

S-330/550 Basics

The S-550 and S-330 digital samplers are 12-bit mono samplers which were first made in 1987. The S-550 is eight part multitimbral with a memory capacity of 64 Tones and 32 Patches. Its total sampling time is 28.8 seconds at 30kHz. The last operating system for the S-550 was the CD-5 system, which was included with the Roland CD-5 CD-ROM player. The S-330 is eight part multitimbral with a memory capacity of 32 Tones and 16 Patches. Its total sampling time is 14.4 seconds at 30kHz. The last operating system for the S-330 was version 1.03. This document is intended to provide a step by step guide to a few of the S-330/550's most commonly used procedures. First, we will show you how to create a Performance disk. Next, we will discuss some of the features added with the CD-5 operating system. Then, we will create a Patch and show you how you can conserve memory by using Sub Tones. Next, we will show you the basic sampling procedure. Finally, we will discuss the use of external SCSI devices with the S-550 and provide a list of compatible peripheral devices. It is our hope that you will find this document a useful companion to the Owner's Manual.

I. Creating a Performance Disk (S-550 Only)

An S-550 Performance disk is a set of up to 8 Patches saved as a group on a single floppy disk. Creating a Performance disk allows you to assemble a group of your own Patches from multiple source disks. Start the S-550 with the CD-5 system disk (SU-04) in the drive and use the following procedure to create a Performance Disk:

- 1) Insert the desired S-550 sound disk into the disk drive.
- 2) Use the mouse to highlight "MODE" and press the left mouse button. The available modes will be displayed.
- 3) Use the mouse to highlight "DISK" and press the left mouse button.
- 4) Use the mouse to highlight "FD Load P" (Floppy Disk Load Patch) and press the left mouse button. "FD P# 111 _____" (the first Patch) will be displayed.
- 5) Select "DISK" from the SUB menu to display a list of available Patches on the disk.
- 6) Use the mouse to highlight the desired Patch and double click the right mouse button.
- 7) Select "FD Load Patch" from the COM menu and press the left mouse button. "Now Loading" will be displayed.
- 8) Select "PLAY" from the MODE menu to display the Patch you just loaded as Patch 1-11.
- 9) Repeat steps 2-7 to load additional Patches as desired. Make sure you select a new Patch location for each Patch (i.e. 1-12, 1-13, etc.).
- 10) Once you have loaded all the Patches that you want to use in your Performance, select "DISK" from the MODE menu.
- 11) Use the mouse to highlight "FD Save" and press the left mouse button. Highlight "Save Set 1" and press the left mouse button. This will save the currently loaded Patches together onto a disk (or disks if necessary).

NOTE: To perform this function it is necessary that you use the CD-5 System version. Earlier versions of the operating system do not allow an individual Patch to be loaded into the S-550. This file is available without charge from the Roland U.S. website (www.rolandus.com). Both the disk and manual for the S-550 CD-5 System are available from the Roland U.S. Customer Service department. They can be reached by calling (213) 685-5141, ext. 289. The part number for the disk is SU-4 and the part number for the manual is 79514299.

II. Features Added with the CD-5 System (S-550 Only)

- **Name Input-** You can enter Tone names, Patch names and disk labels through mouse commands.
- **Map Input-** The parameters of a Patch or Tone can be copied to a separate Patch.
- **DC Cut-** If you have made a sample that has low range noise due to DC current elements, DC Cut will help reduce this noise.
- **Split Settings-** Tones can be set while viewing the Tone list. The Tones in a Patch that is currently being used will be displayed in white, the others will be in black.
- **New Conversion Functions-** You can now convert disks that were in S-550 format to S-50 format.
- **Loading Patches-** You can now load complete Patches from a disk.
- **Floppy Disk Backup-** You can back up the CD-5 System disk (the CD-5 System can not be saved to a sound disk).

III. Creating a Patch (S-330/550)

When a sound is first sampled, that sample is referred to as a Tone. In order to use a Tone, it must be assigned to a Patch. A Patch consists of one or more Tones, each mapped to a key or range of keys across the keyboard. In Edit Mode, the Patch PRM page contains parameters that determine how the Tone(s) will respond when played. To create a Patch, you must first load or create a Tone (or a number of Tones).

Loading Tones

Use the following procedure to load Tones on the S-330/550:

- 1) Highlight "MODE" and press the left mouse button.
- 2) Highlight "DISK" and press the left mouse button.
- 3) Highlight "FD LOAD T" and press the left mouse button.
- 4) Insert the disk containing the desired Tone(s) into the S-330/550's disk drive.
- 5) Highlight the Tone number displayed next to "FD T #" and use the left/right mouse buttons to select the Tone you wish to load.
- 6) Highlight the Tone number displayed next to "Int T #" and use the left/right mouse buttons to select a destination for the Tone in the S-330/550's internal memory.

NOTE: If you select a destination Tone that is not empty, the Wave data for the current Tone will be replaced by the Wave data for the Tone you are loading. Any Sub Tone that uses Wave data of the previous Tone will also be deleted, becoming an empty Tone (see Section IV for more information regarding Sub Tones).

- 7) Highlight "COM" and press the left mouse button. "FD Load Tone" will be displayed.
- 8) Press the left mouse button to begin loading the Tone.
- 9) Repeat steps 4-8 to load additional Tones as desired.

Creating a Patch

Use the following procedure to create a Patch with one or more Tones assigned to the keyboard:

- 1) Load the desired Tone or Tones into the S-330/550's memory (as described previously).
- 2) Select "EDIT" from the MODE menu.
- 3) Highlight "MENU" and press the left mouse button.
- 4) Highlight "Split" and press the left mouse button. The Split page will be displayed.
- 5) Use the left/right mouse button to select "Normal" next to Key Mode (if necessary).

NOTE: There are five Key Modes to choose from: Normal, Unison, V-SW (Velocity Switch), X-Fade (Velocity Cross Fade), and V-MIX (Velocity Mix). Normal and Unison modes will only play the 1st Tone, even if the 2nd Tone is shown to be assigned.

- 6) Use the left/right mouse button to select the desired Tone next to 1st Tone.

NOTE: Do not load Tones into Tone location I-11. Use Tone locations I-12 and higher.

- 7) Use the left/right mouse buttons to select "1st" next to Type Select (if necessary).
- 8) Use the mouse to highlight the key (on the onscreen keyboard in the lower half of the display) you wish to assign the sample to and press the left mouse button. A pair of hash marks will appear above the note indicating that a Tone has been assigned.

NOTE: You can also assign Tones with a MIDI keyboard that is connected to the S-330/550. Simply pressing the desired key on your MIDI keyboard will assign the selected Tone to that note.

- 9) Repeat steps 8-10 to continue assigning Tones as desired.
- 10) Use the left/right mouse button to select "Info" next to Type Select. Play your MIDI keyboard to hear the Tones that were assigned.

IV. Creating Sub Tones (S-330/550)

Sub Tones are used by the S-330/550 to conserve memory. A Sub Tone allows you to share the same sample data between two different Tones. You can edit sample information on a Sub Tone without affecting the original Tone. Since Sub Tones read the waveform data of an original Tone, the original waveform must be in memory along with the Sub Tone. Use the following procedure to create a Sub Tone:

- 1) Load the desired Tone(s) into the S-330/550's memory (as described previously).
- 2) Highlight "MODE" and press the left mouse button.
- 3) Highlight "EDIT" and press the left mouse button.
- 4) Highlight "MENU" and press the left mouse button.
- 5) Highlight "Tone PRM" and press the left mouse button.
- 6) Highlight the currently selected Tone location (upper left of the display, under MODE) and use the left/right mouse buttons to select a blank Tone location.
- 7) Highlight "---" next to Original Tone and use the left/right mouse buttons to select the Tone whose waveform data you would like to use. That Tone number will appear next to "Sub" in the display. You have now created a Sub Tone. You can edit and place the Sub Tone in any Patch as long as the original Tone is in the memory of the S-330/550.

V. Sampling (S-330/550)

The steps below provide a basic set of instructions for sampling a sound with the S-330/550. More detailed information on sampling and editing samples can be found in the S-330/550 Owner's Manual beginning on page 34.

- 1) Connect the audio output of your sampling source to the Input jack on the front of the S-330/550.
- 2) Set the LINE/MIC switch on the S-550's front panel accordingly (depending on the source signal). For example, if you are recording directly from a microphone, press the LINE/MIC switch so it is lit (mic level). If you are recording the output of a CD player, press the LINE/MIC switch so it is not lit (line level).

NOTE: The LINE/MIC setting is not available on the S-330.

- 1) Make sure that the system disk is inserted and select "UTILITY" from the MODE menu.
- 2) Highlight "MENU" and press the left mouse button.
- 3) Highlight "Sampling" and press the left mouse button.
- 4) Highlight the currently selected Tone (next to Source) and use the left/right mouse buttons to select an empty Tone location.
- 5) Highlight the number next to Time and use the left/right mouse buttons to select a sample time that is slightly longer than the sound you wish to sample.
- 6) Highlight the number next to Freq and use the left/right mouse buttons to select "30K" (if necessary).
- 7) Highlight the number next to Threshold and use the left/right mouse buttons to select "0" (if necessary).
- 8) Highlight the number next to Pre-Trig and use the left/right mouse buttons to select "0" (if necessary).
- 9) Highlight the number next to Orig Key and use the left/right mouse buttons to select "C4" (if necessary).
- 10) Highlight "COM" and press the left mouse button.
- 11) Highlight "Manual" and press the left mouse button to begin sampling.
- 12) Start your source sound. The S-330/550 will stop sampling after the amount of time specified in step #7.
- 13) Play middle C (C4) on your keyboard to hear the results.

VI. Using SCSI (S-550 Only)

In order to use the S-550 with external SCSI devices, you will need the HD5-IF interface. This was an optional kit that added a 25 pin SCSI port to the S-550. Unfortunately, this kit is no longer available. Up to 4 SCSI devices can be connected to the S-550.

Troubleshooting

The S-550 will search for the SCSI devices that are connected to it as it first starts up. Make sure that your drives are up and running before starting up the S-550. If the system locks up as it is booting, check for the following:

- 1) Make sure that the cable is completely inserted into the ports.
- 2) Make sure the SCSI drive is set to an ID other than 7. ID 7 is reserved for the S-550 and can not be changed.
- 3) Be sure the drive that is last on the SCSI chain is terminated and that the other drives connected in the middle of the SCSI chain are unterminated. Most hard drives use either internal or external DIP switches to change termination and SCSI IDs. If the drive you are using has no termination, you can terminate it with a external termination plug. Usually, external terminators are inserted into the line between the SCSI port and the cable or into the other available SCSI port on the drive.

Make the appropriate changes and then restart the drives and the S-550 in that order. If the S-550 doesn't recognize the drive(s), check the table below to ensure that you are using SCSI devices that are compatible with the S-550.

VII. Compatible Peripherals with the S-330/550

The S-550 was a current product during 1987-89. The majority of SCSI devices manufactured during this period were more primitive and used Sony drive mechanisms. The drivers in the S-550's system software were created for drives that were available during that time period. The S-550 can format up to a total of 80MB per drive.

RGB Monitors (S-550 and S-330)

These monitors require special adapter cables from Redmond Cable (206) 882-2009 / (615) 478-5760.

Atari 1224	Atari 1435	Mitsubishi DiamondScan	Commodore 1080 & 1084
Darius TSM-1431	Taxan 610/420	Sony KV1311	Sony PVM
NEC 3D	Magnavox 8762	Zenith ZVM133	

Compatible Hard Drives (S-550 Only)

Drives that were know to work with the S-550

CMS Microtech MicroNet Eltekon Dynatek

The SyQuest 105MB removable drives will work with the S-550, but will only be formatted as an 80MB drive.

CD-ROM Drive (S-550 Only)

The Roland CD-5 is the only type of CD-ROM drive known to work with the S-550. It used a Sony CDU-6111 mechanism. The CD-5 came with a CD-ROM disc that contained the S-550 sample library.

We hope that this document has provided you with a better understanding of the S-330/550 Digital Sampler. The operations we have covered such as sampling, creating Patches, Performance Disks, and Sub Tones, are fundamental to the basic operation of the S-330/550. A thorough understanding of these concepts will be helpful when you begin to create you own samples. For further information on these and more advanced operations, please consult the S-330/550 Owner's Manual.