

Interface Control Document

AVDU-2641-xx-ICD



General Description

This document applies to the 264mm (10.4") Colour TFT-LCD Display AVDU-2641-xx and its variants.

The monitor supports the XGA (1027(H) x 768(V)) screen format and 16.7M colours (RGB 8/6-bits data) at high response speeds optimised for high-speed motion video typical in airborne surveillance applications.

This Display contains:


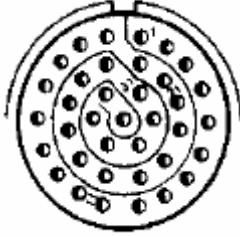

- Power input filter and Power supply module
- Video display driver Panel Electronic Circuit (PEC)
- Inverter PEC for the backlight
- Backlight light box assembly

Fixings are provided on the rear face to mount an external Adaptor (e.g. RDR 1500 Radar converter or quad split screen option)

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Electrical Connections

Monitor connectors (AVDU-2641-01)

Power connector	
 <p>Size 20 contacts Wire Size 24,22,20 Gauge 3, 5, 7.5A max</p>	Unit connector D38999/20WB 98PN FLANGE MT RECEP 6 WAY PIN
	Mating half (cable connector) D38999/26WB 98SN PLUG 6 WAY SKT
	G8801-11M SIZE 11 Backshell
Signal connector	
 <p>Size 22D contacts Wire size 28,26,24,22 Gauge 1.5, 2, 3, 5A max</p>	Unit Connector D38999/20WD 35PN FLANGE MT RECEP 37 WAY PIN
	Mating Half (cable connector) D38999/26WD 35SN PLUG 37 WAY SKT
	G8801-15M SIZE 15 Backshell
Remote OUT	
 <p>Size 22D Contacts Wire size 28,26,24,22 Gauge 1.5, 2, 3, 5A max</p>	Unit connector D38999/20WB 35SN FLANGE MT RECEP 13 WAY Socket
	Mating Half (cable connector) D38999/26WB 35PN PLUG 13 WAY Plug
	G8801-11M SIZE 11 Backshell
Video IN/OUT connectors	
	Unit connector Isolated BNC

For pin outs see table on next page



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Power Connector	
A	+28V DC Power
B	28V DC Power Return
C	Chassis
D	+ Heater (not fitted)
E	- Heater (not fitted)
F	Enable (Ground to pin B for Disable)

Signal Connector			
1	Video 2	S-Video : Chroma in	
2		Ground	
3		S-Video : Luma in	
4		Ground	
5	Video 1*	Composite video in	
6		Ground	
7	Video 3	Luma in / Green in	
8		Ground	
9		Cb in / Blue in	
10		Ground	
11		Cr in / Red in	
12		Ground	
13	Video 5	S-Video_2 : Chroma in	
14		Ground	
15		S-Video_2 : Luma in	
16		Ground	
17	Video 4*	Composite video in_2	
18		Ground	
19	Video 6 YCrCb/RGB selected internally	Cr in_2 / Red in_2	
20		Ground	
21		Luma in_2/Green in_2 (SOG)	
22		Ground	
23		Cb in_2 / Blue_2	
24		Ground	
25		/Composite sync in	
26		Ground	
27	Graphics	PCR	Red, analogue
28		AGND	Analogue ground red
29		PCG	Green, analogue
30		AGND	Analogue ground green
31		PCB	Blue analogue
32		AGND	Analogue ground blue
33		HS_IN	Horizontal sync or composite sync, input
34		DGND	Digital ground
35		VS_IN	Vertical sync, input
36		DGND	Digital ground
37	NC	No connection	

Remote Connector	
1	+28V DC Output
2	28V Return
3	Chassis
4	Data (+)
5	Data (-)
6	Data screen
7	+12V DC Output
8	12V DC return
9	
10	
11	
12	Lighting Bus
13	Inhibit

*Video 1 and Video 4 are looped to BNC connectors on the rear panel.

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Control Key Functions and legend



The Unit defaults to power on when power is applied.

Holding "Power for >4 sec when powered will put the unit into Standby

Holding "Power for >4 sec in standby will power the unit up

The unit will auto power off after 15 seconds when there is no input on the selected video port.

MAP Selects Graphic input 1 (RGBHV computer signal from the signal connector)

Video 1 Selects Composite Video 1 (From the BNC (A) on the back)

Video 2 Selects Composite Video 4 (From the BNC (B) on the back)

PIP will select the one of SYS 2,3,4 as a picture in picture overlaid on MAP

FRZ will freeze the selected Video image

CONT (-) and CONT (+) will adjust the display contrast.

The Menu, UP, Down, Left and Right keys (right bottom above) operate the On-screen display menu system (See manual)

The brightness rotary control (left bottom above) adjusts the display illumination and the associated button backlights.

Note: Key legends can be customised during manufacturing to match customer specific configurations or to address specific installation requirements.



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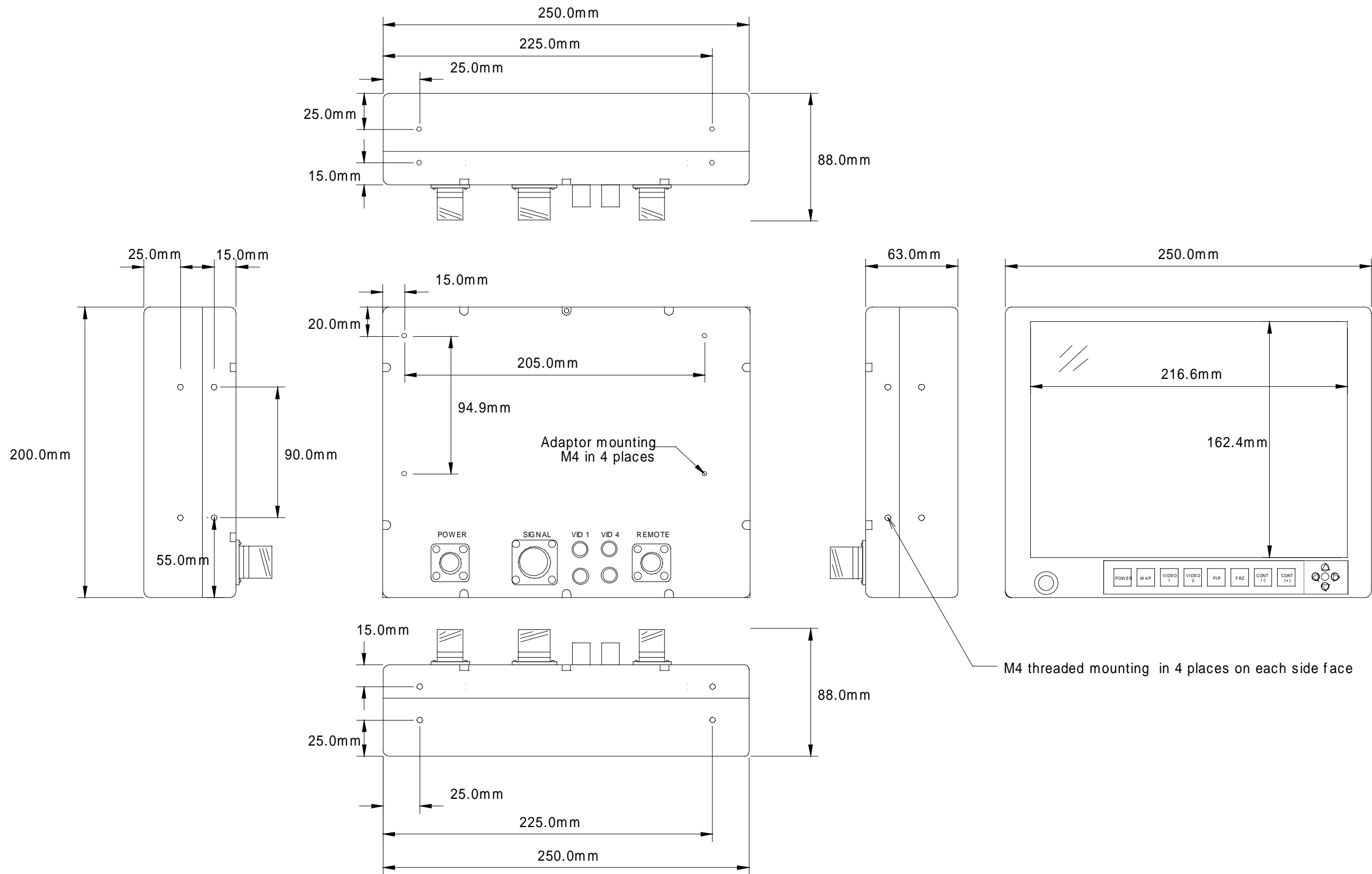
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Handling Precautions

Handling of the Display should be in compliance with Real-Time Vision's handling principles.

- 1) Since front window is an optical assembly and is easily damaged, observe precautions in order not to scratch it.
- 2) Be sure to turn off power supply when inserting or disconnecting the input connectors.
- 3) Wipe off water or fluid droplets immediately. Long contact with water or other fluids may cause discoloration or spots.
- 4) When the front window surface is soiled, wipe it with absorbent cotton or other soft cloth.
- 5) Since the panel is made of glass, it may break or crack if dropped or bumped on hard surface.
- 6) Since CMOS LSI is used in this module, take adequate static electricity precautions and ensure correct human earth bonding when handling.
- 7) Do not open nor modify the Assembly.
- 8) Do not press the front window sheet a in any direction.
- 9) At the insertion or removal of the Power and Signal Interface Connector, ensure that the sockets are free from debris and be sure not to damage the Interface pins
- 10) After installation of the Display into a mounted position, do not twist nor bend the Display even momentary. When designing a suitable mounting, it should be taken into consideration that no bending/twisting forces are applied to the Display from outside. Otherwise the TFT -LCD module or backlight may be damaged.

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The display may be fitted with optional Dzus™ attachment palates which are fitted to either side of the display to allow easy removal from an equipment panel

The dimensions of the display with attachments is shown below:

