# TC Reverbs

#### Reverb 6000 - Halls of Fame

Containing TC's entire Reverb palette, Reverb 6000 is a four engine Reverb monster for professional film and music production. It delivers the finest, wildest and most research-intensive spatial effects of the audio industry today.

#### Reverb 4000 - Offspring of a Giant

The massive System 6000 Reverb Palette - now in stereo! The technology included in the Reverb 4000 is the culmination of years of research into Reverb styles. This broad palette spans from new state-of-the-art Reverbs to world-renowned classics.

#### M3000 - Reverb Rediscovered

M3000 is a pristine, Dual-Engine Reverberator and Room Simulator, and much more than just a sustain effect. It can tell stories. It lets you add room with a distinctive character. It lets you position a source in a room. Polished decay reverb is available as well, for the times where you haven't got more to say.

#### M2000 – Magic with an Expert

The M2000 provides you with a broad palette of high quality effects enabling you to create magical effects. The true dual engine configuration allows you to run two full-blown effects simultaneously, i.e. on two individual effects sends.

#### M-One XL – Another Size Up

Use the M•One XL to run two remarkable sounding reverbs or other quality effects simultaneously. Individualize your sound with the vast number of possible settings. Bring new life to your mixes with TC's unique Compressor and Limiter algorithms.

#### M300 – Use Both

With a strong combination of the dedicated true Stereo Reverb engine and a Multi-purpose Effects engine, the M300 covers virtually any effects application ranging from Live to Studio & performing musicians.

# **REVERB6000**



## REVERB2000



# M3000

STUDIO REVERB PROCESSOR



# M2000



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	Reverb 6000	Reverb 4000	M3000	M2000	M-One XL	M300
# of Engines	4	1	2	2	2	2
S-Rates	44.1/48/88.2/96 kHz	44.1/48/88.2/96 kHz	32/44.1/48 kHz	32/44.1/48 kHz	44.1/48 kHz	44.1/48 kHz
Editor	PC/MAC/ Hardware Icon	PC Icon (Mac version available summer 2003)	None	None	None	None
Control	Ethernet, MIDI	USB, MIDI	MIDI	MIDI	MIDI	MIDI
Reverb Algorithms	VSS4, VSS3, DVR2, Nonlin, Rev3, Rev4, Reflector	VSS4, VSS3, DVR2, Nonlin, Rev3, Rev4, Ambiator	VSS3, Rev2, Rev3	Rev2, Rev3	XL	Rev3
Reverb Styles	Multichannel True Stereo, Multiple Mono	True Stereo, Dual Mono	Stereo	Stereo	Stereo	Stereo
Reveb Type	Source, Generic, Effect	Source, Generic, Effect	Source, Generic, Effect	Source, Generic	Source	Generic
Application	Music Studio/ Film /Post / Mastering	Live / Music Studio / Mastering	Live/Music Studio/ Film/Post	Live/Music Studio	Live/Project Studio	Live/Project Studio
1/0	Analog, AES/EBU, BNC AES/EBU, Wordclock	Analog, AES/EBU, SPDIF, Tos-Link Wordclock	Analog, AES/EBU, SPDIF, Tos-Link	Analog, AES/EBU, SPDIF, Tos-Link	Analog, SPDIF	Analog, SPDIF

# **Reverb Types**

Until 10 years ago, digital reverb was mostly used as a Generic effect applied to many sources of a mix. Nowadays, where more aux send and returns are at disposal, new approaches have emerged. Elements of the mix are being treated individually, adding room character, flavor and depth in more creative and complex ways.

At TC, we call this a Source based approach, and we have put more than 30 man-years of development time into design and refinement of Source based room simulation. When Generic digital reverbs were invented, they stretched the DSP power and memory bandwidth capabilities of their time; and Source specific processing was completely out of the question. Even though we may now consider Generic types to be less than ideal, they still have applications for which they may be chosen instead of their Source based cousins.

The large reverb and room simulation palette of Reverb 6000 allows the user to choose whatever principle suits a present need. Below you will find a suggestion of when to use what.

## **Generic Reverb**

Generic reverb is primarily a flattering sustain effect which can be added to many sources of a mix, or a complete stereo or multichannel system. It adds little character but also does no harm, because the effect is blurred or washed out. If early reflections are offered, there are only few of them and they play a rudimentary role. Therefore, a strong localization is not imposed on the signal, which is what you want when one reverb is used on many sources.

For a graphical artist, the equivalent tool to Generic reverb would be a paint brush.

## **Generic Reverb Pros**

- ▶ 1st choice for composite, mixed material and stems
- 1st choice when used with multichannel joystick on console or DAW
- Ist choice for adding to classical main microphone pick-up
- Works well on moving sources
- Prettier than life
- Quick and easy to use

## **Generic Reverb Cons**

- Blurring takes away character from individual sources
- Pitch modulation may be a problem with some material
- Mono compatibility often compromised to obtain extra width
- Imaging inferior to Source based reverb

## Source Reverb

When elements of a mix are picked up individually, a chance exists to define exactly how each of them is to be heard. There is no reason to apply one Generic reverb to several single sources, unless they are supposed to present an identical position to the final listener, or you have run out of aux sends. When it is desirable to distinguish between single elements sharing more or less the same panning position, source based reverb should be a first choice. Subtle discrimination between reflection patterns of individual sources can make all the difference in the world when it comes to obtaining depth, expression and natural imaging.

Source Reverbs are able to generate multiple, complex early reflection patterns. For best results, if some reflections are already picked up by a microphone, they should be excluded from the simulated pattern by using the appropriate reflection decrease control. Instruments or sources can alternatively share the same reverb input in groups, e.g. stage left, center and right, for a more complex and desirable result than a Generic, one-send reverb approach.

For a graphical artist, the equivalent tool to Source reverb would be a 3D rendering system or Virtual Studio.

### Source Reverb Pros

- Ist choice when input sources can be separated
- 1st choice with spot microphones
- More depth and distinction obtainable in a mix
- Adds character and definition to a source
- For any format, but especially 5.1 and 6.1, localization and the size of the listening area may be improved compared to Generic Reverb types

#### Source Reverb Cons

- Require more sends or direct feeds than Generic Reverb types
- No advantage on composite signals
- Not ideal for moving sources