Industrial Electronic Engineers Inc.

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Industrial Electronic Engineers Inc. brings the latest advances in touch displays and video architecture to warfighters in a variety of display types and applications. Industrial Electronic Engineers focuses on three main applications: ground-based displays, airborne displays, and soldier mounted and hand-held display units.

GROUND-BASED DISPLAYS

As the combat vehicle role evolves to include a wider range of system interaction and manned/unmanned teaming, the seamless integration of the warfighter in the loop becomes even more crucial. Industrial Electronic Engineers (IEE) is at the forefront of new crew-station concepts, delivering immersive, near-seamless wraparound displays that include intuitive touch interactivity, a leap forward in resolution, and processing for better situational awareness and a faster kill chain. These new displays build upon IEE's product heritage of low-latency imaging for fire control and driver vision, open architecture interoperability, and ruggedization for use in extreme combat vehicle environments.

One of IEE's newest displays is the Commander's Control Display Unit. This rugged ground vehicle smart display features an enhanced 12.1-inchwide color CD screen with adjustable brightness that allows operation from night vision to direct sunlight. Bezel keys are night-vision compatible backlit, along with white on black legend for sunlight readability. A single board computer provides a platform for operating system and application software as well as internal graphics generation.

This smart display includes a dedicated high-performance video processor with low latency glass-to-glass video selection, and overlay buffer to support local symbology overlay or

Industrial Electronic Engineers Inc.'s 12.1-inch Commander's Control Display Unit.
INDUSTRIAL ELECTRONIC ENGINEERS INC.

processor-generated video. The input video multiplexer accommodates eight individual video input connections ranging from a high-definition serial digital interface to various analog video standards such as Video Graphics Array red/ green/blue and analog composite video standards, providing support for direct connection to the latest high-definition cameras and sensors, to legacy black-and-white cameras, and forward-looking infrared sensors.

AIRBORNE DISPLAYS

Aviators need flight- and mission-critical equipment that performs day or night in the most demanding conditions. IEE delivers multifunction displays, control display units and mission displays for operator consoles with excellent high-contrast, legible imaging characteristics in lighting conditions ranging from direct sunlight to full darkness and everything in between; including Night Vision Imaging System compliance. IEE equipment is qualified and certified to fly on numerous rotorcraft, including the AH-6 Little Bird, UH-60 Black Hawk, MH-47 Chinook and MV-22 Osprey, as well as Air Force jets. IEE products align with the latest open architecture initiatives for airborne equipment, including Future Airborne Capability Environment, Sensor Open Systems Architecture and ARINC-661 and ARINC-818 standards.

SOLDIER MOUNTED AND HAND-HELD DISPLAY UNITS

IEE hand-held control display units are commercial off-the-shelf designed, and combine a rugged, sunlight-readable display with a keypad and/or touchscreen interface designed to control military and commercial equip-



automatic test equipment

to radios, air-defense systems and IED jammers. These lightweight, low-power, portable control display units support operations through a wide range of ambient light conditions from full sunlight days to Near Vertical Incidence Skywave goggle night operations. The molded composite housing ensures durable field use. IEE's hand-held control display units are fielded in high volume for counter-IED jammer systems such as the Joint IED Defeat Organization and Joint Counter Radio-Controlled IED Electronic Warfare program and, more recently, as the operator interface within counter-unmanned aircraft systems.

For 75 years, IEE has been a trusted provider of enhanced displays for military and industrial applications. From rapid prototyping of custom designs to full-scale production runs, IEE produces innovative, high-quality displays with advanced features like low-latency video processing, high-bright and Near Vertical Incidence Skywave backlighting, and lightweight, ruggedized enclosures. IEE's direct control of critical process steps reduces costs, decreases production lead times and improves life cycle management. IEE display products are distributed worldwide. IEE is ISO 9001:2015 and AS9100D certified.

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