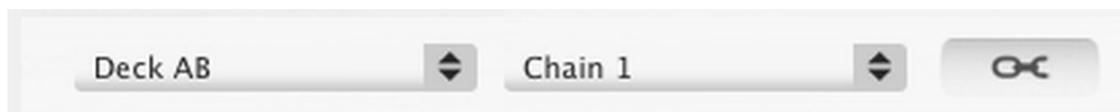
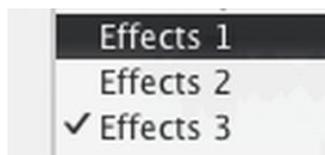
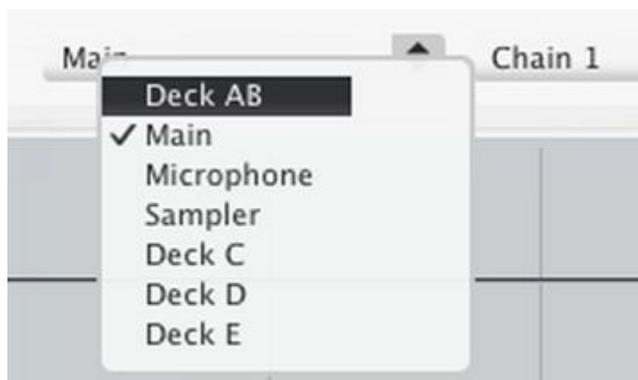


# Effects

Effects 1–3 (under Devices menu) are all identical and each has a selector to select which effect chain to show below.



Effect view, first popup selects which chain group to edit/view, the second popup selects which chain to edit/view.



Chain is a series of effects, such as Filter > Reverb > Filter > Delay (total of 4 effects). Effects are shown in order they are processed: topmost device on left is processed first (audio input), topmost device on right side is next (audio input of it is the audio output of the first device), then the second row from the left and so forth...



Effect chain with filter, reverb, delay and another filter.

Decks AB effects are for the A+B main decks. When editing the chain of these effects, the chain is duplicated so that both decks (on left and right) have the same effects in the same order.

Main is all audio output of Disco XT, this processes the final audio output of decks, microphone, sampler, only master limiter is applied after these effects.

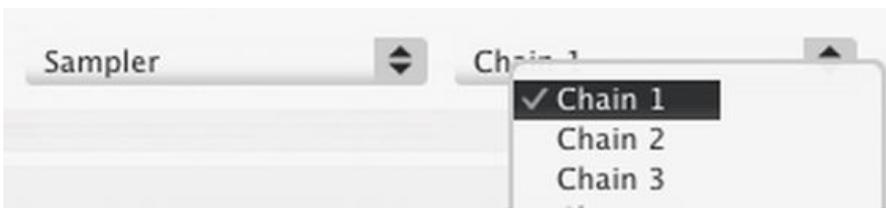
Microphone effects.

Sampler effects.

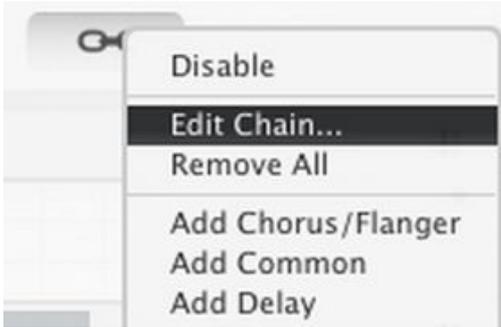
Decks C, D and E all have separate effects.

Each of these effect chain groups from the first popup can hold up to 10 effect chains, this is selected in the next popup "Chain 1..."

In case of sampler, unlike the other chains, the chain number (Chain 1, Chain 2) indicates which sampler this chain is for. So Sampler > Chain 1 is for Sampler 1, sampler > Chain 2 is for sampler 2... Although the device menu of the main menubar by default shows only Samplers 1–3, in preferences the number of samplers can be increased to a maximum of 10 samplers.



'Edit Chain' button, click the button to show a menu:



Disable

This is a quick disable/enable switch for all effects in the chain, each individual effect also has a bypass (ON/OFF) switch shown graphically.

Select 'Edit Chain' to add/remove effects from the chain in the 'Edit Chain' window. To add effects, double click or drag items from the list on the left to the list on the right. To remove an effect double click the effect.

Effects can also be removed by right-clicking background of an effect device and select 'Remove'.



Remove All

Removes all effects from this chain, this can be done in the edit chain window too and is just a quicker option.

Add <effect type>

A quicker way to add a new effect type as last item to this chain.

## Effect chain presets

Preset saving/opening is available for both individual effects and for chains (containing all effects in the chain).

Single effect presets can be saved that contain the modified effect parameter values for later access (folder button on the left side of an effect). Created effect presets can be removed or renamed in Edit menu > Effect Presets...



Effects preset menu.

Effect chain presets are loaded by either:

**Replace:** Removes any effects currently in the chain and loads the effect types (and parameters) from the preset.

**Add to Top:** Does not remove any effects that are already in the chain. Adds the effects in the preset to top of the chain, so any effects already in the chain are moved downwards.

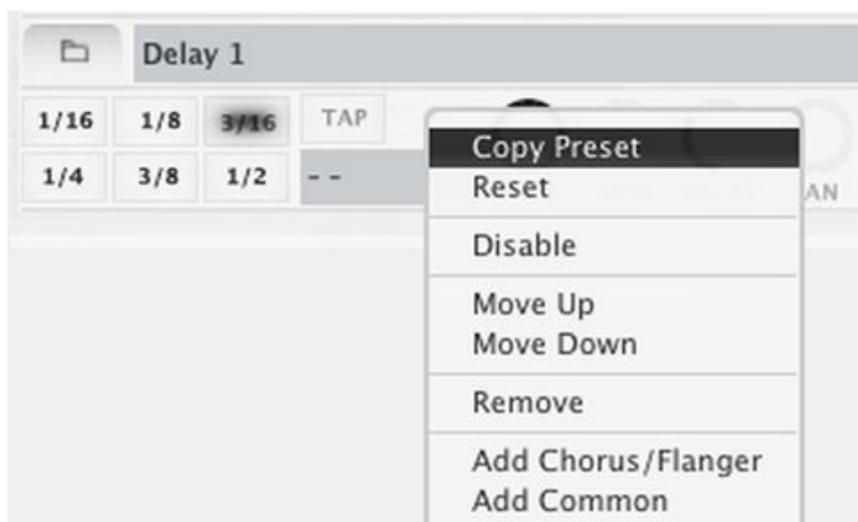
**Add to End:** Does not remove any effects that are already in the chain. Adds the effects in the preset to the end of the chain.



Next is name field, double click to enter a name for this effect chain / chain preset. Giving a name for the effect chain is required before it can be saved as an effect chain preset.

After you have added one or more effects that are then shown below this effect chain editor:

Background of an effects can be clicked to show a menu:



**Copy Preset**

Copies current parameters of this effect type so you can then right-click another effect of the same type and paste the parameters there.

**Reset**

Reset parameters to default values.

**Disable**

Same as clicking "OFF | ON" switch in the top-right corner of effect. When set to OFF, audio is not processed but bypassed, so next effect (if any) receives the input of this effect instead of output.

**Move Up**

Moves the effect up in the chain. Depending on effect settings, the order in which the effects are processed might matter.

**Move Down**

Remove

Removes this effect from the chain.

-

Add <effect type>

Adds effect of the selected type to the chain and moves the effect you clicked on down/right in the list.

## Effect Types

### Chorus/Flanger

Effect types:

Often produces robot like sound, similar to the delay effect with a very small delay, has LFO (low frequency oscillator) to vary the delay, feedback and other parameters.

### Common



Includes simple volume, gain and panning controls. Notice that the dry/wet affects controls such as volume. When this effect is added to transition effect editor it has a hidden parameter 'Rate down' that is connected to rate control of the deck A or B and can be used to create a vinyl-brake-stop like effect.

### Delay



Creates a delay-line/repeat/echo of the input signal after a set time delay. When time delay is altered while playing, the delay effect's rate control can jump to a high/low rate to match the new time delay.

If this effect type is added to chains 'Decks A, B, C, D, E' or to transition editor, the BPM and output tempo of that deck is automatically available (although not visible, display shows --) and it is not required to tap a BPM value to the effect.

If you do tap a new BPM value it is used instead of the deck BPM and tempo, if you then after waiting for a few seconds click 'tap' button the tapped BPM is cleared (--). The BPM of the effect can be altered with musical rhythm buttons such as 1/16 (shortest delay) and 1/2 (longest delay). For the 'Mod' parameter to have any meaning, the time knob needs to be set to any value less than maximum (this is the modification amount).

### Distort



For distorting/destroying sound. Features multiple operation stages.

Parameters:

Drive:

First knob sets amount of gain, second sets additive gain, third one adjusts additive gain.

Rect:

Disabled at zero.

Filters:

Usually either high pass or low pass filtering but not both. Q adjust is for both filters.

Foldback:

First param sets threshold value. Second param disables at zero and is fully audible at middle.

Trem:

Adds a constant gain cut at the set rate/frequency. Disabled at zero.

Saw:

First knob sets threshold, disabled at zero. Second knob sets saw frequency/pitch.

Comp:

Clips the signal at 110 %

Delay:

Adds a time delay from the original audio to some of the stages, such as foldback. This is not a realtime parameter and causes slight silence when changed.

## Dynam



Audio levels dynamics processor, in compressor mode this unit reduces audio loudness differences in the audio (attenuating loud sections while maintaining quieter sections), in expander mode loudness differences are increased (amplifying loud sections above the threshold while maintaining sections below the threshold).

After setting proper threshold by looking at the compression meter at the right side or by listening, adjust attack (usually small value) and release (usually small value).

Ratio sets amount of compression/expansion. At zero it is disabled.

Post gain sets gain applied after the compression/expansion, this is related to the set threshold level.

Optionally, the compression threshold may be detected through a high pass (HP, ignores low frequencies) or low pass (LP, ignores higher frequencies) filter. These filters are not audible but are only applied to the dynamics.

Clip button enables clipping: Signal is clipped at 110%, may cause distortion, depending on current post gain setting.

## Empty



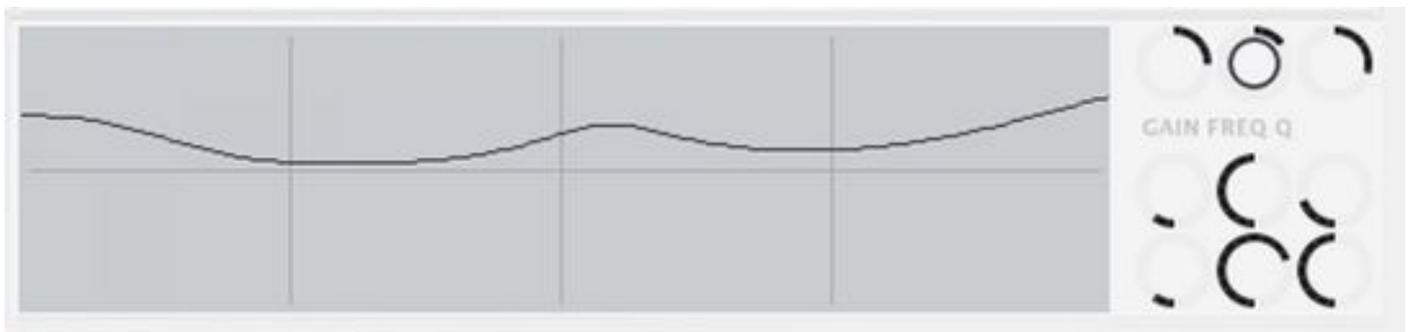
Might be useful for visual purposes, does not do anything.

## EQ



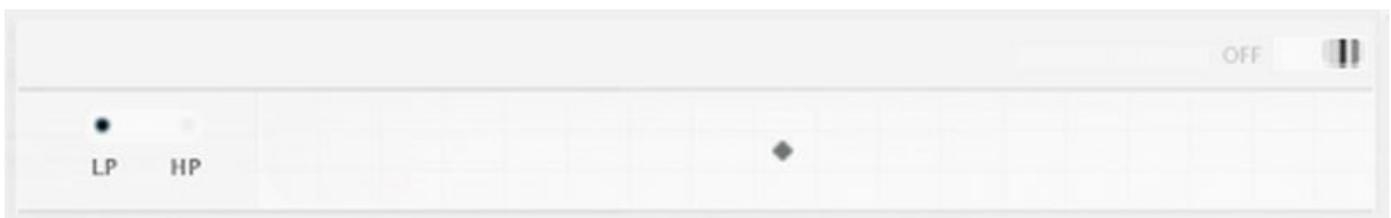
Includes three adjustable EQ filters. Although only one filter can be shown/edited at a time, all three types can be used at the same time.

## EQ Big



Same as "EQ" but this version has a bigger view of the frequency amplitudes. Top knobs alter gain, middle row knobs alter frequency point and bottom row of knobs alter width of the filters.

## Filter



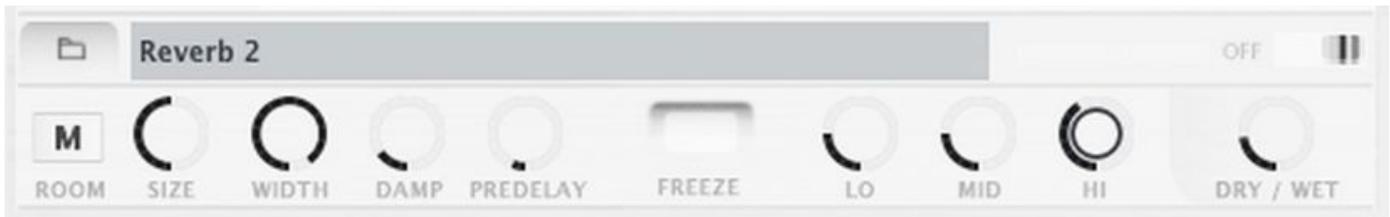
Filter, can be set to either lowpass mode (cuts out high frequencies) or to highpass mode (cuts out low frequencies). Click and drag to adjust the position of the point. Width (X) controls frequency point (in Hz), Height (Y) controls Q / resonance of the filter (amplifies the signal near the frequency point).

## Phaser



Alter phase of the signal with a LFO.

## Reverb



Depending on the parameters, sounds like being played in a large cathedral, hall or room of various sizes. Predelay parameter adds a time delay before the reverb signal. Low, Mid, High EQs are available that adjust the reverb.

## Transition Effects

Effects can be added to transitions between songs where the effect parameters vary within during the transition, following parameter points created by the user. For example, transforming audio of the ending song to a large hall reverb and then mixing the fading-in song to that reverb. Transition effects are described in 'Transition Editor' topic.