

**FREE VIDEO GUIDES**  **NO.1** FOR CANON EOS USERS

# PhotoPlus

THE **CANON** MAGAZINE

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**YOUR COMPLETE EOS CAMERA GUIDE**

## NEW CANON SKILLS FOR 2020

• Get the right gear • Better landscape compositions • Break the rules • Ultra-long exposures



**INSPIRATION**

### WILDLIFE WONDERS

Winning Canon images in the NHM Wildlife POTY



### PAINTING WITH LIGHT

How to use a torch to light up landscapes at night



**//** I took some photographs of people I barely knew, and there's always a bit of tension when you say 'let's go to the bedroom' **//**

Wanda Martin – fashion & music photographer

**39**  
WINTER  
LANDSCAPE  
PRO TIPS

**CANON PRO TIPS**

### SIMPLE HOME STUDIO SETUPS

Brighten up your close-up shots with Speedlites



**IN-DEPTH TESTS**

### THE BEST BUYERS' GUIDES

Expert tests and advice on all Canon cameras, lenses and more





# FLASHGUNS SUPER TEST

*A good flashgun can enhance lighting in almost any shooting scenario. **Matthew Richards** separates the strong Speedlites from the weak...*

**M**any amateurs only reach for a flashgun when shooting indoors or after dark. But that's really missing a trick. A decent flashgun will be much more powerful and versatile than the pop-up flash built into most Canon cameras. They're not only great for adding much-needed illumination when you're shooting in the dark, but also for filling in shadows and giving a more balanced lighting effect (see *Flash With Flowers* on page 8) even under intensely imposing bright sunlight.

Most good flashguns have a zoom facility, which can concentrate 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 that won't be in the image frame. Indeed, most feature a motorized head which can automatically track the zoom setting of the lens fitted to the camera, or match different prime lenses as you swap between them.

The power of the flashgun is referenced as a Gn (Guide number, more on page 106). A bigger Gn represents a greater maximum power output, although we run our own lab tests to check the actual output of each flashgun through its range of power settings. Greater power is particularly useful if you want to use the flashgun in bounce and swivel modes, as you'll need a stronger intensity of light to cover the distance.

We test eight of the latest flashguns to see which shines brightest for photography...



# PHOTTIX JUNO TTL

£169/\$180



With a feast of features for a flashgun at this price, the Phottix is a bargain buy

**T**he new Phottix Juno TTL is the cheapest flashgun in this test group, but you'd never guess that by looking at the specs, features and quality. It has a potent Gn 60 max output, a bounce head with -7 to 90 degrees of tilt and full 180-degree swivel in both directions, plus a 20-200mm motorized zoom head. The construction feels tough and solid, and features a rubber weather-seal around the metal mounting plate.

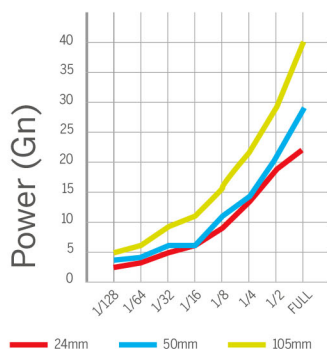
As it's name suggests, TTL flash metering is supported, while advanced modes include high-speed sync, rear curtain and programmable stroboscopic flash. Things get even more interesting when you use the Phottix off-camera. As well as an infrared slave mode, it features a radio frequency transceiver for full wireless RF master and slave functions.

Triggering works well with the Odin II transmitter (£125/\$171), which enables full remote control of flashgun settings over a range of up to

100m, as well as multiple modes including high-speed sync. Moreover, if you happen to use multiple makes of camera, you can buy dedicated triggers for each of them, and the flashgun adapts to give a full range of TTL and other flash modes when used off-camera, via the trigger.

## Performance

The Phottix gives 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 proved reliable.



## FEATURES

- 01** The large and powerful head includes 20-200mm motorized zoom, a wide-angle diffuser and reflector card.
- 02** There's full 180-degree swivel.
- 03** An RF transceiver is built-in, along with an infrared slave facility.
- 04** The interface is based on context-sensitive pushbuttons.
- 05** The mounting shoe has a rubber weather-seal and quick-release lever.

## VERDICT

- FEATURES** ★★★★★
- BUILD & HANDLING** ★★★★★
- IMAGE QUALITY** ★★★★★
- VALUE** ★★★★★
- OVERALL** ★★★★★

## REAR-CURTAIN & MULTI FLASH

Add versatility with trick flash modes for special effects

**M**ost flashguns have a rear-curtain mode, which can be selected via its onboard controls, or from the flash function menu in the host camera. Whereas the first-curtain mode fires the flash as soon as the first shutter has opened, the rear-curtain mode waits until the rear curtain is about to close. It's 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, instead of in front.

Some flashguns also feature a 'Multi' mode, also known as 'repeat' or 'stroboscopic'. This is programmable, so you can preset the number of flashes and the time interval between each one. It's great for getting multiple exposures of an object in motion in a single shot.



With rear-curtain flash mode, the lights of a vehicle crossing the scene appear to stretch out behind rather than in front of its path

## COMPARISON TABLE

								
	CANON SPEEDLITE EL-100	CANON SPEEDLITE 430EX III-RT	CANON SPEEDLITE 470EX-AI	CANON SPEEDLITE 600EX II-RT	HAHNEL MODUS 600RT MK II WK	METZ MECABLITZ 64 AF-1	NISSIN i60A	PHOTTIX JUNO TTL
	www.canon.co.uk	www.canon.co.uk	www.canon.co.uk	www.canon.co.uk	www.hahnel.ie	www.metzflash.co.uk	www.nissindigital.com	www.theflashcentre.com
Max claimed Gn (ISO 100, metres)	Gn 26	Gn 43	Gn 47	Gn 60	Gn 60	Gn 64	Gn 60	Gn 60
Bounce (degrees)	0 to 90 degrees	0 to 90 degrees	0 to 120 degrees	-7 to 90 degrees	-7 to 90 degrees	-9 to 90 degrees	0 to 90 degrees	-7 to 90 degrees
Swivel (left/right)	150 / 180	150 / 180	180 / 180	180 / 180	180 / 180	180 / 120	180 / 180	180 / 180
Zoom Range	24-50mm (manual)	24-105mm (auto)	24-105mm (auto)	20-200mm (auto)	20-200mm (auto)	24-200mm (auto)	24-200mm (auto)	20-200mm
Wide-angle Diffuser	No	14mm	14mm	14mm	14mm	12mm	16mm	14mm
Reflector card	No	Yes	No	Yes	Yes	Yes	Yes	Yes
Auto Metering	E-TTL / E-TTL II	E-TTL / E-TTL II	E-TTL / E-TTL II	E-TTL / E-TTL II	E-TTL / E-TTL II	E-TTL / E-TTL II	E-TTL / E-TTL II	E-TTL / E-TTL II
Flash Exposure Compensation	Via camera menu	+/-3EV	+/-3EV	+/-3EV	+/-3EV	+/-3EV	+/-2EV	+/-3EV
Manual Power Settings	1/1 to 1/128	1/1 to 1/128	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	1/1 to 1/128
AF-assist beam	Red lamp	Red lamp	Red lamp	Red lamp	Red lamp	Red lamp	Red lamp	Red lamp
Secondary lamp	No	No	No	No	No	Sub-flash	LED	No
Wireless Master/Slave	Master/Slave IR	Slave IR/RF	Slave IR	Master/Slave IR	Master/Slave IR	Master/Slave IR	Slave IR (optional RF)	IR slave, RF Master/Slave
Additional Flash Modes	HSS, RC, Strobe	HSS, RC	HSS, RC	HSS, RC, Strobe	HSS, RC, Strobe	HSS, RC, Strobe	HSS, RC	HSS, RC, Strobe
TTL flash exp error	0EV	0EV	0EV	0EV	0EV	-0.33EV	-0.33EV	0EV
Full Power Recycle (NiMH/alkaline)	3.0/5.2 seconds	2.4/3.4 seconds	2.3/4.2 seconds	3.2/3.4 seconds	1.5 seconds	3.4/7.4 seconds	3.5/3.9 seconds	2.6/4.1 seconds
Flash Info LCD	No	Yes	Yes	Yes	Yes	Yes (colour touchscreen)	Yes (colour)	Yes
Supplied accessories	Pouch, stand	Pouch, stand, dome, filter	Pouch, stand, dome	Pouch, stand, dome, filters	Pouch, stand, charger	Pouch, stand	Pouch, stand, dome	Pouch, stand
Batteries	2x AA	4x AA	4x AA	4x AA	1x Li-ion	4x AA	4x AA	4x AA
Dimensions (W x H x D)	65x92x71mm	71x114x98mm	75x130x105mm	79x143x123mm	64x76x190mm	78x148x112mm	73x112x98mm	50x190x80mm
Weight (excl batts)	190g	295g	385g	435g	430g	422g	300g	460g
Target price	£199/\$200	£269/\$249	£399/\$279	£519/\$529	£299/\$255	£419/\$450	£227/\$249	£169/\$180
FEATURES	★★★★☆	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
BUILD & HANDLING	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
PERFORMANCE	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
VALUE	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
OVERALL	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★

## THE WINNER IS... HAHNEL MODUS 600RT MK II WIRELESS

The Hahnel is our top gun, due to its performance and versatility

**D**espite its 'mid-range' price, the Hahnel is a topflashgun with pro-grade handling and features. The 'Wireless Kit' comes with a Canon-dedicated RF trigger for slotting into your hotshoe to enable easy off-camera flash. And finally, its Li-ion power pack enables great stamina and fast recycling speeds.

The high-end Phottix Juno TTL is another great bargain. Add a companion Phottix Odin II radio trigger and it costs about the same as the

Hahnel kit, albeit without the Li-ion battery pack. The Nissin i60A is the best buy if you want a compact flashgun that doesn't compromise on power or handling. The Metz 64 AF-1 is a smart buy if you need a secondary flash tube.

Of Canon's current flashguns, the 430EX III-RT is our favourite for performance, features and price. The EL-100 lacks controls and power, whereas the 470EX-AI is pricey if you don't feel the need for its automated bounce facility. **PP**

