

# Welcome to Cubase way of Making Music

There is some essential information included in this file to help you make effective use of the Cubase for Windows Demo Program. Please read this file through before using Cubase. By doing so you will get a better understanding of what Cubase can do. This file is has three main sections.

**System Requirements:** What kind of hardware will you need.  
**Cubase Installation:** Getting the Cubase ready to Go.....  
**Your First Recording:** Your first steps in Cubase operation.

Have fun but please remember, Cubase is supplied with a illustrated manual with over 350 pages, this file can only hint at whats possible.

## System Requirements

### Your Computer

To run this program you need an MS-DOS compatible 386 SX (or better) that runs at 16 MHz or faster. You need a VGA or Super VGA compatible display with gray scales or colours. The minimum amount of FREE RAM is two megabytes. That is not the same as a computer with two megabytes of actual RAM present. After all your extensions are loaded, Cubase needs two megabytes. You also need a hard disk, a mouse and a MIDI interface.

### MIDI Interfaces

You can use Cubase with different interfaces. There is direct support for many different models, directly within Cubase. Others may be supported via Multimedia Extensions. If any interfaces have been added to the list since this file was written, you will find information about them in the READ\_ME document that may have been added to this disk.

### Windows

This program runs under Windows, version 3.1 or later. We recommend you to use 3.1 or later. If you have a computer that runs at at least 33 MHz with hardware hard disk caching, you can run Windows in 386 Enhanced mode (also called "/3" mode). Otherwise, please use Standard mode (also called "/s" mode).

### Disk

The program comes on one 3.5" DS DD disk. It is not copy protected.

### Note Off Controllers

Some Roland synthesizers send a MIDI message called All Notes Off as soon as you release all keys on the keyboard. This may lead to very confusing results when the same synth is used to play back music from more than one Track. If you experience this problem you should filter out this message using the Controller filters in the MIDI Setup dialog box.

### Running Status

There is a way to make MIDI transmission more compact, called Running Status. This was not a part of MIDI from the beginning so not all units can accept this data compression method. If you experience problems with a Korg DDD1 or DDD5, an Ensoniq Mirage, a Sequential Prophet T8 or a very old Yamaha DX7 you should make sure that you are not transmitting under Running Status from your computer. Check the setting in the MIDI Setup dialog box. It will be obvious if you have this problem since the instrument will hardly play back sequenced material at all.

# Cubase Installation

If your computer isn't already set up as it should be, do so, following the instructions in the computer's Operation Manual. Install the MIDI interface you plan to use and turn it on if needed.

Install Windows and verify that it works as expected. If you plan to use Multimedia Extensions you should familiarize yourself with its concept by reading the Windows manual.

Make yourself reasonably familiar with operations like handling disks and using the mouse (clicking, selecting, double-clicking and dragging).

The following text assumes that you are using a one MIDI In, one MIDI Out interface. If you have a more advanced type, or are using several interfaces, we can't make any definite suggestions on how you should connect your gear. Please refer to the interface manual.

Connect the MIDI Out of the keyboard (or other MIDI device) you plan to use for recording, to the MIDI In of the computer.

Connect the MIDI Out of the computer to the MIDI In of the first instrument. Then connect the MIDI Thru of that instrument to the MIDI in of the next device. Continue to chain the units in this way until they are all connected to the computer. If you plan to use more than three sound sources we recommend that you use a separate MIDI Thru box instead of the Thru jacks on each unit. If more than one instrument doesn't have a MIDI Thru, you will have to get a MIDI Thru box.

Make all audio connections, turn on the instruments and verify that they sound (if possible).

Set each instrument to receive on a certain MIDI Channel. Or if you have multi-timbral instruments, set each sound (Timbre, Part, Program, Patch) to receive on a certain MIDI Channel.

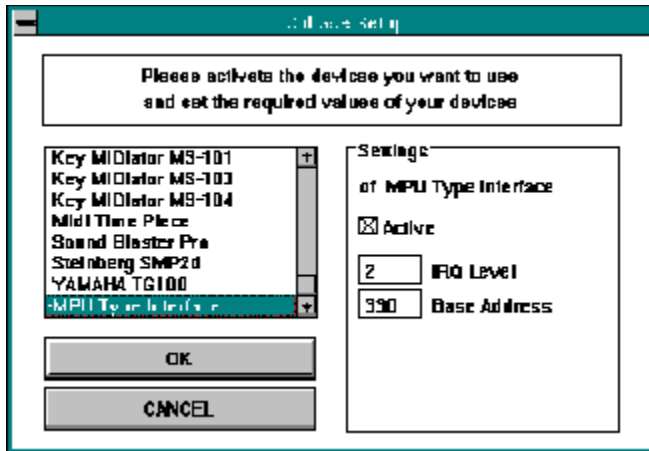
## Installing the Program on the Hard disk

Cubase comes with an installation program that will install the program and all the files it needs on to your harddisk. To start the installation program run Windows and select Run from the File menu. You have to type A:\INSTALL or B:\INSTALL depending the drive you use. Use the instructions displayed by the installation program. After you have done the installation you will have a program group in your program manager with Cubase, the MIDI Setup program and this instruction manual.

It is now time to "tell" Cubase what MIDI interface(s) to expect, or "ask it" to use Multimedia Extensions for Windows (hereafter abbreviated MME).

We do not mean to discourage you, but there is a multitude of PC- models out there and a MIDI interface interacts with the computer on a pretty low level. If you are unlucky you might run into problems when configuring for the interface, problems that require you to familiarise yourself with such technical terms as base addresses and interrupt request levels. Please make your Setup settings very carefully to avoid potential problems. If in doubt, contact an expert.

Double click on the Setup program icon. The program launches, and automatically displays the Device Configuration window.



This is a simple program displaying a list of available driver routines, software need for using Cubase with a specific MIDI Interface. If there are many drivers available, the list can be scrolled.

When you click on one of these drivers, it gets selected and a number of settings for it appears to the right. The only common setting for all drivers is the Active check box. If this is crossed, a small dot appears to the left of the driver file name indicating that it is active. There are two ways to activate a driver, click once on it and make sure the checkbox is crossed, or simply double click on the driver name. All the currently active drivers have a small black dot to the left of their names.

Now use the methods outlined above to make sure the drivers you plan to use are active (and that all else are deactivated!).

For many of the drivers you have to fill in some values (serial port, base address, IRQ and what not). This is described for each type of interface below.

Some interfaces can be used at the same time as others, but not all. As for exactly which combinations of interfaces will work, only experimentation can tell.

Once you have activated the driver(s) you plan to use and have made all the settings for it (them) you can click OK.

Select Exit from Setup's Options menu.

Double click on the Cubase program icon. A startup screen appears, Click on it to make it go away. Cubase starts, displaying an Arrange window with the title Untitled plus a Transport Bar with some tape recorder like controls and a number of buttons.

If the program has a problem establishing contact with an interface, a dialog box will inform you. Please Quit the program, and use Setup to check your Interface installation again.

Observe: This doesn't apply to interfaces connected to the serial ports of the computer, such as the Key Electronics Mediator series. Cubase has no way of telling if serial port devices are properly connected and functioning.

There is a number of reasons Cubase might not be able to establish contact with an interface:

The interface is not properly connected.

The interface is not turned on or is not receiving power.

You haven't done the correct settings for this interface in the Setup program.

There is something wrong with the interface.

There is also a way of seeing directly in the program if the Cubase has proper communication with the interface:

If you pull down the Output menu for a MIDI or Drum Track, a list of available Outputs will appear. If some interface is missing completely in this list, the driver file somehow didn't get activated. The interface itself might be properly installed.

If one or more of the Output list items are grey, Cubase will have loaded the driver but for some reason can't establish any contact with that interface. This does not apply to serial port interfaces as stated above.

Before you go on, make sure that your MIDI Thru setting is correct. If you use a synth for recording, set your synth to Local Off if possible, and check the Thru Active box in Cubase's MIDI Setup Dialog box on the Options menu.

If you use a separate MIDI device like a MIDI keyboard with no sounding capabilities, a guitar to MIDI converter with no built in synth or similar, Cubase should also be set to Thru Active. If you use a synth or similar that can't be set to Local Off, the options are a little bit more complicated due to the nature of MIDI.

Play your MIDI keyboard or other device. Check the "IN" box on the Transport Bar so that you are sure that Cubase receives MIDI data. If you have Thru activated, the "OUT" box just below it should indicate Output of data also.



The IN and OUT symbols on the Transport Bar indicate MIDI In and Out activity.

If the Installation was successful on all points you may now proceed to the next section, Your First Recording!

## Changing Interface Settings

If you later buy another interface or replace the one you have, you may need to select another driver file.

Make sure you have Quitted Cubase.

Start the Setup program.

If the Device Configuration window doesn't appear automatically, select Configuration from the Options menu.

Make all the necessary settings as described above and below.

Click OK, and select Exit from the Options menu.

Start Cubase, and use the procedure outlined above to make sure you have proper contact with the interface.

Songs you made with the old drivers will now output to the ports of the new Interface. you may have to set the Tracks to new Outputs to make the Songs play back as they did with

the old interface.

## Supported Interfaces

Here's information about the currently supported interfaces and the settings in Setup for each one of them. Information about interfaces that are supported, but not found in the list below can be found in a READ\_ME document that you may find in the Cubase directory after installation.

When the Interface requires you to set a base address and an IRQ, please make absolutely sure you here enter the same settings as are actually done on the interface.

### MPU-compatible interfaces

Cubase supports all MPU-compatible interfaces. It uses them in UART mode, which means that all timing is handled by Cubase, not the card. Any metronome on the card is not supported, Cubase instead uses the sound capabilities in the computer to produce a click.

For installation details we refer to the documentation that came with the card.

When you install the MPU interface driver you have to set a base address and an IRQ Level.

These are two settings that are also done on the card, probably with so called dip switches. The most widely used values are base address 330 and IRQ Level 2, but you will have to check the documentation that came with the card. It is absolutely imperative that the settings on the card and in the Setup program are identical, or Cubase won't recognise the card (or you may get even worse problems).

### Steinberg SMP-II

This is a 2 in, 4 out, rack mounted MIDI interface with direct support for time code. It allows you to output on up to 64 separate output MIDI channels and to use Multi recording with separation from the two inputs.

How to install and configure the SMP-II is described in the manual that comes with the unit, but you have to make a base address and IRQ Level in Setup. The default values are IRQ 7 and Base address 300.

### Mark of the Unicorn MIDI Time Piece

This is a 8 in, 8 out, rack mounted MIDI interface with direct support for time code. It allows you to output on up to 128 separate output MIDI channels and to use Multi recording with separation from the first four inputs.

How to install and configure the MTP is described in the manual that comes with the unit, but you have to make a base address and IRQ Level setting in Setup. The default values are IRQ 2 and Base address 340.

### Key Electronics Midiator MS-101

This is 1 in, 1 out interface that is connected directly to the serial port of your computer. It is designed especially for laptop computers where it is necessary to have the interface outside the computer, but it can be used with any PC model. The only setting necessary for it is the number of the serial port you choose.

There is no way for Cubase to tell if the Midiator is correctly connected to the computer. Therefore, it is always displayed in black in the Output pop-ups in Cubase if the driver is activated.

## Key Electronics Midiator MS-103

As above, but with 1 in and 3 out, allowing for Output on up to 48 separate MIDI Channels.

## Creative Labs Sound Blaster Pro

This is actually a card for playing back digital audio, but it also incorporates a 1 in 1 out MIDI interface. Cubase does not support the audio part of the card, only the MIDI part.

How to install and configure the Sound Blaster Pro is described in the manual that comes with the unit, but you have to make a base address and IRQ Level in Setup. The default values are IRQ 5 and Base address 220.

## Fostex

This is a driver for communication with the Fostex R8, G16 and G-24S tape recorders. You can only use one of these at a time. The driver is not used for sending or receiving regular MIDI data as the other MIDI interface drivers are. Instead, when you have it installed, a "Fostex" item appears on the "Timebase" menu in the Synchronization dialog box. This allows you to use Tape Tracks with the above mentioned recorders. There is one setting for this driver, the number of Tracks on your tape recorder. For the R8, set it to 8, for the G-16 set it to 16, etc.

## Multimedia Extensions

Multimedia Extensions (MME) is not a physical interface, but rather a part of the operating system Windows 3.1 (or later). Selecting this means that MIDI data is sent from Cubase to Windows which then transfers it along to an interface or another program. The main reason for using MME is when you want to use an interface for which there is no direct Cubase support, but for which a so called "MME driver" exists.

## Other Files in the Directory

When you installed Cubase on your hard disk, a number of files were copied to a Cubase Directory. Most of these are necessary for running Cubase, but some of them are example files and other files of interest to all users.

DEF.ALL is a settings file, a Song which will be automatically loaded on startup. If you load this Song, change some settings in the program and save the Song again under the same name, you have customized Cubase's settings.

DRUMSETS is a directory containing yet other directories with ready made drum maps for a number of drum machines and synthesizers on the market. Please use the Open File feature with File type Drum Map selected, to load one of these drum maps.

There might be a READ\_ME file in the Cubase directory, containing vital information about changes to the program since this manual was written. Open it using any word Processor or Text Editor.

There will be a set of Groove maps, supplied by DNA, included with the program. See the READ\_ME file for more information about this.

## Advanced Information

The files. For those who have the need, we here describe the other files in the Cubase directory. You don't need to read the following text to use the program.

CUBASE.EXE is of course the program itself. To be able to use it you also need two files called MROSDLL.DLL and CUBASE.INI and two folders called FONTS and MROS. Do not move these folders and files.

The MROS folder contains the drivers for Devices you can use. If you for instance have a Steinberg SMP-II, you need to have a file called MR\_SMP2.DLL or MR\_SMP2.DL in your MROS folder.

When a driver is active its extension is "DLL", when it is inactive its extension is "DL". You use the program Setup (the file SETUP.EXE in the Cubase directory) to make a driver active/inactive.

The driver files are very small, but if you absolutely need to, you can remove the ones you don't need.

In the Cubase Directory you should also find a file called DEF.ALL. You should definitely keep the DEF.ALL in the Cubase directory, because this will make the program start with some sensible settings. You can later alter this file from within Cubase and thereby customize the settings of program.

## Your First Recording

This section gives you a short introduction to how recording is done in an Arrange window in Cubase. This text does not give you all the details.

This text assumes that you have already followed the steps in the "Installation" section, that you are using a regular one port interface, and that you have no problems with the MIDI Thru setting. You should have the default Arrangement in the DEF.ALL song that came with the program, displayed on the screen. This gets automatically loaded when you start the program. This text also assumes that you have one or more MIDI instruments, each set to one MIDI Channel, or that you have a multitimbral instrument (or several), with each sound set to one MIDI Channel.

Play your keyboard and check the IN box on the transport bar. It should flicker to indicate that Cubase is receiving data. If you have Thru turned On (in the MIDI Setup dialog box), the OUT box flickers along, indicating outgoing data.



On the left side of the screen you have the Track List. It now displays 16 Tracks set to send on MIDI Channel 1 to 16. Use the right (increase) and left (decrease) mouse buttons to set the first Track to the right MIDI Channel by changing the value in the "Chn" column.

M	C	T	Track	Chn
J			Track 1	1
J			Track 2	2
J			Track 3	3
J			Track 4	4
J			Track 5	5
J			Track 6	6

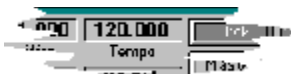
Once you've got the setting right, double click in the "Instrument" column on that first Track. A small box opens up where you can enter a name for the sound or instrument you use. Do this and press [Return] when you are finished.

M	C	T	Track	Chn	Instrument	Output
J			Track 1	1		MPU
J			Track 2	2		MPU
J			Track 3	3	K2000 R	MPII
J			Track 4	4		MPII

If you dont see the instrument column, maybe you need to move the window divider. Locate this thin vertical double line and grab it with the mouse. Dragging it to the left or right will show more or less information about the tracks.

M	C	T	Track	Chn	Instrument
J			Track 1	1	
J			Track 2	2	
J			Track 3	3	
J			Track 4	4	
J			Track 5	5	
J			Track 6	6	
J			Track 7	7	
J			Track 8	8	

If you want to change the tempo, locate the Tempo box on the Transport Bar, and change the value using the left and right mouse button.



Click on Record or press [\*] on the computer keyboard.



After the two bar count-in, start playing for as long as you wish. When you are finished, click on the Stop button or press [0] on the numeric part of the computer keyboard. A black rectangle should be displayed on the first Track. This is a (selected) Part, a recording on a Track. A Part can be dragged around on the screen. If you hold down [Alternate] while dragging you are making copies (duplicating).



Press [0] on the numeric part of the computer keyboard twice so that you return to the beginning of the Song.

Click on Play or press [Enter] to play it back. If you wish, you can use Rewind or Fast Forward at any time to move back and forth without stopping first. If you decide to Stop first, you can use Fast Forward with the right mouse button to hear the music played back in a faster tempo (cueing).



After playing back the Track, return to the beginning of the Song again.

Select a new Track by clicking on it.

♪	Track 7	7	MPU
♪	Track 8	8	MPU
♪	Track 9	9	MPU

Set it to the MIDI Channel for the next sound you wish to record with, and enter an Instrument name for that also.

Record on the second Track just as with the first.

If you make a mistake somewhere there are many ways to go, but we will only suggest two of them here. Either just press [Control]-[Z] on the computer keyboard to make the last recording undone (you can even "undo the undo" if you like). Or if you want to "repair" a section of your recording, use the Rewind and Fast Forward buttons to move to some point before that section. To tell Cubase that you want to Replace music rather than Overdub on the same Track, click once on the Rec Mode switch on the Transport bar, so that it changes to "Replace".



Play back the music. At any time, click on Record or press [\*] to enter recording. Click again to exit record mode without stopping playback. Rewind again if you need to (in Play mode) and Punch in and out as many times as you wish.

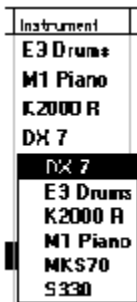
Click on the Record Mode switch once so that you put Cubase back in Overdub mode.

If you want to Quantize a recording, (remember that you don't have to stop playback or even recording to do this) first set the right Quantize value. There is a box at the top of the screen labelled Quantize. If you press the mouse button inside that box, a menu falls down where you can select a Quantize value. This value is valid until you change it.

Quantize	16		
	Off	Off	Off
	64T	64	64.
	32T	32	32.
	16T	16	16.
	8T	8	8.
	4T	4	4.
	2T	2	2.
	1T	1	1.

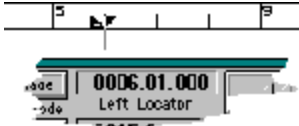
Now select a Part by clicking on it. Then pull down the Functions menu and select Over Quantize or press [Q] on the computer keyboard. You can select several Parts to be Quantized at the same time if you hold down [Shift] while clicking on them.

Continue to record more Tracks. If you want to use an instrument or a sound that has been used before, press any mouse button in the Instrument column, and select that instrument/sound from the menu that falls down. The Track is then automatically set to the right MIDI Channel.



If you want to make a recorded Track send out on another MIDI Channel, just change the "Chn" value for that Track.

If you want recording with a count-in (Precount) to start from some other point than the beginning, click in the Bar Display (above the Parts) at that position, using the left mouse button. What you do is to change the setting of the Left Locator, and the new setting is shown numerically in another box on the Transport Bar.



The Parts that are created can be moved freely between Tracks and duplicated if you wish. They can also be split, joined, copied, repeated, lengthened shortened, grouped and much more. And all this while the music is playing! If you press the right mouse button somewhere in the Part Display, a Tool Box appears that you might want to experiment with.

If you want to delete one or more Parts, select them as with Quantizing and press [Delete] on the computer keyboard.

Normally when you are happy with your piece, you would pull down the File menu and select Save As... (no, you don't have to stop playback to Save). Click on Filetype "Arrangement" in the dialog box that comes up. As this is the DEMO version of the Cubase for Windows Program, you cannot save your music.

Select New from the File menu to get a new Arrangement window. This has no Tracks yet.

Double-click anywhere in the Track column, and a new Track appears. You can create as many Tracks as you wish in this way.

This time you don't have to create Instruments, they are already there when you press the left mouse button in the Instrument column. Select an Instrument for the first Track you wish to record on, and select that Track by clicking on its name.

You are now ready to try the absolute fastest way of making up grooves or short sections of music you ever experienced-cycled recording in Cubase. This time you will record four bars, but the Cycle could be any length. Check the Left and Right Locator boxes on the Transport Bar, they should say 1.1.0 and 5.1.0. If they don't, press the function key [F1] on the computer keyboard.

Click on Cycle on the Transport bar.



Click on Record.

It is unnecessary to deactivate recording at any time during the following procedure. You can deactivate recording at any time by clicking on the Record button, if you want to, but you don't have to!

Start playing after the two bar Precount. The music Cycles over the four bars and you can add as much as you want on each lap.

When you so wish, select a new Track and record on that. Use the "Instrument" column to make each Track output to the right sound/instrument. If you need to, make up more Tracks by double-clicking.

You can Quantize, move Parts and duplicate as you wish and also select new instruments or MIDI Channels for each Track at any time.

If you make a mistake, press [B] to delete the whole recording on that Track or [V] to just delete the last lap you played anything on. And if you come up with anything good, remember to save it to disk!

When you have something you are almost satisfied with, double click on it. A new window opens with a piano keyboard at the left side and a Position Bar just like the one in the Arrange window at the top. You will here see some or all of the notes you recorded, displayed as on a piano roll.

If you wish, you can keep playback going in a Cycle. If you find the automatic scrolling disturbing, use the Options menu to turn "Follow Song" off (no tick).

If you want to hear the edited Part only, during playback, activate "Ed Solo" on the Transport Bar.

Use the scroll bars to locate some notes you want to work on. Press the right mouse button to bring up the Tool box. With the mouse button pressed, select a Tool. Use this Tool in the display, with the left mouse button. Here are some hints:

- The Arrow Pointer is for selecting and moving.
- The Pen is for drawing and lengthening/shortening.
- The Eraser is for deleting.
- The Kickers are for kicking notes around.

When you are finished editing, click on the Control-menu box in the window's title bar, and select "Keep" from the menu that appears. This closes the window and makes your edits "permanent". (You can also do this by double clicking on the Control menu icon or by simply pressing [Return].

Following this short description, you have of course barely scratched the surface of Cubase's power. But you have probably gotten a feel for how simple it is to use. Continue to experiment and try out functions as it suits you. Some things you will have to read in the manual about, and other things will be obvious from the start. But the way this program works, your intuition will always put you on the right track. Good Luck!