Flat Panel Display Enhancement Capabilities

IEE’s expanded display enhancement program increases our capabilities and reduces cost and lead-time for our customers. IEE provides fully integrated LCD flat panel display solutions from concept to production. Our capabilities include a variety of display enhancements to improve contrast ratio and increase the programmable brightness from NVIS, through low ambient light, up to full sunlight readable. Our design team insures that the display product will reliably achieve the stated performance requirements through the wide environmental extremes experienced in outdoor, industrial, aerospace and defense applications.

**IEE Display Enhancement Services:**

- Extensive LCD selection and application experience
- Active enhancement techniques
  - High bright LED backlight
  - NVIS compatible backlight
  - Multi-mode backlight
  - Multi-color backlight
- Passive contrast enhancement techniques
  - Optical bonding of substrates
  - Application of coatings AR, AG, oleophobic
  - Optical filters and polarizers
- EMI/EMC filters and shielding
- Lamination and dry bonding
- Automatic brightness control
- Multiple interfaces
  - Video - VGA, LVDS, DVI
  - Serial - Ethernet, USB
  - Power - AC and/or DC power inputs
- On-screen display controls (OSD)
- Touch screen integration
- Integrated single board computer (SBC)
- Custom housings
- Custom bezels with integrated switches

**Ruggedization:**

- Environmentally sealed enclosures
- Custom bezels with IP/NEMA sealing
- Extended operating temperature range
- Shock and vibration enhancement
- Protective vandal-proof face plates

**IEE provides fully integrated LCD flat panel display solutions from concept to production.**
Advantages of Working With IEE:

• Long history of innovation and performance
• Rugged industrial and military display specialists
• U.S. based engineering and manufacturing (Van Nuys, California)
• Over 65,000 sq. ft. modern manufacturing facility
• Rapid prototype, low, medium and high-volume capability
• ISO 9001:2008 certified

Note: IEE is registered with the US DOS and as such we adhere to all ITAR regulations as it pertains to 'defense articles'.