Laserdyne Pty Ltd



Founded in September 1991, Laserdyne Pty Ltd is an Australian engineering and manufacturing company specializing in electro-optic products for military, paramilitary and similar applications in demanding environments. Laserdyne designs, develops and manufactures its own products, and operates a quality management system to the ISO9001 standard. The company supplies Standard and High Definition Flat Panel Displays, Video Recorders, and Laser Rangefinders to its international client base including military, law enforcement and similar customers.



Adaptable, Reliable and Affordable Displays - Customisation Far Beyond MOTS

The new R Series (R = Reconfigurable) and D series (D = HD) of Black Opal display lines are born to be offered for customisation, also to limited-volume customers, thanks to their modular design architecture









- Most video inputs are available: CVBS, SDI, DVI, PAL, NTSC, and more, as well as video streaming sources over IP protocol. Multiple video inputs, as well as video outputs, can be supported.
- Buttons, their positions,
 Connectors type, their position, number and orientation, as well as all
 Mechanical Dimensions and Mounting Methods can be changed to suit any need.
- Touchscreen controls can be integrated
- Everything is ruggedized to MIL standard spec's, sealed and EMI/EMC compatible
- High brightness and Sunlight Readability are the best in the industry, thanks to LED backlighting technology.
 Night Vision backlighting modes are available.
- Integrations of proven ARM or x86, Computer and Solid State Recorder (with Simultaneous Playback & Recording and Event Marking) are available.
 Customer daughter cards embedded inside the chassis, with full control over the Display Unit and IO, can be designed.
- Required minimum quantities will be discussed case by case



- State-of-the-art, real time, video processing can provide video display with ultra-low video latency when needed for operator comfort, with several features designed to increase the effectiveness of surveillance, sighting and security systems, including:
 - Image Enhancement: video inputs are compensated for obscuration (e.g. rain, fog, snow, mist or smoke) or low contrast using a proprietary low-latency maximum-entropy image enhancer, operational within an adjustable central window where contrast and colour are enhanced.
 - Digital Zoom: a fully X & Y interpolated zoom
 - Freeze Frame: freezes the current prime video channel while leaving live any video inset
 - Colourisation: applies preloaded colour palettes to monochrome imagery
 - Motion ("edge tearing") compensation: minimises the jagged edges that can occur with motion from interlaced sources.
 - Multiple Video Window 'layouts' supported, including splits and quad.





















Our modular architecture allows our design to be flexible in:

- Display features (size, resolution, aspect ratio, backlighting brightness, image processing etc)
- Mechanical features (dimensions, mounts etc) and connections
- Controls
- Input Power Range
- Operating environment
- Optional Embedded Computer
- Optional Embedded Recorder

We want to learn about your application first, before designing our best proposal with the appropriate technology to suit your needs.

Our displays are **adaptable**: we can re-use existing modules, remove unnecessary modules, add modules with new capabilities, customize features.

We can provide **system integration**, by embedding a video recorder module or a computer module to allow you to save space, connections, weight and power in your application.

Our displays remain **reliable**: machined down aluminium structure, purged/backfilled/sealed housing, glass-bonded LCD stack technology, tough/laminated/optically-matched/EMI-shielded/antireflection treated glass window, LED backlighting, high MTBF electronics, heater technology for low temperature operation. And they are **affordable** too!

