

THE APPRENTICE



FACTFILE

PHOTOGRAPHY WORKSHOPS

DAVID LUND offers unique and bespoke teaching on a one-to-one basis or for small groups. He covers everything from still life to his stunning signature liquid imagery. To find out more, contact david@davidlund.co.uk and go to www.davidlund.co.uk. Also see David talk at The Photography Show at the NEC in Birmingham in March!

Diamond job: flawless commercial filmmaking
19 March 2018 – 16:00-16:40 in the Behind the Lens Theatre.

Liquid explosion!
19 March 2018 – 12:00-12:30 on the Live Stage.
www.photographyshow.com

CANON PRO

NAME:

DAVID LUND

CAMERA:

CANON EOS 5D Mk III

DAVID'S background is in graphic design and marketing, but he always knew he could combine these skills with his passion for photography to push creative boundaries. David shoots liquids in motion: drinks, still-life scenes and aerial views, and is constantly being inspired to experiment. He's currently working on a stunning 4K video commission for British Steel.



APPRENTICE

NAME:

HELEN DAVIES

CAMERA:

CANON EOS 77D

HELEN is a retired nurse. She bought her own Canon DSLR last year after borrowing her husband's (and him wanting it back). She's been using a splash art water photography kit to get her portfolio started and picked plenty of tips with the aid of internet searching, but wanted to work with our pro to see how the experts do it.

MAKING A SPLASH

Join pro liquid specialist David Lund as he guides our reader through a super series of colourful splash photo setups

TECHNIQUE ASSESSMENT

Is our splash-shooter ready to capture time-defying stills? David sets up with reader Helen

STARTER SETTINGS

HELEN was used to shooting in Manual mode for splash images at home, but wasn't familiar with high-speed flash lighting. At the start, the pair talked about DSLR settings. "When working in a studio, always shoot fully manual," David says. "The point is to be in full control. The shutter speed doesn't need to be too high, as the high-speed flash will freeze movement. In terms of aperture, we don't want to go past around f/18, as that's when the lens will start to lose clarity. We also want the ISO as low as possible."



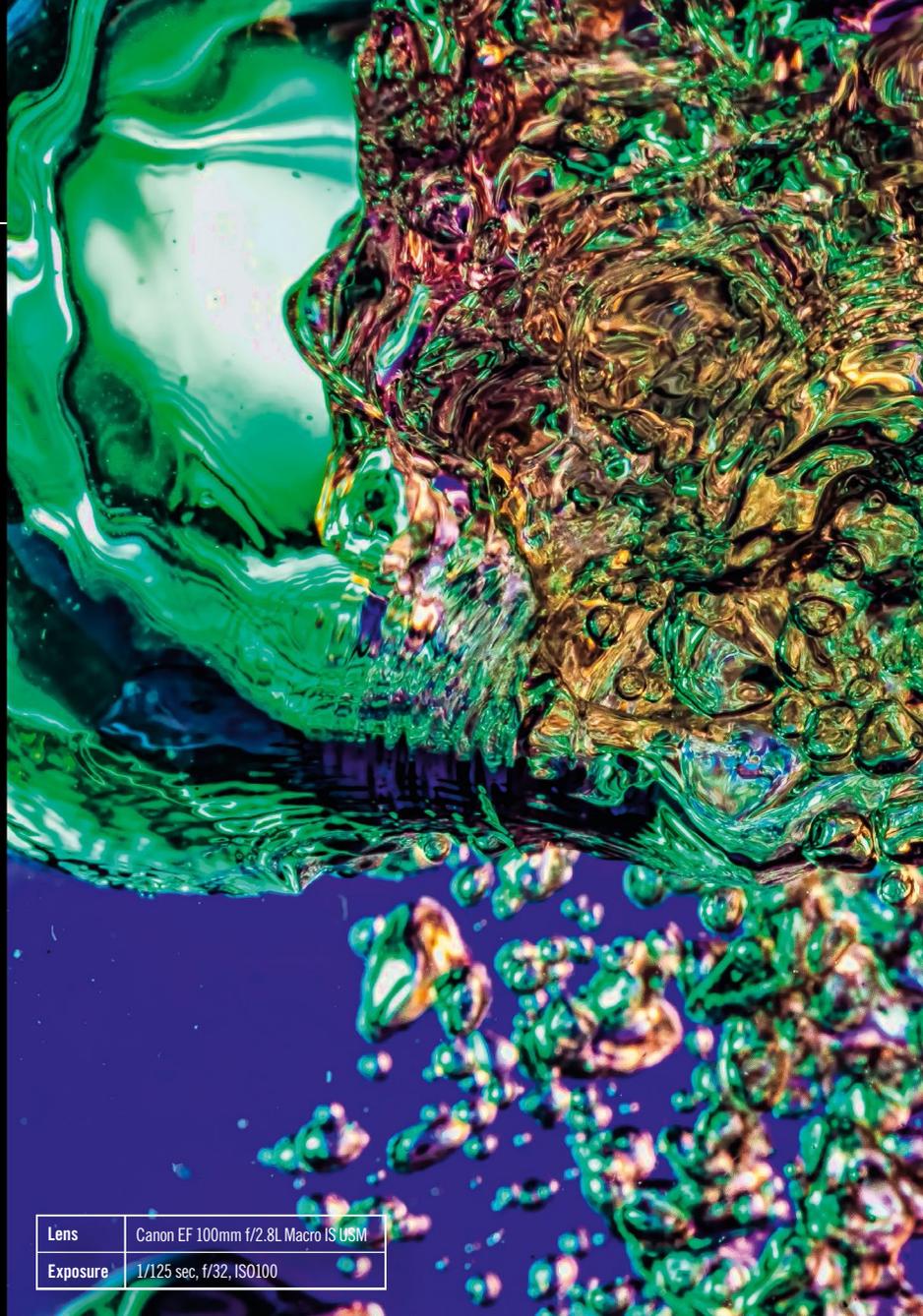
LINKED UP

FOR this genre of photography, sharpness and detail are both incredibly important. David showed Helen how she could tether her DSLR to a computer, so that the pair would be able to view the images full-screen on the monitor as they were shooting.



ON EXPOSURE

"**I HAVE** a light meter, but don't use it very often," David says. "I have a rough idea of the settings I need, already. I tend to take one shot, and then another shot, and refine the exposure as I go." He went through the different settings available on his Broncolor lighting pack with Helen, and explained what shutter speed was best to use. "For the purposes of this demonstration, we want the lighting at a setting of around 1/7,000 sec to 1/10,000 sec. You can change the colour temperature of the Broncolor lighting and also add the option of shooting a sequence of shots."



Lens	Canon EF 100mm f/2.8L Macro IS USM
Exposure	1/125 sec, f/32, ISO100

HELEN'S COMMENT



David showed me how to set up the lights one at a time so we could see the effect that each individual flash had on the bubbles. We used blue and red filters at the back, and green and yellow on each side. We used David's Broncolor flash at 1/10,000 sec. Coordinating when to drop the water to make the bubbles and release the shutter was the main challenge as this involved great timing and patience.

TOP GEAR #1

Broncolor lighting pack

DAVID uses a Broncolor Scoro 3200 S Power Pack, which provides a maximum 1/10,000 sec flash duration and 10 frames per second with the power at full output. The pack also has three individually adjustable power outlets, which David had attached to his Broncolor Unilite flash heads.





HOT SHOT #1

SHOOT WITH A PRO



EXPERT INSIGHT

STEPS FOR SETTING UP

THE first thing on a liquid shoot is to set up the tank or water container. "You can use a standard fish tank, but my tank is made from Pilkington Optiwhite glass. This is extra clear, low-iron glass with a very high light transmission, which improves the clarity of the shots." The next thing was to set up the tripod and mount the camera. For more accurate autofocus, David set the tripod and DSLR face-on to the tank of water. This avoids the lens hunting or picking up reflections.

PRO TIP

TIMED TO PERFECTION

IT'S a major challenge to get the timing of the shutter right as you drop items into the water. Too late, and you'll miss the bubbles and splashes in the water. "It's a game of practice and trial and error, especially if there's shutter lag," David says. He taught Helen how to fire the shutter several times and become attuned to how long it took to fire by listening. When they got into the right rhythm, they were able to get a higher hit rate and capture the most dynamic splash effects every time.



TOP TEN TIPS FOR HAPPY SPLASHES

- 1 Practice run**

On complex commercial shoots, a mini-rehearsal helps ease the pressure. It will also highlight any potential challenges before they crop up.
- 2 Make kit list**

Studio shoots require extra accessories and bits. Make a list ahead, so you don't forget anything.
- 3 Take off the stabilizers**

When shooting with a tripod, turn off the Image Stabilization on your lens as it can cause blur.
- 4 Control the splash**

Try using a syringe to inject water into the tank. This will create a more even spread of bubbles.
- 5 Keep it tidy**

Clear the floor of gels and props as you go, or they'll be a trip hazard. Clean up spills as you go, too.
- 6 Head-on angle**

When shooting through glass, always ensure that your camera is perfectly parallel to the surface.
- 7 Shoot tethered**

Link your Canon DSLR to a computer. Review the exposure and focus on a large screen as you shoot.
- 8 Keep a record**

Take photographs of your setup, so you can recreate the effect. Note camera settings and gel numbers.
- 9 Expert framing**

A photo composition needs to lead the eye in, and have a sense of direction. Also use negative space.
- 10 Avoid fizz**

If you're going to be shooting fizzy liquids like Cola, leave them out awhile to go flat, otherwise they'll become frothy (not a good look).



EXPERT INSIGHT ADDING COLOUR

FOR the optimum clarity in coloured water shots, you want to colour the water with light or gels, rather than inks or paints. David has Heavy Frost Diffusion Lighting Gel Sheets in front of his coloured gels. This paper can be bought in rolls and cut to size. It's ideal for creating an even spread of ambient colour.

PRO TIP

FOCUSING ACCURACY

"WHEN you're photographing liquids, you want the focus to be about 20% in from the front of the tank, as it's much less important if the background of the liquid falls out of focus," David explains. He held objects still in the tank of water, so that Helen could pre-focus on them with her lens manually to fix the point of focus.

TOP GEAR #2 Pocket wizard

FOR splash photography, the right timing is everything. When David is shooting on his Canon, he uses a Pocket Wizard Plus II to remotely trigger the lighting as he fires the shutter. He attached one trigger to the hotshoe of Helen's DSLR, and the other to the Broncolor lighting pack.



HOT SHOT #2



HELEN'S COMMENT



 We used a clear cylinder with a rotating blade at the bottom for this shot to get the tornado effect. The tricky part was to capture the tornado in sharp focus while it still had a nice tail, all before it disappeared. It took a lot of shots to get this one. We shot it with a small aperture in order to get everything in focus. I like the effect that the water looks like ice.



Lens	Canon EF 17-40mm f/4L USM
Exposure	1/125 sec, f/22, ISO100

HOT SHOT #3



HELEN'S COMMENT



For this shot we used David's acrylic ice cubes, and the same flash gels and setup as Hot Shot #1 with the bubbles. David showed me where to focus the camera and where the ice cubes

would enter the water. The challenge was to wait until the ice cubes had just entered the water, just far enough before I pressed the shutter. I love the colours made the trails behind the ice cubes make, the image has also been flipped to create a more abstract result.

Lens	Canon EF 100mm f/2.8L Macro IS USM
Exposure	1/125 sec, 1/32, ISO100



HELEN'S COMMENT



For this shot we used gallium that melts at fairly low temperatures. David's 5x macro lens had a very narrow depth of field.

David poured the gallium over the back of a spoon and told me to use a high speed burst continuously while the liquid was pouring over the spoon. The challenge was to try and get the drop in sharp focus, along with composing a balanced frame. The silvery colours on the metal look great.

Lens	Canon EF 100mm f/2.8L Macro IS USM
Exposure	1/125 sec, f/18, ISO100

HOT SHOT #4

PRO TIP

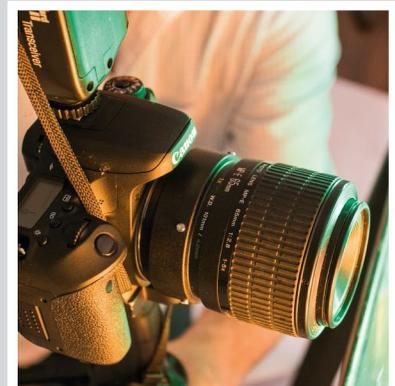
LIGHTING CONTRAST

"**THE** key to clarity in water is contrast of light. When the lights are further back, it creates an even spread of light, but less depth," David says. He showed Helen how changing the light position affected the textures in the water vortex.

TOP GEAR #3

Extreme macro lens

DAVID sometimes uses a Canon 65mm f/2.8 macro lens to focus super-close on liquid subjects. This manual-focus lens requires precision for pin-sharp images. "It's a beautiful lens, but the narrow depth of field (even at f/16) means it can be limiting."



TOP GEAR #4

Coloured gels

DAVID uses Lee colour gel sheets that can be cut to size for different light sources. "They're fireproof, which is important as they're close to hot lights for long periods," he says. "Experiment with different colours, take test shots and to see how the addition of different sheets affects the colour of the liquid," advises David.

HOT SHOT #5

HELEN'S COMMENT



For this shot we used Ferro liquid which is magnetic, so when David put an electro magnet underneath it rose up into these lovely peaks.

We started off with just one light, then David suggested we introduce a blue gel which gave these lovely blue colours to the peaks. I tried to focus on the middle peak which I think I achieved.

TOP GEAR #5 Specialist liquids

DAVID experiments with a wide range of liquids, including children's poster paint. More specialist options include Ferro Liquid (used to create the shot above) which is magnetised in the presence of a magnetic field. Another is the metal Gallium, which will melt in a pan of hot water.



DAVID'S BEST LIQUID SHOTS

David shares three stunning examples from his portfolio



HIGH SPEED PAINT POWDER

I LOVE this image. I started by pouring paints onto a balloon and popped it using a high-speed sound trigger. That amazing moment was captured on camera.



WATERFALLS RECORD ALBUM

THIS was for a record label, who wanted a coloured waterfall shot. I didn't want to use inks and paints, as I wanted an image with clarity and structure, so I used coloured gels to colour the water!



COKE SPLASH

I USED a single Speedlite and silver reflectors. The ice cubes are acrylic and are glued together with a glue gun. I attached a thin acrylic rod from the top to suspend the cubes in mid-air.



Lens	Canon MP-E 65mm f/2.8 1-5x Macro Photo
Exposure	1/125 sec, f/16, ISO100

PRO TIP

CHECK SHARPNESS

LIQUID splashes need to be pin-sharp. When you shoot with the DSLR tethered to a computer, it's quick to check the focal point. Here, it was easy for the pair to review images on Helen's Canon 77D, as they could quickly zoom in and out of shots using the camera's touchscreen.



SHOT OF THE DAY!

Lens	Canon EF 100mm f/2.8L Macro IS USM
Exposure	1/125 sec, f/32, ISO100

HELEN'S COMMENT



I love this shot, and really enjoyed my time with David! He was an excellent teacher and very patient, and explained so much about setting

up the flashes which is the key to great liquid splash photos. I shall be putting my knowledge into practice from now on. For this shot, David dropped a bottle of Russian vodka into water, and we used gels on a light to add colour to the background and water, and a yellow gel on a light to highlight the bottle and trails it's left behind. We then flipped the image on its side

DAVID'S VERDICT



Helen had two things that are exciting to see; potential and passion to learn. I am known for my passion for shooting liquids,

and Helen absorbed every bit of advice and guidance well. She showed a keen interest to understand how to shoot, as opposed to just going through the motions. It's very rewarding to see someone get energized in their work, as Helen was throughout the day. Since the shoot she's moved straight onto a new project with fantastic results. Well done!

BE OUR NEXT APPRENTICE

Do you need some help to take your Canon photography to the next level? Let us know what you'd like help with and we could pair you up with a top pro for the day! Email photoplus@futurenet.com with 'PhotoPlus Apprentice' as the subject, and include your phone number and address.

NEXT MONTH
GARDEN PHOTOS

РУССКИЙ
СТАНДАРТ
VODKA

BOTTLED IN RUSSIA USING WINE

QUALITY
STANDARD