CES 2017 in Las Vegas

The voice of the future

Gary Shapiro, the charismatic boss of the CES organizer, CTA, was again able to announce a vast number of innovations at the show in Las Vegas.

The Consumer Electronics Show, which was held in Las Vegas from January 5-8 this year, celebrated its 50th anniversary and again presented itself as a monster exhibition. More than 3,800 exhibitors, including 600 start-ups, were accommodated on an area of more than 240,000 square meters. The provisional figure of 175,000 visitors is about the same as in recent years. While the number of new photo products was very modest, imaging was everywhere. After all, neither self-driving cars nor smart homes nor more or less intelligent robots can function without image sensors. What's more, hearing is the next feature of more and more smart devices that can be controlled by the human voice.

Robots were much sought-after interview partners at CES.

TV sets naturally also played a role at CES. One of the stars was the Signature W7 OLED TV from LG. The W stands for wallpaper because the ultra-thin screen can be hung completely flat to the wall with magnets. The receiver, tuner and the speakers are accommodated in a separate soundbar at the bottom.

The number of exhibitors from the traditional photo sector was very modest indeed – as was the number of new products. Canon arrived with a handful of compact cameras and camcorders, while Nikon concentrated on the Key-Mission action cams and the network-capable D3400. Panasonic showed its new flagship Lumix GH5 with 6K photo mode together with the

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GX800 entry model and the FZ92 bridge camera, both with 4K video and photo. Sony presented to the US market the new camera products it had announced at and after photokina. Fujifilm and Olympus were not even present.

On the Canon stand, visionaries were welcome.

PowerRay is the world's first underwater drone from PowerVision. One accessory is the FishFinder, which can also spread bait.

Imaging topics of the future

The current big imaging topics such as 360° images and of course drones, were predominantly shown at CES by companies who do not have their roots in the photo industry at all. In addition to the established manufacturers such as DJI or Yuneec, there were also less known players, for example Power-Vision. This young firm comes from the field of robotics and showed not only interesting copter models, but also the world's first underwater drone. The PowerRay can dive to a depth of up to 30 m and comes with a 4K UHD camera that can capture MP4 videos at 30 fps and photos with a resolution of 12 megapixels. When un-

derwater, images are transferred through a cable; as an optional accessory, there is a FishFinder, which can not only locate the angler's prey by means of sonar, but can also distribute bait. The manufacturer sees further possibilities for use in the industrial sector, because the inspection of underwater pipelines, ships' hulls etc. is far cheaper with a robot of this kind than the deployment of divers. The underwater drone should be available from the end of February. No official price has yet been announced, but it is expected to sell for around 2,000 euros/dollars.

In the field of multicopters, there is a

trend towards particularly small and easy-to-handle devices up to the size of a paperback. These flying saucers are intended above all for the selfie generation and should make it possible to take a self-portrait from all kinds of unusual perspectives. In most cases, the mini-drones are controlled via a smartphone app.

Virtual and Augmented Reality, VR and AR, played a major role at CES. With the exception of digital games, many applications are still at the development phase. Nevertheless, the available products and hardware performance are very impressive for such a young product category. The classic construction of 360° cameras with two extreme wide-angle lenses is almost outdated. Instead, more and more manufacturers use several camera modules to capture the 360° panorama. The individual picture sections are then computed to form a complete photo or video. Since this design reaches much higher resolutions than the two-lens construction, it becomes much easier to cut out interesting segments from the panorama and perhaps even print them.

Analog returns to the digital Mecca: In Las Vegas, Kodak announced the renaissance of the Ektachrome slide film, due on the market in September this year. It fits in with the Super 8 camera first shown a year ago and now ready for market. However, until the Ektachrome actually makes its return, the Super 8 must be content with color negative movie film. After processing of the film, the customer receives a 4K video file of his film.

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The interface of tomorrow

As mentioned at the beginning, the trend towards controlling smart digital devices with the human voice is growing rapidly. Plus, the relevant systems are also working more and more efficiently. In 1995, the error rate was in practice nearly 100 percent, in 2013 it had fallen to 23 percent, and for this year, the industry anticipates a success rate of nearly 100 percent. The consequence is that keyboards, computer mice or touch-sensitive displays are become superfluous for many applications because the devices can now respond to a voice command. This is not a dream of the future: The Echo loudspeakers from Amazon can already play the desired music on command with the help of the Alexa word recognition system. LG is incorporating Alexa, for example, into its interactive refrigerator, which answers questions about recipes, makes purchases from Amazon etc. OK Google and Apple Siri can not only search on the Internet for a term spoken onto a smartphone,

No larger than a paperback: the copter C-me from Hobicco. It has been designed to take selfies.

they can also control functions and send messages or emails.

In a smart home and in many other applications (also industrial), digital systems not only listen, they also think. Artificial intelligence was therefore another topic at CES because it not only makes the devices smarter, it also enables them to constantly learn from their own experiences and from those of other networked devices. The self-driving car, for example, could, within the foreseeable future, inform all other networked vehicles about an icy section of the road, a free parking lot or a nasty hole. And security systems could warn their counterparts in the neigh-

borhood of a burglar. In comparison, the refrigerator asking its owner whether it should order more beer is now nothing short of child's play.

Unfortunately, that's one finding from CES 2017, cameras and especially those from traditional manufacturers come across in this environment like dinosaurs from a pre-digital past. Instead of setting aperture and shutter speed with hand-crafted mode dials, you could ask your camera in a friendly way to take a portrait shot with an attractive bokeh effect or command the auto-focus to track the dog running along the beach. Unfortunately, unlike the makers of smart refrigerators, TVs or speakers, the established camera manufacturers do not seem to be really listening. But perhaps, or hopefully, the start-up company, which is smart enough to bring such intelligent features to the design of cameras, has already been founded.

The next CES will take place in Las Vegas from January 9-12, 2018.

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