substances such as paint thinner, benzene or paint remover to clean the flash,and never store the flash in locations containing chemicals such as camphor and naphthalene,as this could damage the plastic case, cause fire or cause an electric shock.
5. Remove any batteries from the flash before storing the flash for a long time to prevent the flash from catching on fire or leaking corrosive liquids.







Nstalling the batteries



① Slide the battery compartment cover and open it as shown by the arrows.

② Install two batteries.
- Make sure the <⊖> and <⊕> battery contacts are correctly oriented.
- Return the cover to its original position.

Install two AA-type penlight batteries (1 .5V or lower) of any of these types.

Recycling Time and Flash Count

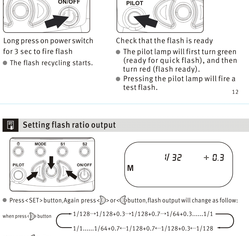
Recycling Time: 0.1 - 4 sec. Flash Count: 100 - 680 flashes
Based on new size-AA alkaline batteries testing standards.

Be sure to use a new set of two batteries of the same brand.
When replacing the batteries, replace both batteries at once.
Do not fire more than 20 continuous flashes in a short time.
If you fire more than 20 continuous flashes in a short time, the overheating prevention function may be activated and make the recycling time about 8 to 20 sec. If this occurs, allow a rest time of about 15 min. and the functioning of the flash will then return to normal.
If you change the batteries after firing flashes continuously, be aware that the batteries might be hot.
Using size-AA batteries other than the alkaline type may cause improper battery contact due to the irregular shape of the battery contacts.

* Size-AA Ni-MH or lithium batteries can also be used.

Attach the Speedlite

Be sure to turn off the camera and flash before installing or removing the flash.



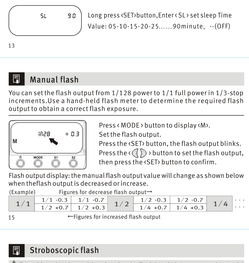
1. Ready to attach the speedlite
Loosen the locking ring by turning it in the direction of the arrow.

2. Attach the speedlite
Mount the speedlite into the camera's hot shoe all the way.

3. Detach the speedlite
Loosen the locking ring to the top,then remove the flash light from camera's hot shoe.

4. Secure the speedlite
Turn the locking ring in the direction.

Switching Flash Coverage



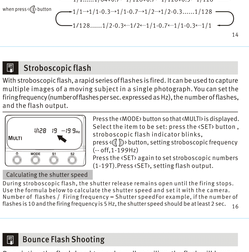
Flash head (normal position)

- The Guide No. is 22 (ISO 100 in meters / feet).

Flash head (pulled forward)

- The Guide No. is 27 (ISO 100 in meters / feet).

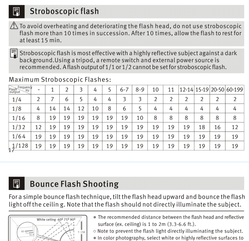
Turning on the power switch



Long press on power switch for 3 sec to fire flash
- The flash recycling starts.

Check that the flash is ready
- The pilot lamp will first turn green (ready for quick flash), and then turn red (flash ready).
- Pressing the pilot lamp will fire a test flash.

Choose the mode

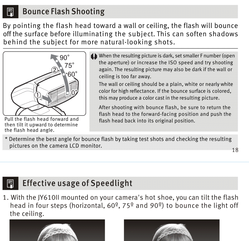


Press < MODE > button,choose < M >, < MULTI > mode.
Press <⊕> button,ON / OFF bank light.

Press<S1>or<S2>button,Enter S1 or S2 slave flash mode
S1: under this mode will sync flash with MASTER on Manual mode
S2: will avoid pre-flash with MASTER

Long press <SET>button,Enter< SL> set sleep Time
Value: 05-10-15-20-25.....90minute, --(OFF)

Setting flash ratio output



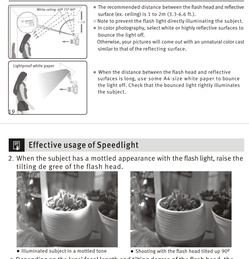
- Press <SET> button.Again press <⊕> or <⊖> button,flash output will change as follow:

when press <⊕> button
1/128→1/128+0.3→1/128+0.7→1/64+0.3.....1/1
1/1.....1/64+0.7→1/128+0.7→1/128+0.3→1/128

when press <⊖> button
1/1→1/1-0.3→1/1-0.7→1/2→1/2-0.3.....1/128
1/128.....1/2-0.3→1/2→1/1-0.7→1/1-0.3→1/1

Manual flash

You can set the flash output from 1/128 power to 1/1 full power in 1/3-stop increments.Use a hand-held flash meter to determine the required flash output to obtain a correct flash exposure.



Press < MODE > button to display <M>.
Set the flash output.
Press the <SET> button, the flash output blinks.
Press the <(⊖)> button to set the flash output, press the <SET> button to confirm.

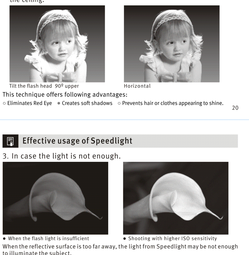
Flash output display: the manual flash output value will change as shown below when the flash output is decreased or increase.

(Example)	Figures for decrease flash output**				Figures for increased flash output**			
1/ 1	1/1 -0.3	1/1 -0.7	1/2	1/2 -0.3	1/2 -0.3	1/2 -0.7	1/4	...
	1/2 +0.7	1/2 +0.3			1/4 +0.7	1/4 +0.3		

**Figures for increased flash output

Stroboscopic flash

With stroboscopic flash, a rapid series of flashes is fired. It can be used to capture multiple images of a moving subject in a single photograph. You can set the firing frequency (number of flashes per sec. expressed as Hz), the number of flashes, and the flash output.



Press the <MODE> button so that <MULTI> is displayed.
Select the item to be set: press the <SET> button , stroboscopic flash indicator blinks, press <(⊖)> button, setting stroboscopic frequency (--off,1-199Hz)
Press the <SET> again to set stroboscopic numbers (1-19T).Press <SET>, setting flash output.

Calculating the shutter speed

During stroboscopic flash, the shutter release remains open until the firing stops. Use the formula below to calculate the shutter speed and set it with the camera.
Number of flashes / Firing 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 sec.

Stroboscopic flash

To avoid overheating and deteriorating the flash head, do not use stroboscopic flash more than 10 times in succession. After 10 times, allow the flash to rest for at least 15 min.

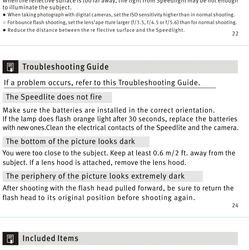
Stroboscopic flash is most effective with a highly reflective subject against a dark background.Using a tripod, a remote switch and external power source is recommended. Aflash output of 1/1 or 1/2 cannot be set for stroboscopic flash.

Maximum Stroboscopic Flashes:

Flash output / Hz	1/1	1/2	1/3	1/4	1/5	1/6-7	1/8-9	1/10	1/11	1/12-14	1/15-19	1/20-50	1/60-199
1/2	2	2	2	2	2	2	2	2	2	2	2	2	2
1/4	4	4	4	4	4	4	4	4	4	4	4	4	4
1/8	8	8	8	8	8	8	8	8	8	8	8	8	8
1/16	8	19	19	19	19	19	19	19	19	19	19	19	19
1/32	12	19	19	19	19	19	19	19	19	19	19	18	16
1/64	19	19	19	19	19	19	19	19	19	19	19	19	19
1/128	19	19	19	19	19	19	19	19	19	19	19	19	19

Bounce Flash Shooting

By pointing the flash head toward a wall or ceiling, the flash will bounce off the surface before illuminating the subject. This can soften shadows behind the subject for more natural-looking shots.



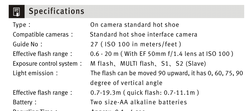
Pull the flash head forward and then tilt it upward to determine the flash head angle.

When the resulting picture is dark, set smaller F number (open the aperture) or increase the ISO speed and try shooting again. The resulting picture may also be dark if the wall or ceiling is too far away.
The wall or ceiling should be a plain, white or nearly white color for high reflectance. If the bounce surface is colored, this may produce a color cast in the resulting picture.
After shooting with bounce flash, be sure to return the flash head to the forward facing position and push the flash head back into its original position.

* Determine the best angle for bounce flash by taking test shots and checking the resulting pictures on the camera LCD monitor.

Bounce Flash Shooting

For a simple bounce flash technique, tilt the flash head upward and bounce the flash light off the ceiling. Note that the flash should not directly illuminate the subject.

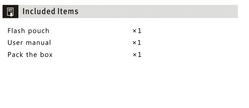


- The recommended distance between the flash head and reflective surface (ex. ceiling) is 1 to 2m (3.3-6.6 ft.).
- Note to prevent the flash light directly illuminating the subject.
- In color photography, select white or highly reflective surfaces to bounce the light off.
Otherwise, your pictures will come out with an unnatural color cast similar to that of the reflecting surface.

- When the distance between the flash head and reflective surfaces is long, use some Aa-size white paper to bounce the light off. Check that the bounced light rightly illuminates the subject.

Effective usage of Speedlight

1. With the JY610II mounted on your camera's hot shoe, you can tilt the flash head in four steps (horizontal, 60º, 75º and 90º) to bounce the light off the ceiling.



Tilt the flash head 90º upper — Horizontal

This technique offers following advantages:
- Eliminates Red Eye
- Creates soft shadows
- Prevents hair or clothes appearing to shine.

Effective usage of Speedlight

2. When the subject has a mottled appearance with the flash light, raise the tilting de gree of the flash head.

- Illuminated subject in a mottled tone
- Shooting with the flash head tilted up 90º

- Depending on the lens' focal length and tilting degree of the flash head, the bounced light may illuminate the subject in a mottled tone.
- Tilt the flash head 90º and take the shot.

Effective usage of Speedlight

3. In case the light is not enough.

- When the flash light is insufficient
- Shooting with higher ISO sensitivity

When the reflective surface is too far away, the light from Speedlight may be not enough to illuminate the subject.
- When taking photograph with digital cameras, set the ISO sensitivity higher than in normal shooting.
- For bounce flash shooting, set the lens' type more larger (F/1.5, f/1.4 or f/1.6) than for normal shooting.
- Reduce the distance between the reflective surface and the Speedlight.

Flash shooting distance range

Flash range guid.

ISO sensitivity	Aperture (F)										
1600	4	5.6	8	11	16	22	32	-	-	-	-
800	2.8	4	5.6	8	11	16	22	32	-	-	-
400	2	2.8	4	5.6	8	11	16	22	32	-	-
200	1.4	2	2.8	4	5.6	8	11	16	22	32	-
100	-	1.4	2	2.8	4	5.6	8	11	16	22	32
Usable flash shooting distance range (m,ft.)	1.9-20	19	13.5	9.6	6.7	4.8	3.4	2.4	1.6	1.2	0.6

Troubleshooting Guide

If a problem occurs, refer to this Troubleshooting Guide.

The Speedlite does not fire

Make sure the batteries are installed in the correct orientation.
If the lamp does flash orange light after 30 seconds, replace the batteries with new ones.Clean the electrical contacts of the Speedlite and the camera.

The bottom of the picture looks dark

You were too close to the subject. Keep at least 0.6 m/2 ft. away from the subject. If a lens hood is attached, remove the lens hood.

The periphery of the picture looks extremely dark

After shooting with the flash head pulled forward, be sure to return the flash head to its original position before shooting again.

Specifications

Type :	On camera standard hot shoe
Compatible cameras :	Standard hot shoe interface camera
Guide No :	27 (ISO 100 in meters/feet)
Effective flash range :	0.6 - 20 m (With EF 50mm f/1.4 lens at ISO 100)
Exposure control system :	M flash, MULTI flash, S1, S2 (Slave)
Light emission :	The flash can be moved 90 upward, it has 0, 60, 75, 90 degree of vertical angle
Effective flash range :	0.7-19.3m (quick flash: 0.7-11.1m)
Battery :	Two size-AA alkaline batteries
Recycling Time :	Approx. 0.1 - 4 sec
Battery life (flash count) :	Approx. 100-680 flashes
Dimensions (W×H×D) :	48 × 64 × 101 mm / 1.89 × 2.5 × 4.0 in.
Weight :	Approx. 140 g / 4.9 oz. (excluding batteries)

Included Items

Flash pouch	×1
User manual	×1
Pack the box	×1