

How to use the SAC-2.2

with Pro Tools

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TABLE OF CONTENTS

SETTING UP THE SAC-2K	4
Transport Buttons.....	4
Display window	4
Jog Wheel	4
THE MIXER CHANNELS	4
Faders	5
Fader range.....	5
Mute and Solo	5
Record-Enabling Tracks.....	5
Automation	5
BANK SWAPPING AND CHANNEL SCROLLING	5
Track order	6
PANNING WITH THE ENCODERS	6
Panning Stereo Tracks	6
Controlling Send amount	6
WORKING WITH PLUG-INS	6
Plug-in Automation.....	6
Plug-in display	6
Assigning a Plug-in to a track	6
Accessing the fifth Insert	7
Modifying individual Plug-in parameters	7
SCRUB MODE	7
Scrubbing resolution	7
Scrubbing while selecting	7
Exiting from Scrub mode	7
SHUTTLE MODE.....	7
Exiting from Shuttle mode.....	8
THE WINDOW BUTTONS	8
Mixer window	8
Edit window	8
Transport window	8
Session Status window	8
Markers window.....	8
Plug-in window	8
OTHER BUTTON FUNCTIONS	8
Editing Mode	8
Editing Tools	8
Marker Locations	8
Recalling Markers.....	9
Working with Dialog boxes	9

SETTING UP THE SAC-2.2

USB

1a. Install the SAC-2.2 Mac or PC USB driver as per the installation instructions in the ReadMe file on the SAC-2.2 CD.

-OR-

MIDI

1b. In the OMS Studio Setup, add an SAC-2.2 Device that uses one MIDI transmit and one MIDI receive channel, connected to the same port of your MIDI interface.

2. In Pro Tools, from the Setup menu, first choose Peripherals..., then MIDI Controllers. Under the Type column, select HUI. Under the Receive From and Send To columns, select SAC Control (or SAC-2.2). The #Ch's column will be automatically assigned. Click OK to confirm your selection. This will automatically set the SAC-2.2 to Pro Tools mode. (PROTO in the SAC-2.2's System menu). The SAC-2.2 responds by updating its Fader and Encoder positions.*

3. Place the supplied templates around the according button fields.

* Certain MIDI interface/computer combinations require that the SAC-2.2's operation mode be set manually. If the Faders and Encoders do not automatically update upon confirming your selection in the Peripherals... dialog, first make sure that the SAC-2.2 is in the correct mode. Press the SAC-2.2's System button and select the PROTO mode with the first Encoder of the right-most display. Then, in Pro Tools, make sure that the SAC-2.2's Input is enabled in the MIDI menu>Input Devices... dialog. The Pro Tools software should now recognize the SAC-2.2.

USING THE SAC-2.2 WITH PRO TOOLS

Transport Buttons

The REWIND, FAST FORWARD, STOP, PLAY and RECORD buttons behave as you would expect. Holding the SHIFT key while pressing the STOP button brings the play location to the beginning of the song.

Time Display

The SAC-2K time display uses the format currently selected in Pro Tools.

Jog Wheel

The Jog Wheel operates in two different modes:

- Scrub mode
- Shuttle mode

THE MIXER CHANNELS

The SAC-2.2 provides eight channel strips, which can be used to view and control any of the tracks in your Pro Tools Session. Each channel strip provides a motorized Fader, a button for selecting the track for various assignments and groupings, a MUTE/SOLO button, a rotary Encoder with a push button function for controlling pan and selecting tracks for Plug-in editing. The left and center displays provide two 10 line character displays for each of the eight tracks. In the center of the eight channel strips is a bank of buttons that can be used to assign the functions of the select buttons and Encoders, alter the displays accordingly and scroll the track assignments.

Faders

The channel Fader controls the volume level of each track. The channel Fader is a touch-sensitive, servo-controlled motorized Fader that tracks any current volume automation in Pro Tools' corresponding track. As soon as you touch the Fader, you "take over" its servo control and the Fader immediately begins controlling track volume, even if you don't actually move it. If the track is currently set to record automation, SAC-2.2's Fader begins to write new automation data into the track as soon as you touch it. When you release the Fader, the result depends on the track's current Automation mode. If it's in Touch mode, the SAC-2.2's Fader will time-out after a brief moment and return to tracking existing automation in the track. In Overwrite or Latch modes, recording continues until you stop Pro Tools' transport.

Fader range

The SAC-2.2's Fader range (from bottom to top) matches the range of Pro Tools' virtual faders (-inf to +6.0 for Audio tracks, 0-127 for MIDI tracks).

Mute and Solo

Each track has a button above its SELECT button that can be used to set that channel's MUTE and SOLO state. The MUTE/SOLO selector button at the left of this row determines the mode of these buttons. When the MUTE/SOLO selector is dark, the buttons act as track MUTE buttons. When the MUTE/SOLO selector is illuminated, these buttons act as track SOLO buttons.

Record-Enabling Tracks

To enable a track for recording, press and hold the Record button while pressing the Select button of the track to be recorded on.

Automation

When Automation recording is enabled for the track being modified, you can record Fader and Encoder moves as automation data in Pro Tools. To do so:

1. In Pro Tools, select the Automation mode on the Track(s) to be automated.
2. Play the song from the desired location, moving the Faders and Encoders as required.
3. To finish recording automation, press STOP.
4. Depending on the type of Automation selected for the chosen track, releasing the Fader(s)/ Encoder(s) while in record automation mode, will either revert the automation to the previously recorded data, if any (touch), or write new data at the position the controls were released (latch).

When the song is playing and Automation recording (whichever type) is enabled, any movement of the enabled track's Faders or Encoders gets recorded as Automation data.

BANK SWAPPING AND CHANNEL SCROLLING

If your Pro Tools Session has more than eight tracks, use the channel scroll buttons to control which tracks are currently being displayed in (and controlled by) the SAC-2.2's eight channel strips. The BANK scroll buttons scroll left and right eight tracks at a time; the TRACK scroll buttons scroll left and right one track at a time.

+1-8_____	+9-16_____	+
<	>	
Track Left	Track Right	
17-24_____	25-32_____	
<<	>>	
Bank Left	Bank Right	
_____	_____	

Track order (left to right)

Track order in the SAC-2K's channel strips always matches the track order in the Pro Tools Mixer window (left to right). If you Show or Hide a track, or change its position in the Mixer window's Show/Hide Tracks List, the change is immediately reflected in the SAC-2K's displays. Only tracks that are Show enabled are displayed when scrolling with the BANK and TRACK buttons.

PANNING WITH THE ENCODERS

The rotary Encoders in each channel strip are used for two purposes - track Panning and adjusting the gain of the channel's Send (Sends 1-4 only). For Panning, make sure that the PAN button is illuminated. For adjusting the gain of the channel's Send, make sure the corresponding SEND button is illuminated.

Panning Stereo Tracks

If a track has a stereo output, there are 2 pan sliders in the Mixer Window. When the Pan LED on the SAC-2.2 is lit solid (not flashing), the Encoder controls the top slider (usually 'Left'). Press the Pan button again and the LED will start flashing, enabling you to control the bottom slider (usually 'Right'). You can toggle the Pan button back and forth as needed.

Controlling Send amount

The Pro Tools Mixer window provides five Sends per track. The SAC-2.2 can control four at a time. Set up the Send assignment in Pro Tools, and with the desired Send window in the foreground, select the corresponding SEND button on the SAC-2.2. The Send amount can now be controlled with the channels Encoder.

WORKING WITH PLUG-INS

The SAC-2.2's right Display and its associated Encoders give you control over Plug-in selection and automated remote control of individual effects parameters.

Plug-in Automation

When Automation recording is enabled for the track being modified, you can also record Plug-in parameter tweaking as automation data in Pro Tools. To do so:

1. In Pro Tools, open the Plug-in to be automated.
2. Open the Plug-in Automation window.
3. Add the desired parameters to be automated.

When the song is playing and Automation recording (whichever type) is enabled, any movement of the right-most bank of Encoders gets recorded as Automation data.

Plug-in Display

The right Display shows the first four of the five Inserts or up to four Plug-in parameters at a time. If there are more than four Plug-in parameters, they can be accessed by switching parameter pages. Parameter pages are incremented by pressing the INS/SEND button (under the Channel Strip section). Parameter pages are decremented by pressing [SHIFT+INS/SEND].

Assigning a Plug-in to a track

1. Make sure that the desired track has been selected by pressing the channel's Encoder button. A selected track is displayed in the Mixer and Edit windows with a red outline around its name.
 2. Open the Plug-in window by pressing the Open Window (Channel Strip PT Window) button. A blank Plug-in window opens. In the right-most display the characters of the selected Insert location will be flashing (no insert).
 3. Press the Assignments (Channel Strip PT Assignment) button so that there are no flashing characters. This is Plug-in selection mode.
-

4. Select a Plug-in with one of the Encoders under any of the four Insert locations. Encoders 1-4 select Plug-ins for Inserts 1-4. Press the Encoder button to lock in your selection. The Plug-in window updates to show the selected Plug-in.

* the transport must be stopped to assign Plug-ins.

Accessing the fifth Insert

When in Plug-in selection mode, the fifth Insert can be accessed by rotating the Jog Wheel anytime a track is selected for Plug-in assignment. This toggles the right Display between Insert locations 1-4 and 5.

Modifying individual Plug-in parameters

1. Press the EDIT (Channel Strip PT Edit) button. The right Display now shows the first four parameters available for that Plug-in.
2. Additional parameter pages are available for Plug-ins with more than four parameters. Rotate the Jog Wheel to access additional Plug-in parameter pages.
3. The following information is displayed momentarily upon switching pages: a) the current page and number of available pages b) whether the Plug-in is mono or stereo c) the Insert location number.
4. The currently editable parameters are shown highlighted in the Pro Tools Plug-in window. (Notice they change when you access additional parameter pages with the Jog Wheel.)
5. Edit the parameters with the Encoders and Encoder buttons.
6. To exit parameter editing, press the EDIT (Channel Strip PT Edit) button to go to the Plug In window, or press the Assignment (Channel Strip PT Assignment) button to go to the Plug-in selection mode.

SCRUB MODE

To enter Scrub mode, press the SCRUB button. The SCRUB button will illuminate, indicating that the Jog Wheel is in Scrub mode. In Scrub mode, audio scrubs no matter which window is the front-most.

Scrubbing resolution

Scrubbing resolution is based on zoom resolution of the window in which you are currently scrubbing.

Scrubbing while selecting

1. Scrub to the desired location.
2. Hold down the SHIFT buttons and scrub, either forward or backward, to define the selection. Continue holding down the SHIFT button while scrubbing to further extend the selection, if needed.
3. The SHIFT button can be released and the track can be scrubbed further without selecting more audio. To resume selecting, press the SHIFT button while scrubbing and the selected range will be extended.

Exiting from Scrub mode

Scrub mode can be exited three ways.

1. Pressing the SCRUB button.
2. Pressing any of the Transport buttons.
3. Pressing the SHUTTLE button (SHIFT + SCRUB). Additionally, you can freely switch back and forth between Scrub and Shuttle modes.

SHUTTLE MODE

To enter Shuttle mode, press the SHUTTLE button, (SHIFT + SCRUB). In Shuttle mode, audio shuttles no matter which is the front-most window.

* Selecting an area for editing in Shuttle mode works the same way as it does in Scrub mode. Just hold down the Shift button while Shuttling.

Exiting from Shuttle mode

Shuttle mode can be exited three ways. 1) Pressing the SHUTTLE (SHIFT + SCRUB) button. 2) Pressing any of the Transport buttons. 3) Pressing the SCRUB button. Additionally, you can freely switch back and forth between Shuttle and Scrub modes.

THE WINDOW BUTTONS

The WINDOW buttons let you open or bring to the front various important windows, including the Mixer window, the Edit window, the Plug-in window and the Markers window. On certain windows, if the window is already the front-most window, pressing that window's button closes the window.

Mixer window

Pressing the MIX (#1 - App>) button opens or brings to the front, the Mixer window.

Edit window

Pressing the EDIT (#2 - left) button opens or brings to the front, the Edit window.

Transport window

Pressing the TRANSPORT (#3 - up) button opens or brings to the front, the Transport window. If the Transport window is already the front-most window, pressing the TRANSPORT (#3 - up) button closes the window.

Session Status window

Pressing the STATUS (#4 - right) button opens or brings to the front, the Session Setup window. If the Session Setup window is already the front-most window, pressing the SETUP (#4 - right) button closes the window.

Markers window

Pressing the MARKER (#5 - undo) button opens or brings to the front, the Markers window. If the Markers window is already the front-most window, pressing the MARKER (#5 - undo) button closes the window.

Plug-in window

Pressing the OPEN WINDOW (Channel Strip PT Window) button opens or brings to the front, the Plug-in window. If the Plug-in window is already the front-most window, pressing the OPEN WINDOW (Channel Strip PT Window) button closes the window.

OTHER BUTTON FUNCTIONS**Editing Mode**

In the Edit window, pressing the EDIT MODE (#9 - paste) button cycles through the various Editing modes.

Editing Tools

In the Edit window, pressing the EDIT TOOL (#0 - save) button cycles through the various Editing tools, changing the mouse pointer's function.

Marker Locations

Pressing the ENTER button opens the Memory Location window, and if pressed again, sets the current counter location as a new Marker. Pressing cancel in Pro Tools or Esc on the Macintosh keyboard cancels this procedure.

Recalling Markers

To recall a Marker, first be sure the NUM button is lit. Then press the Recall Marker button, the Marker location number, and the Recall Marker button again. The Transport will jump to the Marker location.

Working with Dialog boxes

When a dialog box is on-screen in Pro Tools, the ENTER button is the equivalent of OK in the dialog box.