

**ReCycle!**  
THE ULTIMATE TOOL FOR SAMPLED GROOVES

# Sampler Supplement



Operation Manual by Ernst Nathorst-Böös, Ludvig Carlson and Anders Nordmark

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## Navigating this document:

Please use one of the methods described below to quickly find the desired information in this on-line documentation:

- **Use the Table of Contents provided by the Acrobat Reader program.**
- **Use the Adobe Acrobat Reader Search function.**
- **Click on a cross-reference (green text) to jump to the respective topic.**

It is of course possible to print out this document or parts of it.

Additional Information on how to use the Adobe Acrobat Reader program can be found in its on-line Help.

# Appendix A

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## Installing and Using OMS (Macintosh Users Only)

# Introduction

MIDI communication in ReCycle for Macintosh is handled by OMS, the Open MIDI System. This ensures that ReCycle will fit into your current MIDI System. It allows you to use ReCycle with multi-port interfaces such as the Mark of the Unicorn MIDI Time Piece and Opcode Studio series. It also ensures compatibility with future MIDI hardware and software for the Macintosh.

## Do I Need to Install OMS?

You only need OMS in the following situations:

- If your sampler *requires* MIDI communication with ReCycle.
- If, for one reason or another, you don't want to use SCSI for sample data transfer.

## OMS Documentation included!

Included in this package, you will find the full OMS documentation. This document is the complete OMS manual, in electronic format.

## Installing OMS

This section is for those of you who don't already have the latest version of OMS installed on your computer. In this text we assume the following:

- You have *one* MIDI interface connected to one of the serial ports on your Macintosh.
- You have no MIDI Patcher in your system.

If you don't fit the above description setting up OMS is slightly more complicated. Please refer to the OMS documentation.

## Setting Up

### 1. Connect the MIDI Interface to your computer.

If you have a multi-port interface like the Opcode Studio 4 and 5 or the Mark of the Unicorn MIDI Time Piece, there are probably a number of additional steps you need to perform at this point to make it work properly with your computer (install software, set switches etc). See the documentation that came with the MIDI interface, for details.

### 2. Connect the sampler to your interface, both ways!

For ReCycle to work, the MIDI Out on the sampler must be connected to a MIDI In on the interface, and the MIDI In on the sampler must be connected to a MIDI Out on the interface.

### 3. Turn on or activate the interface, if needed.

### 4. Turn on your MIDI system.

## Installing OMS

1. **Locate the OMS Installer file and double click on it.**
2. **Follow the instructions on screen.**

For more information on the OMS installation, see the OMS documentation included in this package.

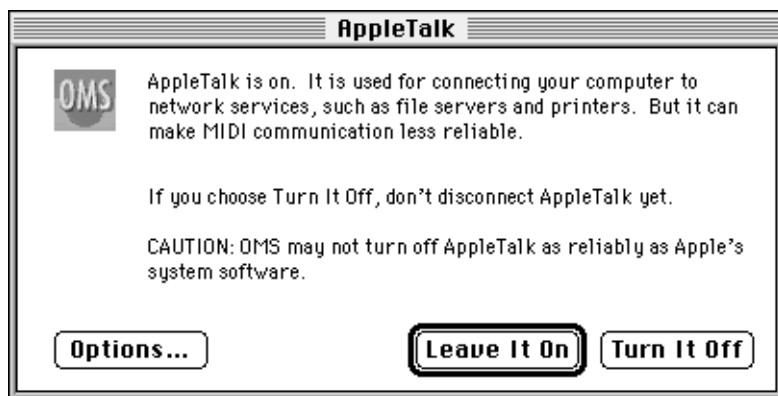
## Launching OMS Setup

After installation, you have a new application on your hard disk, called OMS Setup.

1. **Double click on the OMS Setup application.**



2. **If the following dialog box appears, we recommend that you disable AppleTalk and make sure your interface is active.**



The most common reasons for using AppleTalk are:

- You have a laser printer connected to the Printer port.
- You are using file sharing with other Macintoshes.

See the OMS documentation for more information.

3. **If you have chosen to turn off AppleTalk, yet another dialog box appears. Follow the instructions and click OK.**

You can later activate AppleTalk again from the Chooser, if you need it.

4. **Follow the instructions on screen until you have a Studio Setup window with at least a symbol of your MIDI interface.**

Possibly, OMS has also detected all your connected equipment and displays symbols for it in the window.

# Setting up OMS for ReCycle

This applies whether you just installed OMS or whether you already had it installed in your computer.

## Defining your sampler as a Device

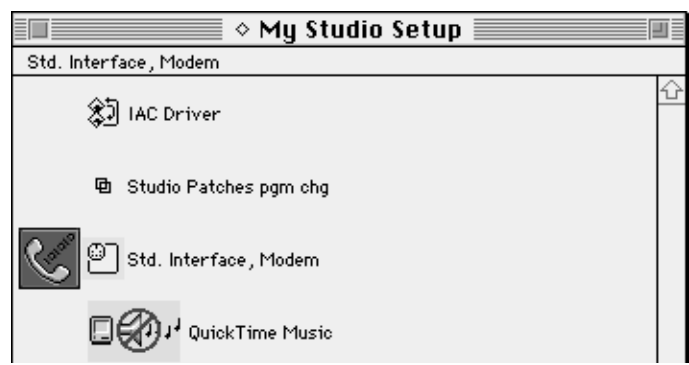
If your sampler is not already defined in the OMS Setup window, you need to do this manually.

**1. Launch the OMS Setup application.**

Your current OMS Setup appears.

**2. Click on the interface symbol, to select it.**

In the example below, a standard MIDI interface is selected.

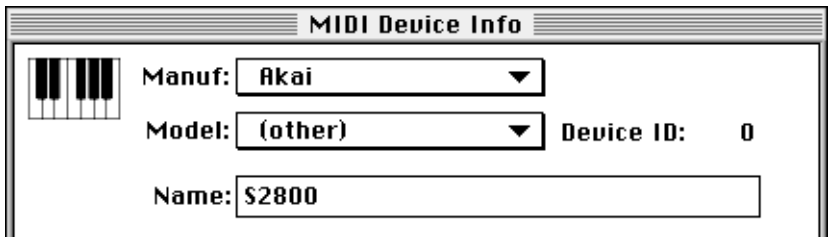


**3. Select New Device from the Studio menu.**

**4. Set up the Manufacturer and Model fields for your specific sampler.**

OMS doesn't "know" about all the different samplers that exist, so for some you have to specify "Other" as the Model, and type in the name in the Name field.

In the example below, an S2800 is specified in this way.



# Setting the Port number for Multi-port interfaces

If you have a multi-port interface like the Opcode Studio 4 and 5 or the Mark of the Unicorn MIDI Time Piece, you need to specify to which port the sampler is connected:

- 1. Select a port number by clicking it.



- 2. Type the number of the port pair to which that MIDI device is connected.
- 3. Press [Return].

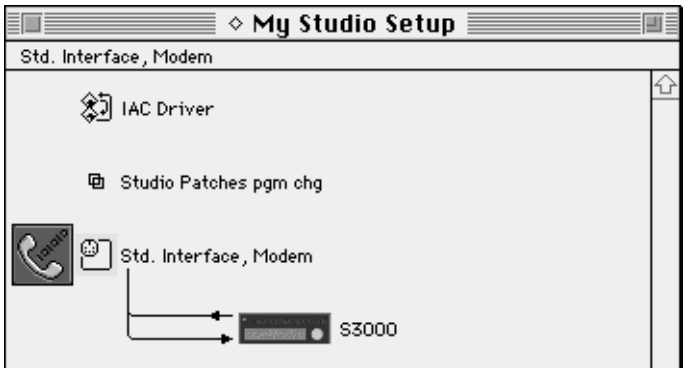
In this example, the S1000 is connected to Port 3.



- 4. If you prefer another icon for the device (this is purely a cosmetic decision), click on the Icon, select a new one and click OK.  
ReCycle does not require any specific setting for all the remaining options in this dialog box, so...

- 5. Click OK to close the dialog box.

You should have a setup that looks something like this for a regular MIDI interface (in this case an S3000 on the Modem port):



...and something like this for a multi-port interface:



- 
- If the sampler is connected to a MIDI Patcher, make sure the Patcher's "Default Program" allows you to have two-way communication between the computer and the sampler. See the OMS documentation for more information about Patchers.
- 

## Making the OMS Setup Current

1. **From the File menu, select "Save".**
2. **If a file dialog box appears, specify a name and location and Save the file.**  
The only reason you will need this file is if you want to change your setup at a later time.
3. **Quit OMS Setup.**

## Selecting the Sampler and testing MIDI communication

To make sure OMS is set up properly, you should test communication between ReCycle and the sampler. This is done using the Verify function:

1. **In ReCycle, pull down the Edit menu and select "Sampler Settings".**  
The Sampler Settings dialog appears.
2. **Pull down the Sampler pop-up menu and select the sampler.**  
If the specific sampler isn't available on the pop-up menu, you need to add it to the Sampler List, as described in the main documentation.
3. **Click the Verify button in the lower part of the dialog.**  
ReCycle checks the connection to the sampler.
4. **Check the icon next to the Verify button.**  
If the icon is a green check mark, communication with the sampler is properly established. A red cross icon means that communication failed, and you need to check your settings.



# How ReCycle interacts with OMS

This section describes how ReCycle interacts with OMS. Use this information together with the OMS documentation to decide how you should set up your system.

- **ReCycle requires two-way communication with the sampler. In other words, the MIDI Out on the sampler must be connected to a MIDI In on the interface, and the MIDI In on the sampler must be connected to a MIDI Out on the interface.**
- **When you launch ReCycle, it checks MIDI communication with all samplers on the Sampler List.**  
If a sampler cannot be found properly, ReCycle will tell you this.
- **When transmitting and receiving, ReCycle uses the System Exclusive ID setting defined in the Sampler Settings dialog in ReCycle.**  
The Device ID setting in OMS is of no importance.
- **If you have more than one sampler of the same model, they must be set to different Device IDs.**
- **If you use a MIDI Patcher, please note that ReCycle never switches programs in it. Instead ReCycle just uses the Patcher configuration that happens to be active at the moment. Therefore we recommend that you set things up so that the “Default Patch” for the Patcher allows for two-way communication between the Sampler and the computer. Otherwise you have to manually switch in the correct Program in the Patcher before using ReCycle.**

# Appendix B

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## Digidesign SampleCell



# Requirements and Support

ReCycle supports all models of SampleCell both on the Macintosh and Windows platforms.

Since ReCycle “only” creates SampleCell Instrument and Sample files which it saves to your computer’s hard disk, you do not need to have either MIDI or SCSI installed to use ReCycle with a SampleCell card. OMS is not required either.

## Installation

Follow all the installation instructions in the SampleCell documentation. Since ReCycle only saves SampleCell Instruments to your computer’s hard disk, you actually don’t even have to have the SampleCell card installed to be able to use ReCycle.

# Sampler Details

## Documents Created

ReCycle saves the SampleCell audio as Multisample Instrument files together with a number of sample files, all in the same folder.

**Mac:** You can save the sample files in any file format except Wave (WAV).

## SampleCell I and II

**Mac:** ReCycle for Macintosh can be used with either of the two types of SampleCell cards for Macintosh, I and II. But, the Instruments ReCycle creates require the SampleCell II editor to be loaded.

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**Mac:** ● SampleCell I is limited to loading 20 samples into one Instrument. Therefore, you can not use loops with more than 20 slices with a SampleCell I card!

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## Preferences

**Mac:** In the SampleCell Macintosh Preferences dialog you will find a setting called “Automatically remap instruments in a bank after adding an instrument”.

- 
- This preference must be turned off, or the first slice in a loop might have its tuning changed!
- 

## Loop Settings

ReCycle will add Loop markers at the beginning and end of each slice. To make a sample actually loop, the only thing you have to do is to turn on looping in the SampleCell editor (this is probably most useful when you have Transmit As One Sample turned on). If you know you want looping to start with, set up a Template Instrument with looping turned on.

## Templates

With SampleCell, the mapping of samples on “the keyboard” is *not* read from the templates (due to the way key ranges are handled in SampleCell). In the Instruments that ReCycle creates, the first sample is always put on the key C1.

## SampleCell Tuning Parameters

The SampleCell editor allows you to perform some very powerful editing to the entire Instrument and to the samples within it. However, there is one parameter which doesn’t really behave as you might expect.

The tuning parameter in the Miscellaneous group of parameters for an Instrument doesn't really tune a sample, instead it shifts the MIDI input up or down along the "keyboard". This means that instead of changing the pitch of all the slices in a loop, it will make the MIDI file play the wrong slices in the loop.

If you want to tune the slices in a loop you have two options:

- Either go into the key map and set the tuning individually for each slice in the loop, or...
- Map a modulation parameter to pitch and use that to change the pitch equally for all sounds in the Instrument.

## **Sample Rates**

SampleCell supports any sample rate, so no conversion is ever required with this instrument.

# Appendix C

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## Akai S1000, S2000 and S3000 series



# Requirements and Support

ReCycle supports all Akai samplers in the S1000, S2000, S3000 and CD3000 series, including all “XL”, “PB” and “i” variations. In this manual we refer to all the models in the 2000 and 3000 (“S” or “CD”) series as “the S3000”.

You need the following:

- **The required operating system for your sampler:**

Model	Operating System
S1000	4.40 or later.
S1100	4.30 or later.
Other	2.00 or later

### For MIDI Transfers:

- **A MIDI interface and two MIDI cables.**

**Mac:** • **For MIDI on the Macintosh you need OMS (included with ReCycle).**

### For SCSI transfers

**Win:** • **A SCSI card.**

- **A SCSI cable.**

It makes no difference to the functionality of the program whether you set up a MIDI or SCSI connection. The only difference is that SCSI transfers are much faster.

- **Not all sampler models come with SCSI built in, so you might need to add a SCSI card to your sampler.**

**Win:** ● Some Akai samplers don’t support SCSI transfers under Windows. This is because the SCSI drivers in Windows only work with devices that at all times reply correctly to a SCSI 2 Device Inquiry message. Unfortunately, some Akai samplers don’t.

Only the following models support SCSI communication with ReCycle under Windows: **S2000**, **S3000XL**, **S3200XL** and **CD3000XL**.

If you have any other Akai sampler model, you are restricted to MIDI transfers.

**Mac:** ● There are some possible problems with SCSI transfers between Macintosh computers and the S1000/S1100. See [page 21](#) for details.

# Which should I use – SCSI or MIDI?

## If you have a Macintosh

**Mac:**• We recommend that you use SCSI. It is much faster than MIDI.

## If you are using Windows

- Win:**• If you have a PC computer without SCSI, you have no choice. MIDI is your only option.
- If you don't have one of the Akai sampler models for which SCSI under Windows is supported (see [page 15](#)), again, using MIDI is your only option.
  - If you have a Windows compatible SCSI card in your computer, and your sampler supports SCSI transfers under Windows, we recommend that you use that.



# Installation

## MIDI Connections

If you want to use MIDI, proceed as follows:

1. **Connect a MIDI Cable from the MIDI Out on the sampler to a MIDI In on your computer.**
2. **Connect a MIDI cable from a MIDI Out on your computer to the MIDI In on the sampler.**

## SCSI Connections

Akai samplers only have one SCSI connector. If you have more than one Akai sampler, you need a SCSI splitter cable or box. This will allow you to connect all units to the computer at the same time.

- 
- To be able to set up a system with more than one Akai Sampler you need to remove termination in all samplers but one. Contact a qualified Akai Service centre.
- 

### General SCSI Rules!

SCSI is a high speed electrical interface, primarily designed to connect hard disks and other peripherals to personal computers. SCSI is not a regular computer network so there are severe restrictions on how many devices you can have connected, cable lengths etc.

- 
- Improper SCSI handling might cause permanent damage to your equipment. Please, always follow the few but important golden rules of SCSI to insure yourself against damaged equipment:
- 

- **Always make all connections with power on all units turned off!**
- **Use high quality SCSI cables! The shorter they are, the better.**
- **The total length of all SCSI cables should never exceed 6 meters (20 feet).**
- **The devices at the ends of your SCSI chain must be terminated!**  
Akai samplers have terminators built in, but these can be removed if needed (contact an Akai service centre for more info).  
Macintosh computers and SCSI cards for PC also have termination built in, but this should under no circumstances be removed.  
If you set up with too many terminators, or a terminator missing, data transmission most probably won't work properly. In the worst case, one of your SCSI devices might get physically damaged.
- **The computer should always be at one end of the SCSI chain of devices.**

- **Set all devices to different IDs before turning on power!**

Akai samplers are normally set to 6, but this can be changed.

**Mac:** Macintosh computers and their internal SCSI hard disks normally occupy IDs 0 and 7.

**Win:** PC SCSI cards are normally set to ID 7.

- **Always turn on the computer last, after all other devices have finalised their startup processes.**
- **Always switch on all devices. If some device is not turned on, you may lose data.**

#### **Win: Windows SCSI Device check**

When you launch Windows the first time after connecting the sampler via SCSI, it will ask you if you want to install a driver for it. Follow the procedure in the Windows Installation chapter in the printed manual.

## **Making Sampler System Settings**

1. **Make sure you have the latest operating system for your sampler. ReCycle may not be able to communicate with the sampler if you don't have a current version.**

New operating systems can be downloaded from Akai's Web site.

- 
- Operating System updates for Akai samplers might be installed inside your sampler or arrive on a floppy disk (which can be copied to a hard disk). If you have your operating system on a floppy disk, this disk must always be inserted into the drive when you turn on the sampler.
- 

2. **Turn on the sampler. If it is loading the operating system from the floppy, let it finish loading everything before turning on any other devices.**

### **Setting MIDI System Exclusive IDs**

For ReCycle to automatically recognize samplers via MIDI (using the "Find" or "Find All" functions), you need to make sure that the sampler has a "MIDI Exclusive Channel setting" of 1 to 16 and not higher:

- **The parameter is called "MIDI EXCLUSIVE Channel" or "MIDI Sysex Chan", depending on the sampler model.**

Consult the sampler documentation for details.

## Setting SCSI IDs

The Akai samplers are normally set to SCSI ID 6. If you only have the sampler connected via SCSI, this will work fine. If you have other peripherals, or more than one sampler connected via SCSI, you need to check that all devices are set to different IDs.

- **The SCSI ID of an Akai sampler is set with the parameter called “local SCSI ID” (S2000 and S3000 series) or “S1000/1100 SCSI ID”.**
- 
- If the computer refuses to boot (the computer “hangs” during startup) there’s something wrong with the termination, cables or SCSI IDs. Go back and check everything again. Try with less equipment connected (but don’t forget – always terminate both ends of the SCSI chain!).
- 

## Launching and Setting Up OMS (Macintosh only!)

**Mac:** Turn to [page 3](#) and set up OMS as described there.

# Sampler Details

## Transmitting

When you Transmit a sample to an Akai sampler, ReCycle always creates new Samples, Keygroups and a Program to put it all in.

## Templates

If you use Templates (as described in the printed manual), ReCycle copies all settings in the Template Program to the Program it creates.

The lowest note number of the first keygroup in the template Program (the Keygroup furthestmost to the left on the “keyboard”) is used for the first sample ReCycle transmits. All other samples are positioned chromatically upwards.

If you want to use templates to position your ReCycle samples on a certain part of the “keyboard”, you might create a Program in your sampler, with only one Keygroup in, positioned where you want the first sample. You could even have a number of such dummy Programs on your sampler startup disk, which would allow you to use the Template pop-up menu in the Transmit dialog to simply select where on the “keyboard” your ReCycled samples will appear.

## Playback Modes

When you slice a sample, we recommend that you set the samples to “PLAY TO SAMPLE END” (to ensure it doesn’t loop and to make sure the entire sample plays). This can be done either for an individual sample or as a setting in the Keygroup. See your Akai sampler manual for more information.

## Loop settings

ReCycle will put the loop points at the beginning and end of each slice. To make a sample actually loop when you hold down the key, the only thing you have to do is to turn on looping (this is probably most useful when you have Transmit As One Sample turned on). If you know you want looping to start with, set up a Template Program with looping turned on.

## Keygroups

The Slices are loaded into one keygroup each. By using “Edit One Keygroup” or “Edit All Keygroups” it is very easy to get creative with the Akai samplers.

- In “All” mode you might for example mimic a pitch shift by changing the tuning of all samples. Or you might change the Decay of the sounds by altering all keygroups’ envelopes.
- In “One” mode you can pitch different samples individually or set them to different Outputs, panning etc.

# S1000/1100 – Macintosh Pitfalls

**Mac:** Due to incompatibility between the Macintosh and Akai S1000/S1100 SCSI implementations, SCSI communication between ReCycle and these samplers may not work reliably on all Macintosh models.

Since it is impossible to tell whether SCSI communication will work for each and every Power Macintosh model, we think you should try it - only experimentation will tell if things work.

- 
- It is very unlikely that this problem will cause any permanent damage to your equipment. Still, Steinberg does not take responsibility whatsoever for lost data or damaged equipment!
- 

## How do I know if it works?

Some transfers will almost certainly work, some time. If a transfer fails, ReCycle will often tell you so. Another indication may be that the system hangs indefinitely during a transfer. Technically, nothing is actually “broken”, it is just that the two machines are waiting for each other, and will do so for an infinite amount of time.

## Slow transfers

If you have many samples (more than one hundred) in your Akai S1000/S1100, SCSI transfers are very slow. Do not confuse this with a “hung” system.

## In case of transfer problems

Even if you have followed the general SCSI guidelines above, there might be extreme situations where you could possibly run into problems with SCSI. If the computer freezes, as a result of communication problems during a transfer to the sampler, proceed as follows:

- 1. On the sampler, make a “Save Entire Volume” to new empty floppy disks. Do not overwrite earlier disks and do not save to hard disk, since the data you save now may be corrupted.**
- 2. Check through the Programs in the sampler and delete those that didn't get transferred accurately. Check that the remaining Programs seem to be intact. Save to floppy again.**
- 3. Restart the sampler and the computer, and try the transfer again.**

The only way to insure yourself totally against loss of important material is to Save on the sampler, as often as possible.

# Appendix D

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## Roland S-760



# Requirements and Support

ReCycle supports the Roland S-760. You need the following:

- **S-760 operating system 2.24 or later.**
- **A MIDI interface and two MIDI cables.**

**Mac:** • **For MIDI on the Macintosh you need OMS (included with ReCycle).**

**Mac:** • **For SCSI transfers you need a SCSI cable.**

It makes no difference to the functionality of the program whether you set up a SCSI connection or not. The only difference is that SCSI transfers are *much* faster.

**Mac:** • **Your S-760 might not come with SCSI built in, so you might need to add a SCSI card to it.**

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**Mac:** ● **Note that SCSI transfers require both SCSI and a two-way MIDI connection!**

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**Win:** ● The S-760 does not support SCSI transfers under Windows. This is because the SCSI drivers in Windows only work with devices that at all times reply correctly to a SCSI 2 Device Inquiry message. Unfortunately, the S-760, as of this writing, doesn't, which means that you are restricted to MIDI transfers when using a Roland S-760 with ReCycle for Windows.

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# Installation

## MIDI Connections

1. **Connect a MIDI Cable from the MIDI Out on the sampler to a MIDI In on your computer.**
2. **Connect a MIDI cable from a MIDI Out on your computer to the MIDI In on the sampler.**

## SCSI Connections (Macintosh Only!)

### **Mac: General SCSI Rules!**

SCSI is a high speed electrical interface, primarily designed to connect hard disks and other peripherals to personal computers. SCSI is not a regular computer network so there are severe restrictions on how many devices you can have connected, cable lengths etc.

- 
- **Improper SCSI handling might cause permanent damage to your equipment. Please, always follow the few but important golden rules of SCSI to insure yourself against damaged equipment:**
- 
- **Always make all connections with power on all units turned off!**
  - **Use high quality SCSI cables! The shorter they are, the better.**
  - **The total length of all SCSI cables should never exceed 6 meters (20 feet).**
  - **The devices at the ends of your SCSI chain must be terminated!**  
Follow the recommendations in your manuals about how to terminate your devices. If you set up with too many terminators, or a terminator missing, data transmission most probably won't work properly. In the worst case, one of your SCSI devices might get physically damaged.
  - **The computer should always be at one end of the SCSI chain of devices.**
  - **Set all devices to different IDs before connecting and turning on power!**  
Macintosh computers and their internal SCSI hard disks normally occupy IDs 0 and 7. The S-760 is normally set to ID 7 so this needs to be changed from the front panel!
  - **Always turn on the computer last, after all other devices have finalized their startup processes.**
  - **Always switch on all devices. If some device is not turned on, you may lose data.**

## Making Sampler System Settings

1. Make sure you have the latest operating system for your sampler. ReCycle may not be able to communicate with the sampler if you don't have a current version. If in doubt, contact your dealer.
  2. Turn on the sampler. Let it finish booting.
  3. On the S-760, press the Mode button and select "System Mode". Press the value button twice to get to the System menu.
  - Mac:** 4. If you want to use the sampler with SCSI, select "SCSI" and press the Value button to enter the SCSI menu.
  - Mac:** 5. Locate the "S-760 Self SCSI ID" parameter and change it if needed. Make sure it is not set to 0 or 7 (since these numbers are occupied by your computer). Also make sure that this setting is not set to the same ID as any other device connected to the SCSI bus.
  6. Press the Value button to exit, select "MIDI" and press Value again to enter the MIDI menus.
  7. On the MIDI menus make sure that "MIDI Out/Thru" is set to Out, and that "Exclusive RX" is set to On.
  8. Press the Mode button, select "Performance" and press the Value button again to enter Performance Play mode.
  9. Turn on all other computer peripherals and let them start up.
  10. Turn on your computer.
- 
- If the computer refuses to boot (the computer "hangs" during startup) there's something wrong with the termination, cables or SCSI IDs. Go back and check everything again. Try with less equipment connected (but don't forget – always terminate both ends of the SCSI chain!).
- 

## Launching and Setting Up OMS (Macintosh only!)

**Mac:** Turn to [page 3](#) and set up OMS as described there.

# Sampler Details

## S-760 must be in Performance mode!

- 
- The S-760 must always be in Performance mode when transmitting or receiving samples!
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## Transmitting

When you Transmit a sample to an S-760, ReCycle always creates new Samples and Partials and a Patch to put it all in.

The default Volume ID for ReCycle Patches is “RCY”. This can be changed before transmission, by editing the name in the Transmit dialog.

## Templates

If you use Templates (as described in the printed manual), ReCycle copies all settings in the Template Patch to the Patch it creates.

The lowest note number in the template Patch (the Partial furthestmost to the left on the “keyboard”) is used for the first sample ReCycle transmits. All other samples are positioned chromatically upwards.

If you want to use templates to position your ReCycle samples on a certain part of the “keyboard”, you might create a Patch on your sampler, with only one Partial/Sample in, positioned where you want the first sample. You could even have a number of such dummy Patches on your sampler startup disk, which would allow you to use the Template pop-up menu in the Transmit dialog to simply select where on the “keyboard” your ReCycled samples will appear.

## Loop settings

ReCycle will put the loop points at the beginning and end of each slice. To make a sample actually loop when you hold down the key, the only thing you have to do is to change looping, from OneShot to whatever mode is required for your application (this is probably most useful when you have Transmit As One Sample in ReCycle turned on). If you know you want looping to start with, set up a Template Patch with looping turned on.

# Appendix E

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## Kurzweil K2000/K2500



# Requirements and Support

ReCycle supports the Kurzweil K2000 and K2500 and their rack versions.

You need the following:

- **The K2000 needs operating system 3.01 or later. The K2500 needs operating system 2.80 or later.**
- **A MIDI interface and two MIDI cables.**

**Mac:** • **For MIDI on the Macintosh you need OMS (included with ReCycle).**

**Win:** • **To do SCSI transfers on a PC you need a SCSI card.**

- **For SCSI transfers you need a SCSI cable.**

It makes no difference to the functionality of the program whether you set up a SCSI connection or not. The only difference is that SCSI transfers are much faster.

- 
- **Note that SCSI transfers require both SCSI and a two-way MIDI connection!**
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# Installation

## MIDI Connections

1. **Connect a MIDI Cable from the MIDI Out on the sampler to a MIDI In on your computer.**
2. **Connect a MIDI cable from a MIDI Out on your computer to the MIDI In on the sampler.**

## SCSI Connections

### General SCSI Rules!

SCSI is a high speed electrical interface, primarily designed to connect hard disks and other peripherals to personal computers. SCSI is not a regular computer network so there are severe restrictions on how many devices you can have connected, cable lengths etc.

- 
- **Improper SCSI handling might cause permanent damage to your equipment. Please, always follow the few but important golden rules of SCSI to insure yourself against damaged equipment:**
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- **Always make all connections with power on all units turned off!**
- **Use high quality SCSI cables! The shorter they are, the better.**
- **The total length of all SCSI cables should never exceed 6 meters (20 feet).**
- **The devices at the ends of your SCSI chain must be terminated!**  
Follow the recommendations in your manuals about how to terminate your devices. If you set up with too many terminators, or a terminator missing, data transmission most probably won't work properly. In the worst case, one of your SCSI devices might get physically damaged.
- **The computer should always be at one end of the SCSI chain of devices.**
- **Set all devices to different IDs before connecting and turning on power!**  
Kurzweil samplers are normally set to ID 6 but this can be changed from the front panel if needed.

**Mac:** Macintosh computers and their internal SCSI hard disks normally occupy IDs 0 and 7.

**Win:** PC SCSI cards are normally set to ID 7.

- **Always turn on the computer last, after all other devices have finalized their startup processes.**
- **Always switch on all devices. If some device is not turned on, you may lose data.**

## Booting Up and Making System Settings

1. Make sure you have the latest operating system for your sampler. ReCycle may not be able to communicate with the sampler if you don't have a current version. If in doubt, contact your dealer.
2. Turn on the sampler and any connected external SCSI devices. Let the sampler finish booting.
3. Turn on your computer.

- 
- If the computer refuses to boot (the computer "hangs" during startup) there's something wrong with the termination, cables or SCSI IDs. Go back and check everything again. Try with less equipment connected (but don't forget – always terminate both ends of the SCSI chain!).
- 

### Win: Windows SCSI Device check

When you launch Windows the first time after connecting the sampler via SCSI, it will ask you if you want to install a driver for it. Follow the procedure in the Windows Installation chapter in the printed manual.

## Checking the MIDI System Exclusive IDs

1. Go to the MIDI Receive parameters page on your K2000.
2. Check the SysEx ID setting. If you have more than one K2000 they must be set to different IDs.

## Launching and Setting Up OMS (Macintosh only!)

**Mac:** Turn to [page 3](#) and set up OMS as described there.

# Sampler Details

## Transmitting

When you Transmit slices to a K2000/K2500, ReCycle always creates new Samples and Keymaps and a Program to put it all in.

## Templates

If you use Templates (as described in the printed manual), ReCycle copies all settings in the Template Program to the Program it creates.

The lowest note number of the first layer in the template Program (the layer furthest to the left on the “keyboard”) is used for the first sample ReCycle transmits. All other samples are positioned chromatically upwards.

If you want to use templates to position your ReCycle samples on a certain part of the “keyboard”, you might create a Program on your sampler, with only one layer in, positioned where you want the first sample. You could even have a number of such dummy Programs in your sampler, which would allow you to use the Template pop-up menu in the Transmit dialog to simply select where on the “keyboard” your ReCycled samples will appear.

## Loop settings

ReCycle does *not* set loop points at the beginning and end of each slice when transmitting to a Kurzweil sampler. If you want to loop a slice (probably most useful when using Transmit As One Sample), you need to set the loop points manually in the sampler and then turn on looping.



# Appendix F

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## Ensoniq Samplers



# Requirements and Support

ReCycle supports the Ensoniq EPS, EPS-16+, ASR-10 and ASR-88.

You need the following:

- **The required operating system version.**  
EPS needs operating system 2.49 or later.  
EPS-16+ needs operating system 1.30 or later.  
ASR-10/88 needs operating system 3.53 or later.
- **A MIDI interface and two MIDI cables.**  
SCSI communication is not supported for Ensoniq samplers.

**Mac:** • For MIDI on the Macintosh you need OMS (included with ReCycle).

## Installation

### MIDI Connections

1. **Connect a MIDI Cable from the MIDI Out on the sampler to a MIDI In on your computer.**
2. **Connect a MIDI cable from a MIDI Out on your computer to the MIDI In on the sampler.**

**If you are using a Multi-Port MIDI Interface or a MIDI Merger**

Since the sampler is connected via MIDI only, all sample data is transmitted via MIDI, in very large portions. If you are using a Multi-Port MIDI interface or a MIDI Merger, the huge amount of data may prevent the interface/merger from working properly, i.e. communication with other connected MIDI instruments may be lost or disrupted. If you encounter such problems, we recommend that you connect the sampler via a single port MIDI interface, if possible.

### Making Sampler System Settings

1. **Make sure you have the latest operating system for your sampler. ReCycle may not be able to communicate with the sampler if you don't have a current version. If in doubt, contact your dealer.**
2. **Turn on the sampler. Let it finish booting before turning on other devices.**
3. **Among the sampler's System parameters, make sure "MIDI SYS-EX" is set to ON.**  
Use the "SAVE GLOBAL PARAMETERS" option to save this setting.

### Launching and Setting Up OMS (Macintosh only!)

Turn to [page 3](#) and set up OMS as described there.

# Sampler Details

## MIDI Communication

- **As described in the printed documentation, Ensoniq samplers cannot be automatically “found” by ReCycle.**  
Instead you have to add them manually to the Sampler List.
- **For MIDI Communication to be possible, you must make sure that the Ensoniq sampler is not in “Load Mode”.**  
If the Ensoniq sampler is in “Load Mode” when ReCycle is launched, the program will not be able to Verify the connection to the sampler properly. If this happens, exit “Load Mode” on the sampler, open the Sampler Settings dialog in ReCycle and use the Verify function to re-establish communication.

## Transmitting

The Transmit dialog allows you to specify an Instrument slot and a name for the Instrument. When you Transmit to the EPS/ASR, ReCycle always creates new Wave-Samples, Layers and Instruments, as needed. In the Instruments that ReCycle creates, the first sample is always put on the key C1.

## Templates

Templates are not implemented for Ensoniq samplers.

## Loop settings

ReCycle will put the loop points at the beginning and end of each slice. To make a sample actually loop when you hold down the key, the only thing you have to do is to turn on looping in the sampler (this is probably most useful when you have Transmit As One Sample turned on).

# Appendix G

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## E-mu Samplers



# Requirements and Support

ReCycle supports:

- The E-mu Esi-32 and Esi-4000.
- The EIV (E4), e-64, e-6400 and E-Synth, including all variations (provided they run the EOS operating system version 4.0 or later - see the note below!).
- Future samplers running the same operating system (EOS 4.0 or later) and using the same SCSI routines.

- 
- Note: Even though ReCycle supports all variations of the EOS 4.0 samplers, the program cannot automatically distinguish one model from another. Therefore, when ReCycle auto-detects an E-mu sampler running EOS 4.0, it will appear in the Sampler List as a generic “E-mu EOS Sampler”. If you like, you can add the sampler manually, and specify the exact model.
- 

You need the following:

- **The required Operating System version:**

Model:	Required Operating System:
Esi-32, Esi-4000	OS 3.02 or later.
E4, e-64, e-6400, E-Synth and all variations,	OS 4.00 or later.

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**Win:**• **On the PC you need a SCSI card.**

- **A SCSI cable.**

Communication between the computer and the sampler happens via SCSI only, which means that MIDI connections (and OMS on the Macintosh) are *not* required.

# Connecting

## General SCSI Rules!

SCSI is a high speed electrical interface, primarily designed to connect hard disks and other peripherals to personal computers. SCSI is not a regular computer network so there are severe restrictions on how many devices you can have connected, cable lengths etc.

- 
- Improper SCSI handling might cause permanent damage to your equipment. Please, always follow the few but important golden rules of SCSI to insure yourself against damaged equipment:
- 

- **Always make all connections with all units turned off!**
- **Use high quality SCSI cables! The shorter they are, the better.**
- **The total length of all SCSI cables should never exceed 6 meters (20 feet).**
- **The devices at the ends of your SCSI chain must be terminated!**  
Follow the recommendations in your manuals about how to terminate your devices. If you set up with too many terminators, or a terminator missing, data transmission most probably won't work properly. In the worst case, one of your SCSI devices might get physically damaged.
- **The computer should always be in one end of the SCSI chain of devices.**
- **Set all devices to different IDs before connecting and turning on power!**  
**Mac:** Macintosh computers and their internal SCSI hard disks normally occupy IDs 0 and 7.  
**Win:** PC SCSI cards normally occupy the SCSI ID 7.
- **The E-mu sampler is normally set to ID 5 but this can be changed from the front panel if needed.**
- **If your sampler has a "Mac on SCSI bus" or "Avoid Host on ID" setting, please activate this. If a certain SCSI Device ID can be selected, set it to the same number as your computer/SCSI card (normally 7).**
- **Always turn on the computer last, after all other devices have finalized their startup processes.**
- **Always switch on all devices. If some device is not turned on, you may lose data.**

# Booting Up

1. **Make sure you have the correct operating system for your sampler (see above).**

ReCycle will not be able to communicate correctly with the sampler if you don't have a current version. If in doubt, contact your dealer.

2. **Turn on the sampler and any connected external SCSI devices. Let the sampler finish booting.**

3. **Turn on your computer.**

4. **If the computer refuses to boot (the computer “hangs” during startup) there’s something wrong with the termination, cables or SCSI IDs. Go back and check everything again.**

Try with less equipment connected (but don't forget – always terminate both ends of the SCSI chain!).

## Windows Device check

When you launch Windows the first time after connecting the sampler via SCSI, it will ask you if you want to install a driver for it. Follow the procedure in the Windows Installation chapter in the printed manual.

# Sampler Details

## Receiving

Samples that you want to receive from your sampler are identified by number. Use the editing facilities on your sampler to find out which number a certain sample has, type in this number in the Receive dialog and click Receive.

## Transmitting

Since more or less only the basic SMDI specification is used for communicating with E-mu samplers, some care must be taken when transmitting samples. Proceed as follows:

- 1. On the sampler, select a Preset where you want to insert the samples.**  
The samples are always entered into the current Preset starting at the key C1. The transmitted samples will overwrite any existing samples in the key range used. Therefore, we recommend that you use an empty Preset.
- 2. Make an approximation of how many samples you will transmit, that is how many slices you currently have in your loop in ReCycle.**
- 3. In the E-mu sampler, find a range of currently unused sample numbers and enter the lowest of these in the Transmit dialog.**  
This range of unused sample numbers must accommodate all the slices you plan to transmit. If you for example plan to transmit 15 slices and enter the number 10, sample numbers 10 to 24 must be unused. If these sample numbers are not unused but rather “contain” samples, these will get overwritten!
- 4. Enter a basic name for the samples.**
- 5. Click Transmit.**

## Templates

Templates are not implemented for E-mu samplers.

## Loop settings

ReCycle will put the loop points at the beginning and end of each slice. To make a sample actually loop when you hold down the key, the only thing you have to do is to turn on looping in the sampler (this is probably most useful when you have Transmit As One Sample turned on).



## Parameter settings

Since the samples are “injected” into the current Preset, no special parameter settings are made. You might want to manually adjust envelopes and other settings to make the slices play back as “transparently” as possible. Or, you might want to modify parameters to purposely change the sound!

# Appendix H

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## Yamaha A3000



# Requirements and Support

ReCycle supports the Yamaha A3000 sampler. You need the following:

- **Operating System 2.00 or later.**
- **A MIDI interface and two MIDI cables.**

**Mac:** • **For MIDI on the Macintosh you need OMS (included with ReCycle).**

**For SCSI Transfers**

- Win:** • **A SCSI card.**
- **A SCSI cable.**

A MIDI connection is required. It makes no difference to the functionality of the program whether you set up a SCSI connection or not. The only difference is that SCSI transfers are *much* faster.

# Installation

## MIDI Connections

1. **Connect a MIDI Cable from the MIDI Out on the sampler to a MIDI In on your computer.**
2. **Connect a MIDI cable from a MIDI Out on your computer to the MIDI In on the sampler.**

### **If you are using a Multi-Port MIDI Interface or a MIDI Merger**

If your A3000 is connected via MIDI only, all sample data is transmitted via MIDI, in very large portions. If you are using a Multi-Port MIDI interface or a MIDI Merger, the huge amount of data may prevent the interface/merger from working properly, i.e. communication with other connected MIDI instruments may be lost or disrupted. If you encounter such problems, we recommend that you connect the A3000 via a single port MIDI interface, if possible.

## SCSI Connections

### **General SCSI Rules!**

SCSI is a high speed electrical interface, primarily designed to connect hard disks and other peripherals to personal computers. SCSI is not a regular computer network so there are severe restrictions on how many devices you can have connected, cable lengths etc.

- 
- **Improper SCSI handling might cause permanent damage to your equipment. Please, always follow the few but important golden rules of SCSI to insure yourself against damaged equipment:**
- 

- **Always make all connections with all units turned off!**
- **Use high quality SCSI cables! The shorter they are, the better.**
- **The total length of all SCSI cables should never exceed 6 meters (20 ft).**
- **The devices at the ends of your SCSI chain must be terminated!**  
Follow the recommendations in your manuals about how to terminate your devices. If you set up with too many terminators, or a terminator missing, data transmission most probably won't work properly. In the worst case, one of your SCSI devices might get physically damaged.
- **The computer should always be at one end of the SCSI chain of devices.**
- **Set all devices to different IDs before connecting and turning on power!**  
The Yamaha samplers are normally set to ID 6 but this can be changed from the front panel (with the "SelfID" setting on the Disk parameter pages). Macintosh computers and their internal SCSI hard disks normally occupy IDs 0 and 7. PC SCSI cards normally occupy the SCSI ID 7.

- Always turn on the computer last, after all other devices have finalized their startup processes.
- Always switch on all devices. If some device is not turned on, you may lose data.

## Booting Up

1. Make sure you have the required operating system for your sampler. Re-Cycle may not be able to communicate with the sampler if you don't have a current version. If in doubt, contact your dealer.
  2. Turn on the sampler and any connected external SCSI devices. Let the sampler finish booting.
  3. Turn on your computer.
- 
- If the computer refuses to boot (the computer “hangs” during startup) there's something wrong with the termination, cables or SCSI IDs. Go back and check everything again. Try with less equipment connected (but don't forget – always terminate both ends of the SCSI chain!).
- 

### Win: Windows SCSI Device check

When you launch Windows the first time after connecting the sampler via SCSI, it will ask you if you want to install a driver for it. Follow the procedure in the Windows Installation chapter in the printed manual.

## Making Sampler System Settings

1. Go to the MIDI Receive parameters page on your A3000.
2. Check the Basic Channel (BasicCh) setting. If you have more than one A3000 they must have different Basic Channel settings.
3. Go to the MIDI Bulk page.
4. Make sure the Protect switch is Off.

## Launching and Setting Up OMS (Macintosh only!)

**Mac:** Turn to [page 3](#) and set up OMS as described there.

# Sampler Details

## Transmitting

When you Transmit Slices to an A3000, ReCycle creates new Samples and a Bank to put them all in. Just as when you load a Sample Bank from disk into A3000's memory, the Bank is initially deactivated.

- 
- To be able to play the Bank, you need to activate it in the current Program.
- 

## Templates

Either a Sample or a Sample Bank can be used as Template (for more information about Templates, see the operation manual).

- **If a Template Sample is used, a default Bank is created, and the parameter settings from the Template Sample are copied to all new samples created.**  
The first sample will be mapped to the same key as the Template Sample (the "OrigKey" parameter), and the following samples will be mapped chromatically upwards.
- **If a Template Bank is used, all settings in this Bank are copied to the created Bank.**  
For the individual samples in the Bank, the first sample in the Template Bank is used as Template Sample.

## Loop settings

ReCycle will put the loop points at the beginning and end of each Slice. To make a sample actually loop when you hold down the key, the only thing you have to do is to turn on looping for the Slices in the sampler (this is probably most useful when you have Transmit As One Sample turned on).

# Appendix J

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## SoundFonts



# What are SoundFonts?

SoundFont is a file format for storing wavetable synthesized sounds. The format is developed by E-mu Systems and Creative Technologies. It allows users to create and edit multi-sampled sounds, and play them back in wavetable synthesizers, typically on audio cards (e.g. Creative Technologies AWE-32, AWE-64 and Soundblaster Live!, Terratec EWS-64 and E-mu APS).

In broad terms, a SoundFont Bank consists of Presets, which contain references to one or several Instruments. Each Instrument in turn contains references to a number of Samples, complete with key and velocity range information. There are also several levels of articulation data (filtering, modulation settings, etc.). These are not affected when ReCycle generates SoundFont files, but they make it possible to change the sound in a SoundFont editor later on.

## Requirements

There are no actual requirements for ReCycle to be able to export SoundFont files, but to make the files possible to use, you need the following:

- **A SoundFont compatible audio card with RAM installed.**
- **An application that can load the exported SoundFont file into the RAM on the audio card.**  
If you are using a Creative audio card under Windows, you can load SoundFont banks using the AWE Control Panel application.
- **An application that plays SoundFonts.**  
This would typically be a software sequencer, like Steinberg Cubase VST.

## Installation

To install a SoundFonts compatible audio card, follow the documentation included with the card. Depending on the card, SoundFont editor and manager software may be included and installed - if not, you need to obtain and install these separately.



# Using ReCycle with SoundFonts

When you have set up and sliced a loop in ReCycle (see the printed documentation), you export it as a SoundFont file using the following procedure:

- 1. Select “SoundFonts” on the Sampler menu.**
  - 2. Select “Export as SoundFont File” on the same menu.**  
An Export dialog appears.
  - 3. Enter a name.**  
This name will be used “internally” in the SoundFont file, and will appear when you handle the SoundFont in your SoundFont editor or when you select it for playback in your sequencer. It is not the same as the file name.
  - 4. Click “MIDI File+Export...” (or “Export...” if you don’t want to create a MIDI file).**  
File dialogs appear, allowing you to specify names and locations for the resulting files (see the printed documentation for details).
- 
- If you are using ReCycle for Macintosh but plan to use the exported SoundFont file under Windows, we recommend that you add the extension “.SF2” to the file name (in ReCycle for Windows, this is done automatically).
- 

Now, a SoundFont Bank file is created. It contains a single Melodic Preset, which contains a single Instrument. The Instrument contains all the slices (as separate samples), laid out chromatically with one sample per key, from key nr 36 (C1) and upwards.

- 5. Use a SoundFont editor or bank manager program to load the SoundFont file into the RAM of your audio card.**  
See the documentation of the program for details.
- 6. Open the generated MIDI file in a sequencer, and set it to play back to the MIDI synthesizer on the card, using your generated SoundFont Bank as sound source.**  
You will hear the original loop played back, but you will be able to change the tempo, remove or reorder individual slices, etc. You could also use the SoundFont editor software to manipulate individual slices in various ways.

## Templates

Templates are not implemented for SoundFonts.

# Appendix K

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## MixMan TRK files



# What are MixMan TRK files?

MixMan TRK files are a native file format of the MixMan Studio and Studio Pro applications, programs in which you create music by mixing and matching beats and loops, automatically adjusting their tempo in the process.

ReCycle can export loops as MixMan TRK files, which then can be imported into MixMan Studio, Studio Pro or other MixMan compatible applications.

- 
- As of yet, MixMan applications are only available for Windows.
- 

## Settings in ReCycle

When you set up the loop to export it as a MixMan TRK file, you should basically follow the steps in the example “Slicing for Tempo Changes” in the chapter “Example Applications” in the main ReCycle Operation Manual.

- **The Pitch to New Tempo function is not used when exporting MixMan TRK files.**

# Appendix L

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## Keyboard Shortcuts

# About Keyboard Shortcuts

Several of the functions and options in ReCycle can be controlled from the computer keyboard. In the tables below, we use the following nomenclature:

- [Command]/[Ctrl]-[O] means “hold down the Command/Apple key if you are using a Macintosh, or the Control key if you are using a PC, and press the O key”.
- [Num] means the numeric keypad to the right.

## File Commands

Function	Key Command	Description
Open	[Command]/[Ctrl]-[O]	Open an audio file or a ReCycle file.
Close	[Command]/[Ctrl]-[W]	Close current document.
Save	[Command]/[Ctrl]-[S]	Save current document as a ReCycle file.
Export REX file	[Command]/[Ctrl]-[B]	Export the loop as a REX (ReCycle Export) file, for use in other programs.
Quit	[Command]/[Ctrl]-[Q]	Quit ReCycle.

## Playback/Audition Commands

Function	Key Command	Description
Play Loop	[Num Enter]	Play the audio between the Locators continuously.
Stop	[Num 0]	Stop playback. In Stop mode, pressing [Num 0] will move the play position to the Left Locator or (if the play position is already at the Left Locator or before it) to the beginning of the file.
Play/Stop	[Space]	Toggle between Play and Stop modes.
Play Previous Slice	[Num 7]	Audition the Slice to the left of the Current Slice and make it the Current.
Play Current Slice	[Num 8] or [Arrow Up]	Audition the Current Slice.
Play Slice and move to next	[Num 9]	Audition the Current Slice and make the Slice to the right the Current.
Move to Previous	[Num 4] or [Arrow Left]	Make the previous Slice the Current.
Move to Next	[Num 6] or [Arrow Right]	Make the next Slice the Current.
Move to Left Loc.	[Num 1]	Move play position to start of loop.
Move to Right Loc.	[Num 2]	Move play position to end of loop.
Scroll On/Off	[F]	Toggle “Scroll during Playback” on/off.

## Magnification Commands

Function	Key Command	Description
Magnify to Fit	[Command]/[Ctrl]-[F]	Zoom out so that the entire sample fits the window.
Magnify to Fit Loop	[Command]/[Ctrl]-[L]	Zoom in/out so that the loop (the area between the Locators) fits the window.
Zoom in	[Command]/[Ctrl]-[+]	Zoom in one step.
Zoom out	[Command]/[Ctrl]-[-]	Zoom out one step.

## General Modifier Keys

Modifier Key	Description
[Option] / [Alt]	Disables “Snap to Slice” when moving Locators or inserting Slices.
[Command] / [Ctrl]	Holding [Command]/[Ctrl] and clicking in the sample view zooms in one step. In the Overview, [Command]/[Ctrl]-clicking is used for “drawing” a zoom box.
[Command]/[Ctrl] + [Option]/[Alt]	Holding [Command]/[Ctrl]+[Option]/[Alt] and clicking in the sample view zooms out one step.

## Other

Function	Key Command	Description
Set Sensitivity	[0]-[9] (Keyboard)	Set Sensitivity from 0 to 99.
Increase Sens.	[+] (Keyboard or Num)	Increase Sensitivity one step.
Decrease Sens.	[-] (Keyboard or Num)	Decrease Sensitivity one step.
Select All	[Command]/[Ctrl]-[A]	Select all Slice Markers.
Arrow Tool	[Command]/[Ctrl]-[1]	Select the Arrow tool.
Mute Tool	[Command]/[Ctrl]-[2]	Select the Mute tool.
Lock Tool	[Command]/[Ctrl]-[3]	Select the Lock tool.
Pencil Tool	[Command]/[Ctrl]-[4]	Select the Pencil tool.
Transmit/Export	[Command]/[Ctrl]-[T]	Transmit the loop to a sampler, or export it as a file on the hard disk, depending on the selection on the Sampler menu.
Receive	[Command]/[Ctrl]-[R]	Receive a sample from a sampler (only available if an external sampler is selected on the Sampler menu).