

Videos as wall images, voice-controlled music and heating, and body sensors for fitness and fun

Consumer Electronics Trends at IFA 2017

As the world's leading trade fair for Consumer Electronics, from 1 to 6 September 2017 IFA will exhibit the products that inspire millions of customers for purchases during the Christmas shopping season. Ultra-slim TV screens that blend in with the walls, high-quality hi-fi music components that feature optimum sound, cameras that film 360-degree videos, voice control for media and the fully connected home, mini-worlds from a 3D printer and much, much more.

There is always room for improving the quality of TV images, and the line-up for 2017 boasts significant progress in the key disciplines of brightness, contrast, color depth and viewing angles. Easier-to-use interfaces, higher-performance processors, a wider range of online content and better assistance from smart functions for automated control in the home round off the positive picture.

A stylish home is also on the list of TV designers' priorities. This year, TV sets will arrive on the market that are as slim as a **windowpane** and can be mounted flush on a wall with magnets, for example.

Brilliant, high-contrast images should be accompanied by a room-filling audio experience. This is provided by slim soundbars mounted beneath the screen, for example. Another option is to place wafer-thin speakers, a so-called soundbase, under the TV set. Other new trends at IFA include loudspeakers that receive music via Wi-Fi or Bluetooth. Some manufacturers employ only one wireless system, others use both. Other popular features include communication protocols such as Apple Airplay and, increasingly, Google Cast. Wireless headphones are now more and more in use. Numerous models combine digital wireless reception with noise-canceling functions for suppressing interference.

35 years ago CDs set the standard for digitally recorded music. Even better quality, so called HiRes, has become the norm in recording studios, and this is now available from more and more music sites. IFA 2017 will showcase plenty of new hi-fi devices that can play lossless, high-quality recordings, ranging from mobile players, special headphones to streaming clients in high-end hi-fi systems.

Ultra HD, i.e. quadruple pixel resolution on a full HD screen, has firmly established itself on the TV market. In the meantime, other quality features are setting new standards, in particular High Dynamic Range. HDR stands for high-contrast depth ranging from extreme darkness to glistening bright, detailed images. Online providers are already offering films in Ultra HD featuring HDR. Amateur moviemakers can also make use of this technology to create fascinating images. IFA will exhibit the first system cameras that not only record in Ultra HD, but also encode every pixel with 10 bits, with such nuanced brightness that they can project full HDR quality onto the screen. Until now, 10-bit recording was the exclusive domain of professional video cameras.

Adventurous media creators are now producing films for TV audiences who wear VR goggles. These products can be viewed on the stands of the large **CE retailers** and at IFA Next, the new section highlighting the future, in Hall 26. A wide range of the necessary hardware has been available for some time: 360-degree cameras for mobile and stationary use, devices that boast resolution to professional standards, 360-degree lens attachments for smartphones and naturally VR goggles that feature higher and higher resolutions and even better comfort.

Be it Alexa, Cortana or Siri, voice control is a trend that has long transcended the boundaries of the established IT world. More and more devices in the networked home can be operated with voice control, and artificial intelligence is now making this even easier. Bots and digital agents learn their master's commands and can automatically take full control of air-conditioning in the smart home, for example. However, a scenario such as this also raises safety questions. Automatic helpers and effective protection of the private sphere will be key topics at IFA 2017.

Besides smart watches, fitness bracelets and sensor-equipped smartphones smart wearables have now arrived which can monitor movement and vital functions via

sensors attached to all parts of the human body. They can be used for fun, sports and games as well as medical rehabilitation.

Many visitors to IFA will be leaving the fair with a nice souvenir: a miniature model of themselves from a 3D printer. The original is reproduced using a scanner that collects object data in 3D. Very large scanners can trace the contours of an adult, for example, and high-performance models can do so in only a split second.