Subject: Total Mix notes
Posted by John [1] on Thu, 07 Dec 2006 23:28:44 GMT
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For those of you using Totalmix with RME hardware I submit my notes to try to make it easy to use this cool thingy.

totalmix

Totalmix is a basically a mixer with two input banks and one output bank. The two input banks are the Hardware Inputs and the Sofware Inputs.

#I/O
Hardware Inputs represent the signal coming in from your external hardware where Software Inputs represent the sound coming from your application like Cubase or Winamp. You can route any input to any output.

#Normal and Submix mode
The main mixer screen has two display modes, normal and submix. When the Submix button on the right is off you are in normal mode. When it is on, you are in Submix mode.

In Submix mode, you click on a hardware output pair (in submix view), and all the faders show their routing for that output. Each output pair can have its own mix.

#Matrix mode
In Normal mode there is a drop down on the third row under each fader that allows you to select multiple output channels to assign the input to. Pressing the "x" key on the keyboard takes you to a third view called Matrix view. Matrix view allows you to see every connection at one time.

_modes

normal view

To enable inputs, you do have to go back to normal mode and turn up those inputs (top row)

The non-submix view lets you view routings for specific channels to specific outputs, but i need find it necessary to use it.

The normal view show's the submixlevels for the 1:1 routing. So if you made a submix for hardware outputs 5&6, the normal view will show the same level for software outputs 5&6. Btw. I always use the matrix to see what's going on.

Clicking in the routing box under the fader allows you to pick multiple routing outputs. The fader/pan will change to reflect the value being sent to that route destination. I think !

submix view

You click on a hardware output pair (in submix view), and all the faders show their routing for that output. Each output pair can have its own mix.

When you select submix view, you can select a pair of outputs on row 3, and ONLY signals routed to those outputs are shown on the upper rows. Personally, I find this simplifies things considerably.

If you are getting something at an output that shouldnt be there, or not getting something that should be there, submix view will show you why.

Submix sets all routing windows to the same selection. Deactivating Submix automatically recalls the previous view.

In this mode, all routing fileds jump to the routing pair just being selected. You can then see immediately, which channels, which fader and pan settings make a submix (for example 'A1 7+8'). At the same time the Submix View simplifies setting up the mixer, as all channels can be set simultaneously to the same routing destination with just one click.

Changing to a different destination (output channel) is done in any routing field, or by a click on the desired output pair in the bottom row.

It is very easy to set up a specific submix for whatever output: select output

For advanced users sometimes it makes sense to work without Submix View.

Example: you want to see and set up some channels of different submixes simultaneously, without the need to change between them all the time. Switch off the Submix View by a click on the green but-ton. Now the black routing fields below the faders no longer show the same entry (A1 1+2), but completely different ones. The fader and pan position is the one of the individually shown routing destination.

default setup

When executing the application for the first time, a default file is loaded, sending all playback tracks 1:1 to the corresponding hardware outputs with 0 dB gain.

Faders in the Hardware Inputs are set to maximum attenuation (called m.a. in the following), so there is no monitoring of the input channels.

All faders of the middle row are set to 0 dB, so no matter on which channels a
playback happens, the audio will be audible via the SPDIF output. Just try it!

direct monitoring

With ASIO direct monitoring (ADM), moving faders in Cubase will move them in TotalMix

faders / post

When you pull the fader down to the bottom the routing goes away.

Think of the drop down channel list as being a rotary switch which lets one fader be used as multiple faders, the selection depending on where you've set the rotary switch.

The faders can also be moved pair-wise, corresponding to the stereo-routing settings. This can be achieved by pressing the Alt-key and is especially

comfortable when setting the SPDIF and analogue output level. At the same time.

TotalMix also supports combinations of these keys. If you press Ctrl and Alt at the same time, clicking with the mouse makes the faders jump to 0 dB pair-wise, and they can be set pair-wise by Shift-Alt in fine-mode.

What I now realise is the input fader (and the playback faders too) are in essence multi-function faders i.e. you select what channel you want the fader to be adjusting, and the other virtual channels will not be altered. So, to adjust the bass guitar level at the phones output, I have to change the input fader (with the drop down list at the bottom of it) to "analog". If I have also routed the bass to a number of ouputs as well, then their levels will remain unaffected. If I wish to alter those too , then I have to change the input fader to one of the other channels of the drop down list.

grouping

Click on the fader name label to turn it orange and select multiple faders. They are now grouped. It only works in one mixer at a time.

matrix

The Matrix provides true mono and is very easy to use.

If you don't want to use the Matrix then use this workaround: use only odd or even channels as effect send. You got lots of them, so this is no limitation at all!

Change gain Ctrl-drag up / down

Horizontal labels: All hardware outputs

Vertical labels: All hardware inputs. Below are all play back channels (software playback channels)

Green 0.0 dB field: Standard 1:1 routing

Black gain field: Shows the current gain value as dB

Orange gain field: This routing is muted.

menu

Always on Top: When active (checked) the TotalMix window will always be on top of the Windows desktop. Note: This function may result in problems with windows containing help text, as the TotalMix window will even be on top of those windows, so the help text isn't readable.

Deactivate Screensaver: When active (checked) any activated Windows screensaver will be disabled temporarily.

Ignore Position: When active, the windows size and position stored in a file or preset will not be used. The routing will be activated, but the window will not change.

ASIO Direct Monitoring (Windows only): When de-activated any ADM commands will be ignored by TotalMix. In other words, ASIO Direct Monitoring is globally de-activated.

Link Faders: Selecting this option all faders will be treated as stereo pairs and moved pair-wise. Hotkey L.

Level Meter Setup: Configuration of the Level Meters. Hotkey F2. See chapter 26.14.

Preferences: Opens a dialog box to configure several functions, like Pan Law, Dim, Talkback Dim, Listenback Dim. See chapter 26.10.

Enable MIDI Control: Turns MIDI control on.The channels which are currently under MIDI control are indicated by a colour change of the info field below the faders, black turns to yellow.

Deactivate MIDI in Background: Disables the MIDI control as soon as another application is in the focus, or in case TotalMix has been minimized.

meters

The input meters are pre fader.

The output meters are post fader.

mixers

Upper row: hardware inputs. The level shown is that of the input signal and is fader independent.

Using the fader and routing window, any input channel can be routed and mixed to any hardware output (third row.)

Middle row: playback channels (playback tracks of the software.)

Using the fader and routing window, any playback channel can be routed and mixed to any hardware output (third row.)

Lower row: hardware outputs. Because they refer to the output of a subgroup, the level can only be attenuated here (in order to avoid overloads), routing is not possible. This row has two additional channels, the analog outputs.

more info

Additional documentation can be found here:
http://www.rme-audio.com/english/techinfo/hdsp_tmhard.htm
http://www.rme-audio.com/english/techinfo/hdsp_tmsoft.htm

This card can be good for:
* setting up delay-free submixes (headphone mixes)
* unlimited routing of inputs and outputs (free utilization, patchbay function)
* distributing signals to several outputs at a time
* simultaneous playback of different programs over only one stereo channel
* mixing of the input signal to the playback signal (complete ASIO Direct Monitoring)

naming channels

The channel names shown in the white label area can be edited. A right mouse click on the white name field brings up the dialog box Enter Name. Any name can be entered in this dialog. Enter/Return closes the dialog box, the white label now shows the first letters of the new name. ESC cancels the process and closes the dialog box.

post send mode

Dragging the faders by use of the right mouse button activates Post Send mode and causes all routings of the current input or playback channel to be changed in a relative way. Please note that the fader settings of all routings are memorized.

So when pulling the fader to the bottom (maximum attenuation), the individual settings are back when you right click the mouse and pull the fader up.

The individual settings get lost in m.a. position as soon as the fader is clicked with the left mouse button.

As long as no single level is at m.a. position, the left mouse button can be used to change the current routing's gain.

presets

Presets are stored in /documents and settings/"your user name"/local settings/application data/rme totalmix/

The preset buttons can get meaningful names in the same way. Move the mouse above a preset button, a right mouse click will bring up the dialog box. Note that the name shows up as tool tip only, as soon as the mouse stays above the preset button.

The preset button names are not stored in the preset files, but globally in the registry, so won't change when loading any file or saving any state as preset. But loading a preset bank (see chapter 26.8) the names will be updated.

TotalMix includes eight factory presets, stored within the program. The user presets can be changed at any time, because TotalMix stores and reads the changed presets from the files preset11.mix to preset81.mix, located in Windows' hidden directory >Documents and Settings, <Username>, Local Settings, Application Data, RME TotalMix<. On the Mac the location is in the folder >User, <Username>, Library / Preferences / Hammerfall DSP<. The first number indicates the current preset, the second number the current unit.

This method offers two major advantages:
Presets modified by the user will not be overwritten when reinstalling or updating the driver The factory presets remain unchanged, and can be reloaded any time.

Restoring Defaults
Mouse: The original factory presets can be reloaded by holding down the Ctrl-key and clicking on any preset button. Alternatively the files described above can
be renamed, moved to a different directory, or being deleted.

Keyboard: Using Ctrl and any number between 1 and 8 (not on the numeric keypad!) will load the corresponding factory default preset. The key Alt will load
the user presets instead.

Preset 1
Description: All playback channels routed 1:1, monitoring of all playback channels.

Details: All inputs maximum attenuation. All playback channels 0 dB, routed to the same output. All outputs 0 dB. Level display set to RMS +3 dB. View Submix active.

Note: This preset is Default, offering the standard functionality of a I/O-card.

Preset 2
Same as Preset 1.

Preset 3
Description: All channels routed 1:1, input and playback monitoring via outputs. As Preset 1,
but all inputs set to 0 dB (1:1 pass through).

Preset 4

Description: All channels routed 1:1, input and playback monitoring via outputs.
As Preset 3, but all inputs muted.

Preset 5
Description: All faders maximum attenuation. As Preset 1, but all playbacks maximum attenuation.

Preset 6
Description: Submix on SPDIF at -6 dB. As Preset 1, plus submix of all playbacks on SPDIF.

Preset 7
Description: Submix on SPDIF at -6 dB. As Preset 1, plus submix of all inputs and playbacks on SPDIF.

Preset 8
Description: Panic. As Preset 4, but playback channels muted too (no output signal).

Preset Banks
Instead of a single preset, all eight presets can be stored and loaded at once. This is done via
Menu File, Save All Presets as and Open All Presets (file suffix .mpr). After the loading the
presets can be activated by the preset buttons. In case the presets have been renamed (see
chapter 26.11), these names will be stored and loaded too.

The preset buttons can get meaningful names in the same way. Move the mouse above a preset button, a right mouse click will bring up the dialog box.
Note that the name shows up as tool tip only, as soon as the mouse stays above the preset button.

The preset button names are not stored in the preset files, but globally in the registry, so won't change when loading any file or saving any state as preset. But loading a preset bank (see chapter 26.8) the names will be updated.

set fader to zero

When you want to set the fader to exactly 0 dB, this can be difficult, depending

on the mouse configuration. Move the fader close to the 0 position and now press the Shift-key. This activates the fine-mode, which stretches the mouse movements by a factor of 8. In this mode, a gain setting accurate to 0.1 dB is no problem at all.

set multiple channels

Often signals are stereo, i. e. a pair of two channels. It is therefore helpful to be able to make the routing settings for two channels at once.

Press the Ctrl-key and click into the routing window of 'Out 3' with the key pressed. The routing list pops up with a checkmark at '3+4'. Click onto 'Analog'. Now, channel 4 has already been set to 'Analog' as well.

shortcut keys

F12, the cpu and disk meter

#toggle Matrix view
X

#toggle visible or not for Input, Playback, Output, Submix
I, P, O, S

#Fader
Set to 0 dB Ctrl-click faders
Set to -6dB for hardware outputs Ctrl-click faders
Center pans Ctrl-click pans
Fine Control Shift-drag

#Stereo
Set faders pairwise in fine mode Shift-Alt
Move faders or pans in stereo Alt-drag
Faders jump to 0 dB pair-wise Ctrl-Alt-drag

#Presets.....
Set Preset to default Ctrl-click on preset button
Load preset Alt-preset_number

#level meter setup dialog
F2

#preferences
F3

#toggle Mute Master
M

#toggle mixer view
T

#link all faders as stereo pairs
L

#meters
#Display range 40 or 60 dB
Key 4 or 6

#Numerical display showing Peak or RMS
Key E or R

#RMS display absolute or relative to 0 dBFS
Key 0 or 3

#Numerical display selectable either Peak or RMS
Hotkey E or R

#Measuring SNR (Signal to Noise) requires to press R (for RMS) and 0 (for referring to 0 dBFS, a full scale signal). The text display will then show

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Subject: Re: Total Mix notes
Posted by DJ on Fri, 08 Dec 2006 03:43:15 GMT
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You should post this to the RME forum. It's a much better explanation than the Totalmix documentation. goo job John. Even I understand it.

;o)

"John" <no@no.com> wrote in message news:4578959c$1@linux...
>
> For those of you using Totalmix with RME hardware I submit my notes to try
> to make it easy to use this cool thingy.

>
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> totalmix
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> Totalmix is a basically a mixer with two input banks and one output bank.
> The two input banks are the Hardware Inputs and the Sofware Inputs.
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> #I/O
> Hardware Inputs represent the signal coming in from your external hardware
> where Software Inputs represent the sound coming from your application
> like
> Cubase or Winamp. You can route any input to any output.
>
> #Normal and Submix mode
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> Submix button on the right is off you are in normal mode. When it is on,
> you are in Submix mode.
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> its own mix.
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> allows you to select multiple output channels to assign the input to.
> Pressing
> the "x" key on the keyboard takes you to a third view called Matrix view.
> Matrix view allows you to see every connection at one time.
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> routing destination with just one click.
>
> Changing to a different destination (output channel) is done in any
> routing

> field, or by a click on the desired output pair in the bottom row.
>
>
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> It is very easy to set up a specific submix for whatever output: select
> output
> channel, set up fader and pans of inputs and playbacks - ready!
>
> For advanced users sometimes it makes sense to work without Submix View.
> Example: you want to see and set up some channels of different submixes
> simultaneously,
> without the need to change between them all the time. Switch off the
> Submix
> View by a click on the green but-ton. Now the black routing fields below
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> The faders can also be moved pair-wise, corresponding to the
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> comfortable when setting the SPDIF and analogue output level. At the same
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> TotalMix also supports combinations of these keys. If you press Ctrl and
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> dB pair-wise, and they can be set pair-wise by Shift-Alt in fine-mode.
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> limitation
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>
>
> Change gain Ctrl-drag up / down
>
> Horizontal labels: All hardware outputs
>
> Vertical labels: All hardware inputs. Below are all play back channels
> (software
> playback channels)
>
> Green 0.0 dB field: Standard 1:1 routing
>
> Black gain field: Shows the current gain value as dB
>
> Orange gain field: This routing is muted.
>
>
>
> menu
>
>
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> Always on Top: When active (checked) the TotalMix window will always be on
> top of the Windows desktop. Note: This function may result in problems
> with
> windows containing help text, as the TotalMix window will even be on top
> of those windows, so the help text isn't readable.
>
> Deactivate Screensaver: When active (checked) any activated Windows
> screensaver
> will be disabled temporarily.
>
> Ignore Position: When active, the windows size and position stored in a
> file
> or preset will not be used. The routing will be activated, but the window
> will not change.
>
> ASIO Direct Monitoring (Windows only): When de-activated any ADM commands

> will be ignored by TotalMix. In other words, ASIO Direct Monitoring is
> globally
> de-activated.
>
> Link Faders: Selecting this option all faders will be treated as stereo
> pairs
> and moved pair-wise. Hotkey L.
>
> Level Meter Setup: Configuration of the Level Meters. Hotkey F2. See
> chapter
> 26.14.
>
> Preferences: Opens a dialog box to configure several functions, like Pan
> Law, Dim, Talkback Dim, Listenback Dim. See chapter 26.10.
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> Enable MIDI Control: Turns MIDI control on.The channels which are
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> The output meters are post fader.
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> mixers
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> Upper row: hardware inputs. The level shown is that of the input signal
> and
> is fader independent.
>
> Using the fader and routing window, any input channel can be routed and
> mixed
> to any hardware output (third row.)

>
>
> Middle row: playback channels (playback tracks of the software.)
>
> Using the fader and routing window, any playback channel can be routed
> and
> mixed to any hardware output (third row.)
>
> Lower row: hardware outputs. Because they refer to the output of a
> subgroup,
> the level can only be attenuated here (in order to avoid overloads),
> routing
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> more info
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> Additional documentation can be found here:
> http://www.rme-audio.com/english/techinfo/hdsp_tmhard.htm
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>   * unlimited routing of inputs and outputs (free utilization, patchbay
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>   * distributing signals to several outputs at a time
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> data/rme totalmix/
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> TotalMix includes eight factory presets, stored within the program. The
> user
> presets can be changed at any time, because TotalMix stores and reads the
> changed presets from the files preset11.mix to preset81.mix, located in
> Windows'

> hidden directory >Documents and Settings, <Username>, Local Settings,
> Application
> Data, RME TotalMix<. On the Mac the location is in the folder >User,
> <Username>,
> Library / Preferences / Hammerfall DSP<. The first number indicates the
> current
> preset, the second number the current unit.
>
> This method offers two major advantages:
> Presets modified by the user will not be overwritten when reinstalling
> or updating the driver The factory presets remain unchanged,
> and can be reloaded any time.
>
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> Restoring Defaults
> Mouse: The original factory presets can be reloaded by holding down the
> Ctrl-
> key and clicking on any preset button. Alternatively the files described
> above can
> be renamed, moved to a different directory, or being deleted.
>
> Keyboard: Using Ctrl and any number between 1 and 8 (not on the numeric
> keypad!) will load the corresponding factory default preset. The key Alt
> will load
> the user presets instead.
>
>
> Preset 1
> Description: All playback channels routed 1:1, monitoring of all playback
> channels.
>
> Details: All inputs maximum attenuation. All playback channels 0 dB,
> routed
> to the same output. All outputs 0 dB. Level display set to RMS +3 dB. View
> Submix active.
>
> Note: This preset is Default, offering the standard functionality of a
> I/O-card.
>
>
>
> Preset 2
> Same as Preset 1.
>
> Preset 3
> Description: All channels routed 1:1, input and playback monitoring via
> outputs.
> As Preset 1,

> but all inputs set to 0 dB (1:1 pass through).
>
> Preset 4
> Description: All channels routed 1:1, input and playback monitoring via
> outputs.
> As Preset 3, but all inputs muted.
>
> Preset 5
> Description: All faders maximum attenuation. As Preset 1, but all
> playbacks
> maximum attenuation.
>
> Preset 6
> Description: Submix on SPDIF at -6 dB. As Preset 1, plus submix of all
> playbacks
> on SPDIF.
>
> Preset 7
> Description: Submix on SPDIF at -6 dB. As Preset 1, plus submix of all
> inputs
> and playbacks on SPDIF.
>
> Preset 8
> Description: Panic. As Preset 4, but playback channels muted too (no
> output
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> Preset Banks
> Instead of a single preset, all eight presets can be stored and loaded at
> once. This is done via
> Menu File, Save All Presets as and Open All Presets (file suffix .mpr).
> After
> the loading the
> presets can be activated by the preset buttons. In case the presets have
> been renamed (see
> chapter 26.11), these names will be stored and loaded too.
>
>
>
> The preset buttons can get meaningful names in the same way. Move the
> mouse
> above a preset button, a right mouse click will bring up the dialog box.
> Note that the name shows up as tool tip only, as soon as the mouse stays
> above the preset button.
>
> The preset button names are not stored in the preset files, but globally
> in the registry, so won't change when loading any file or saving any state

> as preset. But loading a preset bank (see chapter 26.8) the names will be
> updated.
>
>
>
> set fader to zero
>
>
>
> When you want to set the fader to exactly 0 dB, this can be difficult,
> depending
> on the mouse configuration. Move the fader close to the 0 position and now
> press the Shift-key. This activates the fine-mode, which stretches the
> mouse
> movements by a factor of 8. In this mode, a gain setting accurate to 0.1
> dB is no problem at all.
>
>
>
> set multiple channels
>
>
>
> Often signals are stereo, i. e. a pair of two channels. It is therefore
> helpful to be able to make the routing settings for two channels at once.
>
>
> Press the Ctrl-key and click into the routing window of 'Out 3' with the
> key pressed. The routing list pops up with a checkmark at '3+4'. Click
> onto
> 'Analog'. Now, channel 4 has already been set to 'Analog' as well.
>
>
>
> shortcut keys
>
>
> F12, the cpu and disk meter
>
> #toggle Matrix view
> X
>
> #toggle visible or not for Input, Playback, Output, Submix
> I, P, O, S
>
> #Fader
> Set to 0 dB Ctrl-click faders
> Set to -6dB for hardware outputs Ctrl-click faders

> Center pans Ctrl-click pans
> Fine Control Shift-drag
>
>
> #Stereo
> Set faders pairwise in fine mode Shift-Alt
> Move faders or pans in stereo Alt-drag
> Faders jump to 0 dB pair-wise Ctrl-Alt-drag
>
>
> #Presets.....
> Set Preset to default Ctrl-click on preset button
> Load preset Alt-preset_number
>
> #level meter setup dialog
> F2
>
> #preferences
> F3
>
> #toggle Mute Master
> M
>
> #toggle mixer view
> T
>
> #link all faders as stereo pairs
> L
>
>
> #meters
> #Display range 40 or 60 dB
> Key 4 or 6
>
> #Numerical display showing Peak or RMS
> Key E or R
>
> #RMS display absolute or relative to 0 dBFS
> Key 0 or 3
>
> #Numerical display selectable either Peak or RMS
> Hotkey E or R
>
> #Measuring SNR (Signal to Noise) requires to press R (for RMS) and 0 (for
> referring to 0 dBFS, a full scale signal). The text display will then show
> the same value as an expensive measurement system, when measuring 'RMS
> unweighted'.
>

>
>
>

Subject: Re: Total Mix notes
Posted by Morgan on Mon, 11 Dec 2006 13:10:25 GMT
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Hi John,

Nice job on this - We are going to have Tom Sailor < RME USA >
here very soon.
Total mix confuses the heck out of everyone !
You have done a fine job of laying this out :)

Please email me - I have something to run by you

Thanks
Morgan
morganp@ntplx.net

John wrote:
> For those of you using Totalmix with RME hardware I submit my notes to try
> to make it easy to use this cool thingy.
>
>
> totalmix
>
>
>
> Totalmix is a basically a mixer with two input banks and one output bank.
> The two input banks are the Hardware Inputs and the Sofware Inputs.
>
> #I/O
> Hardware Inputs represent the signal coming in from your external hardware
> where Software Inputs represent the sound coming from your application like
> Cubase or Winamp. You can route any input to any output.
>
> #Normal and Submix mode
> The main mixer screen has two display modes, normal and submix. When the
> Submix button on the right is off you are in normal mode. When it is on,
> you are in Submix mode.
>
> In Submix mode, you click on a hardware output pair (in submix view), and
> all the faders show their routing for that output. Each output pair can have

> its own mix.
>
> #Matrix mode
> In Normal mode there is a drop down on the third row under each fader that
> allows you to select multiple output channels to assign the input to. Pressing
> the "x" key on the keyboard takes you to a third view called Matrix view.
> Matrix view allows you to see every connection at one time.
>
>
>
> _modes
>
>
>
> normal view
>
>
>
> To enable inputs, you do have to go back to normal mode and turn up those
> inputs (top row)
>
> The non-submix view lets you view routings for specific channels to specific
> outputs, but i need find it necessary to use it.
>
> The normal view show's the submixlevels for the 1:1 routing. So if you made
> a submix for hardware outputs 5&6, the normal view will show the same level
> for software outputs 5&6. Btw. I always use the matrix to see what's going
> on.
>
> Clicking in the routing box under the fader allows you to pick multiple routing
> outputs. The fader/pan will change to reflect the value being sent to that
> route destination. I think !
>
>
>
> submix view
>
>
>
> You click on a hardware output pair (in submix view), and all the faders
> show their routing for that output. Each output pair can have its own mix.
>
> When you select submix view, you can select a pair of outputs on row 3, and
> ONLY signals routed to those outputs are shown on the upper rows. Personally,
> I find this simplifies things considerably.
>
> If you are getting something at an output that shouldnt be there, or not
> getting something that should be there, submix view will show you why.

>
>
> Submix sets all routing windows to the same selection. Deactivating Submix
> automatically recalls the previous view.
>
>
> In this mode, all routing fileds jump to the routing pair just being selected.
> You can then see immediately, which channels, which fader and pan settings
> make a submix (for example 'A1 7+8'). At the same time the Submix View simplifies
> setting up the mixer, as all channels can be set simultaneously to the same
> routing destination with just one click.
>
> Changing to a different destination (output channel) is done in any routing
> field, or by a click on the desired output pair in the bottom row.
>
>
>
> It is very easy to set up a specific submix for whatever output: select output

>
> For advanced users sometimes it makes sense to work without Submix View.
> Example: you want to see and set up some channels of different submixes simultaneously,
> without the need to change between them all the time. Switch off the Submix
> View by a click on the green but-ton. Now the black routing fields below
> the faders no longer show the same entry (A1 1+2), but completely different
> ones. The fader and pan position is the one of the individually shown routing
> destination.
>
>
>
> default setup
>
>
>
> When executing the application for the first time, a default file is loaded,
> sending all playback tracks 1:1 to the corresponding hardware outputs with
> 0 dB gain.
>
> Faders in the Hardware Inputs are set to maximum attenuation (called m.a.
> in the following), so there is no monitoring of the input channels.
>
> All faders of the middle row are set to 0 dB, so no matter on which channels
> a
> playback happens, the audio will be audible via the SPDIF output. Just try
> it!
>
>
>

> direct monitoring
>
>
>
> With ASIO direct monitoring (ADM), moving faders in Cubase will move them
> in TotalMix
>
>
>
> faders / post
>
>
>
> When you pull the fader down to the bottom the routing goes away.
>
> Think of the drop down channel list as being a rotary switch which lets one
> fader be used as multiple faders, the selection depending on where you've
> set the rotary switch.
>
> The faders can also be moved pair-wise, corresponding to the stereo-routing
> settings. This can be achieved by pressing the Alt-key and is especially
> comfortable when setting the SPDIF and analogue output level. At the same
> time.
>
> TotalMix also supports combinations of these keys. If you press Ctrl and
> Alt at the same time, clicking with the mouse makes the faders jump to 0
> dB pair-wise, and they can be set pair-wise by Shift-Alt in fine-mode.
>
>
>
> What I now realise is the input fader (and the playback faders too) are in
> essence multi-function faders i.e. you select what channel you want the
> fader to be adjusting, and the other virtual channels will not be altered.
> So, to adjust the bass guitar level at the phones output, I have to change
> the input fader (with the drop down list at the bottom of it) to "analog".
> If I have also routed the bass to a number of ouputs as well, then their
> levels will remain unaffected. If I wish to alter those too , then I have
> to change the input fader to one of the other channels of the drop down
> list.
>
>
>
> grouping
>
>
>
> Click on the fader name label to turn it orange and select multiple faders.
> They are now grouped. It only works in one mixer at a time.

>
>
>
> matrix
>
>
>
> The Matrix provides true mono and is very easy to use.
>
> If you don't want to use the Matrix then use this workaround: use only odd
> or even channels as effect send. You got lots of them, so this is no limitation
> at all!
>
>
> Change gain Ctrl-drag up / down
>
> Horizontal labels: All hardware outputs
>
> Vertical labels: All hardware inputs. Below are all play back channels (software
> playback channels)
>
> Green 0.0 dB field: Standard 1:1 routing
>
> Black gain field: Shows the current gain value as dB
>
> Orange gain field: This routing is muted.
>
>
>
> menu
>
>
>
> Always on Top: When active (checked) the TotalMix window will always be on
> top of the Windows desktop. Note: This function may result in problems with
> windows containing help text, as the TotalMix window will even be on top
> of those windows, so the help text isn't readable.
>
> Deactivate Screensaver: When active (checked) any activated Windows screensaver
> will be disabled temporarily.
>
> Ignore Position: When active, the windows size and position stored in a file
> or preset will not be used. The routing will be activated, but the window
> will not change.
>
> ASIO Direct Monitoring (Windows only): When de-activated any ADM commands
> will be ignored by TotalMix. In other words, ASIO Direct Monitoring is globally
> de-activated.

>
> Link Faders: Selecting this option all faders will be treated as stereo pairs
> and moved pair-wise. Hotkey L.
>
> Level Meter Setup: Configuration of the Level Meters. Hotkey F2. See chapter
> 26.14.
>
> Preferences: Opens a dialog box to configure several functions, like Pan
> Law, Dim, Talkback Dim, Listenback Dim. See chapter 26.10.
>
> Enable MIDI Control: Turns MIDI control on.The channels which are currently
> under MIDI control are indicated by a colour change of the info field below
> the faders, black turns to yellow.
>
> Deactivate MIDI in Background: Disables the MIDI control as soon as another
> application is in the focus, or in case TotalMix has been minimized.
>
>
>
> meters
>
>
>
> The input meters are pre fader.
>
> The output meters are post fader.
>
>
>
> mixers
>
>
>
> Upper row: hardware inputs. The level shown is that of the input signal and
> is fader independent.
>
> Using the fader and routing window, any input channel can be routed and mixed
> to any hardware output (third row.)
>
>
> Middle row: playback channels (playback tracks of the software.)
>
> Using the fader and routing window, any playback channel can be routed and
> mixed to any hardware output (third row.)
>
> Lower row: hardware outputs. Because they refer to the output of a subgroup,
> the level can only be attenuated here (in order to avoid overloads), routing
> is not possible. This row has two additional channels, the analog outputs.

>
>
>
> more info
>
>
>
> Additional documentation can be found here:
> http://www.rme-audio.com/english/techinfo/hdsp_tmhard.htm
> http://www.rme-audio.com/english/techinfo/hdsp_tmsoft.htm
>
> This card can be good for:
> * setting up delay-free submixes (headphone mixes)
> * unlimited routing of inputs and outputs (free utilization, patchbay
> function)
> * distributing signals to several outputs at a time
> * simultaneous playback of different programs over only one stereo channel
> * mixing of the input signal to the playback signal (complete ASIO Direct
> Monitoring)
>
>
>
> naming channels
>
>
>
> The channel names shown in the white label area can be edited. A right mouse
> click on the white name field brings up the dialog box Enter Name. Any name
> can be entered in this dialog. Enter/Return closes the dialog box, the white
> label now shows the first letters of the new name. ESC cancels the process
> and closes the dialog box.
>
>
>
> post send mode
>
>
>
> Dragging the faders by use of the right mouse button activates Post Send
> mode and causes all routings of the current input or playback channel to
> be changed in a relative way. Please note that the fader settings of all
> routings are memorized.
>
> So when pulling the fader to the bottom (maximum attenuation), the individual
> settings are back when you right click the mouse and pull the fader up.
>
> The individual settings get lost in m.a. position as soon as the fader is
> clicked with the left mouse button.

>
> As long as no single level is at m.a. position, the left mouse button can
> be used to change the current routing's gain.
>
>
>
> presets
>
>
> Presets are stored in /documents and settings/"your user name"/local settings/application
> data/rme totalmix/
>
> The preset buttons can get meaningful names in the same way. Move the mouse
> above a preset button, a right mouse click will bring up the dialog box.
> Note that the name shows up as tool tip only, as soon as the mouse stays
> above the preset button.
>
> The preset button names are not stored in the preset files, but globally
> in the registry, so won't change when loading any file or saving any state
> as preset. But loading a preset bank (see chapter 26.8) the names will be
> updated.
>
> TotalMix includes eight factory presets, stored within the program. The user
> presets can be changed at any time, because TotalMix stores and reads the
> changed presets from the files preset11.mix to preset81.mix, located in Windows'
> hidden directory >Documents and Settings, <Username>, Local Settings, Application
> Data, RME TotalMix<. On the Mac the location is in the folder >User, <Username>,
> Library / Preferences / Hammerfall DSP<. The first number indicates the current
> preset, the second number the current unit.
>
> This method offers two major advantages:
> Presets modified by the user will not be overwritten when reinstalling
> or updating the driver The factory presets remain unchanged,
> and can be reloaded any time.
>
>
> Restoring Defaults
> Mouse: The original factory presets can be reloaded by holding down the Ctrl-
> key and clicking on any preset button. Alternatively the files described
> above can
> be renamed, moved to a different directory, or being deleted.
>
> Keyboard: Using Ctrl and any number between 1 and 8 (not on the numeric
> keypad!) will load the corresponding factory default preset. The key Alt
> will load
> the user presets instead.
>
>

> Preset 1
> Description: All playback channels routed 1:1, monitoring of all playback
> channels.
>
> Details: All inputs maximum attenuation. All playback channels 0 dB, routed
> to the same output. All outputs 0 dB. Level display set to RMS +3 dB. View
> Submix active.
>
> Note: This preset is Default, offering the standard functionality of a I/O-card.
>
>
>
> Preset 2
> Same as Preset 1.
>
> Preset 3
> Description: All channels routed 1:1, input and playback monitoring via outputs.
> As Preset 1,
> but all inputs set to 0 dB (1:1 pass through).
>
> Preset 4
> Description: All channels routed 1:1, input and playback monitoring via outputs.
> As Preset 3, but all inputs muted.
>
> Preset 5
> Description: All faders maximum attenuation. As Preset 1, but all playbacks
> maximum attenuation.
>
> Preset 6
> Description: Submix on SPDIF at -6 dB. As Preset 1, plus submix of all playbacks
> on SPDIF.
>
> Preset 7
> Description: Submix on SPDIF at -6 dB. As Preset 1, plus submix of all inputs
> and playbacks on SPDIF.
>
> Preset 8
> Description: Panic. As Preset 4, but playback channels muted too (no output
> signal).
>
>
> Preset Banks
> Instead of a single preset, all eight presets can be stored and loaded at
> once. This is done via
> Menu File, Save All Presets as and Open All Presets (file suffix .mpr). After
> the loading the
> presets can be activated by the preset buttons. In case the presets have
> been renamed (see

> chapter 26.11), these names will be stored and loaded too.
>
>
>
> The preset buttons can get meaningful names in the same way. Move the mouse
> above a preset button, a right mouse click will bring up the dialog box.
> Note that the name shows up as tool tip only, as soon as the mouse stays
> above the preset button.
>
> The preset button names are not stored in the preset files, but globally
> in the registry, so won't change when loading any file or saving any state
> as preset. But loading a preset bank (see chapter 26.8) the names will be
> updated.
>
>
>
> set fader to zero
>
>
>
> When you want to set the fader to exactly 0 dB, this can be difficult, depending
> on the mouse configuration. Move the fader close to the 0 position and now
> press the Shift-key. This activates the fine-mode, which stretches the mouse
> movements by a factor of 8. In this mode, a gain setting accurate to 0.1
> dB is no problem at all.
>
>
>
> set multiple channels
>
>
>
> Often signals are stereo, i. e. a pair of two channels. It is therefore
> helpful to be able to make the routing settings for two channels at once.
>
>
> Press the Ctrl-key and click into the routing window of 'Out 3' with the
> key pressed. The routing list pops up with a checkmark at '3+4'. Click onto
> 'Analog'. Now, channel 4 has already been set to 'Analog' as well.
>
>
>
> shortcut keys
>
>
> F12, the cpu and disk meter
>
> #toggle Matrix view

> X
>
> #toggle visible or not for Input, Playback, Output, Submix
> I, P, O, S
>
> #Fader
> Set to 0 dB Ctrl-click faders
> Set to -6dB for hardware outputs Ctrl-click faders
> Center pans Ctrl-click pans
> Fine Control Shift-drag
>
>
> #Stereo
> Set faders pairwise in fine mode Shift-Alt
> Move faders or pans in stereo Alt-drag
> Faders jump to 0 dB pair-wise Ctrl-Alt-drag
>
>
> #Presets.....
> Set Preset to default Ctrl-click on preset button
> Load preset Alt-preset_number
>
> #level meter setup dialog
> F2
>
> #preferences
> F3
>
> #toggle Mute Master
> M
>
> #toggle mixer view
> T
>
> #link all faders as stereo pairs
> L
>
>
> #meters
> #Display range 40 or 60 dB
> Key 4 or 6
>
> #Numerical display showing Peak or RMS
> Key E or R
>
> #RMS display absolute or relative to 0 dBFS
> Key 0 or 3
>

> #Numerical display selectable either Peak or RMS
> Hotkey E or R
>
> #Measuring SNR (Signal to Noise) requires to press R (for RMS) and 0 (for
> referring to 0 dBFS, a full scale signal). The text display will then show

>
>
>
>