

Embedded Displays in the Real World

Example case studies of projects
with rugged, custom and
embedded displays


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Learn from Solutions to Challenging Design Win Requirements

When was the last time you were faced with challenging design requirements and how did you solve the problem? The following case studies cover a broad range of display requirements in a variety of applications, along with the solutions which lead to their successful design wins.

“No single display technology can handle the wide variety of requirements now expected of displays,”
Al Gard
Director of Engineering
Planar Systems

Case Study – Thomas G. Faria Corp

Project

- Marine multifunction touch display for boating
- Faria Marine entered market - Marine navigation system incorporating multifunction touch screen display

Challenges

- Faria needed display expertise to supplement their marine engineering expertise
- Aggressive time to market
- Maestro program - required 12.1 " SVGA sunlight readable touch screen in fanless weather/water resistant enclosure
- Delivered LX1200R sample as example of sunlight readable in 12" enclosure - engaged engineering

Solutions

- Developed 12.1" sunlight readable display with IR touch, utilizing AR/AG and UWVA films and cover glass which was optically bonded to Optrex 12.1" 1000nit LCD panel

Customer Benefits

- Engaged early – the right time in their design cycle
- Made commitment to support their design
- Delivered prototypes to meet aggressive schedule for trade show within 90 days!



Case Study – Medical Product

Project

- Cosmetic Surgery display for floor and portable use

Challenges

- Cosmetic surgery that is fully paid by patients and company needed high-end, high-quality display

Solution

- Provided LA1500RTR which can be used in both floor and portable models. Display provides the best optical solution for an off-the-shelf display and there was adequate inventory in stock to meet the customer's needs.

Customer Benefit

- Superior optics of the display provided, along with excellent engineering, sales and support.



Floor Model



Portable Model

Case Study – BCF, UK

Project

- BCF, UK is a small instrument manufacturer in UK seeing a display for fuel quantity test set for military aircraft, able to operate in extreme temperatures. The end customer is the US Navy

Customer Challenges

- Customer had innovative way to measure aircraft fuel quantity before refueling – one test set for many kinds of aircrafts
- All weather reliable portable instrument required with shock proof VGA
- Lengthy military approval process

Solution

- Provided EL640.480-AM8 ET with a wide temperature range, -40° to $+65^{\circ}$ C

Customer Benefit

- AM8 ET was the only flat panel technology available with immediate response time at any temperature
- Performance proven through multitude of test resulted in peace of mind for the customer



Case Study – Xing Tai Xian Feng Ultrasonic Electronics Co., Ltd

Project

- Xing Tai Xian Feng Ultrasonic Electronics Co., Ltd, located in China, focuses on the railway industry. New sensing device for rail track flaw detection was required

Customer Challenges

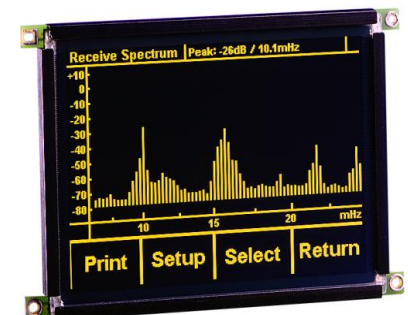
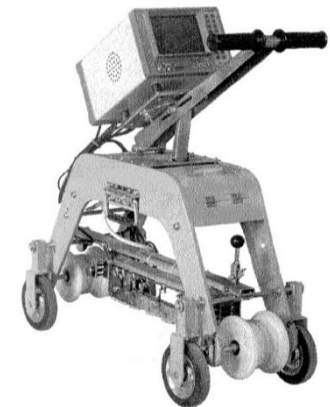
- Sensing device to be used in an outdoor environment. Rugged, sunlight readability and a wide temperature range were required display features

Solution

- Provided EL320.240.36HB (high bright) display, with wide temperature range, -40° to $+65^{\circ}$ C and high bright capability necessary for sunlight readability

Customer Benefit

- The EL320.240.36HB provided all the requirements the customer needed, including rugged capability, wide temperature range and sunlight readability
- Customer has the newest generation of sensing devices on the market



Define Your Project Online

For an interactive guide to defining and selecting a rugged or custom display, visit www.planarembdedded.com/guide-to-custom-lcd.

This application will help you collect the answers you need for your project and will email you a summary of your project definition.

