

# **SoundToys TDM Effects Bundle**

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**Version 1.2 for Mac**

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# I N T R O

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## THANKS!

First off we want to say a big THANK YOU for your purchase of the SoundToys TDM Effects Bundle.

We know there are an awful lot of plug-ins for you to choose from and we (and especially our spouses and kids) are truly grateful that you have chosen to spend your hard earned money on our products. We take a lot of pride in our work and we sincerely hope that you find our plug-ins inspirational and musically useful.

## What is SoundToys Anyway?

So what the heck is "SoundToys" anyway?

Our approach in developing the SoundToys series of Pro Tools plug-ins is to create dedicated processors that provide the absolute best possible sound quality, flexibility and creative sound manipulation in the wonderful world of digital, but that also possess that truly analog character and vibe.

All of us at SoundToys (formerly Wave Mechanics) are a bunch of effects fanatics, and we're constantly searching for new ways to manipulate and mangle sound that will put a smile on your face and help you produce the next great song, movie, video game.

And, just so you know, we are the guys that were responsible for designing such groundbreaking and industry standard products as the Eventide™ H3000, DSP4000, and the Wave Mechanics UltraTools line of plug-ins for Pro Tools TDM. Our DSP algorithms can even be found in such high-end studio gear as the TC Electronics Fireworx, G-Force, and G-Major processors, and more.

# GETTING STARTED

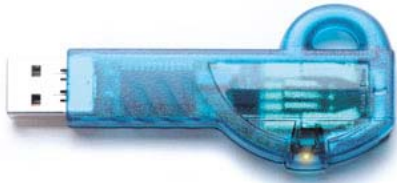
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## System Requirements

The SoundToys TDM Effects are software plug-ins that work on Digidesign Pro Tools TDM systems. You'll need to have you'll need to have a Pro Tools HD or HD Accel system running on a decent Macintosh computer (G4 or better. Faster is always better) running OS X or later.

Our newest plug-ins support the TDM, RTAS and AudioSuite plug-in formats, while our older plug-ins (SoundBlender, PurePitch, and PitchDoctor) support the TDM format only. Speed supports only the AudioSuite format.

You'll also need one of those little "iLok" hardware keys. It's a small blue plastic key that looks like this:



If you don't have an iLok we'll be happy to sell you one at a modest price or you can purchase one from Digidesign or your favorite Pro Tools dealer.

## Installing the SoundToys TDM Effects Plug-Ins

Installing our plug-ins is really pretty easy. The procedure is slightly different depending on whether you have purchased the download version or the boxed version.

### Boxed Version

First, make sure that you have your iLok hardware key connected to your computer, and that you have the SoundToys TDM license card handy. Once

you're ready, simply pop the installer CD into your computer's CD-ROM drive and when the CD icon appears on your screen double-click the SoundToys TDM installer program to start the process.

Follow any instructions included in the installer. After the plug-ins have been installed, launch Pro Tools. You will be prompted to 'authorize' the SoundToys plug-ins. To do this, carefully detach the license chip from the license card, and insert the chip into the slot in the rear of your iLok when prompted to do so by the installation program.

### Download Version

When you purchase the download version of the SoundToys TDM Effects blue, you should have been instructed to download the SoundToys TDM software installer from our web site. If you haven't done so already, please download it now.

You will have also received a SoundToys TDM iLok 'asset' from us, deposited to your iLok.com account. This iLok asset is what we use to unlock our plug-ins for paying customers (like you! ) In order to use SoundToys TDM Effects plug-ins, you will need to transfer the SoundToys TDM asset from your iLok.com account into your iLok hardware key. If you haven't already done this, go to [www.iLok.com](http://www.iLok.com), and follow the instructions on that web site for transferring the asset into your hardware key.

Now, run the SoundToys TDM Effects installer program.

### Where We Put Everything

Once installed, the SoundToys TDM Effects plug-ins will be located in your Digidesign plug-ins folder. A complete set of presets for each of the plug-ins will be installed into the plug-in settings folder. Finally, a SoundToys folder will be created in your Applications folder. The SoundToys folder contains this manual, as well as other useful documentation and tools that you can read or ignore depending on your level of patience or interest in reading babbling things like this manual.

## Registration

If you purchased the packaged version of SoundToys TDM Effects, please register your product by going to <http://www.soundtoys.com/register>. If you purchased the download version from the SoundToys web site, there is no need to register, as we have already done that for you.

For registration, you can find the serial number for this product on the black plastic registration card inside the SoundToys TDM package. We also suggest you keep this card in a safe place, along with the original CD.

We also strongly recommend that you go to <http://www.iLok.com>, set up an iLok.com account, and register your iLok. By registering your iLok, we can better support you in the rare case that your iLok malfunctions, or you have some other problem with your SoundToys authorization.

# What's In the Box?

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OK, now you've got a box full of great effects plug-ins - how do you decide which one to use? Here's a quick run-down of each plug-in in the SoundToys TDM bundle, and a quick guide to some common effects and how to achieve them with our plugs.

## The Plug-Ins

EchoBoy ..... Echo and delay with tape, vintage, modern styles  
Tremolator ..... Modeled vintage trem and modern rhythmic auto-gating  
FilterFreak1..... Single band resonant modulated filter with rhythm options  
FilterFreak2..... Dual band version of above  
PhaseMistress.. Rich analog-sounding phaser with programmable modulation  
Crystallizer ..... H3000-esque pitch-based granular effects and reverse delays  
PurePitch ..... Vocal harmonizing and character alteration  
PitchDoctor ..... Automatic vocal and instrument tuning  
PitchBlender .... Multi-FX processor with pitch, filter, delay and modulation  
TimeBlender ..... A reverse delay/granular version of PitchBlender  
Speed ..... Polyphonic time compression expansion and transposition

## Common Effects

Auto-Panning ..... PitchBlender  
Auto-Gate ..... Tremolator  
Wah-Wah ..... FilterFreak1, FilterFreak2  
Envelope Filter ..... FilterFreak2, FilterFreak2  
Echo ..... EchoBoy, PitchBlender  
Chorus ..... PitchBlender, EchoBoy  
ADT ..... PitchBlender  
Phasing..... PhaseMistress  
Flanging ..... PitchBlender  
Tremolo ..... Tremolator  
Vibrato ..... PitchBlender  
Pitch Transposition..... PurePitch (vocal), Speed (rhythm, guitar, mix)  
Harmonizing ..... PurePitch

Vocal Tuning ..... PitchDoctor  
Time Compression..... Speed  
Vocoding ..... PurePitch  
Warming/Fattening ..... FilterFreak1  
Multi-Effects.....PitchBlender, TimeBlender

# SOUNDTOYS BASICS

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Since you would probably not be reading this unless you own a Pro Tools system we kind of take it for granted that you have at LEAST a basic working knowledge of your computer and of Pro Tools. If you don't, we strongly suggest you make yourself a strong cup of coffee (or two), get a comfortable chair and familiarize yourself with the ins and outs of your Pro Tools system before delving too much further into our plug-ins. Digidesign is really nice and provides lots of manuals for your reading pleasure!

## Knobs



You can use a mouse to control all of the knobs in the SoundToys plug-ins, and they all work in the same way: To turn a knob up, (to the right, clockwise etc), click on the knob with your mouse and drag the cursor to the right or slide the cursor up (towards the ceiling). To turn a knob down, (to the left, counter-clockwise), click on the knob with the mouse and drag the cursor to the left or down (towards the floor). "Mousing" around in a circle doesn't really work; you'll just get frustrated and or dizzy, neither of which is a lot of fun.

### Jumping to a Value using Text Markings

Some knobs have text markings showing minimum, maximum, or other values. Clicking on one of these text markings will automatically move the knob directly to that value.

## Returning a Knob to its Default Value

To return to the knobs "default value", simply hold down the option key and click on the knob. This will automatically move the knob back to its default value.

## Viewing a Knob's Exact Value

To view the exact numerical value of a knob simply hold down the control key and click on the knob. To see the knob's title, hold down control and click on the knob a second time.

## Adjusting a Knob with Fine Control

To get finer control over knob values, hold down the apple [⌘] key while dragging the mouse.

## Toggle Switches



In an effort to provide the feeling of real analog gear our toggle switches "switch" when clicked. To change the "state" of a toggle switch (like the analog/digital control), simply click on the switch it will change from where it was to the "other" setting. Click again to change it back. Really simple!

## LED Displays



LED displays on SoundToys plug-ins work in a couple of ways:

## Nudge Buttons

Most text readouts also include a pair of nudge buttons next to the display. Clicking on the upper button will increase the value by one and clicking once on lower button will decrease the value by one. This is useful for tweaking a value by small steps.

## Numerical Readouts & Entering Values from the Keyboard

For numerical readouts, (like BPM), you can enter exact values right from your computer keyboard. Clicking on the LED display highlights the field and makes it "live". Once highlighted, you can enter a new value via the computer keyboard. Press, "Return" to submit the value and deselect the field. You can also click & drag the cursor to change the value. Simply click on the value and drag the cursor up to increase the value or down to decrease the value, similar to using a knob control. Press, "Return" to submit the new value and deselect the field.

## Pop-Up Menus & Changing Values:



For most text-based readouts (meaning things that aren't a number), like Echo Style, etc., clicking on the readout with the mouse will display a popup menu. To change a value in the popup, hold down the mouse button and drag to select the desired value and let go. The selected entry will show up in the

field, or a new pop-up window may appear depending on what you have selected.

# Using SoundToys Effects Within Pro Tools

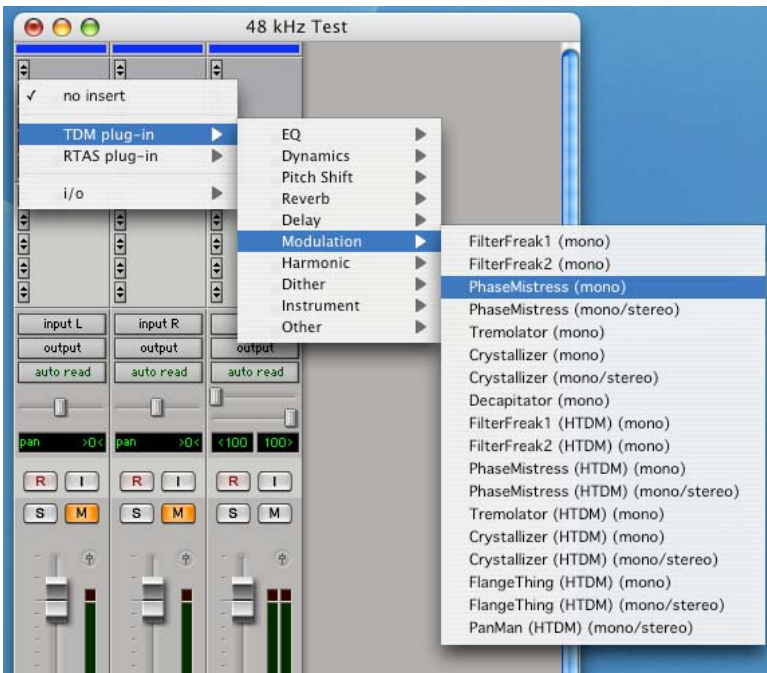
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SoundToys plug-ins are available to process your audio in two different ways: Real-Time, or Non Real-time.

## Real Time Processing (TDM or RTAS)

As a real-time plug-in, SoundToys plug-ins work a lot like a real hardware device. Whatever sound goes into a SoundToys plug-in, comes out with an effect on it, and you can hear it as it is happening (in real time!).

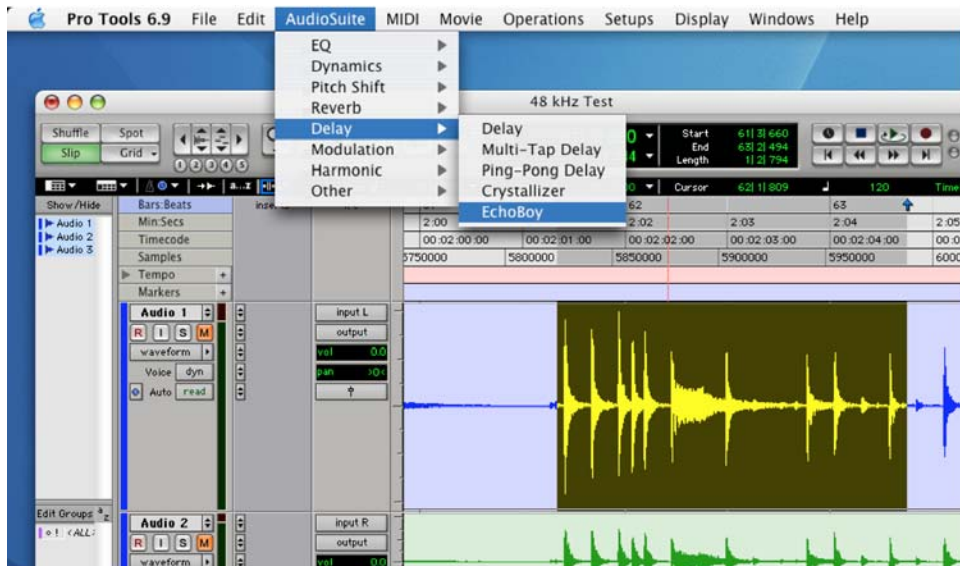
To use SoundToys plug-ins in this way, you must first select one of the SoundToys plug-ins as one of the insert devices within Pro Tools, by clicking on the inserts button on a track. You can do this either from the edit or mix window in Pro Tools. From the inserts pop up, select EchoBoy or one of the other SoundToys plug-ins as shown in the next graphic...



You can insert as many versions of a SoundToys plug-ins as you'd like, just keep in mind that each one gobbles up certain amount of DSP power. For TDM plug-ins, this uses up DSP chips on your DSP farms cards, for RTAS versions this uses your computer's main CPU, and can make your computer start to sweat in terms of what's left over for other tasks.

## Non-Real Time Processing (AudioSuite)

If you want to save DSP power, most SoundToys plug-ins (except SoundBlender, PurePitch, and PitchDoctor) can also be used to process a specific region of audio destructively. This is done in Pro Tools using the AudioSuite menu. To do this, first select the region of audio you'd like to process from the Edit window of Pro Tools. Then choose the desired plug-in from the AudioSuite menu.



Hit the process button to process the selected region and to write the result back to disk. To hear the effect before committing to disk, click on the preview button.

# Standard Pro Tools Controls

SoundToys plug-ins are designed to be very integrated with Pro Tools, supporting all of the “standard” Pro Tools plug-in features and controls including parameter automation, MIDI control, etc. Access to these functions can be found in the gray bar that Pro Tools attaches to the top of our plug-ins. The display below shows the real-time version of EchoBoy. When using the AudioSuite version, an additional gray bar will appear on the bottom with buttons to control previewing and processing.



## SoundToys Effects Presets

For your immediate listening pleasure and for those who just can't wait, we've included a bunch of carefully crafted, creative, cool presets with each of our plug-ins. You might want to check these out, as they not only provide a good example of the various types of effects that can be achieved, but one of them just might be the ticket you need for your latest hit record or production. They also provide a great starting point for you to tweak and mangle to your hearts content. Besides, we spent a whole bunch of time making them so you might as well give them a spin.

## Loading a Preset

To view and load a preset, simply click on the Settings Librarian button located in the standard Pro Tools plug-in controls area, located at the top of the plug-in window, located in Pro Tools, located on your computer, located in your, oops, sorry! And as you would expect, for more info on the Pro Tools Settings Librarian, please read the Pro Tools manual.



## Saving a Preset

Saving a preset is just as simple. Click on the small button to the left of the preset name and choose "Save" to update the current preset, or "Save As" to create a new preset.

## Compare Button

The compare button (often called the compare "light" by Pro Tools pros) is a great way to audition the effect of any changes you've made to one of the SoundToys presets. As soon as you change any parameter in one of our plug-ins, the compare light will come on. Click on the compare light to toggle between the original preset and your current changes.

## Bypass

One of the more useful features on any plug-in is the Bypass button. Click on this to bypass the effect of our plug-ins. When running in RTAS format, this also recovers any CPU cycles being used by the plug-in.

## Optimizing CPU Usage

If you are running the TDM version, you don't have much to worry about. The specialized DSP chips in your TDM system do all of the heavy processing. However, if you are running the RTAS version of our plug-ins, it will use your computer's processor to do its audio processing. Because of our plug-ins' advanced DSP algorithms, they can put a pretty heavy load on your processor. Here are some tips to reduce the processing:

- If you're running multiple tracks through the same effect, use the effect on an aux track and use sends to route the audio through the plug-in.
- Commit your effect to disk by using AudioSuite, or, by bouncing to disk. This is an 'old-school' way of working, but it's very effective, and can also help to reduce 'option-paralysis' when your trying to mix your song.
- Turning "Analog Mode" off (on the plugs that have it) can give you back some power, too. Of course, it may be a vital part of the sound, so that's all up to you.

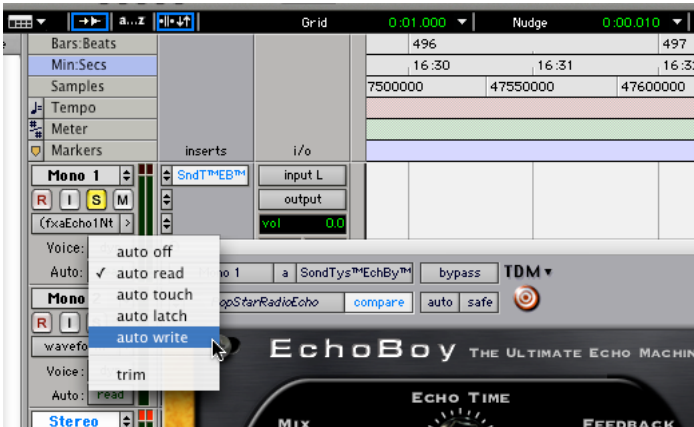
## Automating Parameters

Many of the controls in the SoundToys plug-ins can be automated. Click on the 'auto' button to bring up the Plug-In Automation window. At the left is a list of parameter available for automation. On the right are any of the parameters that are currently automated. Select whichever parameters you'd like to automate then click on the 'Add' button. Those parameters will appear on the right side of the window, and can now be automated from within Pro Tools.

To record automation data, you'll first need to do a few things within Pro Tools. First, bring up the Pro Tools automation window (see Pro Tools Manual for enabling automation) and make sure 'plug-in' is enabled.

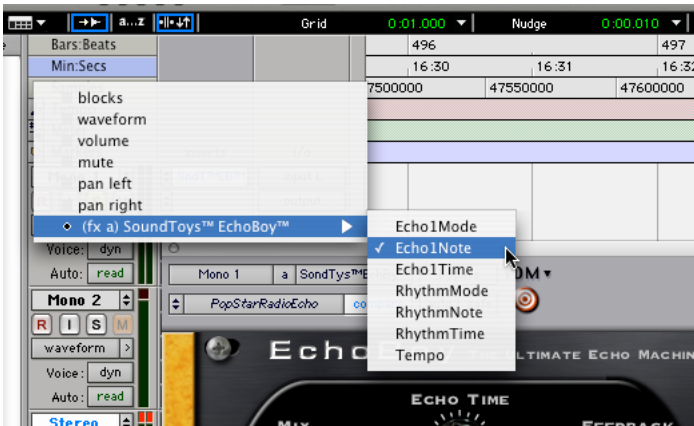


Next, in the track you're working on, select 'auto-write' to enable the real-time recording of automation data. Now, press play and fiddle with the plug-in controls. Pro Tools should now record any control changes you make. When the transport is stopped, the automation will automatically switch to 'auto-touch'.



Please Note: In auto-touch mode, the automation data you've just recorded will be played back, and any new control changes you make will be written over the older automation data. To prevent these new control changes from being recorded, change the automation mode to 'read'. To turn off all automation on this track, set the mode to 'off'.

It would be really cool to edit these control changes, wouldn't it? Pro Tools has got you covered. From the edit window, click on the waveform button and slide the mouse over until you see the plug-in name (in this case, EchoBoy) and its automated parameters. Choose whichever parameter you'd like to edit (it would be nice to see all parameters at once, but for now you've got to work on one at a time.)



Now you'll see the automation control superimposed on the audio waveform. From this you can click and drag to your hearts content, creating all sorts of wild and crazy effects!



## Tempo Control



Many SoundToys plug-ins can set modulation or delay times in musical units. When using this feature, the plug-in needs to know what tempo your song is at so that it can adjust what is needed to keep things all in sync (remember when you had to do that all math by hand - eek!)

There are three ways to tell our plug-ins what tempo your song is playing at - “tapping” it, entering the exact BPM value, or syncing to MIDI tempo,

### Tapping the Tempo

Simply place the cursor over the Tempo button and click the mouse in time with the track. You will notice that the LED readout will change as you tap the button and display the tapped tempo in BPM. To change the tempo to a new value, simply tap the button a couple of times and a new value will be input. Tap tempo is really useful and allows you to adjust the delay time to be in concert with the tempo of a track. It will not be EXACTLY in sync but will get you into the ballpark.

### Entering a BPM Value

BPM stands for Beats Per Minute, and is the standard way of specifying the tempo of a piece of music. If you know the BPM of your track, you can enter it by clicking in the LED tempo display, typing a value between 30 and 300 and pressing the Return or Enter key. This will set the tempo to the new value and set the sync times accordingly.

## Syncing to MIDI

The Midi switch allows you to quickly lock to Pro Tools Midi clock. If you have set the tempo in your session correctly, simply click on the MIDI switch so that it is in the “Up” position with the red LED illuminated. The tempo menu will read out the tempo of the incoming MIDI clock and the Tap Tempo button will be disabled, as will be locked to the incoming signal. If you flip the switch off the plug-in will no longer be synced to midi clock and the tap tempo will again become active.

Note: The MIDI Sync feature requires version 6.0 of Pro Tools or later.

## **For More Details**

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If you made it this far, you deserve a medal! Now that you've taken the time to learn all the basics of using our plug-ins, go to it!

For more details on specifics of each plug-in in the SoundToys TDM Effects bundle, we've provided detailed user guides for each plug-in. These can be found in the SoundToys folder on your computer.

## Getting Help

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We offer free technical support for all registered users. We love to hear from you, but if you are having problems, please first try to look in the manual or on the support page of our web site for an answer. If you are still stumped, please e-mail us with the following info:

- The product version and serial number
- The version number of your Pro Tools system, and type of hardware (e.g. Mix, HD, Digi-001, etc.)
- Your computer type and operating system version number (e.g. System 9.1, OS X, etc.)
- A detailed description of the problem

The e-mail address for support is: [support@soundtoys.com](mailto:support@soundtoys.com)

If you don't have e-mail, you can call us at 1-802-951-9700.

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## **T r a d e m a r k   I n f o**

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