

Monique Manual

Monophonic Unique Synthesizer

Intro

Monique is a monophonic, subtractive synthesizer designed to create unique sounds like basses or leads and also with to scope to do it live on stage.

We tried to keep all important parameters every time accessible on a large, free scalable, multitouch compatible user interface. Also we've build in advanced options to adjust slider handling and speeds to your personal needs.

Tip

Most of the functions are explained in tooltips inside the application. To show the tooltips move the mouse over a button or slider and stay for one second. Alternatively you can use CTRL+H to force a tooltip or use the option "Help → Force show tooltips in the context menu (right click on a slider). This option also works if tool tips are disabled.

Naming conventions

Dials, sliders, rotary sliders, linear sliders or whatever, we always call it slider.

About this Manual

The book starts with some user interface basics in part 1. In part 2 we follow the signal until the sound in your ear to understand the synthesizer itself. Then more and more complex things follow from part 3 (Envelopes) until and inclusive part 8 (Monique as Loop Station)). The leftover from point 9 is technical knowledge like Load and Save Programs.

So you can read this manual from 1 over 2 until 8 and grab all the additional information from technical part (from 9) if needed.

For the beginners we have added Wikipedia article links where we think it could be useful to get more information about for example the function of a delay without annoying advanced users.

Table of Contents

1	User Interface.....	5
1.1	Slider Concept (Front- and Backslider).....	5
1.2	Multitouch.....	5
1.3	Style / Themes.....	5
2	Sound Engine.....	6
2.1	Oscillators.....	6
2.1.1	Tune, Wave and Phase.....	6
2.1.2	Key Sync (K-SNC).....	6
2.1.3	Sync (SYNC).....	7
2.1.4	Modulate Tune or Phase by a LFO (L-MOD).....	7
2.1.5	Frequency Modulation (FM).....	7
2.1.6	Further reading.....	7
2.2	The FM Oscillator.....	8
2.3	Filters.....	9
2.3.1	Signal Flow, Input control.....	9
2.3.2	Parameter: Filter Type.....	9
2.3.3	Parameters: Cutoff and Resonance (CUTOFF, RESO).....	9
2.3.4	Parameter: Distortion (DIST).....	10
2.3.5	Parameter: Panorama (PAN).....	10
2.3.6	Parameter: Volume and its hidden Compression (VOL).....	10
2.3.7	The Modulation Mix, automate Parameters (MOD-MIX / X-MOD).....	10
2.3.8	Define the Modulation Mix.....	11
2.3.9	Automate the Filter Inputs.....	11
2.4	Amp Envelope.....	11
2.5	Equalizer Bank (EQ).....	12
2.6	Effects (FX).....	12
2.6.1	Distortion (DIST).....	12
2.6.2	Chorus (CHORU).....	13
2.6.3	Delay (DELAY, F-BACK, RFLEX).....	13
2.6.4	Looper (FILL, REL, SIZE).....	13
2.6.5	Reverb (REVERB, ROOM, WET).....	13
2.7	Master volume and another hidden Compression.....	13
3	Envelope (ENV).....	14
3.1	Definition.....	14
3.2	Monique's Envelopes (ENV).....	14
3.2.1	Parameter: Retrigger (RETRIG).....	14
3.2.2	Parameter: Shape (SHAPE).....	15
3.3	Edit Envelopes.....	15
4	LFO.....	16
4.1	Parameter: Wave (WAVE).....	16
4.2	Parameter: Speed (SPEED).....	16
4.3	Parameter: Offset (OFFSET).....	16
5	The Arpeggiator.....	17
5.1	Turn the Arpeggiator On/Off or force it On/Off! (ARP).....	17

5.2Steps, Note, Velocity.....	17
5.3Parameter: Shuffle (SHUFL), Grid Offset (OFFSET)(left).....	17
6Playback Parameters.....	17
6.1Note Glide, Velocity Glide (NOTE (GLIDE), VELO (GLIDE)).....	17
6.2Speed, Sync, Fine Offset (OFFSET)(right) Speed Multiplier.....	18
6.2.1Plugin Speed and Sync Implementation.....	18
6.2.2Standalone Speed and Sync Implementation.....	18
6.3Octave, Project Note, Reset (OCT, P-NOTE, RESET).....	18
7Morphing. Think like a DJ, rock the stage live!.....	19
7.1Morph from exiting programs. Be a DJ.....	19
7.2Evolute live. Be a Improviser and Designer.....	20
7.3Automate Morphs. Be a Machine. (MFO).....	20
7.4Morph Smoothing.....	21
7.5DragPad and Smoothing (SMOOTH).....	21
7.6Option: Animate Morphs.....	21
7.7Morph Exceptions.....	21
7.8Parameter Group List.....	21
8Live jam? Monique as Loop Station (FILL, REL, SIZE).....	22
9CTRL.....	23
10SHIFT.....	23
11Context Menu.....	23
11.1Restore Values.....	23
11.1.1User.....	23
11.1.2Factory Default.....	23
11.1.3State On Program.....	23
11.1.4Undo.....	23
11.2Set new User Value (Update Values).....	23
11.3Global Double Click Return Mode and Value.....	23
11.4Global User Input Smoothing.....	24
11.5Global Slider Handling.....	24
11.5.1Linear Slider Handling.....	24
11.5.2Rotary Slider Handling.....	24
11.6Animations.....	24
11.7MIDI.....	25
11.7.1Map MIDI Controller.....	25
11.7.2Snap to MIDI input.....	25
11.8Help.....	25
11.9Global Settings.....	25
11.9.1Save / Load Global Settings.....	25
12Load, save and Program Management.....	25
13Audio Devices (Standalone only).....	26
14 Connect your Keyboard (Standalone only).....	26
15MIDI Mapping.....	27
15.1MIDI Feedback.....	27
16Automation Parameter (Plugin only).....	27
17 Shortcuts.....	27
18Workarounds (Plugin only).....	28
19Gear Overview.....	28

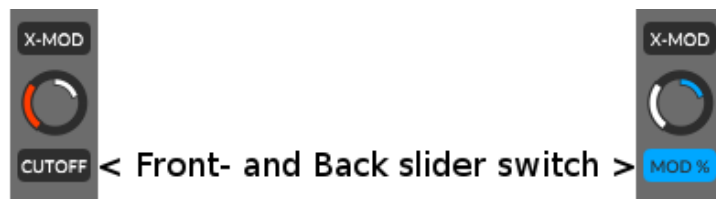
1 User Interface

Keyboard shortcut: SHIFT

1.1 Slider Concept (Front- and Backslider)

Monique comes with a dual slider concept to bundle interactive or similar parameters in to one location. If you have a button directly under a slider, then this is always a switch between front- and backslider or opens a popup with advanced options.

1.2 Multitouch



Monique user interface is multitouch compatible and we tried to arrange the control elements to get the largest possible information by largest possible clearness.

1.3 Style / Themes

In the setup (SETUP) you can find a few factory color themes to change Monique's style to your needs. If none of Monique styles matches to you, you can adjust the colors by yourself.

Excuse us for the simple color editor, but we was thinking we should spend the time we save at the color editor into the sound engine.

2 Sound Engine

Monique's sound engine basically has 3 oscillators, 3 filters, an equalizer bank, build out of 7 resonant band filters and a few effects. But under the hood is much more you should know.

2.1 Oscillators

Three oscillators continuously pulsing in Monique's body and can't wait to spread their digital lives in to your ears.

2.1.1 Tune, Wave and Phase

The first one is known as the master oscillator and is always tuned to the currently playing note (also called: root note). The second and third one can be detuned to the master oscillator or rather to the root note by using the tune slider.

Range: -24 / +24 semitones or 4 octaves in total.

Handling: use the mouse wheel to adjust whole semitones

The waveform of each oscillator can be changed by moving the left wave slider. The little graphic on the slider will show you the current wave which can be built/morphed out of a sine and square, square and saw or saw and noise.

Waveforms: Sine-Square, Square-Saw, Saw-Noise (white)

Handling: use the mouse wheel to switch to the next clean wave form

The master oscillator comes with a phase shift option instead of detune for the second and third ones. Phase shift will move the master oscillator cycle on the time axis.

The phase option does make the most sense if you like to let the master oscillator work against the second and/or third oscillator. However, you can also use it in combination with the K-SNC option (point below).

Max Phase shift: one complete cycle.

2.1.2 Key Sync (K-SNC)

Be Monique's pacemaker and keep her hearts in sync with your fingers.

By default Monique's oscillators will never stop and generate a continuously, clean buzzing sound. Absolutely independent from the keys you hit on the keyboard.

However, percussive sounds, for example, do need a reproducible sound on each note-on, every time, and this a continuous wave can not provide. To generate such reproducible characteristics



enable the Key Sync feature (K-SNC button) on the master oscillator to force a new wave cycle for each note-on for each oscillator.

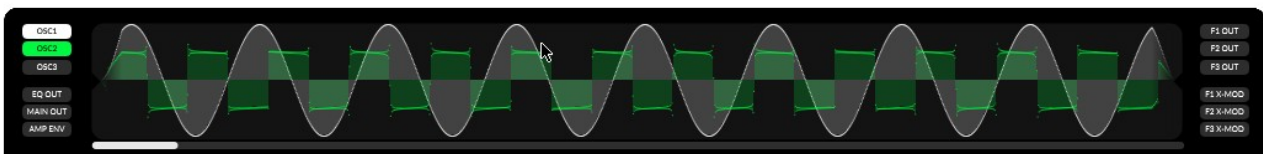
Tip: enabled Key Sync and Phase Shifting can be the missing link for aggressive sounds

2.1.3 Sync (SYNC)

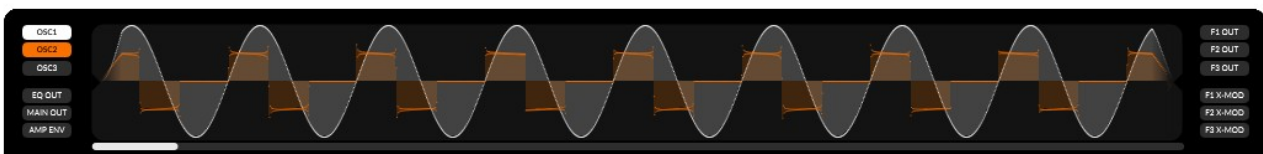
Oscillator two and three can be synced to the master oscillator by turning on the SYNC buttons.

If an oscillator is synced to the master, then the synced oscillator waits at the end of its own cycle until the next cycle of the master oscillator to start its own new cycle.

Oscillator 2 NOT synced (green).



Oscillator 2 IS synced (orange).



2.1.4 Modulate Tune or Phase by a LFO (L-MOD)

To automate the tune or phase shift parameter you need to enable the L-MOD button. The modulating LFO for the phase offset is LFO 1 (same row, filter 1). The tune of the second and third oscillators will be modulated by LFO 2 and 3.

The power of the automation you can adjust by the backslider of the tune or phase slider.

Further reading: [The Modulation Mix, automate Parameters](#)

2.1.5 Frequency Modulation (FM)

The amount of the frequency modulation of each oscillator can be adjusted by the FM slider (backslider of the wave sliders (see [The FM Oscillator](#))).

2.1.6 Further reading

[The FM Oscillator](#), [Note Glide](#), [Velocity Glide](#)

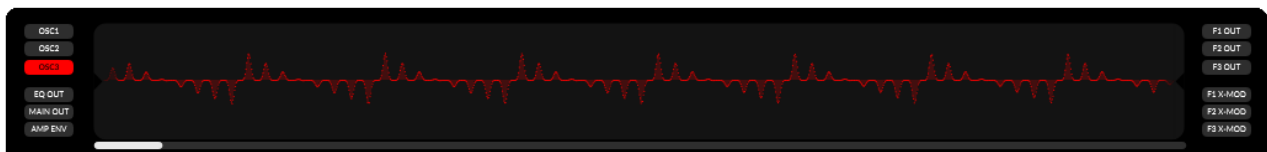
2.2 The FM Oscillator

The FM oscillator is a shapeable sine wave oscillator combined with an LFO for its swing modulation option. 3

You can not hear or route the FM oscillator directly to the output, but instead you can add it as subset to each oscillator with the FM slider of each oscillator (the FM Amount slider is the backslider of the oscillators wave slider – is set to 100% at oscillator 3 in the right graphic).

The adjustable tune of the FM oscillator depends on the tune of the master oscillator and can be 2.01 up to 8.01 times faster.

Just take a look at the two oscilloscope screens. The first one shows a clean, unmodulated saw wave. The second one shows the same oscillator with a maximum FM amount (the same settings like in the graphic right).



Also it is possible to sync the FM oscillator by turning on the SYNC button. The sync algorithm is the same as for “normal” oscillators. In sync the FM oscillator waits at the end of it's cycle for the next cycle of the master oscillator to start its own new cycle.

By the swing option you can rotate the FM oscillator around its own center. This has an similar effect like a vibrato.

Field trip: open the oscilloscope and select an oscillator you like to modulate. Go to the oscillator of your choice and set the FM amount to 50-75%. Now in the FM section you can play around with the parameters and you can see what happens in detail.

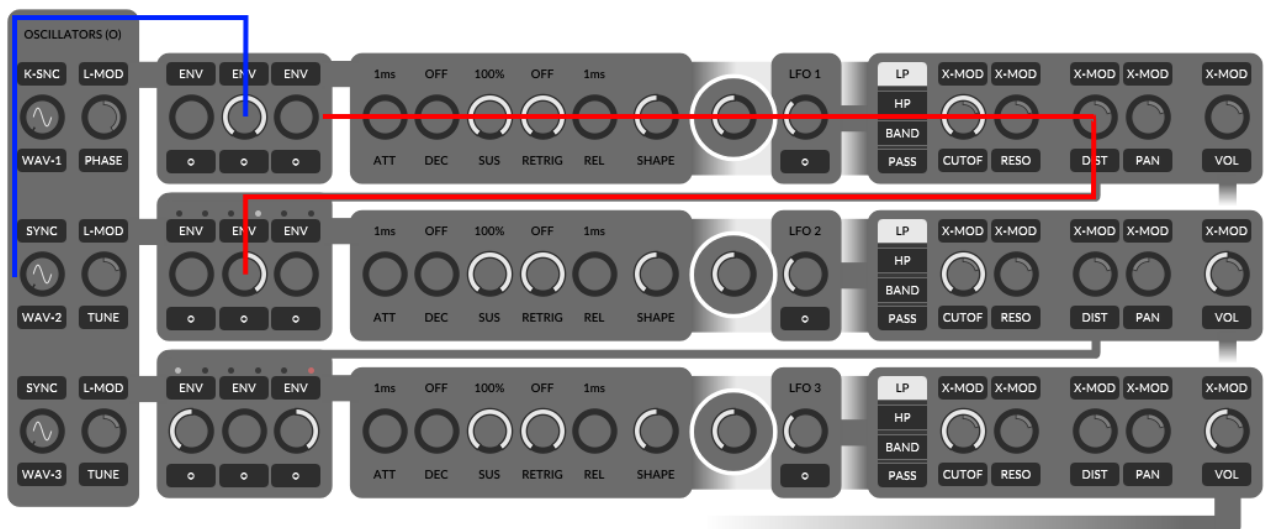
2.3 Filters

2.3.1 Signal Flow, Input control

Each of the three main filters is build out of three single filters to have a own track for each oscillator.

The three tracks will be mixed into a stereo track at each filter output. Before the output mix you can route filtered oscillator signal to the next filter or filter below. To grab that signal from the next filter you have to move the input slider to the right (on the left you grab the oscillator signal directly).

At the sketch below we use the second oscillator as only input of filter 1 (blue line). Then we process the signal in filter 1 and grab it as only input for filter 2 before the pan effect of filter 1 (red line).



Also you can take a look at filter 3 (bottom one). There we use oscillator 1 as direct input, because the input slider is turned to the left. At input three we have an error or silent track, because we try to grab oscillator 3 processed through filter 2 (slider is on the right position), but filter 2 does only process oscillator 2 and not 3.

Further reading: [Automate the Filter Inputs](#)

2.3.2 Parameter: Filter Type

Three fundamental filter types has Monique build in: LowPass (LP), HighPass (HP) and BandPass (Band).

Notch- and band filters with adjustable cutoff frequencies you can create by routings from filter 1 in to filter 2 or filter 2 in three.

2.3.3 Parameters: Cutoff and Resonance (CUTOFF, RESO)

The filter cutoff defines the edge frequency there the filter pass or rather remove frequencies from the signal.

Possible range: 35Hz up to 22000Hz

Resonance defines the gain of the edge frequency (cutoff).

2.3.4 Parameter: Distortion (DIST)

The filter distortion effect processes the signal after the filter itself.

2.3.5 Parameter: Panorama (PAN)

With the panorama effect you can control the arrangement of the filter output in a 2D stereo field.

2.3.6 Parameter: Volume and its hidden Compression (VOL)

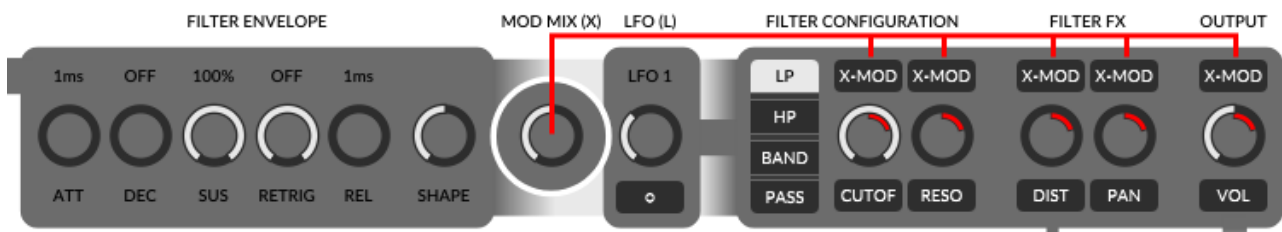
With the volume you can control the output gain of the filter.

Also you should know that Monique automatically compresses signals with too much power and you can assume that an output volume greater 50% starts to compress the signal more and more by increasing the volume.

To visualize the compression: open the oscilloscope and select F1 OUT. At filter 1 set the input for oscillator 1 to maximum, set oscillator 1 wave form to sine and now play around with the filter 1 output and see what happens.

Another interesting experiment: same settings as before, but set all oscillators to saw and set all three inputs at filter 1 to max. Now play with the output volume and if you like with the distortion effect to.

2.3.7 The Modulation Mix, automate Parameters (MOD-MIX / X-MOD)



The modulation mix is a signal which will be mixed out of an envelope curve and a LFO wave and can be used to automate: Cutoff, Resonance, Distortion, Panorama and Volume.

Automate? Yes, we don't move the slider manually, we let the modulation mix do this for us.

To automate one of these parameters by the modulation mix you have to turn on the modulation button (X-MOD) on top of the parameter slider. To adjust the maximum amount by which the modulation mix changes the modulated parameter, switch to the modulation amount slider or backslider and adjust it.

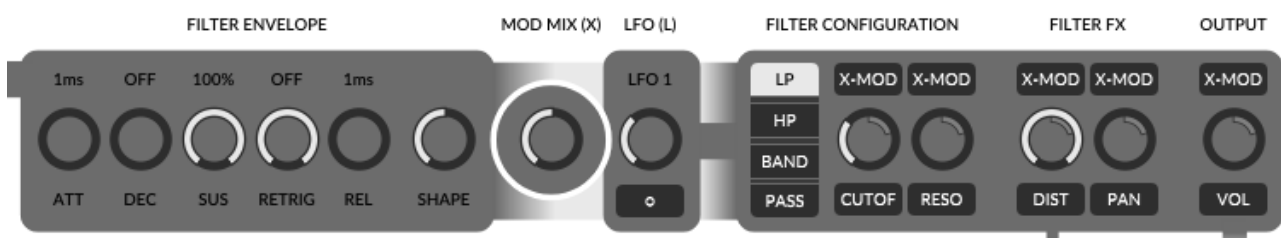
The modulation amount (MOD %) is defined in percent and depends on the parameter value itself (front slider). Let us calculate the modulation result quickly at an example: Distortion is set to 0, X-Mod is turned on and the modulation amount is set to 50 percent. This setup will result in a distortion of 0 at the smallest amplitude of the modulation mix and a distortion of 50 at the largest amplitude of the mod-mix.

Now we set the distortion to 80 and keep the 50 percent mod-amount. This will result a distortion of 80 at the smallest mod-mix amplitude and a distortion of 90 at the largest possible mod-mix amplitude.

2.3.8 Define the Modulation Mix

After we know how we use the modulation mix for parameter automations we like to create more complex modulation mix curves to get a breeze of live to our sound.

In the middle, between Envelope parameters and LFO is the MOD MIX slider. Which defines the amount of the envelope curve and the amount of the LFO wave in our final modulation mix, which we can use for automations. On the absolute left position of the MOD MIX slider we only use the envelope curve as modulator signal (graphic below), on the right only the LFO and in the middle a fifty fifty mix of both.



When should I use the LFO and when the envelope? This is up to you, but you should know that Monique's envelopes are always time based (in milliseconds) and LFO's are always synced to your projects speed and match to musically note durations.

2.3.9 Automate the Filter Inputs

To complete the filter part we have to talk about the ENV buttons on top of the filter input sliders to automate the inputs.

The basic concept to automate the inputs is the same like for all automations: turn on the top button will turn on the automation, but in this case it will change the effect of the input slider itself. If the automation is turned OFF, the input slider defines a fixed input amount for an oscillator. If the automation is turned ON, the input slider defines the maximum power of an envelope curve on the input amount for an oscillator.

The envelope curve you can edit by click the botton with the little cycle "o".

Further reading: [Edit Envelopes](#), [LFO](#)

2.4 Amp Envelope

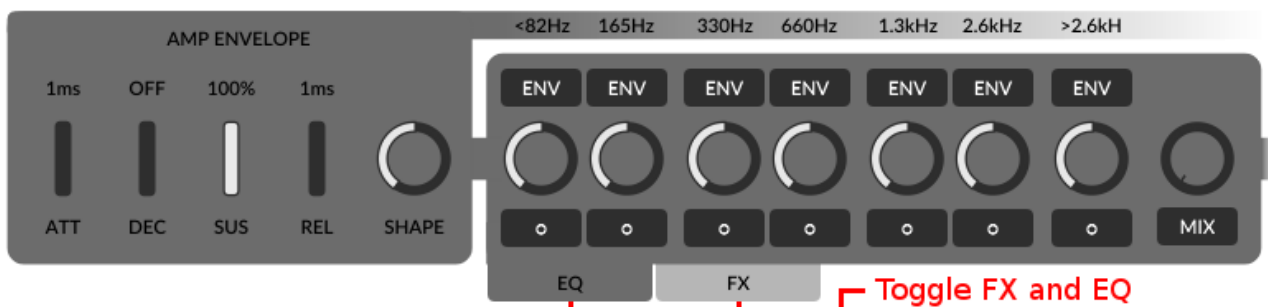
The working place of the amp envelope is before the EQ bank, after the output mix of the three main filters. That means, that the amp envelope controls the volume of the mixed filter signals before the EQ bank and FX section.

Further reading: [Envelope \(ENV\)](#)

2.5 Equalizer Bank (EQ)

The seven band filters in the equalizer bank will help you to improve the fine details of the sound you have created in the main filters before. The complete bank is bypassable with the mix slider on the right. Also you can control the resonance of all the filters by one slider, which you can find as backslider of the mix slider.

That's not all, all band gains are automatable by an own envelope. This follow the same concept which we already know from: [Automate the Filter Inputs](#).

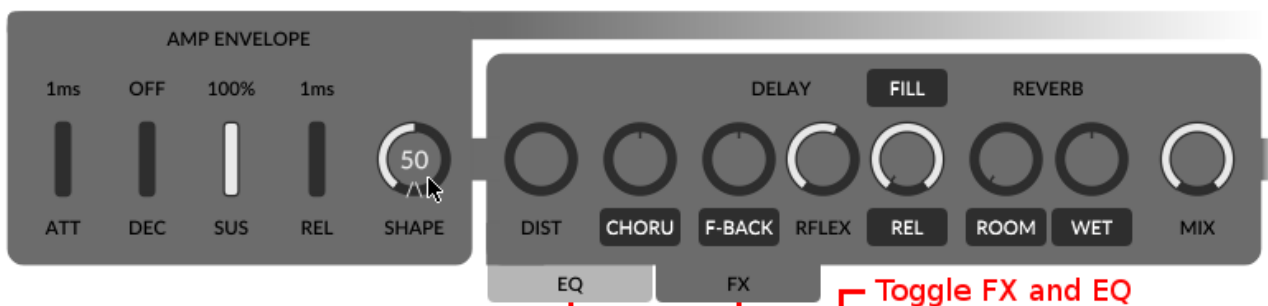


By default you will see the FX section instead of the EQ bank. To toggle between FX and EQ you can use the two little tab buttons (see red makers on the screen above and below).

Further reading: [Automate the Filter Inputs](#), [Envelope \(ENV\)](#)

2.6 Effects (FX)

After the EQ bank it's time to send your sound through a pan- and bypassable effect chain. First of all we have a distortion, followed by a chorus and a delay bundled with a second buffer for a looper effect. At the end of the chain you can round up the signal through a reverb or bypass all effects by the mix slider.



2.6.1 Distortion (DIST)

The distortion effect you can use to gain and destroy your signal.

Wikipedia Distortion: [https://en.wikipedia.org/wiki/Distortion_\(music\)](https://en.wikipedia.org/wiki/Distortion_(music))

2.6.2 Chorus (CHORU)

Five delay lines modulated by five oscillators are Monique's chorus effect. The chorus is arrangeable in the panorama by using the backslider of the chorus.

Wikipedia Chorus: https://en.wikipedia.org/wiki/Chorus_effect

2.6.3 Delay (DELAY, F-BACK, RFLEX)

With an adjustable reflection size comes Monique's delay and like the LFO's the size is synced to the your current project speed. To arrange the delay effect in the panorama you can use the backslider of F-BACK.

Wikipedia Delay: [https://en.wikipedia.org/wiki/Delay_\(audio_effect\)](https://en.wikipedia.org/wiki/Delay_(audio_effect))

2.6.4 Looper (FILL, REL, SIZE)

The Looper has an own part: [Monique as Loop Station](#)

2.6.5 Reverb (REVERB, ROOM, WET)

Last but not least the reverb effect. Three parameters to control the effect itself: room, width and wet. The panorama arrangement you can adjust with the backslider of the wet one.

Wikipedia Reverberation: <https://en.wikipedia.org/wiki/Reverberation>

2.7 Master volume and another hidden Compression

By the master volume you can adjust Monique's final output volume. Also will be each sound sample compressed which has an gain greater 90% of the maximum allowed output . If you like you can use this as an effect too.

3 Envelope (ENV)

3.1 Definition

For the beginners the Wikipedia definition for an ADSR envelope:

“When an acoustic musical instrument produces sound, the loudness and spectral content of the sound change over time in ways that vary from instrument to instrument. The "attack" and "decay" of a sound have a great effect on the instrument's sonic character. Most often this is an "ADSR" (Attack Decay Sustain Release) envelope, which may be applied to overall amplitude control, filter frequency, etc. The envelope may be a discrete circuit or module, or implemented in software. The contour of an ADSR envelope is specified using four parameters:

- Attack time is the time taken for initial run-up of level from nil to peak, beginning when the key is first pressed.
- Decay time is the time taken for the subsequent run down from the attack level to the designated sustain level.
- Sustain level is the level during the main sequence of the sound's duration, until the key is released.
- Release time is the time taken for the level to decay from the sustain level to zero after the key is released.”

Source: <https://en.wikipedia.org/wiki/Synthesizer>

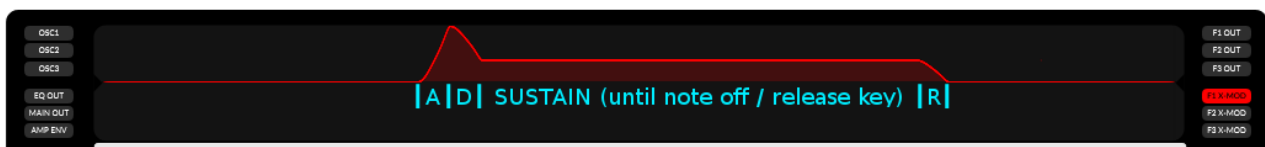
3.2 Monique's Envelopes (ENV)

Monique's envelopes are ADSR envelopes like the definition above and we add two additional parameters: Retrigger and Shape.

- Good to know: Envelopes in Monique are always absolute time based in milliseconds. LFO's instead are synced to note duration and depending on your project speed.

3.2.1 Parameter: Retrigger (RETRIG)

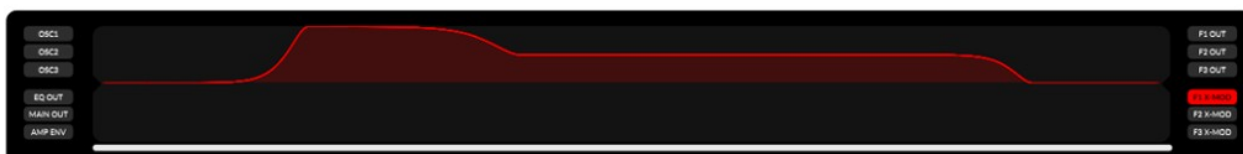
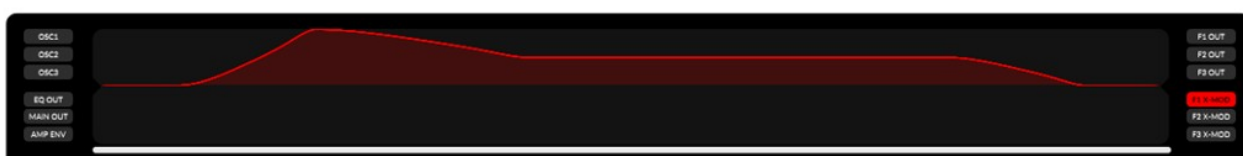
Retrigger define the duration after which the envelope will be restarted. The retrigger timer starts after reaching the sustain level. Take a look at the two oscilloscope screens. The first one shows a standard ADSR envelope and the second one shows the same envelope with enabled retiggers.





3.2.2 Parameter: Shape (SHAPE)

Monique's envelope curves are never 100% linear. With the shape parameter you can define the slope of the curve. The nearest to linear slope is at the center of the shape parameter range. Please take a look at the oscilloscope screens, the first one shows a envelope curve with the shape parameter at zero. At the second one the shape parameter is set to -100 and the third screen shows the same curve again with a shape value of 100.



3.3 Edit Envelopes

All of Monique's twenty envelopes working identically, just the retrigger parameter you'll miss at the amp envelope, because this should be done by note-on's or/and note-off's.



If you edit an envelope in a popup you have a little preview screen on the right (see screen above). If you edit one of the filter- or the amp envelope you can use the oscilloscope to visualize your settings in real time.

To edit envelope parameters via keyboard you can click the label on top of the slider and just enter the value in milliseconds you like.

If you don't like the linear sliders, we have build in the option to only use rotary sliders. Just open the context menu and toggle the entry "GLOBAL SLIDER HANDLING → LINEAR SLIDER HANDLING → Only use linear sliders".

Further reading: [Automate the Filter Inputs](#), [Equalizer Bank \(EQ\)](#)

4 LFO

Monique's low frequency oscillators (LFO) you can use to automate parameters by a sine or near to square wave. Monique has a LFO bundled in each filter and four LFOs driving the morph automations.

- Good to know: LFO's in Monique are always synced to note duration and depending on your project speed. Envelopes instead are absolute time based (in milliseconds).



4.1 Parameter: Wave (WAVE)

Transform the the sine wave to a square wave (near to square, it will be never a perfect square wave).

4.2 Parameter: Speed (SPEED)

Adjust the LFO cycle duration in common note durations.

Range: 16/1 to 1/64

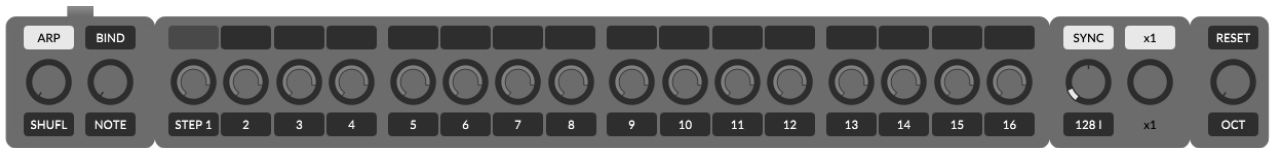
4.3 Parameter: Offset (OFFSET)

With the offset parameter you can move the LFO cycle in the time line with an maximum of one complete cycle.

Further reading: [Modulation Mix](#), [Automate Morphs](#)

5 The Arpeggiator

Monique has also build in a one pattern sixteen step sequencer to create arpeggios on the fly or to trigger the right notes at the right time in a performance.



5.1 Turn the Arpeggiator On/Off or force it On/Off! (ARP)

The ARP button turns the arpeggiator on or off.

If the mouse is over the ARP button a pop up will rise and you can force the arpeggiator to be always on or off and ignoring the program settings. This might be helpful if you send notes to Monique during you switch through your Monique programs and some of them are stored with arpeggiator on and some with off.

5.2 Steps, Note, Velocity

In the middle you have 16 steps, splitted in four 4x4 step groups. By the top button of each step you can enable that step to trigger a note at this position in the bar. The slider below, the note value offset slider defines the note for this step as offset to the current playing note (root note) in semi tones. As backslider of the note offset slider you'll find the velocity slider which defines the velocity or volume value of this step.

5.3 Parameter: Shuffle (SHUFL), Grid Offset (OFFSET)(left)

Increasing the shuffle value will enlarge the duration of each first step and moves every second step by this increasement to the future and shrink the duration to match in the leftover space. Just play around, you will hear and see what you do.

By changing the grid offset, the backslider of shuffle, you can move all the steps in the pattern to the right. This can be useful if you have already a project and a nice pattern, but it does not match from the view of the step positions – then you can try to find a better position in the grid of the bar.

6 Playback Parameters

The following Parameters are beside the arpeggiator, but they does also work on each note you send from keyboard or rather via MIDI.

6.1 Note Glide, Velocity Glide (NOTE (GLIDE), VELO (GLIDE))

Note- and velocity glide are very similar parameters. With both you define the time in milliseconds

how long a value change should take.

Velocity glide is the backslider of note glide slider.

6.2 Speed, Sync, Fine Offset (OFFSET)(right) Speed Multiplier

With the speed slider, right of the arpeggiator you can adjust Monique's internal clock speed and the sync button above let run Monique as synced slave or master with own internal clock.

6.2.1 Plugin Speed and Sync Implementation

If sync is disabled Monique ignores the host speed and runs absolutely independently at the defined speed. This can be useful if your current DAW speed does not match to the speed in which Monique's current program is designed and you like to get the original feel or if you like to do some experimental out of beat stuff. Otherwise, if sync is enabled Monique runs in sync with the host speed.

6.2.2 Standalone Speed and Sync Implementation

If you drive Monique as MIDI clock slave the size of the looper- and delay buffer are still depending on the internal clock speed, because the midi clock is not exact enough to set/keep the correct buffer size. All other things like LFOs stay in sync to the incoming clock as expected.

If Monique does not receive a clock, the sync function has no effect.

6.3 Octave, Project Note, Reset (OCT, P-NOTE, RESET)

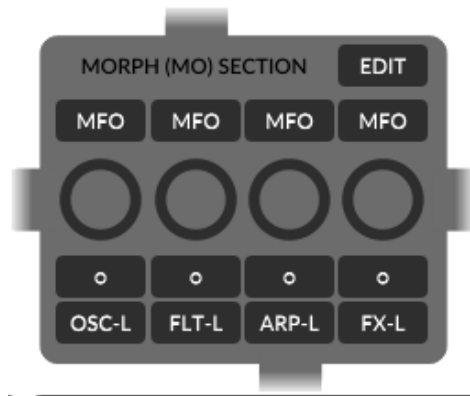
With the octave offset you can pitch the root note by -2 up +2 octaves.

The project note is the backslider of the octave offset slider and is more a helper as a real parameter. If you design a sound for example on E instead of C you can adjust the project note to E and you'll never forget for which note this sound was created. Also you can see the project note as additional caption on Monique's keyboard.

By pushing the reset button you'll send a short note-on with the value of the project note to trigger the arpeggiator without keyboard.

7 Morphing. Think like a DJ, rock the stage live!

The morphing features of Monique are one of those features we have the most fun with by ourselves. It reminds us to the record case of a DJ and its mixing desktop with 4 turntable pairs. Each of our turntable pairs has a own job. One of them mixes out of two records new oscillator values, one out of two new filter values the next one new arpeggiator values and the fourth one mixes new FX and EQ values.



There are two basic ways to put the records on the turntables. One is to edit it manually, may be as a copy or evolution of the current state and the other one is to take a record out of our box of well known records.

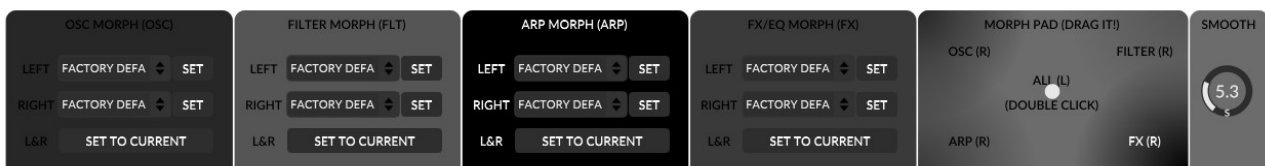
7.1 Morph from exiting programs. Be a DJ.

We start like a DJ would, we take a well known program from our hard disk and put it on Monique's morphtable.

Let us start to mix new filter values. This is a tutorial, please open Monique and follow me.

First we load the factory default program: "AMBIENT 2". At the morph mixer we disable all buttons and turn all sliders to the absolute left (0) to prepare our experiment (graphic above) .

Then we open our record case, the morph editor by hit the EDIT button in the morph mixer. From the morph editor we can load any program we have on to any of our 8 morphtables we like – the left or right side of one of the four morphtable pairs, which we like to call morph group now.



Now we go to the morph editor and in the FILTER MORPH group we load the program "TZZZ" from the RIGHT drop down box to the right table. Back to the morph mixer we turn the filter morph slider (FLT) slowly to the right. The changes in the sound we can hear is a mix out of the states we have on the left table and the new states we loaded on to the right table. When we reach the absolute right of the filter morph slider there only left the filter settings of the new right program ("TZZZ"). To also

load button states we can toggle the FLT-L or rather FLT-R button in the morph mixer to switch between left and right button states (some exceptions later in the text).

Yes, its the same routine to mix oscillator states, arpeggio or FX/EQ states.

7.2 Evolute live. Be a Improviser and Designer.

Lets go on like a real live artist. Let us evolute our records live on the basics we have learned before and update our records live.

Let us create new Filter and FX mixes. This is a tutorial, please open Monique and follow me.

Let us load the program "IMPROVISER". Then we turn all morph sliders in the morph mixer to the left and disable all buttons. Then we go to the morph editor and press the button "SET TO CURRENT" at the bottom of all four groups. This will update all records to the current program states, if you drag any morph slider now nothing should happen (should not change the sound).

Now let us set all morph sliders to the absolute right. 100 and not 99.9 or something, this is important and makes our live more easy when we edit live (later more).

Ok, let us evolute the current sound a bit. Set the OSC 2 input at filter 2 to minus 100 – yes, this we can hear. Now you can play around with the filter morph slider to switch between old and new record states. Set the filter morph back to the right. Now set the FX DIST value to about 50 and FX reverb WET value to about 50. This adds some cool effects to the sound. Play around with the filter- and fx morph sliders – back to the right.

We like to evolute our sound, so lets go back to the morph editor and hit the "SET TO CURRENT" button in the filter group again. Turn the filter morph slider to the left, then turn the OSC 3 input at filter 3 to minus 100. Play around with the FX- and filter morph slider...

I believe you got it?

If you like you can watch this video, I'll evolute IMPROVISER live. TODO-VIDEO

Also you should go on with the next part. Automations will help you to keep the sound interesting during you evolute another group or do anything else.

One open thing, why to set the morph slider to absolute right or left when you edit? You have to know that you always update the left or/and right record if you change a slider or button on the user interface. If you change a slider on the user interface, for example somewhere in the filter section and the filter morph slider in the morph mixer is for example at 99, Monique has to update the left and the right record to get the current value as a mix out of two – at 99 both sides are very similar and may be we loose our left state. But if the morph slider is absolutely left or right then Monique has only to set the left or right value instead of calculating two new values to get the current mix.

7.3 Automate Morphs. Be a Machine. (MFO)

Each morph group has its own LFO to automate the morph mix. Just enable the MFO button on top of the group you like to automate. The LFO parameters you can edit in the LFO popup which you

can open by hit the “o” button.

Note, not all parameters are morphed by an automation. For example buttons you have to switch manually. LFO and ENV parameters are also not automatable (except Sustain).

To get an idea you can load the program SNAP STEP, this one is “completely” automated.

Further Reading: [LFO](#)

7.4 Morph Smoothing

If you drag one of the morph sliders the resulting parameter changes are smoothed by the glide motor time.

Further Reading: [Global User Input Smoothing](#)

7.5 DragPad and Smoothing (SMOOTH)

In the morph editor you can find the morph drag pad. The drag pad is just another way to control the morph mix states. It works like the morph sliders in the morph mixer, but on the right you can define the morph smooth time, which control the delay on your input.

This is a good tool to make slow changes without spending our focus on the slow change itself – multitasking away, we can use the time to do some other stuff :-)

7.6 Option: Animate Morphs

If you don't like the default morph animations you can turn it off in the setup or context menu.

Further Reading: [Animations](#)

7.7 Morph Exceptions

LFO's are not morphable like other sliders, LFO's can only be morphed by the button toggle like you toggle or rather morph button states.

TODO – there are more

7.8 Parameter Group List

An overview of parameters, in which group they are.

TODO

8 Live jam? Monique as Loop Station (FILL, REL, SIZE)

A simple, four bars long loop function Monique has build in. Right of the delay effect you can find the top button FILL, the release slider (REL) and the fill size slider (SIZE).

The loop function is easy to use. To record or fill the loop buffer you have to enable the fill button. This will write the signal after the delay effect into the loop buffer and mix the output of the loop buffer to the signal after the delay effect.

The fill function has always a fade in and fade out time if you turn it on or off. The fade time is the global input smooth time which you can adjust in the context menu.

What does the release slider adjust? First you have to know that the record buffer works like a delay and the signal in the buffer will be overdubbed each time. If you set the release slider to 50%, then the signal will be written into the buffer with half power. So you will hear it next time with 50% of the original and the time after with only 25% and so on. Only if you set release to 100% you have an endless record.

By the size slider, which is the backslider of the release slider you can adjust in which of the four bars of the loop buffer you like to write the signal. By default the slider is set to 1/1 and that means that you write in all the four bars of the buffer at the same time. If you set it to 2/1th you will only write in every second buffer and 4/1 will only write in one of the four bars of the buffer. This you can use to make your pattern more interesting as a one bar long one.

Note that we do NOT record the reverb effect, but the reverb effect will be process the loop output together with the delay output.

To clear the buffer you have to hold down the fill button more than 3 seconds. The buffer will be also cleared if you hit the program INIT button. To chancel the automatic buffer clearing you can click the INIT button again or press the FILL button.

Further Reading: [Global User Input Smoothing](#)

9 CTRL

The control button simply turns the value box for sliders always on or always off. (if off, then only on mouse over).

10 SHIFT

The shift button is the global toggle to switch between all front- and backsliders with one action.

11 Context Menu

To open the context menu you can right click any slider on the main user interface. In the menu you can find some useful tools which can improve your work flow or help you to understand Monique.

11.1 Restore Values

With the restore functions you can restore default and user defined values or you use the undo-redo function to switch between last and current value.

11.1.1 User

Restores the user value for the slider there you have opened the menu. The user value you can set to memory by „Update Values → Set new User Value“.

11.1.2 Factory Default

Sets the value of the INIT program to the slider there you have opened the menu.

11.1.3 State On Program

Sets the value of the selected program to the slider there you have opened the menu.

11.1.4 Undo

A tricky undo function with a very short term memory of one value. In the moment of use the current value will be written to the undo memory and the last will be restored. In real its a undo-redo-undo-redo...-function.

11.2 Set new User Value (Update Values)

See [11.1.1.User](#).

11.3 Global Double Click Return Mode and Value

If you double click a slider you set the value of the selected „Global Double Click Return Mode“ mode.

11.4 Global User Input Smoothing

All user inputs (mostly at sliders) are always smoothed, that means that your changes are not directly change the value, it will be changed step by step. How long the smoothing takes you can adjust to your needs or may be to the product music style.

11.5 Global Slider Handling

By the handling settings you can adjust sliders to your own needs. For example you can swap the linear envelope sliders with rotaries or simply change the sensitivity.

11.5.1 Linear Slider Handling

- **Use only rotary Sliders**
Switches between linear- and rotary envelope sliders.
- **Velocity-Sensitive Mode**
Switches between absolute- and velocity based dragging.
- **Linear velocity acceleration**
Acceleration for the velocity based mode.

11.5.2 Rotary Slider Handling

- **Velocity-Sensitive Mode**
Switches between rotary absolute- and velocity based dragging.

Shortcut: CTRL+drag
- **Use circular dragging**
Drag a rotary slider by a rotation.
- **Use left-right/up-down dragging**
Drag rotary sliders by a north-south or east-west movement.
- **Rotary slider sensitivity**
Acceleration for the left-right/up-down dragging.

11.6 Animations

- **Animate Envelopes**
Activates or disables the automation button animations, for example at the X-MOD buttons.

Shortcut: CTRL+E
- **Animate morph states (sliders)**
Activates or disables morph automation animations on sliders. The morph animations shows the real value of the slider, resulting from an automated morph.

Shortcut: CTRL+R

11.7 MIDI

A few MIDI helpers. See also: [Connect your Keyboard](#)

11.7.1 Map MIDI Controller

Switch to MIDI train mode for the slider there you have opened the menu.

11.7.2 Snap to MIDI input

Defines the minimum distance which a MIDI controller state must have to the real slider value to pick them up or change it. If the snap value is on a maximum, then each change at the MIDI controller changes the listeners slider value immediately. If the snap value is small, then the MIDI controller has to be close to the real slider value to get control. This avoids unwanted jumps if the MIDI controller is far away from the listeners slider state.

11.8 Help

- **Show wiring diagram**

Shows a wiring diagram to understand Monique's cabling.

Shortcut: CTRL+W

- **Force Show ToolTip**

Show the help tooltip for the slider there you have opened the menu.

Shortcut: CTRL+H

- **Show ToolTips automatically**

Turns automatic tooltips (after one second) on or off.

11.9 Global Settings

11.9.1 Save / Load Global Settings

Load and save the global settings. The global settings are context menu settings, MIDI, colour settings, current program, setup.

Normally you won't need this, because the same happens on each Monique start and shutdown. But if you use more than one plugin instance and you like to share your settings between you can do this by this way.

12 Load, save and Program Management

In the top menu bar you can find a big drop down box, there you can select and load a program of the current selected bank. On the smaller box on the left you can select the bank. By the </>- or

left/right-buttons you can navigate through the programs of the selected bank without dropping down the whole list.

By the LOAD button you can reload the current program.

To reset Monique program state to the factory defaults you can click the INIT button. This will also start a auto clearing of the loop buffer (please take a look: [Monique as Loop Station](#)).

- **Save** overwrites the selected program.
- **Save As** create a new program with the current settings.
- **Rename** the selected program.
- **Delete** the selected program.

In reason of Monique's limited file management option you should do some things like moving programs in another bank from a file browser. All the data which Monique produces you can find here:

Windows: *C:\Documents and Settings\YOUR-NAME\Application Data\Monoplugs\Monique*
oder: *C:\Users\tommy\AppData\Roaming\Monoplugs\Monique*

Mac OS: */Users/YOUR-NAME/Library/Application Support/Monoplugs/Monique/*

Linux: */home/YOUR-NAME/Monoplugs/Monique/*

Important: Please shutdown Monique before you change files directly!

13 Audio Devices (Standalone only)

The audio settings you can find in the setup. Here you can select an audio Device of the selected audio Driver. Also you can change the sample Rate and Block size.

The sample rate is a quality parameter and is better with an higher value, but this need more CPU power. If you get some crackls you can enlarge the block size, which adds a bigger delay on the final output. Or you decrease the sample rate and reduce the quality.

If you play Monique from a keyboard or piano you should use the smallest possible block size without burning your CPU to much. If you use a sequencer you can increase sample rate for a better quality on cost of a bigger block size.

14 Connect your Keyboard (Standalone only)

To connect your MIDI keyboard you have to choose it in the "Input" drop down from the MIDI Setup, which you can open with the MIDI button in the top menu. May be the arpeggiator is annoying now, if so you can deactivate it: [Turn the Arpeggiator On/Off or force it On/Of](#).

15MIDI Mapping

Most of the parameters you can control from a MIDI controller.

Standalone only: To control a slider or parameter from a MIDI controller you have to connect the MIDI controller itself first by selecting the device in the drop down box "Controller Input" in the MIDI setup. If the keyboard is sending MIDI controller messages too, then you have to enable the CC check box.

Monique receives controller messages on all channels, but convert all messages to channel 1 messages.

To connect a MIDI controller to a slider you have to enable the MIDI learn mode by click the MAP button. Now you can select any slider or button on the main user interface you like. On select a slider or button a popup will rise. In the popup you can define the connection manually or you simply move a slider on the connected MIDI controller to train a connection automatically. Any existing connections to an MIDI controller will be deleted automatically if you create a new one for it.

Also its enough to train the front- or backslider to one controller, if you switch between front and back you can/have to use the same MIDI controller. Recommendation: train a button from your MIDI controller to the SHIFT button to toggle between front- and backsliders or first and second MIDI connection.

15.1 MIDI Feedback

Monique supports MIDI feedback. If your MIDI controller supports MIDI feedback you have to select the device it at the „Controller Feedback“ drop down in the MIDI setup.

MIDI feedback messages are always channel 1 messages.

16Automation Parameter (Plugin only)

We like to save the place here and won't post the over 250 automation parameter. We hope the user interface oriented order of the parameters will help to find the right one fast.

But we have to talk about a few special parameters. At the end of the list you will find some RMT (remote) parameters. The RMT parameters are helpers to control the ENV and LFO popups. The „RMT LFO POP“ and „RMT ENV POP“ you can use to open and close the LFO and ENV popups and the rest of the RMT parameters are the connection to sliders in this popups.

17 Shortcuts

Esc:	close menus and popups
CTRL++:	increase the user interface size
CTRL+-:	reduce the user interface size

CTRL+A or I:	show the info / about window
CTRL+H:	opens the help popup for the slider under mouse
CTRL+E:	envelope animation on buttons on/off
CTRL+M:	start the MIDI train mode for a slider under mouse
CTRL+R:	morph automation animations on sliders on/off
CTRL+W:	show wiring diagram
CTRL+F11:	maximize the user interface

18 Workarounds (Plugin only)

To load programs in all common hosts without problems we added a timer based workaround which prevents that the host can send program changes after loading a project.

If your DAW project is large it can happen that the timer is too short and you have to increase the time to load everything correctly. In Monique's data folder (see [Load, save and Program Management](#)) you can find the file session.cfg, please open it in a text editor and increase the „RESTORE_TIME_IN_MS="1500"“ value. Please note that you can only change programs in the interval of "RESTORE_TIME_IN_MS" (ms = milliseconds) (increasing in 500ms steps is a good choice).

19 Gear Overview

3 Oscillators + 1 FM oscillator modulated by an LFO

3 Resonant filter (under the hood 3x3) (LowPass, HighPass, Band)

3 LFO's + 4 MFO's from $16/1^{\text{th}}$ up to $1/128^{\text{th}}$ (Sine and near to Square)

7 Resonant band filters in an EQ bank

20 Envelopes

1 Distortion effect

1 Chorus effect (5 delay lines, modulated by 5 LFO) (arrangeable in the panorama)

1 Delay effect (adjustable reflexion size from $1/1^{\text{th}}$ up to $1/1024^{\text{th}}$) (arrangeable in the panorama)

1 Looper effect (adjustable record size (4/1, 2/1, 1/1))

1 Reverb (arrangeable in the panorama)

1 Arpeggiator with 16 steps, shuffle