

Waves V4 Release 4

Release Notes and information



This document lists general information, Installation instructions, Demo info, Authorization info. Specific information on supported host applications, sample rate support charts and known issues.

This document covers MAC OS-9 and OS-X and Windows 98se, ME, 2K & XP.

We hope you will find this document useful and informative.

The Waves team.

1. General Information

Waves Digital Audio Processors are software modules designed to provide professional audio processing as Plug-Ins within a wide range of supported audio host applications.

Waves V4 is a new generation of the software. V4 presents the integration of many efforts to make Waves Plug-Ins better than ever. It presents support for MAC OS-X 10.2.2 or later, as well as new product line enhancements such as the new Renaissance Channel in Renaissance Maxx, Platinum and Diamond.

What's new in V4r4

R4 release includes special builds of all the plug-ins for OS-X and Windows.

OS-X 4.0.5 update presents critical updates required for using on OS10.3 – Panther and on G5 computers. The OS-X plug-in version have been updated and their version numbers incremented by 0.5.

Windows 4.0.5 update contains fixes of the Copy protection to avoid the loss of authorizations on WinXP that some users were experiencing. A Denormalization fix to RDeEsser and a P4 1.4 fix to RChannel.

OS-9 and Windows versions are the same as in the previous releases.

Also there are new products as follows -

Waves Musicians Bundle for OS-9, OS-X and Windows.

Waves IR-1 Parametric Convolution Reverb for OS-X and Windows.

The Waves V4 plug-ins support major Plug-In architectures and host applications as follows –

MAC OS-9

WaveShell-DAE 4.0_9 - Provides compatibility with Digidesign systems from Pro-Tools Free, through native power driven Pro-Tools LE and all the way to Pro-Tools TDM using the MIX hardware generation or the new HD systems. WaveShell-DAE integrates support for Digidesign's 3 different plug-in types – TDM, RTAS and AudioSuite. Waves users with Digidesign systems can read important information in the DAE chapter.

WaveShell-DAE 4.3_9 – Provides compatibility with Digidesign systems for the Waves Transform Bundle. This shell should be installed in the DAE Plug-Ins folder along with WaveShell-DAE4.0_9.

WaveShell-VST 4.0_9 – Provides compatibility with some of the leading VST host applications. Officially supported are – Steinberg Cubase VST 5, NUENDO 1.5 | Emagic Logic Audio 4.7 | TC-Works SPARK 2.0.| Bias Peak 2.62, V-Box 1.01, Deck 3 | Prosoniq – SonicWORX 2.

WavesTransform-VST 4.3_9 – Provides compatibility to Cubase 5 and SPARK for the Waves Transform Bundle.

WaveShell-MAS 4.0_9 – Provides compatibility with MOTU – Digital Performer 2.72 and later and AudioDesk 1.02.

WavesTransform-MAS 4.3_9 – Provides compatibility with MOTU – Digital Performer 2.72 and later and AudioDesk 1.02. for the Waves Transform Bundle Plug-Ins.

MAC OS-X

WaveShell-DAE 4.0_X WaveShell-DAE 4.3_X - Provides compatibility with Digidesign systems from Pro-Tools LE and all the way to Pro-Tools TDM using the MIX hardware generation or HD systems. WaveShell-DAE integrates support for Digidesign's 3 different plug-in types – TDM, RTAS and AudioSuite. Waves users with Digidesign systems can read important information in the DAE chapter.

WaveShell-DAE 4.4_X - Provides compatibility with Digidesign Pro-Tools TDM using the HD Accel hardware.

WaveShell-VST 4.3_X – Provides compatibility with some of the leading VST host applications. Officially supported are – Steinberg Cubase SX 1.05, NUENDO 2.1 | TC-Works SPARK 2.0.| Bias Peak 3, V-Box 1.01, Deck 3|

WaveShell-AU 1.0.3 – Provides compatibility with the leading Audio Units host applications. Emagic Logic Audio 6.2 | Final Cut Pro 4.1 | BIAS - PEAK 4.0 | TC-Works - SPARK 2.8 Within SPARK FX Machine Use either as Audio Units or VST.

Note ! Soundtrack by Apple is currently not supported and there are known problems when the WaveShell-AU is installed. Check Waves homepage for news regarding this and other Audio Units hosts.

WaveShell-MAS 4.2.3_X – Provides compatibility with MOTU Digital Performer 4.1.

WaveShell-DAE 4.5, WaveShell-AU 4.5, WaveShell-VST 4.5, WaveShell-MAS 4.5 - Provide compatibility for IR-1 with the related plug-in host architecture.

Windows

Direct-X – This plug-ins architecture is provided by the makers of Windows, Microsoft. It is the main Plug-Ins architecture of some the industry's finest hosts and lately has become Automation enabled in Sonar.

Steinberg – Cubase-SX 1.02, NUENDO 1.52, WaveLab 4 | Emagic Logic Audio 5.3 | Sonic Foundry Sound Forge 6.0, Vegas Pro 3.0, Vegas Video 3.0, Acid 3.0 | Cakewalk – Sonar 1.3.1 | Magix - Samplitude 6 | Syntrillium – CoolEdit 1.2 |

WaveShell-DAE 4.3 - Provides compatibility with Digidesign systems running Pro-Tools LE or Pro-Tools TDM. The WaveShell-DAE.dpm and it's accompaniment the WaveShell-DAE.dpm.rsr will provide support for Digidesign's TDM, RTAS and AudioSuite architectures. Waves users with Digidesign systems can read important information in the DAE section of this guide.

WaveShell-VST 4.3 – Provides compatibility with some of the leading VST host applications. Officially supported are –
Steinberg Cubase SX 2.0, NUENDO 2.1, WaveLab 4.0

WaveShell-DAE 4.5.dpm, WaveShell-VST 4.5.dll - Provide compatibility for IR-1 with the related plug-in host architecture.

Other unlisted hosts are not officially supported by Waves and though the plug-ins may work, Waves has not tested them in house for operation in the standards we expect. We aim to support the widest possible range of hosts and will post notices on the Waves web site when we adapt support for more hosts.

The Waves Digital Audio Processors cover a wide range of features and applications minding the highest standards in audio quality. Different processors require different amounts of computational resources and each processor will support processing in Sample Rates as high as possible. The processors were tested for sample rates as high as 192kHz of 24bit audio. Waves Ltd. invests a big amount of R&D to make sure the audio processors are as good as possible. Much thought and hard work are incorporated into each tool as well as consulting with world class professionals and practical testing. Many present such a grand amount of possibilities and subtleties, while others are designed to help you get great results at the least effort to save time in the studio.

We hope you will come to realize the power and value in these tools that are sometimes just superior to anything you could get in hardware.

If you experience any problems with any aspect of usage of Waves products, our technical support crew will be there to provide service and help you solve it.

2. How To Get V4.

Waves Digital Audio Processors are sold worldwide by authorized dealers and distributors. For a contemporary list of Waves dealers and Distributors go to Waves web site and look under "How to buy".

The Waves Online store is also open for business and can serve you if you wish to buy online at the retail price. The rest of this chapter applies mostly for Waves users who have version 3.x and need to update to version 4. If you are a new customer just installing your product you can skip this chapter and continue to the next one.

Introduction

Updating your 3.x products to version 4 is simple, whether you are updating online or via your Waves representative. Any Waves 3.x product you own can be updated to version 4.

When an update to version 4 is requested, the Waves online system calculates the price based on the Waves 3.x products registered in your account. Once the price is calculated, all that is needed is to complete the process is to purchase the update. Once the process is finished, your account will show your updated products as version 4. Now you will need to install version 4 by either downloading it from the Waves web site or installing from a Waves Version 4 CD, and then authorize.

The version 4 upgrade process is described below. If you encounter any difficulties or have any questions relating to this update process, please contact Waves technical support team.

Getting Version 4 through Waves Web Site

Browse to Waves web site online registration page at register.waves.com and log into your account. If you have several accounts you will need to perform this procedure for each one of your accounts.

Please note that to proceed with the update, your products must be registered. An unregistered product cannot be updated.

In your account you will see a "Get Version 4" button. Click it. A new page will open in your browser. This page will display the products you own that are updateable in a list and the total cost of the upgrade to version 4.

NOTE: If you have bought any Waves bundle between Sept 1st 2002 and Jan 15th 2003 you will see an additional list consisting of these products, for which you are entitled to a free upgrade.

To proceed with the update process, click the "Next" button. If you wish to cancel the update process, click "Cancel", and the window will close. Clicking "Next" will open the first page of the transaction procedure. Once the transaction has been completed, the updated products will be displayed as version 4 in your account.

All that is left for you to do now is to install Waves version 4, either by downloading the relevant installers from Waves web site or installing directly from Waves Version 4 CD, and authorize your products.

Getting Version 4 through your local Waves dealer or representative

When you contact your local Waves dealer or representative, be sure you have the user name and email address from your Waves account. The dealer will calculate your price for you. Once you have made the purchase, the dealer will update your account for you. Once the process is finished, your account will now show your updated products as version 4.

All that is left for you to do now is to install Waves version 4, either by downloading the relevant installers from Waves web site or installing directly from Waves Version 4 CD, and authorize your products.

3. Products

Waves Digital Audio Processors products are sold separately and at different price points for

- Native processing using the host computer CPU to process audio in real time.
- TDM using Digidesign's DSP hardware to process audio in real time. The authorization for TDM includes Native functionality in all supported hosts.

With the release of version 4.0 our product line includes 35 separate plug-ins with over 120 separate units of which you can run as many as your DAW will allow. In contemporary computers and audio workstation this goes to a very high count allowing you to dress full multichannel mixes with state of the art EQ, Dynamics, Creative Effects processing and Restoration.

Waves Ltd. Distributes its Software Audio Processors in bundles. The bundles are collections of plug-ins compiled by application type i.e. Scientific Mixing essentials - NPP and Gold bundles, Sound sweetening tools – Renaissance Maxx, FX processing – ProFX, Purist Quality Mastering – Masters bundle and Noise reduction and recovery of damaged audio – Waves Restoration.

Waves Digital Audio Processors V4 Release 2 includes the following products:

Waves Diamond Bundle - This is the most comprehensive collection of tools we ever sold in a single package. Including:
Waves Platinum, Waves Restoration and Waves Transform Bundle.

Waves Platinum Bundle - This is a comprehensive collection of tools sold in a single package. Including:
Waves Gold Bundle, Renaissance Maxx and Waves Masters Bundle.

Waves Broadcast and Production Bundle - This is a comprehensive collection of tools we ever sold in a single package. Including:
Waves Restoration, Renaissance Maxx and Waves Masters Bundle.

Waves Gold Bundle – The Gold Bundle is included in the Platinum Package and bundles all the Waves essentials, FX and some sweeteners into 1 box. Including:
C1-Compander, DeEsser, L1-UltraMaximizer, S1-Stereo Imager, Q10-Paragraphic EQ, SuperTap, TrueVerb, Renaissance Compressor, Renaissance EQ, Renaissance Reverb, MetaFinger, MondoMod, Doppler, Enigma, UltrPitch, AudioTrack, C4-Multiband parametric, PAZ, MaxxBass, PS22 (TDM Only).
Waves Gold bundle is part of the Waves Platinum package.

Native Power Pack – The Basic native processing toolset. Including: C1-Compander, DeEsser, L1-UltraMaximizer, S1-Stereo Imager, Q10-Paraphoric EQ, SuperTap-2taps, TrueVerb and IDR. This bundle's components are included in the Waves Gold Bundle. The NPP is native only.

Renaissance Maxx – Next generation tools offered in a cost effective collection Including: Renaissance Compressor, Renaissance EQ and Renaissance Reverb (These components are included in the Waves Gold Bundle). Renaissance VOX, Renaissance Bass, Renaissance DeEsser and Renaissance Channel. This complete bundle is part of the Waves Platinum package

Waves Masters Bundle – Purist quality processors with a focus on audio mastering for CD's DVD's etc. Quality wise this is the supreme team Including: L2-UltraMaximizer, Linear Phase EQ, Linear Phase MultiBand. This bundle is part of the Waves Platinum package

Waves Restoration – An Intensive Care Unit for audio in need of noise or click reduction. Including: X-Noise, X-Click, X-Crackle and X-Hum. This bundle is sold separately and is not included within any other Waves Product.

Waves Transform Bundle – The next step of secret weapon processors. Amazing transformations of time, pitch, identity, punch and more including: Doubler, Morphoder, TransX and SoundShifter.

Waves Musicians Bundle – The amazing value and easy to use toolkit. Including MetaFlanger, SuperTap, Renaissance VOX, Renaissance Axx and Doubler.

Waves 360° Surround Tools (MAC Only) – A complete set of Surround Audio processing, mixing & mastering tools including Bass Management and monitoring calibration as well as panning, reverberation, compression and limiting.

Waves IR-1 Parametric Convolution Reverb (Windows and OS-X) – The breakthrough sampled acoustics reverb with total parametric control and an amazing collection of sampled Halls and venues.

Over the years Waves has sold individual plug-ins and bundles that eventually became part of a different bundle and their original retail was discontinued. However upgrade paths to newer versions were maintained and no product was abandoned without a path to the newer version. Products like TDM bundle, TDM2, NPP2 Renaissance Collection 2, C4, L2 and any other version 3 product you may have is upgradeable to version 4.

All of these products are available at version 4.0 for all the listed supported host applications. All products work for a 14 days demo period at the first time they are installed on a computer.

Read the next chapter for an overview of the different products and their installation instructions

4. Installation

To Install any Waves Digital Audio Processors –

The Waves V4r2 CD Includes Installers for all Listed products. When Inserting the Disk into your CD-Rom drive it will display a set of product installation options as well buttons to launch multimedia tutorials and this guide. You may select between installing everything to installing just a specific bundle according to your Needs.

The options are as follows:

Install Waves Diamond Bundle

Select this to install all products listed Including the Waves Platinum Package and Waves Restoration. You will have 14 days to demo the ones installed for the first time. If you are updating from a previous 3.x version then your authorizations will not be valid for version 4.0 and the 14 days demo should work.

Install Waves Gold Processors

Select this installer to install the following products:

Waves Gold Bundle, Waves TDM bundle 1+2, Native Power Pack Bundle 1+2, Renaissance Collection 1, Waves ProFX.

Install Waves Renaissance Maxx

This will install the Waves Renaissance Collection 2 on your computer.

Install Waves Restoration

This will install the Waves Restoration bundle version 4.0 on your computer.

Install Waves Masters Bundle

This will install Waves Masters Bundle version 4.0 on your computer.

Install Waves 360° Surround Tools version (MAC Only)

This will install Waves 360° Surround Tools Bundle version 4.0 on your computer.

Install Waves Transform Bundle

This will install the Waves Transform Bundle Release 2 on your computer.

Install Waves IR-1

This will install IR-1 Parametric Convolution Reverb and the basic Impulse Response set.

Install Waves Musicians Bundle

This will install the Waves Musicians bundle to your computer.

AFTER INSTALLATION

MAC OS-9 & 10

Installing any of the Waves installers will result in the installer creating a Waves 4.0 folder on the root of your MAC system disk or where requested in the installation process. The Waves 4.0 folder includes a WaveShells folder, Authorizers folder, Plug-Ins folder, the Version 4.0 Readme file and this document in electronic pdf format.

The Installer will attempt to locate Host application plug-ins folders and install the appropriate WaveShell in it. If you install host application after Waves 4.0 is already installed or in some other cases you may need to manually copy a certain WaveShell from the WaveShells folder within the Waves 4.0 folder. To be sure it is recommended to check that the WaveShell- 4.0 is indeed installed in the plug-ins folder of your host application.

When you run the host application for the first time the WaveShell will prompt you to locate the Waves Plug-Ins folder.

Navigate to the Waves Plug-Ins 4.0 folder and click Select. The WaveShell will now scan for its plug-ins and you may see a circling "W" which we call the "Wavelue".

5. Demonstration

For demonstration of Waves Digital Audio Processors version 4.0 you need to install the product of your choice and run it as if it were the real thing. The version 4.0 products will operate in demo for 14days. The demo is fully featured and only the plug-in about box will pop up on every first launch. After 14 days the demo will expire and you will have to authorize the products to continue using them on that computer.

When the demo expires for some or all of the installed plug-ins you can move them to an Unused Plug-Ins folder or delete them from your computer. Otherwise they will continue to prompt you that the demo expired every time you launch your host application. To eliminate any Waves plug-ins from loading with your host, remove the WaveShell from the host application's Plug-Ins directory.

Important demo note!

All of the Waves Digital Audio Processors version 4.0 share a common demo period, for this reason if you want to demo the Native Power Pack only you will be using up your demo for all other version 4 plug-ins.

Authorizing any amount of version 4 product will extinguish the demo for all the rest of the plug-ins. For these reasons we recommend to use the 14 days demonstrations before authorizing any version 4 product.

Plug-Ins in demo period will display the plug-in's "about" screen when instantiated.

6. Registration

In order to be able to authorize your Waves product, you will have to register your product with Waves by using the Waves Online Registration and Authorization application. This service is waiting for you at – <http://www.register.waves.com>. You can also select “Register” from the menu at the Waves Homepage at - <http://www.waves.com>.

To perform the registration you will have to have your product serial number at hand. Be sure you receive your product serial number when you purchase any Waves product. In the process of registration you will be requested to enter some personal information and this product serial number will register you to your purchased product. This will enable you to Authorize your product, receive upgrade deals to your registered products and be eligible to receive technical support.

If you are registering your first Waves product, you will need to select the choice for New Customer – Create a New Account. If you already have an account you may simply log into the system with your username and password, this will get you to your Account management page where you can select “Register Products” to register additional products using the Serial number that you received with your purchase.

Whenever a new account is created an email notice with the important account details will be sent to the email specified in the registration information.

The Waves Online Registration and Authorization application is live 24/7 except when it temporarily goes down for maintenance. It is full of helpful information to get you through the process successfully. If you have no convenient access to the Internet, you can fill a form and send or FAX it to Waves for manual registration. This however is not a 24/7 service but our staff will handle these quickly within office hours with commitment to serve you within 2 business days.

Once you have successfully registered your copy, you can continue to authorize your software to run on the computer of your choice. You can perform authorizations from any Internet connected computer but remember to collect you product “Challenge” only from the device on which you wish to install the authorization of your copy.

7. Authorization

Authorization can be carried out only after you registered your product with Waves and collected the product “Challenge” from the device on which you want to install the Waves Digital Audio Processors authorizations. In the Waves 4.0 folder you will find an Authorizers folder with the following authorizers –

MAC OS-X

- **Authorizer 4.0.5_X** is used for generating a software authorization for Waves V4 processors (all accept Transform bundle and IR1).
- **iAuthorizer 4.0.5_X** is used for generating an iLok Hardware key authorization for Waves V4 processors (all accept Transform bundle and IR1).
- **Authorizer 2.0.5_X** is used for generating a software authorization for Waves Transform Bundle processors.
- **iAuthorizer Transform 2.0.5_X** is used to authorize iLok hardware key for Waves Transform bundle.
- **IR1 Authorizer 1.0_X** is used for generating a software authorization for Waves IR1.
- **iIR1 Authorizer 1.0_X** is used for generating an iLok Hardware key authorization for Waves IR1.

MAC OS-9

- **WavesAuthorizer 4.0_9** is used for generating a software authorization for Waves V4 processors (all accept Transform bundle).
- **iAuthorizer 4.2_9** is used for generating an iLok Hardware key authorization for Waves V4 processors (all accept Transform bundle).
- **Transform Authorizer 2.0_9** is used for generating a software authorization for Waves Transform Bundle processors.
- **iAuthorizer Transform 4.2_9** is used to authorize iLok hardware key for Waves Transform bundle.

Windows

- **iAuthorize** is used for generating either Hard Drive or iLok authorization for All Waves V4 Processors (All except Transform Bundle and IR1)
- **iTransformAuthorizer** is used for generating either Hard Drive or iLok Authorization for Waves Transform bundle.
- **IR1Authorizer** is used for generating either Hard Drive or iLok Authorization for Waves IR1.

If you have registered, you will have a user name and password with which you can log in to your account page where you will find all of your registered products listed. If you have not yet performed authorization for the product you will see that its status shows as registered. Then at the bottom of the Manage My Account page you will see options to Authorize Disk or Authorize iLok. Select The appropriate option.

Important Authorization Note!

It is important to know that the challenge you are issuing is the correct one for the product that you are trying to authorize. The only way to receive your challenge is by launching the Waves Authorizer program which will provide you your challenge. The Authorizers are installed in the Authorizers folder in your Waves 4.0 folder.

In the event that your software authorizations are lost due to Hard Disk change or failure, or for any reason, you can Request Reauthorization from your account page, but in many cases using the same response originally generated should work unless the actual authorized computer mainboard or hard drive was changed. Requesting reauthorization and a log of issued responses can be found in your account page.

8. Sample Rate Support.

Waves V4 Sample Rate support chart

Waves Digital Audio Processors All Support 44.1 and 48kHz Sample Rates. Many support also higher rates as 96kHz or 192kHz now being used more and more. In some hosts plug-ins may be listed even if the session sample rate is higher then what they can handle. Use this chart to know what to expect.

Processor	Up to 96K in TDM HD	Up to 192K in TDM HD	Up to 96K in Native	Up to 192K in Native
Transform Bundle				
Sound Shifter	-	-	+	-
Doubler	+	-	+	-
	(except 4voice ms & ss)			
Morphoder	-	-	+	-
Trans-X	Trans-X Wide + Trans-X Multi -	-	+	-
Waves Gold Bundle				
AudioTrack	+	+	+	+
MaxxBass	+	+	+	+
C4	-	-	-	-
PS22	+	+	-	-
IDR	+	+	+	+
L1	+	+	+	+
C1(Includes C1gate & C1comp)	+	+	+	+
S1	+	+	+	+
Q10	+	+	+	+
TrueVerb	+	-	+	-
PAZ	+	+	+	+
DeEsser	+	+	+	+
MetaFlanger	+	+	+	+
MondoMod	+	+	+	+
SuperTap	-	-	-	-
Enigma	+	+	+	+
Doppler	-	-	-	-
UltraPitch	-	-	-	-
DLA	+	+	-	-
Renaissance Maxx				

Renaissance Compressor	+	+	+	-
Renaissance Equalizer	+	+	+	+
Renaissance Reverberator	+	-	+	-
Renaissance VOX	+	+	+	+
Renaissance Bass	+	+	+	+
Renaissance DeEsser	+	+	+(Mono)	+
Waves Masters				
L2 Ultramaximizer	+	+	+	+
Linear Phase Equalizer	-	-	+	-
Linear Phase Multiband	-	-	+	-
Waves Restoration Bundle				
X-Noise	+(Mono)	-	+	-
X-Click	+	-	+	-
X-Crackle	+(Mono)	-	+	-
X-Hum	+		+	-
Waves 360 Surround Tools				
S360° Panner	+	+		
S360° Imager	+	-		
M360° Manager	+	-		
M360° Mixdown	+	-		
L360° Limiter	+	-		
C360° Compressor	+	-		
R360° Compact	+	-		
IDR360°	+	-		
LFE360°	+	-		
Waves Musicians Bundle				
Renaissance Axx	-	-	+	+
Waves IR-1 Parametric Convolution Reverb				
IR-1	+		+	

9. Known Issues

Mac OS_9

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GENERAL

- PAZ does not measure quite all the way down to -80dB, so depending on sample-rate the meters (and graph) may not go all the way down. In 44kHz the range is down to about -79dB and in 96kHz down to about -60dB.
- RenBass and MaxxBass peak-meters do not really measure down to -30dB for low bass, so depending on sample-rate and on the input signal, the meters may not go all the way down.
- RVerb TDM (DSP) may produce a never-ending tail when the input sound stops, if the reverb time is longer than 2 seconds and on certain inputs. The tail would then stop fading at a floor of -116.9dB.
- In plug-ins containing EQ filters ranging to cutoffs 100Hz and lower (Bass enhancement plug-ins, all equalizers except LinEQ and LinMB), the noise floor of the filters is generally higher by about 6dB in 96kHz than in 48kHz.
- In L2, in 192kHz, the 'Ultra' noise shaping with IDR type2 may produce tonal artifacts in the absence of input signal.
- Some plug-ins that do not support 96kHz or 192kHz (UltraPitch, SuperTap, Doppler) can be opened to process in native VST/MAS environments, but the sound may be bad or with inconsistent results to the settings compared to 48kHz.
- Due to limited resolution of the peak-meters in many plug-ins (PAZ,L1,REQ,RCL and more) , the peak-holds will not show input signal if the input is too low (such as -130dB).
- Doppler in loop mode may click when it reaches the end of the cycle and starts again. When processing in AudioSuite Doppler will mute the first 6 samples.
- UltraPitch - when loading settings saved in version 3.2 the pitch and top frequency parameters will get wrong values.
- SuperTap – when loading settings saved with 3.2 Grid mode and Tempo mode will not load correctly, this effects view, not sound.

DAE

- Plug-In parameter linking in MultiMono inserts does not work unless you select all plug-in parameters for automation. When plug-in parameters are armed for automation the focus is stolen from pro-tools and keyboard events will not reach the host unless you click outside the plug-in.

TDM

- RVerb TDM (DSP) may produce a never-ending tail when the input sound stops, if the reverb time is longer than 2 seconds and on certain inputs. The tail would then stop fading at a floor of -116.9dB.
- DLA plug-in displays the delay shorter by a few samples than should be, due to the extra delay occurring in the DAE I/O. At the moment of writing this text the extra delay is 3 samples (independent of sample-rate), which you should add to the numbers displayed by DLA.
- SuperTap 6 seconds is not compatible with Digidesign HD systems. Sessions saved on MIX hardware with this setting will not load the 6 seconds component.
- Waves version 3.5 is not Varispeed or VSO Variable speed override certified. When using varispeed with Waves plug-ins DSP crashes may occur.

AudioSuite

- Plug Ins will open in mono mode by default. For stereo processing select stereo mode manually.
- When performing an AudioSuite process with a Waves plug-in and hot switching to a non-Waves plug-in there will be an error reporting – “This plugin only processes 47 channels..” Close and reopen the plug-in and all is well.
- Waves Plug-Ins will not allow using overwrite mode.
- Pro-Tools Keyboard focus for Cut <X>, Copy<C>, Paste<V> and Undo <Z> will not function while a Waves AudioSuite plug-in is open.

Digidesign Control Surface support.

- All control surfaces will update the plug-in in real time but not be updated when moving the plug-in parameters with the mouse on screen. The control Surface value will update only when you make the next change on that parameter on the control surface.
- All control surfaces will highlight the plug-in's GUI parameters on it's current page but when you go on to the next page the previous page will not be de-highlighted.
- Some Radio button or toggle controls don't work well with control surface and will require your assistance with the mouse.

VST

- When launching some VST hosts for the first time you will get a WaveShell dialog requesting that you select a Waves plug-in. Just select any plug-in and the host will continue to launch normally. This will cease to happen the next time you launch the VST host.
- VST Automation is not 100% reliable with switches. It does not remember the parameter state, just when it was switched. For example writing automation for an On/Off switch that started “Off” and finished “On” will

work in reverse next time unless you manually set it Off again. The timing is also not quite accurate.

- LinEQ and LinMB under VST do not support normal dual processor mode but will work fine under “Advanced” dual processor. In Emagic Logic you should disable dual processing when you want to use these plug-ins.
- In Logic Audio L1+ shows under Mono to Stereo, but there is no such process.
- Transform Bundle Offline don’t work – SoundShifter Parametric (P) and Graphic (G) are not compatible with neither Cubase 32 or SPARK which are the only supported hosts for the Real-Time components i.e. SoundShifter Pitch, TransX, Morphoder and Doubler.

MAS

- Some plug-ins saved in a project with Waves version 3.2 extend a Disk Error message while loading and fail to load – LinEQ, LinMB, L2, REQ, Rverb, RdeEsser, RCL, C1.
- X-Noise is not properly operable under MAS process. Use in Track inserts etc.
- Plug-In parameters are more sluggish due to MAS automation enabling. Specially in small buffer settings.
- TrueVerb 3.5 will not load settings saved with TrueVerb 2.x.
- Enigma 3.5 will not load settings saved with TrueVerb 2.x.
- Leaving the plug-in “About” screen or keeping the mouse down on a plug-in parameter will eventually mute the sound in all tracks.

SPECIAL NOTES ON SOUNDShIFTER

- Waves SoundShifter is a Heavyweight champion and requires quite a lot of CPU for its process. This may well mean that proper real-time preview at 96kHz is impossible, however the offline process should still be fine as our testing has shown. We recommend to preview by processing short portions and then run on the whole selection.
- At 44.1 and 48kHz RealTime playback and preview is usually fine. We recommend to set your CPU usage to 85% (In the ProTools Playback Engine setup) and buffers to the highest 2048 for the real time. The AudioSuite Buffers should be set to Jumbo for smoothest Real-Time Preview, however this will make the controls feel sluggish. As the preference is global you may want to turn it back to smaller buffers for better control of lighter processors.

OS-X

Pro tools

- Wave plug ins do not have overwrite option under Audio Suite.
- Processing With any Waves Audio Suite plug in and the trying to process with and Digidesign plug in (after hot switching-Switching plug in without closing the GUI) will result with error message :
“This Plug in can process only 48 channels at a time, the current selection is not multiple of that amount”.
- Waves no output assigned in Pro tools (REQ S1 or Rverb and L2 ETC) will produce DC.
- Pro tools GUI Slow Down under Pro tools when a few Waves plug in GUI's are open at the same time (Xnoise Paz).

Wavshell DAE control Surface issues

- Waves plug ins will not update control surface PI parameters when using mouse.
- Changing parameter will not initiate the save on control surface(related to the above).
- Highlight pages-When changing pages the previous page will not un highlight.
- MaxxBass And Rbass TDM-Master bypass is not 24 bit clean.
- Pro tools Compare button does not work with Waves.
- Pro tools Command key modifier will not do fine tuning.
- Wavshell DAE Does not Support VSO in Pro tools (variable Speed override) -Will result DSP crash.

Cubase SX

- Cubase SX-When loading a session saved with Waves plug ins the plug in name will not show up only the name Wavshell (However the plug in will load properly).
- In Cubase SX destructive process will not use the prescan list and will initiate the Wavshell Dialog for plug in.
- UP 3 and 6 Voices M/S will mute in Cubase SX. When Entering numeric values from the keyboard hitting enter will dismiss and reopen the dialog box (another enter will close it).

General to All hosts:

- Qn text in the plug in GUI- Q1,2,3 Labeled Q4 etc.

- C1 SC and C/G Monitor toggle from the keyboard doesn't work.
- DeEsser tab map will stop at threshold.
- S1 Imager-must enter minus before value to In Gain parameter.
- PS-22 L/R and M/S fields should not accept values from the keyboard (they do). So is SuperTap Grid field.
- Wavshells-Mouse Disappears momentarily when entering values from keyboard.
- Enigma Glow Effect looks like a box.
- Paz navigate arrows do not get colored when navigating from the keyboard.
- Paz Cursor will not show up in Pro tools only if you click the Alt Key.
- Paz Cursor would show if another plug in or menu are in from of Paz.
- Rcompressor and RChannel clicking on the plug in GUI will reveal White trim display.

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WINDOWS

- While demoing the Plug-ins in Wavelab, Our Splash screen will pop up behind the plug-ins and not on top of the plug-in.
- Logic Users must perform a "Process DSP" command, open plug-In enabler and make sure there are no Double Waves Entries, before launching Logic for the first time. For this run the RemovedDSPProcess batch file installed.
- Under Cubase SX 1.05 , Preload Waves Plug-Ins on start up option must be checked in order to use Waves VST Versions , DX versions will be fine.
- In some cases under Cubase SX attempting to load Waves VST version will result Error message for the first time, a second attempt will solve it.
- DX metering and Protools AudioSuite preview metering will not be sample accurate.
- Attempting to use DX Automation in SONAR XL 2, we suggest working with the largest buffer size.

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