

DRIVER'S VISION ENHANCER

10.4" Driver's Vision Enhancer LCD Display RS170/RS422 Input (1) Sensor Input (RS-170)(1) Composite AUX Video Input(1) Pass-through Video Sensor Output (RS-170)(2) RS422 Serial Data Interface SVGA Resolution (800 x 600)MIL-C Connectors*LED Backlight (3000:1 Dimming Ratio)Anti-Reflective and Anti-Glare Treatments Enhanced Sunlight Readability 10.4" TFT AM LCD Mounts in Standard A-Kits

Model: DEV1040



Providing clear and precise thermal imagery, the DEV1040 presents mission-critical information under rugged (shock and vibrate) and harsh weather conditions (fog, sand, dust or smoke). The DEV1040 design is compliant to government-issued performance specification MIL-PRF-49256D and ICD A3325865, providing backwards compatibility with legacy DEV system configurations (cables, sensors and mounting). Whether the mission calls for a new vehicle system or a drop-in replacement, the DEV1040 meets the requirements.

STANDARD FEATURES

- Composite AUX Video Input, RS-170 (1)
- Pass-through Video Sensor Output, RS-170 (1)
- Serial Data Interface, RS422 (2)
- SVGA Resolution (800x600)
- MIL-C Connectors*
- LED Backlight (3000:1 Dimming Ratio)
- Anti-Reflective and Anti-Glare Treatments
- Enhanced Sunlight Readability
- 10.4" TFT AMLCD
- IP67/NEMA 6 Enclosure (Sealed Connectors*)
- Mounts in Standard Bracket



* Cables not included

SPECIFICATIONS

TECHNICAL SPECIFICATIONS			
Display		10.4" TFT AMLCD (Thin-Film Transistor Active-Matrix Liquid-Crystal Display), SVGA (800x600), 16,777,216 Colors	
Luminance		800 nits	
Contrast Ratio		900:1	
Dimming Ratio		3000:1	
Viewing Angle		160° (H) x 160° (V)	
Video Inputs		RS-170 (2)	
Connectors*		-MIL-C Connectors (A1J1, A1J2, A1J3, A1J5) - BNC (A1J3, A1J6)	
Housing		Milled AL, Black Hard Anodized	
Mount Options		Standard DEV Bracket; Backwards compatible with legacy DEV installations	
Wide Range DC Power Input†		10-36 VDC (12, 24, 28 VDC nominal)	
Power Conditioning		Protected against Internal Short Circuit, Load Dump, Over Voltage and Reverse Polarity	
Power Consumption		30 Watts Maximum	
ENVIRONMENTAL SPECIFICATIONS			
IP Rating		IP67 (NEMA 6 Submersible)	
Operating Temperature		-40°C to 71°C (-40°F to 160°F)	
Storage Temperature		-51°C to 71°C (-60°F to 160°F)	
Humidity		0-100%	
Altitude		45,000 ft.	
MILITARY SPECIFICATIONS			
MIL-STD-461	EMI	MIL-STD-810	Method 511; Explosive Atmosphere
MIL-STD-704	Aircraft Power Requirements	MIL-STD-810	Method 512; Immersion
MIL-STD-810	Method 500; Altitude	MIL-STD-810	Method 513; Acceleration
MIL-STD-810	Method 501; I & II; High Temperature	MIL-STD-810	Method 514; Procedure I, II, V, VI; General Vibration
MIL-STD-810	Method 502; I & II; Low Temperature	MIL-STD-810	Method 516; Procedure I, Functional Shock
MIL-STD-810	Method 503; Temperature Shock	MIL-STD-810	Method 520; Temp, Humidity, Vibe and Altitude
MIL-STD-810	Method 505; Solar Radiation	MIL-STD-810	Method 523; Vibro-Acoustic/Temp
MIL-STD-810	Method 506; Rain	MIL-STD-1275	Vehicle Power Requirements
MIL-STD-810	Method 507; Humidity	MIL-STD-1472	Thermal Contact Hazard
MIL-STD-810	Method 508; Fungus	MIL-A-8625	Standard Finish, Type III, Class 1 & 2
MIL-STD-810	Method 509; Salt/Fog	MIL-PRF-22750	Painted Finish, Optional, Minimum Quantity Required
MIL-STD-810	Method 510; Blowing Sand and Dust	MIL-DTL-26482	(and 38999) Connector, Qualified

* - Cables not included.

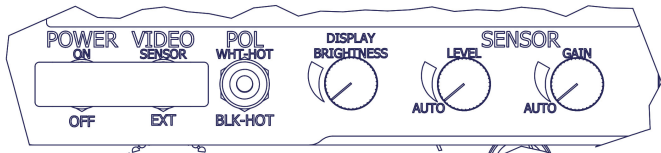
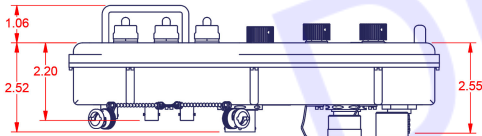
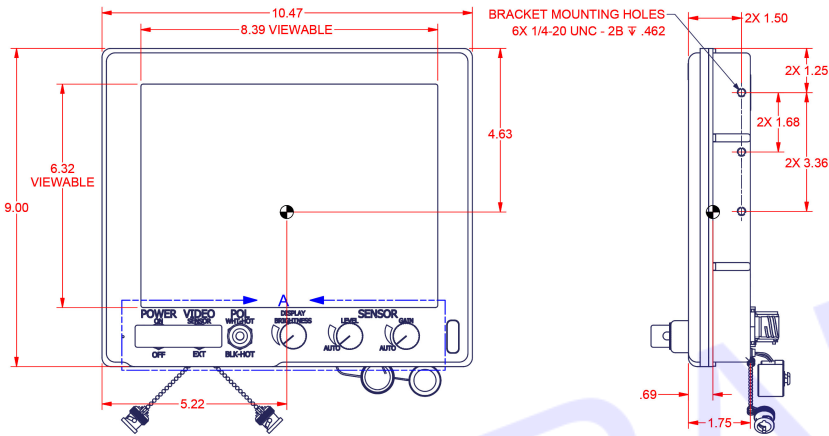
† - Power range specified covers momentary environmental fluctuations generally found in a mobile environment while display is operating. For power initialization and continual operation, nominal voltages are required.

***Specifications subject to change without notice, not responsible for typographical errors.**

MECHANICAL DRAWINGS

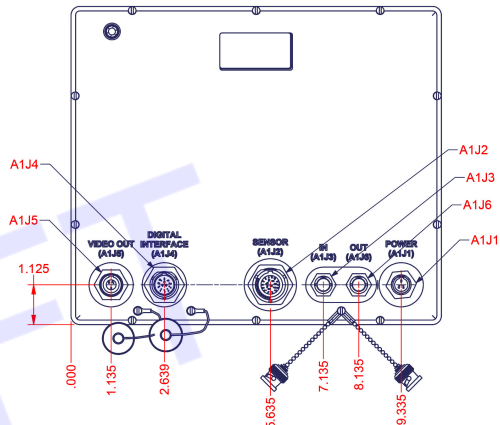
This is subject to change without Notice. Final Drawings Will be Provided for Approval after Order.

CENTER OF GRAVITY



DETAIL A
USER INTERFACE

SHOWN WITH OPTIONAL CONNECTOR DUST CAPS



VIDEO OUT VIA BNC	
A1J6	
PIN	SIGNAL
CENTER	VID_OUT
SHELL	VID_OUT_GND

EXT VIDEO IN VIA BNC	
A1J3	
PIN	SIGNAL
CENTER	VID_IN
SHELL	VID_GND

VIDEO OUT - 3 PIN RECEPTACLE	
MIL-DTL-38999 SERIES I CONNECTOR	
A1J5	
PIN	SIGNAL
A	VID_OUT
B	VID_OUT_GND
C	CHASSIS_GND
AMPHENOL #	88-569781-98S
Mate#	D38999/26WA98PN (141243)

POWER 3 PIN RECEPTACLE	
MIL-DTL-26482 SERIES I CONNECTOR	
A1J1	
PIN	SIGNAL
A	28 VOLT DC
B	28 VOLT RTN
C	CHASSIS_GND
AMPHENOL #	71-533721-33P (3-pin power)
Mate#	PT06E833SSR (141247)

DIGITAL INTERFACE: 13 PIN RECEPTACLE	
MIL-DTL-38999 SERIES I CONNECTOR	
A1J4	
PIN	SIGNAL
1	RS422 RXD+ (OVERLAY)
2	RS422 RXD- (OVERLAY)
3	RS422 TXD+ (OVERLAY)
4	RS422 TXD- (OVERLAY)
5	N/C
6	N/C
7	GND
8	RS422 RXD+ (COMMAND)
9	RS422 RXD- (COMMAND)
10	RS422 TXD+ (COMMAND)
11	RS422 TXD- (COMMAND)
12	N/C
13	N/C
AMPHENOL #	88-569722-35P
Mate#	MS27467E11B3SS (141238)

SENSOR 22 PIN RECEPTACLE	
MIL-DTL-38999 SERIES I CONNECTOR	
A1J2	
PIN	SIGNAL
1	+28 VDC
2	GND
3	GAIN_MODE
4	MAN_GAIN
5	POLARITY
6	N/C
7	N/C
8	CONTROL
9	CONTROL_RTN
10	LEVEL_MODE
11	MAN_LEVEL
12	N/C
13	N/C
14	RESERVED
15	RESERVED
16	N/C
17	N/C
18	SEN VID IN
19	SEN VID IN GND
20	GND
21	N/C
22	N/C
AMPHENOL #	88-569723-35S
Mate#	MS27467E13B35P (141239)