



SHOOT FOR THE STARS

The Nikon D850's high ISO performance and resolution make it ideal for amazing night-shot time-lapse movies. **Marsel van Oosten** reveals how to get the perfect shots



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What I like about time-lapse photography at night is that it shows you the world as you can't see it with your eyes. Particularly with all the light pollution in urban areas, hiding most of the Milky Way. Time-lapse is challenging, but it's also extremely rewarding. It really pays off when it works.

Planning is everything. The challenge is to visualise in broad daylight what a scene is going to look like at night with certain star and moon positions. For this project, my wife and I spent a lot of time calculating where the moon would be rising and at which angle, which position the Milky Way would be in and so on, using a large spreadsheet. Make the most of the nights with a new moon, which are best for star photography as they are darker.

When it comes to the camera, high resolution and ISO sensitivity, as well as low noise, really matters. We used three D850 cameras. They are ideal for this kind of photography. The D850 features a built-in intervalometer, but you can also use a remote such as the MC-36 Multi-Function to programme your camera. Fast, wide-angle lenses are perfect, because they enable you to capture more of the foreground and stars. A good tripod and a programmable 3D tripod head can tilt the camera as it shoots. The 3D tripod head can also be mounted on a slider, so the camera can track in every direction. Lamps are useful to lighten up the foreground, but these don't need to be big. A torch will do.

To capture as many stars as possible, you need to use the longest exposure that will still show the



left Marsel travelled to Namibia in southern Africa to make D850 time-lapse movies against the darkest skies

below To track the night sky in all directions, Marsel recommends mounting a 3D tripod head on a slider



← stars as points, rather than grains of rice. I found that a 20-25 second exposure was ideal.

I normally set the interval time between two and three seconds. This is the minimum needed for the head or slider to move and data to be written to the card. The D850 can do intervals as short as 0.5 seconds, which is useful, as the shorter the interval, the smoother the movement and the longer the time-lapse sequence. On the other hand, the longer the interval, the faster the movements will look.

Auto aperture priority and auto ISO works great for night-to-day transitions. You can also guess the aperture. On a moonless night, it's usually the ISO 3200 or 6400 with a wide-open lens, shooting at 25 seconds. Once I have set up the camera, I never change it: that's the best way to ruin a sequence.

Using an electronic shutter, like the one on the D850, prolongs the lifespan of the camera shutter. You can easily ratchet up hundreds of thousands of shutter activations with one time-lapse project. For shorter shutter speeds, such as 0.5 seconds, it also prevents vibrations caused by the mirror slap.

Keep in mind that every shot should work as a great image in itself. A series of images will then come to life as a time-lapse. When you use 3D heads

and sliders, you need a strong beginning and end position. I always let the cameras run all night.

The D850 can process images and assemble 4K time-lapse in-camera, which saves time. It also has an exposure smoothing function, which evens out tiny jumps in exposure, preventing the film from flickering. Assembling the films manually is time-consuming, but gives more control over the final product. I use Adobe Photoshop Lightroom to process images and LRTimelapse to level exposures. ■

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Watch Marsel's time-lapse video on the *Nikon Pro* app, or at [youtube.com/watch?v=iU-HZ5CYDsY](https://www.youtube.com/watch?v=iU-HZ5CYDsY)

FIVE ESSENTIAL ELEMENTS OF GREAT TIME-LAPSE

DO YOUR RESEARCH

Apps such as the self-explanatory Dark Sky Finder, lunar phase indicator Deluxe Moon and planetarium Go Skywatch are a great help when planning your shoot.

BE A FILM DIRECTOR

Rather than a collection of stills, think of your time-lapse as a story with beginning, middle and end. Anticipate the movement of the moon and the stars, then compose the sequence accordingly.

START SIMPLE

When it comes to movement, less is usually more. You don't want to give your viewers motion sickness, which you will if you pan and tilt in one direction while the stars are moving in another.

ZOOM IN POST

With 8K and even 4K footage, you can zoom and pan in post-production to make your footage more dynamic and still end up with good image quality and detail.

SHOOT, THEN SCORE

A soundtrack turns a good clip into an immersive experience, so it's worth making sure you have the right piece – as well as the licence you need to show the video on your chosen platform.