Canon

Speedlite Transmitter
ST-E2

English

Thank you for purchasing a Canon product.

The Canon Speedlite Transmitter ST-E2 is a wireless transmitter for controlling up to two flash slave groups consisting of Canon Speedlites compatible with wireless flash shooting.

- **Also refer to the instruction manual of your camera and Speedlite.**
  Before using the ST-E2, read this instruction manual and the instruction manuals for your camera and Speedlite. Familiarize yourself with the operation of each before using the ST-E2.

- **It is automatically compatible with the camera's flash metering mode (E-TTL II, E-TTL, or TTL).**
  The camera controls the ST-E2 automatically in the following flash metering modes:
  1. E-TTL II autoflash (evaluative flash metering with preflash reading/lens distance information)
  2. E-TTL autoflash (evaluative flash metering with preflash reading)
  3. TTL autoflash (off-the-film metering for real-time flash metering)

Regarding the camera's available flash metering modes, refer to the "External Speedlite" specification in the "Specifications" of your camera's instruction manual.

The camera instruction manual's chapter on flash photography will refer to cameras having **1 and 2 above as a Type-A camera** (compatible with E-TTL II or E-TTL). And cameras having **3** (compatible with only with TTL) **are called Type-B cameras**.

* **This instruction manual assumes that you are using the ST-E2 with a Type-A camera.**
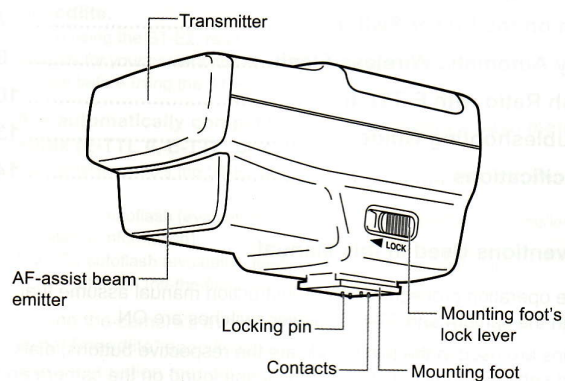 If the ST-E2 is used with a Type-B camera, only manual flash shooting and stroboscopic flash will be possible.

Contents

Conventions Used in this Manual

- The operation procedures in this instruction manual assume that both the camera and ST-E2's power switches are ON.
- Icons are used in the text to indicate the respective buttons, dials, and settings. They match the same icons found on the camera and ST-E2.
- Reference page numbers are indicated by (p.**).
- This instruction manual uses the following alert symbols:
  - 🚫 : The Caution symbol indicates a warning to prevent shooting problems.
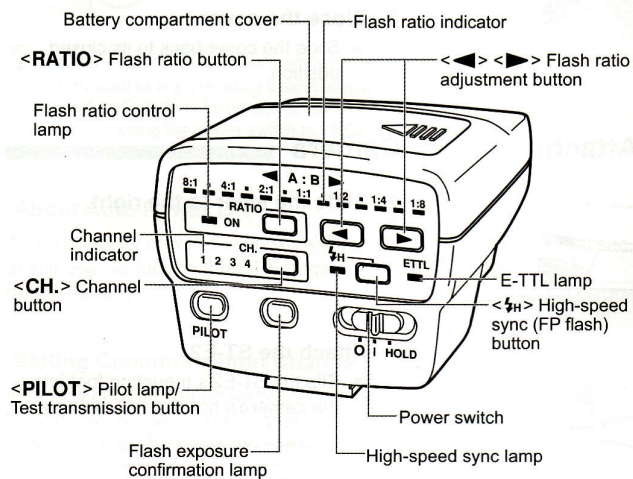 - 📝 : The Note symbol gives supplemental information.

Transmitter

AF-assist beam
emitter

Locking pin

Contacts

Mounting foot's
lock lever

Mounting foot

LOCK
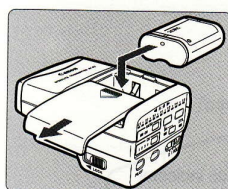
About the AF-Assist Beam

Under low-light or low-contrast conditions, the built-in AF-assist beam
will be emitted automatically to make it eaasier to autofocus. The ST-
E2's AF-assist beam is compatible with the AF points of almost all EOS
cameras. The AF-assist beam is compatible with 28mm and longer
lenses. The effective range is shown below.

Position	Effective Range (m / ft)
Center	0.6 - 10 / 2 - 32.8
Periphery	0.6 - 5 / 2 - 16.4

4

Battery compartment cover

Flash ratio indicator

<**RATIO**> Flash ratio button

< ◄ > < ► > Flash ratio
adjustment button

Flash ratio control
lamp

Channel
indicator

<**CH.**> Channel
button

8:1 4:1 2:1 ◄ A : B ► 1:1 1:2 1:4 1:8
RATIO
ON
CH.
1 2 3 4

<**PILOT**> Pilot lamp/
Test transmission button

PILOT

Flash exposure
confirmation lamp

O | HOLD

E-TTL lamp

< ⚡H > High-speed
sync (FP flash)
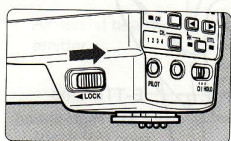button

Power switch

High-speed sync lamp

ETTL
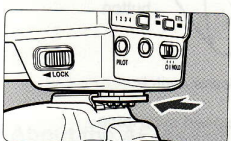
5

Installing the Battery

Use one lithium 2CR5 battery.

1 Remove the cover.
- Slide the battery compartment cover as shown by the arrow and remove.

2 Insert the battery.
- Insert the battery as shown.

3 Close the cover.
- Slide the cover back to its closed position.

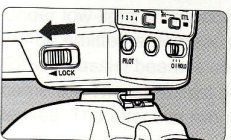## Attaching to the Camera

1 Slide the lever to the right.

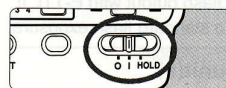**2 Attach the ST-E2.**
- Slip the ST-E2's mounting foot into the camera's hot shoe all the way.

3 Secure the ST-E2.
- Slide the mounting foot's lock lever to the left. The locking pin will then protrude to secure the ST-E2 to the camera.
- To detach the ST-E2, slide the mounting foot's lock lever to the right and detach.

Turn on the Power Switch

1 Turn on the power switch.
- Set the power switch to <**I**>.
- ▶ The <**ETTL**> lamp will light.
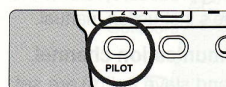
2 Check that the <PILOT> lamp is on.
- When the <**PILOT**> lamp is on, it is ready for wireless flash control.

<**HOLD**> retains the settings made at the <**I**> position and the ST-E2 will not respond to any operation except test transmissions. This prevents the current settings from being altered accidentally. After you set the flash settings, setting the power switch to <**HOLD**> is recommended.

About Auto Power Off

To save battery power, the power will turn off automatically after 90 sec. of idle use. To turn on the ST-E2 again, press the camera's shutter button halfway.

Setting Communication Channel

If there is another Canon wireless flash system nearby, you can change the channel No. to prevent signal confusion. Both the ST-E2 and slave units (p.8) must be set to the same channel No.
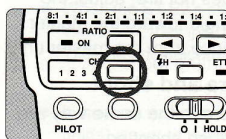
Set the channel No.
- Press the <**CH.**> button to set the desired channel.
- ▶ The channel number changes each time you press the button.

Fully Automatic Wireless Flash

This method has all the Speedlites fire at the same flash output with E-TTL II autoflash controlling the total flash output to obtain a standard flash exposure.

1 Set the slave unit(s).
- As for the setting procedure, refer to the slave Speedlite's instruction manual.
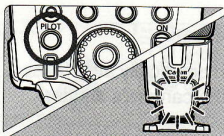
2 Check the communication channel.
- If the ST-E2 and slave unit(s) are set to a different channel, set them all to the same channel (p.7).

3 Position the camera and Speedlites as desired.
- Position the Speedlites within the range shown on the next page.

4 Check that the flash is ready.
- When the slave unit(s) is ready to fire, the AF-assist beam will blink for 1 sec.

5 Check that the wireless flash system works.
- Press the ST-E2's <**PILOT**> (test transmission) button.
- ▶ The slave unit will fire.
- If the flash does not fire, adjust the slave unit's angle toward the master unit and distance from the master unit.
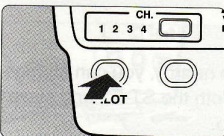
6 Set the camera and shoot.
- Set the camera in the same way as with normal flash shooting.
- ▶ If a standard flash exposure was obtained, the flash exposure confirmation lamp will light for about 3 sec.

Indoors — 15m (49.2ft.)
Outdoors — 10m (32.8ft.)
80°
8m (26.2ft.)   12m (39.4ft.)
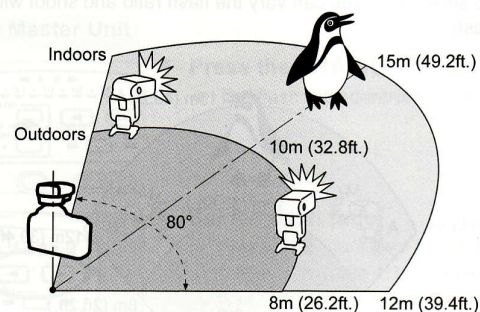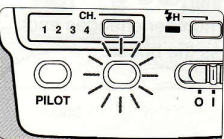
- Use the bounce feature to swing the slave unit's flash body so that the wireless sensor faces the master unit.
- Use the mini stands (equipped with tripod socket) provided with the Speedlites to prop them up as slave units.
- Indoors, the wireless signal may also bounce off the wall so there is more leeway in positioning the slave unit(s).
- After positioning the slave unit(s), be sure to test the wireless operation before shooting.
- Do not place any obstacles between the ST-E2 and slave unit(s). Obstacles can block the transmission of wireless signals.

- Make sure the ST-E2's flash ratio control lamp is off. If the flash ratio control lamp is on, the Speedlite may not fire or a standard exposure may not be attained.
- When the ST-E2's pilot lamp lights and the < ⚡ > icon lights in the camera viewfinder, they indicate that the ST-E2 is ready for remote transmission. They do not indicate that the slave is ready (recharged).

- If the flash exposure confirmation lamp did not light, move the slave unit(s) closer to the subject and shoot again. With a digital camera, you can also increase the camera's ISO speed.
- If auto power off turns off the slave unit, press the ST-E2's <**PILOT**> button to send a test transmission. This will turn on the slave unit.
- Test transmission is not possible while the camera's ⏱4 and ⏱6 timer is in effect.

Flash Ratio with E-TTL II

With two slave units, you can vary the flash ratio and shoot with E-TTL II autoflash.

15m (49.2ft.)

10m (32.8ft.)

12m (39.4ft.)

Indoors   A
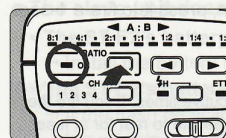
Outdoors   B

80°   8m (26.2ft.)
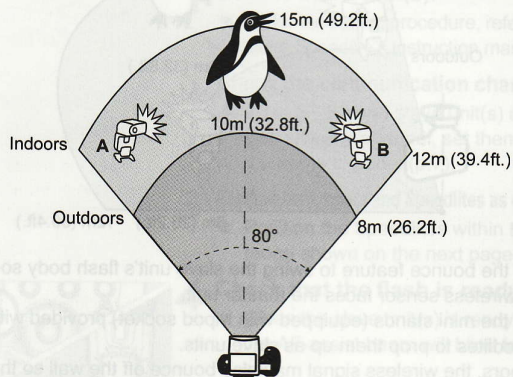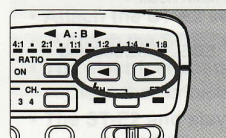
Set the Slave Unit

To put the two slave units into two slave groups, set a different slave ID for both slave units. To set the slave unit's slave ID, see the Speedlite's instruction manual. Set the left slave unit's ID to A, and the right slave unit's ID to B.

❗ If you set the slave ID to C, the slave unit will not fire.

---

1 Press the <RATIO> button.
- The flash ratio control lamp will light.

2 Set the flash ratio.
- Press <◄> or <►> to set the flash ratio within 1:8 to 1:1 or within 1:1 to 8:1.

3 Set the camera and shoot.
- Set the camera in the same way as with normal flash shooting.

❗
- If the power switch is set to <HOLD>, the flash ratio cannot be set.
- With the EOS ELAN II/ELAN II E/50/50E, EOS REBEL G/500N, EOS IX, EOS IX Lite/IX7, EOS REBEL 2000/300, and EOS REBEL XS N/REBEL G II/3000N/66, the flash ratio cannot be set with multiple Speedlites.

- The flash ratio range of 8:1 - 1:1 - 1:8 is equivalent to 3:1 - 1:1 - 1:3 in stops (1/2-stop increments).

◄ A : B ►

8:1 ■ 4:1 ■ 2:1 ■ 1:1 ■ 1:2 ■ 1:4 ■ 1:8

(5.6:1) (2.8:1) (1.4:1) (1:1.4) (1:2.8) (1:5.6)

Modeling Flash

If the camera has a depth-of-field preview button, press it to fire a 1-sec. burst of flashes. This is the modeling flash.
You can check the lighting and shadow effects.

❗ Do not fire the modeling flash more than 10 consecutive times. If you fire the modeling flash 10 consecutive times, allow the Speedlite to rest for at least 10 min. to avoid overheating and deteriorating the flash head.
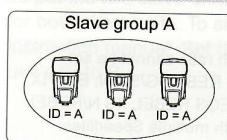
📝 The modeling flash cannot be fired with the EOS REBEL 2000/300 and Type-B cameras (p.2).

High-Speed Sync
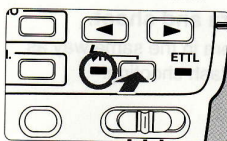
Press the <⚡H> button to turn on the <⚡H> lamp. High-speed sync will then be enabled with the wireless slave units.

About Slave Group Control

Slave group A
ID = A   ID = A   ID = A

For example, if you have the slave ID set to <**A**> for three Speedlites, all three Speedlites will be controlled as if they were one Speedlite in slave group A.

Troubleshooting Guide

If there is a problem, refer to this Troubleshooting Guide.

● **The slave unit does not fire.**
  • **The ST-E2's battery is installed in the wrong orientation.**
    → Install the battery in the correct orientation. (p.6)
  • **The ST-E2's battery is exhausted.**
    → If the flash recycling time takes 30 sec. or longer until the pilot lamp lights, replace the battery. (p.6)
  • **Attach the ST-E2 securely to the camera.**
    → Attach the ST-E2's mounting foot securely to the camera. (p.6)
  • **The electrical contacts of the ST-E2 and camera are dirty.**
    → Clean the contacts. (p.4)
  • **The ST-E2 and slave unit are not set to the same channel.**
    → Set the ST-E2 and slave unit to the same channel. (p.7, 8)
  • **The slave unit(s) is not positioned properly.**
    → Position the slave unit(s) within the ST-E2's wireless transmission range. (p.9)
    → Point the slave unit(s)'s wireless sensor toward the master unit. (p.9)
  • **The slave ID has been set to C for flash ratio shooting.**
    → Set the slave ID to A or B. (p.10)

● **The power turns off by itself.**
  • **After 90 sec. of idle operation, auto power off took effect.**
    → Press the shutter button halfway or press the test transmission button. (p.7)

● **The flash exposure tends to be underexposed.**
  • **The flash ratio originally set for E-TTL II autoflash with multiple slave units was applied to normal flash shooting.**
    → Turn off the flash ratio control lamp before shooting normal flash pictures. (p.9)
  • **The subject was beyond the range of the flash.**
    → Move the slave unit(s) closer to the subject. (p.9)

Specifications

• Type
Type:	On-camera, speedlite transmitter
Compatible cameras:	Type-A EOS cameras (E-TTL II/E-TTL autoflash)
	Type-B EOS cameras (TTL autoflash)

• Wireless Flash
Transmission method:	Optical pulse
Channels:	4
Transmission range (Approx.):	Indoors: 12 - 15 m / 39.4 - 49.2 ft.,
	Outdoors: 8 - 10 m / 26.2 - 32.8 ft.
Transmission angle (Approx.):	±40° horizontal, ±30° vertical
Controllable slave groups:	2 (A, B)
Flash ratio control:	1:8 - 1:1 - 8:1 in 1/2-stop increments
Modeling flash:	Enabled with camera's depth-of-field preview button
High-speed sync:	Provided

• AF-Assist Beam
Linkable AF points:	1 - 45 AF points (28mm or longer focal length)
Effective range (Approx.):	At center: 0.6 - 10 m / 2.0 - 32.8 ft.,
	Periphery: 0.6 - 5 m / 2.0 - 16.4 ft.

• Power Source
Internal power:	One 2CR5 lithium battery
Battery life:	Approx. 1500 transmissions
Power saving:	Power off after 90 sec. of idle operation

• Dimensions (W x H x D):
62 x 51 x 80 mm / 2.4 x 2.0 x 3.1 in.

• Weight
Approx. 100 g / 3.5 oz. (excluding battery)

● All the specifications above are based on Canon's testing stand.
● The camera's specifications and external appearance are subject to change without notice.

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.

Do not make any changes or modifications to the equipment unless otherwise specified in the instructions. If such changes or modifications should be made, you could be required to stop operation of the equipment.

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.
• Consult the dealer or an experienced radio/TV technician for help.

This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

РСТ
АЯ46