Music Production Toolkit™

Version 7.3

contents

chapter 1

Introduction

The Music Production Toolkit™ software option provides music production features and enhancements to Pro Tools LE and Pro Tools M-Powered systems.

📰 *For information on standard Pro Tools LE and M-Powered features, refer to your Getting Started Guide and the Pro Tools Reference Guide.*

What's Included

The Music Production Toolkit package contains the following components:

- Pro Tools Installer disc, which contains Pro Tools software, Music Production Toolkit software components, Digidesign RTAS (Real-Time AudioSuite) and AudioSuite plug-ins, and electronic PDF guides

- TL Space Installer discs

- Activation Card, with Activation Code and instructions for authorizing Music Production Toolkit software components using an iLok USB Smart Key (not supplied)

- Digidesign Registration Information Card

System Requirements

To use Music Production Toolkit, you need the following:

- An iLok USB Smart Key

- An iLok.com account for managing iLok licenses

- A Digidesign-qualified Pro Tools LE or M-Powered system

For complete system requirements visit the Digidesign website (www.digidesign.com).

Compatibility Information

Digidesign can only assure compatibility and provide support for hardware and software it has tested and approved.

For a list of Digidesign-qualified computers, operating systems, hard drives, third-party devices, and all the latest compatibility information, visit the Digidesign website (www.digidesign.com).

Register Music Production Toolkit

If you purchased the Music Production Toolkit software option from the DigiStore (www.digidesign.com) using Internet Activation, you are automatically registered.

If you purchase the boxed version of the Music Production Toolkit option, check the enclosed Digidesign Registration Information Card for information about how to register online.

Registered users receive periodic software update and upgrade notices.

Please refer to the Digidesign website (www.digidesign.com) or the Digidesign Registration Information Card for information on technical support.

Music Production Toolkit Overview

Pro Tools Features

Music Production Toolkit enables the following features in Pro Tools LE and M-Powered:

- Session and track features:
  - Up to 48 audio tracks of simultaneous playback or recording, mono or stereo
  - Ability to use QuickPunch on up to 24 tracks
  - MP3 export option (for bounce recording or exporting a region as an MP3 file)
- Beat Detective features:
  - Ability to apply Beat Detective across multiple tracks
  - Collection Mode

Additional Software

Music Production Toolkit includes the following additional software for working with Pro Tools LE and M-Powered:

DINR™ (Digidesign Intelligent Noise Reduction™) LE Plug-in For reducing noise in audio.

Hybrid RTAS Synthesizer Plug-in For use as a virtual instrument in your Pro Tools sessions.

Smack!™ LE Compressor Plug-in For applying compression to your audio.

SoundReplacer™ Plug-in For replacing one sound in a track with another (such as replacing only the snares in your drum track with a different one-hit sample)

TL Space Native™ Convolution Reverb Plug-in For applying convolution reverbs to your audio.

Conventions Used in This Guide

All Digidesign guides use the following conventions to indicate menu choices and key commands:

Convention	Action
File > Save	Choose Save from the File menu
Control+N	Hold down the Control key and press the N key
Control-click	Hold down the Control key and click the mouse button
Right-click	Click with the right mouse button

The following symbols are used to highlight important information:

☼ *User Tips are helpful hints for getting the most from your Pro Tools system.*

⚠ *Important Notices include information that could affect your Pro Tools session data or the performance of your Pro Tools system.*

⌨ *Shortcuts show you useful keyboard or mouse shortcuts.*

▤ *Cross References point to related sections in this guide or other Pro Tools Guides.*

About www.digidesign.com

The Digidesign website (www.digidesign.com) is your best online source for information to help you get the most out of your Pro Tools system. The following are just a few of the services and features available.

Registration Register your purchase on-line. See the enclosed registration form for instructions.

Support Contact Digidesign Technical Support or Customer Service; download software updates and the latest online manuals; browse the Compatibility documents for system requirements; search the online Answerbase or join the worldwide Pro Tools community on the Digidesign User Conference.

Training and Education Study on your own using courses available online or find out how you can learn in a classroom setting at a certified Pro Tools training center.

Products and Developers Learn about Digidesign products; download demo software or learn about our Development Partners and their plug-ins, applications, and hardware.

News and Events Get the latest news from Digidesign or sign up for a Pro Tools demo.

To learn more about these and other resources available from Digidesign, visit the Digidesign website (www.digidesign.com).

chapter 2

Installation

Installing Music Production Toolkit

⚠ *A Digidesign-qualified version of Pro Tools LE or Pro Tools M-Powered must be installed before you install your toolkit and authorize its software components.*

Install Pro Tools according to the instructions in your Pro Tools Getting Started Guide. Then, return to this guide and complete the instructions in this chapter to install and authorize the Music Production Toolkit option and its software components.

To install Music Production Toolkit

1 Insert the Pro Tools Installer disc into your computer.

2 Locate and double-click the Music Production Toolkit installer icon.

- Music Production Toolkit Setup.exe (Windows)

– or –

- Install Music Production Toolkit (Mac)

3 Follow the on-screen instructions to complete the installation.

The installer process installs Music Production Toolkit features (including the MP3 export option), plus the following additional software:

- DINR LE
- Hybrid
- Smack! LE
- SoundReplacer

⚠ *TL Space Native must be installed separately. See "Installing TL Space Native" on page 6.*

4 Each software component (including Music Production Toolkit) must be authorized before it can be used. See "Authorizing Music Production Toolkit Option" on page 6.

⚠ *If you launch Pro Tools without authorizing a Music Production Toolkit software component, you are prompted to authorize the component during the launch.*

Installing TL Space Native

To install the TL Space Native plug-in and factory impulse responses:

1 Insert the TL Space Installer disc into your computer.

2 Locate and double-click the TL Space Native installer icon.

3 Follow the on-screen instructions.

4 When installation is complete, click Finish (Windows) or Quit (Mac).

5 Before you can use TL Space Native, you need to authorize it. See "Authorizing Music Production Toolkit Option" on page 6.

To install the TL Space Native Impulse Response Library:

1 Insert the TL Space Impulse Response Library disc into your computer.

2 Locate and double-click the TL Space Native installer icon.

3 Follow the on-screen instructions.

4 When installation is complete, click Finish (Windows) or Quit (Mac).

Authorizing Music Production Toolkit Option

Music Production Toolkit and its optional software components must be authorized before they can be used in Pro Tools. Refer to the following sections:

- "Music Production Toolkit and Additional Software Components" on page 6
- "MP3 Export Option" on page 7

Music Production Toolkit and Additional Software Components

Each Music Production Toolkit software component must be authorized before it can be used in Pro Tools. Authorization includes activating your software licenses online, then transferring your licenses to an iLok USB Smart Key (iLok).

The iLok is similar to a dongle, but unlike a dongle, it is designed to securely authorize multiple software applications from a variety of software developers.

This key can hold over 100 licenses (or authorizations) for all of your iLok-enabled software. Once an iLok is authorized for a given piece of software, you can use the iLok to authorize that software on any computer.

⚠ *The iLok USB Smart Key is not supplied with the Music Production Toolkit package, and must be purchased separately.*

Licenses are specific to each software component. You will receive the appropriate licenses online, after you have activated your licenses using the Activation Code on the Music Production Toolkit Activation Card.

Music Production Toolkit provides one Activation Card with one Activation Code for all Music Production Toolkit components.

📖 *For additional information about iLok technology and licenses, see the electronic PDF of the iLok Usage Guide.*

The following Music Production Toolkit software components must be authorized before they can be used in Pro Tools:

- Music Production Toolkit for Pro Tools LE or M-Powered (includes Pro Tools features)
- DINR LE
- Hybrid
- Smack! LE
- SoundReplacer
- TL Space Native

To authorize Music Production Toolkit software components with iLok:

1 If you do not have an existing iLok.com account, visit www.iLok.com and sign up for a free iLok.com account.

2 Transfer your Music Production Toolkit iLok licenses into your iLok.com account by doing the following:

- Visit http://secure.digidesign.com/activation.
- Input your Activation Code (listed on your Activation Card) and your iLok.com User ID. Your iLok.com User ID is the name you create for your iLok.com account.

3 Transfer the licenses from your iLok.com account to your iLok USB Smart Key by doing the following:

- Insert the iLok into an available USB port on your computer.
- Go to www.iLok.com and log in.
- Follow the on-screen instructions for transferring your licences to your iLok.

📖 *For information about iLok technology and licenses, see the electronic PDF of the iLok Usage Guide.*

4 Launch Pro Tools.

5 If you have any installed unauthorized plug-ins or software options, you are prompted to authorize them. Follow the on-screen instructions to complete the authorization process.

MP3 Export Option

The Digidesign MP3 export option must be authorized the first time you export a region or do a bounce recording to an MP3 file.

To authorize the MP3 export option:

1 Launch Pro Tools.

2 Open a session.

3 Do one of the following:

- Click on a region and choose Region List > Export Regions as Files.

– or –

- Make an Edit selection and choose Bounce to Disk.

4 Select MP3 as the File Type.

5 Click Export (in the Export dialog) or Bounce (in the Bounce to Disk dialog).

6 In the Pro Tools MP3 Option dialog, click Authorize.

⚠️ *If Authorize is grayed out, you need to uninstall your existing MP3 option folder and its files from your system, then redo all the steps for authorizing the MP3 option: Close the current session and Pro Tools, locate and delete the MP3 option folder (in the Codecs folder in the Pro Tools application folder), then redo all the steps to authorize the MP3 export option.*

7 When prompted, type in the Pro Tools MP3 authorization code, which is included with your Music Production Toolkit package.

8 Click Next and follow the on-screen instructions to complete the authorization process.

Removing Toolkit Options and Plug-ins

Music Production Toolkit or any of its optional software components can be removed from your system.

Uninstalling Music Production Toolkit removes all components except TL Space Native, which must be removed separately. See "Uninstalling TL Space Native" on page 9.

Uninstalling Music Production Toolkit Components

Uninstalling Music Production Toolkit removes all components except TL Space Native, which must be removed separately. See "Uninstalling TL Space Native" on page 9.

Windows

To remove Music Production Toolkit on Windows XP:

1 Choose Start > Control Panel.

2 Double-click Add or Remove Programs.

3 From the Currently installed programs list, select Digidesign Music Production Toolkit.

4 Follow the on-screen instructions.

5 When removal is complete, close the Add or Remove Programs window.

Mac

To remove Music Production Toolkit on Mac:

1 Locate and open the Pro Tools folder.

2 Drag the following components from the Pro Tools application folder to the Trash:

 • MusicProductionToolkit.bundle

3 Locate and open the Codecs folder (in the Pro Tools application folder), and drag the MP3 folder (containing MP3.bundle) to the Trash.

4 Locate and open the Plug-ins folder on your Startup drive (Library/Application Support /Digidesign/Plug-ins).

5 Drag the following plug-ins to the Trash:
 • DINR LE
 • Hybrid
 • Smack! LE
 • SoundReplacer
 • TL Space Native

6 Empty the Trash.

Uninstalling TL Space Native

Windows

To remove the TL Space Native plug-in and factory impulse responses:

1 Choose Start > Control Panel.

2 Double-click Add or Remove Programs.

3 Select TL Space from the list of installed applications.

4 Click the Change/Remove button.

5 Click OK to remove the plug-in.

6 When removal is complete, close the Add or Remove Programs window.

Mac OS X

To remove the TL Space plug-in:

1 Locate and open the Plug-ins folder on your Startup drive (Library/Application Support/ Digidesign/Plug-ins).

2 Do one of the following:

- Drag the TL Space plug-in file to the Trash and empty the Trash.

– or –

- Drag the TL Space plug-in file to the Plug-ins (Unused) folder.

To remove the TL Space Native impulse response library:

1 Locate the TL Space Impulse Responses folder (Library/Application Support/Trillium Lane/TL Space).

2 Drag it to the Trash and empty the Trash.

chapter 3

Session and Track Features

Music Production Toolkit enables various session and track features for working in Pro Tools LE and M-Powered. It also includes support for the MP3 export option.

📄 *For more information on working with Pro Tools sessions and tracks, see the Pro Tools Reference Guide.*

Support for Up to 48 Mono or Stereo Tracks

Music Production Toolkit lets you play or record up to 48 simultaneous stereo or mono tracks. Higher track counts are only supported with multiple hard drives and faster Digidesign-qualified systems. Visit the Digidesign website for more information (www.digidesign.com).

The first 48 audio tracks that are active *and* have their voice assignment set to DYN (Dynamically Allocated Voicing) play back. Tracks which occur after these 48 tracks do not play back and cannot be recorded on. Their Dynamically Allocated Voicing button will be blue to indicate they are unavailable for playback or record.

⚠️ *Tracks do not play back when they are inactive or their voice assignment is set to Off.*

When working with more than 48 audio tracks, you can play back audio in tracks 49 and higher by changing the higher track's priority, as follows:

- Make a lower track inactive (click the Track Name and select Track > Make Inactive).
- Set the voice assignment in a lower track to Off (click the Voice selector and select Off).
- Drag the Track Name button of the higher track to the left (Mix window) or upwards (in the Edit window or Track List) until it is one of the first 48 audio tracks. The previous 48th audio track will become the 49th audio track and its voice assignment will change to Off.

If the original track 49 (or higher) had its voice assignment set to Off, it will automatically be reset to DYN when you do any of the above steps.

📄 *For more information on track priority and voice assignment, see the Pro Tools Reference Guide.*

Pro Tools LE and M-Powered System Capabilities

Pro Tools LE or M-Powered with Music Production Toolkit still supports all other Pro Tools LE system capabilities (such as 128 available audio tracks, 128 Auxiliary inputs, 32 Instrument tracks, and 256 MIDI tracks).

📄 *For additional Pro Tools LE and M-Powered system capabilities, see the Pro Tools Reference Guide.*

Support for Up to 24 QuickPunch Tracks

With Music Production Toolkit, up to 24 mono or stereo audio tracks can be simultaneously recorded with QuickPunch.

⚠️ *The combination of audio tracks and QuickPunch tracks cannot be greater than 48.*

📄 *For information on recording with Quick-Punch, see the Pro Tools Reference Guide.*

MP3 Export Option

With Music Production Toolkit, the MP3 file type is available when using Bounce to Disk or exporting a region as a new audio file.

MPEG-1 Layer 3 (MP3)

The MPEG-1 Layer 3 compression format (MP3) is used for streaming and downloading audio over the Internet, and for playback on portable devices.

When you select this format, the Resolution (or Bit Depth) pop-up menu in the Pro Tools Bounce Options (or Export Selected) dialog is unavailable.

The sample rate chosen is given to the codec as a "base" sample rate for operations. The actual sample rate and resolution quality of the resulting file is determined by the Encoder Speed set in the MP3 Encoder Options dialog. For example, if a base sample rate of 48000 Hz is chosen, the MP3 Encoder Options dialog will allow output streams in 48 or 12 kHz, depending on the Encoding Speed setting. The Slowest setting results in a higher resolution quality, whereas the Fastest setting results in a lower resolution quality.

When you export or bounce to MP3 format, you can set the following options:

Encoder Settings

Encoding Speed Determines the audio quality of the bounced file. There are two options: Fastest and Slowest.

The Slowest setting can take up to five times longer to process audio than the Fastest Encoding setting, so you should use it only when the highest fidelity is essential and you have a considerable amount of time to devote to the encoding process.

Constant Bit Rate (CBR) Encodes the file at a single bit rate that you choose from the CBR pop-up menu. Because the bit rate is fixed, the quality of the encoded audio will vary depending on the nature of the material being compressed. This option is best for streaming over the Internet, since it has predictable bandwidth requirements.

ID3 Tag Info Settings

ID3 Tag Type The ID3 tag stores data about the encoded audio file that is used by MP3 players to display information about the file. Pro Tools supports three versions of this tag, in order to provide backward compatibility with older MP3 players:

- ID3 v1.0: Appears at the end of a streaming MP3 file, so that tag information is only displayed after software streaming is finished.

- ID3 v1.1: Same as version 1.0, but adds track number information to the tag.

- ID3 v2.3: Appears at the front of a streaming MP3 file, so that tag information is displayed when streaming begins.

⚠️ *While ID3 v2.3 is becoming the standard MP3 format, not all MP3 players currently support ID3 v2.3. Contact the developer of your player software for compatibility information.*

Title/Artist/Album/Comment Type the title, artist, and other information for the MP3 file. This information is displayed by many MP3 players.

Genre Choose a genre for the file. This information is displayed by many MP3 players, and can appear in searchable catalogs and databases.

Track Number If you select ID3 tag type v1.1 or v2.3, you can enter a CD track number for the file. This information is displayed by many MP3 players.

Year Enter a year for the file. This information is displayed by many MP3 players.

Default Button

To restore all settings in this dialog to their default values, click Defaults.

chapter 4

Beat Detective Features

Music Production Toolkit enables various Beat Detective features for working in Pro Tools.

📄 *For information about other Beat Detective features, see the Pro Tools Reference Guide.*

Separating Multiple Tracks

You can use beat triggers from a single track, or subset of tracks, to separate a group of tracks.

In the following example, the defined selection is a drum loop consisting of two bars of 5/4. The kick, snare, hi-hat, and overhead microphones are recorded to separate tracks.

Analyzing the loop's kick drum track, with Detection Resolution set to Beats, Beat Detective places beat triggers at the transients on beats 1 and 4 (see Figure 1).

Figure 1. Kick drum track

Extending the selection to the snare, hi-hat, and overhead microphones tracks, and then performing the separation, results in separated regions in each of the drum tracks at the same location, based on the beat triggers from the kick drum track (see Figure 2).
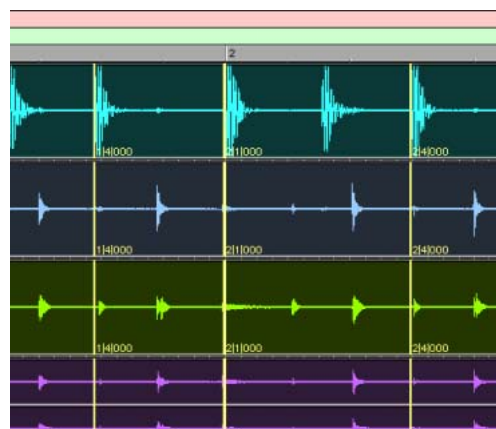

Figure 2. Kick drum, snare, hi-hat, and overhead microphones tracks

The separated regions can then be conformed as a group.

You can also utilize Collection mode when working with multiple tracks. Collection mode lets you analyze and detect triggers on tracks individually, and if you choose, add only the

unique triggers from the current track to the overall collection. For more information, see "Detection (Normal) and Collection Mode" on page 16.

Detection (Normal) and Collection Mode

In some instances, it may be difficult for Beat Detective to successfully analyze multiple tracks with the same Detection settings. With Beat Detective's Collection mode, you can collect a set of beat triggers from different tracks, each with different Detection settings, and use the collection of triggers to generate Bar|Beat Markers or DigiGroove templates, or separate new regions. Collection mode is the only way to analyze and create beat triggers on one track, and apply them to another track.

This method of selectively adding beat triggers from separate analysis passes on different tracks, until you get only the triggers you want, is potentially much more effective than manually deleting, inserting, or adjusting incorrect or false triggers.

Drum Tracks and Collection Mode

Suppose you have drum tracks for kick, snare, hi-hat, and overhead mics. If you analyze a selection across all of the tracks, you may get many false triggers when you raise the Sensitivity slider high enough to capture the hi-hat material (coming mainly from the tracks for the overhead mics).

However, if you analyze only the track for the overhead mics, the resulting beat triggers are slightly later than the material on the other tracks (since it will take more time for the sound to reach the overhead mics). If you then extend

the selection to the other drum tracks and separate them, the regions from the kick, snare, and tom tracks will be cut slightly late (see Figure 3 below).
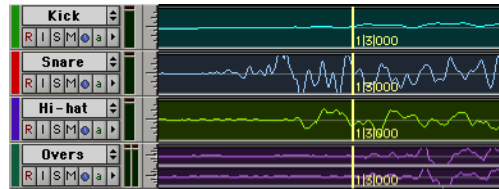

Figure 3. Overhead mics generate late beat triggers

Using Collection mode, you can analyze each drum track separately, one at a time, optimizing the Detection settings for each track until you get the triggers you want. The triggers for each track can be added successively to the collection, or you can choose to collect only the unique triggers from a track. The collection of triggers that results can then be used to generate Bar|Beat Markers or a DigiGroove template, or separate new regions.

Using Collection Mode

Collection mode is available in Bar|Beat Marker Generation, Groove Template Extraction, or Region Separation mode (audio only), and is accessed by clicking the Collection Mode button in the Detection section.
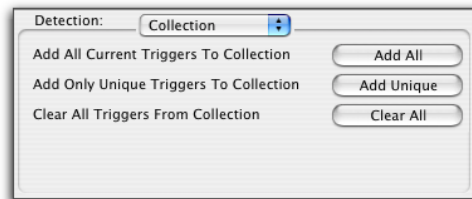
Beat Detective, Collection mode options

To use Collection mode:

1 In the Edit window, make an audio selection on a single track. Make sure the selection's start and end points fall cleanly on the beat.

2 In the Beat Detective window, select one of the following modes:

- Bar|Beat Marker Generation
- Groove Template Extraction
- Region Separation (audio only)

3 Define or capture the selection.

📓 *For information on defining a Beat Detective selection, see the Pro Tools Reference Guide.*

4 Configure the Detection options so the selection's peak transients are accurately detected.

📓 *For information on generating beat triggers, see the Pro Tools Reference Guide.*

5 Click the Collection Mode button.

6 In the Detection (Collection Mode) section, click Add to add all the current beat triggers to the collection.

7 Click the Normal Mode button and move the selection to the next track you want to analyze. Make sure to keep the selection range constant for each track.

⌨ *Press Start+P (Windows) or Control+P (Mac) to move the selection up, or Start+Semi-colon (Windows) or Control+Semi-colon (Mac) to move the selection down.*

With Commands Keyboard Focus enabled, press "P" to move the selection up, or Semi-colon (;) to move the selection down. Hold down the Shift key to retain and add to the current selection. (See the Pro Tools Reference Guide for information on enabling Commands Keyboard Focus.)

8 Configure the Detection options so the selection's peak transients are accurately detected.

📓 *For information on generating beat triggers, see the Pro Tools Reference Guide.*

9 Click the Collection Mode button again.

10 Do one of the following:

- In the Detection (Collection Mode) section, click Add Unique Triggers to add only the *unique* triggers from the track to the collection.

- Click Add All to add *all* triggers to the collection.

- Click Clear All to clear *all* triggers from the collection.

Each new set of triggers added to the collection appears in a different color. If successive triggers in the collection are located closely together (for example, because of microphone leakage), Beat Detective keeps only the earlier triggers (see Figure 4 on page 18).

11 Repeat steps 7–10 for each additional track you are analyzing.

The beat triggers stored in the Collection mode are saved with sessions. Therefore, when a session is opened later, the previous collection material is still there (until it is cleared).

12 Once the desired beat triggers have been added to the collection, you can use them to generate Bar|Beat Markers or a groove template, or separate regions. However, this must be done from the Collection Mode section (when the triggers are displayed in multiple colors).
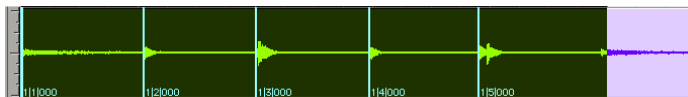
☆ *To separate regions across multiple tracks, make sure to extend the selection to any additional tracks before separating.*

Beat triggers detected in Kick track added to collection

Unique beat triggers detected in Snare track added to collection

Unique beat triggers detected in Hi-hat track added to collection

Collected beat triggers applied to Overhead microphones track

Figure 4. Overhead mic track displaying a collection of beat triggers containing unique triggers generated from the kick, snare, and hi-hat tracks

chapter 5

Additional Software

Music Production Toolkit includes additional software for working with your Pro Tools session material.

DINR LE

DINR LE provides broadband and narrowband noise reduction for suppressing such unwanted elements as tape hiss, air conditioner rumble, and microphone preamp noise.

📄 *Refer to the Digidesign Plug-ins Guide for details on using BNR.*

Hybrid

The Hybrid synthesizer plug-in, developed by Digidesign's Advanced Instrument Research (AIR) group, combines the warmth of legendary analog synthesizers with the powerful features included in popular digital synthesizers.

Hybrid features a sample-accurate synthesis engine with 23 filter modes with true saturation, plus endless modulation and performance capabilities.

📄 *Refer to the Hybrid Plug-in Guide for information on using Hybrid.*

Smack! LE

The Smack! LE compressor plug-in features three compression modes and unique compression ratios to get your desired compression sound.

📄 *Refer to the Digidesign Plug-ins Guide for information on using Smack! LE.*

SoundReplacer

SoundReplacer lets you replace one sound in your track with another (such as replacing only the snare drum in your drum tracks with a different one-hit sample).

📄 *Refer to the Digidesign Plug-ins Guide for information on using SoundReplacer.*

TL Space Native

TL Space Native is a powerful convolution reverb for post production and music applications. The TL Space package includes a comprehensive library of high-quality sampled reverb spaces and effects, from large concert halls to dense plate reverbs.

📄 *Refer to the TL Labs Plug-ins Guide for information on using TL Space Native.*