

FREE Software Downloads

8 Top Mirrorless Cameras • Open Source Raw Converters • Light Painting

dt *D i g i t a l* Photography

The in-depth quarterly for the photo enthusiast

Expert Workshop

Perfect Posing
with **Roberto Valenzuela**

Creative Landscapes

The Magic of ND Filters

High-End Compacts

Monitors for Photographers

Photographing the Sun

Light Painting Ideas

Open Source Software Test

Raw Converters

Better than Lightroom

Market Insights and Camera Test

Mirrorless and Happy

Sony A7 II vs. Canon, Fujifilm, Leica, Nikon, Olympus, Panasonic and Samsung



www.ct-digiphoto.com

20 (2015) • \$14.99
Summer Issue



DISPLAY UNTIL SEPTEMBER 23

TRUSTED TO TRAVEL



When you need to carry it all for a business or pleasure trip, rely on the Fastpack from Lowepro. It's been trusted to travel for years. The next-generation pack design includes enhanced protection with a built-in All Weather AW Cover™ and CradleFit™ device compartment, plus three, primary storage zones to help keep you organized and ready for the fast pace of modern travel.



The
Trusted
Original™

Find out more at
lowepro.com/fastpack

©2015 DayMen Canada Acquisition ULC
Distributed by DayMen Canada – Daymen.ca

Contributing editor Sophia Zimmermann hits the nail on the head when she says: "The reflex mirror has been a second-rate remedy since its invention, and was always a roundabout way of enabling photographers to see what they are capturing." And now, although the mirror has survived the transition into the digital age, its days are surely numbered, especially now that mirrorless camera manufacturers have started getting their act together with regard to autofocus speed and viewfinder clarity.

All photographers use light to illuminate the scenes they capture, but few see light itself as a potential subject, even though creating light sculptures in a studio environment is actually quite simple. See page 112 for an introduction to the fascinating world of light painting. And the Sun – the mother of all light – makes an attractive subject too, but please only point your camera in her direction once you have read our article on page 124.

Whether you decide to look out into space or close the door and shoot in the dark, have fun with all your digital photography experiments!



Juergen Rink





Goodbye Mirror? 16



Open Source Raw Converters 74

Portfolio

Herbert Boettcher spends weeks traveling the world's oceans on container ships and has plenty of time to create fascinating photos of what he sees.

10 Herbert Boettcher Portfolio

The Best Mirrorless Cameras

Are mirrorless system cameras set to steal the image quality crown from DSLRs? We test the latest and best models from the major manufacturers and check whether reality lives up to the marketing hype.

- 16 Market Overview
- 22 Camera Tests
- 32 Conclusions

High-End Compacts

As smartphone cameras take over from entry- and mid-level compacts, we give the latest high-end compacts the full c't treatment.

- 36 Market Overview
- 40 Camera Tests

High-End Monitors for Photographers

Wide-gamut monitors with 10-bit processing support and extended color spaces make conventional screens look pale in comparison. We test six of the best.

- 44 All About Monitor Calibration
- 48 Individual Monitor Tests

ND Filter Workshop

Filter expert Felix Inden explains how today's filter systems work and discusses techniques for creating fantastic filter effects in your own photos.

52 ND Filters and How to Use them

Film and Photo Permanence

How long will your prints and digital photos last? And how can you preserve them for decades or even centuries? We take a detailed look at the history and everyday reality of photo, film and image permanence.

- 62 Introduction
- 64 Testing Methods
- 70 Safe Framing
- 71 Long-term Storage

Open Source Raw Converters

There are plenty of free alternatives to Lightroom, CaptureOne and the like, and some offer unique features that the commercial competition doesn't provide. We test the best of the current crop.

- 74 Introduction
- 78 Software Tests
- 90 Conclusions



Perfect Posing 92

Perfect Posing

Roberto Valenzuela is one of the world's top portrait photographers and photo educators. This workshop introduces his unique system that enables you to create great poses in any situation.

- 92 Introduction
- 94 Posed Photojournalism
- 100 Posing a Subject's Eyes
- 106 Adding Movement
- 109 Case Study

Light Painting Workshop

We introduce this endlessly variable form of visual expression and show you how to create abstract, ethereal, artistic and fun 'light sculptures'.

- 112 Light Painting and Light Brush Techniques
- 121 Light Painting on Canvas
- 123 DIY Gear

Photographing the Sun

Even if the next total eclipse is decades away, the Sun is still a fascinating and endlessly changing subject that offers a wealth of unusual photo opportunities.

- 124 How To Photograph the Sun
- 127 Build Your Own Solar Filter
- 132 ISS Flyby, Hydrogen-Alpha Photos



Light Painting 112

About Us

- 3 Editorial
- 136 Book Review
- 138 Coming Up in Issue 21
- 138 Contact Info

Free Downloads

- 6 Highlights and Contents

Full Version Software

WebSite X5 Home is a simple but powerful website creation tool that makes it a breeze to present your portfolio online.

Special Edition Software

Elements+ unlocks a range of additional tools and functions that are normally hidden in Photoshop Elements.

Videos

- Creative Nature Photography: Using Wide-angle Lenses
- Long-exposure Architectural Photos
- Improve Your Shooting Performance with Pro Photographer Mike Larson
- Between Rock and Jazz: The Works of Lisa Tanner

Free Downloads

Navigate to www.ct-digiphoto.com/downloads202015 to download the content listed above for free

Free Downloads

Visit www.ct-digiphoto.com/downloads202015 for free access to a full version of WebSite X5 Home, a special **ct** edition of the cool Elements+ plug-in for Photoshop Elements, and a range of exciting videos and video tutorials.

Elements+ for Photoshop Elements 13

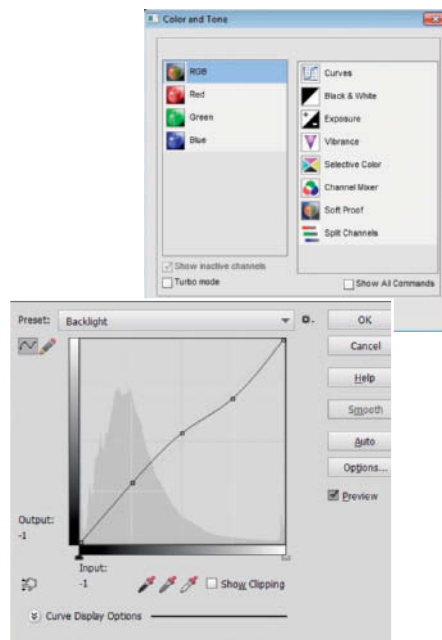
Special edition software: Elements+ unlocks a range of additional tools and functions that are normally hidden in Photoshop Elements.

Although Adobe sells *Photoshop Elements* as a cheaper beginners version of its image processing software, it still includes a number of hidden tools and functions that are normally only available in *Photoshop CC*. The Elements+ plug-in for Windows and Mac unlocks these and makes them available to everyone.

The official trial version of the plug-in has only limited functionality, but **ct Digital Photography** readers have access to a special pre-registered version that is much more powerful than the trial plug-in.

The special edition unlocks all color & tone, selection, layer styles and paths functions. These include the Curves tool, a Channel Mixer and the Selective Color adjustment. Quick Mask mode, alpha channels and the paths tools make

it simple to create complex selections. Additionally, Smart Filters and layers functionality are available in the full version of the plug-in. (sts)



Creative Nature Photography

Video tutorial: Using wide-angle lenses in macro situations



Hans-Peter Schaub is a nature photography expert who loves to take an unconventional and creative approach on his shoots. In this video, he demonstrates the effects of using various focal length lenses and extension tubes in close-up nature photos. Schaub rounds out the video with a selection of useful shooting tips and ideas on how to create unusual wide-angle macro images. (sea)

Image Processing Tools

Windows

Elements+ for PSE 13 special edition

GIMP
GIMP Portable
GREYC's Magic Image Converter (G'MIC)
Inkscape
Inkscape Portable
Photivo
RawTherapee
StylePix
StylePix Portable
UFRaw

Mac OS

Elements+ for PSE 13 special edition

GIMP
GREYC's Magic Image Converter (G'MIC)
Inkscape
Photivo
Raw Photo Processor
RawTherapee
UFRaw

Linux

GIMP
GREYC's Magic Image Converter (G'MIC)
Inkscape
Photivo
RawTherapee
UFRaw

Photo Tools

Windows

DCRaw
ExifTool
GTKRawGallery
IrfanView
IrfanView Plugins
IrfanView Portable
PhotoRec

WebSite X5 Home full version

Mac OS

ExifTool
MacPorts
PhotoRec

Linux

DCRaw
ExifTool
GTKRawGallery
PhotoRec

Sample Images

Camera Test Sample Photos
DCRaw Batch Files
Monitor Test Sample Images
Sample Images for Comparing the Quality of Various Raw Converters

Videos

Creative Nature Photography 4:
Using Wide-angle Lenses
Long-exposure Architectural Photos
Improve Your Shooting Performance
with Pro Photographer Mike Larson
Between Rock and Jazz – The Works of
Photographer Lisa Tanner

WebSite X5 Home 11.0.6.27

Full version software: WebSite X5 is a simple but powerful website creation tool that makes it a breeze to present your portfolio online.



WebSite X5 Home gives you all the tools you need to get your website up and running without first having to learn complex programming skills. The program provides more than 250 ready-made templates that you can fine-tune using the built-in graphics editor, and you can fill your pages by dragging and dropping text, images, videos, music, Flash animations and social network buttons. The program generates the corresponding HTML5 code automatically, ensuring compatibility with all popular search engines and mobile devices. See <http://www.websitex5.com/en/home.html> for more details.

c't Digital Photography readers can download and use the full version of WebSite X5 Home 11.0.6.27 for free – all you have to do is visit <https://answers.websitex5.com/> and register as a new user. During setup, the software installer then requests your e-mail address and the password you chose during registration. If you like what you see and wish to extend the program's capabilities, you also qualify for a 40% discount on an upgrade to the Evolution version 11 that you can purchase from within the program interface. The free registration offer and the upgrade discount are valid until October 15th, 2015. (sea)

www.ct-digiphoto.com/downloads202015



Order Online By 8pm
For Same Day Shipping

CAPTURE EVERY MOMENT

GET PHOTO & VIDEO
CAMERAS AT ADORAMA



Nikon 1 J5
Mirrorless Digital Camera
with 10-100mm VR Lens
\$896.95



Sony Alpha a7
Mirrorless Digital Camera
with 28-70mm
\$1,298.00



Canon PowerShot G7-X
Compact Digital Camera
with 20.3 Megapixel
\$649.00



Sigma
dp-2 Quattro Digital
Point & Shoot Camera
\$888.00



42 W 18TH ST NYC
800.223.2500
adorama.com

FREE 1-3 DAY SHIPPING
on most orders over \$49*
*details at adorama.com/shipping

ADORAMA
MORE THAN A CAMERA STORE

Get in the Picture



c't Digital Photography gives you exclusive access to the techniques of the pros

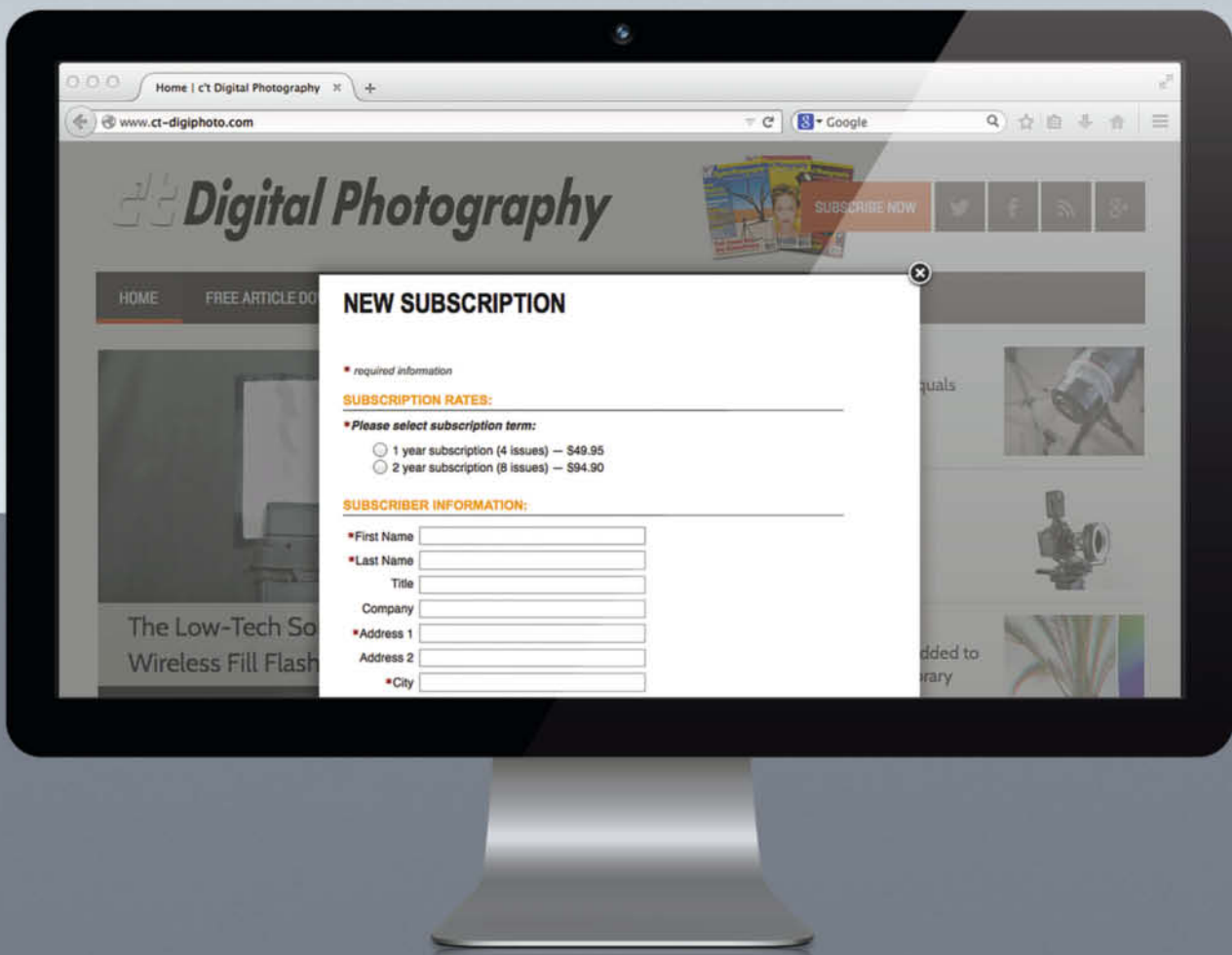
Keep on top of the latest trends and get your own regular dose of inside knowledge from our specialist authors. Every issue includes tips and tricks from experienced pro photographers as well as independent hardware and software tests.

There are also regular image processing and image management workshops to help you create your own perfect portfolio.

Each issue includes a free DVD with full version software, practical photo tools, as well as eBooks and additional video material.

Subscribe Today!

And Save 16%



ct-digiphoto.com



Visit our
website:





Portfolio

Herbert Boettcher

Out on the ocean on a container ship for weeks on end, Herbert Boettcher has all the time in the world for photography. His images emanate stillness and calm that belie their subjects, for the logistics industry these ships are part of is a well-oiled machine that runs faster and faster with every passing day.





The colorful container ship in the foreground stands out crystal clear, while the clouds and the horizon disappear in a distant blur. There is not a soul in sight. The image exudes stillness and calm, despite the pressures of a transport system for which every minute counts and efficiency is the order of the day. Herbert Boettcher cleverly counters this hurriedness with his own unique take on things,

enabling viewers to take their time and enter into the stillness the images convey. The way Boettcher goes about his work is mirrored by the clinical orderliness and precision of his images. Snapshots are not his thing at all, and it is of utmost importance to him that his images turn out as he saw them in his mind's eye. Neither the limits of technology nor the vagaries of life at sea excuse work that is less than

perfect, and a voyage of several weeks may yield only a handful of photos.

Boettcher has been a freelance photographer for more than 20 years. His first two ocean-going sequences, *Seamotion 1* (2004) and *Seamotion 2* (2007), were captured using a home-made pinhole camera and a Hasselblad XPan analog panoramic camera, and he developed his films on board immediately after shooting. After years of dissatisfaction with the



From the 2007 *Seamotion 2* sequence. This photo was captured using an analog Hasselblad XPan camera. All the other images shown here were captured using a Phase One digital back on a voyage made in 2014.

way analog film reproduced colors, going digital in 2010 was a huge milestone that took him closer to the kind of image quality he was aiming for. Digital technology allows him to let a project lie fallow for a while and return to it when the opportunity arises. For Boettcher, there is no contradiction involved in working slowly using digital technology. He now takes a Hasselblad V, an Alpa body and a Phase One digital back with him on his container-ship travels.

The *SeaMotion* projects were commissioned by the Hamburg Süd arm of the Oetker Group – a client that values and seeks out his distinctive style. He also sells his images in calendar form or as single prints, combining commissioned work with artistic fulfillment.

The *Edition Panorama* gallery in Mannheim, Germany is exhibiting work created between 2004 and 2009 until the end of this year. (jr)

For more of Herbert Boettcher's work visit

www.HerbertBoettcher.de

or check out his gallery:

www.editionpanorama.com

