Mirrorless Cameras • Gigapixel Images • Lightroom • Pseudo HDR / DRI

c't Digital Photography

The in-depth quarterly for the photo enthusiast

Creative Corner

Pseudo HDR and DRI
Get the most from your pixels

Painting with Light
LED photo performance art

Workshops

iPad Photo Assistant
Tablet-based shooting support

Gigapixel Panoramas
More detail than you ever thought possible

Free DVD

Light Art eBook

Digital Mega-painting Project Video

Full Version Software, Test Images

Image Processing

RawTherapee How-to
Free and powerful RAW development

Lightroom Workflow
Expert guide

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7 (2012) • **$14.99**
Spring Issue

Mirrorless Camera Test
System Cameras are Coming of Age

$14.99US/CAN

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photoact 2012

Conference and Workshops

© Jorge de la Torriente

Speakers:

Bruce Barnbaum

Christian Bloch

Dan Burkholder

Greg Downing

J Henry Fair

Giovanni Gallucci

Eric Hanson

Gordon Lewis

Marc Muench

Ken Rockwell

Uwe Steinmuller

Jorge de la Torriente

Photographers!

We are proud to announce a premium two-day event aimed at presenting a balanced view of the wide world of contemporary photography. Some of the world's leading photographers and educators will come together to present and discuss the art, craft, and technology of their trade.

- One beautiful location
- Two days
- Three tracks (Art-Craft-Technology)
- Four workshops
- Twelve world-class speakers

Don't miss this unique, intimate event.
Space is limited – **reserve your place now!**

Visit **www.rockynook.com/photoact2012**
for more information and online registration

August 24–25, 2012 ○ Santa Barbara, CA

I am continually amazed by the endless creative possibilities offered by digital imaging technology: this issue's article (page 88) by light artist JanLeonardo Woellert shows how he combines light art and photography to create a completely new form of expression. Our article also gives you exclusive inside information on how these fantastic images are created and tells you how to get started making your own.

Bert Monroy's 'Times Square' digital mega-painting is equally amazing, but more difficult to mimic! The artist spent four years creating and breathing life into a completely digital version of New York's most famous square. Our article (page 18) introduces you to the project, and our exclusive video tutorial on this issue's free DVD gives you the inside track on the background, the tools and the techniques used to complete this unique mega-project.

From 'mega' to 'giga': the first time I zoomed into a gigapixel image of Paris, from an overview of the city to a single peg on a clothesline, I was sure that I had stumbled on a technique that is either incredibly complex, prohibitively expensive or both. However, the hundreds (or sometimes thousands) of source images that make up these incredible images test the limits of computing power but can be stitched together using software that is often free (page 26).

And digital technology is making inroads into your favorite photo magazine too. In addition to the print and iPad app versions (www.ct-digiphoto.com/iPad), *c't Digital Photography* is now also available in a Zinio edition for Android, Windows and Mac at www.ct-digiphoto.com/zinio.

The choice is yours – you can subscribe to the print version and get access to all iPad issues for free, or you can subscribe to just the iPad or Zinio versions. And for good measure, you can buy single issues in all three formats too.

Whichever version you're looking at, I wish you a great read and lots of fresh photographic ideas!

Juergen Rink (editor)

P.S. Have you heard about the photoact 2012 conference? Together with our partner Rocky Nook Inc., c't Digital Photography is staging a unique photo event in August of this year in sunny Santa Barbara, CA. For details, visit www.rockynook.com/photoact2012.

The Making of Times Square 18
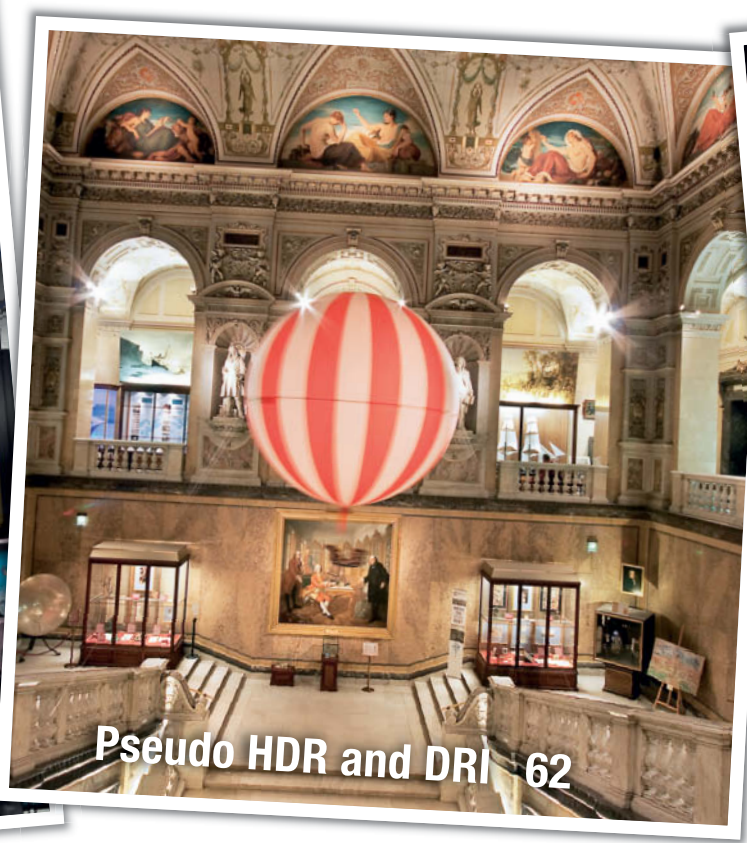
Pseudo HDR and DRI 62

Portfolio

Martin Stranka is a bright new star on the international scene. We spoke to him about his own special brand of photographic art.

Bert Monroy's Digital Magic

Bert Monroy spent four years working with Illustrator and Photohsop to produce an incredible digital painting with almost 500,000 layers. He tells us how the project came about and how he approached the mammoth task of turning the idea into reality.

Gigapixel Panoramas

Gigapixel shooting and stitching techniques can be used to produce images with unbelievable depth of detail. This article shows you how to produce and present gigapixel images, and tests the limits of human and machine in the process.

iPad Photo Assistant

The iPad is a great tool for viewing, keywording and even processing digital images on location. This article introduces the best apps and accessories for harnessing your tablet during a shoot.

Pseudo HDR and DRI

This comprehensive workshop covers all aspects of shooting, processing and tone mapping HDR and DRI images made from single source images.

Light Art Performance Photography

LAPP is a unique symbiosis of photography and light art performance and is rapidly becoming a worldwide phenomenon. This article takes a look at the origins of the genre and the techniques used to produce these fantastic images.

Painting with Light 88

Mirrorless Camera Test 102

System Camera Test

This issue's camera test takes a close look at some of today's high-end and mid-range mirrorless cameras and compares them with the compact competition.

Free RAW Processing

RawTherapee is a donationware RAW developer bursting with features. This article guides you through the options on offer and shows you how to apply them to your images.

The Lightroom Workflow

Lightroom includes a wide range of high-end features that simplify digital asset management and help you to produce better results. This article shows you around the workflow and gives you tips on getting the most from the software.
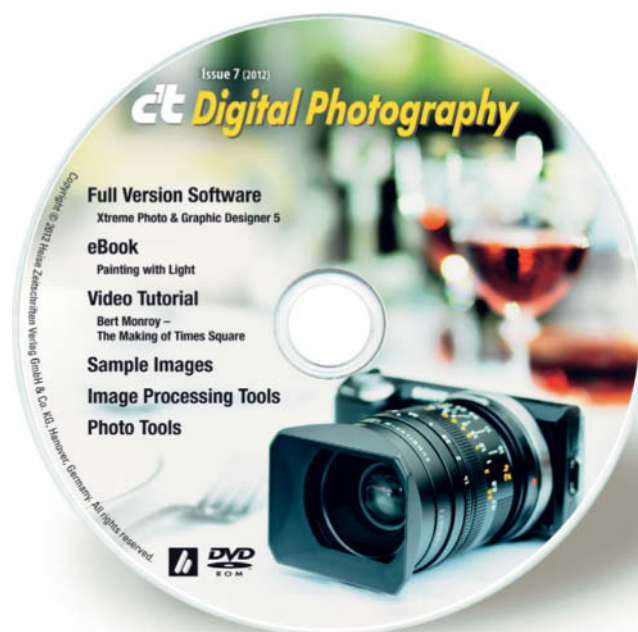
About Us

Free DVD

Readers' Letters

No Bias

Just wanted to say that I love your magazine and think the way you approach the camera reviews are the way is should be done – technical, with no bias for one brand or another. Well done indeed.

Richard Haas

Panorama Equipment Missing

I saw your magazine on the newsstand and bought it. It is an excellent product. The article by Ralph Altmann entitled 'Shooting and Stitching Panoramas' was well done except – no mention was made of the Really Right Stuff line of fine panorama equipment.

Art Lund

Sorry, but we can't test all the equipment out there! We have to restrict ourselves to a representative choice for an article like this. Really Right Stuff is indeed fine gear.

Magazine for Grown-ups

It seems that at last someone has produced a photo magazine for 'grown-ups'! I have only seen one edition so far, but the articles in Issue 6 are so good and in-depth plus with a really useful DVD, that I shall be ordering it from now on. I have just a minor comment that you might consider incorporating in your camera tests. With an ever-growing variety of sensor sizes in the new camera models being introduced, rather than using the existing system (1/2", 1/2.3" etc.) that I'm sure must confuse many people, would it be possible to simply state the actual dimensions in millimeters so that comparisons can be made? Looking forward to the next issue.

David Piper

Intelligent Content

Many thanks for the c't Digital Photography magazine, it's great to read and has intelligent content that's aimed at both photography and the digital darkroom. I've only just discovered it here in Finland, in fact I've only seen it at one particular shop in the center of Helsinki, so I've made sure to order the yearly subscription.

Francis Hart

Where Can I Get Issue 2?

I would like to congratulate you on your high-quality magazine that has so much more to offer than the competition! I have ordered a subscription and I will be recommending it at all of our photo club meetings.

It's just a shame that we can no longer order Issue #2. Is there any way to get hold of a copy?

Johan Vanhauwaert

Sorry, but issue #2 is completely sold out. However, all issues are available for purchase digitally, either using our iPad app or through Zinio (see the links below). The Zinio reader is available for a large variety of operating systems and mobile devices.

iPad app: www.ct-digiphoto.com/iPad

Zinio edition: www.ct-digiphoto.com/zinio

… and what people are saying about us on the Web:

Get c't Digital Photography Magazine – It's Damn Good

After taking a look at a few issues, we have to say that this new magazine has shot up our list of favorites and is now on our 'must buy' list when we hit the newsagent.

Here's why you'll probably like it too: For starters it is detail-heavy. Every article is meticulously explained and has several examples and often explanatory diagrams of the more important aspects of the subject. In fact, the featured articles in each edition read more like a series of mini-guides.

The beauty of that approach is that even veteran shooters will probably learn something or at least be reminded of some important aspects of the particular subject being covered. These are photography articles for information junkies.

While a lot of photography magazines emphasize flashy graphics and beautiful design (which isn't necessarily a bad thing), c't Digital Photography emphasizes hardcore, actionable information about the technique and theory of various facets of photography. It has its fair share of great photography too.

www.lightstalking.com/c-t-digital-photography

Light Stalking

A Bit Different

I came across this magazine and website, and they appear to be 'the business', as it were. So many magazine formats for photography are just full of stuff you already know and equipment reviews that are just not interesting. This one looks a bit different and you might like to check it out. As the cover says 'in-depth' and I think that is correct, fulsome in detail and information.

https://oxfordschoolofphotography.wordpress.com/2011/12/01/ct-digital-photography-magazine/

Oxford School of Photography

Tell us what you think:

We are always happy to receive your comments and suggestions in a letter, an e-mail to editor@ct-digiphoto.com or at www.facebook.com/ct-digiphoto. We reserve the right to abbreviate your input for publication. Our comments are printed in italics.

Bert Monroy and his 500,000-layer photorealistic portrait of Times Square

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Start learning today: **www.lynda.com/trial/ct-digitphoto**

lynda.com
Online Video Library

DVD Highlights

Highlights of this issue's free DVD include a complete eBook on light art photography, sample images from the articles and tests in the magazine and a free full version of Magix *Xtreme Photo & Graphic Designer*. Our additional high-end video material includes a multi-part video tutorial by Bert Monroy on the making of his astonishing 'Times Square' digital mega-painting.

Bert Monroy – The Making of Times Square

Video Tutorial: In addition to this issue's article (see page 18), Bert Monroy uses this multi-part video tutorial to give you the low-down on many of the techniques and tricks he used to create his digital masterpiece with its 500,000 layers and monumental levels of detail.

This issue's eight-page article tells you how Bert Monroy created his fantastic digital mega-painting of Times Square. As a bonus, lynda.com has kindly given us access to excerpts from their amazing video documentary of the project. These 18 video clips introduce you to the artist and take you step by step through the processes involved in the creation of this one-of-a-kind masterpiece.

Monroy gives you background information on the project and on the tools he used during the project. One of the most important of these was his Cintiq hybrid graphics tablet/display, which has 1024 different degrees of pressure-sensitivity and allowed him to paint directly into the monitor image. Such a device device can, for example, be used to draw the boughs of a tree in a natural and intuitive way. Monroy also spends an entire chapter explaining how he creates his own brushes and tells you how he went about organizing this mammoth project with its half-million separate layers.

The artist zooms into many of the painting's details in the course of the videos, revealing a truly astounding degree of resolution. Every single object, whether large or small, background or foreground, was created with the greatest care and precision, and individual video clips explain how dirt and grime effects, realistic-looking clothing seams, trees and asphalt were created.

The second section delves deeper into individual techniques and explains Monroy's approach to working with reference material and how he establishes perspective in his objects. This section also details how individual elements, such as the spotlights illuminating a billboard, were created.

The third and final section concentrates on the people in the painting. Monroy explains in detail how he created the outlines of his figures as well as eyes, lips, noses and various other features. He also gives you inside information on who the people are and how they came to be part of his picture. These include his wife and kids and many of his friends and acquaintances.

The full-length versions of all three videos can be found at Lynda.com.   (jub)

Xtreme Photo & Graphic Designer 5

Full version software: This all-in-one package combines powerful photo editing, cataloging and editing tools in a single, easy-to-use interface.

This package is something of a Swiss Army Knife for digital photographers, and allows you to create vector illustrations and design templates as well as edit your photos from the comfort of a single interface.

The Photo Designer component includes a range of powerful filters and tools for optimizing image brightness, saturation, contrast and sharpness, as well as a red-eye correction tool and content-aware rescaling for making smart adjustments to individual image elements. The built-in Reallusion FaceFilter beautification functionality allows you to quickly and automatically create and adjust individual facial features and remove a range of common facial blemishes. The Photo Manager component includes functionality for viewing, sorting, cataloging and burning photo collections to CD and DVD, as well as slideshow production and online publishing tools.

Please register the software inside of seven days after installation by entering your e-mail address. Once you have registered, the software will remain fully functional forever.   (jub)
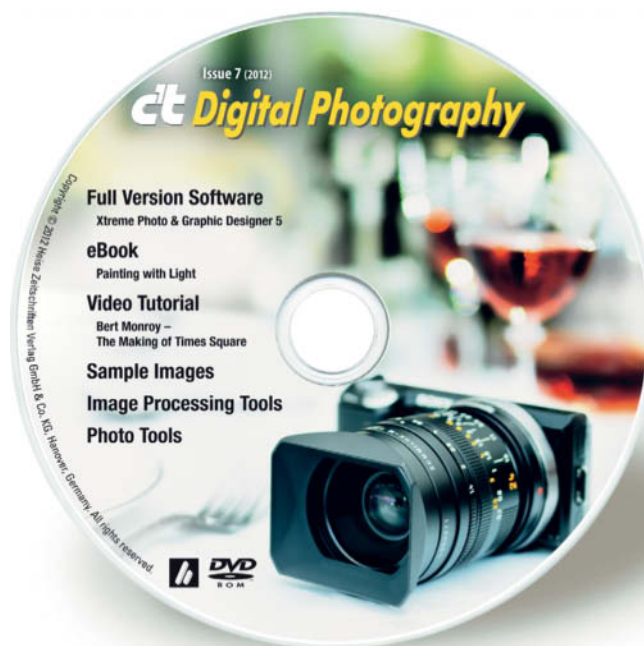
Painting with Light

eBook: This eBook covers the background, development and technique of Light Art Performace Photography.

Light Art Performance Photography, or LAPP for short, is an art form invented by German photographers JanLeonardo Woellert and Joerg Miedza. It combines light painting with complex sequences of precisely choreographed movements.

Woellert and Miedza's art is the subject of interest and appreciation all over the world and their images have received various awards, including the German national prize for scientific photography.

Our article on page 88 introduces LAPP and some closely-held secrets of LAPP shooting techniques, while the eBook itself goes into detail on the evolution of LAPP and includes two galleries of spectacular, large format LAPP images. The final section offers some basic tips to get you started creating your own LAPP artworks.

The large-format, full-color print version of the book is available for US$39.95 from www.rockynook.com, and you can find more information about the artists at www.lapp-pro.de. (jub)

Full Version Software

Xtreme Photo & Graphic Designer 5

Video Tutorial

Bert Monroy –
The Making of Times Square

eBook

Painting with Light – Light Art Performance Photography

Image Processing Tools

easyHDR Basic
FDRTools Basic 2.5.1
Fotomatic 1.4
GIMP
GIMP Portable 2.6.11
GREYC's Magic Image Converter (G'MIC)
HeliosPaint 1.4.5
ImageMagick
ImageMagick Portable 6.7.4
LiveQuartz
Luminance HDR 2.2.0
Perspective Transformations 8.0
Phatch 0.2.7.1

Photomatix Pro
Photomatix HDR Presets
PSPI for GIMP
Raw Photo Processor 4.4.2
RawTherapee
Seashore 0.5.1
UFRaw 0.18
Wire Worm 6.1

Photo Tools

Enblend/Enfuse
EnfuseGUI 2.1.2
Exif Pilot 4.4
Exif Untrasher 1.4.3
ExifTool 8.76
HD View SL 1.2
MacPorts
WIA-Loader 1.7.1.0
WIA-Loader Portable 1.7.1.0

Sample Images

Camera Test Sample Images
Gigapixel Links

Portfolio
Martin Stranka

Martin Stranka is 27 years old and lives in Prague. He only started taking photographs a few years ago, is completely self-taught and already exhibits his work in galleries around the world. His single-mindedness, his unique visual language and the magical quality of his images are the major factors that have shaped his rapid rise to fame. In this interview, he gives us some fascinating insights into his art, his work and his thoughts on photography.

c't DP: What equipment do you use?

Martin Stranka: Although I really like the look of analog photographs, I use a full-frame Canon EOS 5D with 17-40mm and 70-200mm Canon zooms and a 50mm f/1.4 standard lens. I also have a working Flexaret TLR at home that was given to me as a gift, but I haven't yet had time to explore its secrets.

How do you like to organize your shoots? Do you work with assistants?

The process of capturing photos is an ethereal experience. The moment before I release the shutter is one of trance and utter silence in which I can properly gather my thoughts. My photography is all about getting intimate with very personal matters. That's why I like to work alone with the model when I am shooting for my personal portfolio. When I am shooting for commercial clients, I am surrounded by all sorts of helpful people and useful things that I really appreciate when they're there.

Do you wait for the right moment to occur of its own accord? How do you prepare yourself for your subject?

Many of my photos are the result of ideas that start life in my head, but are nevertheless influenced by the magic of the moment. I let the locations and the models I work with inspire me. Some photographers work with intricate sketches and like to completely plan a shot in advance, which is a legitimate approach for commercial shoots. Personally, I tend to work slowly and take only very few photos. I take pictures at moments when I need to express myself and escape from reality, and these are moments that cannot be scheduled. That's just how life is – you can't plan it.

Earning a living as a photographer isn't easy. How have you managed to turn photography into your profession so quickly?

To answer this question I need to tell you how it all started: I remember very clearly the first time I picked up a camera about five years ago. I immediately fell in love with photography, although at the time I didn't think about making a living doing it. In the

Close

five years since, photos have become an addiction and a necessity. It was about a year ago that I decided to abandon the traditional nine-to-five routine and follow my dream. It worked for me, but I know that it's not easy to turn this particular dream into reality. I am very grateful for the opportunity.

People often ask me how I managed to turn professional within such a short space of time. I have always tried to follow my instincts, which tell me to be myself, be loved by a few and not worry about whether

the rest of the world understands me. I think that's part of the secret of success. Commercial photography is potentially quite boring but luckily, my clients allow me to bring my own style into each project. I have created book covers for big New York publishers like Harper Collins or Sterling, and I have worked with a number of other publishers, record companies and individual artists around the world. It is always a really rewarding experience to combine art with commercial photography.

The Czech Republic has a long photographic history and has produced many outstanding traditional, avant-garde and contemporary photographers who have had a great influence on photography all over the world. Can you explain the boundless creative energy that emanates from your country?

That's a really interesting question! I have no idea why so much creativity comes from such a small country. Prague is a truly unique

city for sure, and has its own very special charm. The old city is full of narrow streets that come alive and engulf you in their atmosphere, especially at night when they are lit by wall-mounted torches.

Many famous Czech photographers achieved their success before the second World War, although the war itself and the forty years of communist rule that followed provided strong reasons to document the events that occurred and to escape into the world of photography.

Where can people view or purchase your work? Do you present your photographs online or only in galleries? Which formats do you prefer?

I have been lucky enough to be able to exhibit internationally and I've had solo and group exhibitions in North and South America as well as in Europe and Asia. My photos are often sold at charitable auctions that are associated with my exhibitions. This approach gave me the chance to exhibit in Hong Kong, for example.

Nowadays, an artist has to have an online presence. The Internet and social networks have become really powerful tools for presenting photographs. Most buyers find me via the Internet and purchase prints from my website. I make prints that range from 20×20 cm right up to 150×150 cm. I like really big prints – in fact, the bigger the better. I really love big rooms in which you can hang a single, huge photo that decorates the entire space.

The intellectual depth of your work surprised me in view of your relatively young age. You seem to know a lot about life, and not all of what you know is based on happy experiences. I don't want to get too personal, but was there perhaps some dramatic event that led you to pursue an artistic career?

People often ask me when and why I started to take photos. And yes, five years ago I lost someone very close to me. This event turned my life inside out and made me much more aware of what was going on around me. At first, I couldn't cope with what happened, and I am still fighting the aftermath today. Photography became a kind of valve. I recently noticed that my entire portfolio is full of references to the accident, although it was never my intention to work that way. Water, people on cliffs, people levitating.

Meet Me Half Way

Someone Like You