

## Software Utilities

The mainboard comes with helpful supporting software utilities in CD-ROM discs that contain software utilities and information to improve system performance. This chapter introduces each of them with detailed installation procedures.

### Starting Installation

Insert the CD-ROM disk to start software installation. **If LANDesk® Client Manager (LDCM) software is included** (optional), **run it first**. Start each of them by clicking on the wanted software item(s) on the main menu.

### LANDesk® Client Manager (optional)

The LDCM software must be installed in order to use the hardware manager.

#### Three Options of the LDCM Setup

**LDCM Local Setup** — install software to monitor the *local* system client. Recommended settings can be auto-detected or changed. The installation is straight forward.

1. Select *LDCM Local Setup* in the main menu.
2. Follow the step-by-step installation process.
3. Reboot the system.

**LDCM Administrator Setup** — install software to monitor PC systems on the *network* server within the same bridge address with local software installed. The installation is straight forward.

1. Select *LDCM Administrator Setup* in the main menu.
2. Follow the step-by-step installation process.
3. Reboot the system.

The administrator should install both the Local and Administrator Software. (Hint: first install the *Local Setup*, then the *Administrator Setup*.)

**LDCM Custom Setup** — (for *Experienced* Users).

1. Choose *File | New* from the pull-down menu of the "Untitled" screen and enter a system name.
2. Make the appropriate settings on the right-hand side. IC and Network should not be modified. At present, only ATI Video cards can be monitored by LDCM, do not select Video ATI if using other video cards.
3. Choose LM78 from the pull-down menu and change Chassis Fan to CHAS\_FAN, CPU A Fan to CPU\_FAN, CPU B Fan to No Fan.
4. Change the Threshold RPM to 1,800 RPM and change the Threshold RPM Min to 1,320 RPM.
5. Click *Save* button to save settings and exit.
6. Choose *File | Save* from the pull-down menu, enter a file name, and click *Save*.
7. Exit the current program screen.
8. Run *SETUP.EXE* and choose the system configuration file that was just created.

**NOTE :** 1. System will hang if you click the "Workstation Summary" or "Drives" icon when a floppy drive is not inserted into the floppy drive. For a faster response, insert a floppy diskette before choosing this function.  
 2. When setting up the Administrator LDCM, the LDCM only displays half the actual fan's RPM. Multiply the displayed fan RPM by 2 for the actual fan's RPM.  
 3. Chassis Fan and CPU Fan RPM must be at least 2,640 RPM to be monitored by the LDCM.  
 4. Fan labels are not consistent, use the following table for reference:

PC Health	LDCM Notification Config.	BIOS/Mainboard Label
CPU Fan	CPU Fan	CPU_FAN
Chassis Fan	Chassis Fan	CHAS_FAN
No Fan	No Fan	none

5. LDCM at present can only detect ATI video cards, choose *Non-ATI* in *Local Setup*; otherwise, a run-time error message will show (Error [1] retrieving Mach64 attributes). You may ignore this message by clicking the *OK* button.

**NOTE :** (cont.)

6. The administrator LDCM cannot cross a network bridge to other workgroups.
7. The COM port that is in use will not show up in "Input/Output Ports."

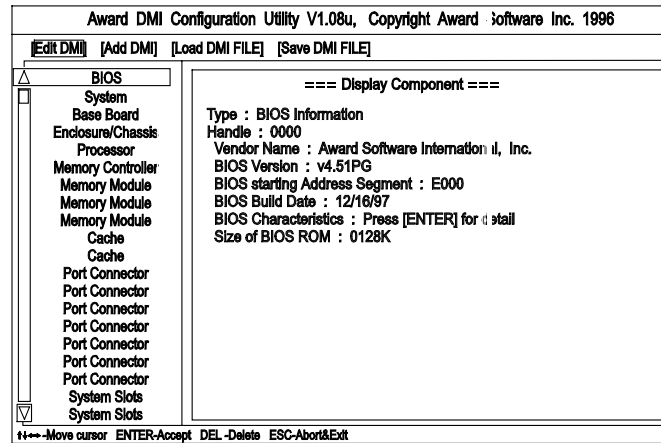
8. LDCM Administrator installation requires a network card; otherwise, the administrator features will run very slow.
9. Mouse (pointer) information will not be shown when there is mouse activity after *Workstation Summary* is selected under Windows NT.

## Desktop Management Interface (DMI)

The mainboard supports DMI within the BIOS level and provides a DMI Configuration Utility to maintain the Management Information Format Database (MIFD). DMI is able to auto-detect and record information pertinent to a computer's system such as the CPU type, CPU speed, internal/external frequencies, and memory size. The onboard BIOS will detect as many system information as possible and store these collected information in a 4KB block in the mainboard's Flash EPROM and allow the DMI to retrieve data from this database. Unlike other BIOS software, the BIOS on the mainboard uses the same technology implemented for Plug and Play to allow dynamic real-time updating of DMI information versus creating a new BIOS image file and requiring the user to update the whole BIOS. The DMI Configuration Utility also allows the system integrator or end user to add additional information into the MIFD such as serial numbers, housing configurations, and vendor information. Those information not detected by the mainboard BIOS has to be manually entered through the DMI Configuration Utility and updated into the MIFD. The DMI Configuration Utility provides the same reliability as PNP updating and will prevent the refreshing failures associated with updating the entire BIOS.

### Starting DMI

1. Format a bootable system diskette and copy the DMICFG.EXE file from the CD-ROM disc to the floppy diskette.
2. Reboot the system by using this bootable system diskette to enter Real mode (DOS).
3. After the DOS prompt appears, type *DMICFG* and press <Enter> key. The following display will appear onscreen.



**Edit DMI** — a menu like the above figure appears onscreen. It provides recorded data about your computer system. This feature allows you to select editable DMI items by pressing the arrow keys. The button *Press [ENTER] for detail* will cause a pop-up sub-menu to appear. Use the <+> or <-> keys to change configurations. Press <Esc> key to abort the configuration and exit or press <Enter> key to save and exit. The screen field under *Show Only Component* means that the items are automatically detected by BIOS. The screen menu under *Edit Component* indicates the items are user-configurable.

**Add DMI** — This menu allows users to add new information such as Manufacturer Name, Product Name, etc.

**Load DMI File** — If users need the old DMI information, use this feature to load the DMI information.

**Save DMI File** — If users need to keep the DMI information that was just changed, use this feature to save the new DMI information.

## IDE Bus Master Driver

The mainboard package includes the Bus Master IDE Driver in the software utility disk for Windows 95 and Windows NT to improve the overall system performance. Read the related README files first before installing it. This mainboard supports Ultra DMA/33 but Windows 95 does not recognize it. When the operating system detects the mainboard and the IDE Bus Master Driver is not installed, the system will treat it as a standard dual PCI IDE controller, not allowing you to take advantage of the Ultra DMA feature. (The attached peripheral devices must support UDMA.)

The installation process is straight forward. Start by clicking on the *IDE Bus Master* item on the main menu. There is no option to be selected while the installation is proceeding. After the installation process, the system should be rebooted.

## Patch for Chipset

The mainboard package provides an INF update software in the software utility disk. Before running the SETUP file, read the related README file first. This software is necessary for the operating system to recognize the onboard chipset; otherwise, the question mark in a circle symbol will appear in your Windows 95 environment. The installation is straight forward. Start by clicking on the item *Patch for Chipset* on the main menu. There is no option to be selected while the installation is proceeding. After the installation process, the system should be rebooted.

## BIOS Flash Software

The mainboard package provides a BIOS flash software tool in the software utility CD-ROM disc. This software is used for upgrading the current BIOS used.

1. Run the CD-ROM disc and click on *Browse CD*.
2. Select *Flash* and choose the BIOS vendor that provided the BIOS chip on this mainboard.
3. Print the related README file and read it first. For more information, visit FIC online at <http://www.fic.com.tw/>.

## Download and Upgrade BIOS File

1. Format a bootable system floppy diskette by typing the command “format a:/s” in command mode.
2. Visit the FIC website at <http://www.fic.com.tw/> and visit the BIOS Update page in the FIC Technical Support section.
3. Select the BIOS file you need and download it to your bootable floppy diskette.
4. Insert the bootable diskette containing the BIOS file into the floppy diskette drive.
5. Assuming that the floppy diskette drive is A, reboot the system by using the A: drive. At the A: > prompt, run the BIOS upgraded file by executing the Flash BIOS utility and the BIOS file with its appropriate extension.

*Command: {flash tool file}{space}{downloaded BIOS file} / cc <Enter>*

*Example: flashxxx 109cd12.awd /cc*

Parameter *CC* stands for **Clear CMOS**. It is most frequently used. You can obtain the list of other parameter switches by adding “/?” after the flash utility filename and pressing the <Enter> key.

6. Upon pressing the <Enter> key, a FLASH MEMORY WRITER menu will appear onscreen. Enter the new BIOS file name with its extension filename into the text box after **File Name to Program**.
7. If you want to save the old BIOS file (perform as soon as system is operational, this is recommended), select **Y** to **Do You Want To Save BIOS**, then type the old BIOS filename and the extension after **FILENAME TO SAVE:**. This option allows you to copy the contents of the Flash memory chip onto a diskette, giving you a backup copy of the original mainboard BIOS in case you need to re-install it. Select **N** to **Do You Want To Save BIOS**, if you do not want to save the old BIOS file.
8. After the decision to save the old BIOS or not is made, select **Y** to **Are you sure to program** when the next menu appears; wait until a message showing **Power Off or Reset the system** appears. Then turn off your system.

<b>NOTE :</b> Do not turn off or reset the computer during the flash process or if there is a problem.
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If you encounter problems while downloading the new BIOS, DO NOT turn off the system since this might prevent your system from booting up. Just repeat the process and if the problem still persists, upload the original BIOS file you saved to disk.

<b>WARNING:</b> If the Flash utility was not able to successfully write to Flash ROM a complete BIOS file, the system may not be able to boot up. If this happens, the system will require service from your dealer.
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9. Remove the diskette and restart your computer.
10. Hold down <Delete> key to enter BIOS setup. You must select “LOAD SETUP DEFAULTS” to activate the new BIOS, then you may set other items from the Main Menu.

## Anti-Virus Tool

The mainboard package provides an optional virus scan tool, the PC-cillin '95 Virus Scanner for the Windows 95 environment, in the software utility disk. This tool allows you to perform virus scan and cure when necessary. Read the related README file first before installing it.

## Hardware Requirements

The PC-cillin '95 Virus Scanner software is fully compliant with Windows 95. The minimum hardware requirements for running PC-cillin '95 Virus Scanner is as follows:

**CPU:** Intel 54C CPU (100MHz or above)  
**RAM:** 8MB (or above)  
**Available disk space:** 4MB

## Technical Notes

PC-cillin '95 Virus Scanner software will be installed to the program group "PC-cillin '95 Virus Scanner" by default. The PCCWIN95.EXE command will be added to the Startup group, and the AUTOEXEC.BAT will be modified to add PCSCAN commands to fully protect your system from computer viruses at system boot up. Read the related README file for more information.

## Onboard Audio Chip Driver Installation

This section describes the installation of the driver for Windows 3.1, Windows 95, and Windows 95 (OSR2), allowing you to take advantage of the built-in sound capabilities of your mainboard.

## OPL3-SA2 Installation for Windows 3.1 and DOS

The OPL3-SA2 driver and associated software are supplied on the CD-ROM disc. The OPL3-SA2 requires MS-DOS 6.2. Operation with other operating systems is not guaranteed. Installation from MS-DOS leads to installation of Windows 3.1 and DOS driver. Along with the OPL3-SA2 driver, the application "YAMAHA STATION" are installed.

## YAMAHA STATION

The YAMAHA STATION application is installed in a new Program Group named YAMAHA. Refer to the README file for more information about the YAMAHA STATION.

### Installation

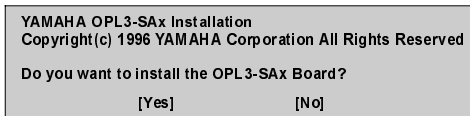
**NOTE:** An OPL3-SAx must be present in your system for successful driver installation.  
This software is installed from the DOS prompt, not the Run command in Windows.  
The installation program overwrites the existing AUTOEXEC.BAT, CONFIG.SYS, and Windows SYSTEM.INI files.  
To cancel the installation program, press the <Esc> key anytime.

1. Play the CD-ROM disc and select the appropriate (WIN31) from the disc.
2. At the C:> DOS prompt, go to the appropriate directory "WIN31" where the CD-ROM drive is located.
3. Type as follows:  
    "install" (installation of drivers application setup program for Windows 3.1)  
    "install -d" (installation of only setup program for DOS/Windows 3.1)  
    and press <Enter> key.

When using the IDE CD-ROM interface of a soundcard and your computer has no Configuration Manager, add the option "-C" as follows:

"install -c"  
"install -d -c"

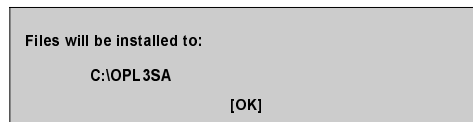
The following dialog box appears:



4. Select and click YES. If you are not using a mouse, press the <Enter> key for YES or the <Esc> key to Cancel.



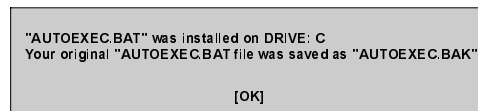
The following dialog box appears:



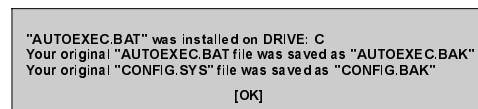
5. Specify the installation directory for the OPL3-SAx Configuration Files or accept the default then click OK.

The files are copied to the hard disk and the following dialog box appears, informing you that the parameter settings for the OPL3-SAx have been added to the AUTOEXEC.BAT file and a copy of the original AUTOEXEC.BAT file has been saved as AUTOEXEC.BAK. The following contents are written into the new AUTOEXEC.BAT. After restarting the system, the following are now valid:

- Set BLASTER (sets the BLASTER function)
- SETUPSA.EXE (is written into the directory assigned at "Files will be installed to:")



If you typed "install -c" or "install -d -c" to use the IDE CD-ROM I/F of the sound card, the following dialog box appears, informing you that the parameter settings for the OPL3-SA has been added to the CONFIG.SYS file and a copy of the original CONFIG.SYS file has been saved as CONFIG.BAK.



6. Click OK to continue.

**NOTE:** Only DOS installation will display the message that the installation is completed. Click OK to finish the installation.

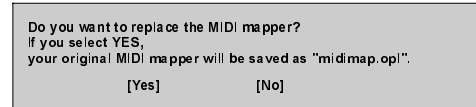
The following dialog box appears, asking whether or not you have Windows installed on your system:



7. Click Yes if Windows 3.1 is installed on your system. Click No if it is not. The following dialog box appears, asking where Windows is installed.

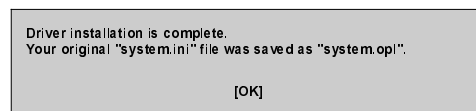


8. Click OK if Windows is installed in the directory C:\WINDOWS, which is the default directory or specify a different directory. The following dialog box appears, asking whether you want to replace the MIDI Mapper.



9. Select Yes to replace the current MIDI Mapper. Select No if you do not want to replace it. If a MIDI Mapper already exists and you replaced it with the OPL3-SA MIDI Mapper, the original is saved as midimap.opl. See your Windows documentation for more information about the MIDI Mapper.

“SETUPSA” dialog opens automatically. If Configuration Manager or PNP BIOS is in your system, see section one on “SETUPSA”. If it is not in your system, see section two on “SETUPSA”. Upon finishing SETUPSA, it will ask you “Next time, do you want to open this setup window in boot sequence?”. If you do, press the <Y> key, if not press the <N> key. The following dialog box informs you that the installation is complete and the original SYSTEM.INI file was saved as SYSTEM.OPL.



10. Click OK to finish. The installer asks whether it can delete the temporary directory. If you want to delete, press <Y> key, and if you do not, press the <N> key.
11. Launch Windows. When Windows is started, the application (YAMAHA STATION) is extracted.

**NOTE:** Even if you did not install the application “YSTATION” in this installation, you can still do it by doing the following steps:

1. When the installation is finished, do not delete the temporary directory “WIN31”.

2. Launch "FILE MANAGER" and double click the "WINSTCD.EXE" in the directory "WIN31".
3. Follow the onscreen instructions to complete the installation.
4. After completing installation, you can delete the temporary directory "WIN31".

## SETUPSA

If the Configuration Manager or PNP BIOS is in your system. (section one)

1. Type "SETUPSA". Open the dialog box and display information on OPL3-SAx I/O address, DMA and IRQ assigned by Configuration Manager or PNP BIOS. Set the value of master volume that is written into OPL3SA.INI. Upon changing the master volume, click "OK", the value is set and written into OPL3SA.INI.
2. Type "SETUPSA /S". Do not open the dialog box but display the configuration of OPL3-SAx onscreen. Set the value of the master volume that is written into OPL3SA.INI

If Configuration Master and PNP BIOS are not in your system. (section two)

1. Type "SETUPSA". Open the dialog box "YAMAHA OPL3-SAx Mixer", display and set the contents into OPL3SA.INI. When you change the configuration and the master volume and click "OK", they are set and written into OPL3SA.INI.

If you are not using a mouse, use the Tab key to move between parameters. Set unique values for the SB (Sound Blaster) and WSS (Windows Sound System) Base I/O Address, IRQ, and DMA channel. The MPU401 IRQ parameter is automatically set to the IRQ that you chose for the Sound Blaster. The default settings, shown below, should work fine. You may need to change them, however, if you have other cards installed in your computer.

	<b>I/O</b>	<b>IRQ</b>	<b>DMA</b>
Sound Blaster	220h	5	1
WSS	530h	5	0
MPU401	330h	5	~

In the SB and WSS Mixer sections, use the left cursor key to raise the volume and the right cursor key to decrease it. If you are using a mouse, click the [UP] and [DOWN] buttons to adjust the volume level.

In SB (Sound Blaster) mode, pressing the S key plays a WAVE sound. Pressing the F key plays an FM sound.

In WSS mode, pressing the W key plays a WAVE sound.

The settings that you make here are written to the AUTOEXEC.BAT file, so they are active every time you switch on the computer. To change these settings after installation, run the "SETUPSA" program again from the directory you specified for installation.

2. Type "SETUPSA /S". Do not open the dialog box but display and set the contents into OPL3SA.INI.

## OPL3-SA<sub>x</sub> Configuration

Various configurations can be set by the panel. Click the "OPL3-SA<sub>x</sub> Config" icon in Control Panel of Windows 3.1. A window showing the *OPL3-SA<sub>x</sub> Configuration* will appear.

## SoftSynthesizer Configuration

The Soft Synthesizer supports GM System Level 1 MIDI data.

### Quality

These four options determine (i.e., sampling rate) and the number of voices that the SoftSynth can produce simultaneously. Select a mode appropriate for the CPU performance of your system. If you choose a high quality mode and your system does not have adequate processing performance, the SoftSynth may not produce sound fluently. In this case, select a lower quality mode.

MODE	SAMPLING RATE (KHz)	MAX. VOICES
Normal	11.025	16
Good	11.025	32
Very Good	22.050	16
Excellent	22.050	32

### Reverb

If you choose ON, you can add reverb to the sound of the SoftSynth.

### MPU401 OUT

These settings allow you to select an External MIDI instrument or the SoftSynth for use with DOS-based games that are played on the Window box. The MS-DOS prompt item in the Main Program Group opens an MS-DOS window. Select General MIDI in the game settings to use this function.

### Full Duplex

It is possible to record a new Wave file while playing an existing Wave file.

### **MIC Volume Control**

When the “MIC +20dB” is checked, microphone volume increases 20dB at play back and recording.

### **ZV Port**

When the “ZV Enable” is checked, ZV port is available.

### **IDE CD-ROM Interface**

When using the IDE CD-ROM interface of soundcard, change the parameters of IDE in SETUPSA, because these are OFF as default values. CD-ROM device driver should be bundled in CONFIG.SYS and the CD-ROM driver is unique to each manufacturer of CD-ROM drives.

Example: a case of CD-ROM drive made by Mitsumi

In the “CONFIG.SYS” file, confirm or add the following two descriptions or rewrite:

```
DEVICE=C:>OPL3SA>SACDROM.SYS /P1E8 /I11 /A3EE
```

```
DEVICE=C:>MTM>MTMCDAL.SYS /D:MTMIDE01 /P:1F0,14 /P:1E8,11
```

In the “AUTOEXEC.BAT” file, confirm or add the following description or rewrite:

```
LH C:>DOS>MSCDEX.EXE /D:MTMIDE01 /S
```

If the CD-ROM drive cannot be recognized in your system, contact the manufacturer of the CD-ROM drive.

### **OPL3-SA3 Installation for Windows 95**

The OPL3-SA3 supports Windows 95 Plug-and-Play. When you start Windows 95, the automatic search option for the Add New Hardware Wizard works as described below.

### **Sound System and Game Port Installation**

1. The *New Hardware Found* dialog box appears. Select “Driver from disk provided by the hardware manufacturer”, then click OK.
2. The *Install From Disk* dialog box appears. Identify the appropriate directory on the CD-ROM drive and click OK.

## VL-603 Mainboard Manual

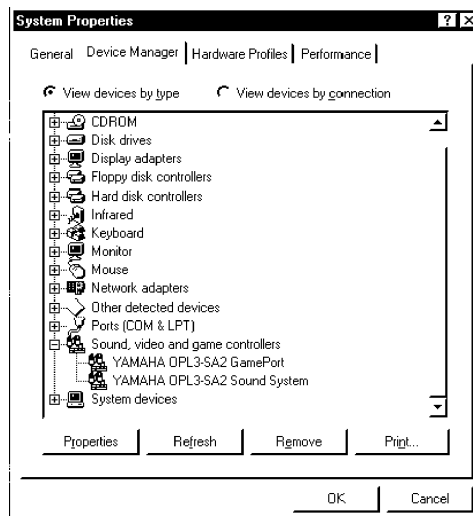
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The drivers are going to be installed into your hard disk drive. This is for the YAMAHA OPL3-SAx sound system installation. The game port joystick driver is detected and installed automatically.

**NOTE :** If the hardware supports modem port or IDE/EDSI hard disk controller, the specified installation process will progress. In this case, continue the installation according to the indication on the screen.

### Confirmation of Installation

To make sure that the OPL3-SAx driver has been installed correctly, open the *System Properties* dialog box in the Control Panel.



If the “YAMAHA OPL3-SAx GamePort” and “YAMAHA OPL3-SAx Sound System” appear, the installation is successfully completed.

### OPL3-SAx Power Management

This function is to control OPL3-SAx power consumption and enable the power saving mode of OPL3-SAx.

## Features

There are four levels of power saving mode which consist of a non-power save mode and three levels of power save mode:

- Non-Power Save mode (N)
- Minimum level of power save (1)
- Intermediate level of power save (2)
- Maximum level of power save (3)

The period that goes into the power saving mode can be set. The power saving mode can be forced to enter into power saving immediately by checking box.

## How To Use

1. Click the Power icon in Control Panel of Windows 95.



Power

2. Click on the OPL3-SAx power management tab in Power Properties and a window will appear. Clicking the right mouse button on the new window will show the corresponding help.

What's This?

## **Non-Power Save Mode**

Power saving mode is not enabled. (FULL ON)

## **Minimum Level of Power Save**

Operating "Minimum level of power save" can be separated by the following three types of setting registry:

### A) LevelPartial = 0

This mode disables OPL3-SAx's digital functions, but analog function and master clock are still working. (Analog output voltage is kept to VREF (2.5V), but muted by the master volume.) Power save mode is entered after the time specified by "Time taken until Power Save mode is".

### B) LevelPartial = 1

This mode disables OPL3-SAx's digital functions except the FM portion, but the master clock is working and analog function is able to use analog input (AUX1, AUX2, LINE) to output sound. FM portion is enabled so that AUX2 becomes effective. Power save mode is entered after the time specified by "Time taken until Power Save mode is".

C) Level1Partial = 2

This mode disables OPL3-SAx's digital functions except FM portion, but master clock is working. Analog functions are disabled except DAC for Synthesizer and 3D enhance controller. At this level, analog input (AUX1, AUX2, LINE) are available to output sound. FM portion and DAC for Synthesizer are enabled so that AUX2 becomes effective. Power save mode is entered after the time specified by "Time taken until Power Save mode is".

**Intermediate Level Of Power Save**

This mode disables OPL3-SAx's digital functions and master clock is stopped, but analog function is still enabled. (Analog output voltage is kept to VREF (2.5V), but muted by the master volume.) Power save mode is entered after the time specified by "Time taken until Power Save mode is".

**Maximum Level of Power Save**

This mode disables all functions of OPL3-SAx. (Analog output voltage becomes ground level (0V).) Power save mode is entered after the time specified by "Time taken until Power Save mode is".

**Time Taken Until Power Save Mode is [ ] Sec.**

This is the place to set the time taken until Power Save mode is entered. The unit of time is expressed in seconds. After sound generator operation (WSS, OPL3, SB, etc.) is completed, this tool waits for the time specified, then Power Save mode is entered. This function is available when "Forced entry to Power save mode" is disabled.

**Forced Entry to Power Save Mode**

Checking this check box will force Power Save mode to be entered. While this setting is enabled, sound generator (WSS, OPL3, SB, etc.) is not available at any time, and when it is disabled, OPL3-SAx functions can be backed to the normal mode automatically by using sound generator, and Power Save mode is entered after the time specified by "Time take until Power Save mode is".

**OPL3-SAx Configuration**

Various configurations can be set by the panel. Click the "OPL3-SAx Config" icon in Control Panel of Windows 95 and the *OPL3-SAx Configuration* dialog box appears.

**SoftSynthesizer Configuration**

The Soft Synthesizer supports GM System Level 1 MIDI data (refer to page 68 for an explanation on the Quality, Reverb, MPU401 OUT, and Full Duplex).



**MIC Volume Control**

When the “MIC +20dB” is checked, microphone volume increases 20dB at play back and recording.

**Tone Configuration**

This function can be controlled using OPL3-SA3.

**Tone Control**

The quantity of bass and treble can be adjusted by using the slider.

**3D Enhanced**

“Ymersion” is Yamaha’s original technology for wide stereo. With the onboard sound chip, four choices appear. Select a mode appropriate for the PC speakers.

3D ENHANCED MODE	TARGET SPEAKER	SPEAKER SIZE
HiFi	Hi-Fi speaker	16 to 38cm
Desk Top	Standard speaker	5 to 12cm
NotePC 1	Small speaker	3.0cm
NotePC 2	Smaller speaker	1.5cm

**Default**

When this button is clicked, each value can be returned to default.

**3D Enhancement Control on Volume Control**

Ymersion, on-chip Yamaha 3D sound enhancement, can be controlled by using the standard Windows 95 volume control. To adjust the wide effect, the item “3D WIDE” appears on the right side. The sound becomes more wide stereophonic when the slider goes up, and normal stereophonic when lower. When adjusting tone of bass and treble, open the *Volume Control* dialog box.

1. Click “Options” and select “Advanced Controls”.
2. Click left-bottom “Advanced” control button.
3. The *Advanced Controls for Volume Control* dialog box appears and the sound tone of bass and treble can be adjusted independently.

**Installation of an Application and the Configuration Utility**

**NOTE:** “DOS MODE” means the state in which you have selected “shutdown” Windows95 in the start menu and “Restart the computer in MS-DOS mode”.

To install the application “YSTATION” and configuration utility (SETUPSA) for DOS MODE of Win95:

1. Play the CD-ROM disc and select the appropriate (APPLI) directory.
2. Launch the MS-DOS prompt.
3. At the C:> DOS prompt, type “A:” then press <Enter> key. If the CD-ROM drive is the E drive, type E: instead of A:, then press the <Enter> key. (Make sure that you are in the “APPLI” directory.)
4. Type “WINSTCD -a” and press the <Enter> key. To use the IDE CD-ROM interface of soundcard, add the option “-c” as follows: “WINSTCD -a -c”.
5. Follow the onscreen instructions to complete the installation process.

### Installation of the Application

To install the application “YSTATION” only, follow all the previous installation instructions except for step 4 which is:

4. Type “WINSTCD” and press the <Enter> key.

### Installation of the Configuration Utility

To install the configuration utility (SETUPSA) for DOS MODE of Windows 95 only, follow all the previous installation instructions except for step 4 which is:

4. Type “WINSTCD -d” and press the <Enter> key. To use the IDE CD-ROM interface of soundcard, add the option “-c” as follows: “WINSTCD -d -c”.

### Using IDE CD-ROM Interface in the DOS-Mode

In the DOS-Mode when using the IDE CD-ROM interface of soundcard, refer to the explanation under the heading IDE CD-ROM Interface on page 69.

### OPL3-SA3 Installation for Windows 95 (OSR2)

Install the Windows 95 driver to run on Windows 95 (OSR2). The OPL3-SA3 supports Windows 95 Plug-and-Play. When you start Windows 95, the automatic search option for the Add New Hardware Wizard works as described below.

### Sound System and Game Port Installation

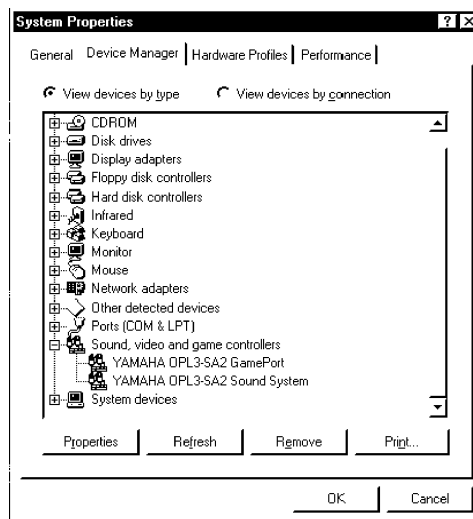
1. The *Update Device Driver Wizard* dialog box appears. Insert the CD-ROM disc into the CD-ROM drive and then click the “Next >” button.
2. The *Update Device Driver Wizard* dialog box changes its contents. Click the “Finish” button and the drivers are going to be installed into the hard disk drive.

This is for the YAMAHA OPL3-SA<sub>x</sub> sound system installation. The game port joystick driver is detected and installed automatically.

**NOTE :** If the hardware supports modem port or IDE/EDSI hard disk controller, the specified installation process will progress. In this case, continue the installation according to the indication on the screen.

### Confirmation of Installation

To make sure that the OPL3-SA<sub>x</sub> driver has been installed correctly, open the *System Properties* dialog box in the Control Panel.



If the “YAMAHA OPL3-SA<sub>x</sub> GamePort” and “YAMAHA OPL3-SA<sub>x</sub> Sound System” appear, the installation is successfully completed.

### OPL3-SA<sub>x</sub> Configuration

Various configurations can be set by the panel. Click the “OPL3-SA<sub>x</sub> Config” icon in Control Panel of Windows 95 and the *OPL3-SA<sub>x</sub> Configuration* dialog box appears.

### SoftSynthesizer Configuration

The Soft Synthesizer supports GM System Level 1 MIDI data (refer to page 68 for an explanation on the Quality, Reverb, MPU401 OUT, and Full Duplex).

### MIC Volume Control

When the “MIC +20dB” is checked, microphone volume increases 20dB at play back and recording.

### Tone Configuration

This function can be controlled using OPL3-SA3. (Refer to page 72 for an explanation on Tone Control, 3D Enhanced, and Default.)

### 3D Enhancement Control on Volume Control

Ymersion, on-chip Yamaha 3D sound enhancement, can be controlled by using the standard Windows 95 volume control. To adjust the wide effect, the item “3D WIDE” appears on the right side. The sound becomes more wide stereophonic when the slider goes up, and normal stereophonic when lower. When adjusting tone of bass and treble, open the *Volume Control* dialog box.

1. Click “Options” and select “Advanced Controls”.
2. Click left-bottom “Advanced” control button.
3. The *Advanced Controls for Volume Control* dialog box appears and the sound tone of bass and treble can be adjusted independently.

### Installation of an Application and the Configuration Utility

**NOTE:** “DOS MODE” means the state in which you have selected “shutdown” Windows95 in the start menu and “Restart the computer in MS-DOS mode”.

To install the application “YSTATION” and configuration utility (SETUPSA) for DOS MODE of Win95:

1. Play the CD-ROM disc and select the appropriate (APPLI) directory.
2. Launch the MS-DOS prompt.

3. At the C:> DOS prompt, type “A:” then press <Enter> key. If the CD-ROM drive is the E drive, type E: instead of A:, then press the <Enter> key. (Make sure that you are in the “APPLI” directory.)
4. Type “WINSTCD -a” and press the <Enter> key. To use the IDE CD-ROM interface of soundcard, add the option “-c” as follows: “WINSTCD -a -c”.
5. Follow the onscreen instructions to complete the installation process.

#### **Installation of the Application**

To install the application “YSTATION” only, follow all the previous installation instructions except for step 4 which is:

4. Type “WINSTCD” and press the <Enter> key.

#### **Installation of the Configuration Utility**

To install the configuration utility (SETUPSA) for DOS MODE of Windows 95 only, follow all the previous installation instructions except for step 4 which is:

4. Type “WINSTCD -d” and press the <Enter> key. To use the IDE CD-ROM interface of soundcard, add the option “-c” as follows: “WINSTCD -d -c”.

#### **Using IDE CD-ROM Interface in the DOS-Mode**

In the DOS-Mode when using the IDE CD-ROM interface of soundcard, refer to the explanation under the heading IDE CD-ROM Interface on page 69.

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