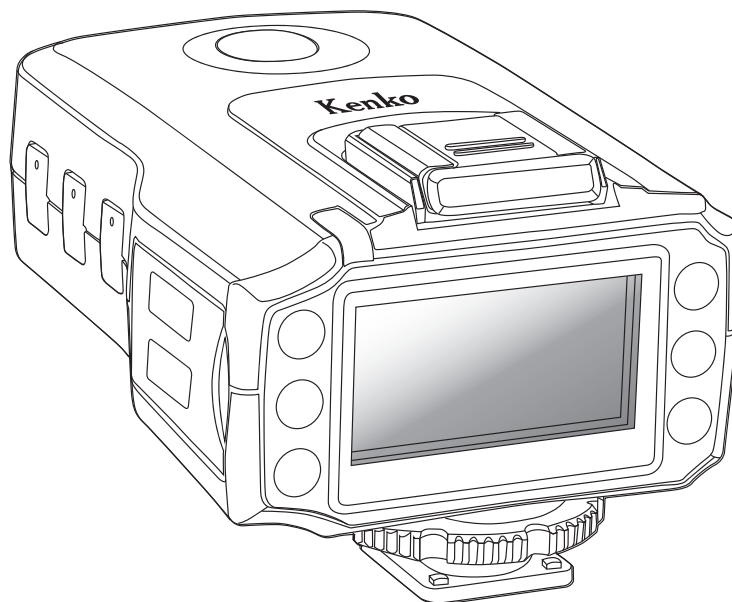


Kenko

2.4GHz Wireless Radio Transceiver

WTR-1

For Nikon (N), for Canon (C)



User Manual

Thank you for purchasing the Kenko wireless transceiver WTR-1.
To ensure your ability to take full advantage of the functions and performance
of this product, make sure you fully read this Manual to ensure proper use.

Introduction

The WTR-1 is a wireless transceiver for flash controllers that uses 2.4GHz radio communications. This product has the following features.

- Compatible with automatic flash functions used in Nikon and Canon cameras
- Attachable to a camera for use as a transmitter
- Attachable to flash devices that do not have radio communications functions to be used as a receiver and enable wireless flash lighting via radio communications

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Safety precautions - Make sure to read this section first -









Make sure you carefully read "Safety Precautions" prior to use to ensure proper use.

About safety indications













This Manual uses the following type of indications.

 Warning or  Warning	Improper handling that does not comply with these instructions could result in death or serious injury.
 CAUTION or  CAUTION	Improper handling that does not comply with these instructions could result in injury. Or, there is a risk of property damage.



Indication and meaning of prohibited matters

 	Prohibited The indicated act is absolutely forbidden.	 	Contact prohibited Do not touch
 	Water exposure prohibited Do not expose to water or moisture.	 	Disassembly prohibited Do not disassemble or modify.

Indication and meaning of cautions

 	Fire risk Possibility of causing a fire	 	Electric shock risk Possibility of electric shock
 	Rupture risk Possibility of battery rupture	 	High temperature risk Possibility of burns
 	Vision damage risk Possibility of resulting in reduced vision	 	Wireless interference risk Possibility of interference with nearby wireless equipment


























Indication and meaning of instructions

 	Action The performance of the indicated act is required.
---	---



Warning













Improper handling that does not comply with these instructions could result in death or serious injury.

 	Do not disassemble or modify. This could result in electric shock.
 	Do not insert metal into this product, any accessories, or the contact points of connector terminals to which cables are connected. This could result in fire, damage, or electric shock.
 	If the product exterior is damaged, do not touch damaged areas. This could result in electric shock.
 	Do not expose this product to water or touch this product with wet hands. This could result in damage or electric shock.
 	Do not use the flash emitter near the eyes of any person. This could cause damage to a person's vision.
 	Do not use a flash or this product while covered by hands or a cloth. This could result in burns or cause a fire.
 	Make sure to use prescribed batteries and insert batteries in the proper direction (+/-). Putting batteries in backwards could cause batteries to rupture or cause battery fluid to leak.
 	Do not use when combining old and new batteries together. This could cause batteries to rupture or cause battery fluid to leak.
 	Do not use when combining batteries from different manufacturers. This could cause batteries to rupture or cause battery fluid to leak.
	Do not use in a very humid or dusty environment. This could result in damage.
 	Do not use the flash in an environment with flammable gases such as propane gas or gasoline. This could result in fire or explosion.
	Do not use the flash when pointing at persons operating a vehicles or motorcycles. This could cause a traffic accident.
	When using in a location with precision equipment that is susceptible to the effects of radio waves, such as an airplane or a hospital, comply with the instructions of an airline company, a hospital, etc.
	Do not place in a location within reach of infants. This could cause unexpected accidents.
	In the unlikely event this product becomes abnormally hot, emits smoke, smells of something burning or otherwise produces any abnormality, stop use immediately and store away from any flammable materials, and then contact our help desk.









Caution

Improper handling that does not comply with these instructions could result in injury. There is also a risk of property damage.

 	Do not drop, or subject to strong shocks or vibration. This could result in damage.
 	If not using for a long period of time, store with the batteries removed. Not removing them could result in battery fluid leak or device damage.
 	Do not store in a vehicle or other location subject to high temperatures. This could result in damage.
 	Consecutive use of the flash will cause the temperature around the light emitter to increase so do not touch this area. This could result in burns.
 	Consecutive use of the flash could cause the batteries to reach high temperatures. Make sure to check that batteries have sufficiently cooled before changing batteries.
 	Do not use benzene, thinner, alcohol, or other organic agents to clean this product. This could result in discoloration or device damage.

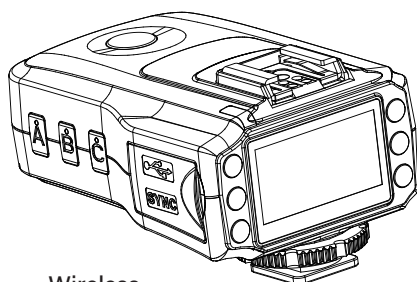
About wireless functions

This product is certified as compliant with the technical standards for 2.4GHz band low-power data communication system as outlined in the Radio Act. As such, no license is required for the use of this device. However, make sure to take the following precautions when using this device.

 	This device uses radio waves in 2.4GHz band. Stop the use of the device in the event this device is impacting nearby wireless base stations or wireless equipment.
 	This product is certified as compliant with technical standards outlined in the Radio Act. As such, do not disassemble or modify this device. Also, do not remove any certification labels affixed to this device. Such actions may be subject to penalty under law.
 	This device is compliant with the laws concerning radio waves in the country of purchase so the use of this device's wireless functions outside the country of purchase constitutes an illegal act. Our Company shall bear no liability whatsoever regarding any trouble that occurs in relation to the use of this device outside the country of purchase. If you are unsure of the country of purchase, contact our inquiry help desk.

Confirming package content

The following items are included with this product.



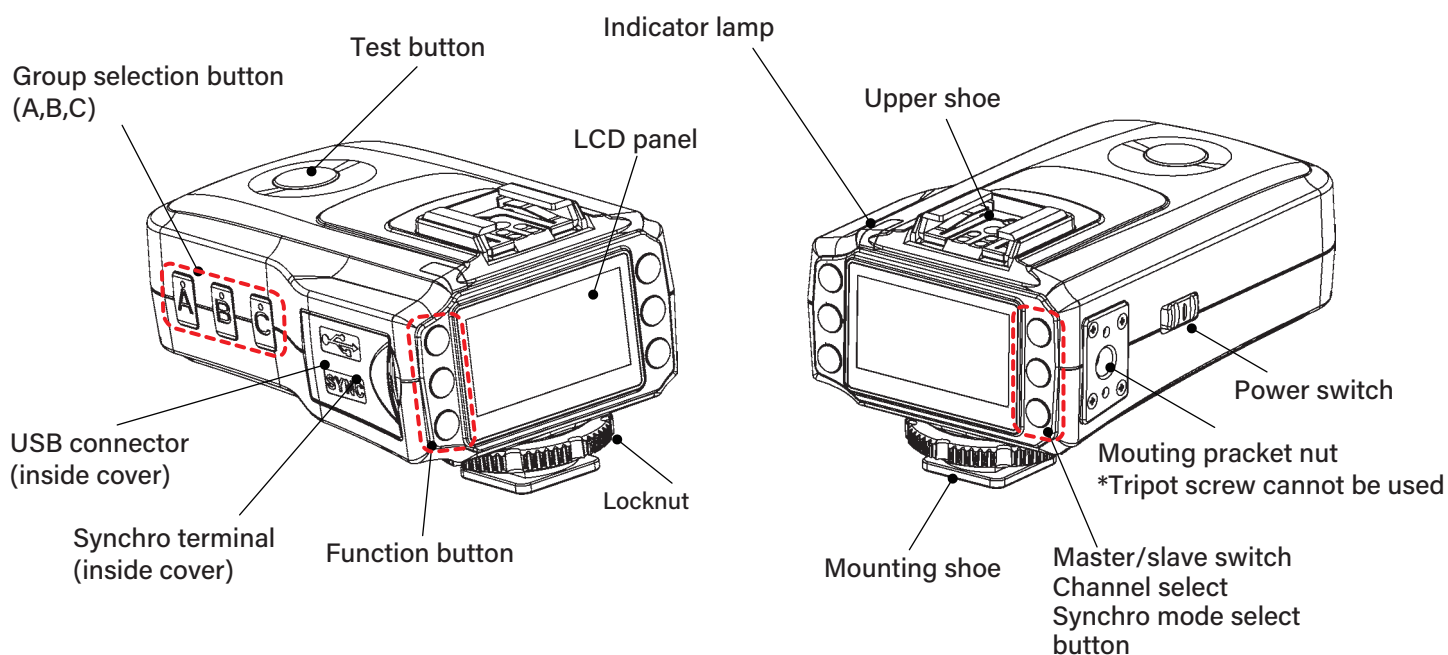
Wireless
transceiver unit



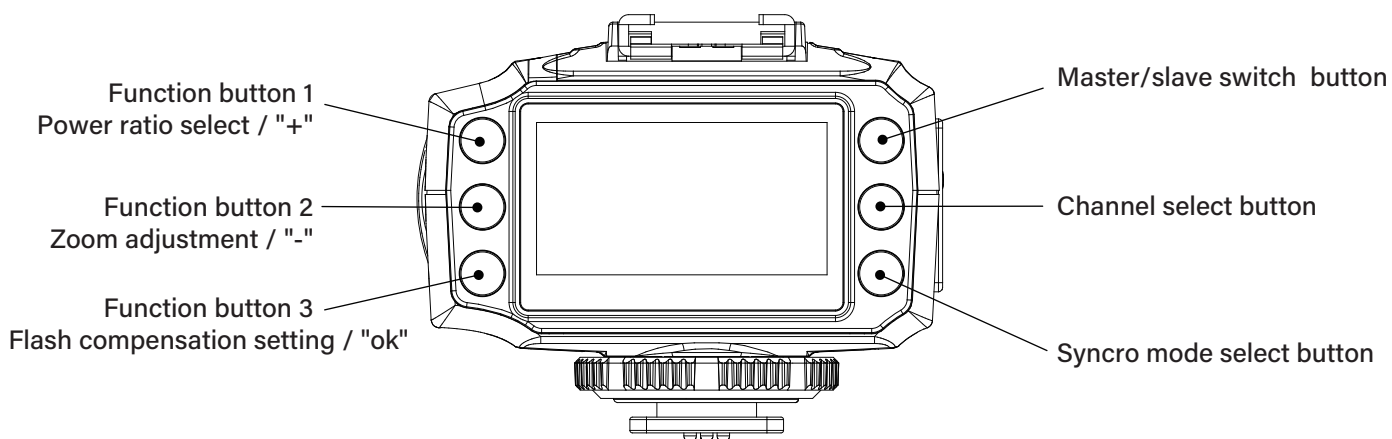
Shoe cover

Other printed matter
- Quickstart guide
- Warranty

Names of parts



●Control button



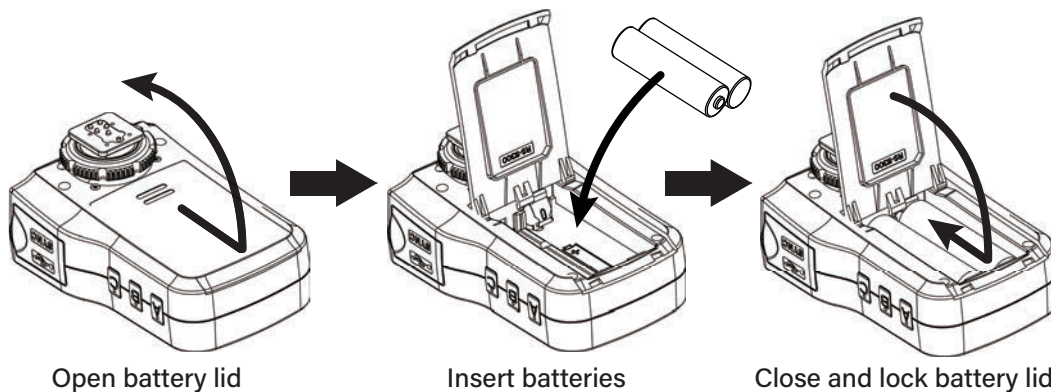
Prior to use

How to insert the battery

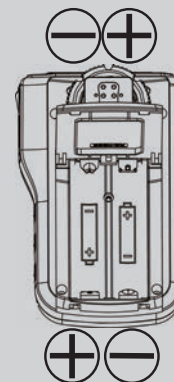
With the device power set to OFF, open the battery cover at the bottom of the unit and insert batteries in the indicated direction.



Make sure to use AA alkaline dry-cell batteries or nickel-metal hydride batteries in the indicated direction.



Battery direction

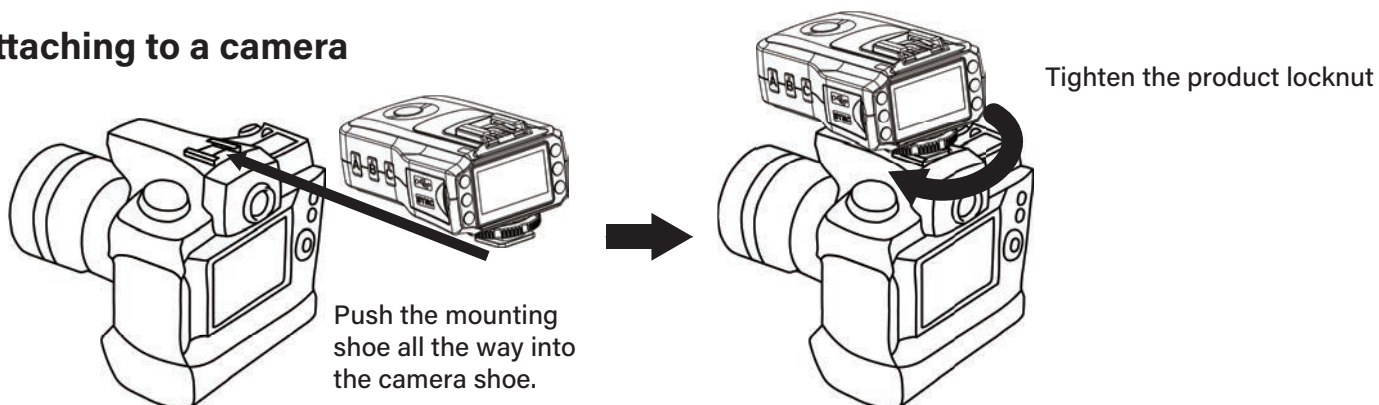


Make sure to use prescribed batteries and insert batteries in the proper direction (+/-). Putting batteries in backwards could cause batteries to rupture or cause battery fluid to leak.

How to attach this device

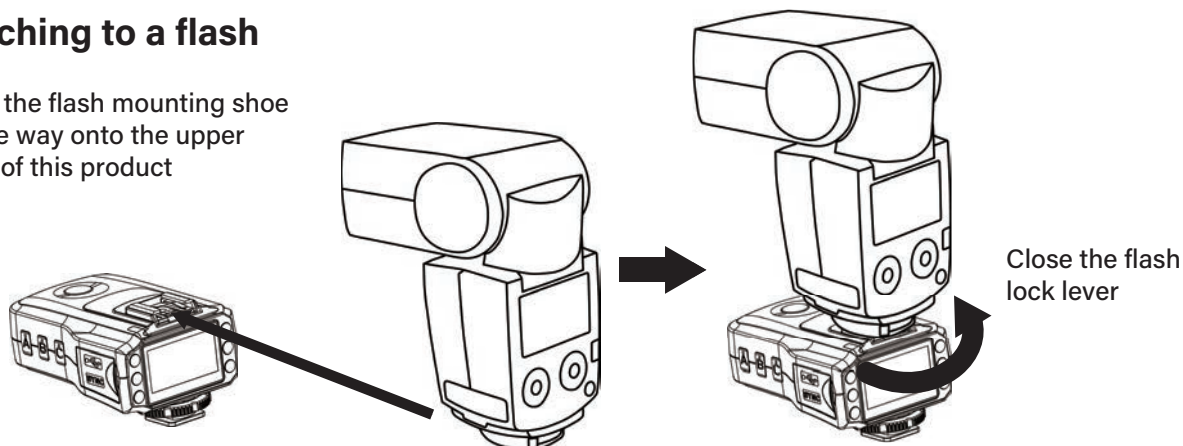
Set this product, the camera, and the flash power units to OFF before attaching this device.

Attaching to a camera

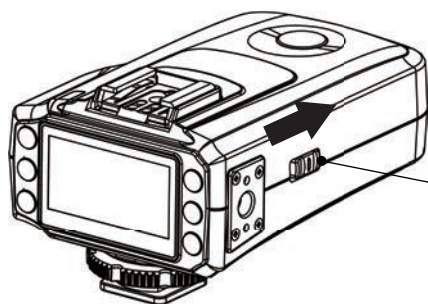


Attaching to a flash

Push the flash mounting shoe all the way onto the upper shoe of this product



How to turn on this device

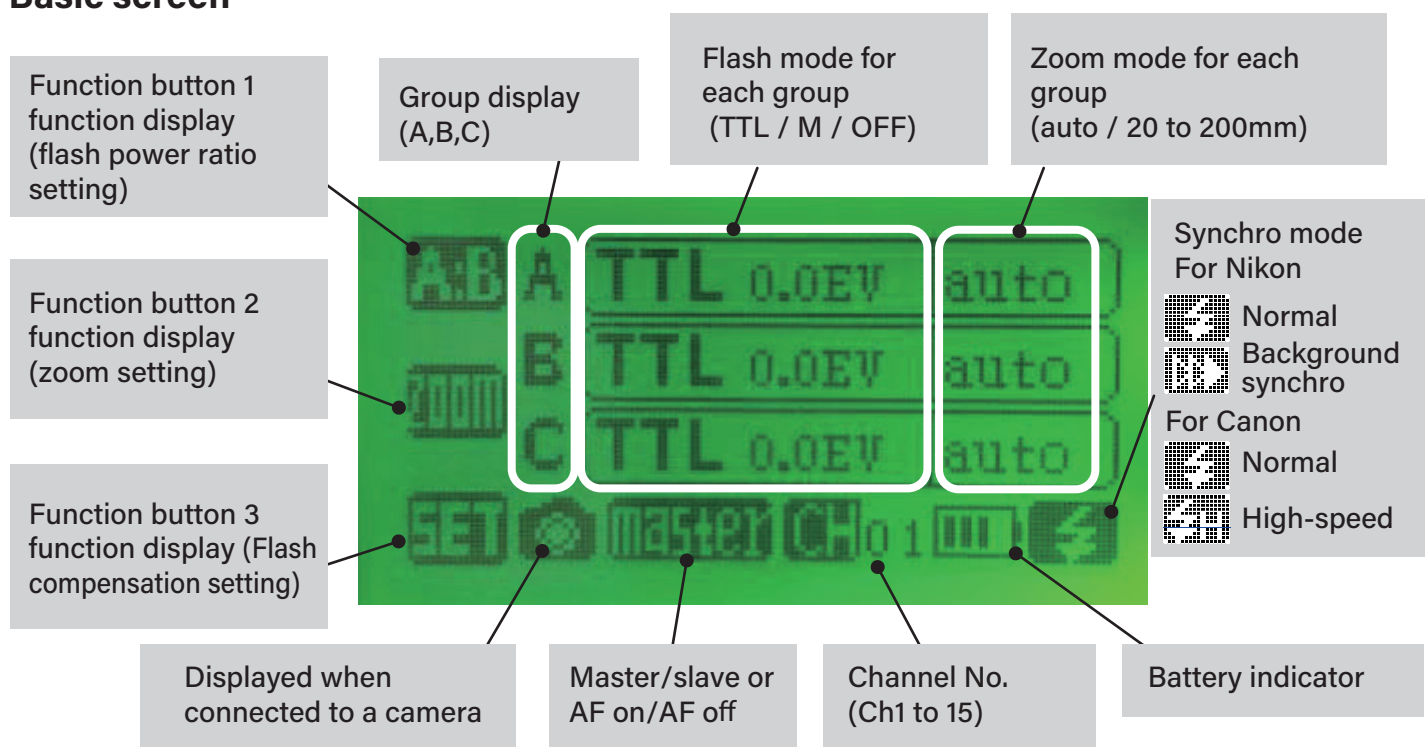


Push the power switch in the direction of the arrow

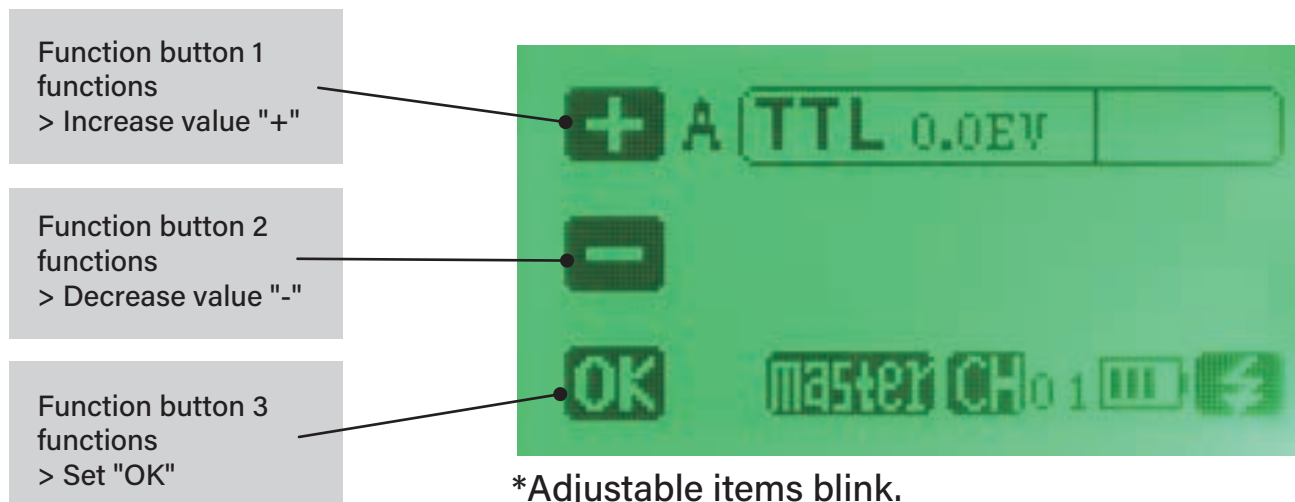
Power switch

Explanation of display screen

Basic screen



When in any settings mode



Basic use

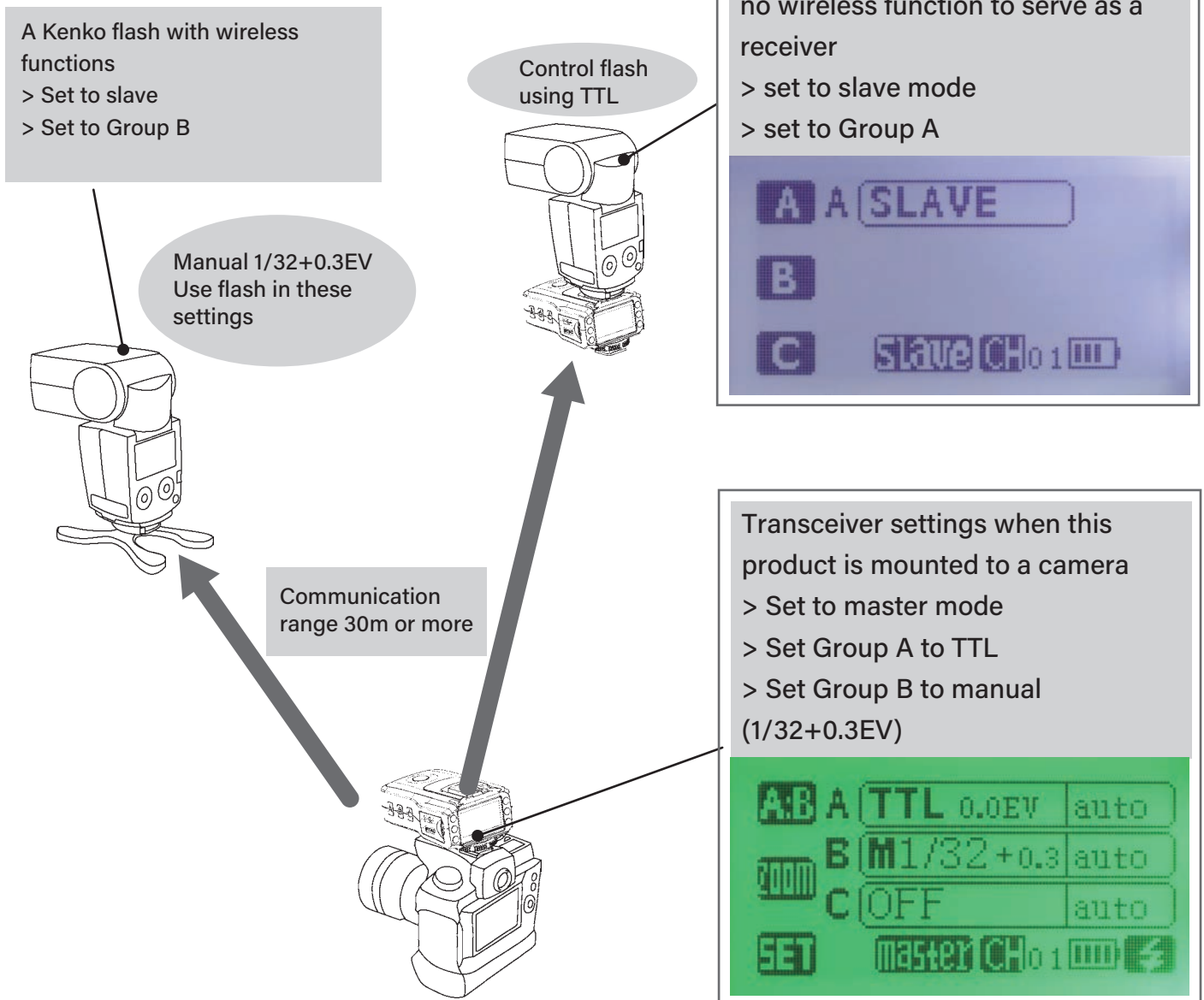
Examples of basic use

Mount this product to a camera and use as a master.

Remote flash control for a Kenko wireless flash setup in the distance. If using multiple units of this product, the 2nd unit and beyond can be used as a receiver for remote flash control.

For example:

Settings for configuring two flash units into 2 groups and controlling one via TTL and the other manually.

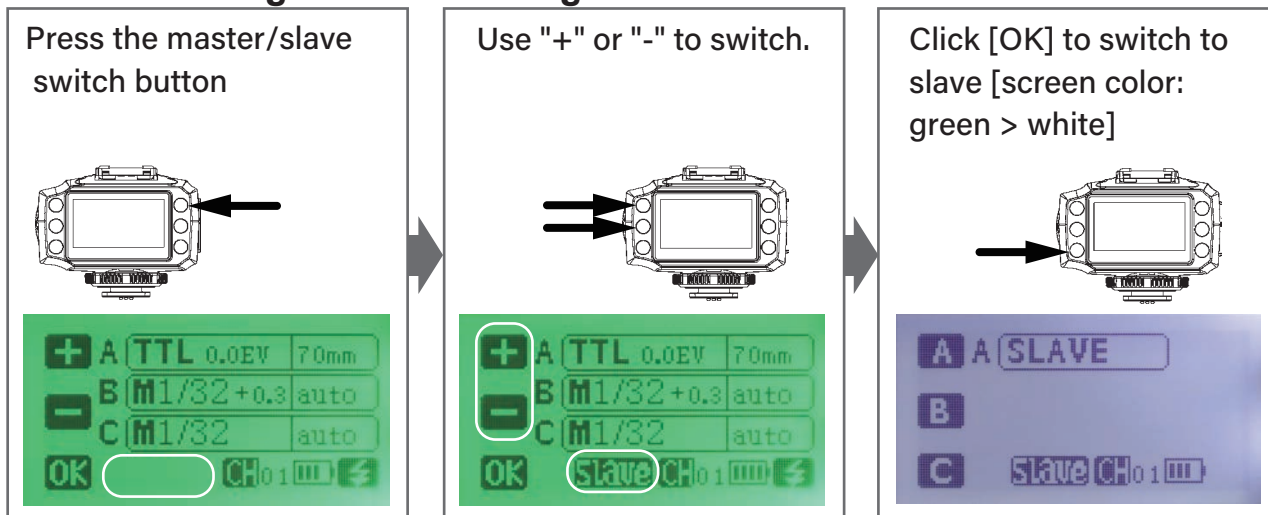


Configuration procedures

Use the following settings for the camera or this product to photograph using auto-flash controlled by the camera's settings.

- ① Set this product to master and set the remote flash or receiver to slave.

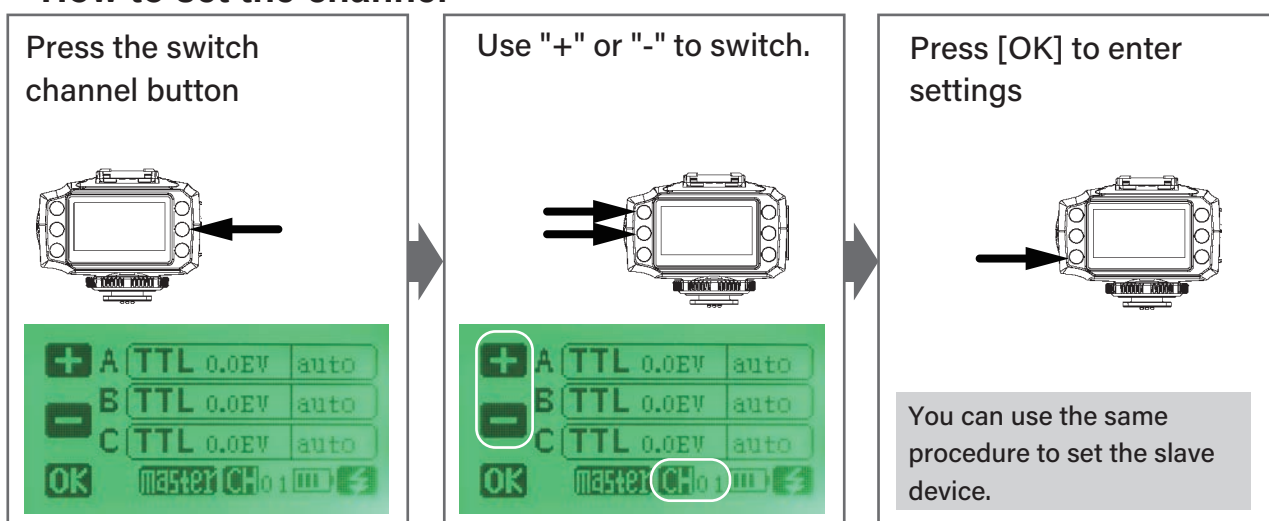
• How to configure slave settings



*When setting the wireless flash to slave mode, refer to the flash User Manual and set the flash to slave.

- ② Set the channel (Set all devices to the same channel) How to set the channel

• How to set the channel



*When setting the wireless flash to slave mode, refer to the flash User Manual and set the flash to channel.

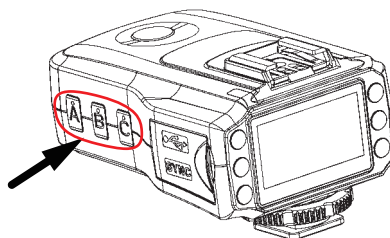
Configuration procedures (cont.)

③ Set the slave group

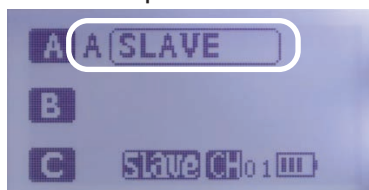
• How to configure slave group settings

Press the group select button (A, B, C) on the product set to slave

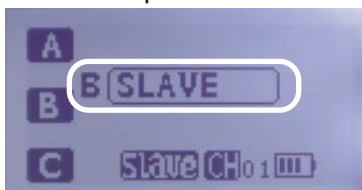
After setting to
slave mode



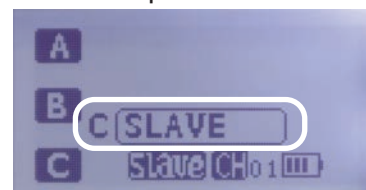
Set to Group A



Set to Group B



Set to Group C



*When setting the wireless flash to slave mode, refer to the flash User Manual and set the group.

④ Decide on the slave flash layout

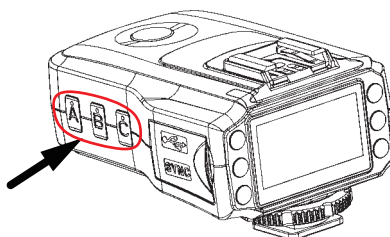
• Refer to the example on P9 and decide on a layout.

⑤ Set the mode for each group (TTL / M / OFF)

• How to set the mode for each group

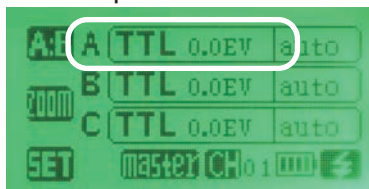
Press the group select button (A, B, C) on the product set to master

After setting to
master mode

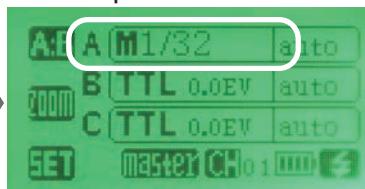


Press repeatedly to switch
between TTL > M > OFF > TTL
in that order

Set Group A to TTL



Set Group A to M



Do not use Group A



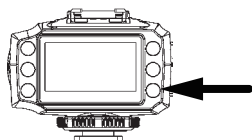
You can use the same procedure
to switch between Group B and C.

Configuration procedures (cont.)

⑥ Set the synchro mode

• How to set synchro mode

Press the synchro mode settings button on the product set to master

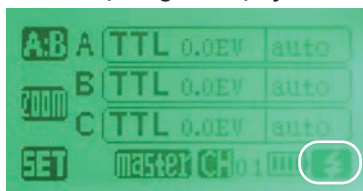


*If the camera is set to rear curtain synchro, then the camera settings are prioritized.

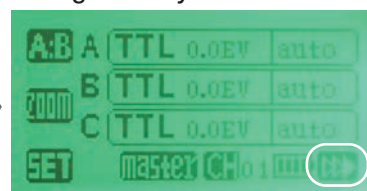
*For Nikon, this device is compatible with FP flash. This is not displayed on the product screen. Confirm the camera display.

For Nikon

Normal (foreground) synchro

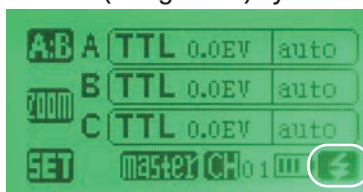


Background synchro

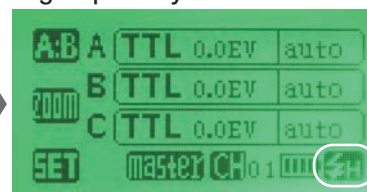


For Canon

Normal (foreground) synchro



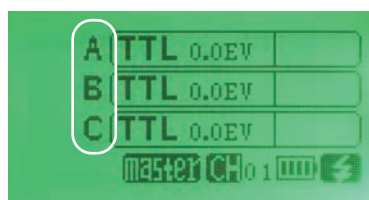
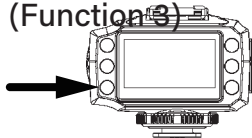
High-speed synchro



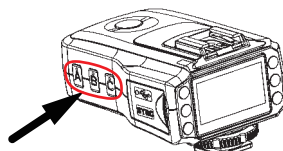
⑦ Set flash compensation, zoom for each group

• How to configure flash compensation settings

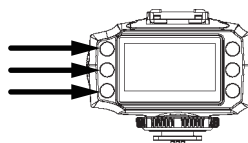
Press the flash compensation settings button (Function 3)



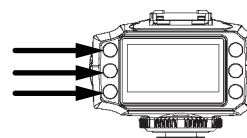
Select the group you want to set



or

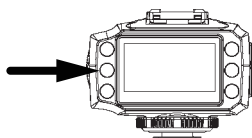


Adjust via [+] or [-]
Press [OK] to set



• How to configure zoom settings

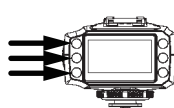
Press the zoom settings button (Function 2)



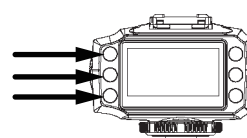
Select the group you want to set



or



Adjust via [+] or [-]
Press [OK] to set

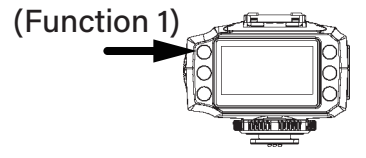


Other methods of use: Configuring flash power ratios

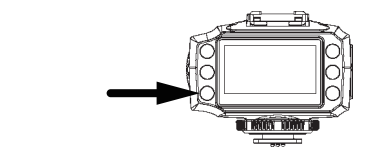
With two or more flash units into multiple groups (A, B, or A, B, C), you can set flash power ratios for each group to control all units via TTL automatic flash control.

To set flash power ratios for 2 groups (A, B)

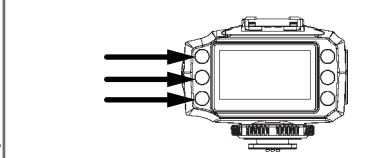
Press the power ratio settings button (Function 1)



Power ratio blinks when you press [SET]



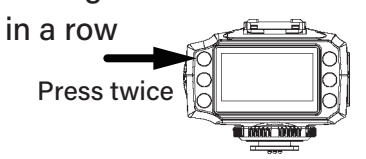
Adjust via [+] or [-]
Press [OK] to set



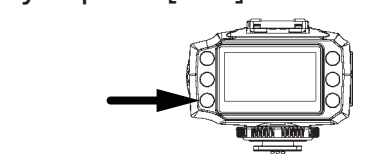
⇒ Shooting in this configuration will shift to camera-based auto-flash control based on the power ratio specified for each flash in Group A, B.

To set flash power ratios for 3 groups (A, B, C)

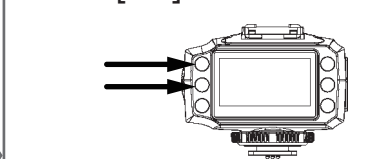
Press the power ratio settings button twice in a row
Press twice



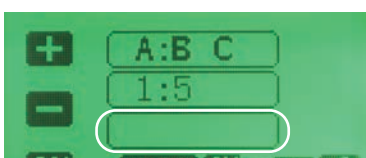
Power ratio blinks when you press [SET]



Adjust via [+] or [-]
Press [OK] to set



Automatically shifts to the power settings for C
Adjust via [+] or [-]
Press [OK] to set



⇒ Shooting in this configuration results in automatic camera-based flash control based on the power ratios specified for each flash in group A, B, C.

List of specifications

Compatible cameras	[For Nikon] Nikon DSLR / mirrorless cameras [For Canon] Nikon DSLR / mirrorless cameras
Radio communication Wireless functions	Communication range: 30m or more No. of channels: 15 channels Flash mode: TTL No. of manual groups: 3 groups (A/B/C) Flash Compensation: -3.0 to +3.0 1/3EV step (TTL) Flash power: 1/1 to 1/128 1/3 step (manual)
Synchro method	Foreground synchro, background synchro
High-speed synchro	Possible
Test flash	Possible using test button
Interface	USB 2.0 (miniUSB), synchro terminal
Operating mode	[For Nikon] i-TTL mode, manual mode [For Canon] e-TTL2 mode, manual mode
Compatible batteries	AA alkaline dry-cell batteries x 2 Or, AA nickel-metal hydride batteries x 2
Dimensions	Width 62.5mm × Height 50.5mm × Depth 94.2mm
Weight	Approx. 120g (excluding batteries)
Accessories	Shoe cover, quick guide

Troubleshooting

In the event of trouble or a warning is displayed, confirm the following prior to contacting the store of purchase or Kenko help desk.

Trouble	Possible causes	Response
Won't turn on	Batteries in wrong direction	Insert batteries again
	Batteries depleted	Replace with new or freshly charged batteries
Flash won't work	Flash overheating prevention function running	Wait for the flash to cool sufficiently
	Shoe or contact dirt	Clean the shoe, terminal
Slave flash won't work	Not attached properly	Make sure device is firmly pushed into the shoe
	Distance to slave too far, or obstacle blocking signal	Reposition master, slave position
	Master side and slave side group and channel settings are different	Check group and channel settings
Not working properly or display is odd Won't accept commands	Possibility of product malfunction	Reset product power
Other	If the above responses do not resolve the problem, or if you need repairs due to damage or malfunction, contact the store of purchase or contact the help desk indicated on P17.	

Notice



Hereby, Kenko Tokina Co., Ltd. declares that the radio equipment type WTR-1 is in compliance with Directive 2014/53/EU.

The full text of the EU declaration of conformity is available at the following internet address:

<http://www.kenkoglobal.com>

FCC Compliance Statement:

changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

ISED Compliance Statement:

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

1. This device may not cause interference.
2. This device must accept any interference, including interference that may cause undesired operation of the device.

L' émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d' Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L' exploitation est autorisée aux deux conditions suivantes :

1. L' appareil ne doit pas produire de brouillage;
2. L' appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d' en compromettre le fonctionnement.

RF Exposure Compliance:

This equipment complies with FCC/IC radiation exposure limits set forth for an uncontrolled environment. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

ce matériel est conforme aux limites de dose d'exposition aux rayonnements FCC/IC énoncées pour un autre environnement. cet émetteur ne doit pas être situées ou opérant conjointement avec toute autre antenne ou l'émetteur.

For Customers in Europe

CULLMANN GERMANY GMBH

Waldstraße 12, 90579 Langenzenn, Germany

CAN ICES-3 (B)/NMB-3(B)

CN ICES-3 (B)/NMB-3(B)

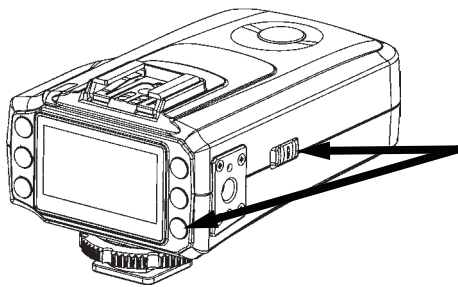
Complies with
IMDA Standards
[DA105282]

About service and maintenance

How to update firmware

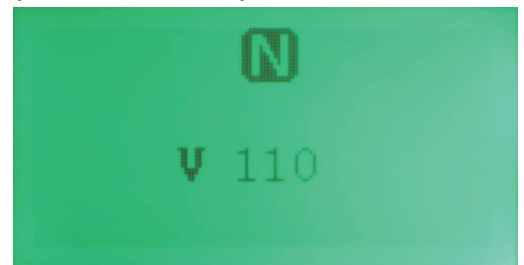
Use a commercially available mini-USB cable to connect the device to a PC and follow the instructions indicated on the device support page to update the device.

How to confirm firmware version



Press and hold the synchro mode select button while moving the power switch to ON.

Version display screen
(For Nikon, Ver. 110)



About maintenance

- To clean the device, use a blower to spray away dirt or dust and wipe lightly with a clean cloth.
- If using near the ocean and exposed to saltwater, dampen a soft, clean cloth with a few drops of fresh water and wipe away saltwater, then dry by wiping with a dry cloth.
- The product is not waterproof or drip-proof.
When cleaning, prevent exposure to water and do not use a wet cloth.
- Do not use dirt removal sprays or sheets containing organic agents such as thinner, benzene, or alcohol.

Contacts

 **Kenko Tokina Co., Ltd.**

KT Nakano Building, 5-68-10, Nakano
Nakano-ku, Tokyo 164-8616, Japan
www.kenkoglobal.com