MASTER CLASS

How to capture motion in motorsport

Darren Woolway ARPS heads to Brands Hatch to practise the art of panning

There are several ways to photograph cars, but a common rookie error is to aim for a completely sharp image of a single vehicle as it passes. The result of this, without any movement visible in the wheels, is that the car looks like it's parked. Freezing the action in this way can be useful when there are multiple cars close together and you want to be able to see details in more than one vehicle. It can also be effective when the car is completely front on.

Panning, therefore, is one of the best ways to make your motorsport pictures exciting and to capture the energy.

EQUIPMENT CHECKLIST
DSLR
70–200mm f/2.8 lens or similar
Memory cards
Batteries
ND filter (optional)
Circular polariser (optional)
Monopod (optional)

PACK THE RIGHT EQUIPMENT

What kind of DSLR you have does not matter too much – as two to three bursts per second should be plenty. Panning does require a bit of shooting in burst mode, but shoot too much and you'll spend longer on the computer afterwards trying to find the best shot than you may have spent at the circuit.

You will need a reasonably long lens (70–200mm is fine), while a wide aperture will allow you to throw the background out of focus a bit more, to emphasise the motion blur. You may need a set of ND filters though, if it's a bright day, to be able to shoot that wide open.

I rarely use a circular polariser but they can help remove windscreen glare if that is causing a problem. I also don't use a monopod, although they do help reduce any vertical motion blur.

I'd recommend taking spare memory cards and batteries, as you can rattle through these with the slow shutter speeds and continuous-shoot mode.

Using multiple cards is also a good precaution in case one card becomes corrupted.

GET IN POSITION

Make sure you're at the right part of the circuit and that you are positioned correctly.

Tuck in your elbows tightly against your sides, as this will lock your body in a stable position. You then need to rotate your hips to follow the car. If you are able to shoot low, then kneel with one knee up and rest your elbow on your knee for support, rotating from there.

Finding the correct part of the track is key. Many people think that for good motion blur you want the cars to be going really fast. Actually, the opposite is true – so for the most effective panning find a point of the track, usually a corner, where the cars are travelling more slowly.

For the best definition to bring out the car's 'bone line' structure, you should have the sun at 45–90 degrees from the angle of the camera. This will create the greatest contrast between highlight and shadow. Having the sun behind the vehicles will result in a very flat image.

Shoot at a corner as the cars will be travelling at their slowest

Not panning with the car gives a sharp background but a blurry vehicle

SET YOUR SHUTTER SPEED

I start with a shutter speed of 1/125. This will allow some motion blur in the wheels and background but shouldn't freeze the motion. Then gradually I will take the shutter speed down – 1/60–1/80 is as slow as I can get away with handheld without a monopod.

The more slowly you shoot, the more dramatic the motion blur becomes but the harder it is to get a sharp shot. If you do not pan with the car (follow its motion) you will have a sharp background and a blurry car. When following the motion of the car you need to learn to shoot with both eyes open. If you do not you will struggle to see where the car is going.

Some front and back movement may be visible

GET READY ... AND SHOOT

To create an image where the car's body is sharp, the body must stay in the same part of your composition for the whole of the exposure.

If the car does not stay in the same place you will blur the body. As you follow the car, only shoot a maximum of two to three images. Remember that the car will pass several more times during the race – assuming it doesn't crash out or suffer a technical failure.

When done correctly, you should have a perfectly sharp car, blurry wheels and a blurry background.

Don't worry if the car is sharp at the centre, where the driver and central graphics are, but there is movement at the front or back. If the car is driven by the rear wheels it will create vibration at the back, while if the car is made of fibreglass you can expect to see some front and back movement.

KNOW YOUR CIRCUIT

Get to know the track well

Most tracks do not charge spectator entry fees during the week, when they are doing track and test days. You can usually find a low fence, or a window that has been created especially for you in the fence line. Brands Hatch, where these images were shot, has several low fence sections and several areas where a fence window can be opened for clear viewing. The hairpin bend up at Druids can be accessed via a bridge which doesn't have any tall fencing in the way.

Try to familiarise yourself with a track's access points

AUTHOR PROFILE

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