User Guide

**Altec Lansing
Multimedia Speaker System For Digital Audio**

ADA 70

DIGITAL POWERCUBE™ SYSTEM

ALTEC LANSING ®

IMPORTANT

WARNING

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

CAUTION

RISK OF ELECTRIC SHOCK
DO NOT OPEN

The lightning flash with arrowhead, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION: TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER- SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

SAFETY INSTRUCTIONS

Read Instructions — All the safety and operating instructions should be read before the appliance is operated.

Retain Instructions — The operating instructions should be retained for future reference.

Heed Warning — All warnings on the appliance and in the operating instructions should be adhered to.

Follow Instructions — All operating and use instructions should be followed.

Water and Moisture — The appliance should not be used near water – for example, near a bathtub, washbowl, kitchen sink, laundry tub, in a wet basement, or near a swimming pool, etc.

Outdoor Use — Warning: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture.

Location — The appliance should be installed in a stable location.

Ventilation — The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, or similar surface that may block the ventilation openings; or placed in a built-in installation, such as a closed bookcase or cabinet that may impede the flow of air through the ventilation openings.

Heat — The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.

Power Sources — The appliance should be connected to a power supply only of the type described in the operating instructions or as marked on the appliance.

Power-Cord Protection — Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at plugs, convenience receptacles, and the point where they exit from the appliance.

Grounding or Polarization — The precautions that should be taken so that the grounding or polarization means of an appliance is not defeated.

Cleaning — The appliance should be cleaned only with a polishing cloth or a soft dry cloth. Never clean with furniture wax, benzine, insecticides or other volatile liquids since they may corrode the cabinet.

Non-Use Periods — The power cord of the appliance should be unplugged from the outlet when left unused for a long period of time.

Object and Liquid Entry — Care should be taken so that objects do not fall and liquids are not spilled into the enclosure through openings.

Damage Requiring Service — The appliance should be serviced by qualified service personnel when:

• The power-supply cord or the plug has been damaged.

• Objects have fallen, or liquid has been spilled into the appliance.

• The appliance has been exposed to rain.

• The appliance does not appear to operate normally or exhibits a marked change in performance.

• The appliance has been dropped or the enclosure damaged.

Servicing — The user should not attempt to service the appliance. Servicing should be referred to qualified service personnel or returned to the dealer or call the Altec Lansing service line for assistance.

IMPORTANT

To install and operate the Altec Lansing ADA70 Speaker System you must have an enabled USB port with Windows 98 (Insert logo) installed in your computer.

DO NOT CONTINUE IF WINDOWS 98 IS NOT INSTALLED IN YOUR COMPUTER

If you experience any difficulties with your multimedia speaker system, please call us. It may be a simple problem that we can help you solve right over the phone. Call our customer service number: 1-800-ALTEC-88 for assistance before returning the speakers. Thank you.

ADA70 Specifications

Satellites

Drivers (per satellite)	One 3 inch full range
	One 1 inch dome tweeter
Satellite Power	14 Watts (7 watts per driver) at
	>0.8% THD
Frequency Response	250 Hz - 20kHz
Input Impedance	>10k ohms
Input Sensitivity	500mV for output
Signal-to-Noise Ratio	>65dB

Subwoofer

Driver	One 6 1/2 inch dual voice coil
Subwoofer Power	20 Watts @ <0.8%THD
Frequency Response	35 Hz-250 Hz
Signal-to-Noise Ratio	>65dB

Built in Power Supply

UL/CUL/CE Approved

System Requirements

Pentium Processor 100 MHz or higher

16 MB RAM

Windows 98

USB host hub connector

One Year Limited Warranty

Altec Lansing Technologies, Inc. warrants to the end user that all of its computer speaker systems are free from defects in material and workmanship in the course of normaland reasonable use for a term of one year from the date of purchase.

This warranty is the exclusive and only warranty in effect relative to Altec Lansing computer speaker systems and any other warranties, either expressed or implied, are invalid. Neither Altec Lansing Technologies, Inc. nor any authorized Altec Lansing Technologies, Inc. reseller is responsible for any incidental damages incurred in the use of the speakers. (This limitation of incidental or consequential damage is not applicable where prohibited.)

Altec Lansing Technologies, Inc. obligation under this warranty does not apply to any defect, malfunction or failure as a result of misuse, abuse, improper installation, use with faulty or improper equipment or the use of the computer speaker systems with any equipment for which they were not intended.

The terms of this warranty apply only to computer speaker systems when such speakers are returned to the respective authorized Altec Lansing Technologies, Inc. reseller where they were purchased.

Under the terms of this warranty the original consumer purchaser has certain legal rights and may have other rights which vary worldwide.

RF Breakthrough Advisory

If this product is placed too close to a high level source of RF energy, RF breakthrough may be experienced which can cause some audio disturbance. If this happens, move the product as far away as possible from the source until the disturbance is eliminated. Using an audio input cable with a high percentage of shielding is also helpful in reducing or eliminating interference.

The FCC Wants You to Know

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:

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

FCC Warning

Modifications not expressly approved by the manufacturer could void the user authority to operate the equipment under FCC Rules.

Introduction

You are about to enter the extraordinary world of Altec Lansing's True Digital Audio. Your new patented Altec Lansing Speaker System is designed like no other in the world. The ADA70 SPEAKER SYSTEM streams digital audio for the most realistic audio playback you can experience from a computer. Plug the satellite speakers into the USB port of your own PC and digital data is delivered directly from the sound source. The Universal Serial Bus (USB) allows information to flow two ways between your computer and your new Altec Lansing Multimedia Speaker System equipped with USB technology.

The conversion from digital to analog takes place right in the speaker. Taking the D/A conversion out of the PC box avoids interference from internal PC activities and results in distortion-free, crisp, clear audio playback. You'll hear the difference in every business presentation, training or education program, music or video CD or interactive game. What you now have is a true digital audio system that is easy to install and to use whether it's individually through USB, Analog or both. Altec Lansing marries unique product design and USB technology that enables you greater control and enjoyment of your listening environment.

Description

The ADA 70 is especially designed for multimedia computer audio. The 3-piece system delivers 34 watts of powerful sound via a subwoofer that adds low frequency dynamics for drama and realism. Two types of audio inputs allow mixing of computer audio signals with other sources of sound. A patented control circuit dynamically boosts bass at low volume to maintain musical sound realism. When properly installed, the ADA 70 adds a dimension to audio enjoyment never before experienced.

Altec Lansing takes advantage of the Universal Serial Bus (USB) technology and connection to enable simple plug and play capability and the most realistic audio playback possible from a PC. USB driver support is built into Microsoft's Windows 98. Volume, bass and treble are adjusted through the Windows 98 on screen controls, or manually with top panel controls located on the right satellite speaker, literally putting sound design in the hands of the user.

The two satellite speakers are magnetically shielded and can be placed close to the monitor without disturbing images. The speaker in the subwoofer, however, is not magnetically shielded. DO NOT place it close to a monitor. Since the subwoofer does not have to be located in any particular relationship to the satellite speakers, placing it on the floor close to a wall, corner of a room or under a desk gives excellent results.

Figure 1 Front View of System

> The subwoofer is not magnetically shielded and should not be placed close to a monitor. Placing the subwoofer on the floor close to a wall or corner of a room provides maximum bass efficiency.
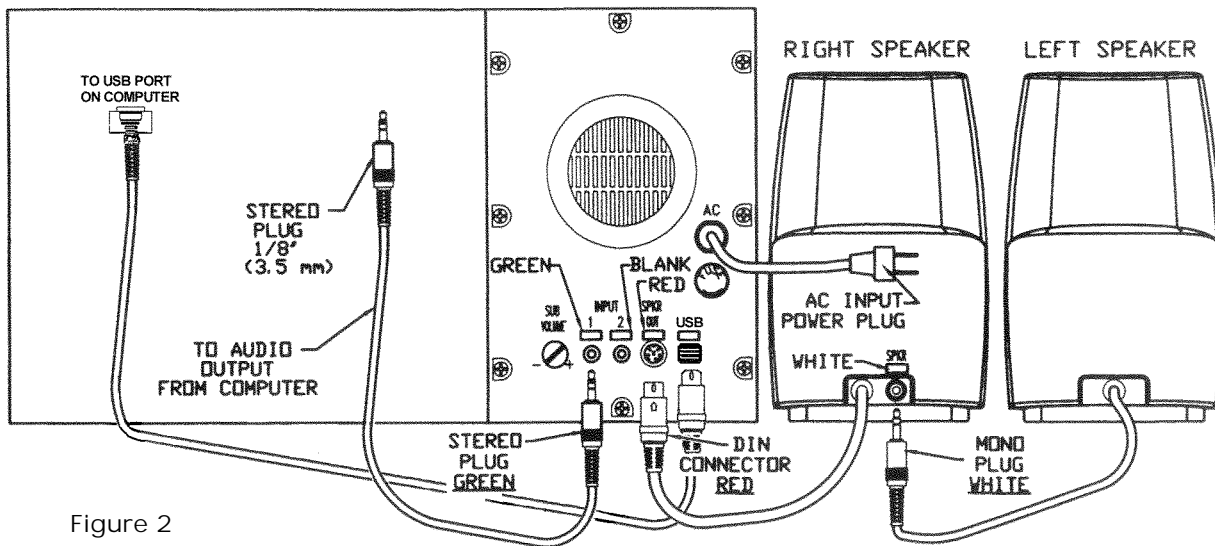
Figure 2

Package Contents

1. Two Speaker Satellites

2. One Subwoofer with the power cord

3. One Mini Stereo Analog Cable (Green)

4. One USB Cable

5. User Manual

> ⚠️ Be sure to examine each piece for damage. If anything is missing contact the retailer from which the Altec Lansing ADA70 Speaker System was purchased.

Connecting the Power Cord

AC Wall Socket Long slot is neutral (ground) side.

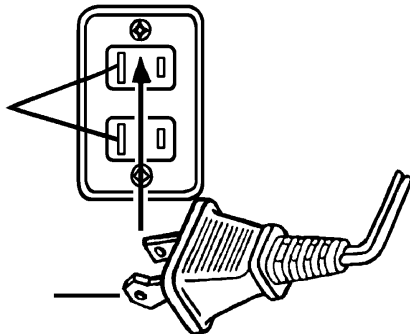Insert the wide blade into the ground side slot.

Figure 3

DO NOT INSERT THE AC POWER PLUG FROM THE SUBWOOFER INTO THE WALL OUTLET UNTIL ALL CONNECTIONS ARE MADE AS SHOWN IN FIGURE 2.

Connecting ADA70 Components

DO NOT CONNECT USB CABLE BETWEEN COMPUTER AND SUBWOOFER UNTIL checking that the ADA 70 speaker system is receiving power.

NOTE: Before making connections, notice that the USB connector cable ends are polarized, not color- coded. The Analog cable ends and the speaker cable ends are color-coded to prevent errors. This color-coding corresponds to connector moldings found on the rear of the subwoofer, right speaker and computer. Figure 2

1. Insert the mono plug colored white located on the left satellite speaker into the jack marked SPKR color-coded in white on the right satellite speaker.

2. Insert the red color-coded DIN (flat head) connector on the right satellite speaker into the SPKR OUT receptacle color-coded red on the subwoofer. Notice that the DIN connector has an arrow. The arrow should face up to make a proper connection. Press the connector firmly into the receptacle to make sure it is fully seated.

3. If a sound card is installed, then insert the stereo plug colored green into the audio jack (Input 1) color coded green on the subwoofer.

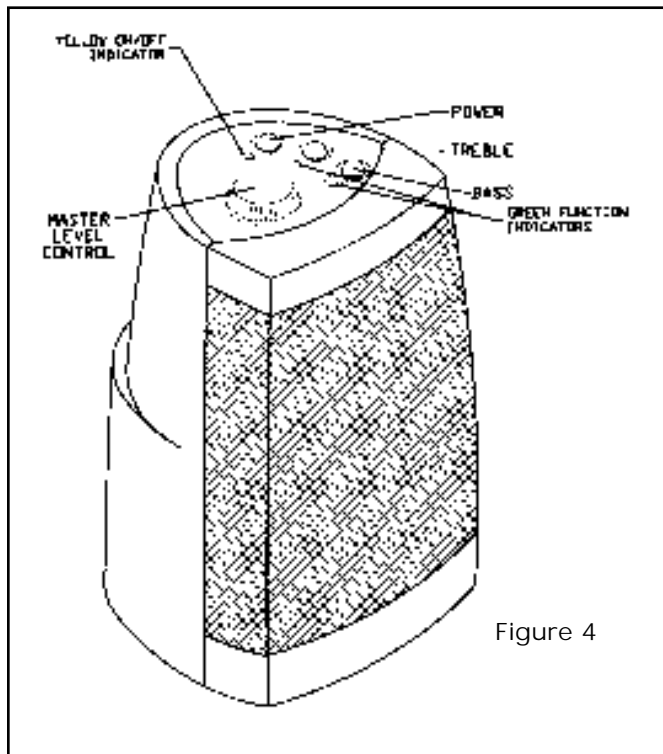4. Plug the power cord from the subwoofer to the AC power wall outlet. Figure 3

CAUTION: To prevent electric shock DO NOT USE the (polarized) plug with an extension cord, receptacle or other outlet unless the blades can be full inserted to prevent blade exposure.

Check that the system is receiving power

To check that the system is receiving power, use the controls on the right Satellite Speaker. Figure 4.

1. Depress power button on right satellite speaker; an amber light should appear to indicate power is on.

2. Depress treble button, a green light should appear to indicate the treble control is operational. Depress the button a second time and the green light will go out.

3. Depress bass button; a green light should appear to indicate the bass control is operational. Depress the button a second time and the green light will go out.

Figure 4

Placement of Speakers

All stereo information is heard from the satellite speakers. The subwoofer contains no stereo information and its sound is non-directional. As a result, the subwoofer does not necessarily have to be placed in any particular relationship to the satellites. Placing the subwoofer on the floor close to a wall or corner of a room provides maximum bass efficiency. The subwoofer is not magnetically shielded and should not be placed near video displays.

The satellite speakers are magnetically shielded and can be placed close to the computer monitor without distorting the video image. Best stereo effect is obtained by placing the speakers as far apart as practical.

Use of Top Panel Controls on Right Satellite Speakers Figure 4

• ON/OFF SWITCH: To turn the speakers on, press the POWER switch. A yellow indicator next to the switch will glow to show the power is on. Press the switch again to turn the power off.

• MASTER LEVEL ROTARY CONTROL: The master level rotary control defaults to master volume control. Rotating the master rotary level control, in this mode, clockwise will raise the volume of all of the speakers simultaneously. Rotating the control counterclockwise will decrease the master volume.

If one of the function buttons has been depressed (BASS or TREBLE), the master level rotary control will adjust the level of the function selected. In this mode, the green function indicator associated with the function selected will be illuminated: see TREBLE/BASS CONTROLS below.

•TREBLE/BASS CONTROLS: To raise or lower treble or bass response, press the switch next to each mode selector, a green indicator will glow to show the function is operational. Turn the ROTARY control clockwise to increase response and counter-clockwise to decrease response. Once the level is set, the indicator next to the function will turn off after a short period. Each function can be turned off quickly by pressing the function button a second time. To reset the Treble and Bass controls to their factory preset (flat) position, depress and hold the corresponding button for a period of approximately three seconds. The green indicator will go out denoting the control has been reset. Once the green indicator is off, the master volume control becomes operational.

Activating the USB Driver

After assuring that the Altec Lansing ADA70 SPEAKER SYSTEM is receiving power, turn on your computer if you have not already done so.

1. Start Windows 98 if you have not already done so.

2. Connect the USB cable, "rectangular" end, into the PC's USB port.

3. Insert the Windows 98 CD-ROM into the appropriate drive.

3. Connect the other "square" end of the cable to the ADA70 Speaker System.

5. Watch the desktop screen on your monitor for the hourglass to appear. If the Windows 98 CD starts automatically, please close the window (Windows 98 CD-ROM). You do not need to reinstall Windows 98.

ADA70 Speaker System Installation Using Windows 98 Device Driver

In order to take full advantage of your new Altec Lansing Multimedia Speaker System, it is important that everything is in the right place in your computer. Windows 98 can do this automatically for you. The "Add Hardware Wizard" will search for new drivers for your Altec Lansing ADA Speaker System. All you need to do is to follow the screen prompts once the hourglass disappears.

The "Add Hardware Wizard" will search for, locate and install the USB Audio Composite Device, the Human Interface Device, the USB Audio Device and the CD ROM Control Device. There are times during each installation when you may be asked to provide necessary information, otherwise default settings are recommended.

Audio Control

Unlike other analog audio speakers, your new ADA 70 Multimedia Speaker System communicates with Microsoft Windows 98 to facilitate easy adjustment of volume, bass and treble. You can customize your audio environment utilizing the manual controls, the software or by combining the two methods.

Accessing Mixer Controls via the Computer

1. Click Start/Program/Accessories/Entertainment/ Volume Control.

Dialog Box for Speaker Volume Control will appear.

2. Click "Advanced" Hot Button. Dialog Box with Advanced controls for adjustments to Bass and Treble will appear. If "Advanced" Hot Button is not present, click options pull down and click advanced controls.

Enabling of Mixer Controls via the Speaker Icon

1. Double click on the Speaker icon on the task bar.

Dialog Box for Speaker Volume Control will appear and follow the same instructions as above.

Use of Manual Controls on the Speakers (Figure 4)

See complete instructions on page 8.

Combining Manual and Computer Controls for Mixing

1. Follow instructions for accessing Mixer Controls via computer.

2. Manually adjust volume, bass or treble control on Right Satellite Speaker. Slider on screen will move according to the manual adjustment made.

SYMPTOMS	POSSIBLE PROBLEM	SOLUTION	NOTE
Distortion (i.e. static, crackling, hissing)	Volume level may be too high and causing speaker to be overdriven	Make sure speaker is connected to line-out jack (unamplified) and not speaker-out jack (amplified); refer to color-coding when making connections. Figure 2	Depending on your sound card, you may also turn off amplifier on sound card (check your sound card manual).

If this product is placed too close to a high level source of RF energy, RF breakthrough may be experienced which can cause some audio disturbance. If this happens, move the product as far away as possible from the source until the disturbance is eliminated. Using an audio input cable with a high percentage of shielding is also helpful in reducing or eliminating interference.

Check with an alternate audio source as mentioned above. |
| | Audio Streaming may not be turned on. | Check volume levels on Windows 98 Speaker control dialog box or controls on right satellite speaker and adjust if necessary. Figure 4 | |
| | Sound card or specific sound file/track may be incorrect. | Be sure that USB Cable is securely seated into computer and ADA70 Speaker System Unit. Figure 2 | For this check, disconnect speakers from sound card and plug into headphone jack on front of CD-ROM player or alternate line-level audio source. |
| No Sound From Speakers | No power to unit. | IF USB device has been previously loaded for another piece of equipment. | Provided power has been verified, it is possible to test the unit by pulling out the audio cable that is connected to the computer and connecting it to an alternate audio source such as a portable CD player.

Check with an alternate audio source as mentioned above. |
| | Volume level on sound card or other audio source may be too low. | Be sure directory is correctly indicated.

Check speakers with another audio source (CD-ROM player) to see if specific file/track may be problem.

Be sure neither bass or tremble buttons are depressed when adjusting volume. Figure 4

Be sure USB Audio Device has been selected. | |
| Subwoofer Emits Very Loud Humming/ Buzzing Noise | Signal cable is not completely inserted into signal jack on subwoofer or speaker. | Make sure signal cables are inserted snugly into signal jacks. Figure 2 | If need be, turn cable slightly when inserting to ensure complete contact.

Depending on your sound card, you may also turn off amplifier on sound card (check your sound card manual). |

ADA70 Digital POWERCUBE ™

ALTEC LANSING ®