

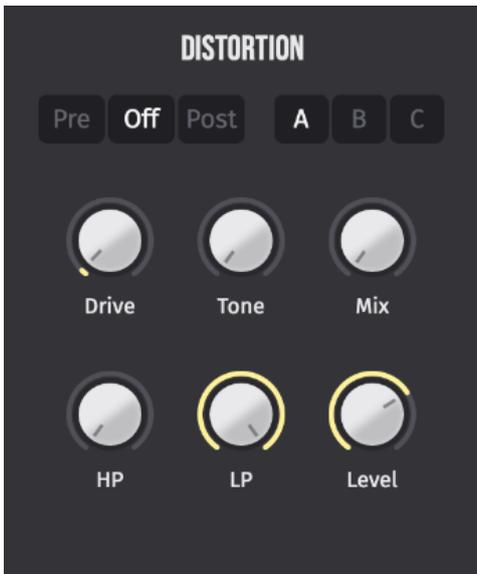
# Mi-03



## Waveform Shape

Blend between the classic saw-tooth and square-wave analog shapes, with a centre point that produces a triangle sound. When playing with MIDI the glide control will alter how quickly overlapping notes slide from one frequency to the next. In sequencer mode the glide/slide feature works on "tied" notes.





## Distortion

The Mi-03 has three distortion types. The distortion can be enabled pre-filter or as a post-effect on the final output. Try adding a subtle character to your sounds, or go wild and completely destroy them! Start by dialing in a small amount of "drive", and then a small amount of "mix" to introduce the distorted signal. Use "tone" to filter the distorted signal. The LP/HP controls in the distortion can usually be left as their default values. The "Level" control is needed to lower the output when adding large amounts of distortion to a sound.

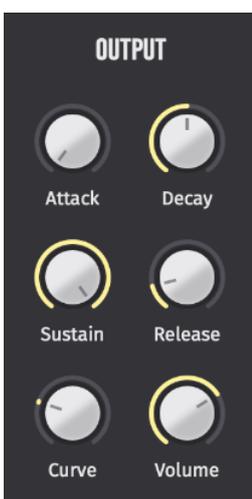
## Filter

Dial in the classic filter sound. Raise the cutoff slightly, and add some resonance. Use the "Env Mod" control to apply the filter envelope. Use the accent control to add extra resonance on louder notes. Trigger accent using the sequencer or if using MIDI control send regular notes as less than 100 velocity and accented notes as greater than 100 velocity.

The filter has attack and decay controls (that work when Env Mod is enabled). The curve control is powerful. Decay will control how long the filter modulation runs for, but the curve control gives extra tweak-ability of how the decay takes place. At it's default it's a standard analog decay. Reduce it and the decay curve is steeper, so the decay will sound snappier. Increase the curve and the decay will linger longer at the top end of the modulation before falling away.

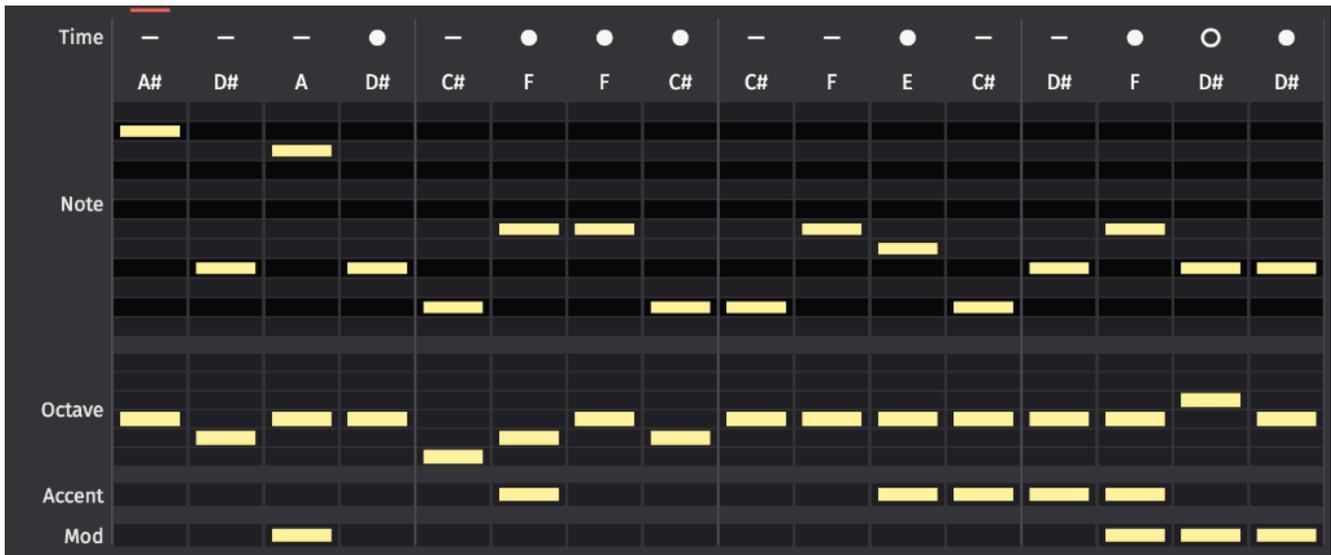


The Acid control will change the sound of the filter by altering the feedback signal within the filter circuit. **WARNING: The Acid control can cause the filter to be unstable. Small tweaks can tune the sound to your liking. But don't combine large changes with high filter cutoffs or resonances. You have been warned! ;)**



## Output

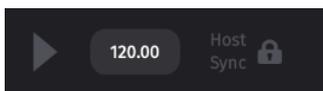
A classic analog ADSR envelope with added decay/release curve control.



## Pattern

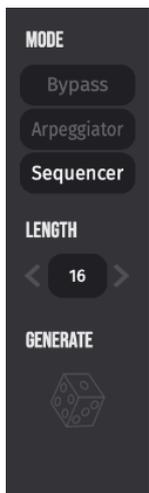
Create classic 16-step acid patterns. Or combine multiple patterns into 32 or 64 step patterns. The patterns are made up of several layers of controls:

- Time: trigger notes by setting the solid circle. The hollow circle is used to create a "tied" note. This either extends the playing note, or slides to a new frequency.
- Note: In sequencer mode this sets the frequency of the note to be played. In arp mode, it is the note number from the currently playing chord that will be triggered.
- Octave: Move notes up or down an octave using these controls.
- Accent: Trigger an accented note. Use the accent control on the filter to decide how much this affects the sound.
- Mod: This alters the way the slide notes are played. Without this tied notes will slide smoothly from one frequency to the next. If you enable "mod" for a step and then slide to a new frequency, the filter envelope will retrigger during the slide.



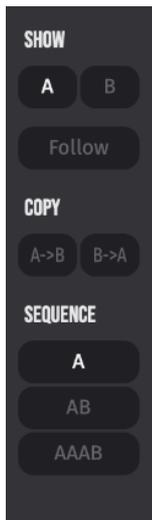
## Transport

Set the BPM or sync the playback with the host transport.



## Sequencer mode

Bypass for MIDI control of the synth. Arpeggiator will sequence based on the currently playing notes. Use sequencer mode to set the exact note values played by the sequencer, whereas Arp mode will alter the sequence notes based on the currently playing MIDI notes. You can reduce the pattern length. And, if you're feeling lucky, click the dice to generate a random pattern.



## Sequence

The sequencer has two banks of up to 16 steps. You can play just bank A, or cycle between bank A and B. Select the follow option and the display will change as the playing pattern changes. Otherwise, use the A and B buttons to select which pattern is editable.

## Tips

- The curve control is subtle but can have a big effect on the character of the sound.
- Double-click a knob to return it to the default value.
- Distortion can make a sound loud! Turn down the level to balance things out.

## Troubleshooting

- **Not getting the sound you want?**  
Try making small changes. A little goes a long way, especially when it comes to modulating the filter, or layering some distortion.
- **Got clicks?**  
If you notice a little click at the start of the note, then try increasing the attack slightly to ease in the amp envelope. Even just a tiny amount will reduce the click and not affect the attack phase of the note.