TITAN PANELMOUNT™

Large Format, Industrial-/Military-Grade, Panel Mount LCD Monitors

Titan PanelMount 40

The **TITAN PANELMOUNT SERIES** of LCD monitors satisfy the increased demands for information density: the need to include more graphical and contextual information in a given viewing space. These large size, wide format monitors are the perfect supplement to the conventional sizes offered in General Digital's venerable LCD product lineup.

In their standard configuration, the Titan PanelMount Series are turnkey flat panel monitors that consist of vibrant displays, full-featured analog video controllers and rugged aluminum enclosures. The LCDs incorporate the latest in technological advances offering wide viewing angles, fast response times and vivid colors. The video controllers support virtually any video source (including Sync-On-Green) and afford many basic and advanced features such as auto-calibration, scaling, image rotation, color adjustment and runtime counters, to name a few. In addition, the controllers can be optionally configured to support live composite video formats (NTSC, SECAM, PAL, RS-170) and display their images using Picture-In-Picture (PIP) windows. Stylish membrane pads are included with each unit to activate the controllers' intuitive on-screen controls.

The rugged aluminum panel mount enclosure provides superior protection to the monitor's sensitive display and electronics. It facilitates simple mounting in your panel or kiosk. General Digital's vast experience with industrial- and military-grade products has led to the construction of this light weight, large format monitor, which is designed to satisfy numerous military standards.

Possessing relatively low power requirements, the LCDs are designed to operate from a single +24V regulated source. Choices include two standard power supply configurations (attached or separate module) featuring a power factor-corrected AC switching supply; a DC-DC converter; a custom supply request; or the customer can provide their own power source. Additionally, the Titan PanelMount Series power supplies are designed with the intent to meet UL 60950 and FCC Class A Certification.

Please feel welcome to contact a Sales Engineer for a no obligation consultation, or visit **www.GDdisplaysystems.com**.

OVER 35 YEARS OF FLAT PANEL SOLUTIONS

QUICK LOOK

ENCLOSURE
» Rugged Industrial-/Military-Grade All-Metal Construction
» Rounded Corners Promote Operating Safety
» Air Cooled Utilizing Quiet Fans and Field-Replaceable Filters

DISPLAY
» 39.5" to 64.5" Diagonal Active Matrix TFT LCD Displays
» WUXGA (1920 x 1080 pixels) High Definition Resolution
» Wide Viewing Angle (Horizontal & Vertical)
» Fast Response Times (Gray to Gray)
» High Brightness and Contrast Enhances Display Quality

VIDEO CONTROLLER
» Support for Interlaced and Non-Interlaced Video Sources
» Support for Separate, Composite, Component, S-Video, Sync-On-Green, HDMI and DVI-D Standards
» Support for NTSC, SECAM, PAL, RS-170 Video Input
» Resolutions to 1920 x 1200 @ 60 Hz; Sub-resolutions to 75 Hz
» Intuitive On-screen Menus for Display Calibration and User's Control
» Remote Calibration and OSD Control Via RS-232 Connector
» Advanced Imaging Features
  - Auto Adjust, Brightness/Contrast/Color Adjustments, Image Expansion, Image Rotation and Horizontal/Vertical Inversion, Picture-In-Picture Source/Size/Location Control, More

POWER
» +24 VDC Operation
» Attached or Separate AC Input Supply Provides +24 VDC
» Low Power Consumption (<280 Watts)

OPTIONS
» Protective Glass Display Overlay (Recommended)
» Capacitive, Resistive, IR (Infrared), Multitouch Touch Screens
» Support for DVI-D Video, HDMI Video, NTSC Video (Composite)
» External Power Supplies (AC, DC, Power Factor Corrected, More)
» Stereo Speakers
» Also Available For a Non-Recurring Engineering Charge (NRE), Minimum Order, and Extended Delivery Time
  - Daylight and Sunlight Readable Displays
  - Night Vision Goggle Compatibility
  - All-LED Backlighting for "No Mercury" Requirements

OTHER
» Designed with the Intent to Meet UL 60950 and FCC Class A Certification
» Designed with the Intent to Meet MIL-STD-901D, -810F, -167B, -740, -461E, -462, -1399

Designed and Manufactured in the U.S.A.

GD GENERAL DIGITAL
The Innovators of Flat Panel Technology

DISPLAY

	Size (Diagonal)	Viewing Area (W x H)	Resolution (Pixels)	Number of Colors	Luminance (0° Max.)	Contrast	Response Time (Rise/Decay)	Horizontal Viewing Angle	Vertical Viewing Angle	Shock [1]	Vibration [1]
TP-40D-847	39.5"	34.57" x 19.11"	1920 x 1080	16.7 Million	480 Nits	4800:1	9.5 ms (Total)	±88°	±88°	50 g, 11 ms ½ Sine Wave	1.0 g (10—200 Hz)
TP-42D-850	42.0"	36.62" x 20.60"	1920 x 1080	16.7 Million	500 Nits	4000:1	8 ms (Total)	±89°	±89°	30 g, 11 ms ½ Sine Wave	1.5 g (10—200 Hz)
TP-46D-840	46.0"	40.08" x 22.55"	1920 x 1080	16.7 Million	450 Nits	1800:1	6/6 ms	±88°	±88°	50 g, 11 ms ½ Sine Wave	2.0 g (10—300 Hz)
TP-55D-849	54.6"	47.62" x 26.93"	1920 x 1080	1.07 Billion	500 Nits	4000:1	6.5 ms (Total)	±89°	±89°	30 g, 11 ms ½ Sine Wave	1.0 g (10—300 Hz)
TP-65D-836	64.5"	56.24" x 31.71"	1920 x 1080	1.07 Billion	360 Nits	4000:1	8 ms (Total)	±89°	±89°	50 g, 11 ms ½ Sine Wave	1.0 g (10—200 Hz)

1 Shock and Vibration data reflect parameters for baseline industrial monitors. Military-grade monitors will sustain even greater shock and vibration levels. Please inquire with a Sales Engineer for more information.

VIDEO CONTROLLER [2]

ddd	Display Supported	640 x 480 VGA	800 x 600 SVGA	1024 x 768 XGA	1366 x 768 WXGA	1280 x 1024 SXGA	1600 x 1200 UXGA	1920 x 1200 WUXGA	Scaling	NTSC / SECAM / PAL / RS-170	Video Supported
					Resolution/Frequency [3]						
115 [4, 5]	All	60, 72, 75 Hz	56, 60, 72, 75 Hz	60, 70, 75 Hz	60 Hz	60, 75 Hz	60 Hz	60 Hz	On/Off	–	Separate, Composite, Sync-On-Green, DVI-D
117 [4]	All	60, 72, 75 Hz	56, 60, 72, 75 Hz	60, 70, 75 Hz	60 Hz	60, 75 Hz	–	60 Hz	On/Off	–	Separate, Composite, Sync-On-Green, DVI-D
121 [4]	All	60, 72, 75 Hz	56, 60, 72, 75 Hz	60, 70, 75 Hz	60 Hz	60, 75 Hz	–	60 Hz	On/Off	Digital Processor, Picture-In-Picture	Separate, Composite, Sync-On-Green, DVI-D

2 Most common video inputs listed. See below for a comprehensive list of supported video standards. Speak with a Sales Engineer for more information.

3 Most common video modes listed. Other video modes supported. Speak with a Sales Engineer for more information.

4 Supports advanced features such as Live Video, Picture-In-Picture (multiple user-selectable sizes), and Picture-By-Picture.

5 Video controller 115 is obsolete and shown for reference only.

VIDEO STANDARDS SUPPORTED All Models

Analog Computer Video	Digital Computer Video	Composite (Live) Video	HD Video	Others
VGA, SVGA, ARGB, RGB, Separate Sync, Composite Sync, Sync-on-Green, DVI-A, STANAG 3350 A / B / C	DVI-D, DVI-I, SD-SDI, HD-SDI	NTSC, PAL, SECAM, RS-170, S-Video, CCTV	HD-SDI, HDMI	CGI, CCIR, EGA, RS-343A, EIA-343A, Custom Sync

MTBF

	Display	Backlight[6]	Inverter	Power Supply (Optional)
TP-40D-847	>50,000 Hours (Min.)	>50,000 Hours (Min.)	182,000 Hours	>100,000 Hours
TP-42D-850	>50,000 Hours (Min.)	>60,000 Hours (Typ.)	182,000 Hours	>100,000 Hours
TP-46D-840	>50,000 Hours (Min.)	>60,000 Hours (Typ.)	182,000 Hours	>100,000 Hours
TP-55D-849	>50,000 Hours (Min.)	>60,000 Hours (Typ.)	182,000 Hours	>100,000 Hours
TP-65D-836	>50,000 Hours (Min.)	>50,000 Hours (Min.)	>100,000 Hours	>100,000 Hours

6 The hours for LED Backlight refer to the half-life of the backlight; that is, the point at which the LEDs reach half of their original brightness. *It does not indicate the life expectancy of the backlight.*

ENVIRONMENTAL

	Temperature, Operating	Temperature, Storage	Humidity, Operating	Humidity, Storage	Altitude, Operating	Altitude, Storage
TP-40D-847	0° C to 50° C	-20° C to 60° C	10% to 90% RH Non-condensing	10% to 90% RH Non-condensing	14,000 Feet	40,000 Feet
TP-42D-850	0° C to 50° C	-20° C to 60° C	10% to 90% RH Non-condensing	10% to 90% RH Non-condensing	14,000 Feet	40,000 Feet
TP-46D-840	0° C to 50° C	-20° C to 60° C	10% to 90% RH Non-condensing	10% to 90% RH Non-condensing	14,000 Feet	40,000 Feet
TP-55D-849	0° C to 50° C	-20° C to 60° C	10% to 90% RH Non-condensing	10% to 90% RH Non-condensing	10,000 Feet	40,000 Feet
TP-65D-836	0° C to 50° C	-20° C to 60° C	10% to 90% RH Non-condensing	10% to 90% RH Non-condensing	10,000 Feet	40,000 Feet

MECHANICAL

	Dimensions - Enclosure / Bezel (H x W x D)	Construction [7]	Finish	Weight, Operating	Weight, Shipping
TP-40D-847	20.40" x 35.35" x 2.88" / 22.60" x 36.84" x 0.38"	5052-H32 and 6061 Aluminum	Black Matte Powder Coat	50 Pounds	70 Pounds
TP-42D-850	22.93" x 38.65" x 5.61" / 24.93" x 40.65" x 0.44"	5052-H32 and 6061 Aluminum	Black Matte Powder Coat	63 Pounds	83 Pounds
TP-46D-840	23.86" x 41.45" x 4.01" / 25.86" x 43.45" x 0.44"	5052-H32 and 6061 Aluminum	Black Matte Powder Coat	76 Pounds	96 Pounds
TP-55D-849	28.02" x 48.86" x 2.99" / 30.02" x 50.86" x 0.44"	5052-H32 and 6061 Aluminum	Black Matte Powder Coat	90 Pounds	110 Pounds
TP-65D-836	34.15" x 58.58" x 4.30" / 36.15" x 60.58" x 0.44"	5052-H32 and 6061 Aluminum	Black Matte Powder Coat	100 Pounds	120 Pounds

7 Typically, General Digital products are constructed with 5052-H32 and 6061 aluminum. Other aluminum or metal composite materials may be utilized as deemed necessary.

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I/O CONNECTIONS

	Power	Analog Video	On/Standby (DC)	S-Video (Optional)	Composite Video (Optional)	HD-SDI Video (Optional)	Serial/Touch Screen (Optional)	DVI (Optional)
TP-40D-847	AC Line Entry Filter w/IEC Conn.	High Density 15-pin Socket or 5 BNC Connectors	LED on Membrane Pad	4-pin Mini DIN	BNC Socket	BNC Socket	DE-9, Socket	DVI-D
TP-42D-850	AC Line Entry Filter w/IEC Conn.	High Density 15-pin Socket or 5 BNC Connectors	LED on Membrane Pad	4-pin Mini DIN	BNC Socket	BNC Socket	DE-9, Socket	DVI-D
TP-46D-840	AC Line Entry Filter w/IEC Conn.	High Density 15-pin Socket or 5 BNC Connectors	LED on Membrane Pad	4-pin Mini DIN	BNC Socket	BNC Socket	DE-9, Socket	DVI-D
TP-55D-849	AC Line Entry Filter w/IEC Conn. with 15 Amp Circuit Breakers	High Density 15-pin Socket	LED on Membrane Pad	4-pin Mini DIN	BNC Socket	BNC Socket	DE-9, Socket	DVI-D
TP-65D-836	AC Line Entry Filter w/IEC Conn. with 15 Amp Circuit Breakers	High Density 15-pin Socket	LED on Membrane Pad	4-pin Mini DIN	BNC Socket	BNC Socket	DE-9, Socket	DVI-D

CALIBRATION All Models

ddd	Interface	Functions	Advanced
115 [5]	On-screen Displays Navigated by 8-button Membrane Pad	Volume, Brightness, Contrast, Saturation, Hue, Sharpness, Input Signal, Aspect Size (Scaling), Image Position (Horizontal & Vertical), Utilities	Auto Source Seek, Auto Picture Setup, Auto Color Gain, Auto Power Off, Picture-In-Picture, Color Temperature, Hot Keys, OSD (Position, Timeout, Language [English, Chinese], Transparency), Manual Clock & Phase, Video Standard, Image Orientation, Gamma
117	On-screen Displays Navigated by 8-button Membrane Pad	Brightness, Contrast, Saturation, Backlight Brightness, Input Signal, Aspect Size (Scaling), Image Position (Horizontal & Vertical), Utilities	Picture-In-Picture (PIP), PIP Size, PIP Position, PIP Transparency, Auto Picture Setup, Auto Color Gain, Wide Screen Mode Detection, Manual Clock/Phase, Auto Source Seek, Auto Power Off, Video Standard, OSD (Position, Timeout, Language [English, Spanish, French, German, Chinese], Transparency, Display Input), Image Freeze, Image Zoom & Pan, Color Temperature, Hot Keys, Backlight Setup
121	On-screen Displays Navigated by 8-button Membrane Pad	Brightness, Contrast, Saturation, Hue, Sharpness, Backlight Brightness, Input Signal, Aspect Size (Scaling), Image Position (Horizontal & Vertical), Utilities	Picture-In-Picture (PIP), PIP Size, PIP Position, PIP Transparency, Auto Picture Setup, Auto Color Gain, Wide Screen Mode Detection, Manual Clock/Phase, Auto Source Seek, Auto Power Off, Video Standard, OSD (Position, Timeout, Language [English, Spanish, French, German, Chinese], Transparency, Display Input), Image Freeze, Image Zoom & Pan, Color Temperature, Hot Keys, Backlight Setup, Image Orientation (Normal, Horizontal Flip, Vertical Flip, Rotate)

OPTIONS   All Models (Ordered Separately — Please Inquire with a Sales Engineer for Additional Options and Accessories)

DISPLAY OVERLAY (Other Overlays Available — Please Inquire with a Sales Engineer)

gg	Description	gg	Description
00	None	35	Capacitive Touch Screen, Ideal Etch
02	Clear Float Glass, Antiglare Etch Two Sides	51	Resistive Touch Screen
04	Clear Float Glass, Antireflective Coating Two Sides	69	IR Touch Screen
21	Vandal Shield, Polycarbonate or Acrylic	73	Multitouch Touch Screen, Projected Capacitive
23	Vandal Shield, Clear Float Glass, Antiglare Etch Two Sides, 2 Panes Bonded (Laminated) Together (Not Bonded to LCD)		
24	Vandal Shield, Soda Lime Glass, Chemically Strengthened (Tempered), Antireflective Coating Two Sides		

POWER SUPPLY [8]

hijj	Input Voltage Range	Output	Frequency Range	Line Entry Module/Filter	Power Factor Correction
EP08 (Rear Mount)	85–264 VAC	300 W / +24 VDC	47–63 Hz	Yes	0.98
IP28 (Internal Mount) [9]	85–265 VAC	500 W / +24 VDC	47–63 Hz	Yes	0.95
0094 (None)	+24 VDC	Filtering and regulation provided by customer			

8 Includes 6'7" AC Power Cable.

9 Default supply for the 65" model.

OTHER (Some Options Will Require an NRE, Minimum Order and Extended Delivery Time)

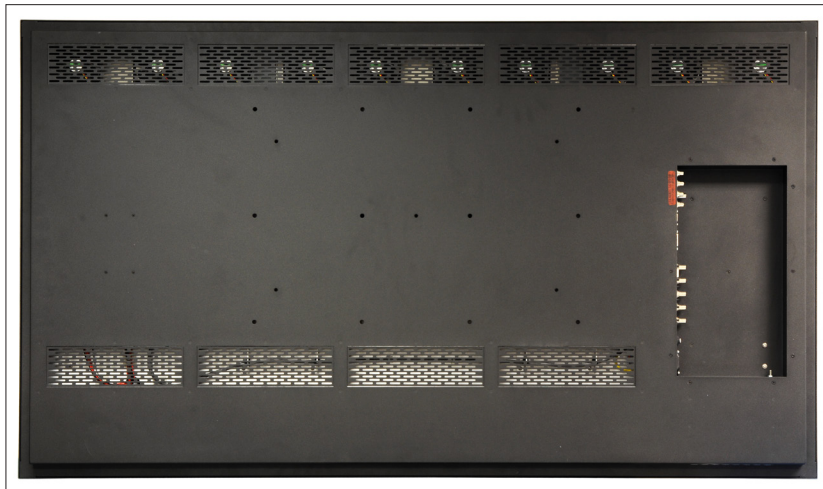|	
NVIS Compatibility	Night Vision Displays Compliant to MIL-STD-3009
Sunlight Readable LCDs	High Brightness Displays to 1000+ Nits
Optical Enhancements	Bonding of Filter and Display Using Indice-Matched Optical Materials; Brightness and Contrast Enhancing Films and Laminations
Power Supplies	AC and DC Supplies; Various Input Ranges, Input Frequencies; Separate or Attached; Power Factor Correction; AC and DC Power Cables
Video Accessories	Video Cables, Signal Extenders, NTSC/PAL/SECAM/RS-170/S-Video/DVI-D/HD-SDI/ SD-SDI/HDMI/HD Component Support, Picture-In-Picture, Picture-By-Picture
Remote Control	IR or Serial Calibration/Control Interface
Customization	Custom Mechanical and Electrical Modifications; Custom Finishing; Custom Software and Performance Modifications; Private Labeling

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MODEL NUMBER CONFIGURATOR [10]

Model Style	Size & Resolution (**aab**)	Display (**ccc**)	Video Controller (**ddd**)	Keyboard/Pointer (**ee**)	Industrial Enclosure (**ff**)	Display Overlay (**gg**)	Power Supply (**hijj**)
TP-	40D-	847-	# # #-	00-	14-	# #-	# # # #
TP-	42D-	850-	# # #-	00-	14-	# #-	# # # #
TP-	46D-	840-	# # #-	00-	14-	# #-	# # # #
TP-	55D-	849-	# # #-	00-	14-	# #-	# # # #
TP-	65D-	836-	# # #-	00-	14-	# #-	IP28

10 The hashtags (#) indicate customer-defined values.

ORDERING

Model Number [11]	Description
TP-40D-847-**ddd**-00-14-**gg**-**hijj**	Titan PanelMount 40, Large Format Industrial-/Military-Grade 39.5" WUXGA, Panel Mount LCD Monitor
TP-42D-850-**ddd**-00-14-**gg**-**hijj**	Titan PanelMount 42, Large Format Industrial-/Military-Grade 42.0" WUXGA Panel Mount LCD Monitor
TP-46D-840-**ddd**-00-14-**gg**-**hijj**	Titan PanelMount 46, Large Format Industrial-/Military-Grade 46.0" WUXGA Panel Mount LCD Monitor
TP-55D-849-**ddd**-00-14-**gg**-**hijj**	Titan PanelMount 55, Large Format Industrial-/Military-Grade 54.6" WUXGA Panel Mount LCD Monitor
TP-65D-836-**ddd**-00-14-**gg**-IP28	Titan PanelMount 65, Large Format Industrial-/Military-Grade 64.5" WUXGA Panel Mount LCD Monitor

11 *Bold Italicized letters* refer to standard customer-defined configurations (see Model Number Configurator above).

Rear view and connector panel
close-up of Titan Lite Series

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