

# 15" TFT LCD Display Composite Video & VGA Input

PROGRAMMABLE TACTICAL AWARENESS CONTROLLER

## Model: DTT1500R



iTechLCD's Programmable Tactical Awareness Controller (DTT1500R) is a ruggedized Mil Spec LCD display, engineered to operate under the most extreme environments found in military tactical wheeled and tracked vehicles. The DTT1500R offers a tactile programmable button interface (ASCII or HEX code) via RS232 protocol for PC software functions.

The ruggedized military computer display can be used in operations such as situational awareness and vehicle tracking, and surveillance and reconnaissance. The DTT1500R display can be used in either day or night operations. It comes equipped with features such as enhanced sunlight readability with high brightness, low power consumption and is NVIS compliant.

iTechLCD's integrated NVIS options either produce near zero color shift or slight color shift for full sunlight readability. The integrated NVIS is MIL-STD-3009 compliant, and can be viewed with NVGs (Night Vision Goggles) through the entire brightness range. Dimming is not necessary to meet MIL-STD-3009, Class B NVIS requirements.

### Standard Features

- 15.0" TFT AM LCD XGA (1024 x 768)
- (2) RGB Inputs
- (1) RGB Output
- (1) Composite Video Input
- (1) Composite Video Output
- (12) Programmable Tactile Buttons (ASCII or HEX code via RS232 protocol)
- Tactile Button OSD User Interface (MIL-PRF-22885G; 1 million+ actuations)
- LED Backlight (1000:1 Dimming Ratio)
- Sunlight Readable
- Anti-reflective/Antiglare Surface Treatments
- Milled AL Case, sealed to IP67 NEMA 6
- Mounts via RAM or Panel Mount
- Military Grade Sealed Connectors
- Wide Range Input (10-36 VDC)†
- Protected against Internal Short Circuit, Load Dump, Over Voltage and Reverse Polarity
- 32 Watts Maximum Power Consumption



### Optional Features

- NVIS Compliance (MIL-STD-3009 Class B)
- Touch (Touch works on both RGB ports)

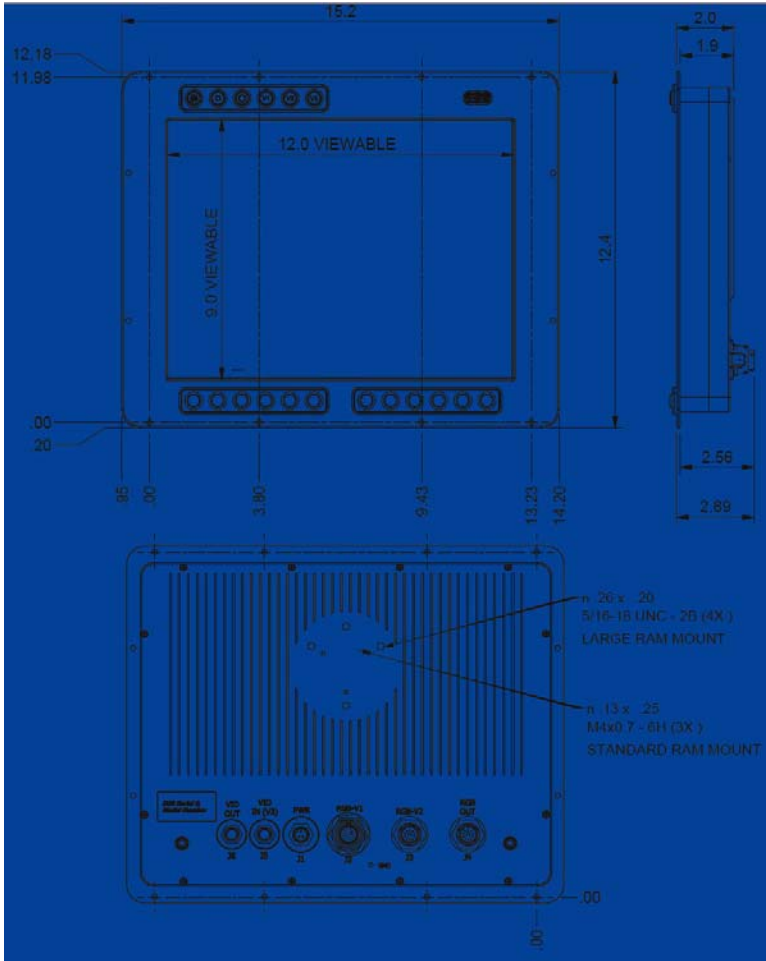
#### Technical Specifications

<b>Display</b>	15.0" TFT AM, XGA, LCD, 16M Colors
<b>Sunlight Readable</b>	1,000 nits*
<b>Contrast Ratio</b>	350:1
<b>Dimming Ratio</b>	1000:1
<b>Viewing Angle (typical)</b>	160° (H) x 135° (V)
<b>Video Input</b>	(2) RGB, (2) RS-170 (NTSC/PAL) (B,D,G,I K)
<b>Mounting</b>	Panel or RAM Mount
<b>Power Conditioning</b>	Internal Short Circuit Protection Load Dump Protection Over Voltage Protection Reverse Polarity Protection
<b>Power Consumption</b>	8 Watts Min - 32 Watts Max
<b>Environmental Specifications</b>	
<b>IP Rating</b>	IP67 (NEMA 6 Submersible)
<b>Operating Temperature</b>	-40°C to 70°C (-40°F to 158°F)

<b>Storage Temperature</b>	-40°C to 70°C (-40°F to 158°F)
<b>Humidity</b>	0-100%
<b>Altitude</b>	45,000 ft.
<b>Military Specifications</b>	
<b>MIL-STD-461E</b>	EMI
<b>MIL-STD-810F</b>	Method 501.4 II-Op; High Temperature
<b>MIL-STD-810F</b>	Method 502.4 II-Op; Low Temperature
<b>MIL-STD-810F</b>	Method 514.5; Procedure 1, General Vibration
<b>MIL-STD-810F</b>	Method 516.5, Procedure 1, Functional Shock
<b>MIL-STD-1275D†</b>	Wide Range DC Power Input 10-36 VDC (12, 24, 28 VDC nominal)
<b>MIL-STD-3009*</b>	NVIS Compliance (Optional)
<b>MIL-PRF-22885G</b>	Sunlight Readability for Buttons
<b>MIL-PRF-22750F</b>	Housing Milled Aluminum, Tan Finish
<b>MIL-DTL-26482</b>	Connector (Qualified)
<b>MIL-DTL-38999</b>	Connector (Qualified)



## Mechanical Drawing



\* iTechLCD's integrated NVIS options either produce near zero color shift or slight color shift for full sunlight readability. The integrated NVIS is MIL-STD-3009 compliant, and can be viewed with NVGs (Night Vision Goggles) through the entire brightness range. Dimming is not necessary to meet MIL-STD-3009, Class B NVIS requirements. Brightness levels will be reduced with the NVIS option.

\* The 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.

RGB-V1 MIL-DTL-38999 SERIES 1 37 PIN CONNECTOR		RGB-V2 MIL-DTL-38999 SERIES 1 13 PIN CONNECTOR		RGB OUT MIL-DTL-38999 SERIES 1 13 PIN CONNECTOR	
J2		J3		J4	
PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
18	RED	1	RED	1	RED
19	RED_GND	2	RED_GND	2	RED_GND
17	GREEN	3	GREEN	3	GREEN
30	GREEN_GND	4	GREEN_GND	4	GREEN_GND
16	BLUE	5	BLUE	5	BLUE
29	BLUE_GND	6	BLUE_GND	6	BLUE_GND
15	H-SNYC	7	H-SNYC	7	H-SNYC
14	V-SNYC	8	V-SNYC	8	V-SNYC
27	SYN-GND	9	SYN-GND	9	SYN-GND
10	N/C	10	TOUCH TXD	10	N/C
11	N/C	11	TOUCH RXD	11	N/C
28	GND	12	GND	12	GND
13	N/C	13	N/C	13	N/C
3	TOUCH RXD				
4	TOUCH TXD				
2	N/C				
6	BUTTON RXD				
7	BUTTON TXD				
5	GND				

POWER INPUT MIL-DTL-26482 SERIES 1 3 PIN CONNECTOR		VIDEO IN-V3 VIA BNC		VIDEO OUT VIA BNC	
J1		J5		J6	
PIN	SIGNAL	PIN	SIGNAL	PIN	SIGNAL
1	28 VOLT DC	1	COAX CORE	1	COAX CORE
2	28 VOLT RTN	2	SHIELD BRAID	2	SHIELD BRAID
3	CHASSIS_GND				

DIMENSIONS	MILLIMETERS	INCHES
Height	315 mm	12.4"
Width	386 mm	15.2"
Depth (with connectors)	68 mm	2.69"
Depth (w/out connectors)	51 mm	2.0"
Weight	9.10 lbs ± .25 lbs. (4.1 kg ± .1 kg)	