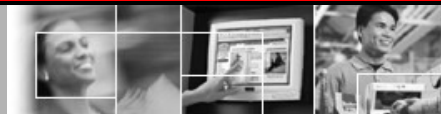


**Retail Platform Software Support**



**TeamPoS® 3000 XL Video Driver Installation and Setup**

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**TeamPoS® 3000 XL  
Video Driver  
Installation and Setup**

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## 1. Overview

This document describes the process of loading the graphics driver for the *TeamPoS3000 XL*. This process is not needed when the Operating System is preloaded by FTXS or loaded from the FTXS Recovery CD, as the video driver is pre-loaded and pre-configured for analog and DVI displays in Clone video mode. This process is only needed when the system integrator is loading their own copy of Windows, or the video driver needs to be re-installed.

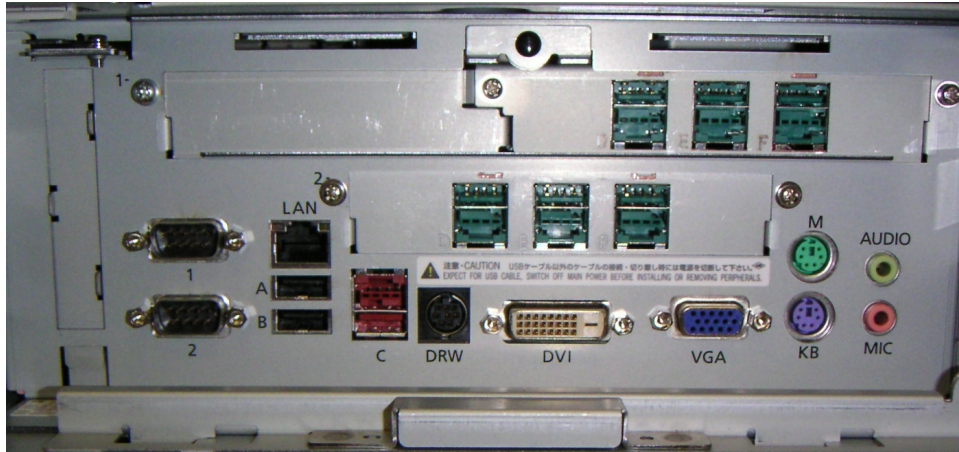
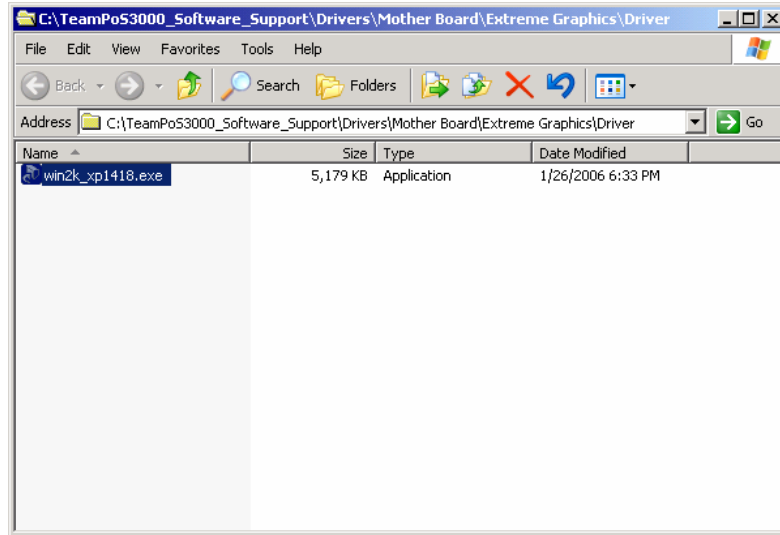


Figure 1

*TeamPoS3000 XL* utilizes the on-motherboard Intel 855GME chipset, which supports dual-head video. There are 2 video connectors on the controller backplane: analog and DVI.

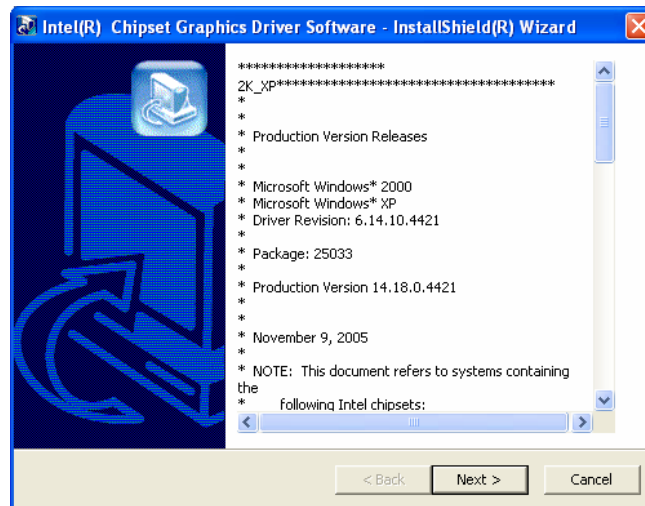
## 2. Loading the Extreme Graphics Driver

During first time boot up a number of pop ups will be displayed indicating the computer has found new hardware. Cancel out of any driver installation and wait until all the devices are identified. It may take two minutes on initial boot up before the system has found all the new hardware and is ready to install new drivers.



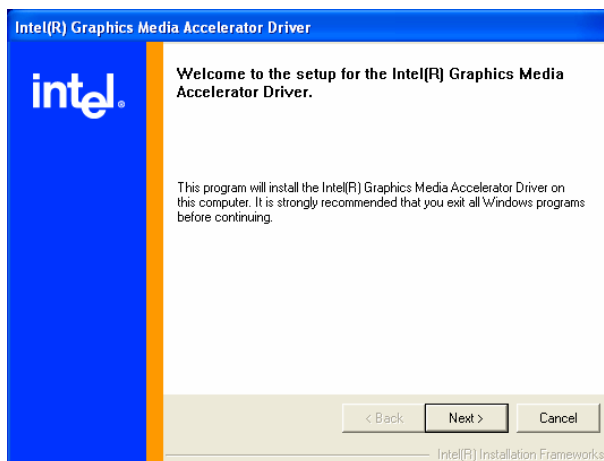
**Figure 2**

- Locate the Extreme driver folder and double click on the driver. The current driver install package at release is win2k\_xp1418.exe, but it is quite possible the driver will be updated throughout the life of this product. Insure you have the latest driver before loading.



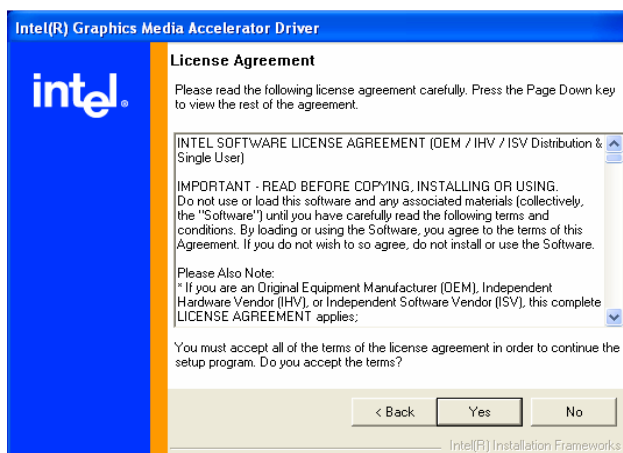
**Figure 3**

- When the “Intel® Chipset Graphics Driver Software” screen appears, click “Next”.



**Figure 4**

- At the Welcome screen, click “Next”.



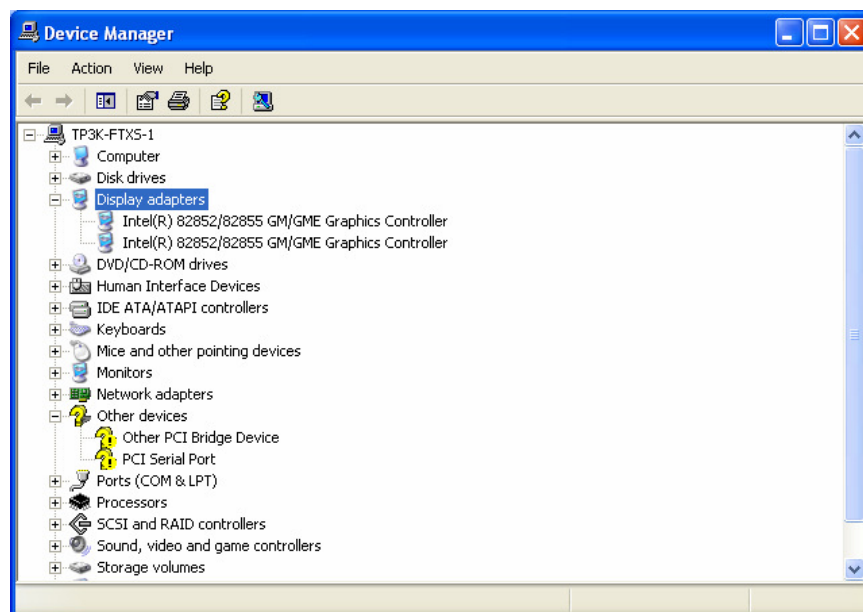
**Figure 5**

- The License Agreement will then be displayed. Click “Yes” to continue the driver loading.



**Figure 6**

- When driver installation has completed, select “*Yes, I want to restart my computer now*” and “*Finish*” to exit.
- Note: Once the restart is performed the Graphics Driver will only set up one screen. Also, resolution may need to be configured to optimal settings for the display type. If dual displays are used, follow the procedure listed in Video Display Configuration (Multiple Displays).

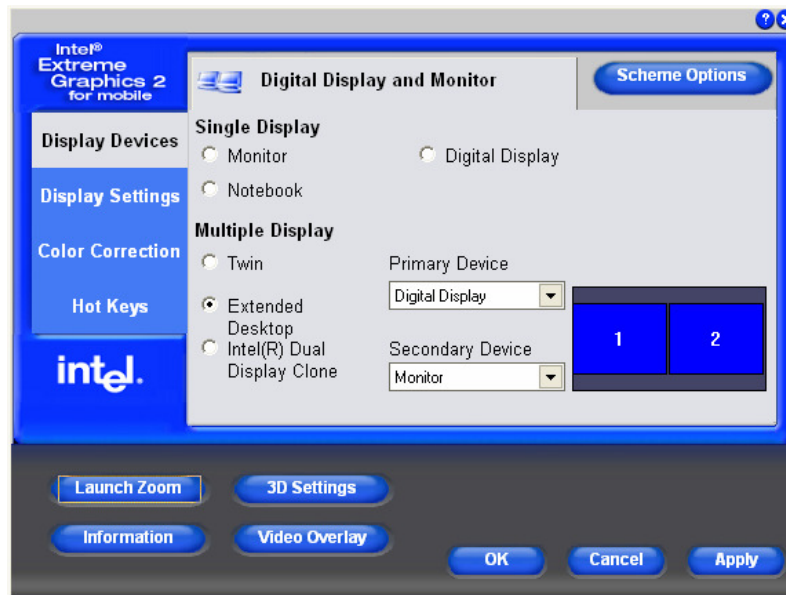


**Figure 7 - Device Manager showing dual video adapters**

- This completes the installation of the video drivers.

### 3. Video Display Configuration (Multiple Displays)

Use the Intel Extreme Graphics video setup utility to manage video settings. The utility can be launched from the Control Panel by double clicking on the Intel Extreme Graphics icon, or the similar tray icon. When the Intel Extreme Graphics 2 for mobile screen is displayed select the configuration desired and click “Apply”. The screen below shows the Extended Desktop option selected.



**Figure 8 - Extreme Graphics Configurator Display**

This screen enables display(s) configuration set up. The display must be attached and powered on for the display type to be presented as a configuration option.

Graphics modes, such as single, extended, etc., can be manipulated from this screen. Display properties, such as resolution, can be found by clicking the *Display Settings* tab on the left navigation pane.

Note the entries under the *Single Display* area in the picture above. Three displays are itemized, *Monitor*, *Digital Display*, and *Notebook*. This is what is seen when the *TeamPoS3000 XL* high-end controller is configured with both DVI and analog connected displays.

- *Monitor* refers to the display connected via the analog (VGA) connection.
- *Digital Display* refers to the display connected via the digital DVI connection.

- *Notebook* refers to the LVDS (Low Voltage Differential Signaling) display connection that is used with the *TeamPoS3000 XT* All-In-One units. The Notebook display type is itemized even though no display device is attached because the internal circuitry to drive this display is always present in the Intel Chipset. This is the method typically used in notebook/laptop configurations, and used in *TeamPoS3000 XT* All-In-One units.

After the driver has been loaded and configured to meet customer requirements, verify the display adapters are loaded properly by going into the device manager and opening up the Display adapters. If two displays are being used there should be two Graphics Controllers loaded as shown in the picture below.

When the desired video mode is setup, proceed to install and run the Display\_Select set video mode utility as described in the following section.



## 4. Display\_Select Utility

### 4.1. Background



**Figure 9 - TeamPoS3000 XL**

*TeamPoS3000 XL* utilizes Intel's 855GME chipset, which supports multiple video channel output. This chipset is typically targeted at the notebook computer market. It is used in *TeamPoS3000 XL* because of its dual-monitor capability. Either analog or DVI monitors can be utilized in single or dual configurations on *TeamPoS3000 XL*.

This section discusses video management under Microsoft Windows® operating systems.

Intel's Extreme Graphics video driver is used for video display. Display can be configured for:

- single display, either analog or DVI,
- dual display, one analog and one DVI monitor, in "Clone" mode where the same display is presented on both monitors
- dual display, one analog and one DVI monitor, in "Extended" windows mode.

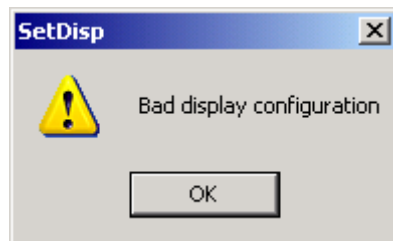
At system start-up, the Extreme Graphics video driver determines the physical display devices, analog and/or DVI, attached to the *TeamPoS3000 XL*. If the physical configuration has changed from the previous session, either due to accidental cable removal, or intentional re-configuring, less than desirable conditions may result.

For example, if the *TeamPoS3000 XL* is configured with a single DVI display, and the system is shut-down in this configuration, and for some reason the DVI display cable is removed, and the system restarted, the result would be no display. If the error condition is recognized and the system is shut-down, the DVI cable reconnected, and system restarted, the result will be a dark, blank screen with no easy way to recover the video.

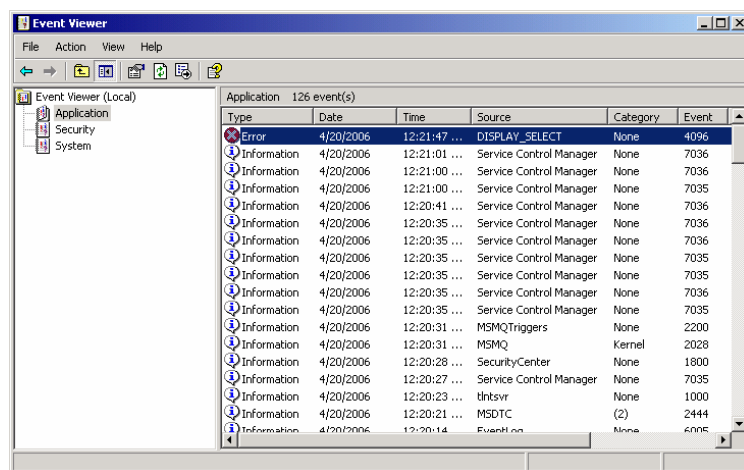
This is due to the fact the Extreme Graphics driver reverts to default "*Notebook*" video mode when this error condition is recognized, since this driver typically targets the notebook market. This condition persists across system cold or warm restarts.

To mitigate this situation, *TeamPoS3000 XL* is supplied with the **Display\_Select** utility to set the video mode, and restore the desired video configuration should problems occur. It only needs to be run once, after final video configuration is set. This state is saved.

A companion utility program, **SetDisp**, runs at Windows start-up and compares the current video state with the saved state. If it detects a difference, SetDisp manipulates the video configuration to mitigate a failed video condition if a display (but not the expected primary display) is still physically connected. When this is the case, that is the previous secondary display is still attached, SetDisp.exe displays a "*Bad video configuration*" pop-up message to alert the user to the condition, and makes an associated EventLog entry (see figures below).



**Figure 10**

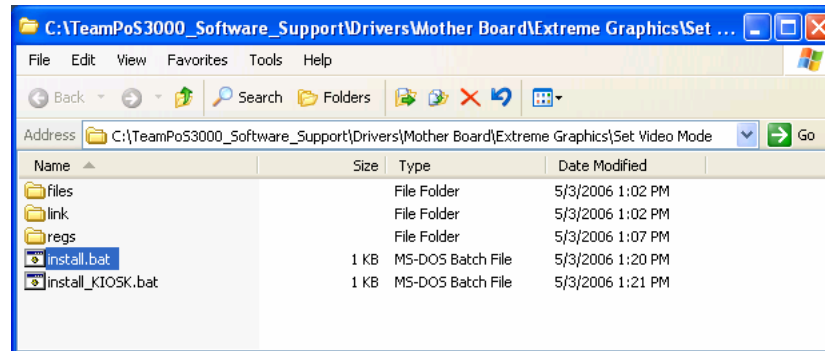


**Figure 11**

When the system is shut-down, and the physical display connects re-attached to the "saved" state, SetDisp.exe will, on the subsequent system start-up, change the displays back to the "saved" configuration. This change may take a few moments after the desktop loads depending on other start-up process.

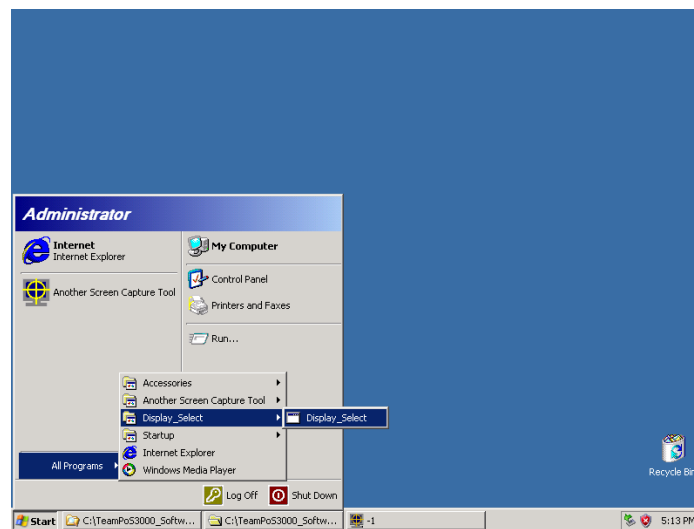
Following are example scenarios and screen shots:

## 4.2. Display\_Select Set Video Mode Utility Installation and Setup



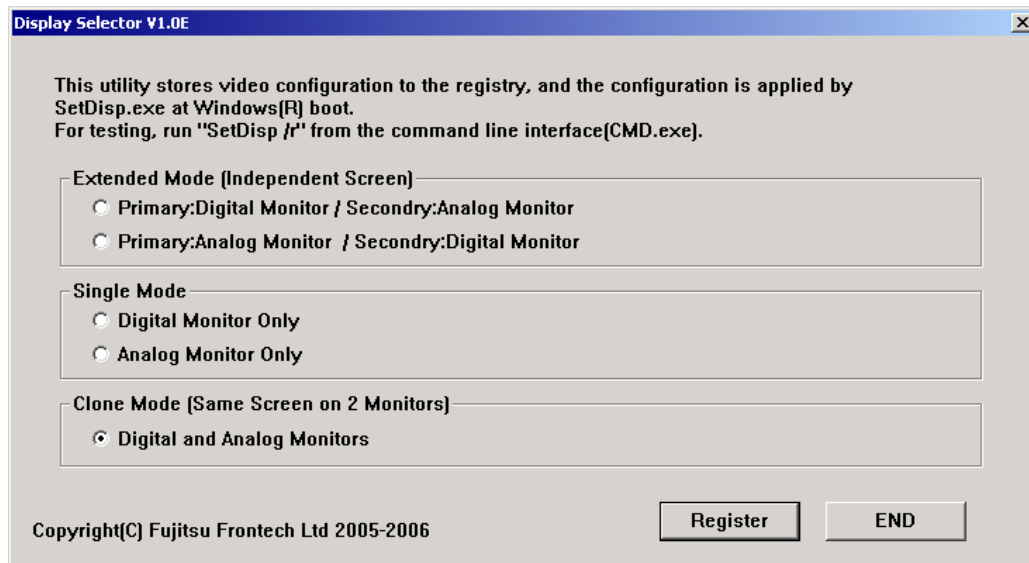
**Figure 12**

- To install the Display\_Select utility, navigate to the folder location containing the Set Video Mode install.bat file. In this example, the folder is c:\TeamPoS3000\_Software\_Support\Drivers\Mother Board\Extreme Graphics\Set Video Mode.
- Two installation bat files are supplied. Install.bat is targeted to the **TeamPoS3000 XL**. Install\_KIOSK.bat is for the **TeamPoS3000 XT All-in-One** system.
- Select and run the file *install.bat*.



**Figure 13 - Starting the Display\_Select utility**

- The Display\_Select utility program has been added to the Start Menu, and the SetDisp.exe program added to the system to run automatically at system start-up.
- Select and start the *Display\_Select* utility from the Start Menu.



**Figure 14 - Display\_Select options screen**

- The Display\_Select utility presents a single, simple screen.
- Select the desired video mode from the list provided, and click "Register". The video mode is now saved and will be used by SetDisp.exe as the benchmark comparison at system start-up.