

Aphex Aural Exciter Type III and Big Bottom Pro Installation Guide

Version 2.0 for Macintosh and Windows

Digidesign

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chapter 1

Installation

Your Aphex Aural Exciter Type III and Big Bottom Pro plug-in package contains the following components:

- Installation CD-ROM
- License Card (for installing both Aphex plug-ins with an iLok hardware key, not supplied)
- *Aphex Aural Exciter and Big Bottom Installation Guide* (electronic PDF guide)
- *Aphex Aural Exciter Type III Plug-In Guide* (electronic PDF guide)
- *Aphex Big Bottom Pro Plug-In Guide* (electronic PDF guide)
- Registration Card

Installing Aural Exciter III and Big Bottom Pro

To install Aural Exciter and Big Bottom, use the Installer CD-ROM.

Macintosh

To install Aural Exciter and Big Bottom:

- 1** Insert the Installer CD-ROM in your CD-ROM drive and double-click the Installer.
- 2** Click Install.
- 3** Follow on-screen instructions.
- 4** When installation is complete, click Quit.

- 5** When you launch Pro Tools, you will be prompted to authorize Aural Exciter and Big Bottom. Refer to “Authorizing Plug-Ins” on page 2.

Windows

To install Aural Exciter and Big Bottom:

- 1** Insert the Installer CD-ROM in your CD-ROM drive. (If you have disabled the auto-launch option on your computer, locate and double-click the Setup.exe file on the Installer CD-ROM.)
- 2** Click Install.
- 3** Follow on-screen instructions.
- 4** When installation is complete, click Finish.
- 5** When you launch Pro Tools, you will be prompted to authorize Aural Exciter and Big Bottom. Refer to “Authorizing Plug-Ins” on page 2.

Digidesign Registration

Please make sure to register! Registered users are entitled to up to one year of free technical support based on product purchased. For more information please refer to your registration card, or visit the Digidesign Web site at:

www.digidesign.com/support

Authorizing Plug-Ins

The Aural Exciter and Big Bottom plug-ins are authorized using an iLok USB hardware key. One iLok hardware key is included with your Pro Tools system. This key can hold over 100 authorizations for all your iLok-enabled software. Once iLok is authorized for a given piece of software, use iLok to authorize that software on any computer.

The iLok is authorized using License Cards. A single License Card is provided for both Apex plug-ins.

To authorize iLok:

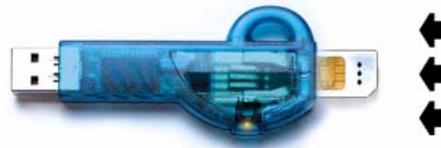
- 1 Insert the iLok into an available USB port on your computer.
- 2 Launch Pro Tools. You will be prompted to authorize any installed unauthorized plug-ins.

 *If you are trying to authorize one or more plug-ins that are already running in Demo mode, do not insert the iLok into any available USB port (or remove it if it is already connected) before launching Pro Tools. Instead, launch Pro Tools, then insert the iLok into any available USB port when prompted by Pro Tools.*

3 Follow the on-screen instructions until you are prompted to insert the License Card into the iLok.

4 Separate the License Card—the smaller GSM cutout—from the larger protective card by pulling the cutout up and out with your thumb. Do not force your finger downward.

5 Insert the License Card into the iLok, making sure that the arrows on the License Card are pointing towards the iLok. You will be able to visually verify that the License Card makes contact with the iLok's metal card reader.



iLok with License Card

- 6 After authorizing, remove the License Card.
- 7 Follow the on-screen instructions to complete the authorization process.

DSP Requirements

The number of Aural Exciter or Big Bottom plug-ins you can use at one time depends on how much DSP power is available in your system. Since the TDM hardware on Pro Tools cards provide dedicated DSP for plug-ins, plug-in performance isn't limited by CPU processing power.

The following tables show the total number of instances of each Aphex plug-in that can be powered by a single DSP chip on Pro Tools|HD-series and MIX-series cards. DSP usage differs according to card type. There are 9 DSP chips on a Pro Tools|HD card, and 6 DSP chips on a Pro Tools|24 MIX card.

 *The tables show theoretical maximum performance when no other plug-ins are sharing available DSP resources. You will typically use more than one type of plug-in simultaneously.*

Plug-ins used in multi-mono format on greater-than-stereo tracks require one mono instance per channel of the multi-channel audio format. For example, a multi-mono Big Bottom Pro used on a 5.1 format track, requires six mono instances since there are six audio channels in the 5.1 format.

 *On 192 kHz or 176.4 kHz stereo tracks, Aural Exciter is only available as a multi-mono plug-in.*

Monitoring DSP Usage

The DSP Usage window (Windows > Show DSP Usage) shows how much DSP is available in your system and how it is being used in the current Pro Tools session.

 *For more information about DSP usage and allocation, see the Pro Tools Reference Guide.*

Table 1. Maximum instances of Aphex plug-ins per DSP chip for a Pro Tools HD card at different sample rates (mono and stereo).

Sample Rate:	44.1/48 kHz		88.2/96 kHz		174.6/192 kHz	
Plug-In	Mono	Stereo	Mono	Stereo	Mono	Stereo
Aural Exciter	8	4	4	2	2	0
Big Bottom	12	6	5	2	2	1

Table 2. Maximum instances of Aphex plug-ins per DSP chip for a Pro Tools|24 MIX card

Sample Rate:	44.1/48 kHz	
Plug-In	Mono	Stereo
Aural Exciter	6	3
Big Bottom	9	4

Allocating Additional Memory to Pro Tools

(Macintosh Only)

If you plan to use a large number of TDM plug-ins in addition to the DigiRack TDM plug-ins included with Pro Tools, allocating additional memory to Pro Tools will help ensure reliable system performance.

If enough RAM is available in your computer, allocate 1–2 megabytes of additional RAM to Pro Tools for each non-DigiRack plug-in installed on your system.

To allocate additional memory to Pro Tools:

- 1 Start Pro Tools so that it can calculate its basic memory allocation.
- 2 Go to the Finder and choose About This Computer from the Apple menu.
- 3 If you have 3 megabytes or more of memory available (as indicated in the Largest Unused Block portion of this window), go to the next step. If you have less than 3 megabytes of free memory (3,000k), stop here: Do not allocate additional memory to Pro Tools unless you install additional RAM in your computer.
- 4 Quit Pro Tools.
- 5 For HD-series systems, open the Pro Tools folder, select the Pro Tools application, and choose Get Info from the Finder's File menu.

– or –

For MIX-series systems, open the DAE folder inside your System Folder, select DAE, and choose Get Info from the Finder's File menu.

- 6 Choose Memory from the Show menu.

7 Enter the desired amount of memory *above the minimum requirement* in the Preferred Size field. For example, if the Preferred Size field currently says “30410k” and you wish to allocate an additional 3 megabytes of memory (1 megabyte equals 1024 kilobytes), enter “33410” into the Preferred Size field.

- 8 Close the Get Info dialog.

The next time you start Pro Tools, it will use this new memory allocation.

Delay in Digital Signal Processing

Virtually all TDM plug-ins incur some amount of signal delay. Aural Exciter adds 14 samples of delay per occurrence (mono and stereo); Big Bottom adds 3 samples of delay per occurrence (mono and stereo).

This is significant only if you use an Aural Exciter or Big Bottom plug-in on one channel of a stereo or multichannel signal but not the others, since this can cause the channels to be slightly out of phase.

If you are working with mono tracks, or are processing all channels with the same plug-in, the signal delays are not long enough to be significant and should not be a concern.

If it becomes necessary to compensate for plug-in delay, use the TimeAdjuster plug-in included with Pro Tools. See the *DigiRack Plug-Ins Guide* for more information on TimeAdjuster.



For a comprehensive guide to calculating DSP-induced delays, see the Pro Tools Reference Guide.