# SampleCell Editor Addendum

**Version 3.1 for Macintosh** 

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## chapter 1

## Introduction

This Addendum is a supplement to the Sample-Cell II Editor User Guide. It documents the new features in SampleCell Editor 3.1 for Macintosh.

## **System Requirements**

To use SampleCell Editor 3.1 you'll need:

- ◆ A Digidesign SampleCell II or SampleCell II Plus PCI card
- A Digidesign-qualified Power Macintosh computer with at least 16 MB RAM available for SampleCell Editor.
- ◆ Apple System software version 9.0.4 or later
- A 17-inch or larger color monitor; black and white monitors are not supported

#### **MIDI Requirements**

You must install and configure OMS (Open Music System) software version 2.3.8 or later to use SampleCell Editor with MIDI devices. See "Configuring OMS" on page 2.

Both USB and serial MIDI interfaces work effectively with SampleCell Editor.

Serial MIDI interfaces require either a Mac serial port or a qualified modem-to-serial port adapter (thereby not using a PCI slot). Refer to Digidesign's Web site for supported adapters.

#### **Additional Equipment**

Depending on your needs, the following items may also be required:

- An audio monitoring system such as a mixer, power amplifier, and speakers
- MIDI controller keyboard (or other MIDI controller device) and MIDI cables to trigger playback of SampleCell using MIDI
- MIDI sequencing software compatible with OMS

▲ SampleCell II cards can also be used with

Mark of the Unicorn's Performer and Free-MIDI instead of OMS. However, Sample-Cell will not receive MIDI directly through FreeMIDI, so you must route MIDI to SampleCell through one or more MIDI tracks in Performer. For details, refer to your Performer or FreeMIDI documentation.

#### **Compatibility Information**

For the latest compatibility information, visit Digidesign's Web site:

www.digidesign.com/compato/

## **Installing SampleCell**

To use SampleCell Editor 3.1, remove any previous version and use version 3.1 in its place. You do not need to replace or update any other portions of the SampleCell software.

## **Configuring OMS**

To use SampleCell Editor with OMS-compatible MIDI applications, or to use the MIDI services in the SampleCell Editor, you'll need to install and configure the Open Music System (OMS).

OMS keeps track of how your MIDI studio is connected and configured and stores this information in Studio Setup documents, which are edited in the OMS Setup application. OMS also routes MIDI between SampleCell, OMS-compatible sequencers, and MIDI interfaces.

#### Before you begin:

- If not yet installed, install the OMS software included with your SampleCell package.
- If OMS is already installed and configured, you'll need to update your current Studio Setup to recognize SampleCell.

#### To update your current OMS Studio Setup:

- 1 Connect your MIDI interface, keyboard controllers, and other MIDI devices. Refer to their documentation if necessary.
- 2 Turn on the MIDI devices and start your computer.
- **3** Launch the OMS Setup application.

4 Choose Studio > MIDI Cards and Interfaces.

OMS searches for and locates your MIDI devices and the SampleCell driver and displays them in vour Studio Setup document.

5 Double-click the SampleCell icon to configure its MIDI Device Info dialog.

Check that it is set it to receive on all channels (1–16), unless you only want it to receive MIDI on certain channels, then click OK.

**6** Choose File > Save and Make Current, then Ouit.

#### To create a new OMS Studio Setup:

- 1 Connect your MIDI interface, keyboard controllers, and other MIDI devices. Refer to their documentation if necessary.
- 2 Turn on the MIDI devices and start your computer.
- **3** Launch the OMS Setup application.
- **4** Choose File > New Studio Setup.

OMS searches for and locates your MIDI devices and the SampleCell driver and displays them in your Studio Setup document.

5 Double-click the SampleCell Editor icon to configure its MIDI Device Info dialog.

Check that it is set it to receive on all channels (1-16), unless you only want it to receive MIDI on certain channels, then click OK.

6 Choose File > Save and Make Current, then Quit.

#### In SampleCell Editor:

- 1 Launch SampleCell Editor.
- 2 Choose SampleCell > OMS Input Devices.
- 3 Select the MIDI controller and other devices. that you will use to play SampleCell Editor.
- 4 To improve MIDI performance, disable any devices that you will not use for MIDI control of SampleCell Editor.

## **Enabling Background MIDI Playback and Input Devices**

SampleCell Editor routes MIDI (via OMS) from your keyboard controller to any Instruments assigned to the channel sent by your keyboard.

You can also trigger SampleCell Instruments from a MIDI keyboard when SampleCell Editor is not the current application by enabling background MIDI operation in OMS MIDI Setup. This option also allows an OMS-compatible sequencer to continue MIDI playback when it is no longer the current application—thereby allowing you to audition changes in SampleCell Editor while the sequencer continues playing.

Keep in mind that when Run MIDI in Background is enabled, and both the SampleCell Editor and your sequencer are echoing MIDI thru to the same Instrument, double-notes will occur.

To avoid this problem, make sure the Pass MIDI Thru in Background option is deselected in the SampleCell Preferences dialog if you have enabled MIDI in Background in OMS MIDI Setup.

#### To enable background MIDI:

- 1 In SampleCell Editor, choose SampleCell > Preferences
- 2 Choose SampleCell > MIDI Setup.
- 3 In the OMS MIDI Setup dialog, select Run MIDI in Background.
- 4 Click OK.

#### **Enabling OMS Input Devices**

If you are using SampleCell Editor as a standalone application, you will need to enable your MIDI controller and other MIDI input devices so that you can use them with SampleCell.

#### To enable MIDI input devices:

1 In the SampleCell Editor application, choose SampleCell > OMS Input Devices.



**Enabling OMS input devices** 

**2** Select the devices that you want to use and click OK.

## chapter 2

## **New Features in SampleCell Editor 3.1**

This chapter covers the new features in Sample-Cell Editor 3.1.

## Support for 96 kHz and **192 kHz Sample Rates**

While the SampleCell II card supports a maximum sample rate of 48 kHz. SampleCell Editor version 3.1 can open Banks, Instruments, and Samples with sample rates of up to 192 kHz. When loaded, audio files are automatically converted in memory to the sample rate of the SampleCell II card.

## **Using SampleCell II TDM** Cards with Pro Tools HD **Systems**

Differences in hardware architecture do not allow audio from SampleCell II TDM cards to be digitally routed directly into the Pro Tools|HD TDM II mixing environment. However, you can still integrate audio from SampleCell II cards into Pro Tools|HD sessions by connecting the analog outputs of your SampleCell II TDM cards into Pro Tools|HD interfaces.

## Sample Rates Displayed in **Sample Map Window**

The Sample Map window now displays the original sample rate at which a selected audio file was recorded. This provides a convenient means of identifying the original sample rate of any sample in an Instrument and helps prevent you from mixing files with different sample rates.

#### Sample Size Display Removed

The Sample Size display has been removed from the Sample Map window. It can now be found in the Sample Parameters window. (Doubleclick a Key Group or Velocity Zone to open the Sample Map window.)



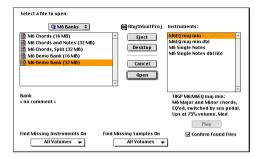
Sample Map window

## **Opening Banks or Instruments** with 24-bit Audio Flles

SampleCell Editor can open Banks and Instruments containing 24-bit audio files, 24-bit audio will be converted to 16-bit depth on the Sample-Cell II card using a proprietary Digidesign Dither for maximum sound quality.

#### To load an existing Bank:

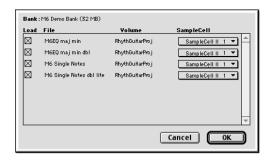
1 Choose File > Open.



Opening a Bank

2 Select the Bank and click Open.

All selected instruments will be loaded. To skip specific instruments, deselect them.



Select Instrument dialog



👸 If vou are using Digidesign's Soft Sample-Cell in addition to a SampleCell II card, you can use the SampleCell pop-up menu in the dialog to choose where you want the Instrument loaded

3 Click OK

## **Audio File Support**

SampleCell Editor 3.1 supports .WAV. Sound Designer I, and split-stereo audio files. Importing a split-stereo audio file into a mono Instrument will load only the channel that you select in the Open dialog.

## **Deselecting Instruments**

Instruments can be deselected by clicking on any blank area in a Bank window. This is particularly important when saving Banks (see below).

## **Saving Banks and Instruments**

The Save Bank and Save Instrument commands now have "Save all instruments to a new location" and "Save all referenced samples to a new location" options that streamline saving Instruments and samples to disk.



**A** Note that the Save menu has changed in the File menu. Instead of separate commands for saving Banks and Instruments there is now a consolidated Save command that applies to whichever is currently selected.

#### Saving a Bank

You can save all Instruments and samples associated with a Bank by using the Save Bank As command



**↑** SampleCell Editor doesn't automatically distinguish between samples, Instruments and Banks, making it possible to overwrite a sample if you accidentally save an identically named Instrument to the same location. For safety's sake, create separate folders for Banks, Instruments, and samples.

#### To save the current Bank with its original name and destination:

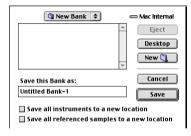
■ Choose File > Save Bank



▲ If the Save Bank command doesn't appear in the File menu. it is because an Instrument is currently selected on screen in the Bank window. Deselect the Instrument by clicking an empty area in the Bank window before saving a Bank.

#### To save a Bank with a new name or destination:

- 1 Choose File > Save Bank As.
- **2** Enter a name and choose the destination for the Bank.
- 3 Select "Save all instruments to a new location" if you want to save new copies of the Instruments associated with the Bank.



Saving a Bank and Instruments

4 Select "Save all referenced samples to a new location" if you want to save new copies of the samples associated with each Instrument.

#### To save all changed Instruments and Banks:

■ Choose File > Save All Changed.

#### **Saving an Instrument**

Most parameters are saved as part of a Bank, as well as with the Instrument. If you change the Instrument Comment or any parameter associated with an Instrument, however, the Instrument must be saved in order to preserve those changes.

While you will be automatically prompted to save these Instrument changes if you close a Bank, you can also save an Instrument manually.

#### To save an Instrument with its original name and destination:

■ Choose File > Save Instrument.



**A** If the Save Instrument command doesn't appear in the File menu, it is because the Instrument is not currently selected on screen in the Bank window. Select the Instrument by clicking it before saving.

#### To save an Instrument with a new name or destination:

- 1 Choose File > Save Instrument As.
- **2** Enter a name and choose the destination for the Instrument.
- **3** Select "Save all referenced sample to a new location" if you want to save new copies of the samples associated with the Instrument.

#### To save all changed Instruments and Banks:

■ Choose File > Save All Changed or press Command+Option+S.

## **Saved Instrument Settings**

In previous versions of SampleCell Editor, the following Instrument parameters were saved and restored with Banks, but not with the Instrument itself:

- · MIDI Channel
- · Low/High Key
- Output Channel
- Pan
- Volume

SampleCell Editor 3.1 saves these settings as part of the Instrument. Whenever the Instrument is loaded into a Bank, these parameters will default to the state in which you saved them.

## **OMS Input Devices Setting**

A new OMS Input Devices setting in the Sample-Cell menu activates and deactivate OMS input devices without requiring you to launch OMS Studio Setup.

## **Reload Sample Command**

The Reload Sample command is now located in the Instrument menu. This command can be used to load or reload a sample or region that has been unloaded or modified and resaved.

#### **Get Instrument Info**

This command has been moved and now appears in the File menu.

## **New SampleCell Preferences**

There are two new items in the SampleCell Preferences window:

- Pass MIDI Thru Unchanged to SampleCell
- Pass MIDI Thru When in Background

Pass MIDI Thru unchanged Allows you to trigger SampleCell playback from a MIDI sequencer or from a MIDI application on a different computer. With this option selected, notes are triggered according to the channel sent by your MIDI controller, regardless of which Instrument is selected. MIDI notes will be sent to Instruments set to the corresponding channel on all SampleCell cards. If you want MIDI thruing to occur in the background, also select the Pass MIDI Thru When in Background option.

Pass MIDI thru when in background Allows external MIDI devices to continue triggering playback of Soft SampleCell, even if SampleCell Editor is not the current application. Also select Pass MIDI Thru Unchanged in the SampleCell Preferences dialog for this to work properly.

## chapter 3

## **MIDI Controller Numbers**

SampleCell Editor allows you to select two MIDI controller numbers from a total list of 120 as modulation sources. This enables you to use, for example, a breath controller (MIDI Controller #2) to modulate Volume or a foot pedal (MIDI Controller #4) to modulate LFO Amplitude.

Table 1. MIDI controller numbers

| Controller<br>Number | Controller Type       |
|----------------------|-----------------------|
| 0                    | Bank Select           |
| 1                    | Modulation Wheel      |
| 2                    | Breath Control        |
| 3                    | Undefined 6           |
| 4                    | Foot Controller       |
| 5                    | Portamento Time       |
| 6                    | Data Entry            |
| 7                    | Channel Volume        |
| 8                    | Balance               |
| 9                    | Undefined             |
| 10                   | Pan                   |
| 11                   | Expression Controller |

Table 1. MIDI controller numbers

| Controller<br>Number | Controller Type               |
|----------------------|-------------------------------|
| 12                   | Effect Control 1              |
| 13                   | Effect Control 1              |
| 14 - 15              | Undefined                     |
| 16                   | General Purpose Controller #1 |
| 17                   | General Purpose Controller #2 |
| 18                   | General Purpose Controller #3 |
| 19                   | General Purpose Controller #4 |
| 20 - 31              | Undefined                     |
| 32                   | Bank Select                   |
| 33                   | Modulation Wheel              |
| 34                   | Breath Control                |
| 35                   | Undefined                     |
| 36                   | Foot Controller               |
| 37                   | Portamento Time               |
| 38                   | Data Entry                    |
| 39                   | Channel Volume                |

Table 1. MIDI controller numbers

| Controller<br>Number | Controller Type                           |
|----------------------|---|
| 40                   | Balance                                   |
| 41                   | Undefined                                 |
| 42                   | Pan                                       |
| 43                   | Expression Controller                     |
| 44                   | Effect Control 1                          |
| 45                   | Effect Control 2                          |
| 46 - 47              | Undefined                                 |
| 48                   | General Purpose Controller #1             |
| 49                   | General Purpose Controller #2             |
| 50                   | General Purpose Controller #3             |
| 51                   | General Purpose Controller #4             |
| 52 - 63              | Undefined                                 |
| 64                   | Damper Pedal on/off (Sustain)             |
| 65                   | Portamento on/off                         |
| 66                   | Sustenuto on/off                          |
| 67                   | Soft pedal on/off                         |
| 68                   | Legato Footswitch                         |
| 69                   | Hold 2                                    |
| 70                   | Sound Cont. 1 (Sound Variation)           |
| 71                   | Sound Cont. 2 (Timbre/Harmonic Intensity) |
| 72                   | Sound Cont. 3 (Release Time)              |
| 73                   | Sound Cont. 4 (Attack Time)               |

Table 1. MIDI controller numbers

| Controller<br>Number | Controller Type                        |
|----------------------|--|
| 74                   | Sound Cont. 5 (Brightness)             |
| 75                   | Sound Cont. 6 (Decay Time)             |
| 76                   | Sound Cont. 7 (Vibrato Rate)           |
| 77                   | Sound Cont. 8 (Vibrato Depth)          |
| 78                   | Sound Cont. 9 (Vibrato Delay)          |
| 79                   | Sound Cont. 10                         |
| 80                   | General Purpose Controller #5          |
| 81                   | General Purpose Controller #6          |
| 82                   | General Purpose Controller #7          |
| 83                   | General Purpose Controller #8          |
| 84                   | Portamento Control                     |
| 85 - 90              | Undefined                              |
| 91                   | Reverb Send Level                      |
| 92                   | Effects 2 Depth (Tremolo Depth)        |
| 93                   | Chorus Send Level                      |
| 94                   | Effects 4 Depth (Celeste/Detune Depth) |
| 95                   | Effects 5 Depth (Phaser Depth)         |
| 96                   | Data entry +1                          |
| 97                   | Data entry -1                          |
| 98                   | Non-Registered Parameter<br>Number     |
| 99                   | Non-Registered Parameter<br>Number     |

Table 1. MIDI controller numbers

| Controller<br>Number | Controller Type             |
|----------------------|-----------------------------|
| 100                  | Registered Parameter Number |
| 101                  | Registered Parameter Number |
| 102 - 119            | Undefined                   |