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QuickGuide to Speedlite Transmitter ST-E3-RT Setup

INTRODUCTION

The EOS Speedlite Transmitter ST-E3-RT allows you to set up multiple Speedlite 600EX-RT flashes as "slaves", which the ST-E3-RT will control and synchronize as the "master" unit. The ST-E3-RT is exclusively designed for radio-based wireless flash control and *cannot* be used for traditional "optical" wireless flash control.

Your wireless radio setup options include:

- Automatic E-TTL with equal output from all units
- Automatic E-TTL with unequal (ratio) output between firing groups
- M – Manually-set power output and exposure
- GR – Group mode — Different groups can have different flash modes. You can set up to five groups.

Only a Speedlite 600EX-RT or ST-E3-RT attached to a camera can be a master unit. You can, however, set up multiple cameras, each with a master unit attached. The slave lighting setup will remain the same.

COMPATIBILITY

EOS cameras released since 2012 (such as EOS-1D X, EOS 5D Mark III, EOS 6D, and EOS Rebel T4i and subsequent models) – full compatibility.
EOS cameras released before 2012:

- Flash sync speed must be one stop slower than the maximum
- No high-speed sync shooting
- No group (GR) flash mode

INITIAL WIRELESS RADIO FLASH SETUP

You must first set the master and slaves to matching transmission channels and wireless radio IDs. Once you have done so, any settings you make to the master will automatically be transmitted to the slaves. This eliminates the need to adjust the slaves individually and manually.

1. To set the master unit: If "Linked Shot" appears in the upper-left corner of the ST-E3-RT's LCD panel, press and hold down the Wireless Flash Button until the RT icon and <MASTER> appear. ("Linked Shot" will disappear.)
2. To set the slave unit(s): Press and hold down the Wireless Flash Button until the RT icon and <SLAVE> appear.
3. Set the master and slave units to the same transmission channel, otherwise the slave(s) will not fire. Use the same procedure below for master and slave:
   a. Press Fn Button 4 until <MENU 3> displays.
   b. Press the channel button (Fn Button 1). The channel number will highlight immediately below RT icon. Turn the selector dial to the channel number of your choice (1 to 15) or AUTO. If you set AUTO, the ST-E3-RT will automatically set the channel that has the best reception.
4. Set the master and slave units to the same four-digit wireless radio ID:
   a. Press Fn Button 4 until <MENU 3> displays.
   b. Press Fn Button 2 to highlight <ID>.
   c. Turn the Select Dial to the digit you want to set. There are four digits.
   d. Press the Select/Set Button to activate the digit setting.
   e. Turn the Select Dial to select any digit from 0 to 9, the press the Select/Set Button to register your setting.
   f. Repeat steps b – e to enter a four-digit number. You can enter any number from 0000 – 9999. The master and slave units must be set to same ID number. The number you set must be different from that of any other 600EX-RT shooter in the vicinity.
   g. Press Fn Button 4 to return the flash to shoot-ready mode.
   h. The <LINK> lamp should light green to indicate a working link between the master and slave, if both are turned on.
      - If you are using more than one master, the color of the <LINK> lamp will vary depending on the order in which you turn the masters on. The first/main master is green. Subsequent/sub-masters are orange.
      - If the LINK lamp is continuously red, check to make sure the master and slave are set to the same channel and ID, and that they are within working distance range.
      - If the LINK lamp is blinking red, either your setup totals more than 16 units or you may need to turn the power off and on again.

E-TTL AUTOMATIC FLASH — ALL UNITS AT EQUAL POWER

In this mode all flash units will fire at the same output to produce a standard flash exposure, which you can adjust with flash exposure compensation (FEC) on your camera, as necessary. This mode is best when you want even lighting throughout the scene. E-TTL also works well when subject-to-flash distances may change during shooting.

1. Perform the initial flash setup described above.
2. Confirm that master and slave are set to the same channel and ID.
3. Set the slave unit to firing group A, B, or C. You can assign multiple slave units to the same group. The slave(s) will not fire if set to group D or E.
4. Position the camera and flash within the correct operating range (30 meters/98 feet).
5. Confirm that the <LINK> lights on the master and slaves are lit and green and that the AF-assist beam emitter on the slave is blinking at 1-second intervals. Also confirm that the red pilot lamp (ready-light) on the ST-E3-RT is illuminated.
6. Press the <MODE> button on the ST-E3-RT transmitter to set the master to E-TTL.
7. Set the ST-E3-RT for non-ratio (ALL) flash control: Press Fn Button 4 until "Menu 2" appears above it. Press Fn Button 2 <Ratio> until "ALL" appears on the left side of the LCD panel.
8. Press the test flash button on the master flash to check operation. If the slave does not fire, make sure it is within the correct range.
9. Take the picture. The flash exposure confirmation lamp will light for 3 seconds to confirm standard flash exposure.
10. The Speedlite Transmitter's flash-ready light will illuminate when all flash units have recycled. You can enable C.Fn-20 on the ST-E3-RT Transmitter to also trigger an audible beep when the slaves have recycled.

E-TTL AUTO FLASH WITH RATIO CONTROL

In this mode you can divide the slave units into different firing groups (A:B or A:B C) and control the flash ratio

(relative output) between them. You can also adjust the overall brightness with flash exposure compensation (FEC) on your camera, as necesssary. This mode is best for lighting setups where the flash-to-subject distance may change from one shot to the next and you wish to maintain consistent output ratios between flash units.

1. Perform the initial flash setup described above (Steps 1 thru 6)
2. To set the group ID on each slave unit:
   a. Press Fn Button 4 until <Menu 1> appears on the slave unit's LCD panel
   b. Press Fn Button 3 on the slave unit ("GR" label above button).
   c. Set at least one slave unit to group <A> and the other to <B>.
3. To set the ratio on the ST-E3-RT:
   a. Press Fn Button 4 to display <Menu 2>.
   b. Press Fn Button 2 (<RATIO>), then set the ratio to <A:B> or <A:B C>. Note: A:B requires a minimum of two units. A:B C requires a minimum of three. In either case, you can adjust the power ratio only between groups A and B. Group C is independent of A and B and is best used for lighting the background or for accent lighting rather than illuminating your main subject.
   c. Press Fn Button 3 (<GR>).
   d. Press Fn Button 3 again, when <A:B ±> is displayed.
   e. Turn the Select Dial to set the flash ratio, then press the Select/Set Button.
   f. If using A:B C ratio, press Fn Button 3 (<GR>) once, and turn the Select Dial to highlight Group C. Press Fn Button 3 (<C±>) to highlight Group C's exposure compensation scale, and turn the Select Dial to adjust its output relative to combined illumination of groups A & B.
   g. Press Fn Button 4 to return to shoot-ready mode.

All flash ratios are expressed as A relative to B (or vice-versa) and as relative amounts of output. For example, "1:1" means firing groups A and B will produce equal output, "2:1" means A will produce twice as much output (one stop more) than B, "1:2" means B will produce twice as much output as A, and "8:1" means A will produce eight times (3 stops) more output than B.

E-TTL GENERAL NOTES

1. Flash coverage is set to 24mm by default when the Speedlite 600EX-RT is set for wireless operation. You can manually set the flash head to a more narrow angle of coverage if you wish.
2. Press the depth-of-field preview button on the camera if you want to fire the modeling flash.
3. The master unit's default time until auto power-off is 5 minutes. If a slave powers-off, press the ST-E3-RT's test flash button to turn the slave back on. You can use C.Fn-10 on the slave(s) to conserve battery power. This will reduce the auto power off time from a 60-minutes after the last shot taken to 10 minutes.
4. The following flash settings are available on the ST-E3-RT in E-TTL mode:
   - Flash exposure compensation
   - Flash exposure bracketing
   - Flash exposure lock
   - High-speed sync
   - Manual flash
   - Stroboscopic flash

MANUAL WIRELESS FLASH

In this mode you set each slave unit to a fixed output and set the camera exposure manually. You can set each unit to the same or a different output. This mode is ideal for lighting setups where the flash-to-subject distance is fixed and you want your exposure setting to be consistent from one shot to the next—for example, when you are photographing subjects whose color and reflectivity are variable.

1. Perform the initial flash setup described above.
2. On the Speedlite Transmitter ST-E3-RT, use the Mode button to set the flash mode to <M>. (Note: You do not need to do this on slave units. Their LCD panels will continue to display "E-TTL", but will change to "M" upon the first shot or press of the master unit's test button.)
3. Set firing group ratio on the Speedlite Transmitter: While <MENU 1> is on the LCD, press Fn Button 2 <Ratio> to the output ratio of your choice. Your options are:
   a. ALL (NO RATIO – EQUAL OUTPUT)
   b. A/B (RATIO A:B)
   c. A/B/C (RATIO A:B:C)
   All ratios are between firing groups.
4. Select a slave group to adjust its power: Press Fn Button 3 <GR> on the master unit, turn the Select Dial, then select the group for which you want to set the flash output. Select A, B, or C. The flash will not fire if set to D or E.
5. Set the power output for each a slave group: Press the master unit's Fn Button 3 <* ±> to highlight the analog flash output scale, turn the Select Dial to set the flash output, then press the Select/Set Button to register your setting.
6. Repeat steps 3 and 4 on the master unit to select and set additional flash groups.

GR — GROUP MODE: DIFFERENT FLASH MODE FOR EACH GROUP

The mode is available only on EOS cameras released since 2012 (such as the EOS-1D X, EOS 5D Mark III, EOS 6D, and Rebel T4i). GR mode is best suited to advanced photographers who have experience in multiple flash lighting. You can set a different flash mode for each firing group, up to a maximum of five groups (A/B/C/D/E). The available modes include:

- ETTL / ETTL II
- Manual
- Auto external flash metering

1. Perform the initial flash setup described above.
2. Press the ST-E3-RT's MODE button until <Gr> appears in the upper-left of the LCD panel.
3. Assign each slave unit to a firing group (A, B, C, D, or E).
4. Set the flash mode for each firing group on the master unit.
   a. While <MENU 1> shows on the LCD, press Fn Button 3 <GR>, then turn the Select Dial to highlight a group.
   b. Press Fn Button 2 <* MODE>. Each press selects a flash mode (E-TTL, M, or Ext.A> for that slave group.
   c. Repeat step b to set the flash mode for each additional group.
5. Set the flash output or flash exposure compensation amount.
   a. While a firing group is selected, press Fn Button 3 <* ±> to highlight the analog scale for flash exposure compensation (E-TTL or Ext.A modes) or manual flash power (M mode).
   b. Turn the Select Dial to adjust the flash exposure scale that corresponds to the flash mode, then press the Select/Set Button.
   c. If you press Fn Button 2 <* ±> when <Menu 1> is on the LCD, you can set flash exposure compensation for all firing groups (E-TTL and Ext.A only).
   d. Repeat to set the flash function of any remaining groups
   e. Press Fn Button 4 to return to the shoot-ready state.