

# CUBASIS

AV

for Windows

## Installation

**Steinberg**

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# About this document

This document describes how to get Cubasis AV installed and up and running on your computer. However, it does not give detailed instructions on how to set up your audio and MIDI system and how to trim your settings for highest possible performance. This information can instead be found in the User Guide document.

## This is what you need...

To use Cubasis AV you need the following:

- **A PC computer with a hard disk and a monitor.**  
For more details about the computer requirements, see below.
- **Windows 95/98 or 3.1x installed on the computer.**

### For Audio

- **A Windows Multimedia compatible 16 bit audio card.**  
By audio card we mean a card capable of recording and playing back digital audio using your hard disk as a storage medium. Aside from these basic requirements there are other considerations which affect the performance and use of the card, such as full duplex mode, stereo/mono, etc. See the chapter "Optimizing Audio Performance" in the User Guide document.

## For MIDI

- **At least one MIDI Interface.**

Cubasis AV can be used with any MIDI interface that comes with a Windows Multimedia driver.

- **At least one MIDI instrument.**

Sometimes, the MIDI interface and instrument are built into the same card. As far as Cubasis AV is concerned, such a card is equivalent to a regular MIDI interface connected to an external MIDI synthesizer. You may also find MIDI synthesizers and/or interfaces on many audio cards.

- **Any audio equipment necessary to listen to the sound from your MIDI devices.**
- **At least two MIDI cables.**  
This is only needed if your MIDI instruments are external – not mounted inside the computer.

## For Printing

- **To print out scores, you also need a Windows compatible printer.**

# About the Computer Requirements

## Processing Power

If you want to be able to record and play back audio in Cubasis AV, the absolute minimum requirement is the following:

- **A 486DX, 50 MHz or better, with at least 8 MByte of RAM.**

These are the minimum requirements. For better performance and a higher number of audio channels, a Pentium processor and at least 16 MB RAM is recommended. You will note the difference between running Cubasis AV on a faster computer and a slower one in two areas: better audio performance and quicker screen updates.

## RAM

All the programs running at the same time in your computer “compete” for the system resources. The more memory you have, the more programs you will be able to run simultaneously with Cubasis AV. If Cubasis AV has access to more memory, you will also be able to record more MIDI data.

## Hard Disk

For audio recording, it is very important to have a large and fast hard disk.

- The size of the hard disk determines how many minutes of audio you will be able to record. Recording one minute of stereo CD quality audio requires 10MBytes of hard disk space. That is, eight stereo Tracks in Cubasis AV that continuously play files “eat up” 80MBytes of disk space per recording minute.
  - The performance of the hard disk has a significant impact on the number of audio channels you will be able to record.
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- See the chapter “Optimizing Audio Performance” in the User Guide document for details about all this.
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# Getting the Computer ready

Before you proceed you should have the computer set up:

- **Install Windows and make sure all basic functionality seems to work as intended.**
- **Study the manuals that come with the computer and familiarize yourself with concepts such as file handling, clicking, double clicking, dragging etc.**

## About Printers

If you intend to print scores, install the printer. Use the software included with the printer or some other software you already have installed (such as a word processing application) to verify that the printer works as expected.

## Defragmenting the Hard Disk

If you plan to record audio on a hard disk where you have already stored other files, now is the time to *defragment* it. Defragmentation reorganizes the physical allocation of space on the hard disk in order to optimize its performance. It is done with a special defragmentation program. Defragmentation utilities are included with later versions of DOS and with Windows 95 and are also available commercially. In Windows 95 for example, you might look for the “Defrag” utility.

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- It is crucial to the audio recording performance that your hard disk is optimized (defragmented).
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# Installing the Audio Card and its Driver

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- Your computer may already have an audio card installed. If this is the case, you can skip this section (if in doubt, try any of the methods described under the heading “Testing the Card” below).
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**1. Install the audio card and related equipment in the computer, as described in the card’s documentation.**

**2. Install the driver for the card.**

Drivers are normally included with all types of regular PC audio cards. Some are even included with Windows itself.

Depending on which version of Windows you use, and whether the audio card is “Plug’n’Play compatible” or not, the installation of the card is done differently - refer to the documentation that comes with the card.

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- You might have to make Base Address and IRQ settings for the card. Make absolutely sure the settings in Windows are in accordance with the settings actually made on the card. Also make sure no two cards in your computer use the same Base Address or IRQ settings!
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## Testing the Card

To make sure the audio card will work as expected, perform the following two tests:

- **Use any software included with the card to make sure you can record and play back audio without problems.**
- **Use the MediaPlayer application (included with Windows) to play back audio.**

Both tests of course assume you have the outputs of the card connected to a sound system or headphones.

## Installing the MIDI Interface/Synthesizer card

Installation instructions for the MIDI Interface should come with the interface. However, here's an outline of the necessary steps:

1. **Install the interface (or MIDI synthesizer card) inside your computer or connect it to a "port" (connector) on the computer (depending on which type of interface you have).**
2. **If the interface has a power supply and/or a power switch, turn it on.**

**3. Install the driver for the interface, as described in the documentation that comes with the interface.**

If you run Windows 95, this is most likely done using the "Add New Hardware" feature in the Control Panel. It is likely that you will need a floppy disk supplied by the manufacturer of the MIDI interface.

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- There might be settings you have to make for Base Address and IRQ for the interface/synth card. Make absolutely sure the settings in Windows are in accordance with the settings actually made on the card. Also make sure no two cards in your computer use the same Base Address or IRQ settings!
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# Installing Cubasis AV

A special installation procedure unpacks all the files and puts them in the right places, automatically.

1. Start the computer and let Windows start.
2. Insert the CD-ROM.
3. Open the CD-ROM in the "My Computer" window, and double click on the file "Setup\_av.exe".

The setup program now launches. After a welcome message, you will be asked which components you want to install:

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<b>Cubasis AV</b>	This is the actual program.
<b>Adobe Acrobat</b>	This installs the Adobe Acrobat Reader software, which is necessary for you to be able to view the electronic documentation. You may install it separately from the CD-ROM later on, if you wish.

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4. Activate the components you want to install, and click "Next" to continue the installation.

A number of dialogs will now appear, guiding you through the installation of each selected component. Finally, a dialog box informs you that the installation was successful.

**5. You may be requested to restart your computer at this point. Do so.**

**6. Remove the CD-ROM and store it in a safe place.**

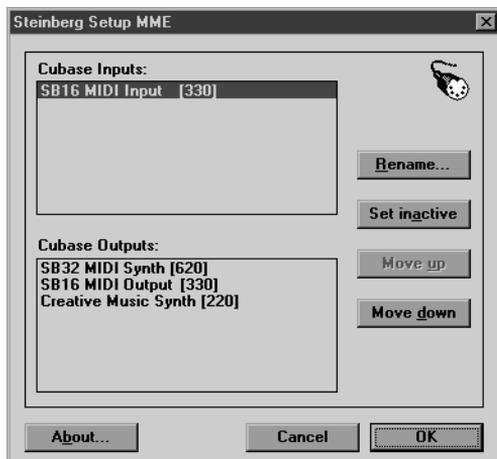
This completes the installation of your Cubasis AV program! But, you're not really done yet...

# Checking and Setting Up MIDI Inputs and Outputs

Cubasis AV can handle several MIDI Inputs and Outputs. These are managed through Windows Multimedia Extensions (MME). However, you have the option of activating/deactivating Inputs and Outputs, making them appear in a certain order inside the program, etc., by opening the Setup MME dialog. This also gives you a chance to check whether your MIDI interface is properly installed and recognized by Windows:

1. Open the Start menu and locate the Cubasis AV submenu.
2. Select the item "Setup MME".

The Setup MME dialog opens:



The two lists show the available MIDI Inputs and Outputs respectively. If your MIDI interface does not appear on this menu, you need to exit the dialog and check your interface connection and installation again. There may be several reasons for the problems:

- The interface is not properly connected to the computer.
- The interface is not turned on or is not receiving power.
- The Windows driver for the interface has not been installed properly (check the setting in the Control Panel).
- The interface base address or IRQ settings are wrong or in conflict with other hardware in your computer.
- There is something wrong with the interface.

Once you find your MIDI interface(s) properly listed in the MME Setup dialog, you can do the following:

**3. To change the order of the Outputs, select an item and use the “Move Up/Down” buttons to move it in the list.**

This will affect the order of the MIDI Outputs when listed in Cubasis AV (you can do the same to the MIDI Inputs, but this is not very useful since the Inputs aren't listed in the program).

**4. To deactivate an Input or Output, select it and click on the “Set Inactive” button.**

An Inactive Input or Output will not appear in Cubasis AV.

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- At this point, it is probably best to leave all Inputs and Outputs active.
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**5. To rename an Input or Output, select it, click “Rename” and type in a new name.**

This name will be used inside Cubasis AV. If for example the original name is very long, it can be practical to give it a shorter name, so that it won't get truncated on the menus in the program.

**6. Close the dialog.**

Now it's time to check the MIDI Inputs and Outputs from within Cubasis AV!

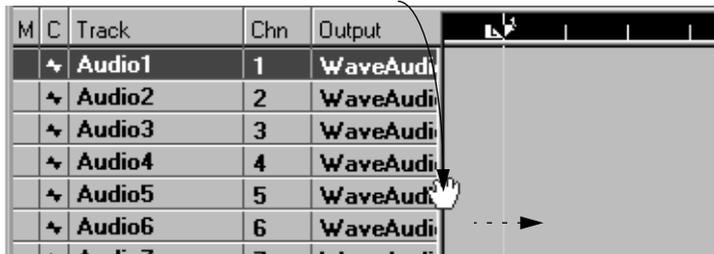
**7. Locate the Cubasis AV program icon on your Start menu and select it to launch the program.**

A startup dialog appears. Cubasis AV starts and displays an Arrange window.

**8. In the Arrange window, locate the column labelled “Output”.**

If it isn't visible, click on the Divider between the Track List and the Part Display (see picture below) and drag it to the right until you see the Output column.

If the Output column isn't visible, drag the divider to reveal it.



**9. Click in the Output column for a MIDI Track to pull down a small pop-up menu.**

The note symbol indicates a MIDI Track.

This pop-up lists your MIDI Outputs.



This menu should list all your MIDI Outputs, as in the Setup MME dialog.

There is no MIDI Input selection within Cubasis AV - the program always responds to MIDI signals on all available Inputs (provided they are activated in the Setup MME dialog). However, if you have a MIDI instrument hooked up to the MIDI Interface already, you can check your MIDI Input simply by playing something. The red “In” indicator at the lower right corner of the Transport Bar should blink each time you press a key.



This light indicates MIDI Input activity.

## Installation done! Where do I go next?

On your hard disk you will find full documentation of all features in the program. If you know you want to learn as much as possible about this program, right from the start, dive directly into this manual.