
PRESS RELEASE

Into the future

No matter how big the challenge is – there's always a solution.

Only a little more than ten years ago CONRAC supplied the first flat screen displays, at that time based on plasma technology, for an airport application. Munich Airport was the first airport to go for the new technology, daring to also be the first to experience the not yet evaluated long term "behaviour" of the screens in 24/7 operation. Since then a lot or almost everything has changed. Plasma technology, at the time the only flat screen technology allowing large display sizes, has almost vanished from the information display market when TFT technology also advanced to large screen diagonals. Nowadays there is a great number of different display sizes available, from small to as large as 82inch TFT displays and 103inch plasma displays, sizes no one would have dreamt of 10 years ago. The same happened to resolution formats, the first 21inch plasma displays offered a VGA resolution, now the standard is HD or full HD, which again pushed the developments of the display electronics.

But then also the airports themselves have changed. Fancy terminal architecture, pleasant waiting areas and a wide variety of high quality shops and boutiques, restaurants, bars, even health and beauty facilities jostling for the travellers' attention. In many aspects retail and entertainment has found to be an important business factor of airport environment. Even more so ever since extensive safety and security checks made it essential to be at the airport well in advance of the time of departure and leaves passengers with more time to spend in the airport. Here and there and everywhere there are flatscreens, not only for up-to-date travel information but also advertising all sorts of products and services. Infotainment instead of just pure information, digital signage instead of information display. Whatever one likes to call it, all these changes, of course, created the requirement for new display types and features suiting and supporting the new applications.

CONRAC, active in the information display business since the late 60's, has always been developing trendsetting products. Thanks to an advanced R&D Department with unique expertise and a Product Management with global market knowledge, CONRAC always keeps a step ahead. Committed to technologically advanced and cost-effective display solutions, existing products are constantly being improved and new products and features are being developed, using only the latest and most reliable technologies. Main objectives are superior image quality and legibility and, very important, to extend the display lifetime.

To suit all different types of applications, CONRAC's display solutions are based on a modular concept. For example, all electronic versions, monitor electronics, special controller boards and industrial PCs are used throughout all different display series, public displays for indoor and outdoor use as well as the narrow bezel display series intended for display walls. The same idea of cross-series use of course also applies to the new developments described.

Sunlight readable displays

A rather challenging requirement in today's modern airports is created by the light-flooded airy terminal design. What is certainly enjoyable for the passengers – who wants to spend time in a dark and dreary atmosphere – gives the display manufacturers a hard time. Bright light does not normally improve the readability of display devices. However, this challenge has been met by implementing a new generation of industrial display panels, ideally suited for applications in bright ambient light environments. These sunlight readable displays guarantee optimal contrast ratio and excellent image performance. The sunlight readable panels available for CONRAC's public displays and narrow bezel series use a different technology from the high brightness panels available. High brightness panels are usually equipped with very strong backlights which due to the high power dissipation generate more heat, consequently leading to a shorter display lifetime. Moreover, strong backlight brightness results in a lower colour saturation, but the contrast ratio which is crucial for the readability does not increase. CONRAC's sunlight readable panels provide a constant colour saturation, contrast ratio and viewing angle without any difference in the heat generation and power consumption compared with standard panels.

New Touch Screen applications

Implementing touch screens isn't really a new idea. With the requirement to save costs, touch screen applications come back into fashion. They are generally used for point-of-information applications, self-service applications such as self-check-in, but there are a lot more applications to be covered when using an appropriate technology. Most touch screens available so far are very sensitive to dirt and moisture, very easily damaged and require a great deal of maintenance making use in public areas a critical issue. CONRAC introduces a touch solution which is perfectly suited for use in public environment. Using a laminated safety glass panel, the displays are vandalism-proof. Moisture or dust on the glass panel does not cause any problem. All electronics is integrated in the display housing, IP protection for outdoor applications or applications involving dust and moisture is easily possible. The touch panel can be operated with anything: With a finger, even when wearing gloves, with a pen or any other object. A further definitive advantage is that unlike most touch screens, the touch panel has no negative effect whatsoever on the image quality. Keeping the consequential costs down, the touch system is absolutely maintenance-free. A periodical calibration as required for most touch systems is not necessary. Other than the obvious applications, this rather ruggedized touch solution can easily be used for demanding applications for example for baggage handling applications – so to speak behind the scenes – or in car parks, in this environment in an IP54 or IP65 housing. Of course, these applications are also supported by CONRAC's Flight Information Display Software MAXCS®.

Everything under control

A pioneering new feature has been added to CONRAC's Public Displays. Essential, especially for displays installed in large networks, is "Display Performance Monitoring" (cDPM). A special circuitry with a front sensor continuously monitors the TFT panel's function (backlight, inverter, power supply and interface). Any malfunction, caused by a broken backlight system, a faulty inverter, a defective power supply or even a faulty TCON board is immediately detected and reported giving total control over all screens connected. This feature simplifies maintenance and records the net uptime of the display units. Despite the almost frameless design, this feature was even implemented in the narrow bezel display series.

CONTACT

CONRAC GmbH, Lindenstrasse 8, D-97990 Weikersheim, Germany
Phone +49-7934-101-0, Fax +49-7934-101-101, E-Mail info@conrac.de, www.conrac.de

Contact / Press:

Petra Ollhoff, Manager Marketing Communications
Phone +49-7934-101-204, Fax +49-7934-101-102, E-Mail p.ollhoff@conrac.de

PHOTOGRAPHS SUPPLIED

- [File conrac_001.jpg](#)
69xx PD touch – Touch solution realised for baggage handling: IP54 protected display connected to CONRAC's FIDS
- [File conrac_002.jpg](#)
Narrow Bezel Displays with cDPM – Display Performance Monitoring
- [File conrac_003.jpg](#)
Here comes the sun... Effect of bright sunlight: standard display versus sunlight readable display
- [File conrac_004.jpg](#) and [File conrac_005.jpg](#)
Made in Germany: CONRAC's production facilities in Weikersheim