

Selecting a Nikon Speedlight Flash Unit

Supplement to Mastering the Nikon D7000

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Selecting a Nikon Speedlight Flash Unit

Nikon makes several Speedlight units that work very well with the Nikon D7000. I personally have used the SB-400, SB-600, SB-700, SB-800, and SB-900 units with the D7000. There are also the R1C1 flash units (SB-R200), which are designed to be used in small groups, such as for a ring-light arrangement.

Let's consider each of the current Nikon Speedlights, along with basic information on the unit's guide number, lens coverage, and how to view detailed specification information on Nikon's website.

Nikon SB-900 Speedlight

I really enjoy using the Nikon SB-900 Speedlight unit. It is a very powerful and easy to use in the CLS arrangement because it has external controls for setting remote mode. It can also be used as a CLS commander when needed.

The SB-900 is now Nikon's flagship Speedlight. It has adjustable beam width that goes wider and farther than most of the flash units. It has a big, detachable diffuser that really helps control hotspots and contrast. Plus, it has an included filter system that communicates with the flash unit.



Nikon SB-900 Speedlight

The controls and menus on the SB-900 are very easy to use; much easier than the previous flagship flash, the SB-800. One perceived drawback: The SB-900 unit is such a powerhouse that it can overheat if fired rapidly, caused by allowing the *batteries to get hot* from heavy current drain. For that reason it has a built-in temperature sensor that will prevent the flash from being fired when it gets too hot. This sensor can be enabled/disabled in the camera's menu. Many photographers leave it disabled so that the flash will not shut off when hot. That could be a problem in events like a wedding. Of course, if you shoot so hard and fast that your flash unit bursts into flames, I suspect that the warranty will be void!

So far, my use of the flash has not caused it to get too hot, and I've shot all sorts of events, so this may not be a real problem for most. There is a firmware upgrade that addresses this issue to some degree. However, some have chosen to seek out the older flagship SB-800, which does not suffer from this perceived issue.

I have both flash units and like them both very well. I use the SB-900 now more than the SB-800 because I love the extra reach the narrow beam width gives me, and I shoot a lot of wide angle group shots. The extra-wide zoom position the SB-900 provides really makes a difference. Plus, I love that big white diffuser!

Official SB-900 Guide Number Information

34m/111.5ft. (at ISO 100, 35mm zoom head position, in FX format, standard illumination pattern, 20°C/68°F) to 48m/157.5ft. (at ISO 200, 35mm zoom head position, in FX format, standard illumination pattern, 20°C/68°F)

Official SB-900 Lens Coverage

17 to 200mm (FX-format, Automatic mode)

12 to 200mm (DX-format, Automatic mode)

12 to 17mm (FX-format, Automatic mode with built-in wide-angle panel deployed)

8 to 11mm (DX-format, Automatic mode with built-in wide-angle panel deployed)

Built-in Wireless Commander Mode for Nikon CLS

Wireless Commander Mode offers wireless control at the master Speedlight position, controlling up to 3 remote Speedlight groups and an unlimited number of compatible Speedlights. Four wireless channel options help manage wireless conflicts in multi-photographer environments.

Nikon Official SB-900 Website Address

<http://www.nikonusa.com/Nikon-Products/Product/Flashes/4807/SB-900-AF-Speedlight.html>

Nikon SB-800 Speedlight

The SB-800 Speedlight unit is similar in power to the SB-900 and has the ability to be a CLS commander too. The SB-800's controls are more difficult to adjust than the SB-900's controls because the settings are buried in menus. I've used these successfully for several years.



Nikon SB-800 Speedlight

The SB-800 is out of production but still in very high demand due to the perceived heating issue with the SB-900. You can sometimes buy them as new old stock on Amazon.com or eBay, but be prepared to pay a large amount of money. As this book was going to print, I saw a new old stock SB-800 on Amazon.com for over \$850. Will the SB-700 or SB-900 replace the desire many have for the SB-800? Time will tell!

Official SB-800 Guide Number Information

38m/125ft. (at ISO 100, 35mm zoom-head position, 20°C/68°F) to 53m/174ft. (at ISO 100 and 105mm zoom-head position, 20°C/68°F)

Official SB-800 Lens Coverage

24 to 105mm (Automatic mode)

14 to 17mm (Automatic mode, with built-in wide flash adapter (14mm with SW-10H Diffusion Dome))

Built-in Wireless Commander Mode for Nikon CLS

Control as many as 3 remote groups (A, B and C) of an unlimited number of compatible Speedlights with the SB-800's wireless Commander mode.

Nikon Official SB-800 Website Address

<http://www.nikonusa.com/Nikon-Products/Product-Archive/Flashes/4801/SB-800-AF-Speedlight-.html>

Nikon SB-700 Speedlight

The SB-700 is one of Nikon's latest Speedlight units, having been released after the SB-900. It seems destined to replace the lower-cost SB-600. It has a built-in wireless commander mode, allowing it to be a controller in the Nikon Creative Lighting System (CLS).



Nikon SB-700 Speedlight

The unit has a nice zoom range on its flash head, reaching out to the coverage of a 120mm lens. It also covers the wide end well, with the equivalent coverage of a 14mm in DX format, and a 24mm in FX. It's quite a desirable flash unit for its power level and lower cost over the SB-900. The external controls on the flash make it significantly easier to use than its cousin the SB-600, which has many functions buried in menus. Consider this flash if you are on a budget, yet need excellent power and coverage.

Official SB-700 Guide Number Information

28m/92ft. (at ISO 100, 35mm zoom head position, in FX format, standard illumination pattern, 20°C/68°F) to 39m/128ft. (at ISO 200, 35mm zoom head position, in FX format, standard illumination pattern, 20°C/68°F)

Official SB-700 Lens Coverage

24 to 120mm (FX-Format)

14-120mm (DX-format)

Built-in Wireless Commander Mode for Nikon CLS

Wireless Commander Mode controls up to 2 remote Speedlight groups and an unlimited number of compatible Speedlights. When used as a remote speedlight up to 3 Groups can be selected. Four wireless channel options help manage wireless conflicts in multi-photographer environments.

Nikon Official SB-700 Website Address

<http://www.nikonusa.com/Nikon-Products/Product/Flashes/4808/SB-700-AF-Speedlight.html>

Nikon SB-600 Speedlight

The Nikon SB-600 Speedlight unit is the low-cost flash for users on a budget. It is only about one stop less powerful than the SB-900 or SB-800 unit and costs considerably less.



Nikon SB-600 Speedlight

Buying several of these won't set you back much and will allow you to set up a great CLS system with your D7000. If you are just getting started in CLS, these might be your best investment. The SB-600 does not have a built-in **Commander mode** itself, like the SB-700, SB-800, and SB-900, but you don't need it since your D7000 does.

Hurry though, if you plan to buy one or more SB-600 units; the SB-600 will probably be phased out now that the SB-700 is on the market.

Official SB-600 Guide Number Information

30m/98ft. (at ISO 100, 35mm zoom-head position, 20°C/68°F) to 42m/138ft. (at ISO 200, 35mm zoom-head position, at 20°C/68°F)

Official SB-600 Lens Coverage

24 to 85mm (Automatic mode)

14mm to 85mm (Manual Mode, with built-in wide-flash adapter)

24mm to 85mm (Manual Mode)

Built-in Wireless Commander Mode for Nikon CLS

None – but does have a remote (slave) mode for use in groups under Nikon CLS control.

Nikon Official SB-600 Website Address

<http://www.nikonusa.com/Nikon-Products/Product/Flashes/4802/SB-600-AF-Speedlight.html>

Nikon SB-400 Speedlight

The SB-400 is Nikon's answer to those who need an economical—yet quite powerful—stand-alone flash unit. Its small size belies its impressive reach and power. I often use my Nikon D7000 as a backup camera during event shooting. I find that this little SB-400 and the D7000's AUTO exposure mode will give me excellent images without thinking about exposure. What else can one ask from a camera/flash combo in fast shooting conditions?



Nikon SB-400 Speedlight

I've shot several weddings with the SB-400 on the D7000, as a backup camera and flash combo, and this little baby is a firecracker. Why buy some aftermarket flash unit, when you can own a genuine Nikon for about US\$120. While not a contender for using within the Nikon CLS system, due to its lack of CLS compatibility, the SB-400 is a great standalone flash with plenty of power for a reasonable price!

Official SB-400 Guide Number Information

21m/69ft. (at ISO 100, 18mm zoom-head position, 20°C/68°F) to 30m/98.4ft. (at ISO 200, 18mm zoom-head position, 20°C/68°F)

Official SB-400 Lens Coverage

As wide as 18mm on Nikon DX-format digital SLR cameras and 27mm on FX format.

Built-in Wireless Commander Mode for Nikon CLS

None (no remote mode either). This is a stand-alone flash unit not to be used in groups.

Nikon Official SB-400 Website Address

<http://www.nikonusa.com/Nikon-Products/Product/Flashes/4806/SB-400-Speedlight-Unit.html>

Nikon SB-R200 Speedlight

Then there are the SB-R200 Speedlight units. These are primarily designed to use in special arrangements on brackets that Nikon created for them. These flash units are not really designed for use in a camera's Accessory shoe. Instead, they have a special foot made to mount to special brackets, as shown in the picture of the Nikon D7000 with the SX-1 circular bracket mounted to the lens's front with two SB-R200 flashes.



Nikon SB-R200 Speedlight and D7000 with the SX-1 ring bracket

You'll see these Speedlights in use if you watch many crime dramas on TV because the investigators often use them for close-up flashes of crime scene evidence. They are normally used in a group arrangement, including special mounting brackets, with a Nikon SU-800 Wireless Speedlight Commander Unit. The SU-800 is discussed next.

Official SB-R200 Guide Number Information

10m/33ft. (at ISO 100) to 14m/46ft. (at ISO 200)

Official SB-R200 Lens Coverage

24mm; 60° (vertical) and 78° (horizontal)

Built-in Wireless Commander Mode for Nikon CLS

None – but does have a remote (slave) mode for use in groups under Nikon CLS control.

Nikon Official SB-R200 Website Address

<http://www.nikonusa.com/Nikon-Products/Product/Flashes/4805/SB-R200-Wireless-Speedlight.html>

Nikon SU-800 Wireless Commander Unit

While not a Speedlight flash, I wanted to show you the Nikon SU-800 Wireless Speedlight Commander Unit (see figure 4E). This unit can be used when you need extra range or need to control more than two banks of flash units—it can control three. The SU-800 can control slave flash units up to 66 feet away, where most Speedlights with a Commander mode can only control out to 33 feet.



Nikon SU-800 Wireless Commander Unit

It uses wireless infrared signals to control the flash banks. It is mounted onto the [Accessory shoe](#) of your camera, thereby precluding the use of the built-in flash.

Official Nikon Key Features

- Functions as a wireless commander for the SB-R200, SB-900, SB-800, SB-700 and SB-600 Speedlight units.
- Controls an unlimited number of Speedlights for up to three groups.
- Provides wireless control up to 66 feet.
- Offers 4 independent channels for competitive shooting environments.
- Built-in AF assists illuminator for critical focus in low-light situations.

Nikon Official SU-800 Website Address

<http://www.nikonusa.com/Nikon-Products/Product/Flashes/4794/SU-800-Wireless-Speedlight-Commander.html>