

# Time Zone Displays (TZA) Manual



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# Electronic Displays Inc. - Time Zone Display

**Model: ED106 - TZA - XF - N1/N12**



## Display Specifications and Options

Digit Height	1.8"
Display Colors	Red Digits (Standard) Green, Amber or Blue (Optional)
Location Designation	1.2" fixed Vinyl Lettering
Number of Time Zones	4 to 10 Fields
Indoor or Outdoor	Indoor
Viewing Distance	Up to 100 Feet
Color of Acrylic Face	Red (Standard) – Varies with digit color
Enclosure Finish	Black Powder-Coat Finish
Enclosure Types	Horizontal Design Matrix Design
Enclosure NEMA Rating	NEMA 1 NEMA 12 (Optional)
Power Supply	U.L. Listed
Display Power Source	120 V <sub>AC</sub> @ 60 Hz
Power Consumption	15 Watts Max Per-Field
Current Draw	~700 mA Per-Field
Mounting Method	Two Brackets for Hanging / Wall Mounting
Warranty	One-Year Factory Service Warranty
Configuration method	Software and Push Buttons
Estimated time to configure display	10 Minutes
Software Name	TZA 1.0

## Configuring the ED106 - TZA – XF - N1 / N12

1. Install the software provided on the disc that was sent with the display. A download link to the software is also available on page 8.
2. The next step required to program the Time Zone Display is to determine the Communication Port (Com. Port) that must be set in the software to send your time zone configuration to the display.

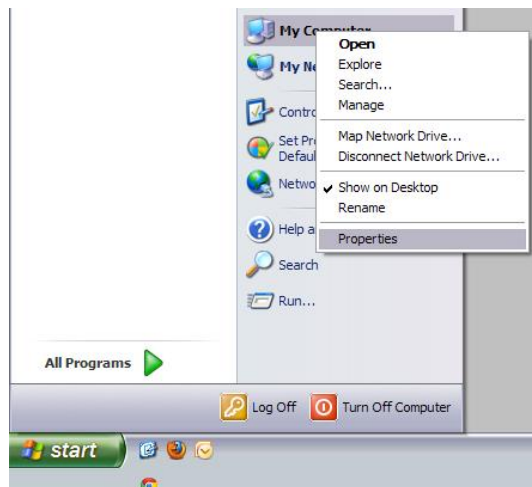
Follow the step-by-step guide that pertains to your Operating system below to determine what Com. Port to set.

**Note:** Consult the “Frequently asked questions and Issues on Communication Ports” on page 24 if any issues arise after completing the steps.

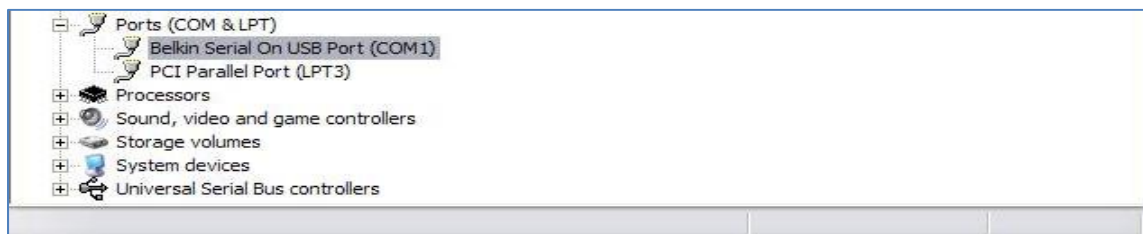
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### Windows XP

- I. Left click on the **Start** button at the bottom of the screen. Right click on **My Computer** and select **Properties**.



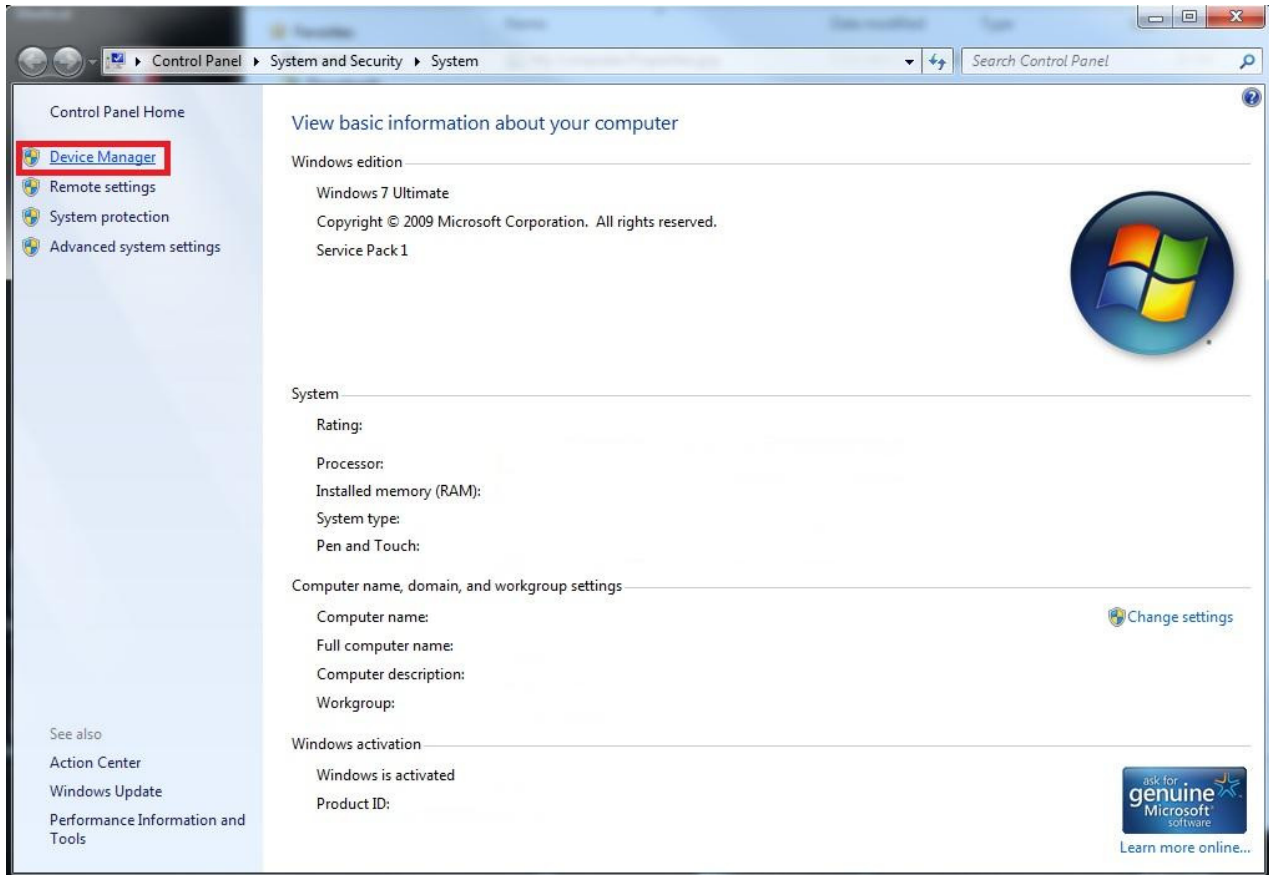
- II. The System Properties window will appear. Click the **Hardware** tab at the top and select **Device Manager**.
- III. Once the Device Manager window appears, scroll down to the **Ports** section and click the “+” sign on the left. If you are using a USB-to-Serial adaptor, it will typically have the manufacturer name of the cable followed by the Com Port number (**Com#**). Record your Communication Port and continue to the next step of this manual



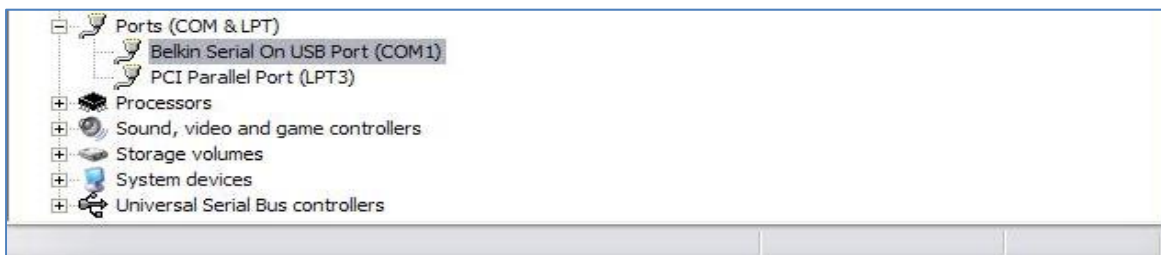
**Note:** If you are using a serial cable to connect to the display, it will appear as “Communication Port (Com#)”

## Windows Vista/Windows 7

- I. Left click on the windows icon in the lower left of the screen. Right click on **My Computer** and select **Properties**
- II. The system properties window will appear. Click on **Device Manager** on the left side of the window.



- III. Once the Device Manager window appears, scroll down to the **Ports** section and click the "+" sign on the left. If you are using a USB-to-Serial adaptor, it will have the manufacturer name of the cable followed by the Com Port number (**Com#**). Record your Communication Port and continue to the next step of this manual



**Note:** If you are using a serial cable to connect to the display, it will appear as "Communication Port (Com#)"

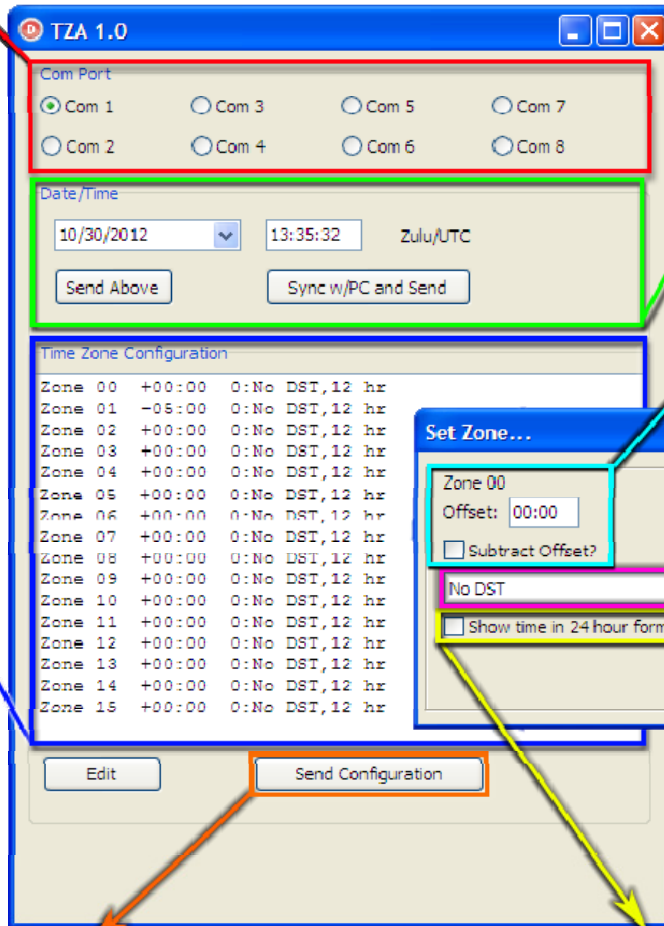
# Time Zone Software Overview

**Sets the communication port used to send Time Zone Configuration.**

**Synchronizes the Date/Time with the computer or to desired**

**Sets the Time Zone for each section of the display with respect to its address (Zone ##)**

**Sets offset for Zone ## to the entered value.**



**Configures Daylight Savings Time**

**Transfers the Data/Time and Time Zone Configuration to display.**

**Sets whether the zone will display time in 12 or 24 hour format.**

2. Once you determined your Com. Port number, set it in the software (Red Box above).
3. The next step is to determine the address of each time zone in your display. This can be determined by powering your display off and then turning it back on. The address (Zone) for each time field will be displayed for several seconds in each time field ( A : ## ) upon startup.

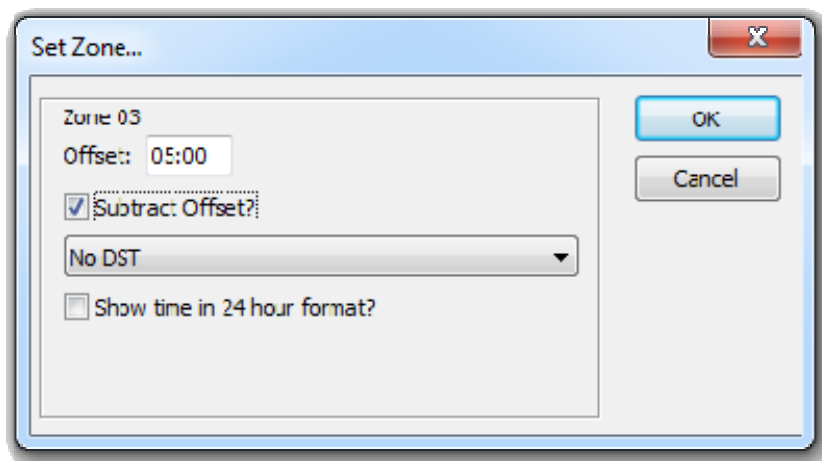
Record the address of each field. A table is located on the next page to help organize the desired configuration.

	Time Zone 1	Time Zone 2	Time Zone 3	Time Zone 4	Time Zone 5
Address					
Location					
Offset					
	Time Zone 6	Time Zone 7	Time Zone 8	Time Zone 9	Time Zone 10
Address					
Location					
Offset					

4. With the addresses recorded for each time zone, the offset for each time zone have to be configured with respect to the 'Master' time zone (Zone 00).

In the **"Time Zone Configuration"** portion of the software (Blue Box in software overview), double-click on **Zone ##** (The numbers next to the zone represent the address) and input the offset from the Master.

For example, the Eastern Time Zone in the United States is **UTC -5:00** and suppose it needs to be set for the third time zone (which may be set to address 3) and the Master time zone on the display is set to GMT/ZULU (UTC + 00:00). Double-click on **Zone 03**, type in **05:00** in the **Offset** field, check **"Subtract Offset?"** and click **OK**.



**Note:** If you have fewer Time Zones than the number of Zones listed in **"Time Zone Configuration,"** disregard the remaining. It will make no impact on the rest of the display.

If you are having difficulty determining the offset, Windows lists a basic overview of World Time Zones in a tab when you double-click on the clock (Bottom right of screen). An interactive map of the Time Zones is also available at <http://www.timeanddate.com/time/map/>

5. Repeat the Step 4 until all the Zones/Addresses for the display have been set.
6. With all the Zones set, click **"Sync w/PC and Send"** and then click **"Send Above"** (Green Box in overview) to synchronize the minutes on the display to your computer. Then click **"Send Configuration"** (Orange box).
7. The display is now configured

## ED106-TZA-XF-N1/N12 : Push Button Operation

There are two push buttons labeled 'Fast' and 'Slow' located on the endplate (side) of the display enclosure; these two buttons adjust the time for the 'Master' time zone (Address/Zone 00). Each display has a single 'Master' time zone (Address 00 – A 00 displayed in boot up sequence) and the remaining time zones are 'Slaves' that offset the time based on what they were set to in the TZA 1.0 software and the Master time zone's clock.

**Any offset for a 'Slave' time zone must be set in the TZA 1.0 Software.**

The table below shows how to adjust the 'Master' time zone. Press the 'Fast' push button to cycle through the operations in the table and the 'Slow' push button to adjust/increment the numbers that the operations are being set to.

Number of 'Fast' push button presses	Operation	Master Time Zone appearance
1	Adjust <b>Month</b>	<b>## : d</b> ## = Number set through 'Slow' push button d = signifies that a aspect of the date is being edited
2	Adjust <b>Days</b>	<b>## : d</b> ## = Number set through 'Slow' push button d = signifies that a aspect of the date is being edited
3	Adjust <b>Year</b>	<b>## : d</b> ## = Number set through 'Slow' push button d = signifies that a aspect of the date is being edited
4	Adjust <b>Hours</b>	<b>## :</b> ## = Number set through 'Slow' push button
5	Adjust <b>Minutes</b>	<b>## :</b> ## = Number set through 'Slow' push button
6	Adjust <b>Seconds</b>	<b>## :</b> ## = Number set through 'Slow' push button
7	<b>Sets configuration</b> (Display goes back to normal operation)	<b>HH:MM</b> HH = Hours that were set MM = Minutes that were set



# Frequently Asked Questions: ED106-TZA-XF-N1/N12

1. I lost a copy of my software. Where can I found another copy?

Another copy of the software can be found on our website. <http://www.electronicdisplays.com/>. Click on **Support** (Top of page) and go to **Downloads** → **Software Downloads**. The software is under **TZA 1.0 Software**.

Direct Link: <http://edisupport.helpserve.com/Knowledgebase/Article/View/160/12/tza-10-software>

2. I am receiving an “Open Com. Port” error when using the TZA 1.0 software. How do I resolve this?

The open Com (Communication) Port error only appears if the communication port that you selected in the software is being in use by another program.

**Solution 1:** Press **Ctrl + Shift + Esc**, and go to the process listings for your computer by right clicking the Time Module software and clicking “**Go to Process.**” The Processes section be brought up and the Time Zone Module executable will be highlighted. Look through the current processes to see if there is another process running for Time Zone Module and end the process by highlighting it and clicking “End Process.”

**Solution 2:** If you are using a USB-to-Serial adaptor, connect it to a different USB port. Keep in mind that you *will* have to reconfigure the communication port in the software (See step 1 at the top of Page 2 of this manual.

3. How do I configure all the time zones with the push buttons?

The push buttons only configure the **Master** time zone that all the zones offset from. The offset for the remaining time zones are configured through the software.

Consult the software and/or push button guide on the previous pages for instructions on programming the display.

4. Do I need to configure the display through the software whenever there is Daylight Savings?

No. If the offset for every time zone is not changing, the display can be adjusted by setting the time on the master time zone and the rest will automatically adjust.

Consult the previous page for a guide to configuring the master time

# Frequently asked questions and Issues with Communication Ports

**1. I am using a serial cable, not a serial-to-USB adaptor. How do I know what Com Port I am using?**

If you are using a serial cable it will appear under the “Ports” section of Device Manager as “Communication Port (Com#).” By default, the computer’s BIOS will typically assign the serial port to COM1 or COM3.

**2. Do I have to verify the Com Port that is being used each time I communicate with my display?**

The only time that you have to verify the Com Port is when you initially set the communication settings for the software or if you are using a serial-to-USB adaptor and are using a different USB port on your computer than what you initially used to configure the display.

There are multiple USB ports on a computer and the operating system assigns each item that is connected to the computer a Com Port; therefore, if you were to move a serial-to-USB cable from the front USB port to a USB port in the back, then the Com Port number *will* change as well.

**3. I plugged my USB-to-Serial cable into my computer and do not see it in the port section of device manager.**

There are several variables that can prevent the serial-to-USB cable from appearing in the “Ports” section of Device Manager: the driver for the serial-to-USB cable is not installed, the wrong driver is installed or the serial-to-USB is damaged/malfunctioning.

To resolve the issue, plug the serial-to-USB adaptor into the computer and look through the device manager for a device with a “!” next to it (Look below at Figure 5 for an example). If there is a device that has a yellow “!” next to it, then Windows does not have the correct driver for the serial-to-USB cable. The driver for the cable can be found on the CD that came with the cable, or by doing an internet search with the manufacturer and the model number of the serial-to-USB cable.



Figure 5

If there is no yellow “!”, then try using a different USB port on your computer to see if that resolves the issue. If the problem still persists, there may be a driver conflict with windows or the serial-to-USB adaptor may be defective.

**4. There is a yellow “!” next to an unknown device in the “Ports” section of Device Manager and nothing else is listed.**

The incorrect driver has been installed for the serial-to-USB cable or no driver has been installed. Install the driver from the CD that came with the serial-to-USB cable or by downloading the drivers from the manufacturer’s website.

5. I installed the drivers for the USB-to-Serial device; however, I still cannot communicate with the display and there is a yellow “?” by the adaptor in the device manager.

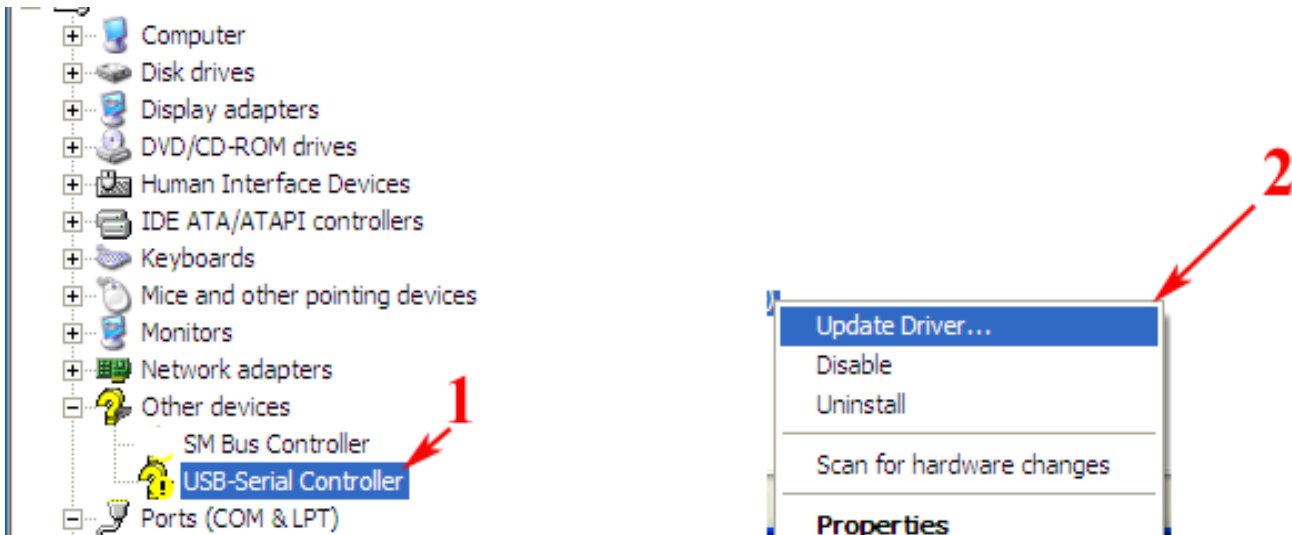
The driver for the adaptor is corrupted and it needs to be removed and installed manually. Follow the steps below to remove and install the drivers for the device.

**Note:** The steps were compiled for a Windows XP operating system. Windows 7/Windows Vista may not be exactly the same.

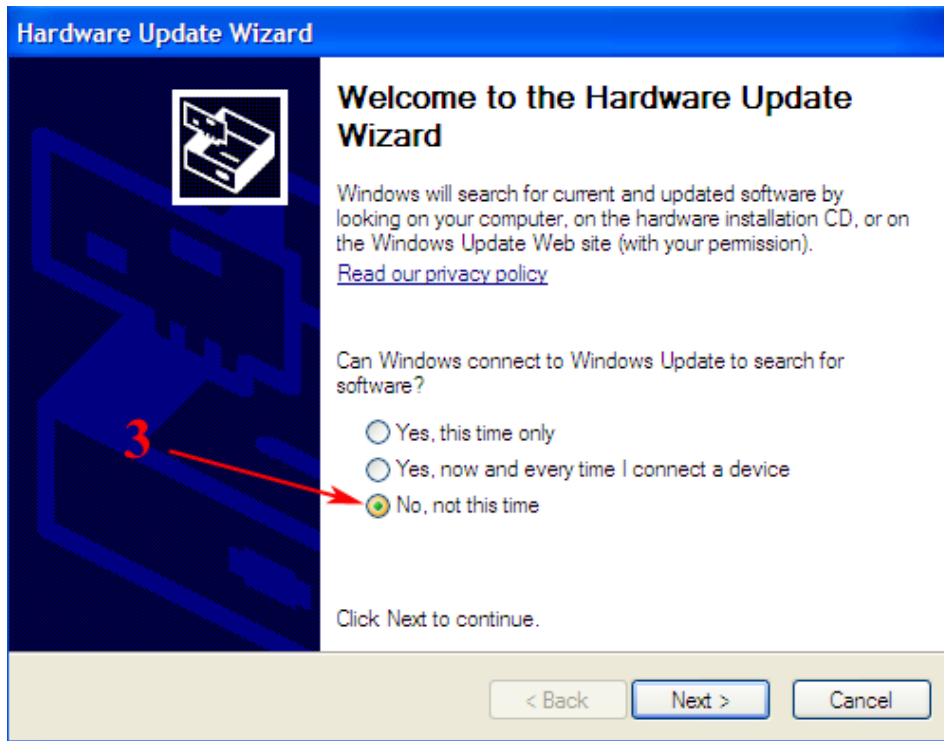
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## Manual Driver Install (EDV3150 USB-to-Serial Adaptor)

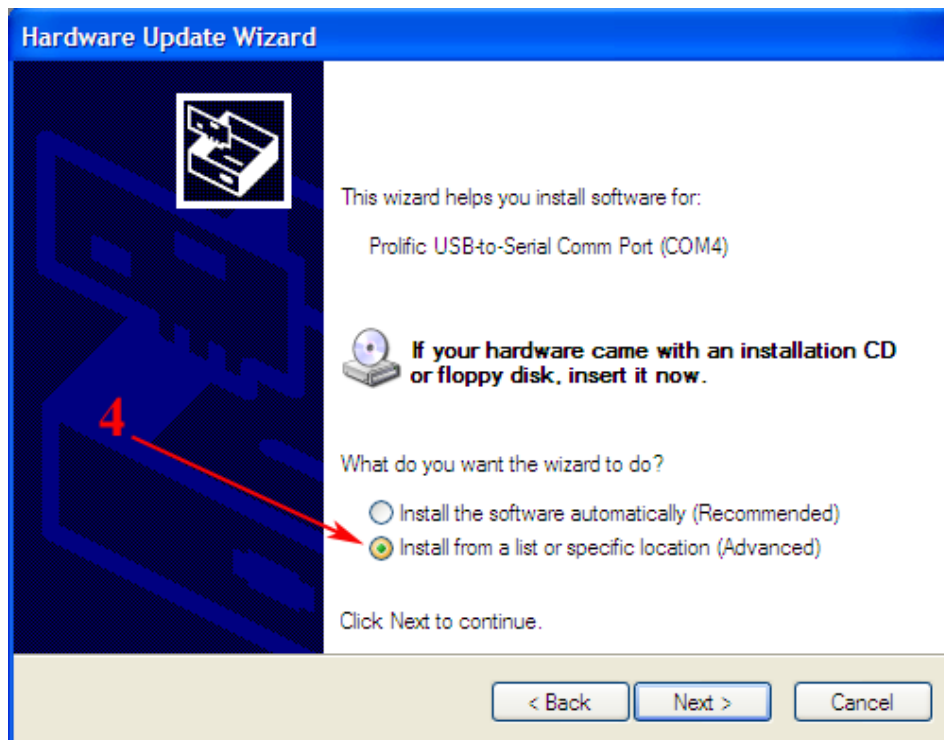
1. Locate and download the Prolific USB-to-Serial drivers (EDI model number: EDV3150)
  - A. They are located at <http://www.electronicdisplays.com/> → Support → Downloads → Driver Downloads.  
Titled: “EDV3150 USB To Serial Adapter Driver”
  - B. Download attachment: [prolific 2303 usb to serial driver \(old version\).zip](#)
2. Extract the contents of the .zip file to a new folder.
3. Execute the “DRemover98\_2K.exe” to remove any previous unsuccessful installs of drivers.
  - A. Restart if prompted.
4. Disconnect the serial-to-USB adaptor and reconnect it to the display.
5. Go to the **Device Manager** and follow these steps:
  - A. Locate the adaptor in the device manager, right click and select **Update Driver**. May be listed in the ‘Ports (Com & LPT)’ or ‘Other devices’ section.



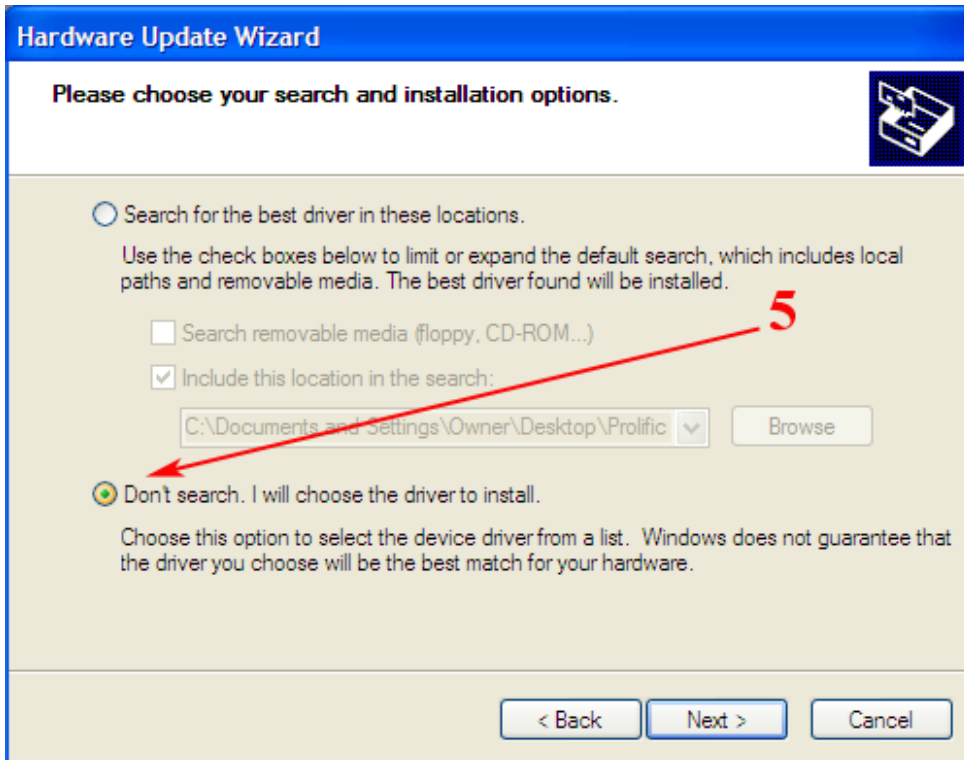
B. Select 'No, not this time' in the hardware Update Wizard and click **Next**.



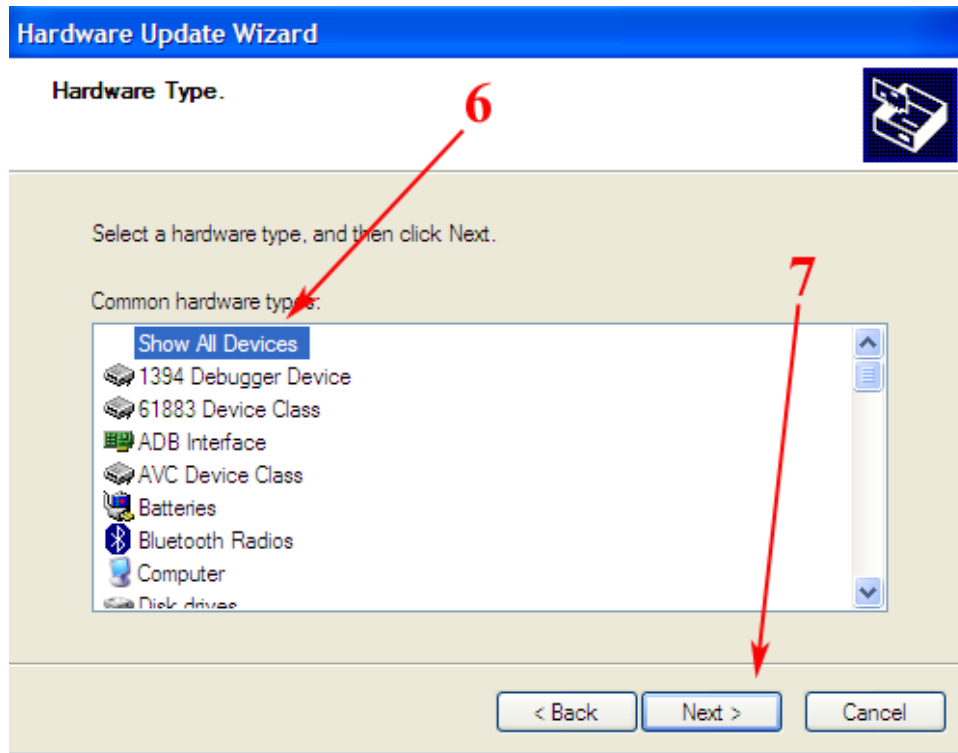
C. Select 'Install from a list or specific location (Advanced)' and click **Next**



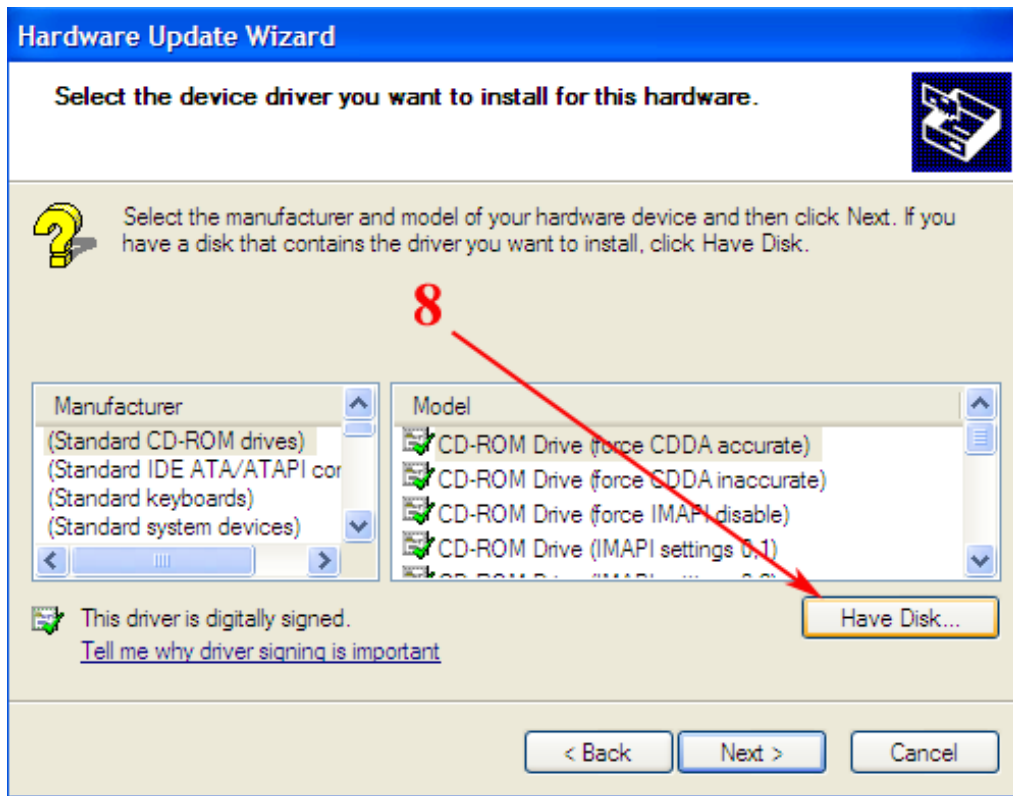
D. Select 'Don't search. I will choose the driver to install.' and click **Next**.



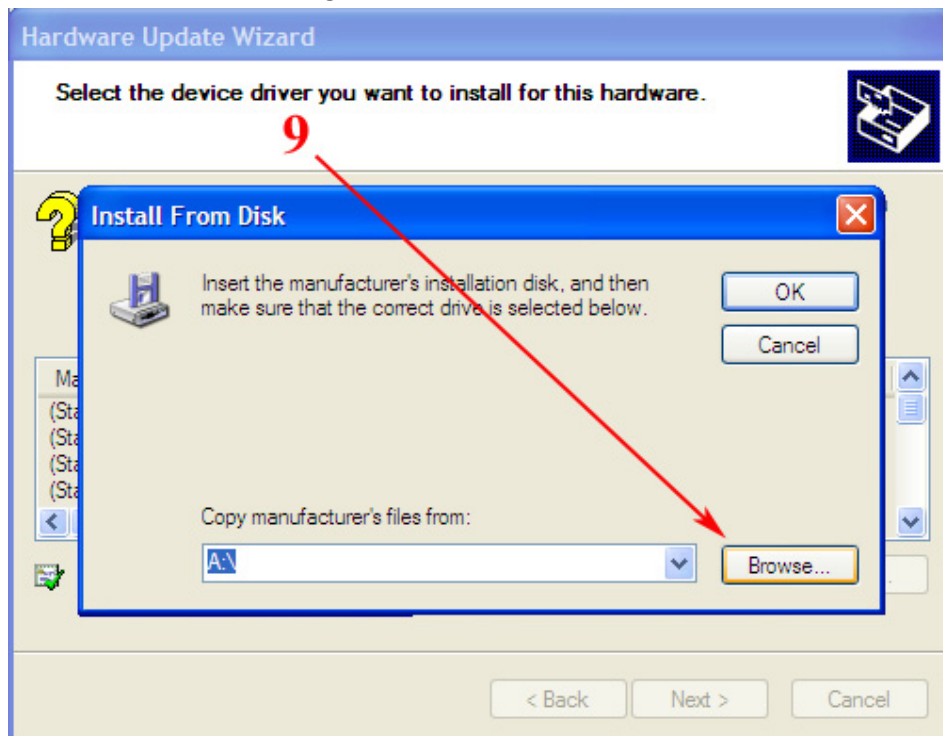
E. Highlight 'Show All Devices' and click **Next**.



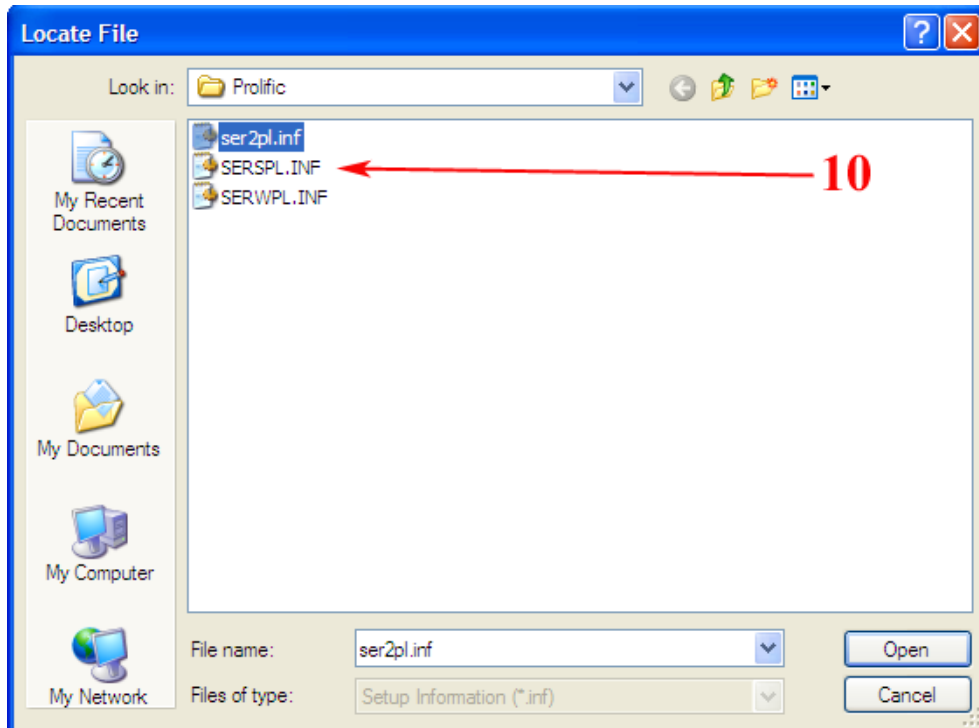
F. Select **Have Disk**



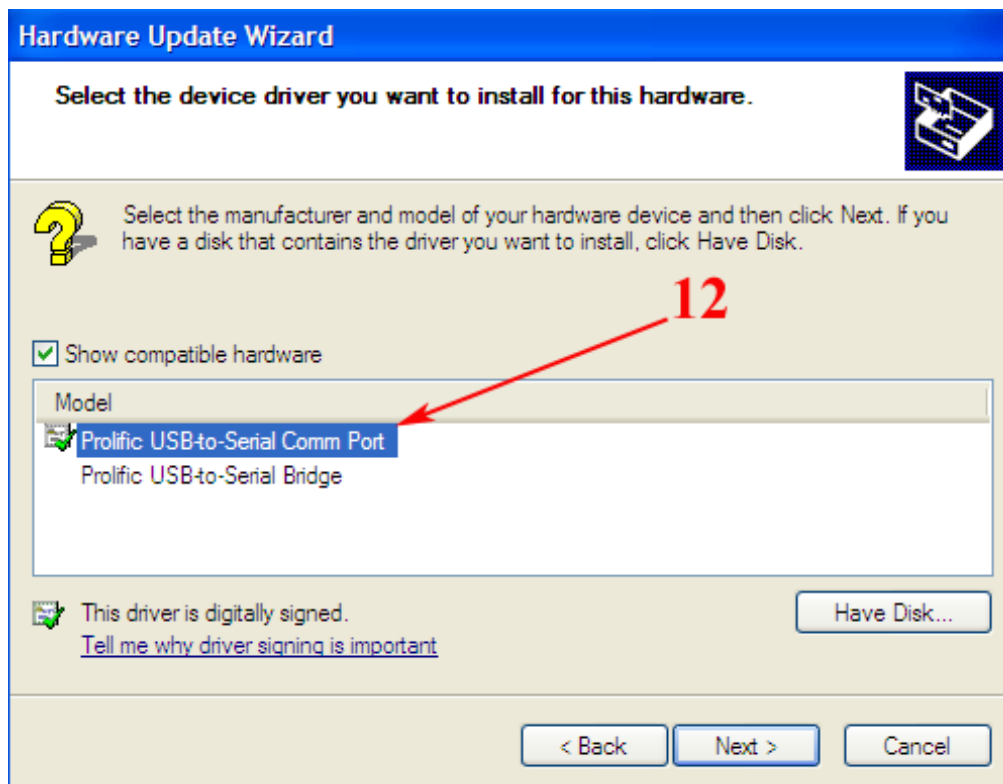
G. Select **Browse** and navigate to the new folder that the drivers were extracted to.




H. Select **SERSPL.INF** from the directory and click **Open**



I. Highlight the model listing that is 'digitally signed' (Has icon to the left of it) and click **Next**.



- J. The wizard will now install the drivers, if a prompt asks to install the driver select 'Continue Anyway' and wait for it to install. Once complete, the Prolific Serial-to-USB adaptor will be listed in the 'Ports' section of Device Manager.

**Note:** If there is a  icon next to the listing in the Device Manager, it means that there is still a driver issue with the adaptor. Repeat the steps in the guide and select a different **.INF** file in step **H** until the icon does not appear.

**Notes #2:** If a Serial-to-USB cable is being used that is not purchased from Electronic Displays, the same procedure can be followed to manually install the drivers for the adaptor as long as you can locate the **.INF** for the drivers. They are typically in the same folder as the executable setup is for the driver, or listed on manufacturer's website a driver for 'Advanced Users.'

6. **I followed all the steps listed, but am still unable to communicate with the display.**  
Contact Electronic Displays Incorporated for technical support.

### **Electronic Displays Incorporated (EDI) Contact Information**

Electronic Displays Incorporated (EDI) website: <https://www.electronicdisplays.com/>

Technical Support Hotline: 630-628-0658

Hours: 8:00 AM – 4:00 PM (Central US: UTC-6:00)

Monday – Friday