



RUGGED HMI SOLUTIONS

DEFENCE | AEROSPACE | NAVAL | SECURITY



TECHNOLOGIES

CONTROL PANEL ASSEMBLIES

We specialise in fully integrated custom control panels with multi-discipline design and manufacturing expertise to provide fully assembled and tested units. Using the latest HMI technologies, we provide a customised service, full system integration and cost reduction.

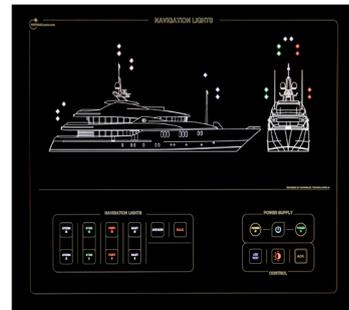
- Design and approvals support
- PCB assembly
- Integration and build
- Incorporating capacitive and membrane switch technology, slider controls, joysticks, tracker balls, rubber keypads, touch screens and displays



THIN FILM BACKLIGHTING

Using our patented thin film backlighting technology we design and build customised illuminated control panels and display solutions that can isolate illumination providing a range of options from flashing sequences, secret-until-lit and animated colour changes.

- Low profile, typically 1.5mm
- Low weight
- Low power consumption
- Up to 13mm panel thickness using glass, acrylic or polycarbonate for hostile environments



CAPACITIVE AND RESISTIVE TOUCH TECHNOLOGY

We design and integrate both Projected Capacitive and Resistive touch technologies into our customer's interface requirements.

RESISTIVE

- Established technology widely used in defence applications
- Haptic feedback
- Multiple construction methods available
- Active or passive switching
- Backlit options available including NVIS

PROJECTIVE CAPACITIVE

- Innovative technology
- Reverse bonded to robust, waterproof and vandal resistant materials, Acrylics, Polycarbonates etc. up to 6mm thicknesses
- No moving parts.
- Easy to clean
- Multi-touch and gesture control
- High quality low profile backlighting in a thin package size

MEMBRANE KEYPADS

We provide fully customised membrane keypads with or without PCB integration and control panel assemblies. We can also incorporate almost any interface technologies including capacitive glide pads, joysticks, tracker balls, touch pads, mechanical switches and touch screen solutions. Materials include Polyester (textured, gloss or chrome effect finish), PVC (textured or gloss finish), Polycarbonate (textured or gloss finish) and Stainless Steel foil (brushed, etched and printed).

- Sealing to IP65, IP67 or IP69K
- Tactile or non-tactile key response
- Dome, pillow or rim embossing
- Chemical and UV resistant overlay materials
- RFI / EMC / ESD protection
- LCD module integration
- PS/2, USB keyboard encoding



APPLICATIONS

WHAT WE DO

As market leaders in HMI solutions established over 30 years, we are committed to the development of the latest technologies in control panel assemblies, capacitive touch, thin film backlighting using LED illumination and membrane keypads.

We provide complex and innovative interface solutions including multi-technology integration into sub-assemblies or fully assembled and tested control units. We provide a complete design, prototype, manufacturing and test service.

We have a proven track record in the demands of the defence, aerospace, naval and security sectors where a rugged, reliable and functional solution is required. Our HMI solutions, whether a simple keypad or complex integrated control panel, are designed and engineered to withstand the extreme harsh environments of land, sea and air applications.

Our products are used in military vehicles, submarines, surface ship applications, tactical communications equipment, launch control panels, unmanned vehicles (UAV), surveillance and recon, dynamic position systems, remote weapon control units, cockpit and flight simulators and remote vision systems.

- Rugged HMI technologies
- Full compliance testing
- Full component traceability
- NVIS
- IP67 and EMI/EMC
- Global military OEM customers
- SC21





Our proven track record in providing design expertise, industry knowledge and the highest levels of service and quality has made us a long-term manufacturing partner to global OEMs in the defence, aerospace, naval and security sectors.

WHY CHOOSE US:

- Over 30 Years' Expertise and Technology Leadership in HMI
- Design and Manufacturing
- Build to Specification Service
- Cradle to Grave Support
- UK Manufacturing
- Flexible, Agile, all Quantities Supported
- Logistics and Supply Chain Management
- SC21 Accreditation
- AS9100D Accreditation

EUROPE

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