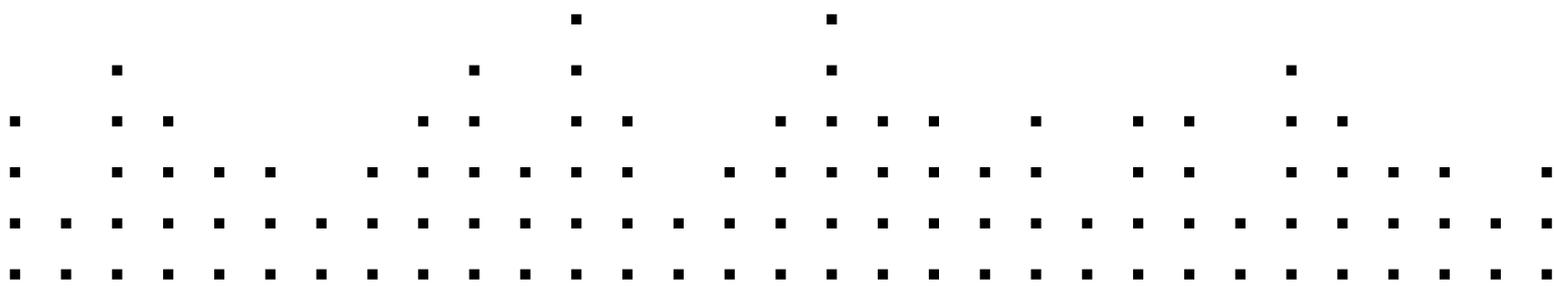


THE FINGER

MANUAL



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Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

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1 Welcome to THE FINGER!

THE FINGER is a powerful polyphonic effects machine, made specifically by Tim Exile for his performance based manipulation, but is equally useful in recording and studio situations. THE FINGER dynamically stacks up to 6 simultaneous effects in any order you chose. Each note within the four middle octaves (C3-B6) has a specific effect with its own settings assigned to it and the order you trigger the notes is the order the effects get layered. The effects can be as expressive as you are. The velocity of each note can change the sound dramatically and the Mod Wheel can be assigned to parameters that affect all the layered effects at once.

A Few Words by Tim Exile

I've always been into the idea of playing electronics like you play acoustic instruments. I used to sit at the back of class at school tapping out jungle breaks and edits. That's when I fell in love with my fingers. I want to be able to touch sounds with them. Not just read adverts about touching sounds with them. I want to go on sound adventures by finger alone. Just a pair of handpants in my palmsack.

I love it when sounds end up somewhere completely different from where they start off. I want to be able to play these transitions with my fingers & keep wandering with the sound. I don't want to end up back where I started. I don't wanna be on a leash like a goat chewing the same patch of grass all day. I want to be a free goat. I wanna check out what that weird mountain over there is like to be on not just look at.

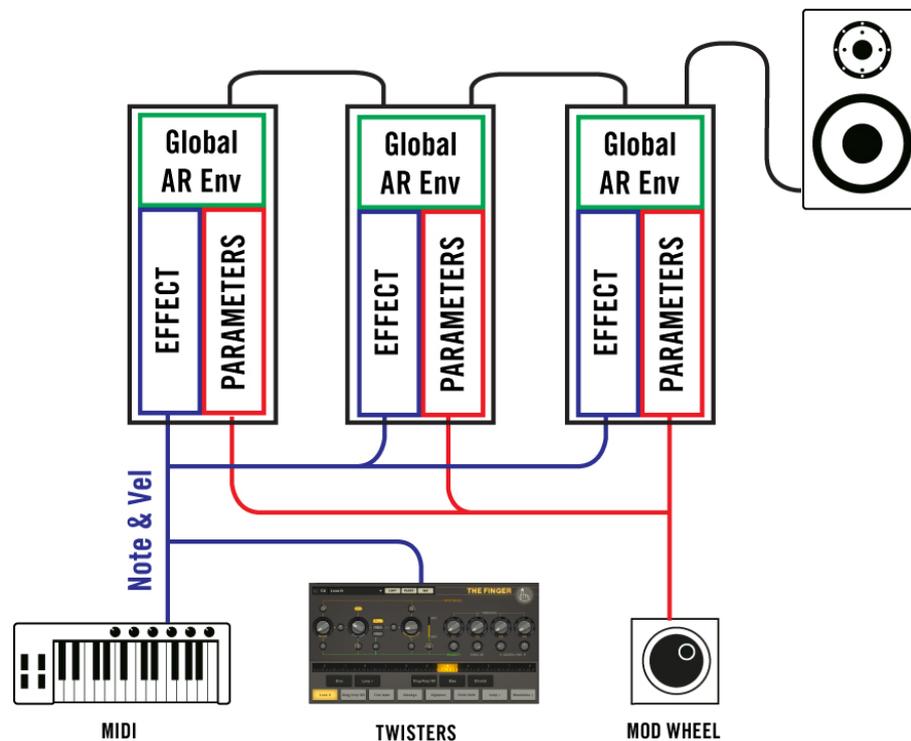
With THE FINGER you can keep on transforming the sound as long as you like. You don't have to go back home after 1 or 2 effects, wide awake and cursing your curfew. Just keep on applying effects, looping, mangling, smoothing, modulating until the cows come home, and all with those lovely fleshy pokey-hitty fingers of yours. You can be harsh, smooth, ambient or jarring. Go wandering in the studio or on stage.

Get those fingers out in the wild! - Tim

2 Content Description

THE FINGER consists of a bundle of REAKTOR Snapshots, all derived from a custom REAKTOR Ensemble by Warp artist, Tim Exile. Each Snapshot has one custom effect for each key within the four middle octaves (C3-B6) on the MIDI keyboard, all meant for real-time mangling of sound. It's an effect you can play like an instrument. And when you think that any six of these effects can be combined in any order, the number of possibilities well exceeds several hundred billion per REAKTOR Snapshot!

THE FINGER dynamically stacks effects in any order you chose. Each MIDI note has a specific effect with its own settings assigned to it and the order you trigger the notes is the order the effects get layered in, so chains can be arranged and re-arranged in no time. The effects are expressive as you are. Any effect can be changed by the force of the velocity and position of the Mod Wheel.



The Finger signal flow. Each Note triggers its own effect. Effects are layered on top of each other serially. The Mod wheel and Global AR Envelope affect all played effects.

Most of the 40+ sounds in THE FINGER are designed to be used as audio effect processors. This means that those REAKTOR Snapshots do not create sound by themselves, but modify an incoming audio signal instead. Consequently, you need to make sure to feed an audio signal into REAKTOR that you can apply the effects to. Because of the special MIDI interaction, see section 4 on setting up THE FINGER in a host.

Although all the sounds can be used without direct MIDI input by using a combination of the Twister Knobs and built in sequencers, all of the Snapshots benefit from receiving MIDI from your keyboard, so don't skip that section.

3 Interface Overview

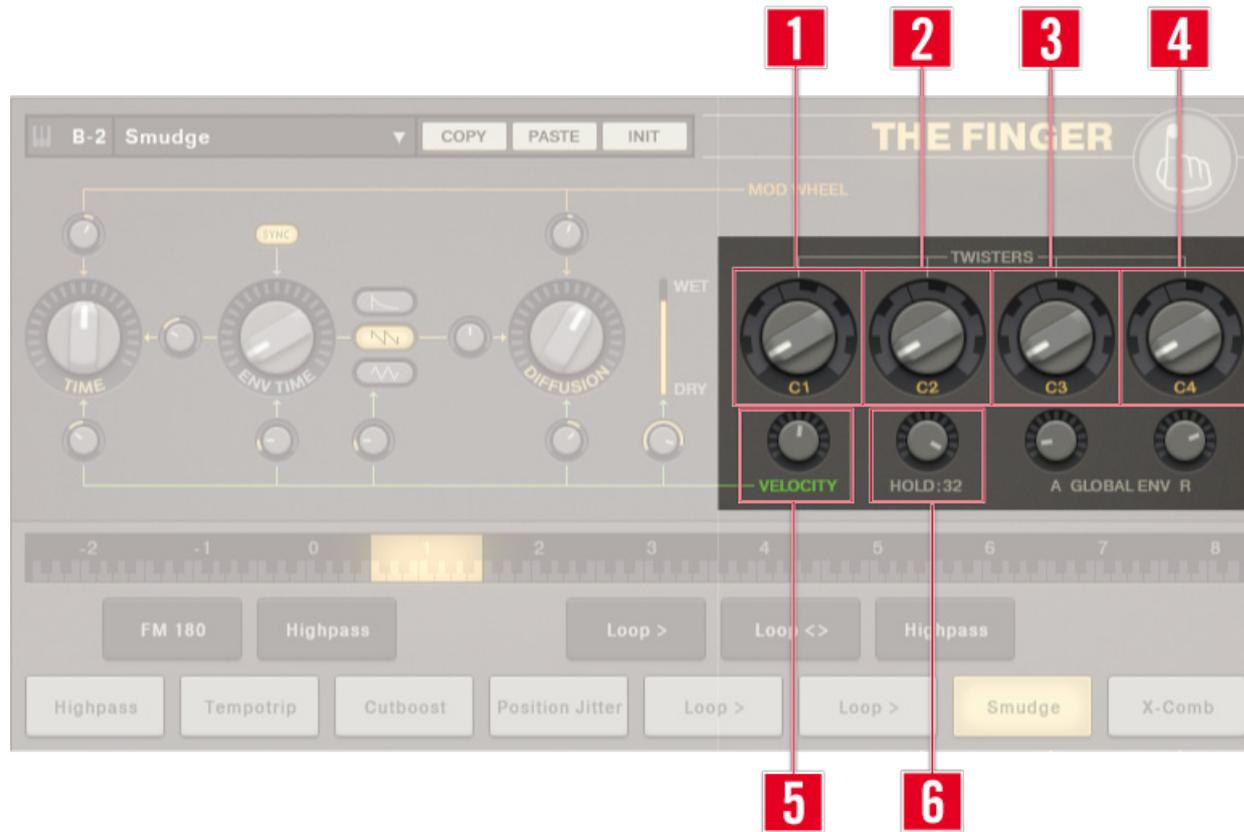
About the Ensemble

THE FINGER ensemble allows you to setup custom effects to any MIDI note. To edit an effect you only have to trigger that effect by playing it with MIDI, turning a Twister Knob to the correct note, or pressing the pad on the GUI for that note (you can use the octave display to go to the correct octave). The controls are dynamically adjusted to the effect you play.

THE FINGER was designed as real performance effect! Because the controls are tied to the last note played, it's best to setup all the effects you plan to use ahead of time and use your MIDI keyboard and Mod Wheel (CC1) to layer and tweak the effects in real time (the Mod Wheel can be crucial for controlling all the effects you have layered at once). Save your configuration as a snapshot to ensure you can always get back to your settings. There are also Copy, Paste and Initialize buttons to help you create a set of effects much quicker.



3.1 Twister Section



1-4 Twister 1-4: Cycles through effects in octave 1-4 respectively when you twist the knob. Effects are triggered with the velocity set by the Velocity knob and held for the amount of time (16ths) set by the Hold knob after you stop twisting the knob.

5 Velocity: Velocity assigned to Twister notes.

6 Hold: The length of a note in 16ths sent from the Twister knobs.

3.2 Global Envelope Section



- 7 **Attack:** Global amount of time effects take to crossfade in from the unprocessed input signal to the processed signal when a key is pressed.
- 8 **Release:** Global amount of time effects take to crossfade out from the processed signal to the unprocessed signal when a key is released.

3.3 Key's Effect Parameters Section



9 **Display of the active note for editing:** This is tied to the last note played.

10-11 **Parameter 1 & 2:** Two custom parameters of the effect chosen in the Effect Type menu.

12 **Effect Type menu:**



Clicking on this area will open a list of all available effects. To assign an effect to the active key, click on the effect name. To cancel, click outside the area.

3.4 Modulation Envelope Section



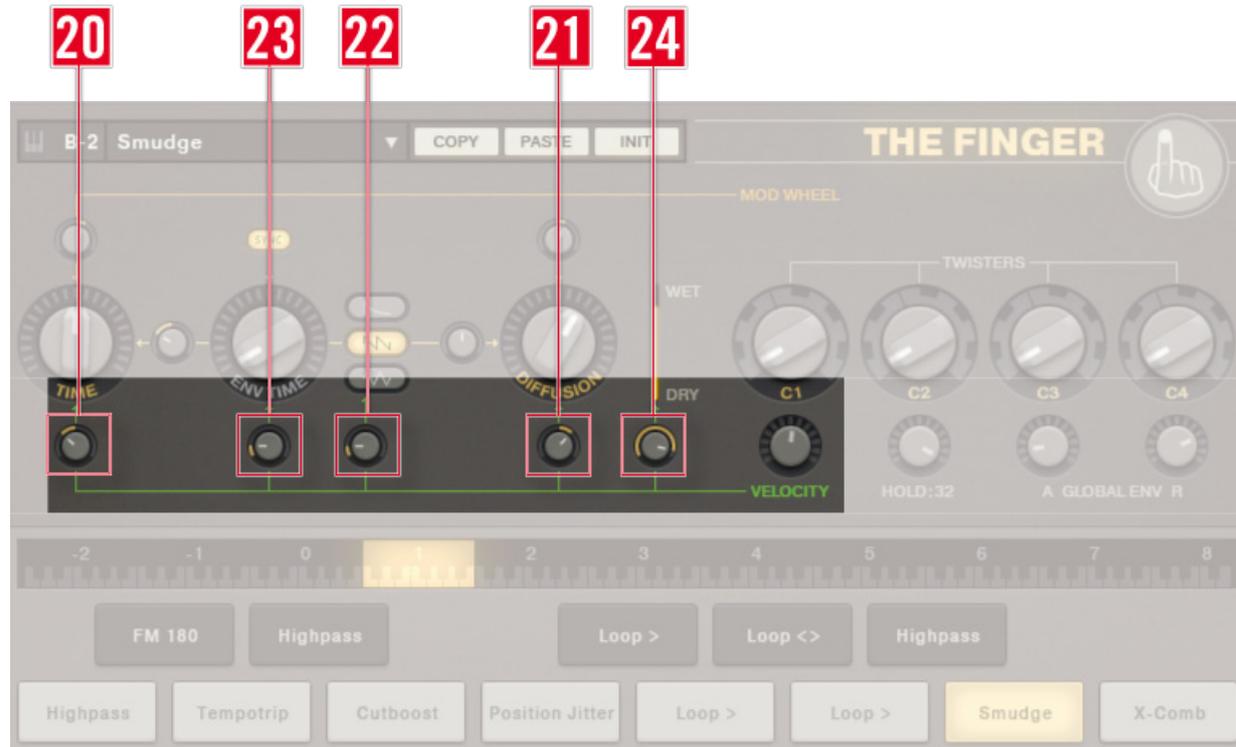
- 13 **Envelope type selector:** The first envelope will fire one time. The second envelope will loop beginning to end. The bottom type will ping-pong loop forward then back.
- 14 **Envelope Sync button:** When this button is on, the envelope will be quantized to 32nds. 1 x 32nd on the left and 64 x 32nds on the far right.
- 15 **Envelope Time:** The length of the Modulation Envelope.
- 16 **Envelope to Parameters 1 & 2:** A bi-polar amount (-100% to +100%) that the envelope will effect each parameter on this key's effect.

3.5 Mod Wheel Section



18-19 Mod Wheel to Parameters 1 & 2: A bi-polar amount (-100% to +100%) that the Mod Wheel (CC1) will effect each parameter on this key's effect. Using this CC1 in conjunction with these controls allows you to adjust the parameter depth of all active effects at once by moving your Mod Wheel (CC1). This is great for real time performance tweaking. For more info on sending MIDI to THE FINGER as an audio effect, see section .

3.6 Velocity Section



- 20-21 Velocity to Parameters 1 & 2:** A bi-polar amount (-100% to +100%) that the note on velocity will effect each parameter on this key's effect.
- 22 Velocity to Envelope Strength:** Amount velocity affects the overall strength of the modulation envelope. Low = velocity doesn't affect it at all. High = strength of the envelope depends entirely on velocity.
- 23 Velocity to Envelope Time:** Amount velocity effects modulation time.
- 24 Velocity to xFade:** Amount that key velocity effects how much effected signal is mixed with the original signal. Low = always crossfades to completely effected signal. High = velocity dictates how far the signal is crossfaded to the effected signal. High velocity = all the way. Low velocity = not much.

3.7 Key Trigger Section



- 25 Trigger Pads for Notes C-B:** The last note played is lit in yellow. You can click and hold any of these pads to trigger the effect on them, also activating the Key's effect parameters for that note. The area is always tied to the octave of the last note played. This area is also useful for remembering what effect is assigned to which note when you are playing.
- 26 Next C Trigger Pad:** Clicking the last C in the octave will trigger that note and forward the Trigger Pads to the next octave. The octaves wrap from 8 to 0.



27

27 Octave Navigation: The last octave played is lit in yellow. You can click on any octave to navigate the Trigger Pads to that octave.

3.8 Edit Section



28 COPY: Copies the current keys effect settings to the clipboard.

29 PASTE: Pastes the clipboard to the current key's effect.

30 INIT: Initializes the effect to a neutral setting. Triggering an effect after initializing will not change the sound. Initialize is great for starting an effect from scratch.

4 Use Cases

4.1 Triggering THE FINGER as an Effect via MIDI

Since THE FINGER is an extremely expressive effect layering machine, the best way to experience the effects is to play them yourself. THE FINGER responds especially well to Velocity and the Mod Wheel (CC1), so even when using THE FINGER as an effect try controlling your sound by triggering the effects manually from your MIDI keyboard and using your Mod Wheel. Sending MIDI to an effect isn't always that straight-forward in all hosts so read the sections below for a little help.

4.1.1 Ableton Live

In Ableton Live, insert the plug-in as an effect. Choose or create another MIDI track. Click on the “MIDI To” menu on the MIDI track and select the track where the effect was inserted. If there are more than one MIDI-enabled effects on the original track, you must select the specific plug-in you want the MIDI to go to from the drop-down menu below the “MIDI To” selection. Make sure you are recording enabled on the new MIDI track, or are using Monitor “In,” to send the MIDI to the plug-in.

4.1.2 Logic

In Logic, first insert the plug-in as an audio instrument from the track sub-menu called “AU MIDI-controlled Effects.” Then use the sidechain menu in the plug-in window to choose an audio track to route into the plug-in. The MIDI will come from the sequences on the audio instrument track (or live MIDI input if that track is selected in the Arrange window) and the audio to be processed will come from the sidechain track.

4.1.3 Cubase SX / Nuendo

In Steinberg products, first insert the plug-in as an effect and “activate” the plug-in. Select the plug-in as the output device for one of your MIDI tracks from the output device menu. The MIDI track will now send MIDI to the effect plug-in. To send MIDI, make sure the MIDI track is active, playing a clip or monitoring MIDI in.

4.1.4 FL Studio

In FL Studio, add the plug-in as an insert to the channel you want to process. In the plug-in window, on the arrow next to the folder icon on the left in the header, select “Show MIDI Port” from the drop-down. A new green area appears on the right of the plug-in wrapper’s header. Drag on this area to select a specific port number. From FL’s main menu select *Channels > Add one > MIDI Out*. On the MIDI Out instrument, select the same port you used for the plug-in. You can now send MIDI on from the MIDI out instrument’s track to the plug-in.

4.1.5 ProTools 8

Create one MIDI or audio channel with the plug-in used as an insert. Create a second track for the incoming MIDI. In the new MIDI track’s Input/output section on the mixer, select our insert. Now make sure you are recording on the new MIDI track (or use monitor to send MIDI always).

4.2 Generating MIDI with THE FINGER

You can also generate MIDI messages with THE FINGER by using the Twister knobs. See chapter [3.1](#) for a description of the Twister knobs’ functions.

5 Reference - Effect Types Specifics

Effect title	Effect Type	Parameter 1	Parameter 2	Technical description
Highpass	Filter	Cutoff	Resonance	2-pole highpass filter with resonance
Bandpass	Filter	Cutoff	Resonance	2-pole bandpass filter with resonance
Lowpass	Filter	Cutoff	Resonance	2-pole lowpass filter with resonance
Boost	Filter	Frequency	Boost	Swept EQ boost
Cut	Filter	Frequency	Cut	Swept EQ cut
Cutboost	Filter	Frequency	Amount	Dual swept EQ, cut before boost
Boostcut	Filter	Frequency	Amount	Dual swept EQ, boost before cut
Sine	Waveshaper	Amount	Cut	Sine waveshaping distortion
Ripped Cone	Waveshaper	Amount	N/A	Simulates a ripped speaker cone
Distortion	Waveshaper	Amount	N/A	Non-linear distortion
Bias	Waveshaper	Min	Max	Amplitude-stretches signal peaks
Degrade	Waveshaper	Sample rate	Bit rate	Sample rate decimate & bit crusher
Ring/amp mod	Modulation	Frequency	Intensity	Ring modulator/tremolo
Ring/amp mod	Modulation	Frequency	Intensity	Ring modulator/tremolo, wide stereo
Free gate	Modulation	Rate	Size	Audio gate/chopper
Sync gate	Modulation	Rate	Size	Tempo-synced audio gate/chopper
Level/pan	Modulation	Level	Pan	Level & pan control
Comb filter +	Delay	Frequency	Damping	Comb filter with positive feedback
Comb filter -	Delay	Frequency	Damping	Comb filter with negative feedback
X-comb	Delay	Frequency 1	Frequency 2	Cross-feeding comb filter
4-comb	Delay	Frequency 1	Frequency 2	4 stacked comb filters
4-comb stereo	Delay	Frequency 1	Frequency 2	Stereo stacked comb filters
Tempotrip	Delay	Length	Slip rate	Tempo-modulated dub delay
Tempoflip	Delay	Length	N/A	Tempo-modulated delay
Smudge	Delay	Time	Diffusion	Reverb
FM 180	Delay	Frequency	Amount	Frequency modulated delay
Position Jitter	Granular	Jitter	Grain size	Random time-shuffling of grains
Putty	Granular	Wobbly	Flabby	Granular effect
Snow	Granular	Flake size	Blizzard	Granular effect
Pitch shift	Granular	Pitch	Grain size	Granular pitch shifter
Pitch shift jitter	Granular	Pitch	Grain size	Granular pitch shifter with grain jitter
Pitch random	Granular	Pitch	Randomness	Pitch randomizer
Stretch	Granular	Speed	Grain size	Temporary time stretcher
Stretch jitter	Granular	Speed	Grain size	Temporary time stretcher with jitter
Reverser	Granular	Grain size	Speed	Grain reverser
Lose it	Granular	Dose	Metabolism	Wonky granular effect
Wavetable >	Wave sampler	Loop point	Speed	Forward looping wavetable
Wavetable <>	Wave sampler	Loop point	Speed	Forward-backward looping wavetable
Wavetable <	Wave sampler	Loop point	Speed	Backward looping wavetable
Loop >	Loop sampler	Loop point	Speed	Forward looping tempo-synced looper
Loop <>	Loop sampler	Loop point	Speed	Forward-backward looping tempo-synced looper
Loop <	Loop sampler	Loop point	Speed	Backward looping tempo-synced looper

6 Credits

REAKTOR Ensemble: Tim Exile

REAKTOR Snapshots: Denis Gökdag, Adam Hanley, Matt Jackson, and Tobias Menguser

Product Design: Matt Jackson, Adam Hanley, and Tobias Menguser

Graphics: Phirol, Gösta Wellmer

Skinning: Dietrich Pank

Testing: Dietrich Pank

Manual: Matt Jackson