Phoenix

A TDM Plug-in

OPERATOR'S MANUAL

Version 3
Dec. 9, 2005

PHOENIX

Phoenix is Crane Song's suite of TDM only plug-ins designed to emulate the unique prop-
erties of a magnetic tape machine. Designer Dave Hill has crafted this software with the
same attention to detail he used to create the electronics for ATR Service's much heralded
"Aria" discrete tape recorders. His intimate knowledge of analog electronics, as well as
decades of experience as a recording engineer has spawned a very useful, musical suite of
plug-ins. The *Phoenix* process not only incorporates the nonlinear saturation characteris-
tics created by magnetic tape itself, but also includes the interrelation of an analog tape
recorder's record/reproduce electronics and equalization curves. The Phoenix suite is not
merely a downscaled version of the Crane Song *HEDD* processor, but a ground-up applica-
tion derived from *HEDD* technology, and specifically engineered and optimized for
Digidesign's TDM architecture.

Five different TDM plug-ins emulate different tape characteristics, each one incorporating a
color change button allowing three choices to modify the process. The *Gold* button is the
position where the color is approximately flat in frequency response, with *Sapphire* being a
brighter, and *Opal* being a warmer tonality. A level control determines the amount of the
Phoenix process integrated into the audio signal, and an input trim determines "how hard
you hit the tape." Because the DSP process is level dependent, reducing the input level will
also cause a change in sound.

The input trim can also be used to prevent clipping in the rare cases where clipping may be
a problem. This can be useful on material that is hitting close to or at digital zero. When
the input trim is at 0dB, (no change in gain) and no tape process is being added to the
sound, the plug-in is bit accurate, meaning the output exactly matches the input.

The *Phoenix* suite contains five separate plug-ins:

- *Luminescent* is the most neutral sounding process of the five.
- *Iridescent* has a similar magnetic character, but with a fatter bottom and midrange.
  This plug-in is the most similar to the tape knob on HEDD-192.
- *Radiant* is characterized by a more aggressive compression curve
- *Dark Essence* is even more aggressive. (The effect is a color with a wider frequency
  range—when used on a vocal *Dark Essence* can reduce sibilance problems by
  increasing the apparent loudness of the rest of the signal.)
- *Luster* starts more gently than the other four processes, but becomes as aggressive
  as *Dark Essence* when the process is at full scale.

Running within Digidesign's TDM architecture, Phoenix is very DSP efficient. It will run approximately twenty instances of a plug-in on a single DSP chip (HD system at 44.1 kHz sample rate).

Phoenix's color is dependant on signal level, program material and sample rate. A higher sample rate results in smother sounds

The *Phoenix* plug-in suite provides a wide range of choices to make your digital world sound warmer, fatter, and more analog. The plug-ins can be somewhat subtle, but the cumulative affect when used on a number of tracks can bring back the warmth and rich-ness which only analog recording has been able to provide.

By grabing the text "INPUT TRIM" with the mouse and moving in the vertical direction the input trim level can be adjusted. It can also have a value between 0 and -12db entered into the window. The Process level can be moved by a mouse by grabbing it's knob and mov-ing the mouse vertically. It can also have a value entered into it's window with 0 db being the maximum value. Phoenix is mono, multi-mono, stereo and 5.1 capable.

Installation

Install the plug-in in and osX system by putting the decompressed file into the *Applications/DigiDesign/ProTools/Plug-Ins* alias directory.

Under os9 the decompressed file is put into the *System/DAE Folder/Plug-Ins* directory

The latest version of Phoenix contains an installer for PT7 and PT6.9 and manual installation is not required.

System Requirements

You MUST have the following to run a Crane Song Plug-In:

Pro Tools TDM Hardware: MIX or HD. Our plug-ins are currently only available for Pro Tools TDM systems.

We do not currently support any other plug-in format.

Pro Tools 5.1.1 or higher running on Mac OS 9 or Pro Tools 6.0 (or later) running on Mac OS 10.2.4 (or later).

Phoenix will also run on a Windows XP system and on VENUE

An ILok USB Smart Key and an Ilok.com account

If you do not currently own an iLok, you must purchase one in order to authorize and run Crane Song plug-ins for both authorized and demonstration mode.

An iLok can be purchased from a variety of sources, including the online DigiStore operated by Digidesign.

An iLok.com account. Creating an account is simple and free. Visit iLok.com for details. If you do not have one proceed to ilok.com and set up an account

Phoenix Plug-in Registration Form
and
Authorization Form

Product*	
Company or Organization	
Your name*	
Title	
Address 1*	
City*	
State*	
Zip/postal code*	
Country*	
Email*	
ilok user ID*	
Type of Work Produced* ☐ Music ☐ Film Post ☐ TV Post ☐ Radio ☐ Other:	
Operating System* (plug-ins available only for Mac OS) ☐ os9 ☐ osX	
Serial Number (Provided by Crane Song)	
Dealer	

(plug-ins available only for Pro Tools TDM systems)
Phoenix Down load Location
http://www.cranesong.com/gtg1663ft1/phoenix/downloads

The above information must be provided to Crane Song Ltd. in order for the Authorization to be sent to your ilok.com account. The Authorization is required for Phoenix to run in BOTH demo and purchased modes. A different Authorization will be provide on purchase of the plug-in

fields with * are required

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