# TRANSFORMIZER® ADAPTING SOUND DESIGN

# **TRANSFORMIZER®**

# User's guide - v. 2.0

The software TRANSFORMIZER®, will be referred to as, TRZ in this manual.

Minimum system requirements for TRANSFORMIZER®. Mac OSX 10.10.5, min. 16 Gb. RAM / Silicon 8mb RAM Windows 10,

iLok account required for authorisation. License on key or host computer.

AAX/AU/VST

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# WARNING

Due to large differences in amplitude and/or pitch values, which may be produced in any combinations of sounds chosen by the user, loud results may occur. Hence we urge users to always start listening at low volume.

For additional info please visit transformizer.com

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# INTRODUCTION

Thank you for your interest in the technology by TRANSFORMIZER®.

TRZ is for anybody working with sound, be it in sync with picture, in sync with the beat, off beat or with no sync at all.

Keeping tech to a minimum, in order to boost your creativity to the max.

If you require any assistance beyond what's in this manual, including frequently asked questions, troubleshooting, tutorials etc., please visit transformizer.com

#### **Download and Installation**

Go visit transformizer.com and download the latest version of the TRZ plugin installer. Double-click on the installer and follow the on-screen installation instructions.

Note: TRZ Pro requires an active license. You can trial by activating a trial license. Alternatively, a new full license can be purchased from transformizer.com.

The license can be stored either on an iLok key or on the host computer.

# THE FUNDAMENTALS

#### What TRZ does

TRZ is a tool capable of transforming a sound into something completely new and inspiring by analysing the behavioural characteristics of a 'Master sound' and applying these characteristics onto 'Child sound' - thus providing users with unique sounding creative options in seconds instead of hours.

Say you need a new signature sound for the intro of your new hit? Throw in a version that plays the melody in the 'Master' section and drop something relating to the lyrics e.g. ...the sound of electricity and work with the controls.

We believe that there is no right or wrong way to design sound. We welcome happy accidents. We are crazy about noise. We respect and love the gift of the unintended.

#### Why is TRZ an Instrument Plug-In?

One of the basic reasons why we decided to make TRZ an Instrument plugin, is first and foremost that we wanted TRZ to be able to output onto 4 separate tracks for full control of mixing and control via midi. Also give the opportunity to drop into record as you're tweaking the knobs.

We've never intended to make a new D.A.W. in the D.A.W, so to speak. But instead an innovative tool that hopefully will enable you to creative completely unheard of sounds very quickly.

# Transformizer is a stereo instrument and should be inserted on a stereo instrument track.

Create an instrument track and insert TRZ. The plugin output routing defaults to 'stereo out'. A mix of the Master section sound and the Child section sound. TRZ is stereo out only. Route the output of the instrument track to an audio track for recording.



(Example from Pro Tools)

When play (space bar) is activated, TRZ will play along and in sync with the cursor in your DAW. If you want to control playback within TRZ only, **press [p]**.

#### **TOP BAR OVERVIEW**

#### The top bar

In the top bar right side you'll find the following options: **[New]**, **[File]** which is a dropdown menu, **[Loop On/Off]**, **[Waveform]** (Waveform, Spectrum//Formant view), **[Learn]** (for midi device learn) and **[EXPORT]**.

# TRANSFORMIZER® New File Loop of Waveform BPM Learn Export

#### [New]

Resets all controls to default values and empty any previously loaded sections. **CAUTION: This can't be undone** 



#### [File]

A drop down menu with the options:

) New F <sup>ile</sup>	Open project	Expor
	Save project	
	Save project as	NDOM
	Save project with media	
	HI CUT TONAL	FILTE

#### **Open project**

Opens a dialogue box for selecting location and restoring of previously saved .trzb projects.

#### Save Project:

Opens a dialogue box for selecting location and saving of .trzb projects.

#### Save Project As

Opens a dialogue box for selecting location and saving of .trzb projects. Most often used when saving a new version of an already saved project.

#### Save Project with media

Opens a dialogue box for selecting location and saving of .trzb projects including the media files used. When saving in this mode a folder with the name chosen is saved at the location chosen.

#### [Loop on]

2 state button switches from Loop on to Loop off and vise versa.



#### [Waveform]

Works as a 3 state button. By pressing the 3 state button in the top bar, you have the choice of **waveform**, **spectrum** or **formant** view.





#### [%, BPM]

Enables viewing the speed either as a percentage or bpm. Default BPM.



#### [Learn]

MIDI learn. Press learn, then the parameter you want to control and lastly the controller you want to use. Connection made.Press again if you want to 'forget'.



#### [Export]

Will export a bounced stereo file of 1 shot of the master play selection. If in loop mode, bounce will continue until you pres stop. What you hear is what you get. So tweaking the knobs as you bounce will get "recorded".



# [UNDO]

Pressing this will show a list of the history of your edits, which you can undo. Here you can go back to specific edits for A/B comparison. MIDI controller changes can be included if needed.



You can either choose an edit directly in the history list or use the backwards [<] or forward [>] symbol keys to move forth and back between edits for easy A/B comparison. (keyboard short cut [x] for < and [c] for >)

Include MIDI controller changes	• • • 120N
Index and under the density current state): 31. Charge algorithm of Child from Nythmic to Tonal 30. Randomized Child 22. Randomized Child 23. Randomized Child 24. Randomized Child 24. Randomized Child 25. Randomized Child 26. Randomized Child 26. Randomized Child 27. Randomized Child 28. Randomized Child 29. Randomized Child 20. Randomized Child 20. Randomized Child 20. Randomized Child 20. Randomized Child 20. Randomized Child 20. Randomized Child 21. Randomized Child	-
16. Randomized Child	

## [U.I. size]

Top bar to the far left, is the view size selection. Options depends on monitor capabilities. Max. Size 120%



#### Saving files

You can save setups via the Transformizer file menu as .trzb files. Within the DAW project, you create a folder in which you save .trzb files and media if needed. This way you make sure that your .trzb files + media is always at hand in your DAW



You also have the option to save the set-up internally e.g. in Pro Tools as .tfx. This means that the TRZ settings and path to audio files will be saved as a 'general setting' in the Transformizer Basic folder within the Pro Tools plug in settings folder. This approach requires that the actual audio files are available on the machine when opening the project.

# THE USER INTERFACE

#### Sections

The U.I. consists of a scalable window with 2 equally sized rectangular windows. A <u>Master SECTION</u> in the top and <u>Child SECTION A</u>, below.



All sliders can be controlled using the scroll wheel. **Double clicking a control slider, returns it to default position.** 

#### The Master Section.



This is the Master Section with a sound loaded. Sounds are loaded by drag dropping them into the M1 part of the section and TRZ always remembers the absolute path of the sound file.

#### **Basic operation**

#### A good way of operating TRZ in your DAW is:

Import the files you want by double clicking in the empty M1 window or drag files directly into TRZ. It is recommended to save TRZ set up files by creating a named folder (eg. TRZ) in the project folder of your DAW. It's an easy way to manage TRZ files for a particular project.



Use the 'reveal file' option by right clicking in the waveform window when a sound is loaded, to locate the file path if needed. (see <u>keyboard</u> <u>short cuts</u>) This goes for both Master and Child Section. The sound loaded in the Master window will be the basic factor for sound manipulation of the sounds in the Child section **and mandatory for Trz to play**.

# Master section part M1

M1 with a sound loaded (these controls are the same in Master and Child sections). This is where the audio waveform I displayed.



## [X] Clear button

Clears the section. **CAUTION** can't be undone.

### [F] File Name Section

Here the name of the file is displayed. And by pressing it or the check mark, all parameters of the the section will by-pass'ed

#### [F] Toggle File selector

Enable the user to reselect sounds in the current folder of the current sound. When active, an arrow for folder selection is also enabled to move to parent folder.



#### Waveform sub display



In the bottom of the waveform display window is a waveform sub display where the whole waveform is displayed statically at all times. Play selections are shown in 'red' and in this window, you can navigate inside the waveform regardless of the zoom of the main window.

#### **Play Selection markers**

Default play selection is the full with of the the audio waveform display.



The markers [S] Start and [E] End are set by either grabbing the letter [S] or [E] or the line connected to the them .

By shift+double clicking either the letter [S] or [E] or the line connected to them, **Start and End position of the Play Selection, the markers will swap**. TRZ will always play from [S] to [E], meaning that if E is before S the cursor will move right to left and the file will be played in reverse.

Double clicking either the letter [S] or [E] or the line connected to them, will return Start and End to the beginning or the ending of the Master audio file respectively.

Double clicking within the range in the Master section will make TRZ playback from where you click.

Pressing [S] or [E], will place the Start or the End of a play selection at the playback curser respectively.

You can move det whole play selection/range by simply grabbing in between the play selection markers and dragging left or right.

# **Master section Part M2**



#### EQ (High/Low Pass filters)

The low/high Cut filters are set at -48dB/oct. Click and drag the knob shape. In the waveform display window a corresponding line will indicate the amount of cut/boost.



#### ALGORITHM



The 4 different algorithm choices are modes, biased to improve the result of analysis on various kinds of sounds. Tonal is specifically for content with a tonal main content (sustained tones), Rhythmic towards transient sounds, Complex is based on a granular algorithm. Good with transient rich sounds and Complex2 is an alternative version of Complex. Also good with transient rich sounds

(these controls are the same in Master and Child sections)

These parameters are the core of TRZ and have a great impact on the results you create with TRZ. So please experiment thoroughly with this section, preferably in conjunction with the PITCH MODE parameter.

#### RANDOMIZER

The randomizer feature is meant as a means of getting started og getting inspiration for ways of manipulating sounds.



#### FILTER

Press FILTER to chose which parameters to randomise. You will have a pop up menu where you can select or deselect parameters. Once chosen the parameter gets a little check mark to the left. You can also set your own default set up for each section.



#### LEVEL



By tweaking the level button, you choose the level, LESS or MORE, of randomisation, ranging from 0 -

where 0 is none and 100% is	ENERCY	PITCH MODE	TONE
extreme.			

Results totally depend on the material used. Go nuts.

#### GO

By pressing the GO button, randomisation of the chosen parameters is engaged.



#### **TRANSIENT SHAPING**

Affects the sound of transients. This parameter is useful in shaping transients and maintaining contour. Small changes have a big impact depending on the sounds used.



#### **PITCH MODE**

Control for biasing the way the sound is perceived for further processing. Determines whether the emphasis on pitch analysis is mainly in the energy content (noisy sounds, texture) or overtone structures (vocals, instruments) Result is also depended on algorithm choice. **ENERGY** favours timing **TONE** favours tonal content. (*On/off button to the left. Goes for all sliders*)

ENERGY	PITCH MODE	TONE

#### **PITCH TRANSPOSE**

Enables transposing the sound loaded in the section. Transposes – to + 24 semitones in cent steps. When playing TRZ, a small indicator below the controller will indicate the approximate value of the Master for easy matching of pitch.



#### LOOP CROSSFADE



In the case where parts of a sound is used loop style, we've implemented LOOP CROSSFADE (in blue) The value is a percentage of the sounds length used for cross fading audio material and analysed pitch and amplitude curves to smooth discontinuities. If you want the snaps/clicks just leave it out.

#### SPEED

This parameter controls the global speed of the setup. Can be controlled from -300% – 300% in 1 pct. steps. This is the base speed applied to all sounds. The LCK button to the right will lock to the host tempo. Indicate a bar with the play selectors in the original tempo of the file and then engage the LCK button. Speed will be adjusted to that of the host. If the speed LINK button of the slave is on, what ever selection made in the slave selection will loop in perfect sync with the master and whatever's playing in your DAW.



## Part M3 of the Master section, controls



#### **Dynamics pre/post**

Controls whether the compressor is applied before or after the channel fader

#### **Dynamics on/off**

Bypass toggle the channel compressor on or off.

#### **Dynamics fader**

Control the agressiveness of the compressor. The slider controls both the position of the knee point, the compression ratio, and the time constants for the energy estimates in the compressor.

#### Dyn meter

Gives a visual indication of the amount of compression applied.

#### Mute buttons

Turns the volume for the individual sections Master and Child A on or off respectively. By shift-clicking the button, the output is solo'ed. Shift-click again to return.

#### Section faders

Control the output level of the Master and Child A on or off respectively. By shift clicking the master, the Child A fader below will be locked with it.

#### Section meter

Display the individual output level of the Master and Child A channel (metering range from -120 to 20 dB).

#### Main output meter

Displays the summed output level of the Master and Child A channel. (metering range from -120 to 20 dB)

#### Main output fader Controls the overall output level of TRZ

# THE CHILD SECTIONS



Sounds are loaded by either double clicking the empty waveform window or drag-dropping them in the C1 part of the Child section. This goes for both MASTER and CHILD Section.

# The Child section Part C1 controls

**Play Selection markers in the Child Sections** 

(Refer to p. 12 for explanation of controls)

# Part C 2 of the Child section, controls

EQ (High/Low Pass filters)

(Refer to page 15)

## ALGORITHM

(Refer to p. 15 for details)

#### **TRANSIENT SHAPING**

(Refer to p. 16 for details)

#### PITCH MODE

(Refer to p. 16 for details)

#### **PITCH TRANSPOSE**

(Refer to p. 17 for details)

#### SPEED

(Refer to p. 17 for details)

LOOP CROSSFADE

(Refer to p. 17 for details)

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# **KEYBOARD SHORT CUTS**

ACTION	SHORT CUT
Play/Stop in Host + TRZ	Press space bar
Play/Stop in TRZ	Press [p]
Play from mouse cursor	Double click graphics area
Return parameter to default value	Double click parameter curser
Reveal file	Right click graphics area
Reset volume in graphics window	Right click graphics area
Reset loop in graphics window	Right click graphics area
Adjust the Child play selection to the Parent play selection	Double click Start or End play selection cursor (either line, S or E symbol)
Set Start or End point of play selection	Press [s] or [e] on the keyboard
Swap Start and End play selection (will play the selection backwards)	Ctrl + double click Start or End play selection cursor (either line, S or E symbol)
Adjusting fine scroll left/right in graphics window. (Default coarse)	Cmd + scroll left/right (Mac) / Ctrl + scroll left/right (Windows)
Adjusting fine zooming waveform in or out in graphics window. (Default coarse)	Cmd + scroll up/down (Mac) / Ctrl + scroll up/down (Windows)
Solo in Place fader in Mixer	Shift + Click Mute button in mixer section
Group slider in mixer section	Shift + hold down mouse on fader, will cause other active faders below the chosen, to be locked to the movement of that fader.
Move play selection	Click on play selection and hold down mouse button. Move and release at desired position.
Enable automation	Press [D] in the graphics display
Undo a single or coalesced sequence of actions performed on the same parameter	Press [x] on the keyboard, or click the UNDO button in the upper right section to see history of actions performed. Click an item in the list to jump back to a previous state of the project. The list also has an option for recording changes performed via MIDI controllers.
Redo a single or coalesced sequense of actions performed on the same parameter	Press [c] on the keyboard
File toggle. Enables toggling files, maintaining your settings	Press [F] in the graphics display