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All of us here work hard to provide powerful but affordable software. From the day in 1987 when Cakewalk for DOS 1.0 first shipped, we have never used copy-protection. We thank you for your purchase of this product.

Thank you.

## Glossary

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### activate

Activating a window means to make it the topmost, current window. The window caption changes to show that it is the active window. If an application's main window is active, then one of its "child" windows may be active, too.

### event filters

Event filters let you specify criteria that an event must meet in order to be affected by some operation. Each row specifies a kind of event to include or not. If you check including a kind of event, the rest of the row indicates certain values that an event must have to still be included.

## velocity

In MIDI, how fast you strike a key is called the velocity. Each note event has a velocity stored with it. Usually the velocity controls how loud and/or "bright" the sound of the note is, just like with a real piano. But this depends on the synthesizer or sound card: velocity can sometimes have no effect (as with an "organ" patch) or set to control other characteristics of the sound.

#### patch changes

A type of MIDI command that tells an instrument to use a different sound. Numbers from 0 to 127 each select a different sound -- what sound depends on the synthesizer: MIDI doesn't require that certain numbers mean certain kinds of sounds. This flexibility has many benefits. But an optional "General MIDI" specification does assign sounds (like "Grand Piano") to particular numbers, making it easier to distribute MIDI Files that will sound similar on different equipment.

Note that manufacturers use an incredible variety of jargon for "patch", including "program", "voice", "preset", and other terms. We stick with "patch" because it's one of the oldest phrases and one which doesn't have other meanings for electronic music.

**synchronization**A mode of playback where Cakewalk follows an external source of timing instead of its internal clock.

From and Thru markers
This pair of times let you tell most Cakewalk editing commands what region of time you want changed.

### **Now marker**

Shows the current time. As you play or record, this will change to reflect the current time. While not playing or recording, as you move through screens you will change the current time. Some editing commands -- like Paste -- also propose using the Now marker for a time.

## CAL

Cakewalk Application Language. CAL is an interpreted language for writing custom editing commands. CAL programs can get user input, display messages, and insert, delete, and modify events in tracks.

#### controller

MIDI uses controller messages for a variety of things. Each controller message has a **number** for what it controls. The MIDI spec assigns many controller numbers to standard functions. For example, controller 1 is the Modulation Wheel, controller 7 is Volume, controller 10 is Pan, and controller 64 is sustain pedal. However, not every synthesizer responds to every assigned controller number. And some synthesizers have special functions assigned to other numbers. You need to check the manual for a synthesizer to see what it responds to. Each controller message also has a **value**. For instance, 0 for Modulation Wheel means no modulation, and 127 means full modulation. The Sustain Pedal is an "on/off" controller, so 0 means no pedal and anything else means the pedal is down.

### System Exclusive

MIDI data that is understood only by a particular brand/model of synthesizer and ignored by everyone else. Each manufacturer gets a unique ID code with which to tag their System Exclusive messages. Typically used to save/restore data describing patches (sounds) and/or configuration information for a synthesizer. Cakewalk can receive this data, store it, and transmit it, but cannot understand what it means.

### layers (Staff view)

When a staff contains other than chordal harmony -- that is, overlapping notes with different durations -- separate layers must be created. Each layer has its own stem direction, beaming, and rests. Cakewalk has no internal limit to the number of layers, but aesthetics will impose a practical limit. If too many notes, too close in pitch are crammed together; Cakewalk cannot resolve these "aesthetic errors". You can help by moving parts to different tracks, so they can have a staff to themselves.

#### Contents

#### Welcome to Cakewalk Professional for Windows 1.0!

While using the program, you may get context-sensitive help -- help about what you're currently working on -- at any time. Press the **F1** function key, or, press the Help button of any dialog box. This help system will pop up and take you directly to the relevant topic.

Point and click on any of these items for help:

<u>Answers to Common Questions</u> (Save yourself a call to Tech Support!) <u>Keyboard Shortcuts</u> Glossary

Help on Menus: File Realtime Mark GoTo Edit Track Window Settings

Descriptions of differences between Cakewalk for Windows and Cakewalk 4.0 for DOS are in this style.

## **Keyboard shortcuts**

```
FUNCTION KEYS:
              F1 Help (context-sensitive)
       CTRL+F1 Edit/Run CAL
         ALT+F1 Edit/Undo
              F2 Edit/Copy
CTRL+F2 Edit/Cut
SHIFT+F2 Edit/Paste
CTRL+SHIFT+F2 Edit/Paste to One track
SHIFT+F3 Realtime/Step record
         ALT+F4 File/Exit
              F5 GoTo/Time
         ALT+F5 GoTo/Search Next
(The F6 keys work only with Window/Options/DOS F6 Keys on:)
              F6 Switch to Track/Measure view
       SHIFT+F6 Switch to Track/Measure view
       CTRL+F6 Open or switch to Event-list view
         ALT+F6 Open or switch to Piano-roll view
              F7 GoTo/From
              F8 GoTo/Thru
              F9 Mark/From=Now
             F10 Mark/Thru=Now
      CTRL+F12 <u>File/Open</u>
      SHIFT+F12 File/Save
             F12 File/Save As
    OTHER KEYS:
        CTRL+Z Edit/Undo
         CTRL+C Edit/Copy
         CTRL+X Edit/Cut
         CTRL+V Edit/Paste
  CTRL+SHIFT+V Edit/Paste to One track
```

# **README.WRI**

This file contains important information about changes since the printed documentation went to press. You should read this file.

Cakewalk SETUP installs an icon for README.WRI that you can double-click on.

Or, choose the "Help/View README.WRI file" command.

# Save changes?

You are quitting Cakewalk or loading a new file, but your changes to the current file have not been saved.

- To save your changes before quitting or loading a new file, press **Yes**.
- To simply quit or load another file, press **No**. Your changes will be lost.
- To back out of quitting or loading a new file, press **Cancel**.

# **Cannot Undo later**

The action you are about to take cannot be reversed later using the **Edit/Undo** command.

- If you are unsure about proceeding and you haven't saved your work, press **No**. Use <u>File/Save</u> to save your workfile now, then take this action again.
- To proceed anyway, press **Yes**.

#### WINCAKE.INI

This file is located in the directory you installed Cakewalk. It contains information that Cakewalk needs to store between sessions, for example, your preferences. Many items are stored here from choices you make in Cakewalk's menus and dialog boxes. But some items can be changed only by directly editing this file using the Windows Notepad application.

If you make changes to this file, they will not take effect until the next time you start Cakewalk. Also, when you quit Cakewalk it writes some information about your preferences to this file. So if you need to directly edit WINCAKE.INI, it is best to quit Cakewalk, make your changes, then restart Cakewalk.

WINCAKE.INI is divided into sections. The section beginning with the line

[WINCAKE]

is where you should add information if no particular section is mentioned. For example, if you are advised to, "add the line AskSysxAutoSend=1 to WINCAKE.INI", you should put it on the line under [WINCAKE], like this:

[WINCAKE] AskSysxAutoSend=1 The File menu contains mostly commands for relating to files, plus a few others.

**New** Wipe out the whole work and start fresh.

**Open**Load a work from a disk file
Save
Save a work to a disk file

Save AsSave a work to a disk file under a new nameMergeLoad a work's events into the Scrap bufferExtractSave the Scrap buffer into a work file

**Exit** Exit the program

# File/New

Wipes everything out and gives you a fresh slate, almost as if you had quit and re-started.

If your work has changed since it was last saved to disk, you will be given a chance to save it first.

Also loads \$DEFAULT.WRK if found.

See Also: <u>File Menu</u>

### File/Open

The **Open** command lets you load Cakewalk workfiles or Standard MIDI Files.

Loading a file replaces the file currently in memory. If you have made changes since it was last saved, you will be given a chance to save it before loading the new work.

## System Exclusive Auto-send banks.

If you load a Cakewalk workfile containing **System Exclusive Auto-send banks**, you will be asked whether you want to send them. Answer "No" if you are loading a file from someone else that may contain unknown System Exclusive data. That way you will avoid accidentally changing your synthesizer's data. If you want to defeat this prompt, add the following line to your **WINCAKE.INI**:

AskSysxAutoSend=0

### **Dropping files from the File Manager**

You can also load files by dragging them from the Windows 3.1 File Manger and dropping them anywhere on Cakewalk's window. If Cakewalk is playing when you drop the file, playback will stop, the new file will be loaded, and playback will be turned back on again.

See Also:

### File/Save

Use **File Save** to save a changed file using the same name.

If you started the work using  $\underline{\textbf{File New}}$ , it has no name. You're asked for a name by  $\underline{\textbf{File}}$   $\underline{\textbf{Save As}}$ .

Cakewalk for Windows uses the same file format as Cakewalk 4.0 for DOS unless you have tracks with more than 32,000 events, system exclusive banks with more than 64K bytes, or other things not supported by Cakewalk 4.0 for DOS. In such an event, Cakewalk for Windows stores the new feature in a new "file chunk". Cakewalk 4.0 for DOS will ignore and discard that portion of the file when loading.

See Also:

#### File/Save As

Lets you save the work in memory as a Cakewalk workfile or as a Standard MIDI File.

The ".WRK" or ".MID" file extension will be automatically appended to the name, depending on the type of file you've selected.

*Note:* Standard MIDI File format cannot hold all the information that is stored in a workfile. Save a file in this format only when you want to use the file with another program that reads MIDI Files. See the User's Guide for details.

Cakewalk for Windows uses the same file format as Cakewalk 4.0 for DOS unless you have tracks with more than 32,000 events, system exclusive banks with more than 64K bytes, or other things not supported by Cakewalk 4.0 for DOS. In such an event, Cakewalk for Windows stores the new feature in a new "file chunk". Cakewalk 4.0 for DOS will ignore and discard that portion of the file when loading.

See Also:

# File/Merge

**File Merge** lets you load a Cakewalk workfile into the Scrap buffer. From there, you can **Edit Paste** the material to the location you want.

See Also:

<u>File Menu</u>

# File/Extract

File Extract saves the current Scrap buffer into a Cakewalk workfile.

**Hint:** The **Edit Copy** and **Edit Cut** commands move a group of events into the Scrap buffer.

See Also: File Menu

# File/Exit

If your work has changed since you last saved it, you will be asked if you want to save it now. If you do not save your work, it will be lost.

See Also:

# Realtime

The Realtime menu contains commands relating to recording and playback.

<u>Play</u> Record **Rewind** 

Punch-In Set automated punch-in/punch-out times Record notes one step at a time

Step record Multi-take mode Turn multi-take mode on/off

Set Auto-Rewind, Auto-Stop, and Auto-Restart **Auto-shuttle** 

## Realtime/Play

- You can also start/stop playback by pressing play button in the control bar, or by pressing the SPACEBAR.
- The "panic" button on the control bar also stops playback -- plus it turns all notes off and zeroes all continuous <u>controllers</u>.
- The loop button on the control bar is a short-cut for selecting **Realtime/Auto-shuttle**, checking all the options (rewind/stop/start), and setting the rewind and stop times to the <u>From and Thru markers</u>, respectively. In other words, set From and Thru, then click the loop button. As long as this button is on, if you change From and Thru, the Auto-shuttle times will be automatically be updated. *Double-*clicking this button (when it's off) calls up the full **Realtime/Auto-shuttle** dialog.

See Also:

### Realtime/Record

• Starts/stops recording. You can also start/stop recording by pressing the record button in the control bar or pressing the R key.

When you stop recording, if anything was recorded you get a "Keep take?" prompt. Answer Yes to keep the new material, or answer No to discard it.

The punch-in button is a short-cut for selecting **Realtime/Punch-In values**, enabling punch, and setting the punch-in and -out times to the <u>From and Thru markers</u>. The punch-in and -out times will change if you change From and Thru, but not until the next time you start recording. *Double-clicking* this button (when it's off) calls up the full **Realtime/Punch-In values** dialog.

See Also:

Multi-take mode Realtime Menu

# Realtime/Rewind

Rewinds to the beginning or to the optional **<u>Auto-Shuttle</u>** rewind time. You can also rewind by pressing the rewind button on the control bar or pressing the W key.

See Also:

#### Realtime/Punch-In values

You can enable Punch-in mode, and set an automated punch-in and punch-out time for recording. In this mode, no matter where you start and stop recording, material will only be recorded in the punch region you've set. Moreover, the recorded material will replace, rather than be merged with, existing material in that time region.

**Tip:** The default recording mode is "sound-on-sound", i.e., merging new recorded material with existing material. To put it into "overwrite" mode, enable Punch-in and set the punchin time to 1:1:0 and the punch-out time to something very big like 1000:1:0.

See Also:

Record

# Realtime/Step Record

Lets you record music one rhythmic step at a time.

Note that you step-record while *inside* the step-record dialog box. Once you leave that window, you are no longer in step-record mode.

See the User's Guide for details.

See Also:

#### Realtime/Multi-Take Mode

Multi-take mode makes it convenient to record and audition many takes of a given passage. When you finish recording, you get the usual "Keep take?" prompt.

If you answer "No" to "Keep take?", the take is discarded as usual. Then you're asked about trying another take. If you answer "Yes", recording is restarted from the same place.

If you answer "Yes" to "Keep take?", that track is muted, and recording is restarted from the same place but with the next blank track.

Cakewalk for Windows remembers your multi-take mode preference from the last time you ran Cakewalk for Windows. It ignores the setting in Cakewalk workfiles that Cakewalk 4.0 for DOS uses.

See Also:

Record Realtime Menu

#### Realtime/Auto-Shuttle

Auto-Shuttle provides various options for automatically stopping, rewinding, and restarting playback under certain conditions.

**Auto-Rewind** rewinds to a time you specify whenever playback or recording is stopped.

**Auto-Stop** stops playback or recording at a time you specify.

**Auto-Restart** restarts playback whenever it is stopped -- except when you stop playback manually. For example, it restarts if playback was Auto-Stopped, if the end of the work was reached, or if you pressed the Rewind button.

Note that if all three are enabled, this results in looping of all tracks from the Auto-Rewind time to the Auto-Stop time. The loop button on the control bar is a short-cut for setting this. This looping may have a slight delay associated with it, especially if you have certain **Settings MIDI Out** options turned on.

#### **Auto-Shuttle and synchronization**

If the clock is set to <u>MIDI Sync</u> or <u>SMPTE/MTC Sync</u>, checking Auto-Restart is handy for a "chase mode": when playback stops, Cakewalk will restart, which means waiting for sync mode. You can start and stop playback on the tape deck or drum machine and Cakewalk will follow. Auto-Stop and Auto-Rewind are ignored when you are using synchronization.

See Also:

# Mark

The Mark menu contains commands relating to setting the values of the <u>From and Thrumarkers</u>.

<u>From value</u>	Enter a specific value for the From marker
Thru value	Enter a specific value for the Thru marker
From = now	Set the From marker equal to Now (the current time).
Thru = now	Set the Thru marker equal to Now (the current time).

From = start
Thru = end
Set the From marker to 1:1:0 (the beginning).
Set the Thru marker to the end of the work.

# Mark/From value

Lets you enter in a specific value for the From marker.

From and Thru markers.

See Also:

### Mark/Thru value

Lets you enter in a specific value for the Thru marker.

The Thru marker is used by many commands, especially editing commands, to indicate the end time of a region. The From marker indicates the start of the region. You mark the region *before* choosing the editing command.

See Also:

### Mark/From = Now

Sets the From marker to be equal to the Now marker. Now always shows the current time. So, this is useful for setting the From marker, "live," while the work plays back -- especially if you use the F9 shortcut key.

*Note:* If the current window is the Track/Measure view, then the From time is rounded down to the first tick of the current measure.

From and Thru markers.

See Also:

### Mark/Thru = Now

Sets the Thru marker to be equal to the Now marker. Now always shows the current time. So, this is useful for setting the Thru marker, "live," while the work plays back -- especially if you use the F10 shortcut key.

*Note:* If the current window is the Track/Measure view, then the Thru time is rounded up to the last tick of the current measure.

From and Thru markers.

See Also:

## Mark/From = Start

Resets the From marker to the start of the work (1:1:0). Useful when you want the whole work to be included in an edit operation, assuming you also set Thru to the end.

From and Thru markers.

See Also:

### Mark/Thru = End

Resets the Thru marker to the end of the work (the time of the last event from all tracks). Useful when you want the whole work to be included in an edit operation, assuming you also set From to the beginning.

From and Thru markers.

See Also:

### GoTo

The GoTo menu contains commands relating to going to a different time in the work.

TimeEnter a specific time to go toFromGo to the time in the From markerThruGo to the time in the Thru markerBeginningGo to the start of the work (1:1:0)

**End** Go to the end of the work

**Previous measure Next measure**Go to start of this or previous measure
Go to end of this or next measure

**Search** Go to the next event that meets criteria you supply

**Search Next** Find the next event that meets the criteria you specified in the

last Search.

# GoTo/Time

Lets you enter in a specific time to go to. The Now marker reflects the change.

See Also: **GoTo Menu** 

# GoTo/From

Takes you to the time indicated by the From marker. In effect, sets Now equal to From.

From and Thru markers.

See Also:

# GoTo/Thru

Takes you to the time indicated by the Thru marker. In effect, sets Now equal to Thru. <u>From and Thru markers</u>.

See Also:

# GoTo/Beginning

Takes you to the beginning of the work (1:1:0).

See Also: **GoTo Menu** 

# GoTo/End

Takes you to the end of the work (the time of the last event from all tracks).

See Also:

## **GoTo/Previous Measure**

If you are in the middle of a measure, this takes you to the start of that measure.

If you are already at the start of the measure, takes you to the start of the previous measure.

See Also:

# **GoTo/Next Measure**

If you are in the middle of a measure, this takes you to the end of that measure.

If you are already at the end of the measure, takes you to the end of the next measure.

See Also:

# GoTo/Search

Finds an event at or later than the current time which meets certain criteria that you specify in an <u>Event Filter</u>.

See Also:

# **GoTo/Search Next**

Finds the next event that matches your previous **GoTo Search** command.

See Also:

#### Edit

The Edit menu contains commands relating to moving and changing regions of your work.

Regions are events (a) from selected tracks and in the time range specified by the <u>From and</u>

Thru markers

UndoUndo the most recent edit or Undo.CopyCopy a region to the Scrap buffer.CutMove a region to the Scrap buffer.PasteMove scrap buffer back to the work.

Paste to One trackMove Scrap buffer back to only one track.QuantizeRound off the starting times of events.LengthChange temporal length of region.SlideSlide a region ahead or back in time.InterpolateScale values; "search-and-replace".RetrogradeReverse the order of events in region.

**Transpose** Transpose pitches of Note and/or KeyAft events.

**Controller fill** Insert a series of <u>controller</u> events.

**Fit To Time** Adjust tempos to make region last specified amount of time.

**Fit Improvisation** Insert tempos to fit free-form playing to time grid.

**Run CAL program** Run an existing <u>CAL</u> program.

### Edit/Undo

Reverses the effect of the most recent command from the Edit menu. If the last Edit menu choice was **Undo**, then this command will be called "Redo", plus the name of the command that was undone.

See Also:

**Edit Menu** 

### **Cakewalk Windows Clipboard Formats**

The <u>Cut</u>, <u>Copy</u>, and <u>Paste</u> commands work with music data on the Windows Clipboard in several formats.

#### Standard MIDI Files

One format is MIDI File format: the data on the Clipboard is a memory image of a Standard MIDI File. Any other application capable of understanding MIDI Files and recognizing this Clipboard format can exchange data with Cakewalk. You can copy and paste data to and from Cakewalk and the other application. This is faster than creating an actual Standard MIDI File on disk, and there is no temporary file for you to delete later if it was a temporary transfer.

Note to programmers: Cakewalk calls **RegisterClipboardFormat()** with the string "Standard MIDI File". The handle that you put on or get from the Clipboard is a block of memory from **GlobalAlloc()** that contains nothing more or less than the exact image of a Format 0 or 1 Standard MIDI File. Please help our mutual customers by supporting this simple protocol for data exchange under Microsoft *Windows*.

#### **Private format**

A private format is recognized by Twelve Tone Systems applications. For example, if you are running two copies of Cakewalk for Windows at once, and copy-and-paste music data between them, the recipient will use the private format simply because it is faster.

### Edit/Copy

This command works differently depending on the active window. If you are working in a text window (like Comments or CAL), then this copies the selected text to the Windows Clipboard.

Otherwise, this operates on music data. It copies any combination of track events, tempo changes, and meter changes in the time region From..Thru to the Clipboard.

If you check Track events, then events from selected tracks are copied. You can opt to use an Event Filter to further define what events will be copied.

You cannot cut meter changes unless the <u>From and Thru markers</u> are set to cover a time range that is an exact number of measures long. Since a meter defines how long a measure is, by definition you cannot cut other than in units of whole measures.

See Also:

<u>Cut</u> Paste

Paste to One track

**Edit Menu** 

**Cakewalk Windows Clipboard formats** 

#### Edit/Cut

This command works differently depending on the active window. If you are working in a text window (like Comments or CAL), then this cuts the selected text to the Windows Clipboard.

Otherwise, this operates on music data. **Cut** moves any combination of track events, tempo changes, and meter changes in the time region From..Thru to the Clipboard.

If you check Events, then events from selected tracks are cut. You can opt to use an <u>Event Filter</u> to further define what events will be cut. But note that the **Delete hole** and **Use Event Filter** options are mutually exclusive: unless you delete *all* the events in the region, there won't be an empty region to delete.

You cannot **Cut** meter changes unless the <u>From and Thru markers</u> are set to cover a time range that is an exact number of measures long. Since a meter defines how long a measure is, by definition you cannot cut other than in units of whole measures.

See Also:

Copy

**Paste** 

**Paste to One track** 

**Edit Menu** 

**Cakewalk Windows Clipboard formats** 

### **Edit/Paste**

This command works differently depending on the active window. If you are working in a text window (like Comments or CAL), then this pastes text from the Windows Clipboard.

Otherwise, this works on music data. **Paste** inserts a copy of the Clipboard data in your work at the current position. Events are pasted to the same tracks they were originally from which they were originally <u>Cut</u> or <u>Copied</u>. The pasted material can be repeated any number of times, with the repetitions inserted one after another. This lets you create repeating themes quickly.

See Also:

Paste to One track
Edit Menu
Cakewalk Windows Clipboard formats

### **Edit/Paste to One track**

Works just like **Paste**, but forces all the events to be pasted into a single track.

Use this to  $\underline{\textbf{Cut}}$  or  $\underline{\textbf{Copy}}$  something from one track, then paste it to an entirely different track.

With respect to tempo and meter/key signature changes, **Paste to One track** works no differently than regular **Paste**. The tempo map and the meter/key signature map are still treated as separate "tracks".

*Hint:* To paste multiple tracks to multiple different tracks, try using the drag-and-drop feature of the **Measure pane** in the Track/measures view.

See Also:

**Edit Menu** Cakewalk Windows Clipboard formats

### Edit/Quantize

Rounds off the starting times and/or durations of note events to a resolution that you pick.

Durations are given a value of the resolution amount minus one. That way, notes do not run into each other, legato-style, causing problems on some synthesizers. Durations smaller than the resolution amount will be rounded *up* to the resolution minus one -- not down to zero.

Normally operates only on note events in the selected region (selected tracks in the time range From..Thru). If you use an <u>Event Filter</u>, however, it will operate on whatever kinds of events you have specified there.

See Also:

**Edit Menu** 

### Edit/Interpolate

**Interpolate** is a powerful command that lets you search for certain events and replace their parameters with new, interpolated values.

You will be given two <u>Event Filter</u> dialogs to fill in. The first box works like a normal Event Filter, except how you specify the ranges is important. The second Event Filter is used only for its range fields. The replacement scales parameter values from the first range to the second range.

See Also:

**Edit Menu** 

### Edit/Length

Lets you stretch or shrink the starting times and/or the durations of note events by a percentage that you pick. You specify this in a percentage of the original values. For example, 200% would make things twice as long, 50% would make them half as long.

This command does *not* change the tempo map. Instead, it modifies the actual starting times and durations of the events.

See Also: Edit/Fit To Time Edit Menu

# Edit/Retrograde

Reverses the order of events. The first shall be last and the last shall be first.

See Also:

**Edit Menu** 

### **Edit/Transpose**

Transposes the pitches of Note and/or KeyAft events up or down by the amount you specify.

<u>Diatonic math option</u> The <u>Amount to transpose by is...</u>

checked...

Yes the number of half-steps

No the number of diatonic steps (based

on the current key signature)

Unless you check the <u>Use event filter</u> option to exclude one of the two kinds, both Note and KeyAft events' pitches are affected by **Tranpose**.

See Also:

**Edit Menu** 

### Edit/Slide

Moves a region earlier or later. This is similar to the <u>Time+</u> track parameter, but this permanently changes the event times.

*Note:* You cannot slide a region earlier than 1:1:0. The From time must be at least as big as the amount of time you are sliding. Otherwise you will simply get an error message.

Example: If From is 1:1:30, you cannot give an amount less than -30.

See Also: **Edit Menu** 

#### **Edit/Controller fill**

Lets you insert a series of MIDI <u>controller</u> or pitch wheel events. The data values can range from one value to another over time.

In the dialog box, you pick a controller type, a MIDI channel, a starting and ending value for the controller, and a starting and ending time (the <u>From and Thru markers</u> are proposed as a default). Cakewalk inserts a series of controller events so that the value changes smoothly over time from the starting to the ending value. Controller fill never inserts more than one event on the same tick. If there are any existing controllers of that type in the time region, they are deleted before the new ones are inserted.

You can also create controller changes by drawing in the <u>Controllers view</u>. Drawing is more flexible: you can draw any shape, whereas **Controller fill** creates only linear (straight line) changes. However, **Controller fill** can create an even change over a very long period of time, which might be awkward for you to draw by hand.

See Also:

**Edit Menu** 

## **Edit/Fit To Time**

This lets you make a region last a specific amount of real-world time. **Fit to Time** changes the duration of the region by changing the Tempo map to speed up or slow down, without changing the musical (measure:beat:tick) times of the events in the region.

See Also:

Tempo view Edit/Length Edit Menu

## **Edit/Fit Improvisation**

Lets you fit a free-form improvisation into the Measure:Beat:Tick timing grid, without altering how it sounds, by both changing the event times and inserting offsetting tempo changes.

You need to refer to the *User's Guide* for a full description of the steps needed to prepare for this command.

See Also:

**Edit Menu** 

## **Edit/Run CAL Program**

Lets you pick and execute a <u>CAL</u> program file. CAL programs work on events the same way as built-in Cakewalk editing commands: they change events from selected tracks in the From..Thru time region.

See Also:

<u>Creating and modifying CAL programs</u> <u>Edit Menu</u>

#### Track

Most of the Track commands correspond to parameters in the <u>Track pane</u> of the Track/measure view. The advantage of these command equivalents is that they let you change a parameter on many tracks at once. These topics explain what the track parameters are:

Name
Status
Loop
Key+
Vel+
Time+
Port
Channel
Patch
Pan
Volume

The following commands do not correspond to track parameters. They are commands that operate on tracks:

SoloMute all tracks except the current track.Un-soloRestore the muted settings of tracks.CloneBack up a track, putting a clone of it on another track.

Wipe Delete all events; don't reset track parameters.

**<u>Kill</u>** Delete all events and reset all parameters to defaults.

# Track/Name

Each track has a name, which you may use for any purpose you wish.

The **Track/Name** command lets you change the name of all the selected tracks at once.

See Also:

Track Menu

### Track/Status

Muted tracks are silent, but may be un-muted instantly during playback.

The **Track/Status** command lets you toggle the muted status of all selected tracks at once. "Toggles" means that non-muted tracks become muted, and vice versa.

See Also:

Track Archive Track Menu

#### Track/Archive

**Archived** tracks are "super-muted": they can't be un-muted during playback.

Why would you want to do this? If you have a large number of muted tracks (for instance, with different versions of solos, or bits of thematic material), you may encounter timing problems. Cakewalk still processes muted tracks during playback so that it can be ready to un-mute them instantly at your command. Archiving them means you "promise" not to unmute those tracks during playback. Thus they can be ignored, possibly improving performance.

The **Track/Archive** command toggles the archived status of all selected tracks at once. "Toggles" means that non-Archived tracks become Archived, and vice versa.

See Also:

<u>Track Status (muting tracks)</u> Track Menu

# Track/Loop

Tracks may play from 1 to 9998 times.

9999 has a special meaning: keep looping as long as other, non-looping tracks are still playing -- that is, keep repeating the track along with non-repetitive tracks.

The **Track/Loop** command lets you change the Loop parameter for all selected tracks at once.

See Also:

# Track/Key+

The **Key+** parameter is an amount added to the MIDI key number (pitch) of all note events in the track. It is an on-the-fly transposition that does *not* change the key number that is actually stored for each note event. **Edit/Transpose** lets you do the latter.

The **Track/Key+** command lets you change the Key+ parameter for all selected tracks at once.

See Also:

# Track/VeI+

The **Vel+** parameter is an amount added to the <u>velocity</u> of all note events in the track. This parameter is an on-the-fly transposition that does *not* change the velocity that is actually stored for each note event.

The **Track/Vel+** command lets you change the Vel+ parameter for all selected tracks at once.

See Also:

### Track/Time+

The **Time+** parameter is an amount added to the starting time of all the events in the track. This parameter is an on-the-fly transposition that does *not* change the time actually stored for each event. (The **Edit/Slide** command lets you do the latter.)

The **Track/Time+** command lets you change the Time+ parameter for all selected tracks at once.

See Also:

# Track/Port

The **Port** parameter controls which port tracks will be routed to. Ports correspond to one or more MIDI Out devices that you've set up using **Settings/MIDI Devices**.

The **Track/Port** command lets you change the Port parameter of all selected tracks at once.

See Also:

<u>Track Menu</u>

### Track/Channel

The **Channel** parameter forces all events in a track to be transmitted to a particular MIDI channel. Each event has a MIDI channel stored actually stored with it, so the Channel parameter can also be "--" or "none", letting a track contain events for more than one MIDI channel.

The **Track/Channel** command lets you change the Channel parameter of all selected track(s) at once.

See Also:

### Track/Patch

The **Patch** parameter is for transmitting a <u>patch change</u> before playback starts. Tracks may contain actual patch change events, for example to change patches midway through a track. For that, use the <u>Event-list view</u>. But using the Patch parameter is easier when a track needs only a single patch for its whole length.

If you want to use the Patch parameter, you must also give the track a forced MIDI channel using the **Channel** parameter. Otherwise Cakewalk won't know what MIDI channel to use for the patch change.

The **Track/Patch** command lets you change the Patch parameter of all selected tracks at once.

See Also:

#### Track/Pan

The **Pan** parameter is for transmitting a MIDI Pan (10) <u>controller</u> event before playback starts. Tracks may contain actual pan events, for example to change panning midway through a track. For that, use the <u>Controllers view</u>. But using the Pan parameter is easier when a track needs only a single pan setting for its whole length.

If you want to use the Pan parameter, you must also give the track a forced MIDI channel using the **Channel** parameter. Otherwise Cakewalk won't know what MIDI channel to use for the pan event.

The **Track/Pan** command lets you change the Pan parameter of all selected tracks at once.

See Also:

### Track/Volume

The **Volume** parameter is for transmitting a MIDI Volume (7) <u>controller</u> event before playback starts. Tracks may contain actual volume events, for example to change volume midway through a track. For that, use the <u>Controllers view</u>. But using the Volume parameter is easier when a track needs only a single volume setting for its whole length.

If you want to use the Volume parameter, you must also give the track a forced MIDI channel using the **Channel** parameter. Otherwise Cakewalk won't know what MIDI channel to use for the volume event.

The **Track/Volume** command lets you change the Volume parameter of all selected tracks at once.

See Also:

# Track/Solo

Mutes all tracks except the current track.

The original track muted settings are restored when you select  $\underline{\textbf{Track Un-solo}}$ .

See Also:

# Track/Un-solo

Restores the track muted settings that were in effect before you used **<u>Track Solo</u>**.

See Also:

# Track/Wipe

Deletes all events from all selected tracks.

Unlike **Track Kill**, **Wipe** preserves the track parameters like the name.

Like **Track Kill**, the events are not Cut to the scrap buffer, they are simply deleted, so *there* is no way to get them back. The From and Thru markers are ignored -- all events in the selected track(s) are wiped out.

See Also:

### Track/Kill

Kills all events from all selected tracks and resets the track parameters to their default values. The events are not Cut to the scrap buffer, they are simply deleted, so *there is no way to get them back*. The From and Thru markers are ignored -- *all* events in the selected track(s) are killed.

See Also:

Track Wipe Track Menu

# Track/Clone

Makes a copy of the selected track's events and/or all its parameters.

Useful for quickly making a back-up copy of a track before embarking on some major editing operation, or to double a part on a different MIDI channel.

See Also:

#### Window

Cakewalk has a variety of windows.

#### Permanent windows:

**Track/measure view** View of track parameters and measures.

<u>Comments</u> Comments notepad.

Tempo Map
Meter/Key sig Map
System Exclusive
Graphical view of tempo changes.
List of meter (time signature) changes.
System Exclusive data generic librarian.

CAL<br/>MarkersCAL program editor.MarkersMarkers for times.FadersGraphical faders.

### Windows that you create/destroy:

**Piano-roll** Graphical view of a track's notes.

**Event list**Controllers

List of a track's events (all kinds, not just notes).

Graphical view of a track's controller data.

Staff Notes from multiple tracks transcribed on a staff.

### Window options:

<u>Auto-activate</u> Graphical view of a track's notes. <u>Control bar at bottom</u> Control bar at bottom of window.

**DOS F6 view keys** Use Cakewalk for DOS F6 shortcut keys

### Track/measure view

The Track/measure view is your main window in Cakewalk. It is divided into two halves.

On the left is the **Track pane**, which lets you view and change track paramaters.

On the right is the **Measures pane**, which is useful for getting an overview of your work and performing "global" editing operations.

When you move the cursor over the border between the two panes, it changes to a left/right arrow. Click and drag the border left or right.

If you double-click on the border, you can toggle the parameters section size between its maximum and whatever other size you had last set by dragging. (This is similar to maximizing *vs.* restoring a window.)

See Also:

### Track pane

The Track pane lets you view and change track parameters.

**Select tracks:** You may select tracks by clicking on the track number in the leftmost column. A track is selected when its number is displayed in reverse video. Double-clicking selects or un-selects all tracks.

#### **Enter new values:**

With the mouse Double-click on a field

Wiht the Use the arrow keys to move the highlight

keyboard to the field, then press ENTER.

This will let you type in new information directly on the screen, or, it may call up the **<u>Track</u> parameters dialog**.

### Increase/decrease values:

With the mouse Click on a field and drag the mouse toward

you or away from you.

<u>With the keyboard</u> Press + and - to add/subtract by 1. Press ] and [ to add/subtract by 10.

**Customizing the layout:** You can arrange the position and width of the columns using the mouse. Click in the header row to drag a column to a new position. If you click near the right edge of a column, you can change its width.

See Also:

Track parameters Measures pane Window Menu

#### Measures pane

The Measures pane lets you see in which measures a track has events. This is useful for getting an overview of your work and performing "global" editing operations.

**Change the Now marker and the current track:** Click on a cell to set Now (the current position) and the current track (you'll see the highlight in the Parameters pane move, too).

NOTE: If you click in selected measures -- drawn in reverse video -- you should click and release quickly so you don't start drag-and-drop (see below).

**Opening a view window:** Click on a track with the right button, and a popup menu will appear listing the different kinds of Cakewalk track editing views. Select the type you want, and the view will open for that track.

**Selecting measures:** Click and drag left and right to set the <u>From and Thru markers</u>. Selected measures will be drawn in reverse video. SHIFT+CLICK to extend any existing selection to the point you click.

NOTE: If you click in selected measures -- drawn in reverse video -- you should click and release quickly so you don't start drag-and-drop. Tapping quickly will clear the existing selection; then you may drag to make a new selection.

**Drag and drop:** You can drag selected measures to a new position. Click in the selected measures and hold the button: after a moment, the cursor changes. Drag to the point where you want the new new upper-left corner to be, and release the mouse button. You can move measures horizontally and/or vertically this way.

To copy instead of moving, hold down the CTRL key while clicking. The original selected measures will remain.

To clear the selection without starting drag-and-drop, quickly click and release the button.

With both moving and copying, the dropped measures will replace any existing measures they are dropped on. Drag-and-drop can be undone by **Edit/Undo**.

See Also:

<u>Parameters pane</u> Window Menu

### Track parameters dialog

This dialog box lets you change many related **<u>track parameters</u>**. Double-clicking or pressing ENTER on the Port, Channel, or Patch fields brings up this dialog.

Changes here are effected in realtime. This dialog is handy for "orchestrating" while a song plays back, because you can hear the results while you change the "destination" -- port, channel, patch -- and also parameters like key and <u>velocity</u> offset, pan and volume. You can freely experiment with all of them because pressing Cancel restores all of the original track parameters. Press OK to keep your changes.

Press the **Configure** button (next to the **Patch** item) for the <u>Settings/Patch names</u> command.

#### **Event list view**

The Event list view lets you see and edit events from one or more tracks in an alpha-numeric list format. It is not graphical, but it packs a lot of information into a small space and is the only view that lets you see all types of events -- notes, controllers, patch changes, sysx meta-events, MCI commands, wave events, text events, etc.

### Multiple tracks

Each Event list includes whatever tracks were selected (including the current track) when you opened the window. To view a different group of tracks, select them, then open a new Event list window.

### Step-playing events.

With the Press SHIFT+SPACEBAR to play the highlighted event. If it's a Note or Wave event, the sound will sustain as keyboard

long as you hold down the SPACEBAR. When you release the SPACEBAR, you are automatically

advanced to the next event.

With the SHIFT+click on an event. If it's a Note or Wave event, <u>mouse</u>

the sound will sustain as long as you hold down the

mouse button.

See Also:

# Patch change dialog

The list of patch names you may pick from depends on the port and MIDI channel of the event. If the track has a forced MIDI channel, the channel stored for the event is ignored.

You can change which patch names are used for various ports and channels by pressing the **Configure** button, which calls up the **Settings/Patch names** command.

See Also:

Event list Window Menu

### **Event kind dialog**

This lets you change an event from one type to another. If you are inserting events in the **Event list** view, typically you press the INSERT key to duplicate an existing event, then change its values.

There are various kinds of events. Cakewalk provides you with standard MIDI events like Notes, Patch changes, and so on. Plus there are special events that aren't part of MIDI.

MIDI events contain only a small amount of data. For example, a Note event has a key number (pitch), <u>velocity</u>, and duration. Cakewalk stores normal MIDI events in such a way that you can cycle among the various kinds without losing data peculiar to a certain kind. In fact, by temporarily changing a Note event into a KeyAft event, you can get a different view of the same data: you can see the raw MIDI key number instead of Cakewalk's pitch name like "C#4". You can do this using the plus or minus keys or dragging with the mouse, and avoid calling up this dialog box.

But the special kinds of events require more data -- Wave events, for example, use up a lot of memory! Cakewalk cannot preserve this data, and requires you to press ENTER and use this dialog box if you want to change an event to or from one of these special event types. This prevents you from accidentally deleting a special event.

See Also:

### Wave edit dialog

Wave event data cannot be directly edited in Cakewalk. But you can load and save data in standard .WAV files. Also Windows has a standard "Wave" Clipboard format. You can copy and paste the wave event data between Cakewalk and other programs that understand wave data.

The Sound Recorder applet included with Windows 3.1 can Copy wave data to the Clipboard, but it cannot Paste data. Either save the data to a .WAV file to load in Sound Recorder, or use a more full-featured wave editing application.

## Wave events vs. MCI command events

You can play wave data by using a Wave event, or, an MCI command event with the command "PLAY <wavefile>". There are pros and cons to each:

	Advantages	<u>Drawbacks</u>
Wave events	Because the Wave event contains the data itself, wave playback is triggered with virtually no delay. Also, you don't have to keep track of one or more separate .WAV files.	Waveform data can grow very large, even for short samples at a low frequency and resolution, making your work and file very large.
MCI command "PLAY *.WAV"	The size of the Cakewalk workfile will be much smaller, because it is storing only the MCI command text, not the wave data itself. Also, MCI commands can be used to control other media devices.	It takes the MCI interpreter time to parse an MCI command and load the .WAV file. Putting the event early to compensate for the delay may not help if the delay is unpredictable.

See Also: Event list Window Menu

#### Piano-roll view

The Piano-roll window has two main panes (sections): note and velocity. When you first open a Piano-roll window, the note pane may be full size and the velocity pane hidden at the bottom. You can double-click on the the gray border bar to "maximize" the velocity pane or drag the gray border to whatever position you wish.

### Working in the note pane

There are two tools, selection and edit.

Selection mode lets you drag to set the From and Thru markers.

✓ **Edit** mode lets you insert brand-new notes, change existing notes, and "scrub" notes. The **Snap-to** button lets you pick a round-off amount for when you drag and change note start times and durations.

**To change an existing note:** Which part of the note you click on -- left, middle, or right -- determines what you can change.

<u>To change...</u> <u>click on...</u>

Starting time

left third A left-right cursor appears, and you

can drag the note left or right to a

new time without affecting the pitch.

Pitch middle third

An up-down cursor appears, and you can drag the note up or down to a new pitch without affecting the starting time. In this mode, the note will sound as you move to each

new pitch step.

Duration right third

A left-right cursor appears, and you can drag left or right to change the length of the note without affecting

the starting time or pitch.

**To insert a new note:** Hold the CTRL key and click. A note appears. As long as you hold down the mouse button, you may drag the note to the desired position.

If you CTRL+click on... the new note will be...

an existing note a copy of that existing note (same

pitch, duration, and MIDI channel).

empty space a copy of the last note that you

dragged or deleted.

**To delete a note:** While dragging, press the DELETE key.

**To "scrub" notes:** If you click anywhere a note does not exist, you can drag side-to-side over time to hear notes. This can be handy to find the time where a bad note is, to test how an entire chord sounds after changing the pitch of one of its notes, or to test notes after adjusting their velocities in the velocity pane (see below).

**To change "hidden parameters":** Click on a note using the RIGHT mouse button. A dialog box lets you edit all note parameters, including some that the Piano-roll view doesn't

display.

# Working in the velocity pane:

The velocity pane graphs the <u>velocities</u> of notes appearing above in the note pane. To modify velocities, click and drag the shape you want. Remember that velocities are not a separate type of event, they are an attribute of note events, just like pitch and duration. So in the velocity pane you are shaping the velocities of existing note events, not creating or destroying "velocity events" (there's no such thing).

See Also:

#### **Controllers view**

The Conrollers view is for kinds of events like <u>Control</u>, Pitch Wheel, and Channel Aftertouch. Usually there are groups of these events that describe a shape, for example, a series of Pitch Wheel events with increasing values that create an upward pitch bend.

There are three tools, or modes, you can work with: selection, draw, and erase.

- □ **Selection** mode lets you drag to set the <u>From and Thru markers</u>.
- **Draw** mode lets you draw new events of the type and MIDI channel you have selected. Any existing events of that type are replaced by what you draw.
- **Erase** mode lets you simply erase events you see on the screen. Drag over the events you wish to erase.

See Also:

#### Staff view

The Staff view is a view of sequencer data as staff notation, with basic interactive editing capabilities. (It's not supposed to be a replacement for full-featured music publishing software that addresses the many possible nuances of conventional music notation.)

**To insert a new note:** Hold the CTRL key and click; while you hold down the mouse button, you may drag the note to the desired position.

If you CTRL+click on... the new note will be...

an existing note a copy of that existing note (same

duration, velocity, and MIDI

channel).

empty space a note with a duration matching

the duration button you've

pressed, and the same velocity and MIDI channel as the last note that

you dragged or deleted.

**To delete a note:** While dragging a note, press the DELETE key.

**To change "hidden parameters":** Click on a note using the RIGHT mouse button. A dialog box lets you edit all note parameters, including some that the Staff view doesn't display.

**Snap-to.** The "Snap-to" checkbox determines whether you will be guided to inserting notes of certain durations at starting times that are multiples of that duration. For example, if you've selected the quarter-note button, and Snap-to is checked, your inserted notes will be forced to the nearest quarter-note boundary. This can be handy for entering many notes quickly, but of course you will need to turn this off to enter certain things: for instance, if you want to insert a half-note on the last beat of a measure.

### "Simplifying" options.

Several options help you display inexact human performances without making the notation too terribly complex. You may not want to see very small noteheads (like 32nd notes) or separate <u>layers</u>. There are alternatives to using the <u>Edit/Quantize</u> command to round-off the actual times and durations of the notes: you can preserve the human feel without getting horribly complicated notation.

**Fill.** This option rounds up durations to the next beat (if there would otherwise be a rest). This is especially effective with chords, because the notes may be released at different times. However, you may want to turn this off if you are entering notes using the mouse. Otherwise, you may be confused when you insert an eighth-note in 4/4 time and it looks like a quarter-note, at least until you insert another eighth note immediately following it.

**Trim.** This cuts off durations if they extend only a little way past the start of the next note. This helps with legato parts. As with Fill, you may wish to turn off Trim if you're entering notes precisely using the mouse.

**Resolution.** This is similar to **Edit/Quantize**, but works on-the-fly without affecting the actual notes' timing for playback. Also, it uses a different approach to rounding-off the timing that is more appropriate for notation.

See Also:

# Comments

Lets you use record comments about your work in a  $\underline{\textbf{notepad}}$ . These comments are saved in the workfile.

See Also:

# Notepad

When you're using a view that has a standard Windows notepad, the Edit menu will change. The Undo, Cut, Copy, and Paste commands work with text in the notepad and the Windows Clipboard, instead of working with track events.

The Windows Clipboard is shared among all Windows applications, so you can cut, copy, and paste text between Cakewalk and other programs.

# **System Exclusive**

This provides 256 banks for MIDI System Exclusive data.

Each bank can hold any number of system exclusive messages (up to available memory in Windows 386 Enhanced Mode; up to 1 MB in Windows Standard Mode).

A bank may be marked as *Auto*, which means it will be automatically sent whenever you load the file. Usually you will want to mark your patch and configuration data bank as *Auto* so your instruments are set up automatically for the song.

See Also:

# **CAL** view

Lets you load, edit, save, and run <u>CAL</u> programs using a <u>notepad</u>

When the window is first opened, or when you press Clear, a standard template is provided. This helps you remember the prolog, body, and epilog structure of a CAL program.

To quickly run a CAL program without disturbing any program you may be editing in the CAL view, you can use the **Edit Run CAL program** command.

See Also:

#### Markers view

Markers are a way of associating text with a time. The time can be a normal musical time, or locked to an absolute real-world time so that if the tempo changes, they will still refer to the same real-world time. Locked times are useful for indicating cue points when creating music to accompany visuals (film scores, ad jingles, multimedia presentations, etc.)

Anyplace that you can enter a time in a Cakewalk dialog box, you may also select from the list of markers by pressing F5. The predefined Now, From, and Thru markers are in this list along with any markers that you've defined. Pick a marker and press OK. The marker time will be supplied.

#### **Faders view**

The Faders view provides graphical faders (sliders) that generate MIDI <u>controller</u> events as you move them.

#### Faders and tracks

Each fader is associated with a particular track, which you can select. This association has two roles:

- 1) The fader will transmit controller events to the **Port** and **Channel** of the track. (**Tip:** a track can be set to no particular MIDI Channel; if so the fader will not work: it has to transmit to *some* MIDI channel.) If you record fader movements into a track -- see below -- then you should associate the fader with that track.
- 2) If the track contains controller events of the fader's type (for example, Volume), then the faders will update as the current time changes: either during playback or when you manually move to a new time. The fader shows the value for the most recent controller value in the fader's track.

#### Moving the fader and generating controller events.

You can drag the fader thumb and slide it to a new position. Appropriate MIDI Controller events are generated as you change the value.

Faders also have a "preview" click feature. Move the cursor directly over the fader's black slot. The value will temporarily change to show you what value would take effect *if* you clicked. This is handy for making instant jumps without generating lots of events with intermediate values.

#### Recording fader-generated controller events.

If recording is on, the controller events generated when you move a fader will be merged into the recording buffer. You can think of the fader as an external MIDI instrument. Start recording for a particular track, move the fader, and the resulting controller events will be recorded in the track.

**Tip:** Use <u>Punch-In</u> and/or <u>Multi-take mode</u> for recording faders. Cakewalk's normal recording mode is "sound-on-sound", meaning it merges what you've recorded with what's already on the track. This will not work well with controller events. **Punch-In** mode lets you have new material overwrite existing material, and **Multi-take** mode makes it easy to try many takes in a row, with each on a separate track.

See Also:

### Tempo view

There are three tools, or modes, you can work with: selection, draw, and erase.

- □ **Selection** mode lets you drag to set the <u>From and Thru markers</u>. If you do this to prepare for using the <u>Edit Copy</u> or <u>Edit Cut</u> commands, remember to check Tempo changes in the dialog box, and possibly un-check Track events and Meter changes. These commands can work on any or all of these.
- ✓ Draw mode lets you draw new events of the type and MIDI channel you have selected. Any existing events of that type are replaced by what you draw.
- **Erase** mode lets you simply erase events you see on the screen. Drag over the events you wish to erase.

See Also:

# Meter/Key signature map

Meter and key signature changes can occur only on measure boundaries. You can insert, delete, or change any entry in the meter/key map. The map always has at least one entry, for measure 1, because there must always be some meter and key signature.

#### Meters

The meter describes how to divide time. You pick the number of beats per measure, and the value of each beat.

# **Key signatures**

The key signature controls how Cakewalk displays notes.

In the **Event view** and some dialog boxes, Cakewalk converts the MIDI pitch number to labels like "C#2", or the C-sharp in the 2nd octave. (Octave 0 corresponds to MIDI pitch number 0, Octave 1 to pitch number 12, and so on. You can change this through the BaseOctave variable in **WINCAKE.INI**).

And of course the **Staff view** needs to know the key signature.

Changing the key signature only changes how Cakewalk displays notes. To actually transpose pitches, use the **Edit/Transpose** command.

See Also:

### **Auto-activate**

Normally you <u>activate</u> windows by clicking on them. With this option enabled, you don't have to click: merely moving the mouse cursor over any window activates it.

You may want to turn off **Auto-activate** if you don't like this behavior, or if your machine is too slow redrawing the windows as they're activated. If you are using Windows utility software that already provides auto-activation ("floating windows") you will also want to add the line WinEat1stClick=0 to **WINCAKE.INI**. You may want to put it below the line "WinAutoActivate=<0 or 1>", which is how Cakewalk stores your preference for **Auto-activate** being off or on.

See Also:

# Control bar at bottom

This lets you move the control bar to the bottom of the main window. If you are used to Cakewalk for DOS, you may be more comfortable with this. But leaving the control bar at the top of the window lets you move the mouse much less distance between the menu and the control bar.

See Also:

# **DOS F6 View Keys**

This option is intended for people familiar with Cakewalk for DOS. It makes the F6 keystrokes act like they do in Cakewalk in DOS. (This emulation isn't perfect because Cakewalk for Windows has more kinds of "views" and many of them can be visible at once.)

<u>Keystroke</u>	Action
F6 or SHIFT+F6	If the active window is an Event list or Piano-roll window, it is closed. Activates the Track/Measure view (the "Track View" and "Measure View" are combined in Cakewalk for Windows).
CTRL+F6*	Opens an Event list window ("Event View"), or, if one is already open, activates it.
ALT+F6	Opens a Piano-roll window ("Note View"), or, if one is already open, activates it.

<sup>\*</sup> Normally in Windows programs, CTRL+F6 takes you to the next window in an application. That standard meaning is ignored when this option is enabled.

See Also:

# **Settings**

The Settings menu contains commands for setting miscellaneous program parameters and options.

Clock
Metronome
Timebase
MIDI Devices
Patch names
MIDI Out
MIDI Thru
Record Filter
Channel Table
Time Format
Auto-Save

# Settings/Clock

Change the clock source.

InternalPlay using internal (computer) clockMIDI SyncPlay in synchronization to MIDI Sync dataSMPTE/MTC SyncPlay in synchronization to SMPTE/MTC

# **Internal Clock**

Internal synchronization using the computer's internal clock.

See Also:

Settings Clock
Settings Menu

MIDI Sync
MIDI synchronization makes Cakewalk follow another device that is sending MIDI Sync to the computer's MIDI In port.

See Also:

Settings Clock Settings Menu

# SMPTE/MTC Sync

SMPTE/MTC synchronization makes Cakewalk follow another device that is sending SMPTE/MTC timecode to the computer's MIDI In port. Some MIDI interfaces have a special SMPTE jack to read timecode directly. You may also use a device that converts SMPTE to MTC for sending over a MIDI cable.

See Also:

**Settings Clock** Settings Menu

# Settings/Metronome

The left column of items lets you pick various options about when you want to hear the metronome.

The right column lets you specify a MIDI note that will be played as a metronome "tick". The default key number is that used by most drum machines for a closed hi-hat. MIDI channel 10 is a popular convention for drum machines, so that is also provided as a default.

To disable the MIDI metronome note entirely, specify 0 for the Velocity and/or Duration.

See Also:

# Settings/Timebase

The timebase is also known as PPQ: "Pulses Per Quarter-note". This is the number of clock ticks that a quarter-note is worth. Generally, higher values provide more precision, but many people are not sensitive to much improvement using a timebase greater than 120 PPQ. The computer has to work harder to provide higher timebases, so if you cannot hear the difference, it is probably best to stick with the default value of 120 PPQ.

See Also:

# **Settings/MIDI Devices**

You may pick any number of available MIDI In and MIDI Out devices. (You must pick at least one MIDI Out device.) For devices to show up in this list, you must have installed them using the "Drivers" icon of the Windows Control Panel. Cakewalk lists only MIDI In and MIDI Out devices, not other kinds devices.

MIDI Out devices are assigned to Cakewalk port numbers in the order they are listed. For example, if you select "MPU-401" and "Sound Blaster", port 1 in Cakewalk is the MPU-401 and port 2 is the Sound Blaster.

Note that some drivers may not support more than one program using them at the same time. If so, Cakewalk may not be able to open a device that some other program is using. What might not be obvious is that "some other program" could be the Microsoft MIDI Mapper.

The Microsoft MIDI Mapper is a "device" that intercepts MIDI data and modifies it before passing it on to a real device. If both Cakewalk and the MIDI Mapper are trying to use the same device, Cakewalk may give you an error message that it can't open the device. This is because the MIDI Mapper has already opened it. If you want to use the device through the MIDI Mapper, you must **not** also directly select it in Cakewalk. If, instead, you don't want to use the device with the MIDI Mapper, then press CANCEL. Use the "MIDI Mapper" icon of the Windows Control Panel to change the current map so that it doesn't use the device.

See Also:

# Settings/Patch names

Cakewalk lets you assign names to <u>patches</u>. The default set of "names" are numbers from 0 to 127. You may also select numbers from 1 to 128, or lists of names that correspond to the factory presets of a number of popular synthesizers. If you don't see your instrument on the list, you may be able to use the "General MIDI" list, which is a standard layout that many newer instruments use.

Because you may have different kinds of instruments connected to various ports and channels, Cakewalk lets you specify which patch names to use for each port and channel. Once you set this up, the correct list will be used automatically for each port/channel.

### Using the dialog box

You can select more than one port/channel at a time in the list on the left. If they share the same patch list, that will be selected on the right, otherwise nothing will be selected. To make a change, click on the patch list you want to use.

If you don't want to save your settings for the next Cakewalk session, remove the check from that option before pressing OK.

For information on creating your own lists of patch names, please see the PATCHES.INI file.

See Also:

# **Settings/MIDI Out**

This dialog lets you control various options related to information that Cakewalk sends to the MIDI Out port(s).

**Send MIDI Start/Continue/Stop/Clock** controls whether Cakewalk will transmit MIDI Sync. If you are not <u>synchronizng</u> another device like a drum machine to Cakewalk, leave this disabled.

**Use Start, never Continue** lets you force Cakewalk to send a MIDI Start even when playback begins from other than the start (1:1:0).

**Send MIDI SPP** enables sending MIDI Song Position Pointer. This message lets devices synchronizing to Cakewalk jump to the correct spot.

**Locate delay for SPP recipient** can be set higher than zero to give slow devices more time to jump to the correct spot.

**Zero continuous controllers** sends messages every time playback stops to lift up the sustain pedal, center pitch bend wheels, and zero modulation wheels. It also sends a "reset all continuous controllers" message. Because this is sent for every MIDI channel of every port, it can take awhile, and using this option with **Auto-shuttle** will cause it to "lurch".

**Patch/controller search-back** makes Cakewalk do some extra work before playback starts. It searches for the most recent patch change, pitch bend wheel, modulation wheel, and sustain pedal events on each MIDI channel of each MIDI port and sends them. This ensures that even if you jump to an arbitrary point in your song, any intervening patch, wheel, and pedal settings will be acted on. This option could take a long time if your song is very long.

See Also:

# Settings/MIDI Thru

These options control how MIDI input is transformed and echoed to the MIDI output. Auto mode, the default, is the most convenient. It routes things based on the Port, Channel, Key+ and Vel+ parameters of the track you currently have the cursor on in the **Track/measure view**.

Please see the manual for more details.

See Also:

# Settings/Record Filter

This lets you filter out certain kinds of MIDI events. By default, aftertouch events are filtered out.

See Also:

# **Settings/Channel Table**

The Channel Table lets you optionally map certain MIDI channels onto certain tracks when recording. Events on certain channels will end up on certain tracks. This is most useful when "dumping" a sequence from another sequencer, or working with a guitar controller that transmits on separate channels at once. (Note that Cakewalk also permits each track to contain events from different MIDI channels; you don't *have* to split things onto separate tracks.)

The dialog box has a checkbox for enabling/disabling the channel table and for assigning a track number to each MIDI channel. The "Fill" button can save you typing: it looks at the number in the field you have the cursor on, and fills in the remaining fields with increasing values.

See Also:

# **Settings/Time Format**

Select a SMPTE/MTC format.

The "Offset" option lets you specify a SMPTE time that will correspond to the beginning of your work. In other words, this is the SMPTE time corresponding to musical time 1:1:0.

*Hint*: If you are syncing to SMPTE/MTC, you should stripe your tape beginning with SMPTE/MTC time 0:0:0:0 and set an offset of at least 2-3 seconds, or 0:0:3:0. This gives the SMPTE tape reader enough time to establish a good sync lock-up before your song starts.

See Also:

# Settings/Auto-Save

Lets you specify how the maximum number of minutes that can pass before an automatic save is performed. Specify zero minutes to disable automatic saving.

An automatic save occurs if (a) the file has changed since last saved and the number of minutes you've specified has elapsed, or (b) you have made more than 100 changes since the files was last saved.

Your work is saved to a work file called AUTOSAVE.WRK. If you should need to retrieve your work after an error or system crash, use <u>File Open</u> to load AUTOSAVE.WRK. You may then use <u>File Save As</u> to re-save this under the name of the file you were originally working on. **Warning:** If you don't re-save soon, then the Auto-save feature may write over AUTOSAVE.WRK.

See Also:

# **Answers to common questions**

Here are answers to some of the most common questions about Cakewalk Professional for Windows. Checking this list may save you a phone call to technical support!

### Setup

- Why can't I hear anything on my synthesizer (no MIDI output)? Answer
- Why can't I record anything? (no MIDI input)? <u>Answer</u>
- How do I get a driver for my brand of MIDI interface? Answer

#### Customization

- How do I create my own set of patch names? <u>Answer</u>
- How and why should I use the Microsoft MIDI Mapper? <u>Answer</u>

### **Wave Audio**

- How do I play back wave audio (.WAV files) files in my song? Answer
- Why can't I play wave audio with my Sound Blaster? Answer
- Why can't I play wave audio using my MPU-401 or Ad Lib card? Answer

#### **Miscellaneous**

• Why do I get the error "Cannot open timer" when I start Cakewalk? Answer

# "Cannot open timer"

If you start Windows from a directory containing Cakewalk 4.0 (for DOS), then Windows will mistake Cakewalk 4.0's TIMER.DRV file for its own TIMER.DRV file located in the Windows system directory. Windows silently fails to load its timer driver, and you discover the failure only when trying to use a program that needs the timing services, like Cakewalk Professional for Windows.

To work around this problem with Windows, simply start Windows from another directory (for example, from the root directory or the Windows directory).

### Wave events and Sound Blaster

The Sound Blaster (ROM 1.5 and earlier) cannot do both MIDI input and wave output at the same time. Thus, if you've selected "Creative Labs Sound Blaster 1.5" as a MIDI In device in Cakewalk Professional's "Settings/MIDI Devices" dialog, wave audio won't work. This includes Cakewalk's special Wave and MCIcmd events as well as wave audio attempted by any other Windows application running while the "Creative Labs Sound Blaster 1.5" MIDI In device is open. This is *not* a limitation of Cakewalk Professional, but rather of the Sound Blaster: while *any* program is using the "Creative Labs Sound Blaster 1.5" MIDI In device, wave audio will not work.

Note that MIDI *output* will work fine along with wave audio: you can select "Creative Labs Sound Blaster 1.5" from the list of MIDI *Out* devices. The problem occurs only when you've selected the "Creative Labs Sound Blaster 1.5" as a MIDI *In* device.

### Wave events and non-Wave cards

There are basically three functions that multimedia audio hardware can provide:

- (1) MIDI interface (link to external synthesizers)
- (2) Tone generators (on-board synthesizers)
- (3) Digital audio (wave form audio, like a CD or DAT recorder/player)

Various multimedia audio cards provide one or more of these three functions. The MPU-401 is "only" a MIDI interface. The Ad Lib is "only" a tone generator. The Sound Blaster and MultiSound cards combine all three functions.

Wave events require the third function, **digital audio**. To use Wave events, you must install a sound card with digital audio capabilities and install a wave driver for the card using Windows Control Panel. For more information, consult the manufacturer of the sound card you own or are considering purchasing.

# **No MIDI Output**

If you aren't getting any MIDI output, please run through this check-list:

- Make sure you've connected your cables properly. See the instructions in the Cakewalk Professional *Installation Guide*.
- Make sure you install a MIDI driver for your interface using Windows Control Panel. See the instructions in the Cakewalk Professional *Installation Guide*. Make sure you specify the correct configuration information -- like IRQ and base port address -- in the driver's setup dialog box.
- Now the driver is available for Windows programs to use. Next, you need to tell Cakewalk Professional to use it. Choose the **Settings/MIDI Devices** command and make sure the device is selected (highlighted) in the MIDI Out list.
- Try loading and playing a sample workfile included with Cakewalk Professional. Make sure that each track is set to a <u>Port</u> and <u>Channel</u> to which you've connected a synthesizer. Because you can change the Port and Channel during playback, you can experiment with different settings easily until you hear a sound.

# **No MIDI Input**

If you aren't getting any MIDI input, please run through this check-list:

- Make sure you install a MIDI driver for your interface using Windows Control Panel. See the instructions in the Cakewalk Professional *Installation Guide*. Make sure you specify the correct configuration information -- like IRQ and base port address -- in the driver's setup dialog box.
- Now the driver is available for Windows programs to use. Next, you need to tell Cakewalk Professional to use it. Choose the **Settings/MIDI Devices** command and make sure the device is selected (highlighted) in the MIDI In list.
- Make sure you've connected your cables properly. See the instructions in the Cakewalk Professional *Installation Guide*.

# **Microsoft MIDI Mapper**

The Microsoft MIDI Mapper is intended to help make MIDI song files be "portable" from one system to the next by mapping patch numbers, key numbers, and so on from a standard General MIDI layout to whatever synthesizer a particular user has. If you are not preparing or using MIDI song files for multimedia distribution purposes, you may not need to use the MIDI Mapper at all: it may be solving a problem that you don't have and needlessly complicating your setup.

If you *do* need the Microsoft MIDI Mapper, be sure to read Microsoft's documentation for it. Also, feel free to call Microsoft Windows Technical Support for assistance using their product.

To get you started, however: One key point is that you have Cakewalk Professional use the MIDI Mapper instead of directly using the device. The whole idea is for the MIDI Mapper to sit between Cakewalk Professional and the device and map data on the way. For example, in Cakewalk Professional's **Settings/MIDI Devices** list you would select "Microsoft MIDI Mapper" but not select "Roland MPU-401". Instead, select "Roland MPU-401" in the MIDI Mapper, using the Windows Control Panel. So you set up a chain: Cakewalk Professional sends data to the MIDI Mapper, the MIDI Mapper transforms the data and sends it to the MPU-401.

# **Creating your own patch names list**

Cakewalk Professional lets you associate a list of patch names with each port/channel. You make this association using the **Settings/Patch names** command. A number of lists for some popular synthesizers are provided.

If you wish to create your own list, you need to edit the PATCHES.INI file supplied with Cakewalk Professional. You may want to make a backup copy of this file before changing it.

Load the PATCHES.INI file into a text editing program like Windows Notepad. Follow the instructions at the beginning of the file. After adding your patch names to the file, save it and restart Cakewalk Professional. It will "compile" the file into a PATCHES.BIN file that can be read much more guickly when the program starts in the future.

Choose **Settings/Patch names**. You should see your new patch name list among the others. Associate your list with each port/channel that you desire.

### **Devices and drivers**

Windows 3.1 provides the Multimedia Extensions. Manufacturers of MIDI interfaces, sound cards, and other multimedia hardware can create drivers. Any Windows program can use these drivers.

We have supplied a couple drivers with Cakewalk Professional only as an interim provision to help the owners of a few of the most popular MIDI interfaces. Eventually even these drivers will be available directly from the maker of the MIDI interface.

If your MIDI interface is not in this list, you need to contact its manufacturer to obtain a driver for it.

# Using wave audio (.WAV files)

Cakewalk Professional lets you trigger playback of digital audio at various times in your song. You must have installed a digital audio sound card like a Sound Blaster, Pro Audio Spectrum, or MultiSound, *and* installed a wave driver for it using the Windows Control Panel "Drivers" icon.

You trigger digital audio playback by inserting a special kind of event in a track at the time you want. There are two kinds of events you may use, Wave or MClcmd. There are <u>prosand cons</u> for each.

You may find it easiest to keep these special events on a track all by themselves. Here are step-by-step instructions:

- Open an **Event-list view** for the track in which you want to insert the event.
- Press INSERT to add a new event.
- Move the cursor to the **Kind** column and press ENTER (or, double-click on the **Kind** cell with the mouse.)
- In the Event kind dialog, choose Wave audio or MCI command, and press OK.
- If you selected **Wave audio**, then you see the Wave edit dialog. Choose **Load wave from file** and then pick a .WAV file.
- If you selected **MCI command**, then you must type the text for the MCI command in the Event-list view. Move the highlight one cell to the right -- press the RIGHT key once -- and press ENTER. Enter the MCI command, "PLAY <filename>", where <filename> is a .WAV file. For example, you could use the command, "PLAY C:\WINDOWS\CHIMES.WAV", to play the CHIMES.WAV file included with Windows 3.1 and located in the C:\WINDOWS directory.

**Tip:** To test your new event, you may step-play it, as explained in the help topic for the **Event-list view**.

**Tip:** During playback, only events from checked (non-muted) tracks are played. Make sure you change the track **Status** in the **Track/Measure view** to hear your Wave or MClcmd event.