



Get flash

A good flashgun can enhance lighting in almost any shooting scenario. Here are some of the best on the market

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Many of us only reach for a flashgun when we're shooting indoors or if the sun's gone down. But that's really missing a trick. A decent flashgun will be much more powerful and versatile than the pop-up flash that's built into your camera, if it has one. They're great for not only adding much-needed illumination when you're shooting on the dark side, but also for filling in shadows and giving a more even lighting effect, especially under bright sunlight.

Most good flashguns have a zoom facility, which can focus the beam over a tighter area when using lenses with longer focal lengths. This increases the effective power and range of the flashgun when using telephoto lenses, as you're not wasting light illuminating areas of the scene that won't be in the frame. Most feature a motorized head, which can automatically track the zoom setting of a lens fitted to the camera or match different prime lenses as you swap between them. →

The contenders

1 Phottix Juno TTL	£169/\$180
2 Nikon Speedlight SB-500	£199/\$217
3 Nissin i60A	£227/\$249
4 Nikon Speedlight SB-700	£259/\$267
5 Metz mecablitz 52 AF-1	£274/\$260
6 Hähnel Modus 600RT Mk II Wireless Kit	£299/\$255
7 Metz mecablitz 64 AF-1	£419/\$450
8 Nikon Speedlight SB-5000	£569/\$597



Flashgun fun

Be quick on the draw with these useful flashgun facts

The max power output of a flashgun is quoted as a Gn (Guide number). It equates to the distance at which the flashgun can effectively illuminate a subject, at any given aperture, usually with a camera sensitivity setting of ISO100. If you divide the Gn by the f-number of the aperture in use, you'll get the effective reach of the flashgun. For example, a flashgun with a Gn 40 rating (ISO100) will give you a range of 10m when shooting at f/4, or 5m when shooting at f/8. Remember, if bouncing the flash off a ceiling or wall, the effective distance between the flashgun and the object you're shooting can become much longer, and there will also be a loss of intensity.

A 'softer' quality of light is preferred for portraiture. For this, you'll need a large light source – larger than a flashgun. The easiest solution is to bounce the flash off a white wall, which gives a much larger area of source illumination. Many flashguns have a reflector card that pulls out from just above the flash tube, enabling some light to be thrown forward in bounce mode. Even under bright sunlight, a flashgun can be useful for filling in shadows around the eyes and under the nose. The problem is that, if you want to use a wide aperture, the shutter speed for a correct exposure may exceed the flash sync speed of the camera. This is the maximum speed at which the shutter can fire when using the flashgun in regular flash mode, typically

1/200 or 1/250 sec. Auto FP high-speed sync mode enables faster shutter speeds to be used, where featured in compatible cameras and flashguns, although the maximum output is reduced. When your flashgun is mounted on a camera's hotshoe and firing direct at the subject, you'll end up with flat lighting. To create modelling that gives images a more natural look, you should use the flashgun off-camera. Many Nikons feature a pop-up flash module that can act as a wireless commander, triggering compatible remote flashguns that have an infrared wireless slave mode. Remote flashguns configured in up to three groups can be triggered via an infrared beam, complete with the availability of TTL flash metering.

What to look for...

Fancy features are available in many current flashguns

ON THE BOUNCE
Most have a vertical tilt range of 0-90 degrees and some dip a little lower. Apart from the two Metz offerings, all have full 180-degree swivel in both directions.

FLASH MODES
All flashguns on test enable Auto FP high-speed sync and rear-curtain flash with compatible cameras, and some add a programmable stroboscopic mode.

TRIGGER ACTION
Infrared slave compatibility enables off-camera use. Some have commander and slave modes, and even RF (Radio Frequency) communication.

ZOOM RANGE
Apart from the fixed SB-500, all flashguns on test have a zoom range of at least 24-105mm, and a couple stretch to as much as 20-200mm.

EASY ACCESS
On-board controls and an LCD screen help to enable an intuitive interface, for quick and easy control of flash modes and settings.

POWER RATING
The Nikon SB-500 and SB-700 have power ratings of Gn 24 and 38 respectively, but some competitors up their game to Gn 60 or more.



Trick modes

Rear-curtain sync and repeating modes are often available for special effects

Most flashguns feature a rear-curtain mode, which can be selected from the host camera's flash settings. Whereas the usual first-curtain mode fires the flash as soon as the first shutter curtain has fully opened, the rear-curtain mode waits until the rear curtain is about to close. It's particularly useful in long exposures when, for example, a vehicle with lights is moving across the scene. Light trails will appear to stretch out from behind the vehicle, instead of in front of it, which gives everything a much more natural look. Some flashguns also feature a 'Repeat' mode, also known as 'stroboscopic'. This is typically programmable, so you can preset the number of flashes and the time interval between each one. It's ideal for capturing multiple exposures of an object in motion, at different stages along its path.



Phottix Juno TTL

£169/\$180

Something of a wildcard in the group



This new flashgun has pro-grade power output and features, rock-solid build including a weather-sealed mounting foot, and a generous 20-200mm motorized zoom range, all at a great price. Currently it only enables manual flash settings when used in a Nikon camera's hotshoe. So why is it being snapped up by many Nikon photographers?

The Phottix features a built-in radio transceiver, so can act as a slave when used with a Phottix Odin II, Ares II or Elinchrom Skyport trigger. For example, add a Nikon-dedicated Odin II trigger (£125/\$171) and the flashgun switches allegiance, delivering a full range of Nikon-dedicated auto TTL, high-speed sync, rear curtain and even programmable stroboscopic modes for off-camera flash.

Performance

There's powerful output over its large zoom range with fast recycling speeds, even after a full-power flash. This works out to 2.6 or 4.1 seconds for NiMH and alkaline batteries. TTL accuracy in off-camera firing proved consistently reliable in our tests.

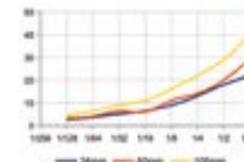
N-Photo verdict

A Nikon-dedicated version is coming but, in the meantime, this model is a great choice for off-camera flash.



Power output

The high maximum power output of the Phottix Juno TTL is remarkable for a flashgun that comes with such a low price-tag.



TTL accuracy

No TTL flash metering is currently available for hotshoe-mounted shooting, but is accurate when used off-camera.



Recycle speed

Recycling speed after a full-power flash is nearly a second quicker than in some of the similarly powerful flashguns on test.



Nikon Speedlight SB-500

£199/\$217

A compact and clever 'constant' companion

Just about small enough to squeeze into a coat pocket, this is a travel-friendly flashgun that also features a built-in triple LED 'constant light', ideal for close-up video. In other areas, the SB-500 is a particularly bare-bones affair. There's no zoom facility for the head, which has a fixed focal length equivalent of 24mm, or 36mm for DX format cameras. There's also no flip-out wide-angle diffuser or reflector card, which you'll find on the vast majority of current flashguns.

Around the back, the control panel is simple and uses a few status LEDs instead of the LCD panel. As such, most settings and adjustments need to be applied from menus in the host camera. There is an infrared wireless slave mode (channel 3 only), but the commander mode only works with up-market cameras from the D5500, D7200, D750 and D810 onwards.

Performance

Max power output is respectable and comes close to most larger flashguns when used at 24mm, but the lack of a zoom head means you'll lose power when at longer focal lengths.

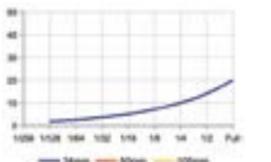
N-Photo verdict

We like the compact, lightweight build and LED constant lamp but it's missing a fair few important features.



Power output

The diminutive SB-500 draws close to the bigger flashguns on test with a larger Gn rating when at their 24mm zoom setting.



TTL accuracy

As usual with Nikon's own-brand flashguns, TTL flash metering is consistently very accurate, with no flash compensation required.



Recycle speed

The SB-500 is powered from two AA batteries rather than the usual four. This makes recycle speeds quite pedestrian.





Nissin i60A

£227/\$249

It's something of a small wonder

There are quite a few small, lightweight flashguns on the market that look equally at home on mirrorless cameras as they do on full-blown SLRs. However, most only have a meagre maximum power output and rudimentary on-board controls. They also often lack an LCD screen around the back.

This Nissin packs a lot into its small build, with a powerful Gn 60 rating, 24-200mm motorized zoom head and an elegant graphical user interface based around a colour screen. A secondary LED light is also featured, ideal for shooting video. Infrared and RF wireless slave triggering are available, the latter working well with Nissin's optional Commander Air 1 or more up-market Commander Air 10s RF triggers. You can buy these for around £75/\$89 or £135/\$170.

Performance

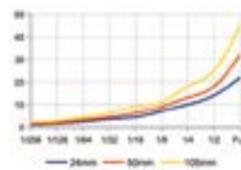
Nissin punches above its weight with mighty max power output, but we experienced a slight and consistent amount of underexposure during TTL flash shooting, equating to about one-third of an f-stop.

N-Photo verdict

Small but strong and feature-rich, the Nissin is a svelte delight, complete with an attractive price tag.



Power output
The Nissin i60A manages to match – or even beat – some of the most powerful flashguns on the market for sheer output power.



TTL accuracy

In our tests, we found that the Nissin i60A slightly but consistently underexposed by roughly one-third of an f-stop.



Recycle speed

It's a little on the slow side when paired with NiMH cells, but recycles faster than some when powered with alkaline batteries.



Nikon Speedlight SB-700

£259/\$267

This popular Speedlight is losing ground

There's a lot to love about this flashgun. As well as the soft carrying case and tabletop/tripod stand that you find with many flashguns, there's also a diffusion dome and colour filters for balancing flash with tungsten or fluorescent lighting. It all comes together to form a great kit that feels more than the sum of its parts.

The power rating of Gn 38 and the 24-120mm motorized zoom range are adequate, but fall short of what's available in a number of competing flashguns at a similar price point. And while the SB-700 boasts wireless infrared commander and slave modes, it lacks a built-in radio frequency receiver or transceiver, which are becoming increasingly mainstream.

Performance

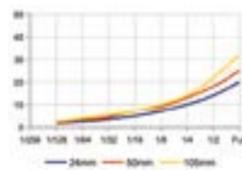
Maximum output power is noticeably down compared with most competing flashguns, but TTL metering is accurate and consistent. You get the bonus of different illumination patterns across the frame but, annoyingly, regular i-TTL mode (rather than i-TTL BL) is only available by switching the host camera to spot metering mode.

N-Photo verdict

It gives the most value of any own-brand Nikon flashgun, but your money goes further elsewhere.



Power output
The maximum output power of the SB-700 is less than from most similarly priced flashguns, throughout the zoom range.



TTL accuracy

TTL BL (Balanced Light) mode can be very dependable, however you cannot switch to regular TTL mode on the flashgun itself.



Recycle speed

Recycling speeds of the SB-700 are good when paired with NiMH batteries, but only about half as fast when running on alkaline cells.



Metz mecablitz 52 AF-1

£274/\$260

A mid-range flashgun for touchscreen fans

The Metz 52 looks like one of those flashguns that has no on-board controls, forcing you to spend more time tweaking things from menus in-camera. As it turns out, the lack of buttons and switches is due to the flashgun featuring a touchscreen with a logical and intuitive layout to its comprehensive menu system.

In other areas, the feature-set is typical for a mid-range flashgun at this price. There's a Gn 52 power rating, an automated zoom range of 24-105mm and a 0-90 degree bounce. The range of the swivel action is less impressive, with 180 degrees to the left, but only 120 degrees to the right. Par for the course with mid-range flashguns, there's no programmable repeat (stroboscopic) mode and wireless commander/slave functions are limited to infrared, rather than radio frequency connectivity.

Performance

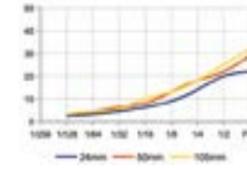
Performance is good, not great, with mediocre max power output, slight but consistent TTL overexposure and sluggish recycling speeds. Even so, the Metz is capable and well built.

N-Photo verdict

Not just a gimmick, the touchscreen interface works well. In other areas, the Metz is a bit of an underachiever.



Power output
Compared with some of the most recent designs, this Metz flashgun is a little lacking when it comes to maximum output power.



TTL accuracy

You may need to dial in about half a stop of negative flash exposure compensation in TTL mode to ensure that exposures stay accurate.



Recycle speed

Recycling speeds on the Metz mecablitz 52 AF-1 tend to be a little slower than usual for a flashgun with a mid-range power rating.



Hähnel Modus 600RT Mk II

Wireless Kit £299/\$255

The Mark II is even more appealing

Packed with features and a built-in RF transceiver, the Modus 600RT boasts RF and infrared commander and slave connectivity, along with a Gn 60 maximum power rating and 20-200mm motorized zoom. The flashgun is great value at £249/\$255, while the 'Wireless Kit' adds a hotshoe-mounting Hähnel Viper RF trigger with a 100m range. A 'Pro Kit' is also available at £499/\$559, adding a second flashgun.

The Hähnel is powered by a rechargeable Li-ion battery pack, which enables great stamina, with up to 1000 half-power flashes, along with a 0.7 second recycling speed. The range of flash modes features a programmable stroboscopic option, while Mark II improvements include a quick-release hotshoe locking lever and a charger with a USB socket.

Performance

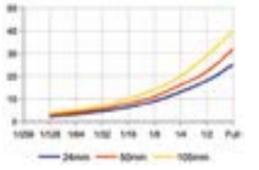
Performance is impressive in all areas, from powerful max output to rapid recycling and reliable TTL metering. RF triggering never misses a beat and you can link other makes of flashgun to an RF group with Viper receivers.

N-Photo verdict

Great power, speed and stamina. The Wireless Kit delivers ace versatility at an affordable price tag.



Power output
There's plenty of illumination on tap with the MK II, and there's enough juice from the battery for up to 600 full-power flashes.



TTL accuracy

Never missing a beat, the Modus 600RT MK II proved to be both super-accurate and consistent for TTL metering throughout our tests.



Recycle speed

After a full-power flash, the 1.5-second recycling speed from the supplied Li-ion battery pack is twice as fast as in many flashguns.





Metz mecablitz 64 AF-1

£419/\$450

It's currently top of the mecablitz range

This range-topping flashgun from Metz has a mighty Gn 64 rating, a 24-200mm zoom range and -9 to 90-degree bounce facility, but swivel to the right is limited to 120 degrees. A neat bonus is the additional sub-flash module, which is great for adding a controllable amount of fill-in lighting when the main head is being used in bounce or swivel mode. Around the back, a colour touchscreen makes for easy point-and-pick navigation of menus and adjustments.

The flashgun can operate in both commander and slave wireless configurations via infrared linking, but it lacks a built-in RF transceiver. There's also a programmable stroboscopic flash mode and a socket for powering the flashgun from an optional external power pack.

Performance

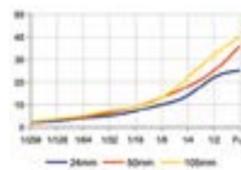
The Metz 64 didn't live up to its Gn 64 billing, the output power falling short of some Gn 60 rated flashguns at corresponding longer zoom settings. TTL metering is on the bright side and recycling speeds are particularly slow when using alkaline batteries.

N-Photo verdict

The touchscreen and secondary flash are great, but performance could be better and there's no built-in RF.



Power output
Despite its extravagant Gn 64 claims, the power output proved to be no better than from several Gn 60 flashguns on test.



TTL accuracy

There's not much to complain about here with the Metz mecablitz 64 AF-1, but the TTL metering tends to give slight overexposure.



Recycle speed

Recycling speed isn't particularly quick with NiMH batteries and is actually downright slow when using alkaline cells.



Nikon Speedlight SB-5000

£569/\$597

Own-brand flashgun with radio transmission

The big deal about the pro-grade SB-5000 is that it's Nikon's first flashgun to feature built-in radio frequency connectivity. This boosts the off-camera range from 7m and a beam angle of 60 degrees between the commander or pop-up flash, to 35m with full 360-degree coverage. Another bonus is that RF linking works through obstacles and around corners, and is much more reliable when shooting under bright sunlight.

However, unlike some independent RF flashguns, the SB-5000 only has an RF receiver, so you can't use it as a trigger. The working range is also less than the 100m that's now common. On the plus side, the SB-5000 has great build quality, a 24-200mm zoom range, programmable repeat mode and comprehensive on-board controls.

Performance

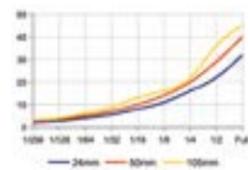
Punching above its Gn 55 rating, maximum output from the SB-5000 equals or exceeds that of many Gn 60-64 flashguns on the market. Recycling speeds are also rapid, even when using AA cells, rather than an optional power pack.

N-Photo verdict

A tasty top-end product with great performance. Shame it only works as a wireless commander in infrared mode.



Power output
The SB-5000 eases itself ahead of most competing flashguns for maximum available intensity, throughout the zoom range.



TTL accuracy

Highly dependable, TTL accuracy of the SB-5000 is equally accurate both when hotshoe-mounted and being used off-camera.



Recycle speed

Recycling speeds are pretty fast when using both NiMH and alkaline batteries, as opposed to the optional power pack.



The winner is... Hähnel Modus 600RT Mk II Wireless Kit

Great performance, agility and versatility, it's the top gun

Despite its distinctly 'mid-range' price, the Hähnel Modus 600RT Mk II is a top-end flashgun with pro-grade handling and features to match. The 'Wireless Kit' comes with a Nikon-dedicated RF trigger for slotting into your hotshoe to enable easy and effective off-camera flash. Its Li-ion power pack enables great stamina and super-fast recycling speeds.

The high-end Phottix Juno TTL is a great buy for off-camera flash, when coupled with

an optional Phottix Odin II radio frequency trigger. But if you want anything more than manual flash modes when it's slotted into the hotshoe of your camera, you'll have to wait for the Nikon-dedicated version. The Nissin i60A is the best buy if you want a compact flashgun that doesn't compromise on power, whereas the Metz 64 AF-1 is a smart choice if you fancy a secondary flash tube and colour touchscreen.

Nikon's SB-5000 is a powerful pro-grade Speedlight but it's been overtaken by the

likes of the Hähnel and Phottix flashguns for RF connectivity, both in range and triggering options. The Nikon is also much more expensive to buy. The mid-range SB-700 remains our favourite own-brand Nikon flashgun, while the SB-500 is nicely compact but rather lacking in features. **M**



	Phottix Juno TTL	Nikon Speedlight SB-500	Nissin i60A	Nikon Speedlight SB-700	Metz mecablitz 52 AF-1	Hähnel Modus 600RT Mk II kit	Metz mecablitz 64 AF-1	Nikon Speedlight SB-5000
Target price	£169/\$180	£199/\$217	£227/\$249	£259/\$267	£274/\$260	£299/\$255	£419/\$450	£569/\$597
Max claimed Gn (ISO100, metres)	Gn 60	Gn 24	Gn 60	Gn 38	Gn 52	Gn 60	Gn 64	Gn 55
Bounce (degrees)	-7 to 90 degrees	0 to 90 degrees	0 to 90 degrees	-7 to 90 degrees	0 to 90 degrees	-7 to 90 degrees	-9 to 90 degrees	-7 to 90 degrees
Swivel (left/right)	180 / 180	180 / 180	180 / 180	180 / 180	180 / 120	180 / 180	180 / 120	180 / 180
Zoom Range	20-200mm	24mm (fixed)	24-200mm	24-120mm	24-105mm	20-200mm	24-200mm	24-200mm
Wide-angle diffuser	14mm	No	16mm	12mm	12mm	14mm	12mm	14mm
Reflector card	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Flash exposure compensation	+/-3EV	+/-3EV	+/-2EV	+/-3EV	+/-3EV	+/-3EV	+/-3EV	+/-3EV
Manual power settings	1/1 to 1/128	1/1 to 1/128	1/1 to 1/256	1/1 to 1/128	1/1 to 1/128	1/1 to 1/128	1/1 to 1/256	1/1 to 1/256
AF-assist beam	Red lamp	No	Red lamp	Red lamp	Red lamp	Red lamp	Red lamp	Red lamp
Secondary lamp	No	Constant LED	Constant LED	No	No	No	Sub-flash	No
Wireless Commander/Slave	IR slave, RF Commander/Slave	Commander/Slave IR	Slave IR (optional RF)	Commander/Slave IR	Commander/Slave IR	Commander/Slave IR/RF	Commander/Slave IR	Commander/Slave IR, Slave RF
Auto FP/Repeat modes	Auto FP, Repeat	Auto FP	Auto FP	Auto FP	Auto FP	Auto FP, Repeat	Auto FP, Repeat	Auto FP, Repeat
TTL/TTL-BL modes	TTL	TTL + TTL-BL	TTL	TTL + TTL-BL	TTL + TTL-BL	TTL + TTL-BL	TTL + TTL-BL	TTL + TTL-BL
TTL flash exp error	0EV	0EV	-0.33EV	0EV	+0.5EV	0EV	+0.16EV	0EV
Full power recycle (NiMH/alkaline)	2.6/4.1 seconds	4.6/6.8 seconds	3.5/3.9 seconds	2.7/5.4 seconds	4.1/5.2 seconds	1.5 seconds	3.4/7.4 seconds	2.3/2.9 seconds
Flash Info LCD	Yes	No	Yes	Yes	Yes (touchscreen)	Yes	Yes (colour touchscreen)	Yes
Supplied accessories	Pouch, stand	Pouch, foot	Pouch, stand, dome	Pouch, foot, dome, filters	Pouch, foot	Pouch, stand, charger	Pouch, foot	Pouch, stand, dome, filters
Batteries	4x AA	2x AA	4x AA	4x AA	4x AA	1x Li-ion	4x AA	4x AA
Dimensions (WxHxD)	50x190x80mm	67x115x71mm	73x112x98mm	71x126x105mm	73x134x90mm	64x190x76mm	78x148x112mm	73x137x104mm
Features	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Build & handling	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Performance	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Value	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Overall	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★