

SYSTEM 6000
Ultimate Multichannel Processing Platform



L I C E N S E S

UNWRAP ▶ MDW HiRES EQ ▶ BACKDROP
STEREO MASTERING ▶ MULTICHANNEL MASTERING
STEREO REVERB ▶ MULTICHANNEL DELAY



This license includes up-conversion presets for the type of program material typically dealt with in film production and music mastering.

PROFESSIONAL STEREO TO 5.1 CONVERSION

UnWrap puts the process of converting from stereo or LtRt to 5.1 in the hands of an audio professional. It is the world's primary high-resolution up-conversion processor, and with its wealth of controls, a benchmark in film and music production. To demonstrate some of UnWrap's capabilities, presets from users are being added time after time, and included with the license.

track has to be spread to all cinema speakers. Consequently, Unwrap provides a host of parameters to aid the design of a result faithful to the original with regards to width, timbre, spaciousness and other important factors. The 5.1 result can be subsequently down-mixed to stereo again with no sonic penalties. Take a preset tour to spark your creativity, or start a new up-mix from scratch.

Many reasons can exist for up-converting: A multitrack source tape may be unavailable for a remix, a classic stereo mix too sacred to touch or a stereo sound-

Processing is 48 bit and sample rates up to 96kHz may be used.

Licenses to Try, Rent and Buy

System 6000 can host attractive additional processing possibilities based on a license principle. A license contains a number of presets plus access to one or more extra algorithms. An algorithm is a DSP processing program inside the System 6000, e.g. a stereo to 5.1 converter. Licenses can be purchased or rented, and it is possible to mix permanent and rented types within the same frame. Before a decision is made whether to buy or rent, one 200 hour free trial period is available by getting a demo-key at the TC website.

Processors in one frame. A license, however, is associated with one frame and cannot be shared with others. A rented license lasts for 200 hours and costs approximately 15% of a permanent license. If a permanent license is bought later, its price is reduced by the accumulated renting expenses.

System 6000 offers two distinctively different entry points: Reverb 6000 and Mastering 6000. Reverb 6000 and Mastering 6000 can both be expanded with optional algorithms. This brochure contains information about the range of licenses that the System 6000 has to offer. Check out the current possibilities at www.tcelectronic.com.

Each license grants the right to use multiple instances of an algorithm, e.g. four MD5.1

Tools	Reverb 6000	Mastering 6000
Stereo Reverbs	●	●
Multichannel Reverbs	●	●
Stereo Delay	●	●
Multichannel Delay	●	●
Stereo Mastering	●	●
Multichannel Mastering	●	●
Monitor Matrix	●	●
Stereo VariPitch	●	●
Multichannel VariPitch	●	●
UnWrap	●	●
BackDrop	●	●
MDW HiRes EQ™	●	●

Included ● Not included. Optional License required ●

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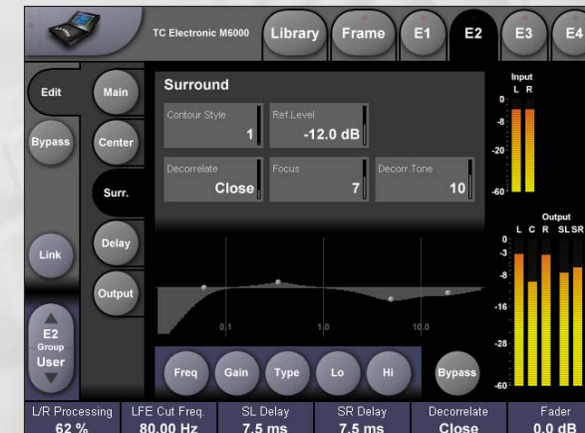
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UnWrap

MD 4
MULTIBAND DYNAMICS

The Stereo Mastering License includes three algorithms: MD3, MD4 and BrickWall Limiter 2. It contains Limiter, Optimizer and Stereo Enhancer presets, emulation of the Cat43 for real-time noise removal, and presets to reduce distortion at the end listener.

MD4 MULTIBAND PROCESSOR

MD4 is the latest and greatest high resolution, multi-band dynamics processor from TC. MD4 has five bands with phase linear reconstruction, and can operate in several different ways, including a newly developed DXP mode to lift up low level detail individually in the bands.

MD4 is therefore efficient for traditional mastering, as well as for converting film to domestic dynamic

range, or for processing single sources such as vocal, dialogue or acoustic instruments.

All processing is done at 48 bit resolution and may be stereo, dual mono or applied surgically to the M and S part of a stereo signal. For example, equalization and compression can target the center or L/R components of a mix to bring out certain elements, or adjust the width.



MD4

MD 3
MULTIBAND DYNAMICS

MD3 MULTIBAND PROCESSOR

MD3 is a refinement of the MD2 dynamics processor from M5000. It is a 3 band structure for level optimization and spectral balancing, and offers a

Compressor, Expander, Limiter and Equalizer in one algorithm.

BRICKWALL 2
STEREO PRECISION LIMITER

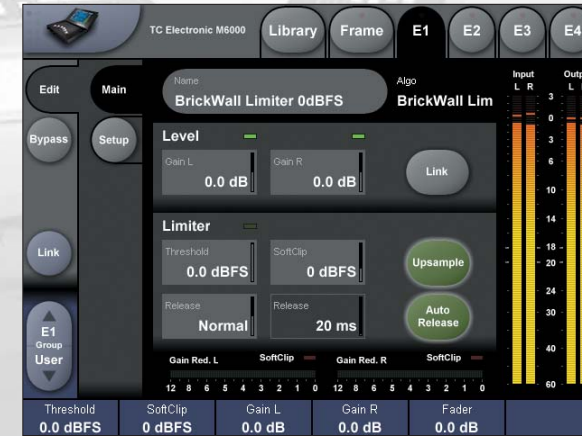
BRICKWALL LIMITER 2

Among audiophiles it is generally believed that many recent CD releases sound worse than what was the norm 15 years ago. Investigating the problem, TC engineers found the cause to be inadequate level restriction in production and mastering, triggering distortion in broadcast processors, data-reduction algorithms and consumer CD players. More information about this phenomenon, which creates early listening fatigue, can be found at the TC web site.

Brickwall Limiter 2 is a second-generation processor designed to show if the signal is "contaminated" with odBFS+ peaks, and to remove them when neces-

sary. Built on the foundation of the original BrickWall Limiter, it offers even better protection of the downstream signal-path without sacrificing overall loudness.

BrickWall Limiter 2 is bit transparent below the threshold of limiting, and may therefore be used on an already dithered master. Let the BrickWall Limiter 2 have the final word, and it will ensure cleaner and more predictable results on CDs and DVD - as well as data-reduced deliveries such as MP3, AAC, Dolby Digital or DTS.



BrickWall 2



MD5.1 and MDX5.1 are high resolution dynamics processors for multichannel signals. MD5.1 is ideal for quality compression, limiting and noise reduction purposes; while the latest addition, MDX5.1, features TC's award winning DXP processing.

MDX 5.1 ADVANCED MULTICHANNEL PROCESSOR

MDX5.1 allows bringing up low level detail to focus on natural expression, speech intelligibility, qualities of acoustic recordings and level re-scaling, rather than an ignorant aim for max loudness, distortion and listener fatigue. Thanks to DXP processing, low level lift can be applied to specific channels selectively in one, two or three frequency bands using phase linear split and reconstruction filters.

MD5.1 and MDX5.1 offer extensive inter-channel linking possibilities, and feature 48 bit fixed point processing throughout. If it is required to process more channels than 5.1, Engines can be run in parallel to cater for 6.1, 7.1, 10.2, 12.2 or higher number formats. The ingenious topology of System 6000 permits low latency processing, which make the processors advantageous even for broadcast, live or theatrical applications.



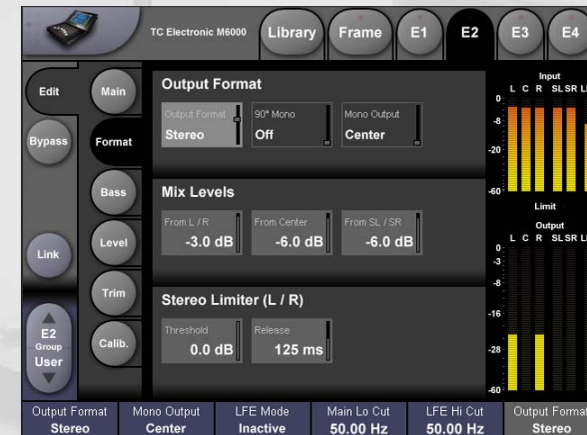
MDX5.1



TOOLBOX 5.1

Toolbox 5.1 is an indispensable tool for mono, stereo, matrixed surround and 5.1 production. It can be used in two different ways: As a Monitor Matrix, or in the Primary Signal Path.

Toolbox 5.1 provides pristine Down-mix Conversion, Bass Management, Solo, Mute, Time/Phase alignment and Calibration functions. Used as a 5.1 Monitor Matrix, any reproduction scenario can be tried out and reference levels for e.g. domestic, cinema and other listening conditions can be set.



Toolbox 5.1



Included in the Multichannel Mastering license - see description on page 5



Included in the Multichannel Mastering license



Included in the Multichannel Mastering license - see description on page 4





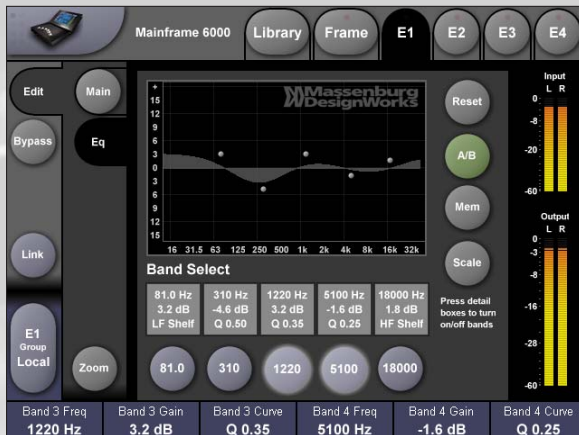
The license includes two Equalizers. One for dual mono and stereo, one for 5.1 or 6.0. Both can be used at sample rates between 44.1 and 96 kHz.

GEORGE MASSENBURG HIGH PERFORMANCE EQUALIZERS

In recognition of George Massenburg's great sense of audio, and strong influence on previous TC processors, the MDW HiRes EQs have been developed. The precision timing, routing and 48 bit processing offered by System 6000 provides a perfect foundation for George's wonderful EQs to excel, regardless if inter-

facing is done in the analog or digital domain.

The MDW design complements the TC alternatives, and therefore offers the user a choice between several EQ flavors, each with specific advantages.



MDW HiRes EQ



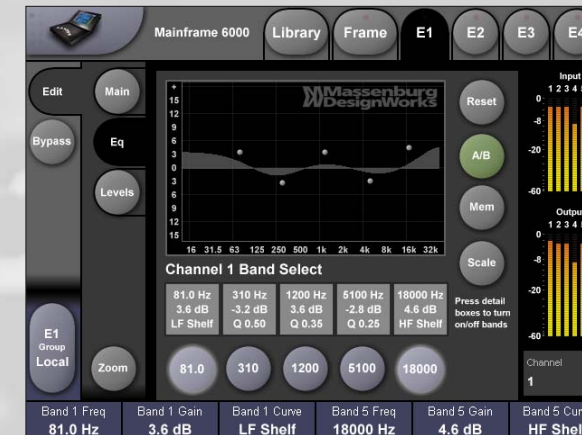
MDW HiRes EQ LICENSE

Five parametric bands of every shape and form are provided per channel. Outer bands can be configured as shelving or 2nd order filters (Butterworth). Band 1 filters can be switched between 2nd and 4th order. All five bands cover a 30kHz frequency range and parametric or shelving bands are capable of cut/boost over a +/-25 dB range.

If the system clock rate is set at 44.1 or 48kHz, the signal is up-sampled to double rate, processed and down-sampled to the system rate. This approach is a way of precisely mimicking the behavior of analog EQs as well as reducing alias distortion. Therefore, the upper frequency setting is extended to 30kHz regardless of sample rate.

Absolute and relative linking of parameters, bands and channels as well as a zoomed frequency response display make real-time adjustments across channels easy to accomplish.

Apart from the sonic advantages, this also makes it easy to switch between low and high rates without having to reset parameters.



MDW HiRes EQ 5.1



The license includes the best stereo and dual source Reverbs and Delays from TC - for example VSS3, VSS4, Nonlin2 and Reflector - plus access to hundreds of film and music presets, as well as the stereo section of Halls of Fame.

SOURCE REVERB

Use source based Reverb to create spatial sensation. Subtle position cues support localization and enables better discrimination between instruments. VSS3 and VSS4 let you do this to maximize character, depth and the listening sweet spot, for the important sources of a mix. Extensive control facilities make it

easy to omit elements of the reverb that may have been picked up from an acoustic environment by microphones already.

Source Reverb algorithms of the Stereo Reverb license: VSS3 and VSS4.



VSS4



CLASSIC AND WILD

Traditional type reverbs are also included in the Stereo Reverb license: A range of the best from M5000, new emulations of old classics, sweet sounds of the past and Wet'n'Wild reverbs. This is the most comprehensive quality selection to be found anywhere.

Classic and Effect reverb algorithms of the Stereo Reverb license: DVR2, NonLin2, Rev2, Rev3 and Core2.



DVR2



DELAY AND EFFECTS

High resolution Delays: 2290 users prepare yourself for the next step. More control, more time, more formats, more wacky. This section includes King of Delay, Reflector, which supports LR as well as LCR output modes, a new polyphonic pitch shifter, VariPitch, and classic processing from M5000.

Delay and Effects algorithms of the Stereo Reverb license: Reflector, Delay2, VariPitch, Chorus and Phaser.



Reflector

5.1 & 6.1 REVERB STEM REVERB

This license includes everything from the Stereo Reverb license - plus all LtRt, Quad Mono, 5.1 and 6.1 reverb and delay algorithms from TC. It also gives access to SpacePan, and every reverb and delay preset in the machine, including the complete Halls of Fame bank and the Skywalker Sound Collection.

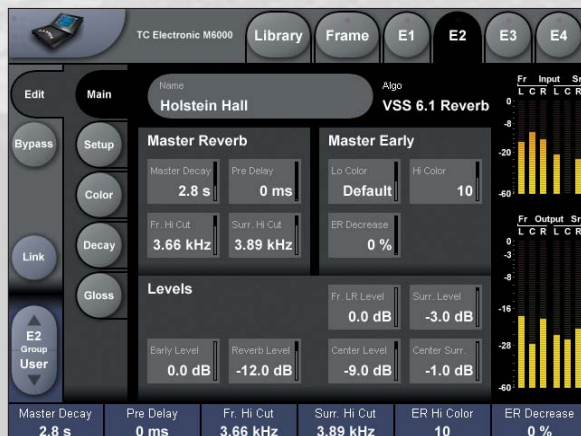
MULTICHANNEL REVERB FOR STEMS

Credible room rendering for 5 or 6 main speakers is a whole different story than adding extra outputs to a stereo reverb - this is even difficult to accomplish with microphones in a natural room. VSS5.1 and VSS6.1 lets you get the most out of a reproduction format without ending up with a muddy soup.

VSS multichannel technology takes advantage of a higher directional resolution internally than what is needed at the output - thereby optimizing localization, and keeping all aspects of the rendered response

under the operator's precise control. The late, diffused response is also subject to detailed control, and decorrelated to an extent that allows the decay time of each output channel to be adjusted individually.

The Multichannel Reverb license includes these algorithms: VSS5.1 Source, VSS6.1, VSSM4, VSS3SR, SpacePan, Reflector 6, VariPitch 8 - plus the algorithms of the Stereo Reverb license.



VSS6.1

5.1 REVERB SOURCE REVERB

MULTICHANNEL REVERB FOR SINGLE SOURCES

VSS5.1 has four separate source inputs, while VSS6.1 renders reverb on to entire stems of 5 or 6 main channels. The license also gives access to

aneight input to 5.1 panning algorithm, SpacePan, which is a level and delay controller for real-time positioning and movement of sources.



VSS5.1



SpacePan



DELAY AND BOUNDARY EFFECTS

Never underestimate the power of delay. Reflector adapts to any mix condition, and it is the most extreme delay and boundary effect you will ever come across. Covering mono, stereo, LCR, 5.1 and 6.1

from subtle ambience to advanced wave and swirl effects, your imagination is the limit. Delay and Effects algorithms of the Multichannel Reverb license: Reflector 6 and VariPitch 8.



Reflector 6



Reflector 6

PROFESSIONAL NOISE REDUCTION

Since its first release, BackDrop™ has already earned a benchmark position among noise reduction professionals. Film and mastering engineers have repeatedly cherished its ability to deliver an immediate quality result. Truly new processing principles, referenced to a detailed human hearing model, really does set BackDrop™ apart from older noise reduction attempts.

and S parts to surgically remove unwanted sounds in any layer of the program, and afterwards restore it to stereo again.

To make BackDrop a fast and efficient real-time tool, the removed part of the signal may be monitored while adjusting.

BackDrop™ features modes for the removal of broadband and Cyclic noise such as hiss, room, reverb, hum, air conditioning etc. on mono and stereo material. It can even decompose a stereo signal into M

The algorithm can be used with sample rates up to 48kHz, and preset templates are provided to combat typical noise sources in film production as well as in music mastering and restoration.



BackDrop

FREE
demo license

BUY
a license

RENT
a license

Online License Shopping

System 6000 licenses are available to you at all times and ensures the completion of your current projects without delay 24 hours a day, 7 days a week! You can decide to acquire a permanent license or even rent it for a block of 200 hours using the "Rent a License" service. For 15% of the cost of a license you can use the latest TC technology on your project. The clock only runs when your System 6000 is switched on...

www.tcelectronic.com

TC ELECTRONIC A/S DENMARK ▶ ☎ +45 8742 7000
TC ELECTRONIC INC USA ▶ ☎ (818) 665 4900 ▶ MAIL: INFO@TCELECTRONIC.COM
WWW.TCELECTRONIC.COM

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