VILTROX
Your Smart Choice

FC-210N
Wireless TTL Trigger

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.
Specifications subject to change without notice.
For more information, please visit www.viltrox.com

Cautions

1. Do not pull the wire when connected with cable.
2. Turn off the power and removed the battery when the unit is not in use for extended periods of time.
3. Stay away high temperature areas such as a closed car under direct sunlight and the control panel.
4. Store in a cool, dry place. Don't touch the unit with wet hand. Don't expose to rain.
5. Do not use in the flammable occasion, in violation of this warning may cause an explosion or fire.
6. Owing to this product include battery, regarding how to use and charge battery, please operate in strictly according to related rules, otherwise maybe cause explosion, fire or physical injury.
7. When connected with flashgun, don't get close the flashgun with your eyes. The flash light may cause harmful effect on your eyes.

This product have the integrated design of wireless transceiver, if the product is not in the transmitting state, which is automatically connected into receiving (standby) state, for the convenience of presentation, this manual will be mounted on the camera shoe will be called the launcher, mounted or attached flash will call receiver.

General Description

Viltrox FC-210 N wireless transceiver is designed for Nikon users to design a high performance 2.4GHZ wireless flash device, can flash in 360 degree layout, realize different shooting effect.
Compatible with Nikon i-TTL flash system perfectly. Support the front curtain, rear curtain, high speed sync (FP automatic synchronization), the highest speed 1/8000s*, remote change each flash exposure compensation or flash output, support mixed use different flash mode, support the transmitter installed i-TTL flash, and support the main control unit using the transmitter on the setting of each packet flash parameter, the design of transceiver of the products, remote control distance can up to 100M. Supports 2 wireless channel and A/B/C three groups, and with the wired shutter release and wireless shutter release function.
Viltrox FC-210N transceiver set includes 2 same transceiver, support a single camera simultaneous control of multiple flash, flash can be connected by purchasing additional single loaded transceiver, combined into multiple flash light, no limit on the number of receivers.
Use to the camera and flash with TTL function compatible.

Supported functions list

- Support flash mode: i-TTL,Manual,Multi flash
- Support front and rear curtain SYNC,FP high speed SYNC up to 1/8000s
- Support i-TTL,Manual,Multi flash mix-use (mix control model)
- Support transmitter on camera flash and i-TTL function
- Support transmitter fixed on master controller set separately flash parameters (Master model)
- Support exposure compensation,exposure lock function
- Support simulation (modelling) flash, red-eye flash reduction
- Support flash hand zoom(auto)
- Compatible with whole series of Viltrox flash units and Nikon flash units.
- Support PC interface trigger studio light.
- PC interface input supports front/rear curtain SYNC, high speed SYNC (super SYNC)
- Support single contact flash camera/flash trigger (max SYNC up to 1/250s).

Compatibility list

Functions that this product supports reply on the cameran and flash.Different camera and flash achieves different functions.
Below for assuming using compatible camera and flash.

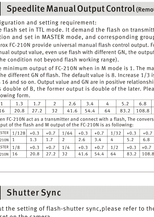
Compatible camera list:
Nikon: D70/D70S/D80/D90/D200/D300/D300S/D600/D700/D800D3000series/ D5000series/D7000series etc.

Compatible flash list:
Viltrox: JY610,JY610N,JY620,JY620N,JY680,JY680N etc flash,some flash not support through camera menu to control. Need to set the flash parameter manually.

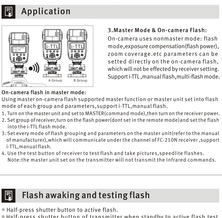
Compatible flash list:
Nikon:SB-600/SB-600/SB-700/SB-800/SB-900/SB-910
support to use master model list: SB-700/SB-900/SB-910/S i-800

Pls refer camera and flash manufacturer manual to use the below functions : FV LOCK/ modeling flash/red-eye reduction flash
Zoom flash head zoom(flash search range): support on camera and off camera flash head also zoom.Pls set manual zoom in the flash when not use auto zoom.

Name of Each Part

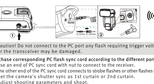


Name of Each Part



Before you start

1. Installing the Batteries
Pen the cover and installl two AA batteries according to the + and - marks, rechargeable batteries of 1.2V can be used. Replace the batteries when the product does not work stably.

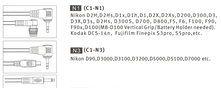


- Slide the battery compartment cover as shown by the arrow.
- Insert 2×AA batteries,make sure the "+" and "-" battery contacts are properly oriented, push down the cover and slide it back.

Please use one 2×AA batteries with the same brand,and change them all together at the same time.

Before you start

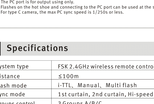
2. Installing the Transceiver on the Camera (As Transmitter).



① Unscrew the locking ring of the transceiver.
② Slip the mounting foot into the hot shoe of the camera.
③ Turn the locking ring according to the direction of arrow, the locking pin will protrude from the mounting foot.
④ It is supported that install a flash on the hot shoe of the transmitter.

Before you start

3. Install Flash on the Hot Shoe of the Transceiver (As Receiver).



① Install the transceiver on the mini stand or other fixing equipment (excluded).
② Loosen the locking ring of the flash.
③ Slip the mounting foot of the flash into the receiver.
④ Tightly lock the locking device of the flash.

⚠ Caution! The hot shoe of the transceivers can only install flash being applicable to DSLR cameras,can not install high-voltage flash,or the transceiver may be damaged.

Check that all equipments are installed and connected reliably before use,turn all equipments on,setting the transceivers in the same channel, set the group of receivers,test button is used to awaken and test whether the flash works before shooting, trigger the flash until flash recycling completely.

Operation Set

- Set different groups FC-210N into the same channels, they can't work together if in different channels. (same channel)
- Please set every flash trigger in the same group, Otherwise,it cannot work in different groups. (same group)
- When many groups' flash trigger need to be used in the same environment, please set these different group as different channels.

Channel	Transmitter	Receiver
Group1	●	●
Group2	●	●

⚠ **Attention !** Please set the flash trigger in the same group in same channel through choose the receiver or transmitter's channel. Otherwise,the flash trigger cannot control the camera shutter or trigger the flash.

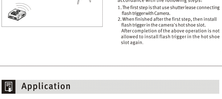
Channel Test

1. Please set the FC-210N power/off switch in the same channel.
2. half Press FC-210N shutter button,the state in same channel's indicator lamp ( ) will shine,it show that the channel set are correct.

⚠ **Caution!**
Don't change the channels random. If you have to change channels, please restart FC-210N and retest channels after channels changed, this will make sure each same group FC-210N work under same channels. Make sure the power/off switch is OFF when fixing FC-210N on the camera hot shoe or under flash.

Fix and Install

Three fixed methods for FC-210N.



1. Fixed by lanyard
2. Fixed by the camera hot shoe

Application

As the camera shutter remote control to use

1. **A Flash Trigger:**
When the flash trigger connected to the camera with the shutter cable, Regard as the wired shutter remote control to use.

2. **One to one control:**
A flash trigger connected to the camera with the shutter cable,Press shutter button of another flash trigger,you can enter the remote control of the pattern with the camera.

Application

3. **Multiple Control :** A flash trigger is used as the main control end, two or more of flash trigger used for connecting the camera as the shutter controlled side, Press the main control end of the shutter button, can be used for synchronous control the controlled end camera shooting.

Note: When the camera's hot shoe without flash, the flash trigger can be mounted directly on the camera's hot shoe slot, but strictly in accordance with the following steps:
1. The first step is that use shutter lease connecting the camera and receiver.
2. When finished after the first step, then install flash trigger in the camera's hot shoe slot. After completion of the above operation is not allowed to install flash trigger in the hot shoe slot again.

Application

As the remote control of camera flash to use

1. Installa flash trigger onto the hot shoe of camera, and another flash trigger connected to camera flash or studio light (Connected to the camera flash and studio light at the same time), Press the camera shutter button, can achieve a lot of camera flash sync flash with the camera.
2. Install a flash trigger onto the hot shoe of camera, and install the camera flash onto the flash trigger, and another flash trigger connected to camera flash or studio light (Connected to the camera flash and studio light at the same time), Press the camera shutter button, can achieve a lot of camera flash sync flash with the camera.

Application

1. **Remote Control Mode:**
Set the speedlite on the receiver to ITTL mode, this speedlite will flash according to Nikon camera.
It support ITTL and M mode.

2. **Mixture Mode Control:**
Speedlite on camera and speedlite on the receiver can flash at the same time in different flash mode. It include ITTL, M mode and Multi mode.
Set the speedlite on receiver into M mode, ITTL mode and multi mode.

Speedlite Manual Output Control (Remote Control Mode)

Configuration and setting requirement:
Slave flash set in TTL mode. it demand the flash on transmitter have the master function and set in MASTER mode, and corresponding group at in M mode.
- Viltrox FC-210N provide universal manual flash control output. for the same FC-210N manual output value, even use flash with different GN, the output power is the same(in the condition not beyond flash working range).
- The minimum output of FC-210N when in M mode is 1. The maximum is according to the different GN of flash. The default value is 8. Increase 1/3 to 10.4, and increase 1 is 26 and so on. Output value and GN are in positive relationship. When the output A is double of B, the former output is double of the later. Please reference to the following form.

	1	1.3	1.7	2	2.6	3.4	4	5.2	6.8	8	10.4	13.6
	16	20.8	27.2	32	41.6	54.4	64	83.2	108.8	128		

When FC-210N act as a transmitter and connect with a flash, The conversion between GN output of the flash and M output of the FC-210N is as following:

M OUTPUT	1/128	+0.3	+0.7	1/64	+0.3	+0.7	1/32	+0.3	+0.7	1/16	+0.3	+0.7
FC-210N 1	1.3	1.7	2	2.6	3.4	4	5.2	6.8	8	10.4	13.6	
M OUTPUT	1/8	+0.3	+0.7	1/4	+0.3	+0.7	1/2	+0.3	+0.7	1/1		
FC-210N 1 N	16	20.8	27.2	32	41.6	54.4	64	83.2	108.8	128		

Application

3. **Master Mode & On-camera Flash:**
On-camera uses nonmaster mode: flash mode,exposure compensation(flash power), zoom coverage.etc parameters can be setted directly on the on-camera flash, which will not be effected by receiver setting.
Support ITTL,manual flash,multi-flash mode.

On-camera flash in master mode:
Using master on-camera flash supported master function or master unit set into flash mode of each group and parameters,support i-TTL,manual flash.
1. Turn on the master unit and set to MASTER(command mode),then turn on the receiver power.
2. Set group of receiver,turn on the flash power(Ignit set in the remote mode)and set the flash into the i-TTL flash mode.
3. Set every mode of flash grouping and parameters on the master unit(refer to the manual of manufacturer),which will communicate under the channel of FC-210N receiver ,support i-TTL,manual flash.
4. Use the test button of receiver to test flash and take pictures,speedlite flashes.
Note:the master unit set on the transmitter will not transmit the infrared command.

Shutter Sync

About the setting of flash-shutter sync,please refer to the camera manual, and set on the camera.
Support front curtain sync,rear curtain sync,high-speed sync.
High-speed sync have to be used under setting synchrospeed of camera flash (auto FP options).
Higest synchrospeed is 1/8000s or 1/4000s(depends on camera).
Some cameras are not support high-speed sync(non-auto FP options), the shutter speed will be limited at 1/250s or even lower when use the camera.

Flash awaking and testing flash

- Half-press shutter button to active flash.
- Half-press shutter button of transmitter when standby to active flash,test to trigger flash when press transmitter shutter button.

* Manual operation to active flash before shoot when can not active flash by press button.
* Can not support the function to active flash when connect flash by PC.
* Receiver sign comes at the moment to trigger flash.

PC Port Triggering (Support Super Sync)

⚠ Caution! Do not connect to the PC port any flash requiring trigger voltage more than 300V, or the transmitter may be damaged.

*** Purchase corresponding PC flash sync cord according to the different ports of the flashes needs.**
1. Use an end of PC sync cord with nut to connect to the receiver.
2. The other end of the PC sync cord connects to strobe flashes or other flashes which supporting PC port.
3. Set the camera shutter speed to 1/250s or slower in Portrait or 2nd curtain.
4. Adjust shooting parameters and shoot.

*** Super sync:Use the non-high speed sync flash to realize higher sync speed, this function is more applicable to strobe flashes whose flash duration is longer. (PC port output only).**
1. Connect the receiver to flash via PC port and it may needs setting at manual full-power flash output (1/1).
2. Use manual exposure or aperture priority mode, set the shutter sync as hi-speed sync, the maximum shutter sync speeds can reach to 1/8000s. Take photos and check whether the photos are synchronous, if not, reduce shutter speed continuously until the photos, results depend on the camera and flash.

* The PC port is for trigger purpose only.
* Flashes on the hot shoe and connecting to the PC port can be used at the same time.
* For type C camera, the max PC sync speed is 1/250s or less.

Other Accessories

N1 (C1-N1)
Nikon D2H,D2Hs,D1x,D1h,D1,D2X,D2Xs,D200,D100,D3,D3X,D3s, D2Hs, D300S, D700, D800,F5, F6, F100, F90, F90x,D3100MB-D10 Vertical Grip/Battery Holder needed; Kodak DCS-14n, Fujifilm Finepix S3pro, S5pro,etc.

N2 (C1-N3)
Nikon D90,D3000,D3100,D3200,D5000,D5100,D7000 etc.

Adapter

Specifications

System type	FSK 2.4GHz wireless remote control system
Distance	≥100m
Flash mode	i-TTL、Manual、Multi flash
Sync mode	1st curtain, 2nd curtain, Hi-speed sync
Groups control	3 Groups A/B/C
Max.Sync speed	1/8000s
Compatible flash	Hot shoe flash,studio AC flash
Channels	2
Shutter Interface	2.5mm plug
Studio flash light connect plug	Standard PC output port
Battery	AA Battery×2
Standby time	60h
Size	70×60×45mm
Weight	Approx.126g(two)

Included Items

FC-210N Wireless TTL Trigger	2 pcs
Connecting line (N1, N3, PC3.5)	3 pcs
Adapter	1 pcs
Mini Flash Stand	1 pcs
User Manual	1 pcs
Warranty Card	1 pcs