Interior Industrial Photography
With ultra-wide angle lenses

Capturing wide-angle images not possible with other lenses
Canon EF 14mm f/2.8L II USM

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Introduction

There are some things that you need to photograph that only an extreme wide-angle lens can capture. I first learned this over 30 years ago when I needed to photograph the corbel vaults and interior rooms inside 5th-9th century Maya palaces and temples in Guatemala, Belize, Mexico, and Honduras. So I bought a 15mm ultra-wide angle Nikkor lens for my Nikon F3 (in the 1980’s there were no digital cameras).

Today in 2011 I still have this Nikkor lens, though now I use it with a digital SLR: Nikon D300. Since this camera is not full-frame, I don’t get the full original 110 degrees of coverage.

Then recently it was possible to obtain a full-frame Canon EOS-1Ds Mark III digital camera from Parrot Digigraphic. So now I needed a super wide-angle lens. I selected a 14mm fixed focus lens. This gives 114 degrees of coverage.

Although this lens costs over two thousand dollars I did not flinch, because I did not want to compromise on quality. Keep in mind this is the version “II”, not the older version.

- Original Canon EF 14mm f/2.8L USM Wide Angle Lens, street price about $1850
- Newer Canon EF 14mm f/2.8L II USM, street price about $2,199
Examples of what this 14mm lens can do

Recently I needed to do photography in Dubai and Saudi Arabia. I had with me the 14mm lens and a 100mm macro. My assistant was to have brought over several basic zoom lenses (and her new Canon Rebel). But there was too much paperwork to get a visa for her (she is Guatemalan, not US citizen): the hotel was not cooperative since the reservation was made by a sponsor not by me directly, so at the last minute it was not possible to fly the assistant to the Middle East. Thus I was stuck for over a week with no basic zoom lens. All I had was this ultra wide-angle option. But in fact in several situations, this lens was wonderful.

To accomplish a full comparison it would have been useful to have two cameras side-by-side, each with a different lens. But since my assistant could not get to Dubai I had to work by myself (and with one camera). But much of what I was photographing with the new lens I had already photographed with a basic Nikon zoom lens and the D300 about a year ago. So I can do rough comparisons.
This view is hard to do considering that in a factory there is no space to get away and take the whole object.

The same shot with a normal zoom lens, it can only take part of the machine.
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Picture taken with a Canon EF 14mm f/2.8L II USM

Picture taken with a AF Nikkor 24-85mm f/2.8-4D a normal zoom lens.
Picture taken with a Canon EF 14mm f/2.8L II USM

Picture taken with a AF Nikkor 24-85mm f/2.8-4D a normal zoom lens.
Other Canon wide-angle lenses

Although the 14mm lens is wonderful to have, in most cases it is far too wide-angle. In most cases you will wish to avoid the natural and inherent distortion of such a remarkable lens. So I have been looking around to see what other lens I would like as a backup.

Be careful when looking at the camera specs, because many lenses are for the small sensor cameras (less than full-frame). These lenses do not really provide ultra-wide angle on a small frame system. I am only interested in true wide-angle and only on a full-frame digital system.

Here are a few options for price comparisons:

- Canon EF 20mm f/2.8 USM, street price $467
- Canon EF 24mm f/2.8, street price $339.
- Canon EF 24mm f/1.4L II USM, street price $1660
- Canon EF 28mm f/1.8 USM, street price $477
- Canon EF 35mm f/2, street price $309

For illustrative purposes is very useful, to have a full view of the machine you are talking about.
What other lens would I like?

The 17-40mm zoom would be what I am looking for, but reviews are not encouraging. Too many photographers said it is not sharp and they dislike it. But for ease of use (for the range of wide-angle), it would be nice if the quality of the resulting photographs were better. Comparable issues with the reviews of the Canon EF 16-35mm f/2.8 L II USM: too many photographers day they are not pleased with that lens either.

- Canon EF 16-35mm f/2.8 L II USM, street price $1,545
- Canon EF 17-40mm f/4L USM, street price $748
- Canon EF-S 18-200mm f/3.5-5.6 IS Standard Zoom Lens, street price $574. But at full sensor size, this is only 29-320mm

Since none of the ultra-wide zoom lenses have a good set of reviews, I would prefer to remain with a prime lens, and would like to evaluate the Canon EF 24mm f/1.4L II USM for all the many situations when 14mm is too wide but a 28mm and especially a 35mm would not be wide enough.
Summary

If you are in a situation where only a 14mm ultra-wide angle lens can capture the subject in front of you, then this is a great lens. It is also a fun lens to experiment with, both for architectural photography as well as for landscape photography. Actually I got this lens to do photography inside the jungle (in the rain forests of Guatemala), where the trees are so close you can’t get far away to get a wide shot.

Yet for photography of factories, this is a helpful lens to have.

Acknowledgements

We obtain most of our Canon camera equipment from Parrot Digigraphic. This is because if you want to print your images later on, Parrot Digigraphic is one of the leading resources in the USA for reliable information on the pros and cons between Epson and HP and between Epson and Canon.

If you buy your equipment from a box pusher, their sales reps know only how to offer a cheap price: the sales reps are not specialists in fine art photography, architectural photography, and definitely not in industrial photography.

You can contact Parrot Digigraphic via info@ParrotColor.com or telephone toll free, (877) 727-7682.

All photographs taken for this evaluation were stored in Hoodman CF memory cards, which were kindly donated to help us continue our work to inform and educate on digital photography technology.

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All tripods and tripod heads used in the evaluation of the cameras are from Gitzo and/or Manfrotto, provided courtesy of Bogen Imaging. This master distributor for these two brands in the USA is now named Manfrotto Distribution, telephone: (201) 818-9500, Fax: (201) 818-9177, e-mail: info@manfrottodistribution.us