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Planar TD3200  
Transparent Display  
**USER MANUAL**

[www.planar.com](http://www.planar.com)



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# Usage Notice



**WARNING** – Please do not open or disassemble the product as this may cause electric shock.

## Precautions

Follow all warnings and precautions as recommended in this user's manual to maximize the life of your unit and to insure the safety of the users.

### Do:

- Turn off the display before loading content into the display box
- Operate and store your transparent display box in a clean, dry environment
- Be certain to determine your table, countertop or mount can support the 55lb (121kg) weight of the TD3200 display box plus weight of the added contents
- Disconnect the power plug before cleaning
- Clean front glass using a soft clean cloth moistened with commercial mild window glass cleaner or 50/50 mixture of water and isopropyl alcohol
- Use a soft cloth moistened with mild detergent to clean the enclosure housing
- Remove lint and other loose debris from the inside surface of the LCD with a dry lint-free soft cloth

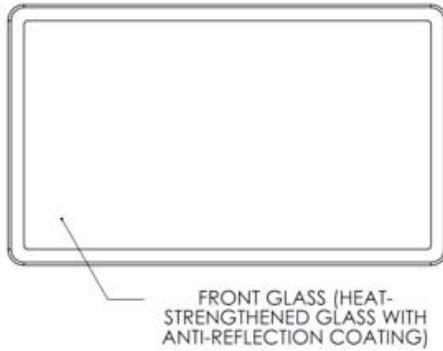
### Don't:

- Do not look directly at the LED illumination system in operation with access door removed
- Do not touch the front or the inside display surface with sharp or hard objects
- Do not use abrasive cleaners, waxes or solvents for your cleaning
- Do not spray cleaner inside the display enclosure. We recommend wiping the interior with a soft cloth that has been moistened with a mild detergent

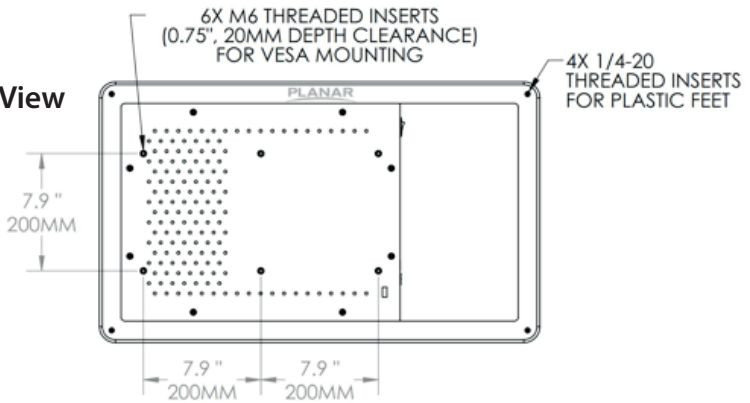
# Introduction

## Getting to Know Your Planar Transparent Display Monitor Display Box Feature Descriptions

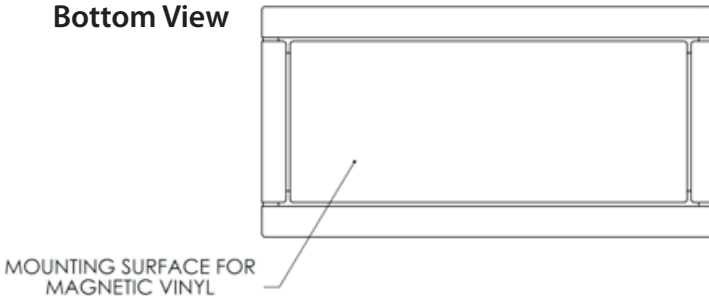
Front View



Back View



Bottom View



## Placing your Monitor

When used on a countertop or other supporting surface, the TD3200 can be oriented in landscape or portrait mode. Be certain to determine the table or countertop can safely support the 55lb (121kg) weight of the TD3200 display box plus the weight of the added contents. In landscape mode we recommend the access door be oriented on top but in portrait mode there is no preferred orientation as to which short side is on top.

The TD3200 can also be mounted using the VESA Flat Panel Mounting Physical Mounting Interface Standard incorporated into the back plate of the display. Please refer to the REAR VIEW drawing in the prior section for mounting pattern dimensions. Again, be certain to check to make sure the mount is capable of supporting the weight of the TD3200 display box plus contents. Planar recommends using UL or similarly tested mounting hardware. In mounting the display on a stand using the 200 mm square VESA pattern, use the four adjacent holes in the center of the unit. We don't recommend using the outer 200 mm square pattern by itself.

To mount the monitor on a swing-arm or other mounting fixture, follow the instructions included with the mounting fixture to be used. Again, Planar recommends using UL or similarly tested mounting hardware.

If the monitor is placed against a wall or with the backside against a countertop, we recommend installing the four rubber feet into the threaded inserts located at the corners of the backside of the display. This will permit spacing for cooling ventilation and also allow room for the power and video cables.

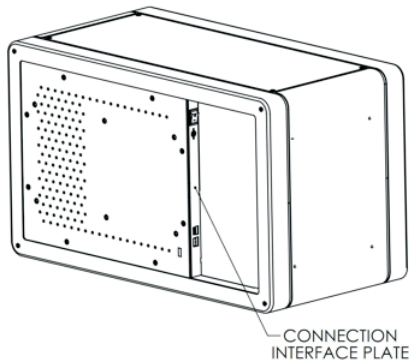


**WARNING** – For wall or swing-arm VESA mounting, you must select the proper screw length! Your M6 mounting screws should protrude no more than 5/8" (16 mm) into the VESA mount threaded holes (see REAR VIEW figure in prior section). Use of longer screws can damage the monitor. For example, if your VESA mounting bracket is ¼" (6mm) thick, use 20 or 22 mm long M6 screws.

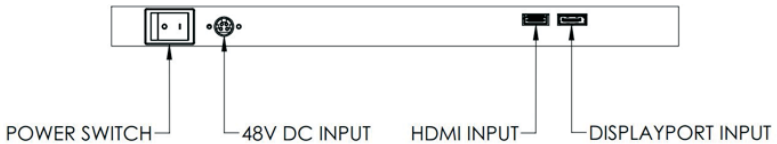
## Attaching Electrical and Video Connections

Power is supplied to the TD3200 display box through the four pin connector of the power supply brick. Attach this to the “48C DC input” plug on the Connection Interface Plate (see figure below). The power switch controls both the video and the internal illumination for the display box.

Your computer or media player can either employ an HDMI or DisplayPort output to interface with the TD3200. No special additional hardware is needed.



### Detail of Connection Interface Plate



**NOTICE** – If the graphics card of your computer or player doesn’t auto-sync with the TD3200, we recommend a manual display setting of 1366 x 768 for best results. We have listed all the compatible video modes of your TD3200 in the Appendix (on page 13) for your reference.

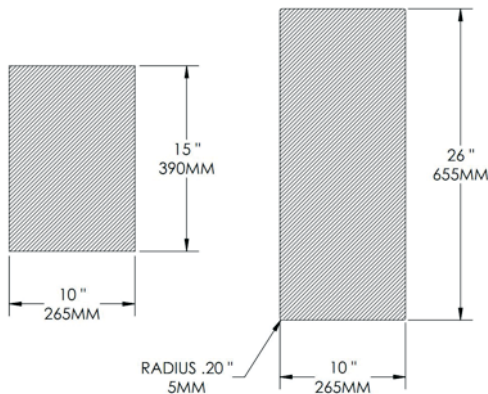
## Using Magnetic Vinyl

We have fabricated the TD3200 display box from aluminum to provide a sturdy but relatively lightweight enclosure. In addition the access door and other three side panels are made from steel to allow the user to employ these surfaces for additional messaging or decoration through use of magnetic vinyl. See examples below.

This material can quickly change the appearance of the exterior of the box to compliment the video content and/or to blend in with other surfaces in the environment. Printed magnetic vinyl is readily available online or at printing service vendors.



### Magnetic Vinyl Dimensions





# Setup

## Presentation of Your Material in the TD3200 Display Box

Place materials to be displayed inside the display box using the access door on one long side of the enclosure. Loosen the fasteners using a standard Philips #1 or #2 screwdriver. We have included a small screw driver with a clamp mount that can be positioned on the back of the TD3200 for easy storage. We have also included a magnetic lift tool with the display box that can be used to assist in raising the steel access door after loosening the fasteners. You can store the lift tool by attaching it to a steel plate found in the accessories bag. After removing the adhesive liner, the plate can be attached on the backside of the display to provide a place to store the lift tool.

You should experiment with placement of the objects to be displayed in the TD3200 to optimize their appearance and interaction with your video content. You will find that the brightness of display box and the legibility of the screen content can be affected by the color of objectives placed in the display box. For best results we suggest avoiding large areas of dark colors inside the display box.

Most conventional digital signage video content can be used with the TD3200, but enhancements to the content are possible to optimize the attention-grabbing effect you and your customers will see in using the Planar transparent display box. In preparing video content for the TD3200 driving the LCD to white will produce the highest transparency while black screen features will result in the most opacity. Intermediate colors will have intermediate transparency. Note that slide-show presentation software, such as Microsoft Powerpoint™, can be used to create simple but effective content for the TD3200.

In order to maximize the brightness of the TD3200 we have provided an extremely high level of white light illumination inside the display box. In addition to enhancing the appearance of objects inside the box and of the LCD display, this intense light level can be used to drive a photovoltaic turntable to further enhance the eye-catching performance of your Planar transparent display box by rotating your interior content. These light-driven turntables are available online: search using the keywords: "solar turntable". Most of these turntables have a limited weight capacity.

**NOTE:** While there is almost no ultraviolet light emitted from the white LEDs we employ, the white light is sufficiently bright to cause potential photobleaching of materials susceptible to light-induced color fading. We recommend testing of light fastness of materials to be displayed for an extended period (weeks to months) in the display box.

# Cleaning

The anti-reflection coating on the front glass of your TD3200 should be cleaned with standard glass cleaner and a soft cloth. In order to remove fingerprints effectively it is usually better to wet the cloth with the cleaning solution and work on small sections of the glass at a time rather than starting to clean the whole surface at once.

The exterior of the TD3200 can be cleaned with a standard water-based cleaning solution and a cloth. The interior of the display box can be cleaned with the same materials.

BE CERTAIN TO TURN OFF THE POWER TO THE DISPLAY BOX WHEN CLEANING THE INTERIOR OF THE UNIT. APPLY THE CLEANING SOLUTION TO THE CLOTH. DO NOT SPRAY CLEANING SOLUTION INTO THE INTERIOR OF THE DISPLAY BOX.



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# Appendix

## Troubleshooting

A properly-functioning TD3200 will show a “splash screen” when power is first applied. If a suitable video source is attached, the screen will then display whatever video image is being sent to the TD3200 shortly after the splash screen appears. Note that when power is applied you should also see light from the LEDs located around the perimeter of the AMLCD screen. When power is being supplied to the TD3200 power supply, the indicator light on the power brick will glow green.

**Possible Problem** – After setup, the switch on the Connection Interface Plate (see page 7) has been turned on and no image appears. In addition, the LEDs in the box are not functioning. This probably means no power is being applied to the display box. **Items to check:**

- Verify the power brick is plugged into a power source. **Note:** if the power brick is receiving power, a green LED on the brick will be lit.
- Make sure the power cord is securely attached to the power brick.
- Check to see the output plug from the power brick is properly inserted in the plug located in the Connection Interface Plate.

**Possible Problem** – The splash screen appears after power is turned on, but a “no sync” message appears on the screen and afterward the monitor shows no image. This usually means no recognizable video signal is being received by the display box. **Items to check:**

- Make sure the video cable is properly plugged in at the video source (computer or media player).
- Verify the other end of the same video cable checked previously is securely plugged into either the HDMI or DisplayPort receptacle in the Connection Interface Plate (see page 7).
- If an adapter is being used as part of the video cable, check to confirm the two plugs are properly seated.
- If you are using a DVI plug from the video source, check to make sure there are no bent pins in the plug.
- Verify that the output of your computer or player is one of the formats listed on page 13 of this document.

If these troubleshooting instructions do not resolve the problem, please call 1.866.PLANAR1 and select option 1 to determine the next steps.

## Specifications

	TD3200 - Transparent Display Monitor
Product Name	TD3200
Planar Part Number	997-6821-00
Viewable Size	31.25" diagonal (27.3" x 15.2")
Viewing Angle (Typical)	178° Horizontal and Vertical
Response Time (G-to-G, Typical)	8 ms
Brightness (Typical)	350 cd/m <sup>2</sup>
Native Display Resolution	1366 x 768
Aspect Ratio	16:9
Color Palette	16.7 million colors
Pixel Pitch	0.511 mm
Refresh Rate	50 to 60 Hz
Exterior Dimensions (WxHxD)	29.5" (749 mm) x 17.5" (445 mm) x 15.0" (381 mm)
Interior Dimensions (WxHxD)	27.25" (692 mm) x 15.25" (387 mm) x 13.5" (343 mm)
Access Door Dimensions	24.2" (615 mm) x 8.8" (223 mm)
Display Weight	55.1 lbs (25.0 kg)
Video Inputs	Digital (HDMI, DisplayPort)
Power Supply	External AC adapter, 48V DC
Power Requirements	100-200 VAC (50/60 Hz)
Power Consumption	125W
VESA Compatible/ Location	Built-in 200 x 200 and 400 x 200 mm VESA, Back
Service and Support	3-Year Warranty
Product Approval	NRTL Listed, FCC-Class A, CE, RoHS
In the Box	TD3200 32" LookThru LCD Monitor, Power Adapter and Cord, HDMI Cable, User's Guide, Quick Start Guide, feet and fasteners, access door lift tool and mount, screwdriver and mount.

## Compatibility Modes

Mode	Resolution	V-Frequency (Hz)
VGA	640 x 480	60
WVGA	800 x 480	60
SVGA	800 x 600	60
XGA	1024 x 768	60
WXGA	1280 x 720	60
WXGA	1280 x 768	60
HD	1366 x 768	60

## **Compliance Information**

Federal Communication Commission Radio

Frequency International Statement

This equipment has been tested and found to comply with the limits for a Class A digital device pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference with the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

## **Support and Service**

Planar is a US company based in Beaverton, Oregon and Espoo, Finland with a worldwide sales distribution network.

Visit Planar at <http://www.planar.com/support> for product registration, operations manuals, line drawings, touch screen drivers, warranty information and access to Planar's Technical Library for online troubleshooting.

To speak with Planar Customer Support please have your model and serial number available and dial one of these numbers:

### **Americas Support**

Tel: 1-866-PLANAR1 (866-752-6271) or +1 503-748-1100

Hours: M-F, 8am - 8pm Eastern Time | M-F, 5am - 5pm Pacific Time



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## **Planar Systems, Inc.**

Customer Service

24x7 Online Technical Support: <http://www.planar.com/support>

## **Americas Support**

Tel: 1-866-PLANAR1 (866-752-6271) or +1 503-748-1100

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