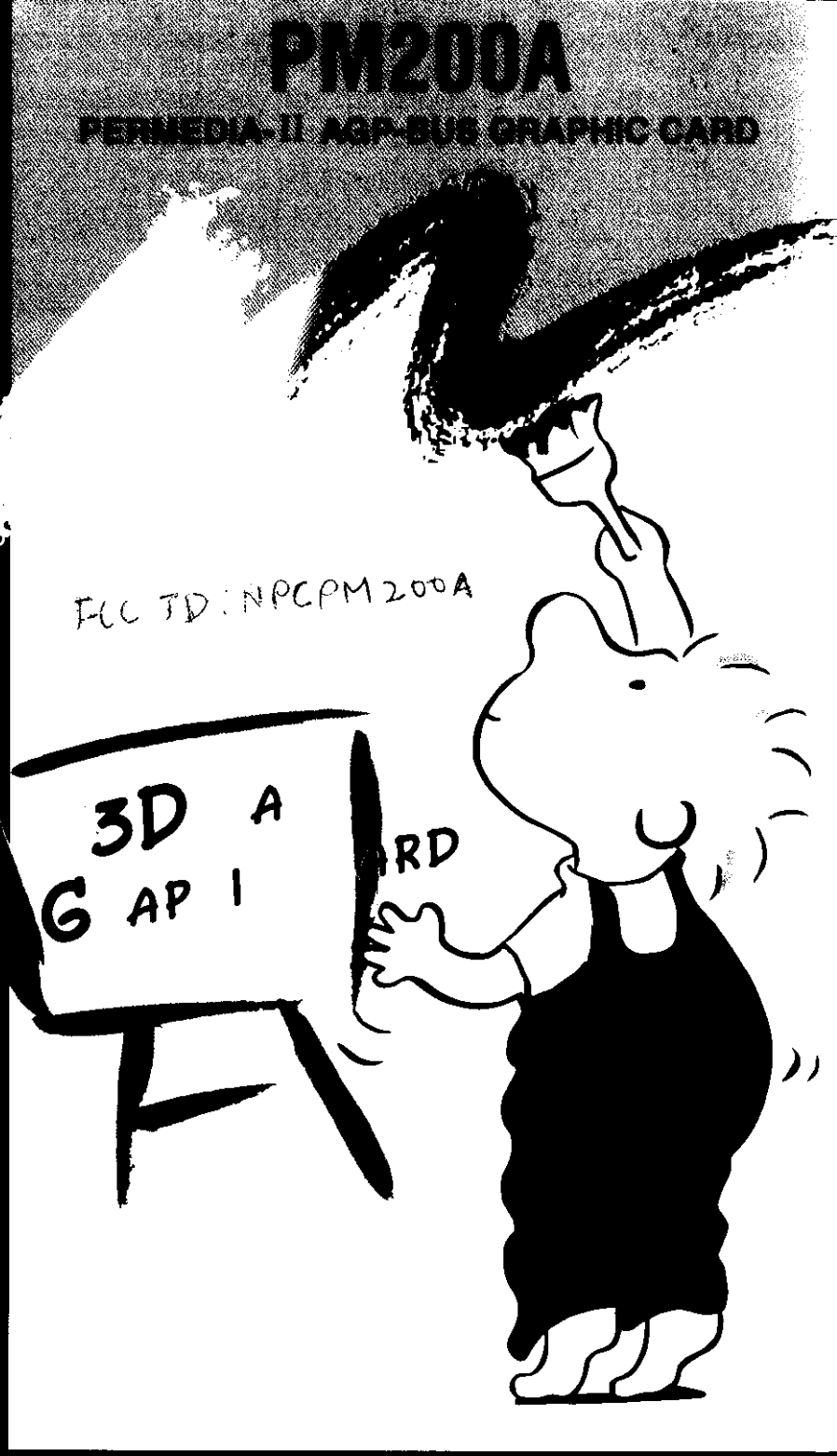
MULTIMEDIA

PM200A

PERMEDIA-II AGP-BUS GRAPHIC CARD



Federal Communications Commission (FCC) Statement

This Equipment has been tested and found to comply with the limits for a class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Warning:

You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference &
(2) This device must accept any interference received, including interference that may cause undesired operation.

Table of Contents

Chapter 1
Introduction

Thank you for choosing the PM200A graphics card. The PM200A is a high-performance graphics card that plugs into a AGP expansion slot inside your personal computer. This high-end product incorporates the 64-bit graphics engine and 3D features.

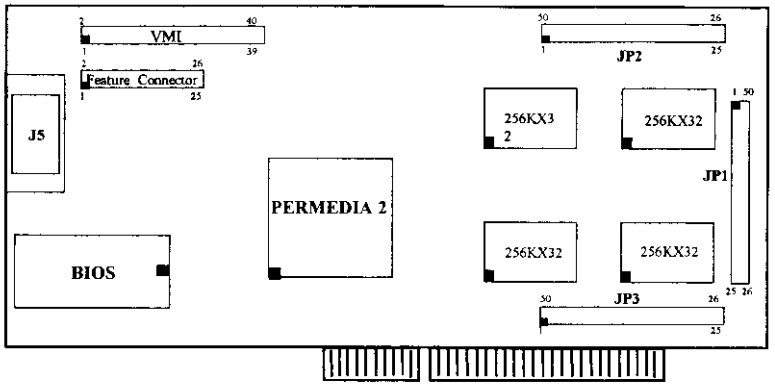
The PM200A is 100% VGA compatible and supports all VESA 2.0 standards: VBE 2.0 (SVGA), DPMS (Energy saving), and DDC 2B (Plug-and-Play monitor).

The following features provide the flexibility to meet a wide range of user needs.

Features:

- Full support for 66MHz Accelerated Graphics port (AGP)
- High-performance 64-bit 2D/3D graphics engine
- Integral True-Color 230MHz RAMDAC
- Supports 4MB/8MB frame buffer, using SGRAM
- 3D feature set:
  high quality texture mapping; smooth shading and blending; optional 15 or 16 bit Z buffer; and fog and depth cueing
- 3D Geometry pipline set-up processor
  - Integral 100M Flop setup unit, reduces load on CPU and Bus
  - OpenGL and Direct3D compatible
  - 100% hardware texture mapping

- Driver Support
  - Windows NT and Windows 95
  - OpenGL and Direct3D
  - QuickDraw and QuickDraw 3D
- 2D Windows acceleration, video playback acceleration
- MPEG2 compatible Video playback acceleration



Chapter 2
Software Installation

2.1 Installing on Windows

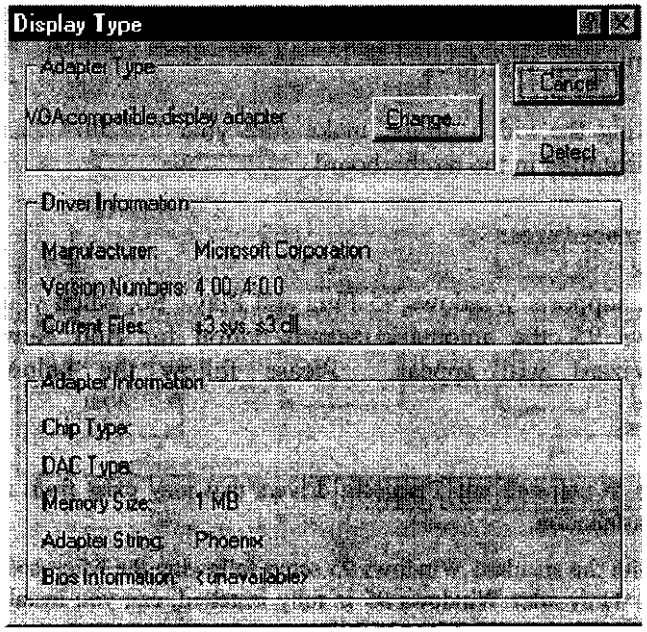
Before installing the video driver, make sure your PM200A has already been installed in the motherboard.

Installation procedures:

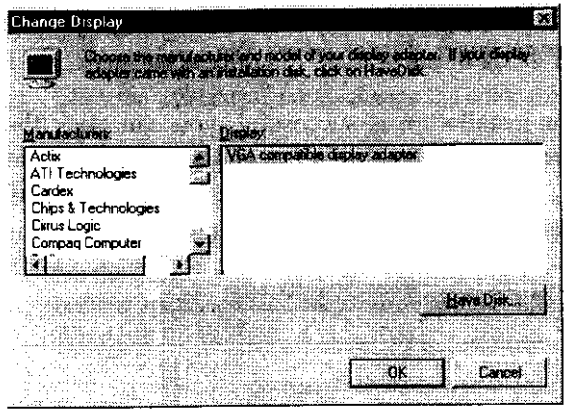
The PM200A supports Windows 95 Plug and Play. So, when you start Windows 95, the automatic search option for Add New Hardware Wizard will appear. Please follow the below instructions:

1. Make sure to uninstall any Permedia drivers that may exist from a previous installation.
2. Proceed with the standard Windows 95 setup following the Microsoft document. Only after Windows 95 is fully installed, can you install the PM200A Windows 95 driver as follows:
3. Start Windows 95 if not already started.
4. The New Hardware Found dialog box appears. Follow the step-by-step instructions.
5. When this process completes, a System Settings Change dialog box appears. Click on the "Yes" button when it asks "Do you want to restart your computer now ?"

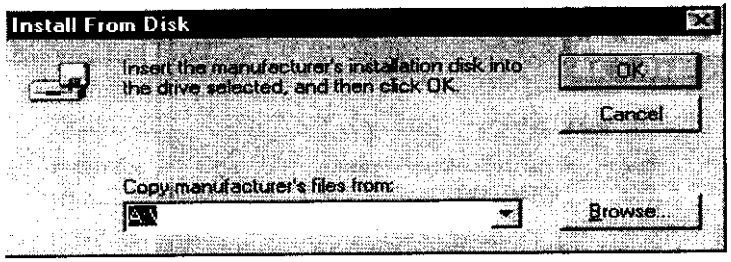
6. Your computer will enter standard VGA mode. Please right-click on the Windows 95 desktop and pop up the Properties window. Choose the Settings tab and click the display Type" button. Then, in the Display Type window, click the change..." button, as follows:



After that, please choose the "Have Disk..." button from the change Display dialog box.



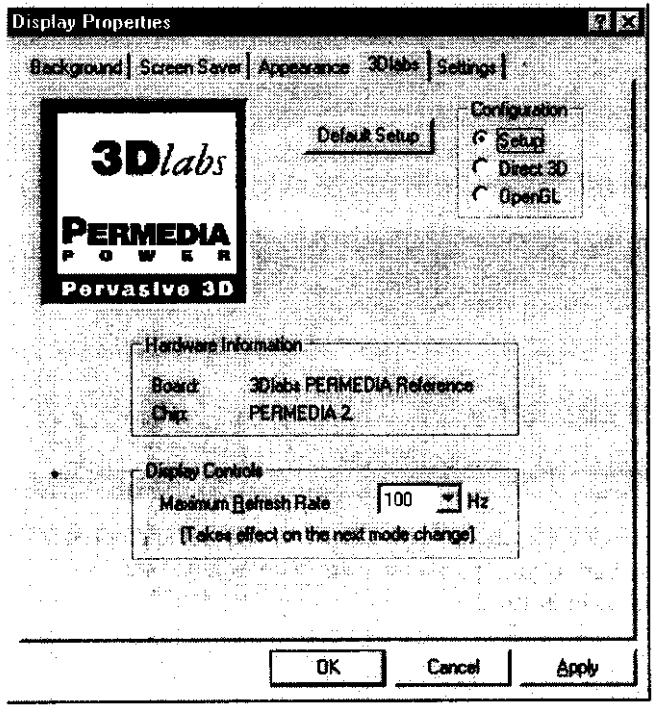
You will be prompted to insert the driver disk as shown below:



Insert your driver disk into drive A: (or CD-ROM drive, if appropriate). In case of CD-ROM drive, you specify the path "D:\PM200A\Win95\". Follow the on-prompt instructions.

7. Click OK to close the existing Properties window. Press Yes, if you are asked to restart your computer. Please choose Yes.

To make sure if your installation is successful, you can click the Display icon from the Control Panel to show the slightly different Properties window. Now it's possible to change your display resolution, color palette, and other Permedia settings through this window.



Changing resolution and refresh rate:

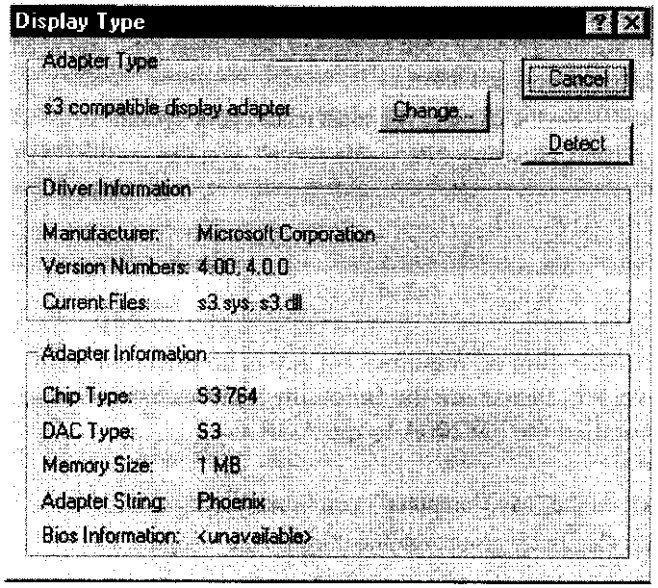
1. Choose the following: "Start\Settings\Control Panel\Display".
2. Click the "Settings" tab to change the color resolution.
3. Click the "Advanced Properties" tab, and select the refresh rate under refresh rate bar. (If your want to change the refresh rate, you need to setting the monitor type before.)
4. When you complete the change, you must restart your system.
5. On the other hand, choosing "Permedia Setup", you can set the DMA buffers rate, font cache, etc. (the refresh rate set only support for Windows 95 Version1.0)

2.2 Installing on Windows NT 4.0

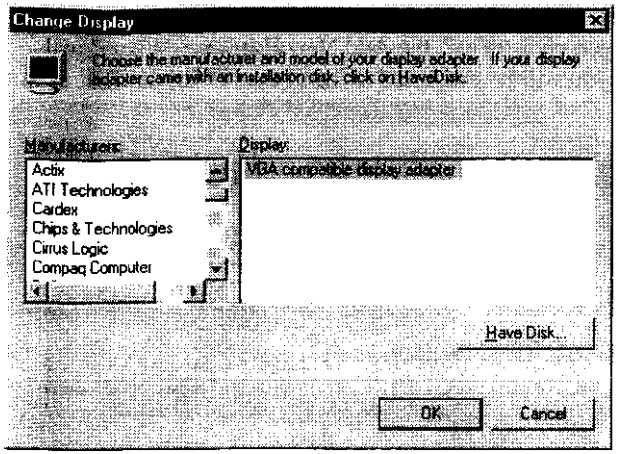
Basically, the installation of Windows NT 4.0 is no different from that of Windows 95. Please see the following instructions (assume that you had installed the PM200A to the AGP slot).

1. Double-click on the "My Computer" icon from Windows NT.
2. From the My Computer group, double-click on the "Control Panel" icon.
3. From the Control Panel group, double-click on the "Display" icon.

2. Choose the Settings tab and click on the "Display Type" button. The following window will appear (your window may be different from this):

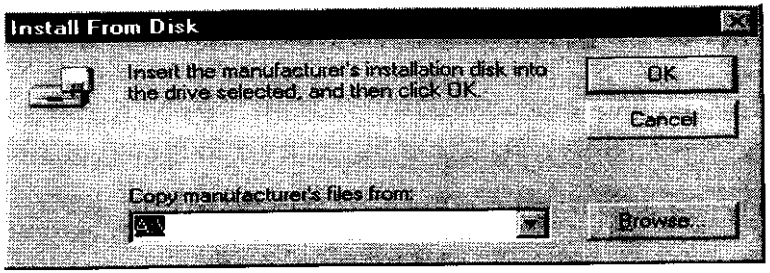


5. Press the "Change..." button in this window. A window titled "Change Display" will appear.



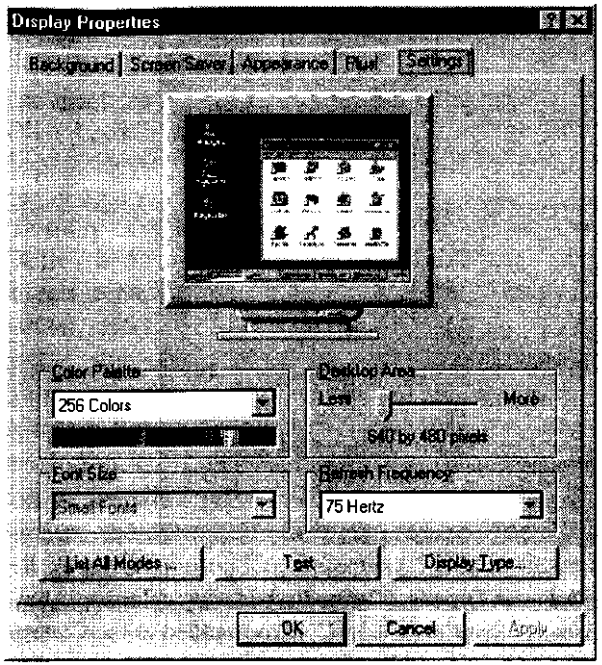
6. Press the "Have Disk ..." button in this window. A window titled "Install from Disk" will appear.
7. Specify the path "D:\pm200a\winnt40\" (or A:\ ). Insert the driver disk for your machine architecture into the drive and press OK. The "Change Display" window will appear with two sub-windows. The left hand sub-window contains a list specifying chip types (e.g. Permedia or GLINT); the right hand sub-window will contain a selection within that group. Select the chip type in the left hand sub-window and the nearest board type in the right hand sub-window and press OK.
8. Then follow the instructions and quit the Control Panel Window. When asked if you want to restart the computer, press "Yes".

9. After restarting your computer, the saved Display Properties window is restored. If you click "Yes", the Add New Hardware Wizard will appear. Then you will be prompted to insert the NT driver disk, as in the following:

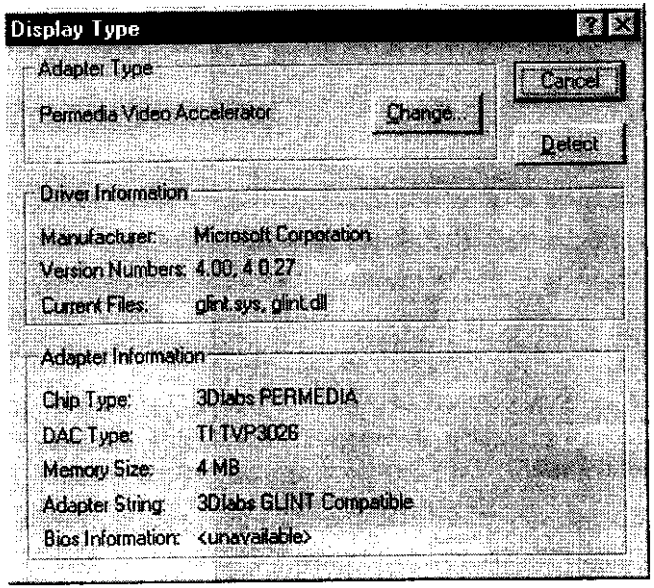


10. When this process completes, a System Settings Change dialog box appears. Click on the "Yes" button when you are asked "Do you want to restart your computer now? "

1. To make sure if the installation is successful, you can click the Display icon from the Control Panel to show the Display Properties window.



12. Choose the " Display Type..." button to show the modified window:



Please check if your Adapter Type is "Permedia Video Accelerator". On the other hand, you can see that the "GLINT" icon is added to the Control Panel group. You can do GLINT configuration setting for your purpose.

Note that for NT 4.0 there are no options to select for a given resolution at install time. When the machine reboots, NT 4.0 allows the video mode to be dynamically changed without the need for a reboot.

The machine will now shutdown. On restart again, choose the non-VGA boot option. It will restart using the GLINT board as the display device. This can be checked by opening the "Display" applet again and pressing the "Change Display Type..." button. The "Display Type" window should report that it is running on a GLINT or PERMEDIA display board. If the standard Windows NT screen does not appear and the display remains on the blue boot screen, ensure that the VGA cable has been correctly connected.

If the desired resolution, depth and frequency have not been chosen at install time, then open the Display Applet to define the required resolution, color depth and monitor frequency. This selected mode can be tested to ensure that it can be handled by the monitor. For running the default 3D demos, a resolution of 1024x768 with 4096 colors is recommended. Selecting 75Hz is desirable if the monitor can support this frequency. On some double buffered applications, the higher refresh rate allows higher frame rates to be achieved. For NT 4.0, the display will change dynamically.

The above procedure installs the NT display driver, GLINT control panel applet and the OpenGL installable client driver. Once the display resolution and pixel depth have been appropriately re-configured, the machine is ready to run both Windows NT and OpenGL applications and demos.

2.3 Installing the HEIDI Driver

If you have 3DStudio Max on your hard drive, you have to install the Heidi driver.

To install your GLINT Heidi driver, locate your 3DStudio Max directory on your hard drive and then enter the Drivers sub-directory. Rename the file 'WGLINT.HDI' to 'WGLINT.BAK', and copy the new 'WGLINT.HDI' from this Driver Disk to the Drivers directory.

You can now run 3DStudio Max. The new driver will take effect.

Please note that when using the GLINT Heidi driver under Windows 95, the following software components must also be installed:

Direct X version 3 or later, and
The Microsoft OpenGL binaries, opengl32.dll and glu32.dll.

The best performance can be achieved through running in 32768 color mode.

Chapter 3
Software MPEG Player

3.1 Introduction

Software Requirements

- Microsoft Windows 95
- Permedia Windows driver

Hardware Requirements

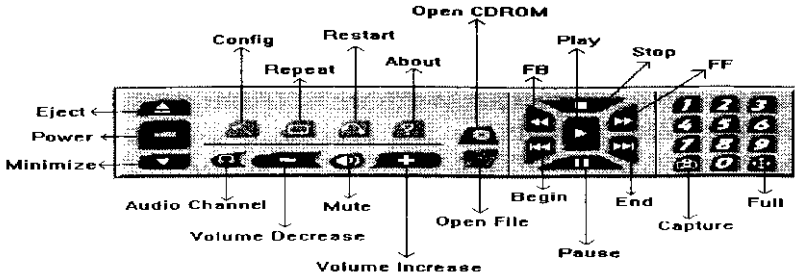
- Pentium-133MHz (Cyrix 6x86-P120+) or above
- At least 2MB of free hard disk space, 4x speed or above CD-ROM drive
- Sound card with a Windows wave audio driver installed
- 256 (or above) color VGA card is required. A VGA card with DCI or DirectDraw support is recommended
- 8MB of system memory is required

3.2 Installing Software MPEG Player

Installing on Windows 95

1. Start Windows 95.
2. Insert the VCD PowerPlayer setup disk into drive A (or CD-ROM drive).
3. Choose Run from the Start menu.
4. In the Run dialog, type "A:\Setup" (or D:\Mplay\Setup) and click the "OK" button.
5. The VCD PowerPlayer setup program will begin the execution.
6. Follow the on-screen prompts until the in stallation is complete.

The control panel of the software MPEG Player is shown in the following diagram:



The some important buttons which deserve greater detail are as follows:

Config:	Set up the device options.
Repeat:	Repeat the playback continuously.
Restart:	Resume the playback from the beginning
Number:	Choose a particular track.
Capture:	Clicking on this icon will capture the image on the video screen into the Clipboard. To get the image, you can save it as a .BMP file or use the typical Windows cut/copy/paste features.
Full:	Switch the playback screen at 1x, Maximize, Full screen.
Audio Channel:	Select the left and/or right audio channel.