



6030 Ultimate Compressor

Emulations for Every Occasion

User Manual

McDOWELL SIGNAL PROCESSING, LLC

McDSP 6030 Ultimate Compressor Plug-in Manual

McDSP McDowell Signal Processing, LLC

1300 Crittenden Lane #401

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
- Customers who always want more 'gear'.

from the entire McDSP development team.

Copyright Notice:

Copyright 1998-2010 McDowell Signal Processing, Limited Liability Company

All Rights Reserved. The McDowell Signal Processing, Limited Liability Company's 6030 Ultimate Compressor Plug-In and corresponding User's Manual is copyrighted and all rights are reserved. Information in this document is subject to change without notice and does not represent a commitment on the part of McDowell Signal Processing, Limited Liability Company. This document may not, in whole or part, be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form for the purpose of resale without prior consent, in writing, from McDowell Signal Processing, Limited Liability Company.

Trademarks:

McDowell Signal Processing, Limited Liability Company is a trademark of McDowell Signal Processing, Limited Liability Company.

Avid™, Digidesign™ and Pro Tools™ are registered trademarks of Avid Technology, Inc.

Digital Performer, Mark of the Unicorn, and MOTU are registered trademarks of Mark of the Unicorn, Inc.

Logic, Logic Suidio, and Apple are registered trademarks of Apple Computer, Inc.

The Audio Units logo is a trademark of Apple Computer, Inc.

Ableton, Ableton Live, Operator and Sampler are trademarks of Ableton AG.

Windows, and Windows XP are registered trademarks of Microsoft Corporation.

Intel is a registered trademark of Intel Corporation.

All other product and company names are trademarks or registered trademarks of their respective holders.

Table of Contents

McDSP 6030 Ultimate Compressor Plug-in Manual ii

McDSP License Agreement	vi
<i>Getting Started with the 6030 Ultimate Compressor</i>	<i>viii</i>
System Requirements	viii
Installing the 6030 Ultimate Compressor Plug-in	x
Installation on Mac OS X	x
Installation on Windows XP and Vista	xi
Installation on VENUE D-SHOW systems	xii
Authorizing your McDSP Plug-ins	xiv
Authorizing with a pre-programmed iLok Smart Key	xiv
Authorizing with an iLok License Card	xiv
Authorizing with iLok.com	xviii
Registering your McDSP Plug-in	xxi
Using your McDSP Plug-ins	xxi

6030 Ultimate Compressor 1

The Quick Start Tour: The 6030 Ultimate Compressor Plug-in 2

6030 Ultimate Compressor Overview	2
Controls	4
Module Selector	4
Output Section	4
Module Section	4
Displays	4
Meters	4
General Information	5
Control Linking	5
Automation	5
Presets: Using the Presets and Making Your Own	5
A Word on Preset Compatibility	5

<i>Using the 6030 Ultimate Compressor Plug-in</i>	6
Basics	6
Compression	6
A Closer Look	7
U670	7
Moo Tube	7
Opto-C/Opto-L	7
British-C	7
Over EZ	8
FRG444	8
D357	8
Applications	9
Vocals	9
Drums	9
Bass	9
Keys, Etc.	9
<i>6030 Ultimate Compressor Plug-in Reference Guide</i>	10
6030 Ultimate Compressor Specifications	10
DSP Delay	10
DSP Usage	11
Pro Tools™ HD and HD Accel DSP hardware	11
Maximum Instantiation Counts at 48 kHz	11
Percentage of DSP used by one instantiation at 48 kHz	11

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 licensors 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@mc dsp.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@mc dsp.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 the 6030 Ultimate Compressor

Each McDSP plug-in is delivered inside an installer application, and uses the Interlok copy protection software to authorize each plug-in. This section describes how to install and authorize a McDSP plug-in. General system requirements are also described.

System Requirements

McDSP HD and Native plug-ins are compatible with Pro Tools™ HD, Pro Tools™ LE and Pro Tools™ M-Powered systems as well as Audio Unit compatible DAWs including Logic, Digital Performer (DP) and Ableton Live. Additionally, a third party software application that supports the TDM, RTAS, or AudioSuite plug-in standard may be supported.

McDSP plug-ins support Mac OS 10.5.x (Leopard), 10.6.x (Snow Leopard), Windows XP, Vista, and Windows 7. Supported versions of Pro Tools™ include 7.4.x and 8.x or greater. Supported versions of Audio Unit compatible DAWs including Logic, Digital Performer (DP) and Ableton Live must be versions that support the Mac OS 10.5x (Leopard) or 10.6x (Snow Leopard).

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

Supported Plug-in Formats

McDSP plug-ins are available in TDM, RTAS, AudioSuite, and Audio Unit (AU) formats.

Hardware

McDSP plug-ins support any Avid (Digidesign) or approved third party hardware supported in Pro Tools™ 7.4.x and 8.x or greater, including HD and HD Accel hardware and interfaces, 002, 003, the Mbox product line, and M-Audio interfaces. McDSP plug-ins also support approved hardware for DAWs supporting Audio Units (AU) including Apogee, MOTU, and RME.

All McDSP HD plug-ins, except Synthesizer One, also support the Avid (Digidesign) VENUE D-SHOW systems.

The McDSP Mac versions are compatible with both Intel and PowerPC based computers. The McDSP Windows versions require an Intel Pentium 4 or greater processor.*

** McDSP Windows test machines are chosen to follow the Avid (Digidesign) recommended systems guide, which currently is the Dell Precision™ Workstation 670 with 2.79 GHz Xeon processor. All products are guaranteed to run on that system. Older Intel processors (i.e. Pentium III and predecessors) and AMD processors are not officially supported, although some users have had limited success with newer AMD processors (i.e. Dual Opteron 1.79 GHz, Athlon 64 2.20 GHz, and Athlon 64 XP 3700).*

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

Installing the 6030 Ultimate Compressor Plug-in

Installation on Mac OS X

The 6030 Ultimate Compressor plug-in package includes this manual, ReadMe and Release Notes, a folder of presets for the 6030 Ultimate Compressor plug-in, and the 6030 Ultimate Compressor plug-in. Two copies of the 6030 Ultimate Compressor Licensing Agreement are included - one in this pdf manual and a second as a separate text file. The 6030 Ultimate Compressor plug-in manual requires that Adobe Acrobat reader (or similar .pdf reader) is installed.

Both online and boxed versions will come with a 6030 Ultimate Compressor installer that will automatically install the 6030 Ultimate Compressor plug-in and its presets on your system. The authorization of the 6030 Ultimate Compressor plug-in is still required after running the installer, and those steps are detailed in the following sections.

Installing the 6030 Ultimate Compressor 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). In Mac OS X, 10.5.x or 10.6.x, simply double click the .zip file to unpack the installer. The boxed plug-in package purchased at your local dealer will be on CDROM. As with the online version, these 'physical' versions of the 6030 Ultimate Compressor plug-in package should be copied into a local folder on your system.

- Insert the McDSP 'HD Disk,' 'Native Disk,' or 'LE Disk' CDROM onto an available CDROM drive.
- Navigate to the 6030 Ultimate Compressor plug-in folder on the CDROM - the installer application is contained therein.
- Run the 6030 Ultimate Compressor plug-in Installer application to install (copy) the 6030 Ultimate Compressor 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 6030 Ultimate Compressor 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 XP and Vista

The 6030 Ultimate Compressor plug-in package includes this manual, ReadMe and Release Notes, a folder of presets for the 6030 Ultimate Compressor plug-in, and the 6030 Ultimate Compressor plug-in. Two copies of the 6030 Ultimate Compressor Licensing Agreement are included - one in this pdf manual and a second as a separate text file. The 6030 Ultimate Compressor manual requires that Adobe Acrobat reader (or similar .pdf reader) is installed.

Both online and boxed versions will come with a 6030 Ultimate Compressor installer that will automatically install the 6030 Ultimate Compressor plug-in and its presets on your system. The authorization of the 6030 Ultimate Compressor plug-in is still required after running the installer, and those steps are detailed in the following sections.

Installing the 6030 Ultimate Compressor Plug-in and presets with the Installer:

The 6030 Ultimate Compressor plug-in package purchased at your local dealer will be on CDROM and contain a Windows self extracting executable (.exe) similar to the online 6030 Ultimate Compressor plug-in package prepared for Internet delivery. Both the boxed and online versions of the 6030 Ultimate Compressor plug-in executable file will automatically install the plug-in and its presets on your system. Double click the file to launch the installer which will install the 6030 Ultimate Compressor plug-in, presets, and documentation. At any time after installation, you may access the documentation from the Windows 'Start Menu' under the 'McDSP' group.

Authorization of the 6030 Ultimate Compressor 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 6030 Ultimate Compressor Plug-in installer, you will be prompted by the 6030 Ultimate Compressor Plug-in installer to reboot your system. If you are not prompted by the installer, there is no need to reboot.

- Insert the McDSP 'HD Disk,' 'Native Disk,' or 'LE Disk' CDROM onto an available CDROM drive.
- Navigate to the 6030 Ultimate Compressor plug-in folder on the CDROM - the installer application is contained therein.
- Run the 6030 Ultimate Compressor plug-in Installer application to install the 6030 Ultimate Compressor 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 6030 Ultimate Compressor 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 6030 Ultimate Compressor plug-in package for VENUE D-SHOW systems includes presets for the 6030 Ultimate Compressor plug-in. The 6030 Ultimate Compressor 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 6030 Ultimate Compressor Pro Tools plug-in installer on any available computer.

Both online and boxed versions will come with a VENUE compatible installer that will automatically install the 6030 Ultimate Compressor plug-in and its presets on your system. The authorization of the 6030 Ultimate Compressor plug-in is still required after running the installer, and those steps are detailed in the following sections.

Note that all McDSP HD plug-ins, except Synthesizer One support the Digidesign VENUE D-SHOW system.

Installing the 6030 Ultimate Compressor Plug-in and presets on VENUE with the 'HD Disk':

The boxed 6030 Ultimate Compressor plug-in package purchased at your local dealer will contain a CDROM titled 'HD Disk' that is specially formatted to work with your VENUE console. The VENUE installers are also 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. Both the boxed and online versions of the 6030 Ultimate Compressor installer are the same and 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 6030 Ultimate Compressor 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 6030 Ultimate Compressor plug-in available on the left hand side.

- Select the 6030 Ultimate Compressor plug-in and select 'INSTALL.'
- If a previous version of the 6030 Ultimate Compressor 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:

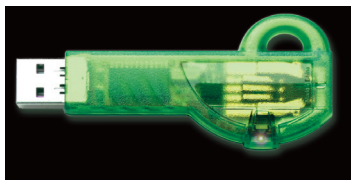
If you do not have a boxed copy of the 6030 Ultimate Compressor with the included 'HD Disk' CDROM, you can still obtain a copy of the VENUE compatible installers from the www.mcdsp.com website. Once you have located and downloaded the latest VENUE compatible installers from the McDSP website, you will 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

Authorizing with a pre-programmed iLok Smart Key

McDSP bundles such as the Emerald Pack come with a pre-programmed iLok Smart Key. Simply insert the iLok into any available USB port on your computer. The iLok's indicator light will illuminate when the iLok has a proper connection. The plug-ins included in the bundle require no further authorization steps. As with any iLok on your system it is recommended that your iLok be registered and synchronized with iLok.com



Authorizing with an iLok License Card

All McDSP plug-ins require that a valid authorization is present on your iLok USB Smart Key. McDSP plug-ins that are purchased individually provide this authorization on a plastic License Card (about the size of a credit card), with a small punch-out iLok License Chip. After being separated from the License Card, this iLok License Chip is to be inserted into the 'key slot' of the iLok USB Smart Key in order to transfer the authorization from the License Card to the iLok USB Smart Key. Note that each License Card holds ONE plug-in authorization. The following instructions detail this process



Important Note: The Authorization Wizard will prompt the user to register their iLok USB Smart Key at iLok.com. iLok.com is a service offered by PACE Anti-Piracy, Inc. and this step is recommended but NOT REQUIRED by McDSP to complete the authorization of the plug-in. If you choose to register your iLok USB Smart Key at iLok.com, care must be taken to record your iLok.com account information (i.e. write down your User ID and Password in a safe place). If your iLok.com account information is lost, the iLok cannot be registered to another account and unfortunately there is nothing McDSP can do to help you. See iLok.com for more details about the benefits of using PACE's iLok.com service.

Note: Images in this section are for illustration only, the actual product and screens will be the name of the product you are authorizing.

Authorizing a McDSP Plug-in from a License Card with the Authorization Wizard:

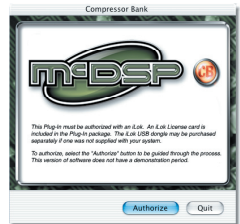
The Authorization Wizard is used to install an authorization from a License Card to the iLok USB Smart Key. To use the Authorization Wizard for the plug-in you purchased, perform the following steps:

- Insert your iLok USB Smart Key into an available USB port.
- On a Mac: Locate and launch the 'Authorizer' application found in the 'Authorize' folder in the plug-in package for the McDSP plug-in you purchased on the CD-ROM.
- On Windows XP or Vista, just launch the DAW host to authorize the individual McDSP plug-in you purchased.

Note: When authorizing the plug-in on Windows XP or Vista with a new iLok USB Smart Key, you must insert the iLok USB Smart Key and complete the Windows 'Found New Hardware Wizard' before attempting to authorize the plug-in.

- Select the 'Authorize' button to be guided through the Authorization Wizard.

Note: Selecting the 'Quit' button at any time will not authorize the plug-in or allow it to be used for a trial period. If 'Quit' is selected, the plug-in will not be available in the DAW host insert menu.

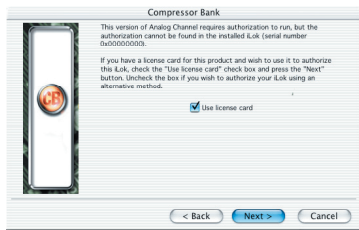


- McDSP plug-ins require that the user personalize their copy of the plug-in. A dialog is displayed soliciting this information.

Note that the product registration card enclosed with the plug-in MUST ALSO be filled out as well and returned to McDSP via mail (or fax to 707-220-0994). This additional mail-in registration will entitle the user to future upgrades and advance information from McDSP.

- Once the plug-in is personalized, click the 'Next' button to continue.
- Check the 'Use License Card' box and press the 'Next' button.

Note: Although the Authorization Wizard may appear to allow authorization by challenge response, that method is currently NOT SUPPORTED McDSP plug-ins.



- Separate the small punch-out iLok License Chip (the removable metal and plastic tab) from the License Card by pushing the cutout up and out with your thumb. Do not force your finger downward.



- The iLok License Chip may now be inserted into the 'key slot' of the iLok USB Smart Key. If the iLok USB Smart Key does not appear to be present on the system, ensure the iLok USB Smart Key is connected to a valid USB port and that the green LED is lit inside the iLok USB Smart Key. To insert the License Chip into the iLok USB Smart Key, orient the iLok USB Smart Key's USB end to the left, and the loop end to the upper right. Insert the metal chip end of the iLok License Chip (the License Chip tab should have the metal chip side facing up towards you, not down). You should be able to visually verify that the License Chip makes contact with the iLok USB Smart Key metal card reader.



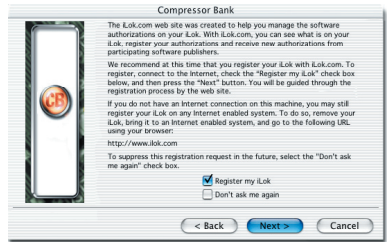
- The green LED in the iLok USB Smart Key will light when it is ready to receive and transmit data.
- Upon inserting the iLok License Chip, a message will be displayed indicating the authorization was installed successfully. Click 'Ok' in the message dialog.



- Once the authorization is installed on the iLok USB Smart Key, a dialog is displayed prompting the user to register their iLok USB Smart Key at the www.ilok.com website. The iLok.com website was created to allow users to manage the software authorizations on their iLok USB Smart Key. **THIS STEP IS NOT REQUIRED TO COMPLETE THE AUTHORIZATION OF MCDSP SOFTWARE.**

The registration of the iLok USB Smart Key to an iLok.com account can be bypassed by clearing the checkbox. The user may also choose to not be asked to register again. While iLok.com is a great resource for the iLok USB Smart Key, your iLok USB Smart Key may only be linked to one iLok.com account. That is, an individual iLok USB Smart Key can only be registered to one account at a time--but a single account can have multiple iLok USB Smart Keys. If the iLok.com account information is lost, the iLok USB Smart Key cannot be registered to another account. However, an iLok USB Smart Key may be transferred between accounts if all the authorizations have been transferred off the iLok USB Smart Key. Register the iLok USB Smart Key to an iLok.com account only when you are ready to retain all the needed iLok.com account information (User ID and Password).

- A 'Finished' dialog is displayed showing what authorization method was used.
- Click 'Finish' to exit the Authorization Wizard.



Authorizing with iLok.com

Required for demo, upgrade, and replacement authorizations only

iLok.com can be accessed from any Macintosh or PC with an Internet connection. You can do this at home, a friend's, or at the office as long as there is an internet connection to access iLok.com--note that you don't have to use your DAW host computer! You simply use this computer to connect to iLok.com and transfer authorizations to your iLok Smart Key. The iLok Smart Key can then be moved to your DAW host to complete authorization of your plug-in.

You will need:

- A computer with an Internet connection. Either a Macintosh running OS 9.2 to OS 10.5 or a PC running Windows 98, ME, 2000, XP, or Vista
- An iLok USB Smart Key
- A valid iLok.com account. Visit www.iLok.com and set up a free account, if you have not already done so.

- 1) Download and install the required client software from iLok.com.
- 2) Download the desired McDSP plug-in Installer from:
<http://www.mcdsp.com/support/updating.html>
- 3) To receive an upgrade or replacement authorization, email your iLok.com account information to: support@mcdsp.com
To receive a demo authorization, email your iLok.com account information to: authorize@mcdsp.com

Insert your iLok Smart Key into an available USB port and ensure that the indicator light is lit. Once your demo, upgrade, or replacement authorization is available for transfer, your iLok.com account will display the notice saying "You have licenses" on the upper left. Begin by selecting that link.

iLok.com v2.0 [Log Out](#) | [Help](#)

Account **Manage** **Buy** **About** **Help**

[Overview](#) [History](#) [Profile](#) [Order Status](#)

Important!
[You have licenses](#)

Enhance your account
[Zero Downtime](#)

What's new?
[Buy an iLok](#)
[Buy a Dongle](#)
[Buy a](#)
[Move your licenses](#)

Welcome Bob!

You are logged into the new, improved iLok.com. New features with this version include:

- Support for [moving licenses](#) between iLoks.
- Optional [Zero Downtime coverage](#) for your critical iLoks.
- Secure [transfer of ownership](#) between iLok.com account holders.
- Improved browser compatibility, including support for Apple's Safari browser.
- Improved automated [help and support](#).

From this account section you can see a summary of your account, [edit your account profile](#), and [review your iLok.com history](#). In addition, this section will provide you with important messages regarding your account.

To manage your iLoks, including viewing your iLok contents, receiving licenses from software vendors, or moving licenses between iLoks, click [here](#).

The next page will display the pending licenses available for download. This page will also display the name of the plug-in, its manufacturer, the type of authorization (Demo, Not For Resale, or License), the date the authorization was deposited, and the date when the authorization will no longer be available for download from the server.

Before any transfer of authorizations can take place, you must synchronize your iLok Smart Key with iLok.com. This may take a moment to process depending on your internet connection.

Once you have synchronized your iLok, you can select the authorization(s) you wish to transfer to your iLok.

If you have multiple iLoks connected to your computer, it is important to select the correct iLok you wish the authorizations to be transferred to. Then click "Download Licenses" to begin the process. Again, this may take a moment depending on your internet connection.

When the transfer finishes you will be asked to confirm the completion of the transaction, thereby letting you know that the transfer was successful.

Pending licenses available for download:

Product	Company	Type	Deposited	Expiration
Analog Channel	McDSP	Demo	09/14/2004	03/14/2005
Chrome Tone	McDSP	License	09/14/2004	09/28/2004
Compressor Bank	McDSP	NFR	09/14/2004	09/14/2005
FilterBank	McDSP	License	09/14/2004	03/14/2005
HC2000	McDSP	Demo	09/14/2004	03/14/2005
Synthesizer One	McDSP	License	09/14/2004	09/28/2004

Insert your iLoks and synchronize:

Before downloading licenses, you must insert one or more iLoks as needed and press the "Synchronize" button. Once your iLoks are synchronized with your account, you will be able to select the licenses to download and the target iLok to receive the licenses.

Note that the synchronization process may take some time. Please press the button only once, don't remove or insert your iLoks, and don't touch your browser until the process completes. A progress page should be displayed within a few seconds of pressing the button.

[Synchronize](#)

Step 1 - Select the pending licenses to download:

Product	Company	Type	Deposited	Expiration
<input type="checkbox"/> Analog Channel	McDSP	Demo	09/14/2004	03/14/2005
<input checked="" type="checkbox"/> Chrome Tone	McDSP	License	09/14/2004	09/28/2004
<input type="checkbox"/> Compressor Bank	McDSP	NFR	09/14/2004	09/14/2005
<input type="checkbox"/> FilterBank	McDSP	License	09/14/2004	03/14/2005
<input type="checkbox"/> HC2000	McDSP	Demo	09/14/2004	03/14/2005
<input type="checkbox"/> Synthesizer One	McDSP	License	09/14/2004	09/28/2004

Step 2 - Select an iLok to receive the licenses:

Select which iLok should receive the licenses, then press the "Download Licenses" button.

Note that the download process may take some time. Please press the button only once, don't remove or insert your iLoks, and don't touch your browser until the process completes. A progress page should be displayed within a few seconds of pressing the button.

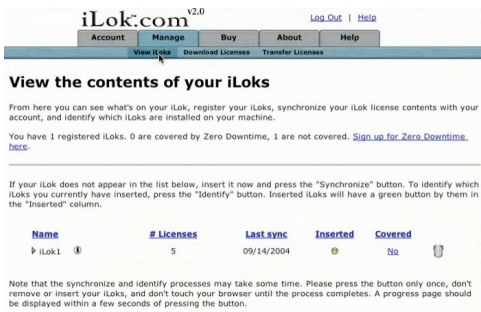
☒ Select an iLok [Download Licenses](#)

If the **iLok1 (0x00011053)** is not in the list above, insert the iLok now and click [here](#).



If you wish to go back into your account and visually confirm the transaction for yourself, select “View iLoks” Then select the iLok you had the authorizations transferred to.

That’s it! Dont forget to log out and move the iLok Smart Key to your DAW host system if you are using another computer for Internet access. Also, you may need to install a different version of the plug-in if you are upgrading or replacing.



iLok.com v2.0 [Log Out](#) | [Help](#)

[Account](#) [Manage](#) [Buy](#) [About](#) [Help](#)


[View iLoks](#) [Download Licenses](#) [Transfer Licenses](#)

View the contents of your iLoks

From here you can see what's on your iLok, register your iLoks, synchronize your iLok license contents with your account, and identify which iLoks are installed on your machine.

You have 1 registered iLoks. 0 are covered by Zero Downtime, 1 are not covered. [Sign up for Zero Downtime here.](#)

If your iLok does not appear in the list below, insert it now and press the "Synchronize" button. To identify which iLoks you currently have inserted, press the "Identify" button. Inserted iLoks will have a green button by them in the "Inserted" column.

Name	# Licenses	Last sync	Inserted	Covered
iLok1 ⓘ	5	09/14/2004		No ⓘ

Note that the synchronize and identify processes may take some time. Please press the button only once, don't remove or insert your iLoks, and don't touch your browser until the process completes. A progress page should be displayed within a few seconds of pressing the button.

Transferring Authorizations with iLok.com

You may freely transfer any authorization within your iLok.com account between any of your registered iLok Smart Keys. If you wish to transfer an authorization out of your iLok.com account to a different user, it will require additional support from PACE Anti-Piracy, Inc and may be subject to a service fee or limited by manufacturer restrictions. Check the www.ilok.com website for updates and developments regarding iLok USB Smart Keys and the Pace Interlok Copy Protection system.

Registering your McDSP Plug-in

To register your McDSP plug-in, fill out and return the product registration card enclosed with the boxed plug-in package by mail or fax 707-220-0994. Registering your product entitles you to future upgrades and advance information from McDSP. Each individual product must be registered (even if you have multiple copies), and the product must be registered to an individual, not an entity. If you represent a company it is your company's responsibility to notify McDSP in writing if the individual who registered the plug-in is no longer with the company. The Company must also be able to supply matching registration information to successfully transfer ownership of the plug-in.

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.

6030 Ultimate Compressor

The 6030 Ultimate Compressor is the next generation of dynamic range control technology. Building from the entire McDSP compression algorithm code base, the 6030 adds new sonic capabilities, stunning new interfaces, and quality only McDSP could deliver.

Using the popular module format, the 6030 Ultimate Compressor offers ten different compressors. All of these designs are by McDSP - some completely from the ground up, while others are emulations of existing gear with unique variations created by McDSP. Each 6030 Ultimate Compressor module is easy to operate, and yet has enough sophistication for the most discerning professional.

Whatever your style, from smooth tube emulations to aggressive solid-state designs, the 6030 Ultimate Compressor has a custom-made dynamic range control module that is just right for you.

Features:

- Unique twists to classic designs in addition to several completely new designs
- Multiple compression algorithms in a single compressor
- Side chain support
- Analog Saturation modeling
- Double precision processing
- Ultra low latency
- Mono and stereo versions

The Quick Start Tour: The 6030 Ultimate Compressor Plug-in

Start the DAW host and instantiate the 6030 Ultimate Compressor 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 6030 Ultimate Compressor plug-in. Note the 6030 Ultimate Compressor plug-in will operate on master or regular audio tracks in mono or stereo versions.
- If the insert selection does not show the 6030 Ultimate Compressor plug-in, verify that the 6030 Ultimate Compressor 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.

6030 Ultimate Compressor Overview

The 6030 Ultimate Compressor is divided into three sections - Module Selector, Output Section, and Module Section.

The Module Selector lets the user choose the desired compression module. Compression modules are swapped in and out in real-time, and the Module Selector control can be automated.

The Output section contains the input and output metering, output (makeup) gain, and buttons to select a side chain as the compression key signal, and to monitor the compression key signal.

The Module Section holds the interface for each compression module. Just as the algorithm for what module is swapped in and out in real-time, the user interface is also updated as a new module is selected.



Controls

Module Selector

A set of ten buttons shows the available compression modules available in the 6030 Ultimate Compressor. Choosing any one of these buttons will replace the current compression module with the selected module in the module section.



Output Section

The 6030 Output section includes input and output meters, an output gain control, and key and listen buttons.

- **Output Gain** - the amount of signal that is increased after the compression action
- **Key** - select side chain input instead of the input signal as the compression key
- **Listen** - audition the signal being used to trigger the compressor



Module Section

The 6030 Ultimate Compressor has ten different compression modules. Each module has a different set of controls, and all the possible controls are listed below.

- **Threshold** - the signal level at which the compression action starts
- **Ratio** - the amount of signal level compression, as a ratio of input to output
- **Attack** - the rate at which compression action starts
- **Release** - the rate at which compression action stops



Displays

Meters

The 6030 Ultimate Compressor Output Section has meters showing input and output signal levels. Additional gain reduction metering is showing in a VU styled meter in each compressor module in the Module Section.



General Information

To adjust any of the 6030 Ultimate Compressor 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 host such as the Mackie HUI and Digidesign's ICON™, ProControl™ and Control 24.

Control Linking

There is no control linking capability in the 6030 Ultimate Compressor at this time.

Automation

All 6030 Ultimate Compressor controls are completely automatable. See your DAW User Manual for automating plug-ins section.

Presets: Using the Presets and Making Your Own

The 6030 Ultimate Compressor preset library demonstrates the wide range of applications the 6030 Ultimate Compressor can be used. 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.

A Word on Preset Compatibility

Presets for the 6030 Ultimate Compressor configurations are interchangeable.

Using the 6030 Ultimate Compressor Plug-in

The 6030 Ultimate Compressor offers a wide variety of compression algorithms. The following sections cover basic operations of the 6030 Ultimate Compressor, provide a more in depth description of some of the features of the 6030 Ultimate Compressor, and outline some applications for the 6030 Ultimate Compressor plug-in.

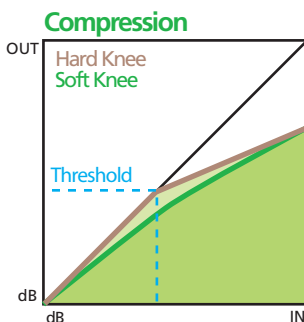
Basics

Compression

A compressor affects the signal once the signal level is above the selected threshold. A compressor is used to reduce the output level of signals once they rise above the threshold. A ratio control determines the amount of gain reduction, as a ratio of the input to output (in dB). The higher the ratio, the more gain reduction is applied to the signal as it continues to rise above the selected threshold. Gentle compression ratios are considered to be in the 2:1 to 4:1 range, while stronger ratios are 8:1 and higher. Attack and release times determine how fast the compressor begins to reduce signal levels (attack) and how fast the compressor recovers to a state where it is no longer affecting the input signal (release).

Although the basic controls of a compressor - threshold, ratio, attack, and release - are commonly found on most compressors, the method used to enact the desired dynamic range control can vary significantly. For this reason, the pro audio market offers many types and brands of compressors (and limiters). Hardware based techniques such as electro-optical sensors to track signal levels, all-tube designs for the truly analog purist, solid state (can you spell FET?) circuits, and many others have strongly influenced the design of dynamic range controllers over the years.

The 6030 Ultimate Compressor takes a sampling of some of these techniques, from classic devices and our own engineering experience. Furthermore, instead of just regenerating sounds folks are already familiar with, the 6030 incorporates unique twists and modifications (all designed by McDSP engineering) to bring new compressor 'sounds' to the pro audio market. Check out the next section for a closer look at the 6030 Ultimate Compressor modules.



A Closer Look

U670

The U670 module is a variation of a Fairchild 670, with slightly faster signal tracking to accommodate modern production styles, and yet still imparts a 'warmth' into the audio output.



Moo Tube

The Moo Tube module emulates an all tube design with a few unique twists. Mid range sensitivity has been modified by McDSP engineering, attack and recovery times are gentle yet usable for many applications, and the output frequency response is variable based on the amount of compression.



iComp

The iComp module is an all original McDSP design. Attack and release times are not available on this module, and are instead automatically updated based on user selected threshold and ratio control values.



Opto-C/Opto-L

The Opto-C and Opto-L modules use an electro-optical attenuation circuit model for compression (Opto-C) or limiter (Opto-L) applications. Both these modules have a McDSP designed key circuit for a slightly different response than the originals.



British-C

Based on a more 'traditional' English design, the British C module offers control for threshold, ratio, attack, and recovery. Internal circuit smarts help prevent unwanted distortion, even at extreme compression settings (low threshold, fast attack and release).



Over EZ

The Over EZ module incorporates a smooth knee response with a flexible control configuration including user selectable threshold, ratio, attack, and release.



SST'76

The SST'76 module is a solid-state circuit model with another McDSP designed key circuit. For the curious, SST does not stand for Super Sonic Transport.



FRG444

The FRG444 module, commonly referred to as 'The Frog' by McDSP engineering staff, uses an moderately aggressive compression design to quickly respond to audio input.



D357

The D357 module is the most aggressive compressor in the 6030 Ultimate Compressor module collection. An LED style GR meter is also used to show as much dynamic range control response as possible.



Applications

Vocals

The 6030 Ultimate Compressor modules best suits for vocal and dialog applications include the U670, Moo Tube, and iComp modules. For more articulated performances where significant amounts of sibilance are in the performance, the Over EZ and British-C modules also work well.

Drums

The SST'76, FRG444, and D357 modules are great for dealing with drum tracks. Although these modules can be used to really compress the incoming audio, they have enough control flexibility to produce well balanced dynamic range control.

Bass

The Opto-C, Moo Tube, and iComp modules are great for low frequency instruments like bass guitar and bass synths.

Keys, Etc.

Instruments like piano, keyboards, guitar and more generally do well with the 6030 Ultimate Compressor modules with more control. Modules like the FRG444 and British-C can deliver gentle, moderate, and aggressive sounds.

6030 Ultimate Compressor Plug-in Reference Guide

6030 Ultimate Compressor Specifications

Parameter	Range	Function
MODULE SELECTOR		
MODULES		U670, MooTube, iComp, Opto-C, Opto-L, British-C, Over EZ, SST'76, FRG444, and D357
OUTPUT SECTION		
OUTPUT	0 to 48 dB	The amount signal level is increased after the compression action
KEY	on/off	Select side chain input as compression key
LISTEN	on/off	Monitor input signal (from input or side chain) instead of compressor output
MODULE SECTION		
THRESHOLD	-48 to 0 dB	Signal level at which compression action is initiated
RATIO	varied by module	Amount of compression as a ratio of input to output signal level in dB
ATTACK	varied by module	Rate at which compression action is initiated
RELEASE/ RECOVER	varied by module	Rate at which compression action is terminated

DSP Delay

The delay incurred by any of the 6030 Ultimate Compressor plug-in configurations is 3 (THREE) samples on HD systems. This is the absolute minimum number of delay samples a TDM plug-in can have. The McDSP plug-ins are designed in this manner to provide the user with the closest analog mixing console experience possible (analog inserts such as EQ and compression do not cause a processing delay when inserted into a track).

DSP Usage

Pro Tools™ HD and HD Accel DSP hardware

The TDM versions of the 6030 Ultimate Compressor plug-in configurations use a varying amount of DSP resources for each 6030 Ultimate Compressor configuration. The table below is a listing of these DSP usages. DSP usage is shown in the Pro Tools™ System Usage window.

Maximum Instantiation Counts at 48 kHz

Configuration	6030 Ultimate Compressor Mono	6030 Ultimate Compressor Stereo
# INSTANTIATIONS PER DSP ON HD SYSTEMS	10	5
# INSTANTIATIONS PER DSP ON HD ACCEL SYSTEMS	20	10

All of the 6030 Ultimate Compressor plug-in configurations can operate on the same DSP, depending on the configuration's DSP requirements. See below for the percentages of a HD or HD Accel DSP used by a single instantiation of a 6030 Ultimate Compressor plug-in.

Percentage of DSP used by one instantiation at 48 kHz

Configuration	6030 Ultimate Compressor Mono	6030 Ultimate Compressor Stereo
% OF DSP USED ON HD SYSTEMS	10%	20%
% OF DSP USED ON HD ACCEL SYSTEMS	5%	10%

Using the data provided in the above chart, the 6030 Ultimate Compressor (stereo) and 6030 Ultimate Compressor (stereo) plug-in configurations can share the same DSP.

The 6030 Ultimate Compressor supports some higher sample rates (88.2 kHz and 96 kHz). For 88.2 kHz and 96 kHz operation the dsp usage is roughly doubled (2x).



www.mcdsp.com

*Copyright 2010 by McDowell Signal Processing, LLC.
All trademarks are property of their respective owners.
McDSP is a trademark of McDowell Signal Processing, LLC.*