Synclavier keyboard controls

IN-04-0990

The Synclavier keyboard

The **keyboard** consists of a **Synclavier keyboard** with musical performance controls, a **keyboard control panel** for creating, recording, editing and storing sounds and a **back panel** with various input and output jacks.

Note: These keyboard performance techniques, called **real-time effects**, are explained more fully in "Real-time effects" in the *FM Synthesis* or *Sampling and Sound Editing* manuals.

The Synclavier keyboard and back panel

The 76 keys of the Synclavier keyboard are velocity and pressure sensitive so that you can control a sound's volume or quality by varying the sharpness of your keyboard attack or the amount of after-touch pressure you apply to the keys.

Two wheels, located at the far left of the keyboard, provide other means of varying the sounds of the keyboard.

pitch wheel (outside wheel) changes the pitch of any sustained sound by as much as a whole-tone above or below the original sound.

mod wheel (inside wheel) can be programmed to change the volume or any quality of a sustained sound.

The **ribbon controller** above the keys lets you change the volume or a particular quality of the sound by running your finger up or down.

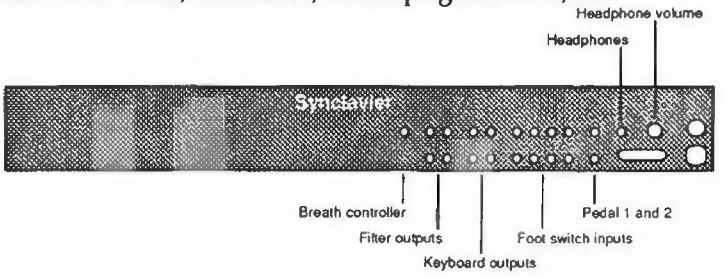
Pedals, footswitches or a breath controller plugged into the inputs on the back of the keyboard control panel can be used for special effects.

pedals reserve PEDAL 1 for volume control and PEDAL 2 for other types of effects.

footswitches plugged into HOLD, REPEAT, PORTAMENTO, PUNCH IN/OUT, SUSTAIN, ARPEGGIATE, PHRASE or MUTE, footswitches let you to turn on or off these functions without removing your hands from the keyboard.

breath controller patch to any real-time effect parameter.

Keyboard and filter outputs can be used to connect the keyboard to outboard filter units, oscillators, envelope generators, etc.



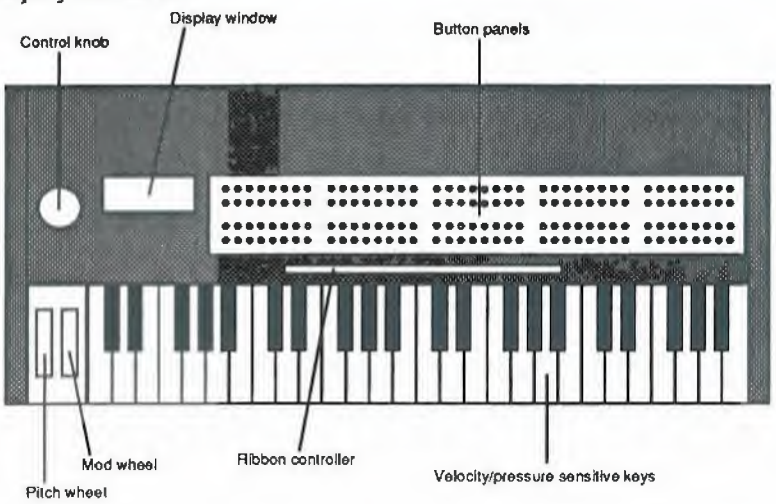
Keyboard control panel

Above the Synclavier keyboard is a panel with five panels of red **buttons**, a **display window** and a **control knob** that provide one way to control the system.

Panel 1	Create synthesized sounds, modify sampled sounds.
Panel 2	Control the sequencer.
Panels 3 & 4	Store and recall sounds and sequence.
Panel 5	Control keyboard effects and modify synthesized and sampled sound.

The **display window**, to the left of the button panels, reflects the function of the button pressed. Sometimes the display window shows the name of the function. Other times it shows a value or a message relating to the function.

Any value shown in the display window can be changed by turning the **control knob**, the metal wheel to the left of the display window. The control knob is spring loaded and self-centering. Values decrease when you turn it to counterclockwise and increase when you turn it clockwise. The further you turn it, the faster the values change. When you release it, the last value reached remains in the display window.



The VK Panel

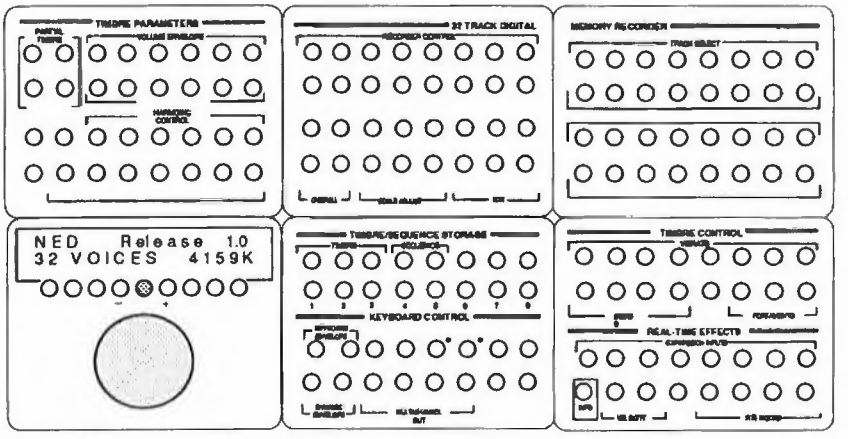
If you have the VK Panel option, you can operate the Synclavier without using its keyboard unit.

The VK Panel

With the VK Panel displayed, five button panels, the control knob and display window appear on the screen and control the same functions as those on the velocity/pressure keyboard control panel.

Whenever the Real-Time Performance system is running, you can activate the VK Panel and use it in tandem with any of the directories or displays. If you reduce the size of the display using the half-size or mid-size command, you can view both the display and parts of the VK Panel.

Once you have become familiar with the operation of the VK Panel, you can perform any of the operations of the Synclavier—sampling and sound editing or sequence recording and editing—from the terminal.



Selecting and sizing the VK Panel

You can select the VK Panel while any RTP display is on the screen.

- Select **VK Panel** from the **Window** pulldown menu or press ⌘-**D** on the terminal keyboard.

  The VK Panel appears in front of the current RTP display. Use the same commands to toggle the VK Panel behind or in front of the current RTP display.

You can change the size of the VK Panel by clicking the **Size** box in the lower right corner and dragging it until the display is the desired size. You can scroll to parts of the panel that are not on view using the scroll bars to the right and at the bottom of the VK Panel window. The Zoom box in the upper right corner of the VK Panel lets you toggle between the custom size and full size.

Sizing the current RTP display

You can reduce the size of the current RTP display so that most of the VK Panel is visible at the same time.

1. Select **Half Size** or **Mid Size** from the **Display** pulldown menu.

2. Select VK Panel as explained before or by clicking anywhere on the VK Panel itself.

   The VK Panel is drawn over the current RTP display.

3. Click on the upper bar of the VK Panel and drag it to a position where you can see just the top of the current RTP display and where the upper right panel is just to the right of the RTP display.

4. Bring the RTP display to the front by clicking on it.

   The three lower panels and the upper right panel of the VK Panel are visible around the RTP display.

Using the VK Panel (con't)

Rearranging the VK Panel

You can place the individual panels of the VK Panel in any arrangement and store up to 6 different arrangements. Thus, panels used with a particular operation can be visible around the current RTP display.

1. Select **Arrange VK** from the **Window** pulldown menu.

   A miniature VK Panel is displayed beside six numbered presets.

2. Select a numbered preset.

3. Drag each miniature panel to a new position until you have the desired arrangement. At any time you can click **Default** to return to the default arrangement.

4. Click OK.

   The rearranged panel is saved under the designated preset. The Arrange VK dialog closes automatically.

Using the current RTP display and the VK Panel together

Normally, only the foreground display—either the current display or the VK Panel—is active. You can set the screen so that both the VK Panel and the current RTP display are active using the **Activate Window** command on the **Window** pulldown menu.

1. Position the VK Panel so that the desired panels are visible around the current half-or mid-size RTP display.

2. Select **Activate Window** from the **Window** pulldown menu to toggle between window modes.

   If there is a checkmark in front of the Activate Window command, both the current RTP display and the VK Panel are active.

   If there is no checkmark in front of Activate Window, only the display in the foreground is active.

Pressing VK Panel buttons

You control the functions of the Synclavier using the buttons of the VK Panel— just as you would on a Synclavier keyboard control panel. As with the Synclavier keyboard control panel, buttons have three modes:

mode	VK Panel button color
off	red
on steady	white
on blinking	white blinking

To turn on a function

- Click the appropriate red button.

  The button turns white or blinking white, depending on its mode.

You can also drag to encompass several buttons and release the trackball button.

To turn off a function

- Click the appropriate white or blinking button. In some cases, you may have to click twice or click another button.

  The button turns red.

Using the VK Panel (con't)

Holding VK Panel buttons

Certain functions on the Synclavier velocity/pressure keyboard require you to press and hold a button while you press another button. You accomplish this on the VK Panel using the Shift key on the terminal keyboard.

1. Press the Shift key to turn the cursor into a hand with a pointed finger.
2. Click the desired button and release the shift key.

   The button becomes white, and the hand remains on the button.
3. Click the second button.

To release the held button

- Click the button without the Shift key pressed.

To release all held buttons press ⌘-T on the terminal keyboard.

Operating the VK Panel control knob

You can change the values of a selected parameter using the control knob just as you would on the Synclavier keyboard control panel.

1. Click the desired parameter button.
2. Click and drag the control knob to the right or left.

   The knob appears to turn in the direction of the drag, and the value in the display window increases or decreases.

   The rate buttons above the control knob indicate the rate at which the value is changing. Buttons furthest right or left indicate the highest rate of change.

You can also increment the selected value by clicking the rate buttons.

Using terminal keyboard equivalents

At any time you can perform any VK panel operation using terminal keys. Keyboard equivalents also make it possible to simplify complex operations to a single keystroke using a key reassignment and macro program such as QuicKeys.

1. Select a group of buttons. (This step does not have to be repeated for additional operations using buttons from the same series.)

key combination	*bank selected*	*panel*
Option-KP0	Timbre Parameters, upper	1
Option-KP1	Timbre Parameters, lower	1
Option-KP2	Recorder Control, upper	2
Option-KP3	Recorder Control, lower	2
Option-KP4	Track Select 1-16	3
Option-KP5	Track Select 17-32	3
Option-KP6	Timbre/Sequence Storage	4
Option-KP7	Keyboard Control	4
Option-KP8	Timbre Control	5
Option-KP9	Real-Time Effects	5

Note: The abbreviation KP denotes using the keypad number keys.

2. Click or hold the desired button.

key combination	*action*	*button row*
Option-[1–8]	click	upper
Option-Control-[1–8]	click	lower
Shift-Option-[1–8]	hold	upper
Shift-Option-Control-[1–8]	hold	lower

3. Turn the control knob, if necessary.

key combination	*increment value by*
Option- + or –	ones
Option-Control- + or –	tens
Option-Shift- + or –	hundreds
Option-Control-Shift- + or –	thousands

Note: Press ⌘-T to release all held buttons.