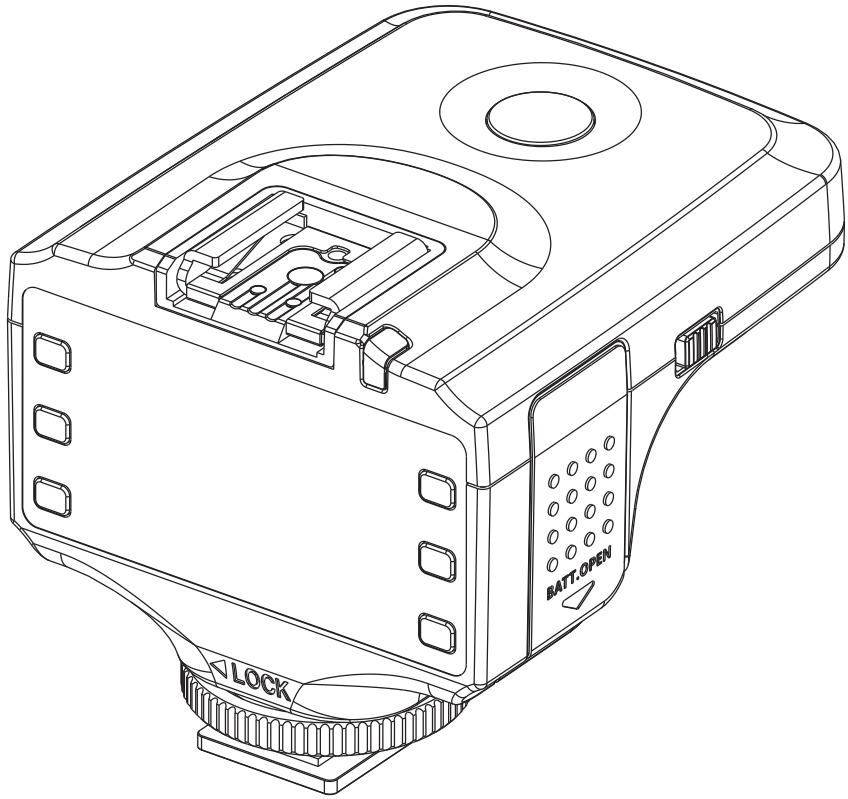
[pro]master®

ST1 [*Wireless* *Transceiver*]

For Nikon (ST1N)

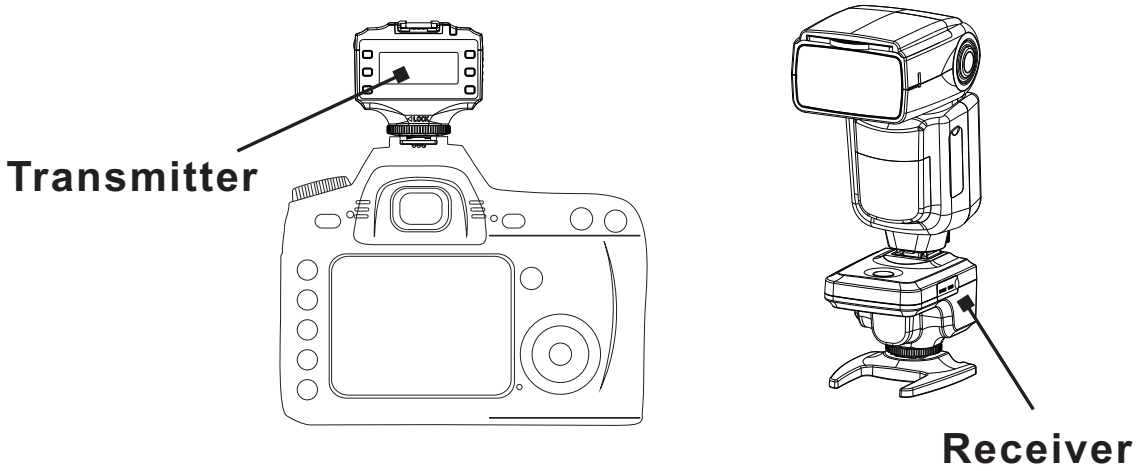


Contents

Precautions

1. Do not attempt to disassemble, open, or repair this transceiver by yourself.
2. Always use batteries of the same type, brand, and age. Always replace both batteries at the same time. Do not combine different types, brands, old, or new batteries. This could cause the batteries to overheat, leak, or explode.
3. This product is not water resistant. Keep it away from rain, snow, and high humidity areas.
4. Install the batteries in proper orientation as indicated in the battery chamber.
5. Remove any batteries from the unit before storing for long periods.

This product is a wireless transceiver, meaning it can act as either a transmitter or as a receiver. For the purpose of this instruction manual it will be called a transmitter (master unit) when installed on the hot shoe of a camera. It will be called a receiver (slave unit) when a flash is installed or connected to it for remote operation. Also, the words 'flash' and 'speedlight' may be used interchangeably



Foreword

Thank you for purchasing the **[pro]master** ST1 Transceiver.
The ST1N is an excellent tool for advanced wireless flash photography using Nikon cameras and speedlights. Its various flash-mode functions include: I-TTL, M, DT, and it supports a maximum shutter sync speed of 1/8000S. It can also control up to three flash groups.
From the transmitter you can directly control the flash mode, output power, and focal length for each group.The ST1's remote distance can reach up to 100m while supporting 30 wireless channels and 1 auto channel.

Here are some of the ST1's features:

- Dot matrix LCD display screen
- Supports wireless shutter release for camera
- Can be individually set to group A/B/C for flash focus
- Can be individually set to group A/B/C for flash exposure compensation and/or flash output
- Can be individually set to A/B/C flash mode: I-TTL/ manual flash
- Functions as a basic flash trigger (max sync speed is 1/250S) with a standard hot shoe (non nikon camera)
- Equipped with an AF focus assist beam (can be disabled)

● Please be sure to use the Transceiver's custom menu（Senior menu) to choose the specific flash model which is mounted on the hot shoe for best exposure results.

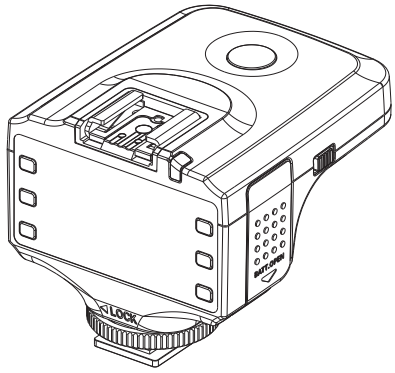
- Shutter Sync: first curtain sync, second curtain sync, and FP high-speed sync. Maximum sync speed is 1/8000s.
- Supports exposure compensation and flash value lock function
- Supports 30 wireless channels and 1 auto channel
- PC sync port
- Firmware can be upgraded through the USB interface

● **Please read this manual while also referring to your camera and speedlight's instruction manuals.**

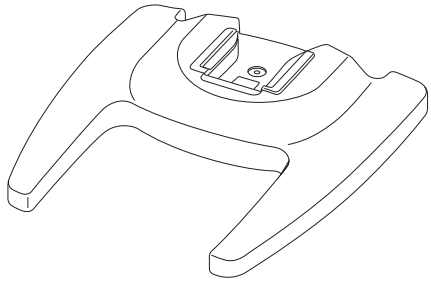
Included items:

The ST1 comes with the following accessories.

- Transceiver
- Mini Stand
- Manual

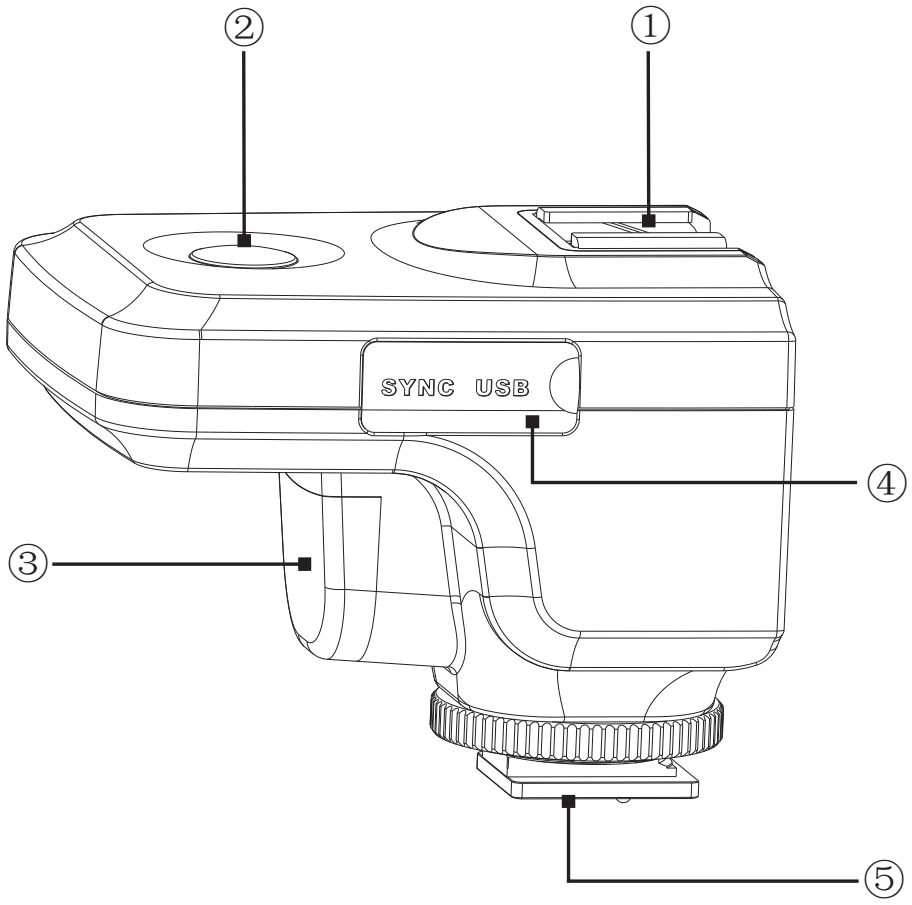


ST1N



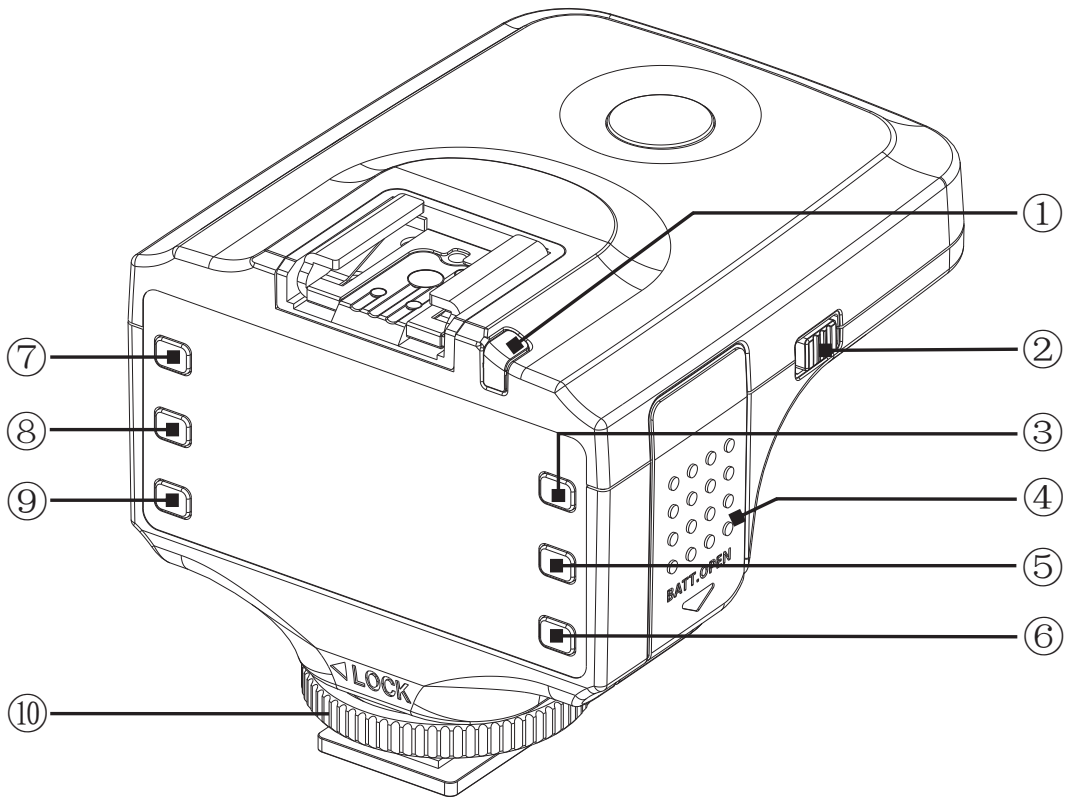
Mini Stand

Parts Identification



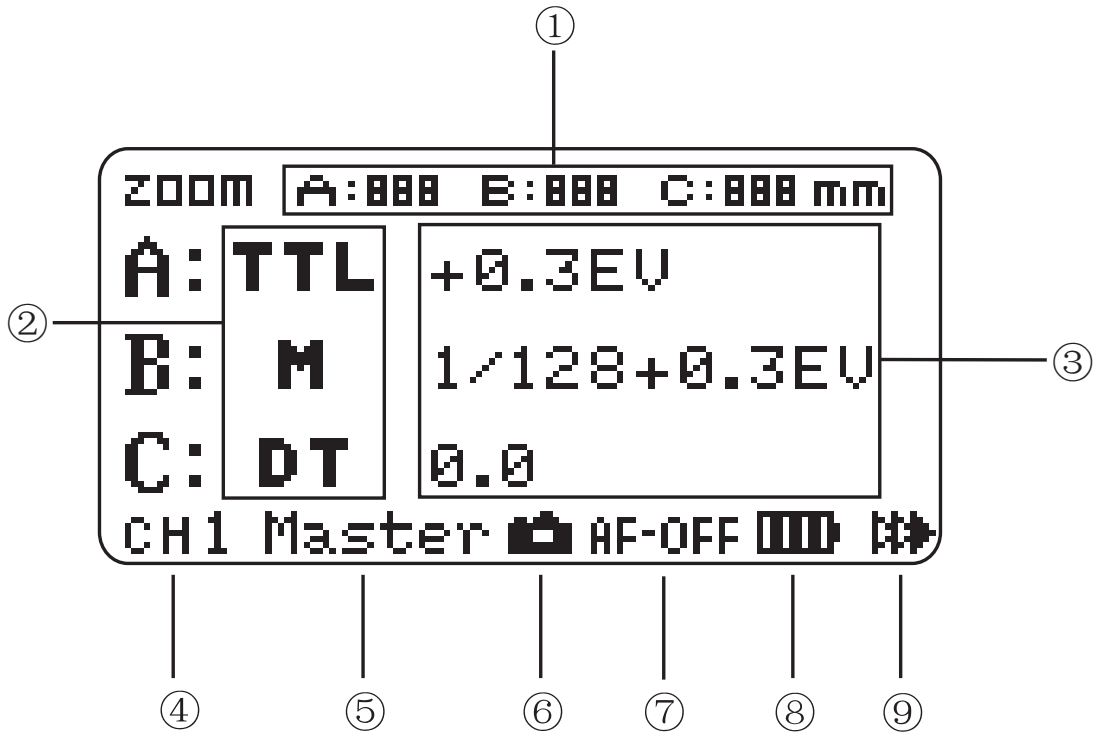
①Hot Shoe ②Test Flash/Shutter Button
③AF Assist Beam Emitter ④PC sync port /
⑤Hot Foot USB Interface

Parts Identification



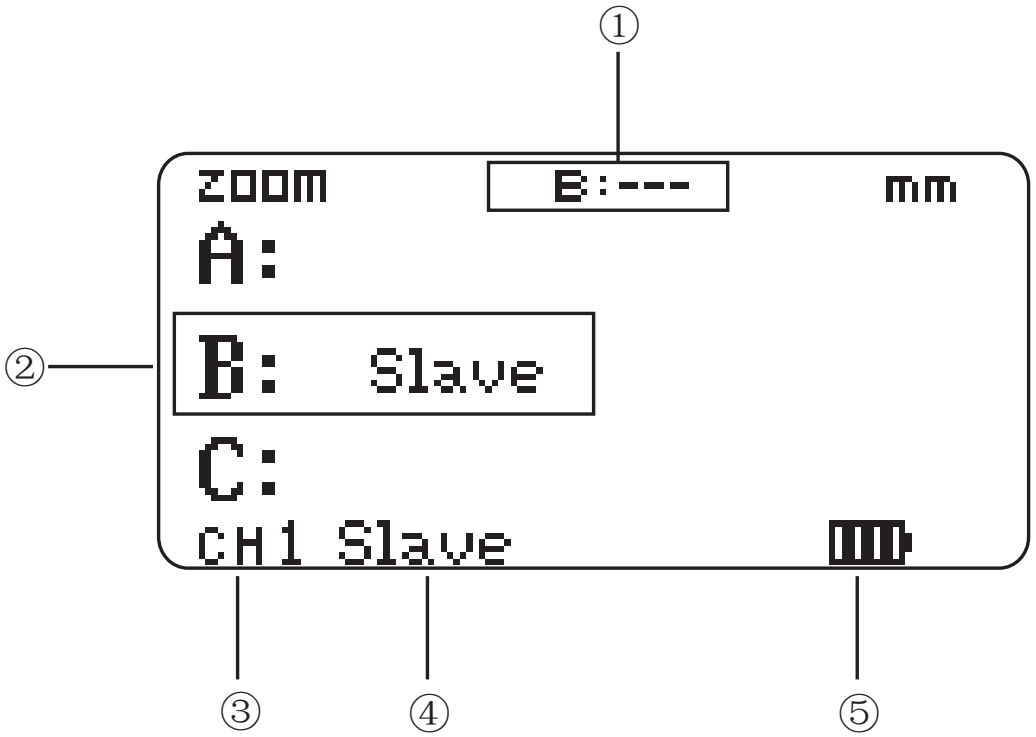
①Status Indicator ②Power Switch ③Increase Button
④Battery Cover ⑤Decrease Button ⑥Confirm 'OK' Button
⑦Zoom Button ⑧Channel/Group Button ⑨Mode Button
⑩Locking Ring

Transmitter Display



①Focal Length Area
②Group Function Mode Display Area
③Exposure Compensation/
Manual Output Display/Delay Time Area
④Channel Icon ⑤Transceiver Mode
⑥Camera Communication
⑦AF Assist Beam Emitter State
⑧Power Icon ⑨Sync Mode Display Area

Receiver Display



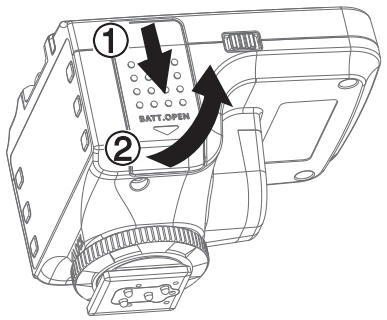
①Focal Length Area
②Group Area
③Channel Icon
④Transceiver mode ⑤Power Icon

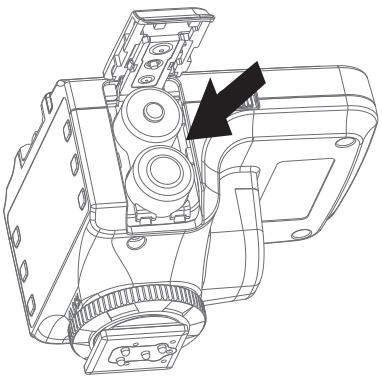
Basic Operation

Inserting the batteries

❶ Open the cover.

Slide it down as shown by the arrow to open.



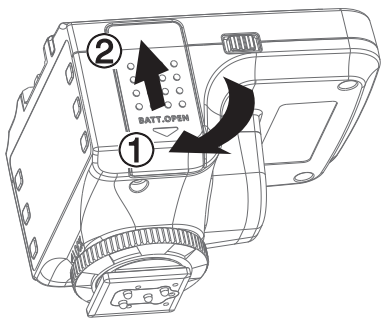


❷ Installing the batteries.

Make sure the + and - battery contacts are properly oriented as shown in the battery compartment.

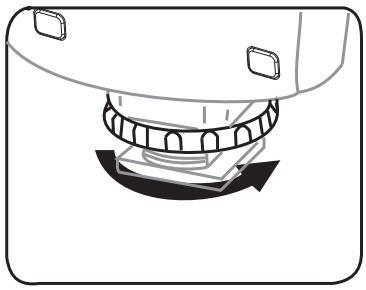
❸ Closing the cover.

Close the battery compartment cover and slide it up as shown by the arrow.



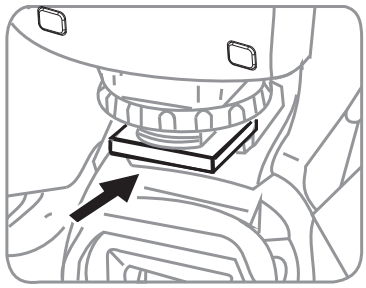
Basic Operation

Attaching to the camera



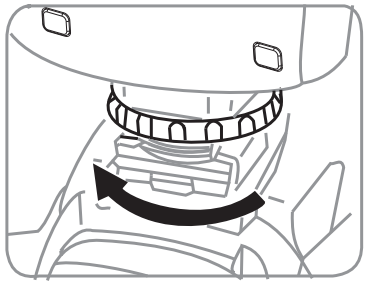
❶ Preparing to attach the transceiver.

Loosen the locking ring by turning it in the direction of the arrow.



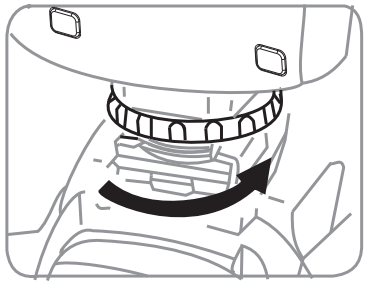
❷ Attaching the transceiver.

Mount the transceiver into the camera's hot shoe by sliding it in all the way.



❸ Securing the transceiver.

Turn the locking ring in the direction of the arrow to tighten.



❹ Detaching the transceiver.

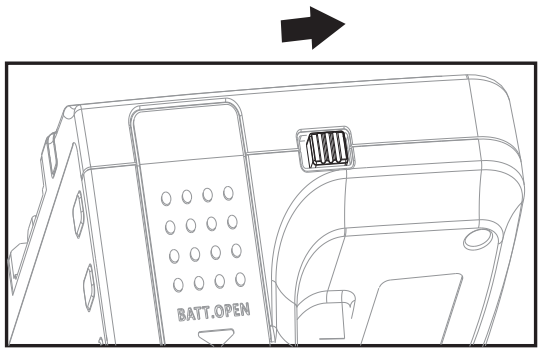
Loosen the locking ring. Then remove the transceiver from the camera's hot shoe by sliding it out.

Basic Operation

Turning on the power

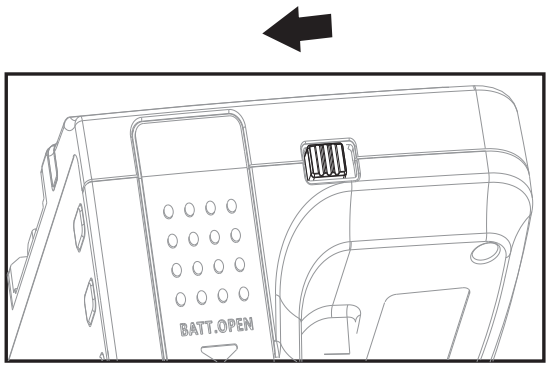
❶ Turn on the power.

Turn the power switch to <ON>.



❷ Turn off the power.

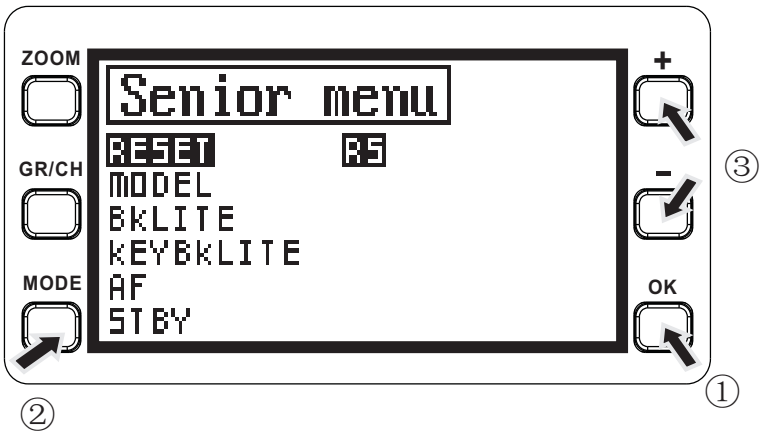
Turn the power swith to <OFF>.



- In order to save power, the Transmitter will enter a sleep state after a specified time (this time can be adjusted as a custom setting). The LCD will not display. Press the shutter button halfway or press the test button to wake it up.
- As a Receiver it will not enter a sleep state.

Custom Setting

You can customize the transmitter features to suit your shooting perferences with custom settings by using the Senior menu.



RESET	Reset custom setting
RS	RS: Reset
MODEL	Model
V760/200LS 331EX V500/600 OTHERS	Optimized for 200SL Optimized for 331EX Optimized for V500&V600 Optimized for Nikon flash and other manufacturers flashes
BkLITE	LCD backlight
OFF ON	**OFF:Turn off** ON:Turn on
KEYBkLITE	Button Backlight
OFF ON	**OFF:Turn off** ON:Turn on
AF	AF-assist illuminator
OFF ON	**OFF:Turn off** ON:Turn on
STBY	Standby function
15MIN 30MIN 45MIN OFF	**15MIN: 15minutes** 30MIN: 30minutes 45MIN: 45minutes OFF: Function canceled

*Standby controls the length of time before the ST1 enters sleep mode.

LCDLITE	LCD contrast
5 4 3 2 1 0	5 represents the maximum contrast; 0 represents the minimum contrast
VER	Version of firmware
	Version

❶ Press the OK button for approx. 2 seconds to display the custom setting menu.

❷ Press the MODE button to highlight a setting you wish to adjust.

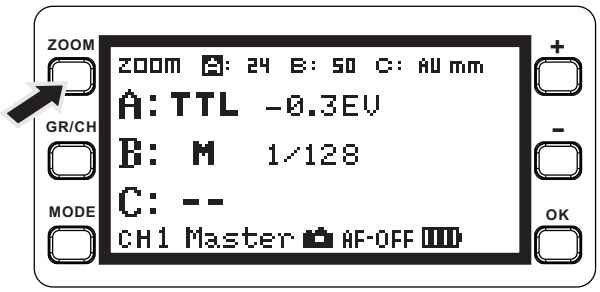
- Press the + button to access a particular setting.
- Use the + and - buttons to adjust a setting.

❸ Press the OK button to lock-in the new setting and return to the other custom options.

Finally, press the OK button for approx . 2 seconds to exit the Custom settings menu.

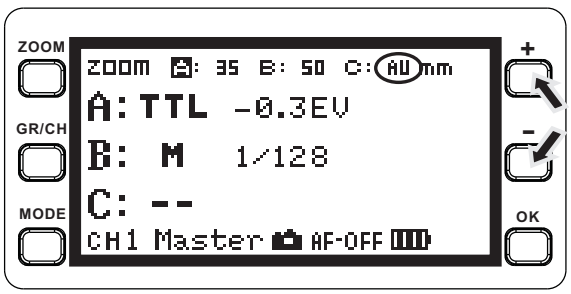
Transmitter operation

Focal length setting

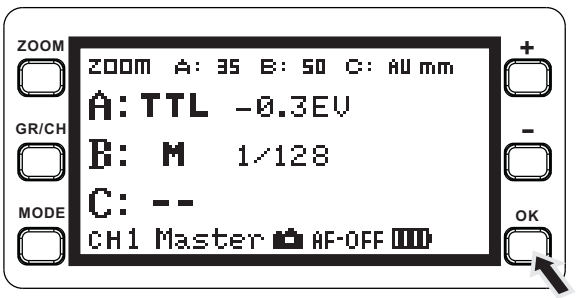


Press ZOOM button to highlight zoom A.

Continue pressing the button to highlight the B or C group and control the zoom setting for that group.



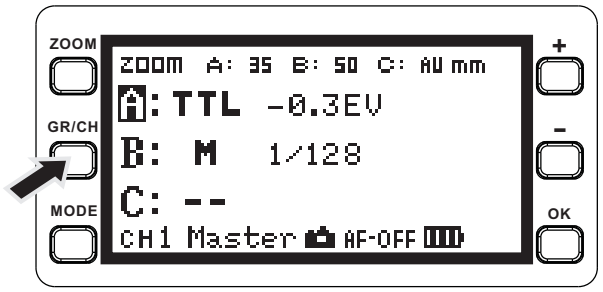
Press + button to manually increase the zoom setting.
Press - button to manually decrease the zoom setting.
Choose "AU" to automatically match the zoom setting of the lens.



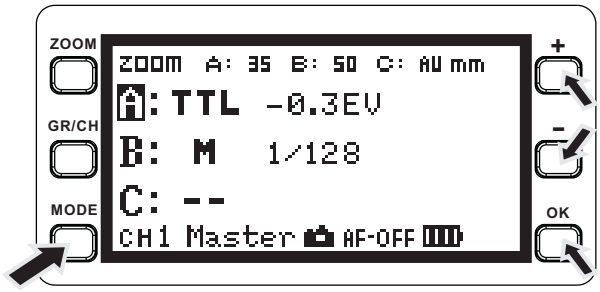
Press OK button to confirm.

Transmitter operation

Group and mode settings



Press GR/CH button to highlight group A.

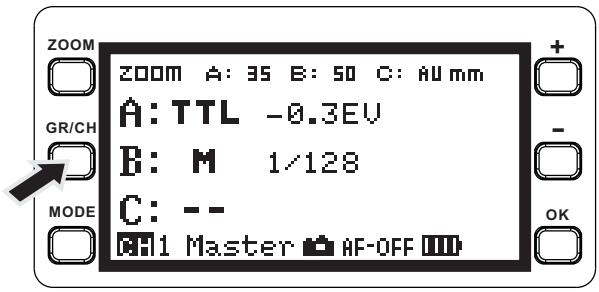


Press MODE button to choose a flash mode for the group.
Press the + or - button to choose a compensation value for the group.
Press the OK button to confirm.

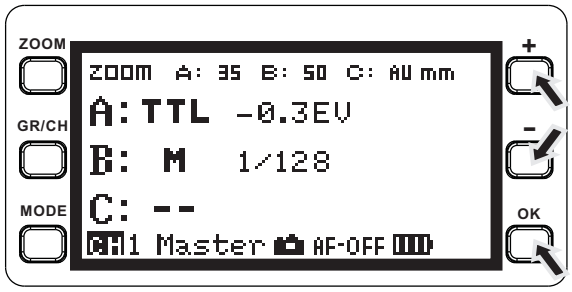
- TTL mode: The flash exposure compensation (FEC) value has a range of -3 to +3 EV.
- M manual mode: The FEC value has a range of 1/128 - 1/1 in 1/3 EV steps.
- DT mode: this mode allows the use of high speed sync. even when a flash does not have this feature. Set the flash to manual in this case. The camera must support high speed sync. for DT mode to properly function.

Transmitter operation

Transmitter channel setting



Press the GR/CH button for 2 sec. to highlight channel.



Press the + or - button to choose a channel.
Press the OK button to confirm.

① If another photographer is using a similar type of wireless flash system close by, your receivers may accidentally fire in sync with that photographer's transmitter. Use a different channel number to avoid this.
② Be sure to set the transmitter and receivers to the same channel.

Receiver operation

Group setting

Press the MODE button for 2 sec. to switch to receiver mode.

Press the GR/CH button to highlight and select the desired group.

Press the OK button to confirm.

Receiver operation

Receiver channel setting

Press the MODE button for 2 sec. to choose receiver mode if you have not done so already..

Press the GR/CH button for 2 sec. to highlight channel.

Press the + or - button to choose a channel.
Press the OK button to confirm and lock in the channel.

Flash triggering

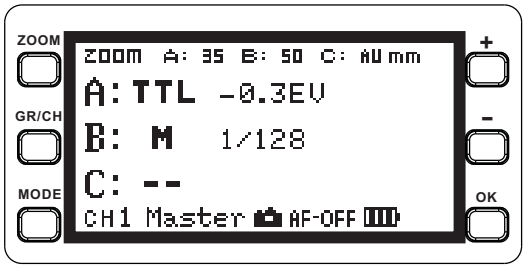
Before flash triggering, make sure the transmitter and receiver are on the same channel, and a flash is placed on each receiver's hotshoe.

Testing

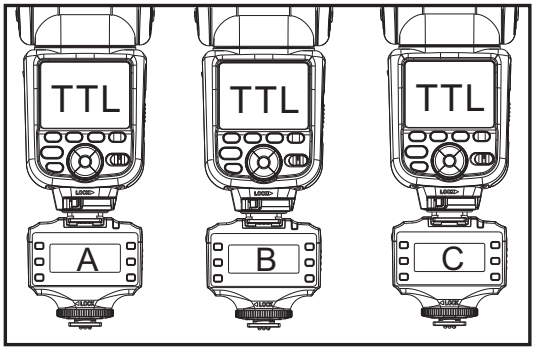
Turn on the transmitter, receivers, and flashes. Press the transmitter's test button. All groups which have been selected will flash at once. Receivers set to a different channel will not flash.

Parameter control triggering mode

In this mode, the flash on the receiver must be set to TTL mode! The mode and output of the receiver flash(s) will be controlled from the transmitter. As you change the mode on the transmitter, each receiver in that group will display the newly chosen mode after one shot is fired.



Transmitter



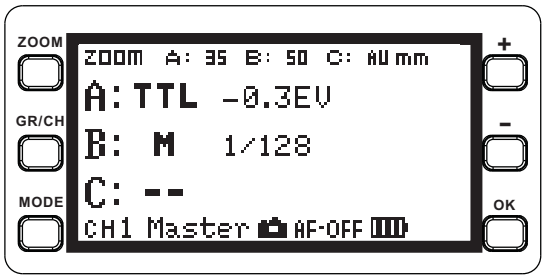
Receiver

* Please Use **Receiver's** custom menu "Model" option to choose the speedlight model which is mounted on hot shoe.

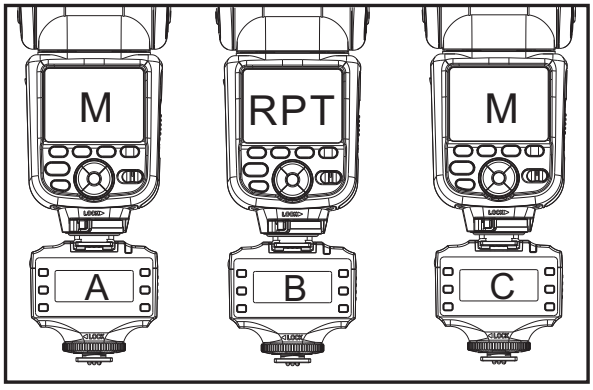
Flash triggering

Non-parameter control triggering mode

Set the speedlight on the receiver to Manual or RPT mode. In this case the speedlight will work according to its own mode and settings. The transmitter will not control the flash mode or exposure compensation. The transmitter will, however, fire the flash.



Transmitter

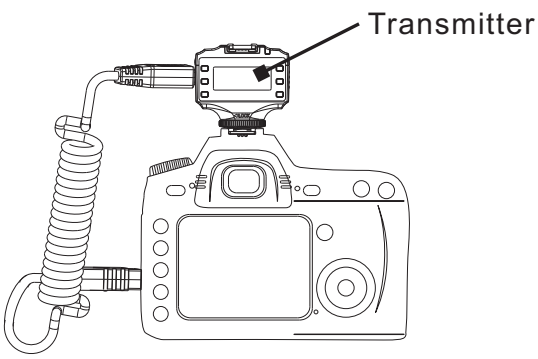


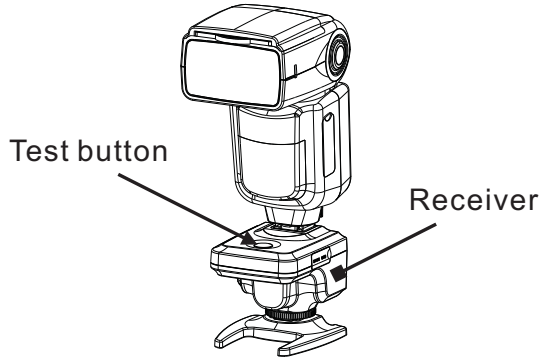
Receiver

Shutter release function

The ST1 can also be used as a wireless, remote shutter release for your camera.

①. Install a transceiver on the camera's hot shoe, and use a shutter connecting cable to connect the transceiver's PC sync port to the camera.



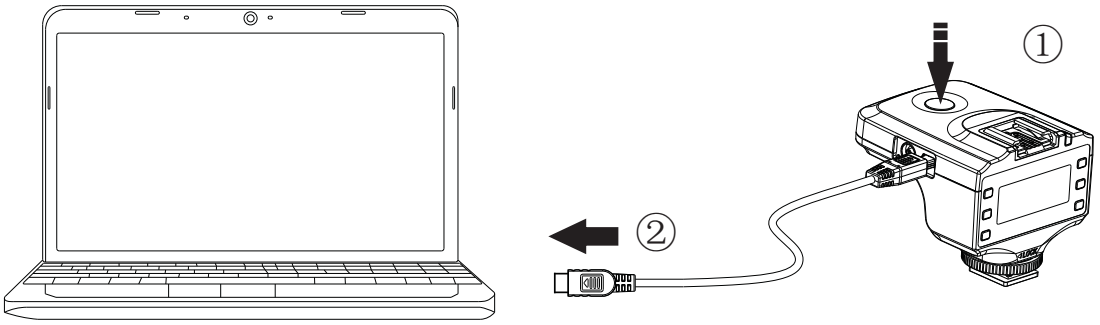


②. Press the test button of another ST1 transceiver to focus and shoot. If a speedlight is installed on the transceiver it will fire in sync.

● Shutter release cables are sold seperately.

Firmware Updates

The ST1 has a USB service port located next to its PC sync port.
While the ST1 is designed to work with cameras presently available in the market, it may require firmware updates as new cameras and speedlights are released, or as cameras are updated with new firmware. Refer to www.promaster.com for the most recent firmware.



To update the ST1's firmware:

① **Turn off the power**. Hold down the test button.
② Connect to a computer using a USB-MINI cable.
③ Use the PC terminal software to update the firmware.

- Before updating the firmware, remember to turn off the power.
- USB-MINI cable sold seperately.

Troubleshooting Guide

Power does not turn on.

- Replace the batteries if they are low or out of power.
- Check that the batteries are installed in the correct orientation.

The slave speedlight does not fire.

- Make sure all tranceivers are powered on and the speedlight is on and in a ready state.
- Check that the transmitter and receiver are set to the same channels and groups.
- Check the electrical contacts of the transceiver and camera and all speedlights. Reposition them or clean the contacts if necessary.

Troubleshooting Guide

The picture is underexposed or overexposed.

- Be cautious of highly reflective objects (glass window, etc.) which can trick the camera's exposure meter.
- If the subject is very dark or very bright, you may need to use flash exposure compansation.
- When high-speed sync is set, the effective flash range is shorter. Position the slave unit closer to the subject.
- When using autoflash shooting with three firing groups A, B and C, do not fire with group C pointed toward the main subject.
- Overexposure may occur when TTL and manual flashs are used at the same time. In this case a manual flash makes a suitable backlight and should be adjusted properly.
- Be sure the proper flash model is selected in the Custom menu (Senior menu).

The picture is blurred.

- When the camera's shooting mode is set to <AV> and the scene is dark, slow sync may be enabled automatically (the shutter speed becomes slower). Use a tripod, or set the shooting mode to <P> or fully automatic mode.

Specifications

System type:Digital FSK 2.4GHz wireless controller
Range: 100M
Channels: 30 channels and 1 auto channel
Flash modes:I-TTL, Manual , DT
Sync modes: front-curtain sync, rear-curtain sync , FP sync
Groups: 3 Groups(A/B/C)
Shutter: Supports camera control camera single shooting
Maximum sync speed: 1/8000S
AF assist beam emitter: supported
Speedlight auto zoom: supported
USB firmware upgrade: supported
Battery type: AA×2
Stand-by time: 120h
Dimensions: 77.8mm(L)×65mm(W)×62mm(H)
Weight: 98g（without batteries)

● Design and specifications subject to change without notice.

One Year Unconditional Warranty

If for any reason, this ProMaster product fails within ONE YEAR of the date of purchase, return this product to your ProMaster dealer and it will be exchanged for you at no charge. ProMaster products are guaranteed for ONE FULL YEAR against defects in workmanship and materials. If at any time after one year, your ProMaster product fails under normal use, we invite you to return it to ProMaster for evaluation.

WWW.PROMASTER.COM | FAIRFIELD CT 06825

FOR

NIKON

Made in China

Code 4660