SA-2
Dialog Processor

User Manual

McDSP SA2 Plug-in Manual

McDSP
McDowell Signal Processing, LLC

2083 Old Middlefield Way #204

Mountain View, CA 94043

Support

Email: info@mcdsp.com

Technical Support: help@mcdsp.com

World Wide Web: www.mcdsp.com

Special Thanks to:

- Rob Barrett Jr., our #1 customer
- All those folks who asked for a limiter from McDSP

from the entire McDSP development team.

Copyright Notice:

Trademarks:

Table of Contents

McDSP License Agreement

The software described in this manual is furnished under a license agreement and may be used only in accordance with the terms of the agreement.

McDowell Signal Processing, Limited Liability Company License and Warranty:

The software which accompanies this license (the "Software") is the property of McDowell Signal Processing, Limited Liability Company or its licensers and is protected by copyright law. While McDowell Signal Processing, Limited Liability Company continues to own the Software, you will have certain rights to use the Software after your acceptance of this license. Except as may be modified by a license addendum which accompanies this license, your rights and obligations with respect to the use of this Software are as follows:

You May:

- authorize 1 (one) copy of the Software on 1 (one) PACE Anti-Piracy iLok USB Smart Key, for use with no more than 1 (one) computer at any given time;

- make copies of the Software for archival purposes, or copy the software onto the hard disk of your computer and retain the original for archival purposes;

- after written notice to McDowell Signal Processing, Limited Liability Company, transfer the Software on a permanent basis to another person or entity, provided that you retain no copies of the Software and the transferee agrees to the terms of this agreement

You may not:

- copy, duplicate, or reproduce the documentation which accompanies the Software for the purpose of resale;

- sublicense, rent or lease any portion of the Software to a third party without expressed written permission from McDowell Signal Processing, LLC;

- reverse engineer, de-compile, disassemble, modify, translate, make any attempt to discover the source code of the Software, or create derivative works from the Software;

- make any attempt to circumvent any copy protection software;

- use a previous version or copy of the Software after you have received a replacement set or an upgraded version as a replacement of the prior version, unless you donate a previous version of an upgraded version to a charity of your choice, and such charity agrees in writing that it will be the sole end user of the product , and that it will abide by the terms of this agreement. Unless you so donate a previous version of an upgraded version, upon upgrading the Software, all copies of the prior version must be destroyed.

Limited Warranty:

McDowell Signal Processing, Limited Liability Company warrants that the media on which the Software is distributed will be free from defects. Your sole remedy in the event of a breach of this warranty will be that McDowell Signal Processing, Limited Liability Company will, at its option, replace any defective media. McDowell Signal Processing, Limited Liability Company does not warrant that the Software will meet your requirements or that the operation of the Software will be uninterrupted or that the Software will be error-free. THE ABOVE WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NON INFRINGEMENT. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS. YOU MAY HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE.

Disclaimer of Damages:

REGARDLESS OF WHETHER ANY REMEDY SET FORTH HEREIN FAILS OF ITS ESSENTIAL PURPOSE, IN NO EVENT WILL McDowell Signal Processing, Limited Liability Company BE LIABLE TO YOU FOR ANY SPECIAL, CONSEQUENTIAL, INDIRECT OR SIMILAR DAMAGES, INCLUDING ANY LOST PROFITS OR LOST DATA ARISING OUT OF THE USE OR INABILITY TO USE THE SOFTWARE EVEN IF McDowell Signal Processing, Limited Liability Company HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU. IN NO CASE SHALL McDowell Signal Processing, Limited Liability Company's LIABILITY EXCEED THE PURCHASE PRICE FOR THE SOFTWARE. The disclaimers and limitations set forth above will apply regardless of whether you accept the Software.

U.S. Government Restricted Rights:

RESTRICTED RIGHTS LEGEND: Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c) (1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or subparagraphs (c)(1) and (2) of the Commercial Software Restricted Rights clause at 48 CFR 52.227-19, as applicable, McDowell Signal Processing, Limited Liability Company, Mountain View, CA 94043 (info@mcdsp.com).

General:

This Agreement will be governed by the laws of the State of California. This Agreement may only be modified by a license addendum which accompanies this license or by a written document which has been signed both by you and McDowell Signal Processing, Limited Liability Company. Should you have any questions concerning this Agreement, or if you desire to contact McDowell Signal Processing, Limited Liability Company for any reason, please email: legal@mcdsp.com. By downloading, using, or copying this Binary Software, Licensee agrees to abide by the intellectual property laws, and all other applicable laws of the U.S., and the terms of this License. Ownership of the software shall remain solely in McDowell Signal Processing, Limited Liability Company.

Getting Started with SA2

Each McDSP plug-in is delivered inside an installer application, and uses the iLok2 to authorize each plug-in.

System Requirements

McDSP HD and Native plug-ins are compatible with Pro Tools™, Pro Tools™ HD, Logic 9 and Logic X, Cubase, Nuendo, Abelton Live, MOTU Digital Performer (DP) Studio One, and other DAWs that support AAX, AU, VST, and/or VST3 plug-in formats.

McDSP Native plug-ins support AAX Native, AU, VST, and VST3 plug-in formats. McDSP HD plug-ins addtionally support the AAX DSP plug-in format, as well as AAX Native, AU, VST, and VST3 plug-in formats. McDSP plug-ins support MAC OS 10.7.2 or later (Lion), 10.8.x (Mountain Lion), 10.9.x (Mavericks), 10.10.x (Yosemite), and Windows 7 and 8.

McDSP plug-ins require an iLok2 USB Smart Key for authorization.

McDSP AAX plug-ins require Windows 7 or later, MAC OS10.7.2 or later, and support Pro Tools 10.3.8 or later, 11.1.3 or later, and Pro Tools 12.x or later.

McDSP Au plug-ins require MAC OS 10.7.2 or later, and support Logic 9 and Logic X, Digital Performer, Abelton Live, and other AU compatible DAWs.

McDSP VST and VST3 plug-ins require Windows 7 or later, MAC OS 10.7.2 or later, and support Cubase 7.x or later, Nuendo 6.5.x or later, and other VST and VST3 compatible DAWs.

Most McDSP HD plug-ins also support the VENUE systems on D-show, Profile, and SC48 hardware, except for the 6020 Ultmiate EQ, AE400 Active Eqalizer, SPC2000 Serial/Parallel compressor, and the SA2 Dialog Processor. These are AAX only (DSP and Native) and can only run on S3L hardware.

Please visit *mcdsp.com* for the latest compatibility information.

Installing the SA2 Plug-in

Installation on Mac OS X

The SA2 plug-in package includes this manual, ReadMe and Release Notes, a folder of presets for the SA2 plug-in, and the SA2 plug-in. Two copies of the SA2 Licensing Agreement are included - one in this pdf manual and a second as a separate text file. The SA2 plug-in manual requires that Adobe Acrobat reader (or similar .pdf reader) is installed.

The authorization of the SA2 plug-in is still required after running the installer, and those steps are detailed in the following sections.

Installing the SA2 plug-in and presets with the Installer:

The online version of the package has been prepared for Internet delivery, and is transmitted as a compressed file in zip format (.zip). Simply double click the zip file to unpack the installer.

- Run the SA2 plug-in Installer application to install (copy) the SA2 plug-in, presets, and documentation to a local folder on your system. The plug-in will be placed in the 'Plug-ins' folder, and the presets will be placed in the 'Plug-ins Settings' folder.

- If a previous version of the SA2 plug-in (or other HD, Native, or LE version) was already in the plug-ins folder, it will automatically be updated (or replaced) by the installer.

Installation on Windows

The SA2 plug-in package includes this manual, ReadMe and Release Notes, a folder of presets for the SA2 plug-in, and the SA2 plug-in. Two copies of the SA2 Licensing Agreement are included - one in this pdf manual and a second as a separate text file. The SA2 manual requires that Adobe Acrobat reader (or similar .pdf reader) is installed.

The authorization for the SA2 plug-in is still required after running the installer, and those steps are detailed in the following sections.

Installing the SA2 plug-in and presets with the Installer:

The SA2 plug-in package contains a Windows self extracting executable (.exe). The SA2 plug-in executable file will automatically install the plug-in and its presets on your system. Double click the file to launch the installer to install the SA2 plug-in, presets, and documentation.

Authorization of the SA2 plug-in is still required after running the installer, and those steps are detailed in the following sections. Note that after installing new versions of the PACE iLok drivers with the SA2 plug-in installer, you will be prompted by the SA2 plug-in installer to reboot your system. If you are not prompted by the installer, there is no need to reboot.

• Run the SA2 plug-in Installer application to install the SA2 plug-in, presets, and documentation to a local folder on your system. The plug-in will be placed in the 'Plug-ins' folder, and the presets will be placed in the 'Plug-ins Settings' folder.

• If a previous version of the SA2 plug-in (or other HD, Native, or LE version) was already in the plug-ins folder, it will automatically be updated (or replaced) by the installer.

Installation on VENUE D-SHOW systems

The SA2 plug-in package for VENUE D-Show systems includes presets for the SA2 plug-in and the SA2 plug-in. The SA2 Licensing Agreement is displayed when installing the product on D-SHOW. The pdf manual can be obtained by running the Mac OS X or Windows XP/Vista version of the SA2 Pro Tools plug-in installer on any available computer.

The VENUE compatible installer will automatically install the SA2 plug-in and its presets on your system. The authorization of the SA2 plug-in is still required after running the installer, and those steps are detailed in the following sections.

Note that only McDSP HD plug-ins support the VENUE system.

McDSP HD plug-ins also support the S3L system. Installation details and more information can be found at mcdsp.com.

Installing the SA2 plug-in and presets on VENUE with the 'HD Disk':

The VENUE installers are available online as a compressed zip file download, however you will have to take additional steps to create your own VENUE installer CD-R, see additional instructions below before proceeding with these instructions. The SA2 installer will install both the plug-in and its presets on your system.

Note that after installing new versions of the PACE iLok drivers with the SA2 plug-in installer, you will need to reboot your system. You will not be prompted to reboot, and if you don't you may see an error message saying "TPkd driver required, and a reboot. Please reboot or reinstall the software." If you see this message, simply reboot the console and try again.

- Insert the McDSP 'HD Disk' CDROM onto the CD drive. Note that neither the McDSP 'Native Disk' nor the 'LE Disk' contains VENUE compatible installers.

- Ensure your system is in 'CONFIG' mode, you cannot install plug-ins in 'SHOW' mode.

- Navigate to the 'OPTIONS' page and then select the 'PLUG-INS' tab.

- You should now see the SA2 plug-in available on the left hand side.

- Select the SA2 plug-in and select 'INSTALL.'

- If a previous version of the SA2 plug-in was already installed, it will be updated by the installer.

Creating a VENUE D-SHOW Installer CD-R from the online zip file:

The SA2 VENUE compatible installer is available from mcdsp.com. . Once you
have located and downloaded the latest VENUE compatible installers from the
McDSP website, you will have to take several additional steps to create a VENUE
compatible Installer CD-R. For your convenience, all VENUE compatible products
are located in the same downloadable zip file, so you will only have to create
one CD-R to install all compatible McDSP products.

• Unzip the downloaded file and locate the folder named "TDM Plug-Ins"
  inside the unpacked folder.

• Using any CD-R burning application, burn this folder and its contents to an
  ISO format CD-R. It is recommended that you use a brand new CD-R for this,
  and do not rewrite an older CD-R.

• Once you have burned this folder to a CD-R, you should see it at the root
  level of the disk (i.e. "D:\TDM Plug-ins"). Important: If the "TDM Plug-ins"
  folder is not located at the root level of the CD-R or has been renamed, the
  VENUE console may not properly recognize the installer disk.

• At this point, you can follow the 'HD Disk' installation instructions above to
  complete the installation.

Authorizing your McDSP Plug-ins

McDSP plug-ins require the iLok2 USB smart key to demo, purchase, or upgrade McDSP plug-ins. Management of authorizations (licenses) are handled via the iLok License Manager software application. Both the iLok License Manager software and iLok2 USB smart key are available at ilok.com. Additional information about the iLok License Manager is available at ilok.com.

Authorizing with the iLok License Manager

To use your McDSP plug-ins, you will first need to download an authorization license for your product. Visit iLok.com and download the latest version of the iLok License Manager. Please note that the iLok License Manager requires:

- Mac OS X 10.5.8 and above (Intel only)

- Windows 32-bit and 64-bit Windows XP (SP2) and above

- An iLok and an iLok account

After you've downloaded and installed the iLok License Manager, make sure your iLok is plugged into the USB port of your computer and login.

Demos

Once logged in, click on your login name and you will see a demo license under the 'available' section. Drag this license and drop it on the iLok of your choosing to activate it. Once the activation is complete, run the McDSP installer corresponding to the activated license. Note McDSP HD licenses authorize HD plug-ins, and McDSP Native licenses authorize Native plug-ins.
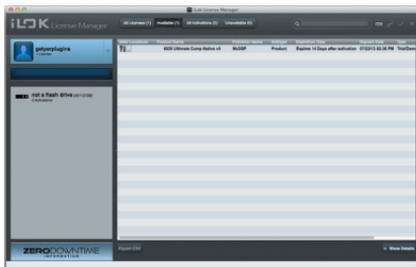
Redeeming License Codes

Once logged in, click on the upper right section of the iLok License Manager and choose the button for 'Redeem an Activation Code'. Here you can enter the activation code. Once it is redeemed, drag this license and drop it on the iLok of your choosing to activate it. Once the activation is complete, run the McDSP installer corresponding to the activated license. Note McDSP HD licenses authorize HD plug-ins, and McDSP Native licenses authorize Native plug-ins.

Registering Your McDSP Plug-in
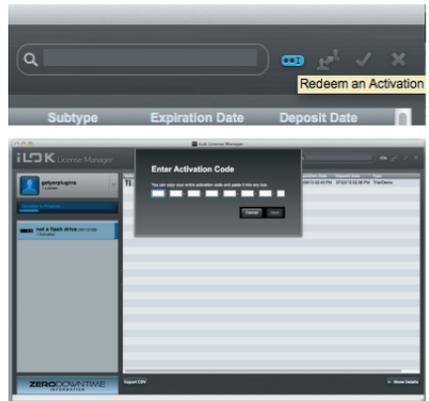
If you purchased a McDSP plug-in or McDSP plug-in bundle electronically from mcdsp.com, your purchase is automatically registered with McDSP.

If you purchased a McDSP plug-in or McDSP plug-in bundle electronically from an authorized McDSP dealer, your iLok.com account is used to confirm your purchase should you wish to upgrade at a later time.

If you purchased a boxed copy of a McDSP plug-in or McDSP plug-in bundle, register your purchase by filling out and returning the enclosed product registration card by mail or fax (707-220-0994).

Using Your McDSP Plug-ins

Starting a McDSP Plug-in

Follow the installation, authorization, and registration instructions above.
Launch your DAW host, and the McDSP plug-in and its presets are ready for use.
Refer to your DAW User Manual for details on general plug-in operation.

Exiting a McDSP Plug-in

A McDSP plug-in is exited by closing the plug-in window, or de-instantiating the
plug-in. Your DAW host sessions will save instantiated plug-in configurations
and their settings. Refer to your DAW User Manual for details on general plug-in
operation.

SA2 Dialog Processor

Dialog. The focal point of any movie, television show, documentary, or for that matter, any creative media production involving the spoken word. Add to the mix a sweeping musical score, dozens of foley effects, and plenty more - and it becomes clear the job of dialog mixing is a tall order. After all, if you can't hear what the actors are saying, why watch it at all!!

Many dialog editors and mix engineers have honed their craft to a repeatable process so they can work through the many hours of scenes. A few more intrepid ones have gone about creating their own custom processors for handling some of the issues presented by dialog processing. One such box was the Sonic Assault, originally conceived by Mike Minkler, and up until June of 2014 was in heavy use at Todd AO in Burbank California.

But the abrupt closing of Todd AO put Minkler and others who'd come to rely on the device in a bit of a pickle. Arrangements were made for McDSP to have a look at the box, and the result is the SA2 Dialog Processor, or SA2 for short.

The SA2 Dialog Processor is designed to improve the overall sound of recorded speech. But the SA2 is not just for dialog. It's equally useful for vocals, and is a great tool for adjusting the timbre of any track, a reliable de-esser, and a fine multi-frequency compressor, in our completely biased opinion.

The SA2 Dialog Processor is made up of 5 bands of active equalization, configured in a variety of modes to best address common issues of dialog. Each band of active equalization has a threshold control to determine at what signal level the active equalizer begins to effect the signal. There are also enable buttons for each band to quickly audition the effect of any given band. Two mode selectors - one for controlling the ballistics of the active equalization, and a second for placing the five bands at strategic locations in the frequency spectrum. Finally, there are input and output gain controls for overall adjustment.

Feature List:

- Five independent bands of strategic active equalization
- Multiple process modes for a variety of applications
- Unique signal reduction metering
- Double precision processing
- Ultra low latency
- Mono and stereo versions

The Quick Start Tour: The SA2 Dialog Processor Plug-in

Start the DAW host and instantiate the SA2 Dialog Processor plug-in

- • Launch the DAW host and open a session.
- • Verify the Display-> Mix Window Shows->Inserts View option is checked.
- • In one of the inserts of a stereo master fader, select the SA2 Dialog Processor plug-in. Note the SA2 Dialog Processor plug-ins will operate on master or regular audio tracks in mono or stereo versions.
- • If the insert selection does not show the SA2 Dialog Processor plug-In, verify that the SA2 Dialog Processor plug-in has been installed correctly.
- • For more information on starting your DAW host and working with plug-ins, see the Reference Guide provided by your preferred DAW.

SA2 Dialog Processor Overview

The SA2 Dialog Processor consists of five pre-programmed active equalizers at strategic frequencies and bandwidths best suited for dialog adjustment. Each band has its own threshold control to adjust the signal level at which the band's active equalizer begins to reduce signal level. Every band has its own enable button to quickly audition the effect of each band's processing.

Above each threshold control is a meter showing the amount of signal level reduction for that band. Metering is displayed as a percentage of maximum reduction.

Input and output gain controls are provided for final adjustment. The input gain control can also be used to adjust the effective threshold of all the band threshold by increasing or decreasing the signal level going into the active equalization bands. Adjustments made with the input gain control in this regard can be offset by the output gain control.

Signal Reduction Meters

Input Gain

Output Gain

Mode Controls

Active Equalization Bands

Displays

Meters

The SA2 Dialog Processor has five meters showing the amount of signal reduction in each active equalizer band.   Metering is displayed as a percentage of the maximum reduction, which is 12 dB. For example, when the gain reduction meter value is at 25%, that means there is approximately 3 dB of signal level reduction at the target frequency of that band. Similarly, a 50% meter value corresponds to approximately 6 dB of reduction, 75% to 9 dB, and 100% to 12 dB.

General Information

To adjust any of the SA2 Dialog Processor controls the user can:

 • Hold the <Command> key while dragging the slider for fine control, or

 • Click on the text box to highlight and edit the numeric value to get precise control (if a value outside the valid range is input, the control will default to the nearest allowed value when enter is hit) and hit <Enter>, or

 • Click on the text box to highlight the numeric value and then use the arrow keys to increase or decrease the numeric value, or

 • Use the <Option> key to bring all the controls to their default values, or

 • Use hardware controller surfaces supported by your DAW such as the Avid ICON, Artist Control, Artist Mix, S3, S6, the Mackie HUI protocol, and many others.

Automation

All SA2 Dialog Processor controls are completely automatable. See your DAW User Manual for the automation plug-ins section.

Presets: Using the Presets and Making Your Own

The SA2 Dialog Processor preset library demonstrates the wide range of applications the SA2 Dialog Processor can be used on. No preset will suit every application, and they have been provided as a guide for the user, and will hopefully inspire new ideas and ways to use this sophisticated plug-in.

Refer to your DAW User Manual for accessing and saving plug-in presets.

Using the SA2 Dialog Processor

The SA2 Dialog Processor can do more than just improve recorded speech. Vocals are equally benefited by some adjustments from the SA2. Other instruments, like bass, guitar, drums, and keyboards can also always do with a bit of active equalization to soften frequency areas that are too strong relative to the instrument itself and/or the entire mix.

Basics

A parametric equalizer response looks like a 'bell' curve - the highest (or lowest) point being the selected frequency, it's height determined by the gain, the width of the bell determined by the Q (1/bandwidth) of the equalizer.

Active equalization is, simply put, an advanced version of the standard parameter equalizer, designed to update its own response based the input signal level.

The SA2 Dialog Processor active equalizers use their band threshold to determine at what signal level the active equalizer begins to update its response. This process is very similar to how a compressor works - the signal is effected at a selected threshold, at a rate equal to attack and release times, along a processing curve determined by a ratio control. But unlike a compressor, the SA2 Dialog Processor bands operate on only a selected portion of the frequency spectrum. The SA2 Dialog Processor automatically sets attack, release, and ratio control settings based on the selected Mode control options - "Gentle", "Normal" and "Assault". Additional adjustment of the five active equalization bands can done with the Band Mode control options - "Narrow", "Normal", "Wide" and "Vari".

A Closer Look at the SA2 Dialog Processor Plug-in

One Band at a Time

The SA2 Dialog Processor's five active equalization bands are carefully placed at strategic locations in the frequency spectrum for use with dialog sibilant adjustment.   When first operating the SA2, a good technique is to enable one band at a time, and develop a 'sonic sense' of where in the spectrum it operates, and how it is affecting the track you intend to process with it. Upon learning how each band is acting on the track individually, the user is better able to apply multiple bands at the same time.

Input Control as Overall Threshold Adjustment

There will be times where the SA2 Dialog Processor threshold controls all need to be updated at the same time.   This can be accomplished by using the input gain control to increase (or decrease) the input signal level, and thereby causing the effective threshold to be more (or less) sensitive and the subsequent active equalization action to increase (or decrease).   Once a suitable input adjustment is found, the difference it has created can be offset by an opposite setting on the output gain control.

For example, if the input gain control had to be set to +3.0 dB, the output gain control could be set to -3.0 dB to offset this level adjustment.

Audition the Modes

Generally the 'normal' modes for both active equalization ballistics (Mode) and band frequency placement (Band Mode) are very good. But as the desired effect on the dialog, vocal, etc. is being crafted, a good strategy is to experiment with the other Mode control and Band Mode control options. Sometimes a softer effect, say with the "Gentle" and "Wide" modes is good. Other times, the performance is very aggressive, and thus requires more aggressive settings, such as "Assault" and "Vari".   Altering the threshold amounts while changing the Mode control and Band Mode control options is a good way to get familiar with the SA2 processing characteristics as well.

Using the Meters

When operating the SA2 Dialog Processor, the five active equalizer bands are extremely useful in not only showing when the SA2 is affecting the track, but by how much, and by which bands. The SA2 meters can also show when the signal is (perhaps) being overly processed.

For example, if all active equalizer band meters are showing 75% or more signal reduction, consider increasing all band thresholds by a few dB.   Similarly, if some or all of the active equalizer band meters are ALWAYS showing some amount of signal level reduction, consider decreasing the input signal level with the input gain control, or increasing all the band thresholds by 6 dB or more.

SA2 Dialog Processor Applications

Dialog

The main design focus of the SA2 Dialog Processor is, as its name implies, for dialog processing.   Recorded speech contains plosives, transients, steady state vowel sounds, inflections and other nuances that make it a difficult signal to adjust. The situation is even worse for the dialog editor or mix engineer because the loss of any one of these elements of the recording could cause the loss of intelligibility. A shouted command by the movie's hero at the height of the epic battle in the final scene needs to be balanced with the rest of the elements in the mix, but also has to be understandable.

The SA2 takes all these issues into account, and delivers five highly customized active equalization bands with three ballistics options (Mode) and four frequency distributions (Band Mode).   The user only needs to adjust the threshold controls to dial in just the right amount of plosive and transient reduction, balance out vowel and other steady state sounds, and influence inflections.

Going through some of the presets for dialog can get any user on the right path towards a nicely adjusted dialog track. Using the active equalization bands enable buttons is a great way to quickly audition how each band is affecting the audio.   Sometimes a good setting is made better by simply disabling one or two of the five bands.

Vocal

A powerful vocal can only remain powerful if the listener can understand what the singer is saying.   The SA2 Dialog Processor is just as suited for this purpose as for dialog.   Like dialog processing with the SA2, using some presets is a good place to start.   More aggressive vocals could be better suited with the "Assault" ballistics mode. If a more subtle approach is warranted, then the "Normal" or "Gentle" modes might work better.

Another approach is to drop all the band thresholds to a nominal level - say -24 dB (all the threshold knobs point straight up at this setting).   Then audition the different modes to see what might be the most appropriate. Applying one band at a time is a great way to get familiar with the strategic placement of the active equalization bands in the SA2.

Drums

Yes really. Drums.   All those snare hits, kicks, cymbal crashes, etc. can get pretty nasty and make any mix a tad too crispy. Apply an SA2 Dialog Processor to your drum buss now man! Consider the drum track just like a dialog or vocal track. There are some 'plosives' you want to adjust just a bit to bring the drums back in line with the rest of the mix. If it's a rock band, the "Assault" mode is probably well suited for the job.   Like dialog or vocals, checking out one band at a time gives the mixer a sense of where the SA2 is processing within the frequency spectrum, and what parts of the drum mix are really in need of adjustment (and which parts are not!).

More

Why stop at drums? Indeed the SA2 Dialog Processor can be useful on pretty much any audio track. Too much resonance in that synth solo? Over doing it in the mid range of your guitars? What was that flute player thinking? All issues that can be addressed with the SA2.

SA2 Dialog Processor Plug-in Reference Guide

SA2 Dialog Processor Specifications

Parameter	Range	Function
Active EQ		
INPUT	-24 to +24 dB	Input signal level adjustment
OUTPUT	-24 to +24 dB	Output signal level adjustment
THRESHOLDS 1-5	-48 to 0 dB	Signal level at which active equalizer begins to apply its EQ response
ENABLE 1-5	on/off	Enable (or disable) active equalizer band.
MODE	Gentle, Normal, Assault	Ballistics options to control the rate of attack and release of the active equalization
BAND MODE	Narrow, Normal, Wide, Vari	Distribution options for the active equalization bands

DSP Delay

McDSP DSP AAX plug-ins have an internal delay of 16 samples. This is the minimum amount of sample delay McDSP plug-ins can operate at while maintaining the current level of DSP usage.

DSP Usage

Pro Tools™ HDX hardware

The AAX DSP version of the SA2 Dialog Processor DSP usage is shown in the table below for operation at the 48 kHz sample rate. DSP usage approximately doubles for 88.2 kHz and 96 kHz sample rates. This information can also be viewed in the Pro Tools System Usage window.

Maximum Instantiation Counts at 48kHz

Configuration	#Instances per DSP	# Total Instances per HDX card
SA2 Dialog Processor mono	12	216
SA2 Dialog Processor stereo	8	144

All McDSP AAX DSP plug-ins can share the same DSP with other McDSP, Avid, and third party plug-ins..

www.mcdsp.com