



AL524
UNIVERSAL INDICATOR DISPLAY



FEATURES

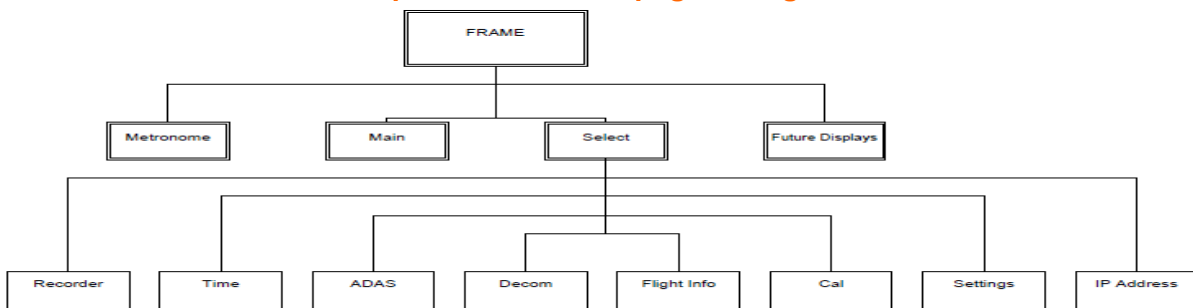
- Widely separated keys for operation control
- Optional GUI software package
- Operates on 18-36 VDC power
- Leg and bulkhead mounting systems
- 6.5" diagonal User Programmable LCD Display
- Apogee gauge setup software
- Multiple Pages per display
- Chapter 10 compatible
- NVIS compatible
- Audio cues

OVERVIEW

The AL524 is a 6.5 inch ruggedized user programmable LCD display. Designed for the flight test community to provide the test engineers and pilots with a way annotate the flight recorder data files with events. The unit features and 10/100/1000 Ethernet interface capable of receiving Chapter 10 data packets from multiple sources. The data packets are then then processed for display. The display is also capable of sending Chapter 10 messages to control and update other devices.

AL524's currently in use are configured to monitor and annotate the on board data recorders with current flight profile information not available via the instrument package. These parameters include flight number, sortie, recorder status and event counts. These abilities combined the size and flexibility of the system have enabled our customers to collect and analyze flight test data collected under unique mission conditions that cannot easily be recreated in the test environment. Since the AL524 like all Apogee labs configurable displays are not tied to a single instrument once a flight test profile is completed the system can be reconfigured for another profile by downloading a new user developed display page. These pages can be any combination of dialog boxes, standard gauges (dials, and bars, custom gauges such as tether hover, strip charts, XY plots and text display of system parameters. When used in conjunction with the Apogee Labs gauge setup software.

Example of hierarchal page configuration



MECHANICAL & ENVIRONMENTAL

Connectors :

Power Input :MIL – 38999 Series III

22-Pin Male Bulkhead

Part # - D38999/20WC35PN

The AL524 is designed to meet the following specifications:

Qualification Testing not preformed as of 10/1/13

Operating Temperature: -20°C to+60°C

Storage Temperature: -55°C to +85 °C

MIL-STD-810F, Method 501.4, Procedure I

MIL-STD-810F, Method 502.4, Procedure I

Humidity:

MIL-STD-810F, Method 507.4, Procedure II.

Altitude: up to 20,000 ft

MIL-STD-810F, Method 500.4, Procedure II

Transportation Conditions: up to 50,000 ft

MIL-STD-810F, Method 500.4, Procedure I

Sand and Dust

MIL-STD-810F, Method 510.4, Procedure I and II

Water Proofness

MIL-STD-810F, Method 506.4, Procedure III

Explosive Atmosphere

MIL-STD-810F, Method 511.4

Vibration: Boeing ICH Helicopter Specification

D724-10009-1, Rev A

Shock:

Operational - 20 g: MIL-STD-810 F,
Method 516.5, Procedures ICrash - 40 g: MIL-STD-810 F,
Method 516.5, Procedures V**EMI: MIL-STD-461E**CE101 Conducted Emissions,
Power Leads, 30 Hz to 10 kHzCE102 Conducted Emissions,
Power Leads, 10 kHz to 10 MHzCS101 Conducted Susceptibility,
Power Leads, 30 Hz to 150 kHzCS114 Conducted Susceptibility,
Bulk Cable Injection, 10 kHz to 200 MHzCS115 Conducted Susceptibility,
Bulk Cable Injection, Impulse ExcitationCS116 Conducted Susceptibility,
Damped Sinusoidal Transients,
10 kHz to 100 MHzRE101 Radiated Emissions,
Magnetic Field, 30 Hz to 100 kHzRE102 Radiated Emissions,
Electric Field, 10 kHz to 18 GHzRS101 Radiated Susceptibility,
Magnetic Field, 30 Hz to 100 kHzRS103 Radiated Susceptibility,
Electric Field, 2 MHz to 40 GHz**DISPLAY CHARACTERISTICS**

6.5" inch diagonal LCD

Display control: selected by pushbuttons

Resolution: 480(h) x 640(v) pixels (Viewed in Landscape orientation)

Contrast Ratio: 600:1 typical

Viewing Angle: >60°

Rugged LED-based backlight

Day Mode - Sunlight Readable(Luminance up to 800 cd/m²)

Night Vision Mode – NVIS

(Type II) Class B compatible

ELECTRICAL

18-36 VDC @ < 1.0 Amps

OPTIONS

Wall / Leg mount kit

Custom gauges and graphics