



**PT3290PW**

**Touch Screen Monitor**

**USER'S GUIDE**

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The test results show that this device meets the FCC rules. Those limits are set to protect residential areas from the devices with harmful emission. This device will produce, use and radiate radio frequency energy. In addition, failure to follow the user's manual to install or use this device might produce harmful interference with radio communication. Notwithstanding the foregoing, it does not guarantee that this type of harmful interference does not occur in some special installations. The interference caused by this device to the reception of radio or television signals may be verified by turning it on and off. Any changes or modifications to this TFT edge-lit LED LCD would void the user's authority to operate this device.

Industry Canada (ICES-003): This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

### **Important Waste Disposal Information**

Please recycle or dispose of all electronic waste in accordance with local, state, and federal laws. Additional resources can be found online at <http://www.planar.com/about/green/>.

The crossed-out wheellie bin symbol is to notify consumers in areas subject to Waste Electrical and Electronic Equipment (WEEE) Directive 2012/19/EU that the product was placed on the market after August 13, 2005 and must not be disposed of with other waste. Separate collection and recycling of electronic waste at the time of disposal ensures that it is recycled in a manner that minimizes impacts to human health and the environment. For more information about the proper disposal of electronic waste, please contact your local authority, your household waste disposal service, or the seller from whom you purchased the product.



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# Usage Notice

## Precautions

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

### **Do:**

- Turn off the product before cleaning.
- Touch screen surface may be cleaned using a soft clean cloth moistened with mild window glass commercial cleaners or 50/50 mixture of water and isopropyl alcohol.
- Use a soft cloth moistened with mild detergent to clean the display housing.
- Disconnect the power plug from AC outlet if the product is not going to be used for an extended period of time.

### **Don't:**

- Do not use over 16 hours per day.
- Do not touch the LED Display screen surface with sharp or hard objects.
- Do not use abrasive cleaners, waxes or solvents for your cleaning.
- Do not operate the product under the following conditions:
  - Extremely hot, cold or humid environment.
  - Areas susceptible to excessive dust and dirt.
  - Near any appliance generating a strong magnetic field.
  - In direct sunlight.
- If smoke, abnormal noise or odor emits from your Touch LED LCD Monitor, remove the power cord immediately and call your service center.
- Never remove the rear cover of your Touch LED LCD Monitor. The display unit inside contains high-voltage parts and may cause electric shock.
- Never try to repair your Touch LED LCD Monitor yourself. Always call your service center or a qualified technician to fix it.
- Due to safety concerns, if the VESA mounting kit is purchased separately, please make sure the mounting kit is UL-listed, and replaceable only by service personnel.

# Usage Notice

## Consignes de sécurité

Respectez tous les avertissements, les précautions et conseils d'entretien recommandés dans ce manuel de l'utilisateur pour maximiser la durée de vie de votre appareil.

### **A faire :**

- Éteindre le produit avant de le nettoyer.
- La surface de l'écran tactile peut être nettoyée avec un chiffon doux et propre imprégné d'un nettoyant doux du commerce pour vitres ou d'un mélange à 50/50 d'alcool isopropylique et d'eau.
- Utilisez un chiffon doux imprégné d'un détergeant doux pour nettoyer le carter de l'affichage.
- Débranchez la fiche d'alimentation de la prise de courant secteur si le produit ne doit pas être utilisé pendant une période prolongée.

### **A ne pas faire :**

- Ne pas utiliser plus de 16 heures par jour.
- Ne touchez pas la surface de l'écran LED avec des objets coupants ou durs.
- N'utilisez pas des produits de nettoyage abrasifs, de la cire ou des solvants pour le nettoyage.
- N'utilisez pas le produit dans les conditions suivantes :
  - Environnement extrêmement chaud, froid ou humide.
  - Endroits poussiéreux ou sales.
  - Près d'appareils générant un fort champ magnétique.
  - Sous la lumière directe du soleil.
- Si de la fumée, un bruit anormal ou une odeur s'échappait de votre moniteur LCD LED, débranchez immédiatement le cordon d'alimentation et appelez votre centre de réparation.
- Ne retirez jamais le couvercle arrière de votre moniteur LCD LED. L'unité d'affichage contient des éléments où circule un voltage élevé et présentant un risque d'électrocution.
- N'essayez jamais de réparer vous-même votre moniteur LCD LED. Faites toujours appel à votre centre de service ou à un technicien qualifié pour toute réparation.
- Pour des raisons de sécurité, si vous achetez séparément le kit de fixation VESA, assurez-vous que celui-ci est certifié UL, et qu'il peut être remplacé uniquement par un technicien qualifié.

# Introduction

## About PT3290PW

The PT3290PW is a 31.5" flat panel screen with an active matrix, thin-film transistor (TFT) edge-lit LED LCD.

This unit is to be used as commercial and light industrial equipment only.

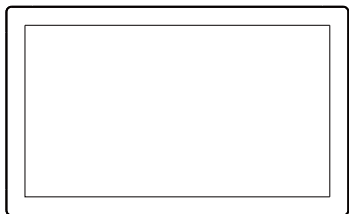
### Features include:

- Direct Analog signal input
- Direct Digital signal input
- Active matrix TFT edge-lit LED LCD technology
- 1920 x 1080 resolution
- 31.5" viewable display area - 16:9 aspect ratio
- 31.47 ~ 67.5 KHz horizontal scan
- 47 ~ 63 Hz high refresh rate
- 0.3637mm x 0.3637mm pixel pitch
- Auto adjustment function
- Multilingual OSD user control
- 600mm x 200mm and 200mmx200mm VESA mount
- Projected Capacitive touch screen with USB controller
- Audio - 5W x 2

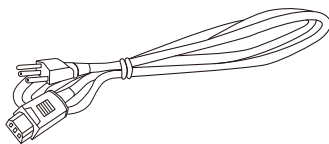
## Touch Screen for PT3290PW

- Projected Capacitive 10-point touch screen
- Interface: USB controller
- Transmittance: 84%(min)
- HID: Windows® 7/8/10
- Driver:
  - Windows® 7/8/10: For Projected Capacitive, the driver is a mouse emulation driver. If your Windows version is Windows 7 or later, there is no need to install this driver. There is a HID touch digitizer build-in driver in Windows 7/8/10.
  - Linux kernel 2.6.x (32 bit & 64 bit), Apple ® Mac OS

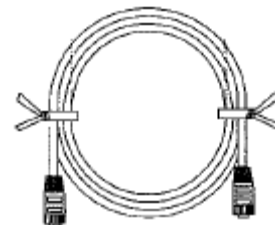
## Package Overview



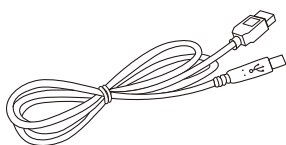
Display



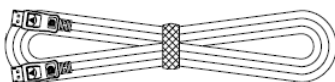
Power Cord



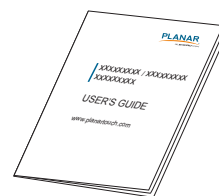
RJ45 TO RJ45 CABLE



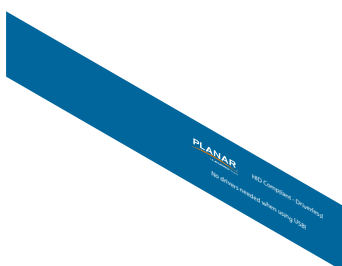
USB Cable (A to B)



DisplayPort CABLE



User's Guide



Quick Start Guide

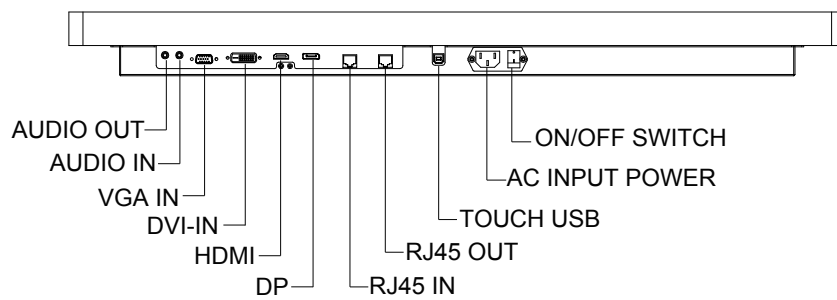
# Installation

## Product Overview

- Front View



- Bottom View

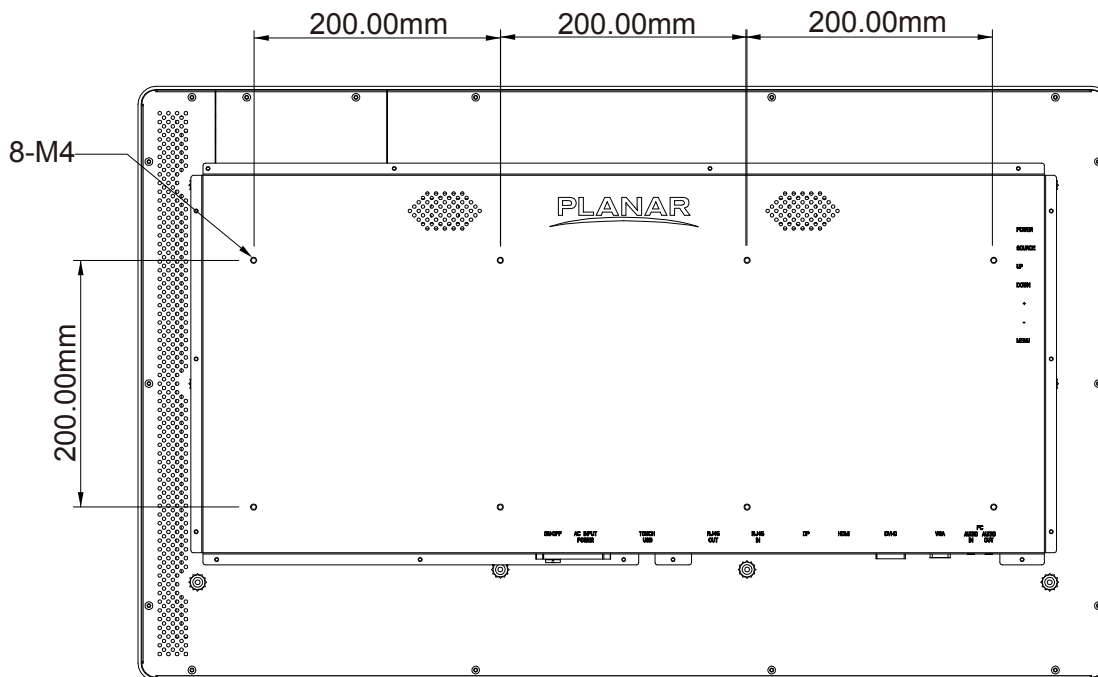




## VESA Mount for Your Monitor

This monitor conforms to the VESA Flat Panel Mounting Physical Mounting Interface standard which defines a physical mounting interface for flat panel monitors, and corresponding with the standards of flat panel monitor mounting devices, such as wall and table arms. The VESA mounting interface is located on the back of your monitor.

To mount the monitor on a UL certified swing arm or other mounting fixture, follow the instructions included with the mounting fixture to be used.



### **Warning!**

***Please select the proper screws!***

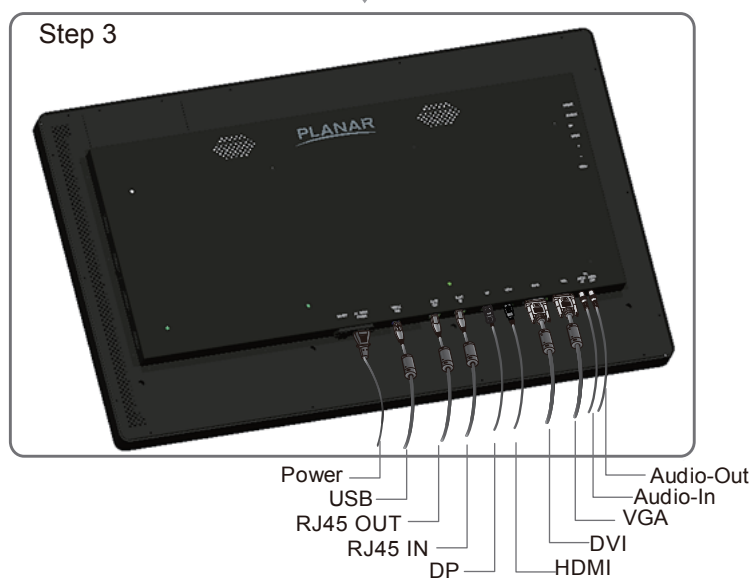
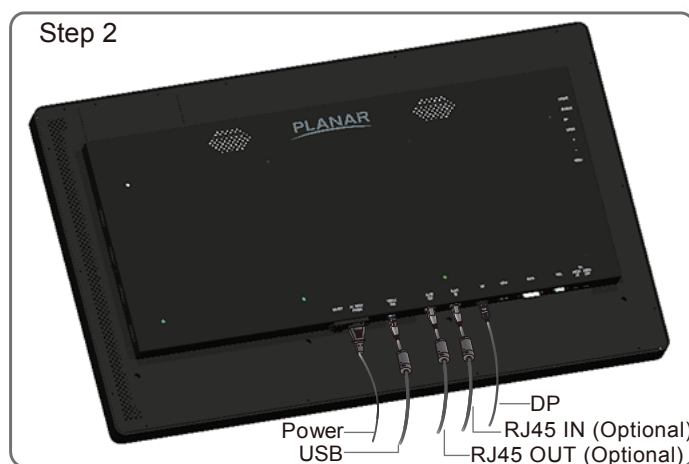
***The distance between the back cover surface and the bottom of the screw hole is 10 mm. Please use four M4 screws diameter with proper length to mount your monitor.***

***Please note: the optional mount must be able to support at least 44 lbs (20Kg).***

## Start Your Installation

Please follow these instructions so that you can hook up the cables to associated connectors.

1. Lay the display flat on an even surface as seen in the step 1 diagram.
2. Connect the DP, Power, and USB cables as seen in step 2 diagram.  
Connect RJ45 to RJ45 Cable if remote control is required. (Optional)
3. Connect the cables to the appropriate connectors as seen in the step 3 diagram.



## Connecting the Display (Figure 8.1)

To setup this display, please refer to the following figure and procedures.

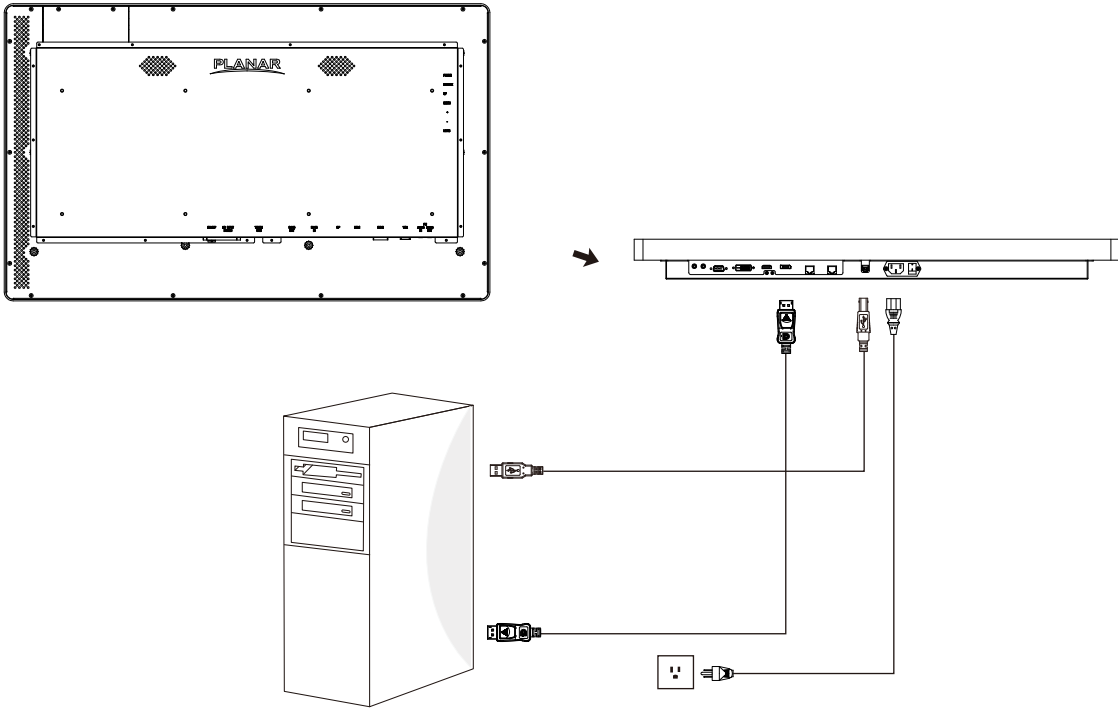
1. Be sure all equipment is turned off.
2. Connect the AC power cord to the power connector on the monitor and the other end into an electrical outlet (8.1).
3. Connect the DP cable from the display's DP input connector to the DP connector of your host computer (8.1).
4. Connect the USB cable from USB port of your display to USB port of your computer (8.1).
5. Once the touch screen is configured, the monitor is ready for use.

### **Notice!**

***To ensure the display works well with your computer, please configure the display mode of your graphics card to make it less than or equal to 1920 x 1080 resolution and make sure the timing of the display mode is compatible with the display.***

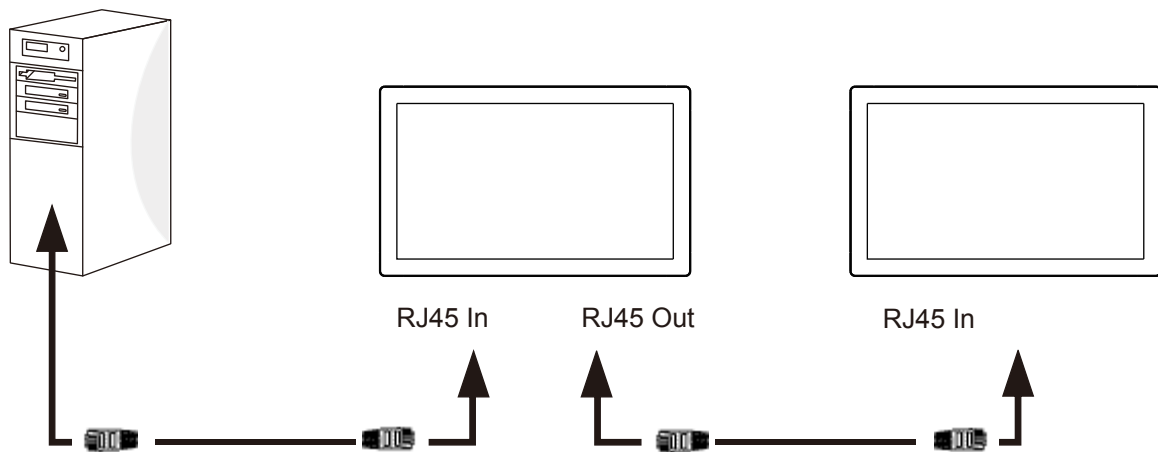
***We have listed the compatible "Video Modes" of your display in the appendix (on page 15) for your reference.***

(Figure 8.1)



### Controlling the PT3290PW monitor via RS232 (Optional)

The PT3290PW monitor can be controlled by connecting to a PC with a RJ45 terminal diagrammed below:

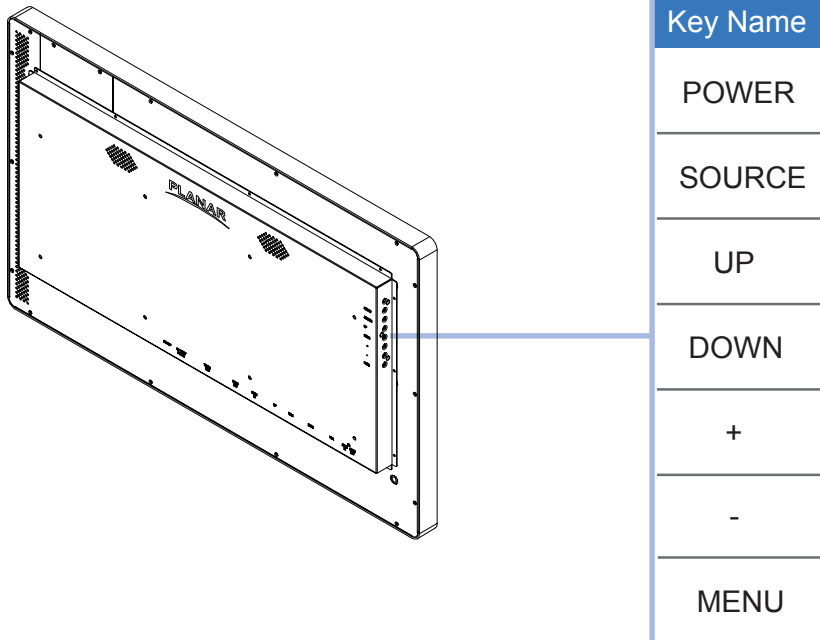


**Note:**

Two COM Ports are reserved for this option.  
Please refer to the RS232 section starting on page 13 for more information.

# User Controls

## Rear Panel Controls



OSD Key	Menu Function
POWER	Power On/Off
SOURCE	To select source input port
UP	To move up OSD item
DOWN	To move down OSD item
+	To increase adjustment value or move forward to the OSD sub-layer
-	To decrease adjustment value
MENU	To show / hide the OSD menu or move backward to the OSD sub-layer

\* After user makes the adjustment, the adjusted value will be saved automatically.

## How to Use the OSD Menu

Key Name
POWER
SOURCE
UP
DOWN
+
-
MENU

1. Press the “MENU” button to pop up the “on-screen menu” and press “Up” or “Down” button to select among the four functions in the main menu.
2. Choose the sub-layer menus by pressing the “+” button.
3. Press “Up” or “Down” button to select the adjustment items in the sub-layer menu. If the adjustment items have a sub-layer menu, Press the “+” button to choose it also.
4. Adjust the value of the adjustment items by pressing the “+” or “-” button.
5. With the OSD menu on screen, press “Menu” button to return main menu or exit OSD.
6. The OSD menu will automatically close, if you have left it idle for a pre-set time.

## OSD/Power Lock out

1. To Lock the OSD / Power menu buttons, please follow the instructions below:  
(Please note: the monitor has to be turned ON with a valid signal pre-set)
  - (a.) Press and hold “Menu” and “Up” keys simultaneously for 3 seconds, then OSD will be locked and show "OSD Locked" 3 seconds.
  - (b.) Press and hold “Menu” and “Down” keys simultaneously for 3 seconds, then Power button will be locked and show "Power button Locked" 3 seconds.
2. To Unlock the OSD / Power menu buttons, please follow the instructions below:  
(Please note: the monitor has to be turned ON with a valid signal pre-set)
  - (a.) Press and hold “Menu” and “Up” keys simultaneously for 3 seconds, then OSD will be unlocked and show "OSD Unlocked" 3 seconds.
  - (b.) Press and hold “Menu” and “Down” keys simultaneously for 3 seconds, then Power button will be unlocked and show "Power button Unlocked" 3 seconds.

Please note:

- a. When the OSD lock function is selected, this indicates that all the buttons except “power” button are now disabled.
- b. When the Power button lock function is selected, this indicates that the power key is disabled; user can not to turn off the monitor by “Power” key.

# On-Screen Display Menus

## Main OSD Menu:

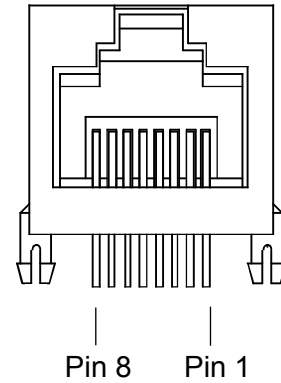
Layer1	Layer2	Layer3	Layer4	Adjustment	Default	reset (to default)	
Image	Brightness			0 ~ 100	70	Yes	
	Contrast			0 ~ 100	50	Yes	
	Sharpness			-4 ~ 4	0	Yes	
	Color Temp. Menu	9300k			9300k	9300k	Yes
		6500k			6500k		
		User Settings			User Settings		
				R	0 ~ 100	100	No
			G	0 ~ 100	100	No	
			B	0 ~ 100	100	No	
Display	Auto Adjust			Phase, Clock, V Position, H Position	NA	NA	
	Phase			0 ~ 100	Per timing	Yes	
	Clock			0 ~ 100	Per timing	Yes	
	H Position			0 ~ 100	Per timing	Yes	
	V Position			0 ~ 100	Per timing	Yes	
Audio	Volume			0 ~ 30	15	Yes	
	Mute			On/Off	Off	Yes	
	Audio Select			Default/Audio Jack	Default	Yes	
System	Input	VGA/		VGA/	VGA	No	
		DVI/		DVI/			
		HDMI/		HDMI/			
		DP		DP			
		Signal info			Width, Height, V Frequency	NA	NA
	Osd Settings	Timer	3 sec		3 sec	12 sec	Yes
			6 sec		6 sec		
			12 sec		12 sec		
			30 sec		30 sec		
		H Position			0 ~ 100	50	Yes
		V Position			0 ~ 100	50	Yes
		Transparency			0 ~ 10	0	Yes
	Language	English			English	English	No
		Espanol			Espanol		
		Deutsch			Deutsch		
French				French			
Italian				Italian			
日本語				日本語			
中文				中文			
Aspect				Full	Full	Yes	
				16:10			
				4:3			
DCR				On	Off	Yes	
				Off			
Reset	Reset						
Monitor ID				Broadcast(1) ~ 9	Broadcast	Yes	

# Control through RS232

1. RJ45 pin definition on display side:

Pin No.	Name
1	NC
2	NC
3	NC
4	RXD (Receiving data)
5	TXD (Transmit data)
6	GND
7	NC
8	NC

Type of connector: RJ45 8-pin male:



2.1 COM port setting in PC side:

PROTOCOL	RS-232C
BAUD RATE	9600 (bps)
DATA LENGTH	8 (bits)
PARITY BIT	NONE
STOP BIT	1 (bit)
FLOW CONTROL	NONE

2.2 COM command structure from PC side:

Header	Message	Check code	Delimiter
--------	---------	------------	-----------

**Header:** specify the start of this command package.

**Message:** command body, it comprises OP code page, OP code, parameters, checksum.

**Delimiter:** end of package.

\* *The detail structure statement, please refer the command format sheet.*

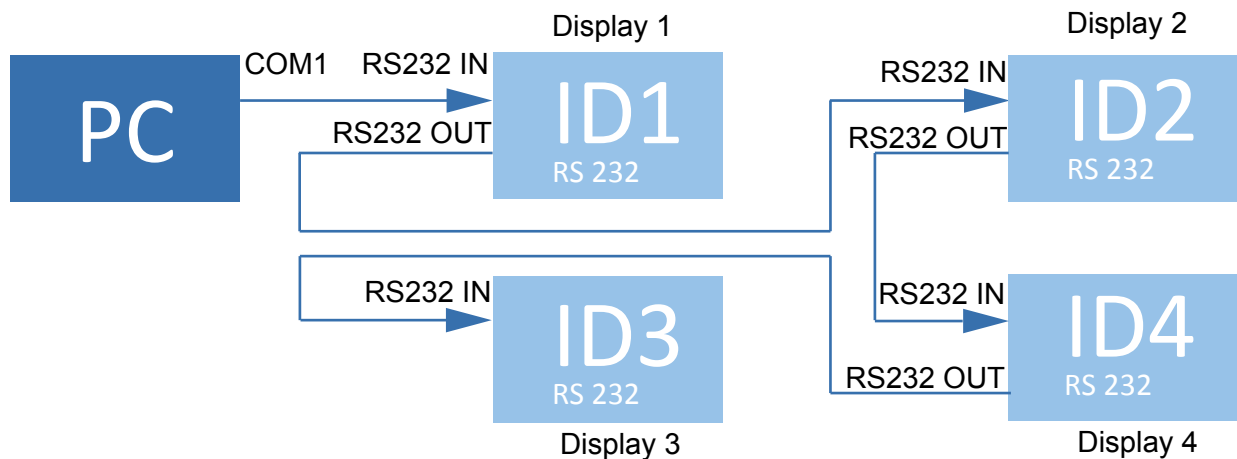


### 3. Configuration

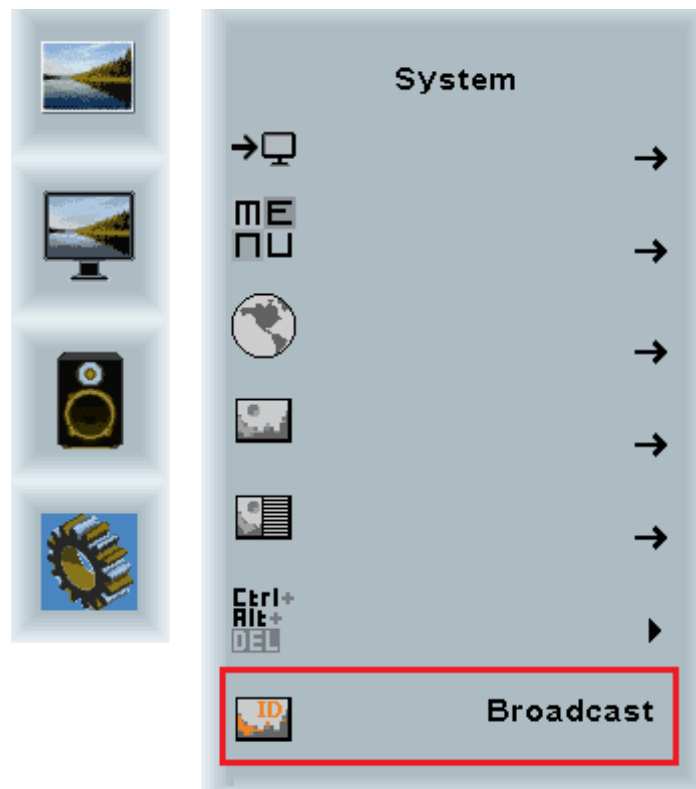
These monitors can be daisy-chained together. Except Broadcast mode, every monitor in this chain should have a unique ID which can be chosen by the OSD menu. The maximum ID number of monitors in this daisy-chain is up to 9.

If Individual mode, IDs should set correctly, then SW tool could control them individually. Otherwise, the conflict will happen. If Broadcast mode, monitors ID setting doesn't matter.

#### Daisy-chained RS232 with one COM port



Monitor ID can be adjusted by OSD menu as below:



## 4. Command format

Operation	Header							Message										Delimiter		
	Byte0	Byte1	Byte2	Byte3	Byte4	Byte5	Byte6	Byte7	Byte8	Byte9	Byte10	Byte11	Byte12	Byte13	Byte14	Byte15	Byte16		BYTE17	
Write	SOH	Fix code	MonitorID(1*)	Fix code			STX	OP code	page	OP code			Parameters			ETX	Checksum		XOR from Byte1 to Byte16	0x0D
Read	0x01	0x30	0x2A(1*)	0x30	0x45('E')	0x30('0')	0x41('A')	0x02	0x30	0x31	0x31	0x30	0x30	0x30	0x30	0x36	0x34	0x03	XOR from Byte1 to Byte16	0x0D
POWER OFF	0x01	0x30	0x2A	0x30	0x45	0x30	0x41	0x02	0x30	0x30	0x30	0x33	0x30	0x30	0x30	0x30	0x30	0x03	0x1C	0x0D
POWER ON	0x01	0x30	0x2A	0x30	0x45	0x30	0x41	0x02	0x30	0x30	0x30	0x33	0x30	0x30	0x30	0x31	0x03	0x1D	0x0D	
VGA	0x01	0x30	0x2A	0x30	0x45	0x30	0x41	0x02	0x30	0x32	0x43	0x42	0x30	0x30	0x30	0x30	0x03	0x1C	0x0D	
DVI	0x01	0x30	0x2A	0x30	0x45	0x30	0x41	0x02	0x30	0x32	0x43	0x42	0x30	0x30	0x30	0x31	0x03	0x1D	0x0D	
HDMI	0x01	0x30	0x2A	0x30	0x45	0x30	0x41	0x02	0x30	0x32	0x43	0x42	0x30	0x30	0x30	0x32	0x03	0x1E	0x0D	
DISPLAY PORT	0x01	0x30	0x2A	0x30	0x45	0x30	0x41	0x02	0x30	0x32	0x43	0x42	0x30	0x30	0x30	0x33	0x03	0x1F	0x0D	

# Appendix

## Troubleshooting

If you are experiencing trouble with the display, refer to the following. If the problem persists, please contact your local dealer or our service center.

***Problem: No image appears on screen.***

- ▶ Check that all the I/O and power connectors are correctly and well connected as described in the “Installation” section.
- ▶ Make sure the pins of the connectors are not crooked or broken.

***Problem: Partial Image or incorrectly displayed image.***

- ▶ Check to see if the resolution of your computer is higher than that of the display.
- ▶ Reconfigure the resolution of your computer to make it less than or equal to 1920 x 1080.

***Problem: Image has vertical flickering line bars.***

- ▶ Use “Phase” in “Display” to make an adjustment.
- ▶ Check and reconfigure the display mode of the vertical refresh rate of your graphic card to make it compatible with the display.

***Problem: Image is unstable and flickering***

- ▶ Use “Phase” in “Display” to make an adjustment.

***Problem: Image is scrolling***

- ▶ Check and make sure the VGA signal cable (or adapter) is securely connected.
- ▶ Check and reconfigure the display mode of the vertical refresh rate of your graphics card to make it compatible with the display.

***Problem: Vague image (characters and graphics)***

- ▶ Use “Phase” in “Display” to make an adjustment. If this problem still exists, use “H Position” to make an adjustment.

***Problem: Touch no function***

- ▶ Operating systems require 15 seconds to recognize the PT3290PW after connecting the USB cable and power cable.

## Warning Signal

If you see warning messages on your screen, this means that the display cannot receive a clean signal from the computer graphics card.

Below are the three kinds of Warning Signal. Please check the cable connections or contact your local dealer or our service center for more information.

### No Signal

This message means that the display has been powered on but it cannot receive any signal from the computer graphics card. Check all the power switches, power cables, and video cable.

### Going to Sleep

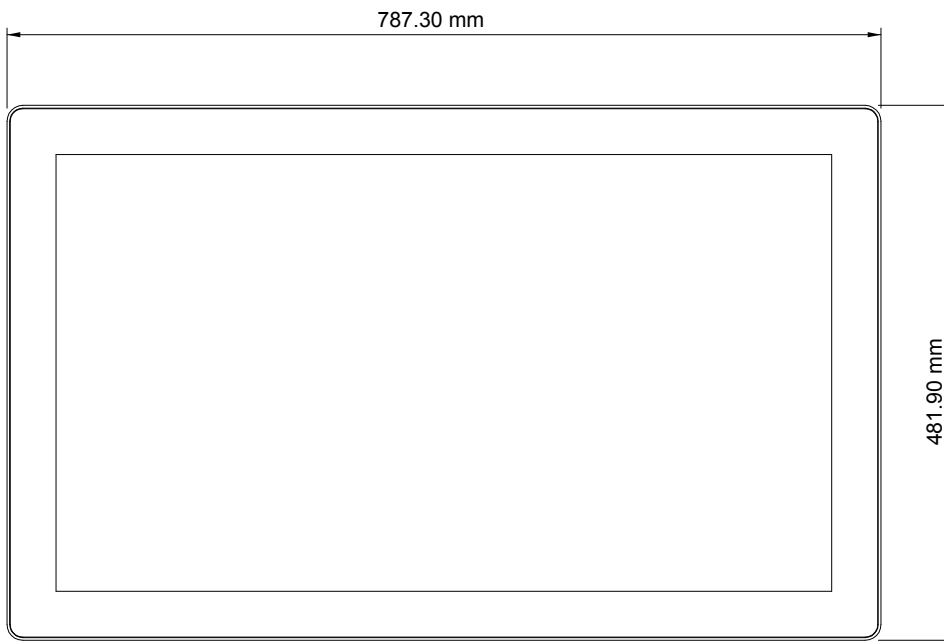
The display is under the power saving mode. In addition, the display will enter power saving mode when experiencing a sudden signal disconnecting problem.

The monitor can be activated by pressing any keyboard, triggering the mouse or touching the screen.

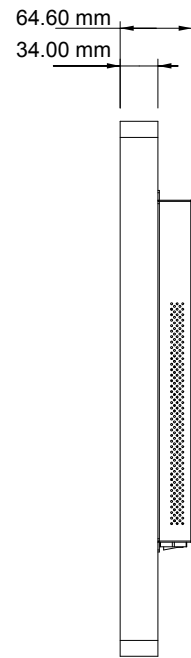
### Out of Range

This message means that the signal of the computer graphic card is not compatible with the display. When the signal is not included in the "Video Modes" list we have listed in the Appendices of this manual, the monitor will display this message.

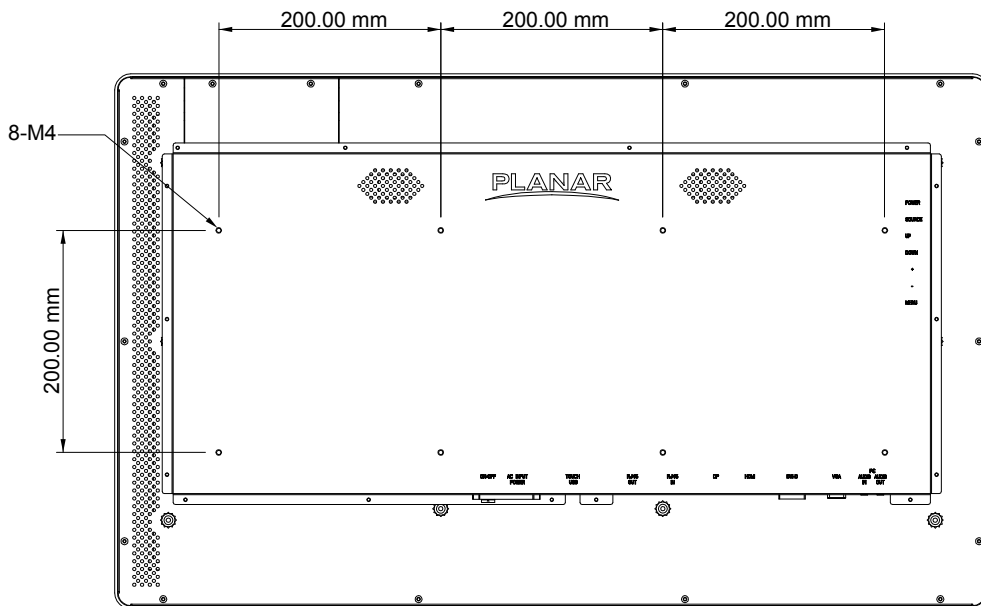
# Product Dimensions



Front View



Side View



Back View

## Compatibility Modes

The monitor shall synchronize with any vertical frequency from 56.25 Hz to 85.08 Hz, and with any horizontal frequency from 31.469KHz to 91.146 KHz. If the input frequency is out of the above-specified range, the monitor shall display a warning screen indicating that the input frequency is out of range. Under no circumstances shall any combination of input signals cause any damage to the monitor. Compatible modes see Figure 1

Figure 1 Compatible modes

Resolution	V Freq. (Hz)	H Freq. (KHz)	Standard
640 x 350	85.08	37.861	VESA
640 x 400	85.08	37.861	VESA
640 x 480	59.94	31.469	VESA
640 x 480	60	31.5	VESA
640 x 480	72.809	37.861	VESA
640 x 480	75	37.5	VESA
640 x 480	85.008	43.269	VESA
720 x 400	70.087	31.469	IBM
720 x 400	85.039	37.927	VESA
800 x 600	56.25	35.156	VESA
800 x 600	60.317	37.879	VESA
800 x 600	72.188	48.077	VESA
800 x 600	75	46.875	VESA
800 x 600	85.061	53.674	VESA
1024 x 768	60	48.363	VESA
1024 x 768	70.069	56.476	VESA
1024 x 768	75.029	60.023	VESA
1024 x 768	84.997	68.677	VESA
1152 x 864	70.012	63.851	VESA
1152 x 864	75	67.5	VESA
1280 x 720	59.856	44.772	VESA
1280 x 768	59.87	47.776	CVT
1280 x 960	60	60	VESA
1280 x 960	85.002	85.938	VESA
1360 x 768	59.96	47.368	VESA
1360 x 768	74.892	60.288	VESA
1366 x 768	59.79	47.712	VESA
1280 x 1024	60.02	63.981	VESA
1280 x 1024	75.025	79.976	VESA
1280 x 1024	85.024	91.146	VESA
1680 x 1050	59.954	65.29	CVT
1600 x 1200	60	75	VESA
1920 x 1080	59.934	66.587	VESA

## Touch Screen Driver Installation

The PT3290PW Series is available with USB connection. The touch driver is available at [www.planar.com/support](http://www.planar.com/support) for these operating systems: Windows® 7/8/10, Linux kernel 2.6.x (32 bit & 64 bit), Apple® Mac OS. (Windows 7/8/10 Multi touch without driver)

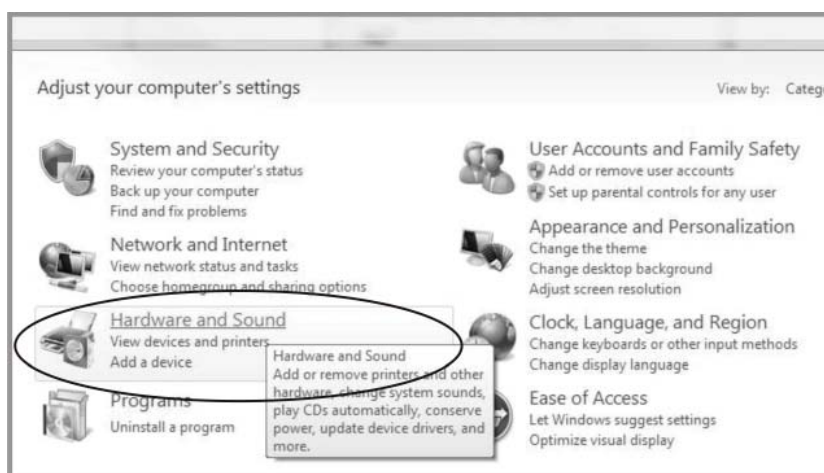
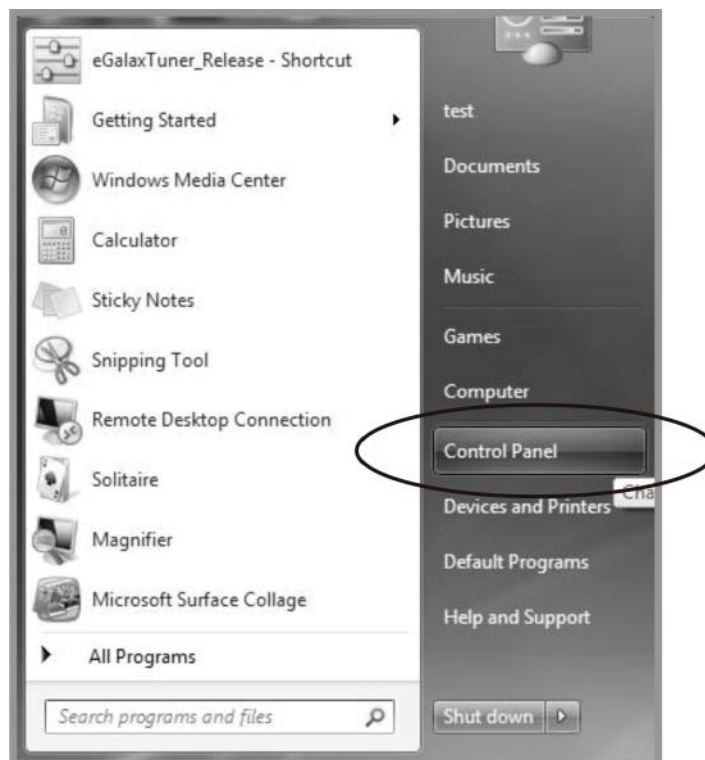
### **Please Note:**

1. The PT3290PW is Microsoft Windows® HID (Human Interface Device) compatible if you use the USB touch screen interface. No additional software driver is required for general operation of the touch screen.
2. Operating systems require 15 seconds to recognize the PT3290PW after connecting the USB cable and power cable.

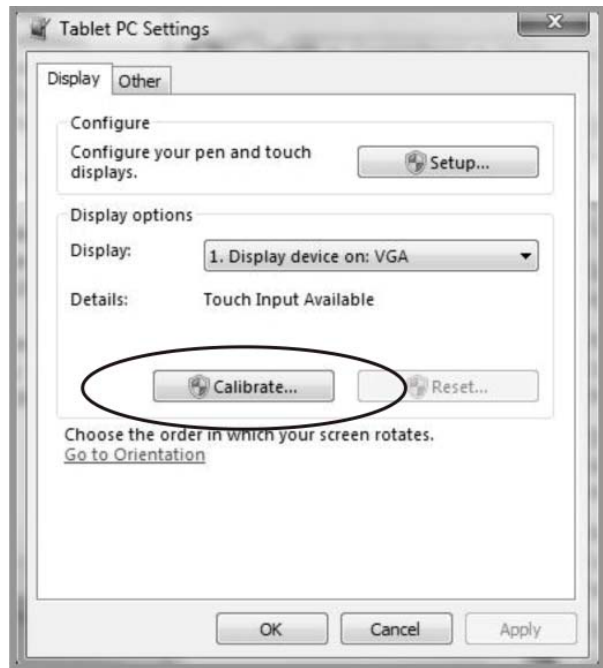
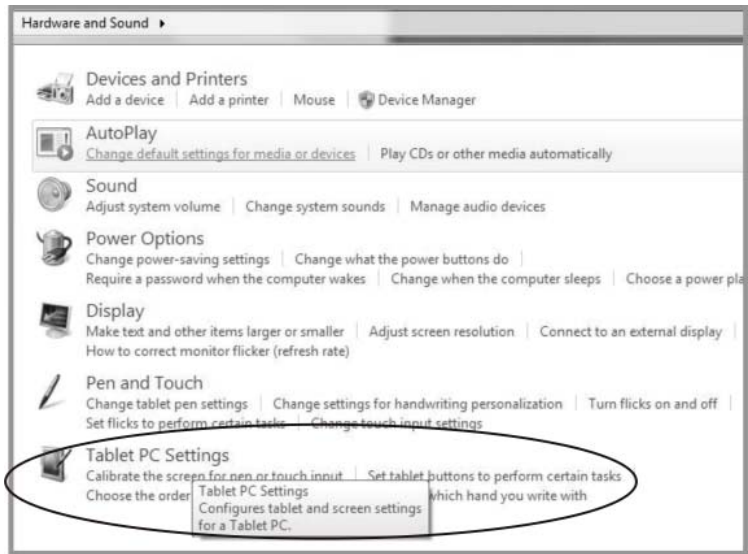
## PT3290W Calibration (Optional):

Calibrating the touch screen in Windows 7/8/10:

1. Tap the Start button, Control Panel and then Hardware and Sound.
2. Under Tablet PC Settings, tap Calibrate the screen for pen or touch input.
3. On the Display tab, under Display options, tap Calibrate and then Yes to allow the program to make changes.
4. Follow the on-screen instructions to calibrate the touch screen.







## **PT3290PW Driver Installation Instructions:**

**If you are using a PC running, Windows® 7/8/10, follow the instructions below:**

1. Power on the PC.
2. Make sure that the USB cable is connected to the computer.
3. Windows® 7/8/10: For Projected Capacitive, the driver is a mouse emulation driver. If your Windows version is Windows 7 or later, there is no need to install this driver. There is a HID touch digitizer build-in driver in Windows 7/8/10.

**If you are using a PC running driver Linux kernel 2.6.x (32 bit & 64 bit), follow the instructions below:**

1. Power on the PC.
2. Make sure that the USB cable is connected to the computer.
3. Visit [www.planar.com/support](http://www.planar.com/support).
4. Follow the step-by-step instructions as shown on the pop-up windows.

**If you are using a PC running Linux or Apple® Mac OS, follow the instructions below:**

1. Power on the computer.
2. Make sure that the USB cable is connected to the computer.
3. Follow the step-by-step instructions found in the zipped file at [www.planar.com/support](http://www.planar.com/support).

## Technical Support

### Cables and Accessories

To find cables and accessories for your Planar monitor, touch screen or other Planar products visit our online store at [www.PlanarOnline.com](http://www.PlanarOnline.com).

### Technical Support

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

To speak with Planar Customer Support please have you model and serial number available and dial:

#### Planar Support

Tel: 1-866-PLANAR1 (866-752-6271) or +1 503-748-5799 outside the US.

Hours: 24 hours a day, 7 days a week.

**Toll or long distance charges may apply.**

**Planar, a Leyard company**

Customer Service

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

1195 NW Compton Drive

Beaverton, OR 97006-1992

**Tel:** 1-866-PLANAR1 (866-752-6271) or +1 503-748-5799 outside the United States.

**Hours:** 24 hours a day, 7 days a week

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