

A quick start guide to
INSTACOMPOSER
A MIDI generator plug-in

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Instacomposer is a MIDI generator plugin designed to procedurally generate melodies, phrases, riffs, chord progressions and other musical elements.

- **Infinite number of ideas:** Never producing the same output twice.
- **Artificial intelligent:** Making decisions are not just random. The AI has its own preferences and tries to generate more pleasing rhythms and pick more suitable notes based on the scale, the chords and the note's position in the phrase.
 - **Structuring beats and bars:** Using different shapes and formats to build interesting combination of beats and bars. This will add the necessary rhythmic and melodic consistency and a structure we often find in music. A big part of why humans enjoy music and art in general is because the brain has evolved to be an advanced pattern recognition machine. When it successfully discovers interesting shapes, patterns and mathematical relationships in its sensory data, it rewards us with positive feelings. And when things seem just random and chaotic we get bored if not bothered with it.
 - **Generating patterns and motifs:** Using small musical ideas that keep repeating or reoccurring throughout the melody.
 - **Adding harmony:** Sometimes adding harmony notes. Often a 3rd, 5th or an octave above, sometimes other intervals and some other times a combination these.
 - **Following the chords:** Sometimes deciding to pick notes only from the current chord. This should bring out the chords underneath and make the melody a bit more in line with the chord progression.
 - **Chord progression generator:** Generating desirable sequences of chords inspired by the most commonly used chord progressions.
 - **Chaos control:** Making sure everything is under control, preventing extreme situations like notes repeating too much, jumping up or down violently or climbing in one direction too high.
 - **User control of the algorithms and probabilities:** Using the available controls users can specify their preferences and get similar results every time. They can tweak anything from chord complexity, note population, structuring beats and bars to pattern generation, adding harmonies, velocity randomization, etc.
- **Time Signatures:** Supporting a majority of time signatures by using different combination of number of beats per bar and number of notes per beat.
 - **Beats per bar:** Can be set to any number between 1 and 8.
 - **Notes per beat:** Can be set to any number between 2 and 8.
- **Multi-Mode:** Including different algorithms for generating different types of elements such as melodies, bass lines, rhythmic patterns, pads and chords.
- **Multi-Track:** Using the 5 available tracks, each with their own set of controls, users can generate multiple layers based on the same chord progression.
- **Multi-Channel:** Using separate MIDI channels each track can be routed to a different instrument making it easier to form a whole song.
- **MIDI editor:** Enabling users to edit and make changes to the MIDI files within the plugin.
- **Save as MIDI:** Saving the output as a MIDI file on the drive. Each track can be saved separately.
- **Drag and drop:** Drag and drop the MIDI files directly to your host or file browser.

The main interface

Click to open the about/authorization page

Manual Playback Control
Auto starts/stops with input MIDI notes

Track 1
Track specific controls

Select this track
Select the track and hit the GO button to generate MIDI for this track

MIDI file controls
Drag: Drag and drop this track as a MIDI file directly to the host or another location
Save: Save this track as a MIDI file
Clear: Clear all MIDI notes in this track

Track mode
Choose between different modes such as melody, rhythm, bass, pad or chord. Each mode has its own algorithm and generates different kind of outputs

M & S: Mute and solo controls
Oct: Octave offset
Vel: Velocity multiplier

MIDI Channel
Set different channels for each track and route them to different instruments or plugins

Scale and Key

Chord Progression
Generate new chord progression F: File manager for chord progressions. L: Load saved chord presets

Drag directly or save all the tracks as a single MIDI file
Clear button clears out all the tracks

Alternate: Generates a new variation of current melody
Rand Velocity: Randomizes the velocity of current notes

Generate Output
Generate MIDI notes for the active track(s) based on the current scale, key, chord progression and the track mode

Select which tracks to generate output for
Choose all the tracks, individual tracks or right click and add/remove any combination needed

Set the time signature
The number of beats per bar
The number of notes per beat

Tab Switch
Each tab has a set of controls used to tweak different aspects of the decision making process. Read more about these controls on the next pages

Options
- Link controls for all the tracks. When disabled each track can have its own settings.
- Reset all the controls.
- Chord Mode: Use Inversion: When enabled the chords will be inverted depending on the chords around it
- Chord Mode: Add base note: When enabled the chord's root in a lower octave will be included

Main Menu: Manage presets and global settings

Switch between the Track and Editor views

Enable or bypass the plugin making it pass through

Transpose current notes, scale and chords up or down

Stop the playback and kill off all the playing notes

Link to W.A.Production website

INSTACOMPOSER

Menu < sweet melody >

View: Tracks Process Transpose Panic

W. A. PRODUCTION

Loop Start Beat Number Loop End

Double click to open in the editor
Drag and drop as a MIDI file to the host or drive

C: Copy Chord
P: Paste Chord
R: Repeat Previous

Repeated chords
Chord for this beat

Log.

Option General

General

Patt/Vel

Harm/Time

Basic Chords

Exotic

Less Population

More Population

Zero Chromatic

More Scale

Chord Notes

Random Bar Struct

Smart Random Bar Combo

Smart No

Fill In

Yes

0.5

0.5

0.0

0.5

1.0

1.0

0.0

Log.

The image shows a MIDI editor interface with a piano roll. The vertical axis on the left represents pitch, with labels for 5 and 6. The horizontal axis represents time. Several blue horizontal bars represent notes. Annotations with leader lines point to specific features:

- Selected Notes**
Move, resize, delete or change the velocity of selected notes simultaneously
Delete key deletes selected notes
click anywhere else to deselect notes
- Move**
Drag left, right, up or down to move the note
- Velocity**
Drag up or down to change the velocity
- Resize**
Drag left or right to resize the note
Hold Alt (Win) / Option (Mac) to disable snapping
- Right click to delete the note**
- Note Velocity**
Drag up or down to change the velocity of notes
- Selecting Notes**
Click on empty space and drag over a note or a group of notes to select them
Hold Ctrl key to select multiple set of notes

Probability controls

These controls alter the decision making process by changing the probabilities

Chromatic Notes

Controls the probability of adding chromatic notes that are not necessarily in the selected scale

Bar Structure

With lower values the probability of generating more random combination of beats increases
With higher values the probability of structuring bars based on patterns and repetition increases
Random: Different beats, so more complex and chaotic bars
Smart: More intelligently structured combination of beats

Fill In

This is a post process step that fills in the gaps between generated notes
No: No extra notes will be added
Yes: Will fill in all the gaps

Option	General
General	0.5
Patt/Vel	0.5
Harm/Time	0.0
Basic Chords	0.5
Exotic	1.0
Less Population	1.0
More Zero Chromatic	0.0
More Scale Notes	0.5
Chord	1.0
Random Bar Struct	1.0
Smart Bar Combo	0.0
No Fill In	Yes

Log.

Chord Complexity

(Used by chord progression generator)
With lower values the probability of picking more basic chord shapes like Major or Minor increases
With higher values the probability of picking fancier or less commonly used chords like 11th increases

Note Population

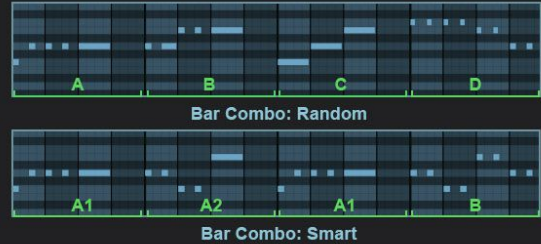
With lower values the probability of generating less notes increases (less busy)
With higher values the probability of generating more notes increases



Note Selecting

With lower values the probability of picking any note from the scale increases
With higher values the probability of picking notes just from the chord increases

Bar Combination

With lower values the probability of structuring more random combination of bars increases
With higher values the probability of structuring bar combos based on patterns and repetition increases
Random: Mostly different bars
Smart: More intelligently structured bars that produce similar or repeating bars






No Variation With Variation

Variation

With lower values the probability of generating variable number of harmonies decrease
With higher values the probability of generating variable number of harmonies increase
No: fixed number of harmonies
Yes: variable number of harmonies

Offset Time

With lower values the probability of generating shorter offsets increases
With higher values the probability of generating longer offsets increases



Strumming notes in both directions

Strumming

With lower values the probability of strumming the stacked notes decreases
With lower values the probability of strumming the stacked notes increases

Option

General

Patt/Vel

Harm/Time

Harmony

0.2

No

Yes

Add

0.5

Less

More

Number

0.5

No

Yes

Variation

Time

0.2

No

Yes

Humanize

0.2

Less

More

Offset

0.1

No

Yes

Sync Harm

Strum

0.2

No

Yes

Add

0.2

Short

Long

Length

0.2

Less

More

Occurrence

Strum Occurrence



With lower values the probability of adding less strums increases
With higher the probability of adding more strums increases

Add Harmony

With lower values the probability of adding harmonies decreases
With higher values the probability of adding harmonies increases

Number of harmonies

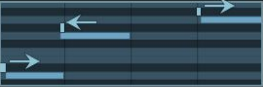
With lower values the probability of adding less harmonies increases
With higher values the probability of adding more harmonies increases



Harmonies: 1 Harmonies: 3

Humanize Timing



Slightly offsets notes in time
With lower values the probability of adding offsets decreases
With higher values the probability of adding offsets increases



Notes with offsets

Sync Harmonies

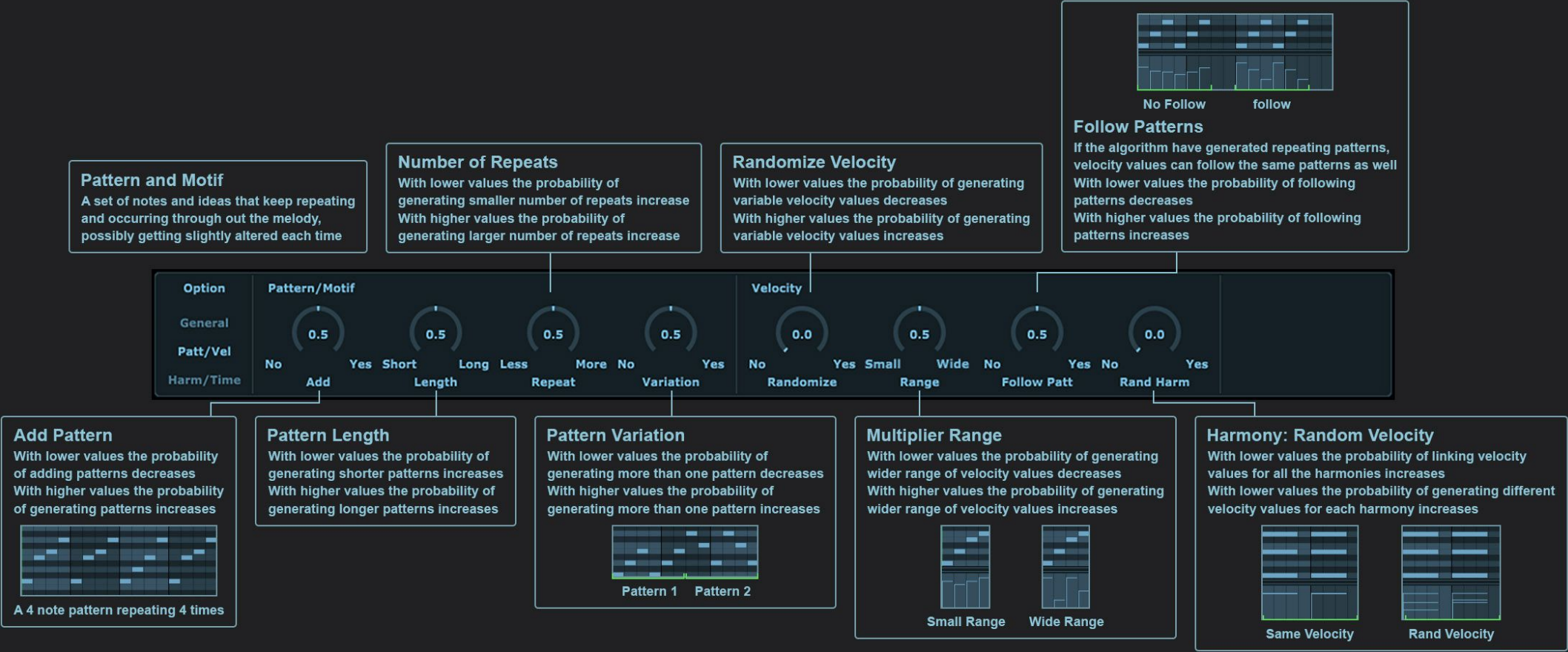
With lower values the probability of syncing offsets for harmonies decreases
With higher values the probability of syncing offsets for harmonies increases
No: Each harmony will have its own offset
Yes: Harmonies will have the same offset



Synced Not Synced

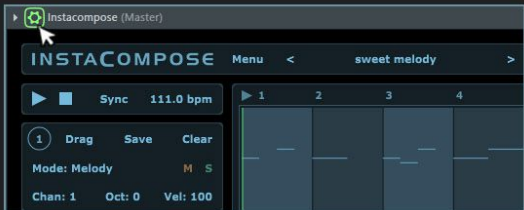
Strum Length

With lower values the probability of generating shorter strums increases
With higher values the probability of generating longer strums increases

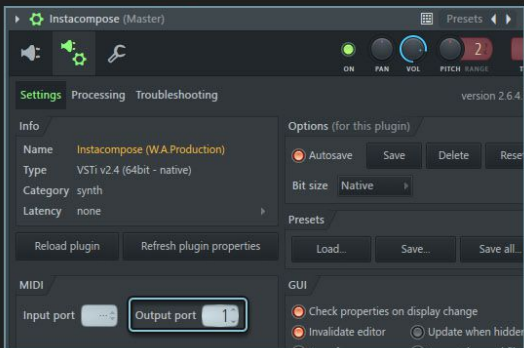


FL Studio

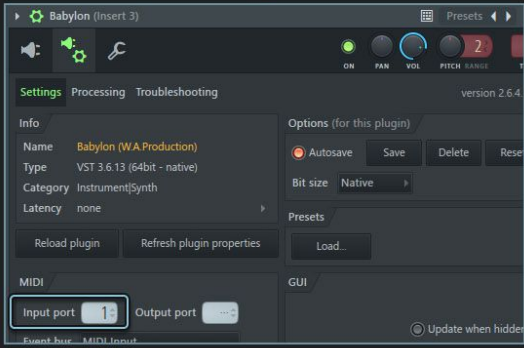
1. Load the plugin as a VST instrument and navigate to the wrapper settings



2. Set the MIDI output port to one of the available ports



3. Set the MIDI input on the target instrument to the same port



Pro Tools

1. Add the plugin as an instrument track
2. Add the target instrument
3. Add a MIDI track
4. Use the MIDI track to route the MIDI I/O



Ableton Live

1. Add the plugin as an instrument track
2. Add the target instrument
3. Set the MIDI input option on the target instrument to receive MIDI from the plugin



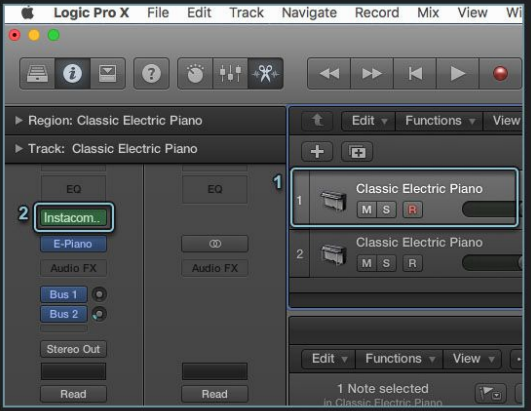
Cubase

1. Add the plugin as an instrument track
2. Add the target instrument
3. Set the MIDI input option on the target instrument to receive MIDI from the plugin



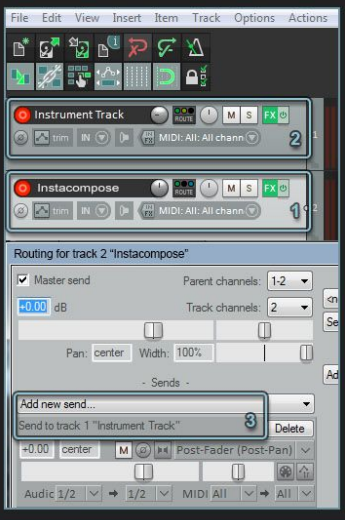
Logic Pro

1. Add the target instrument
2. Insert instacompose as a MIDI effect plugin



Reaper

1. Add the plugin as an instrument track
2. Add the target instrument
3. Set the send option on Instacompose to send MIDI to the target instrument



To get the most out of the plugin, you can connect each track to a different instrument or number of instruments.

A. With a single plugin

Using a multi channel plugin like Kontakt (or any other similar plugins). you can load multiple instruments and route them to different MIDI channels.

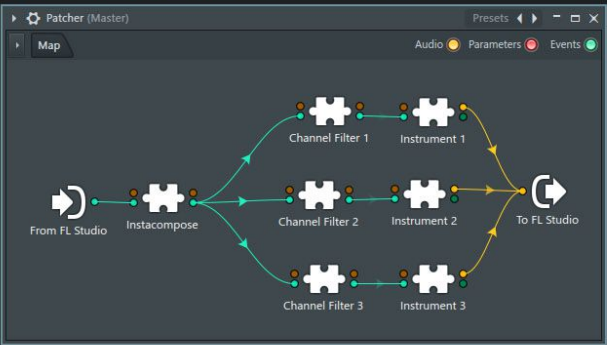


B. With multiple plugins

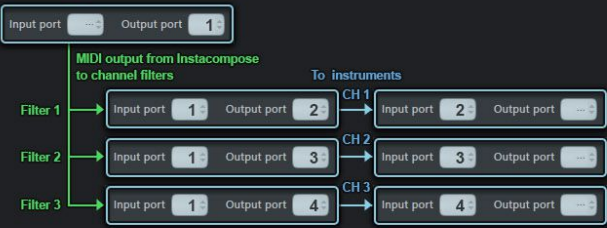
There are few ways to connect the plugin to multiple instruments. The details will depend on the host and the plugins used, but the goal is to route each MIDI channel to a different instrument track.

If none of the host or the target instrument had a feature to specify a MIDI channel to use, we can use a channel filter plugin to do the job. We're using FL Studio in our examples, but the concept is the same and there should be similar routing mechanisms in most DAWs.

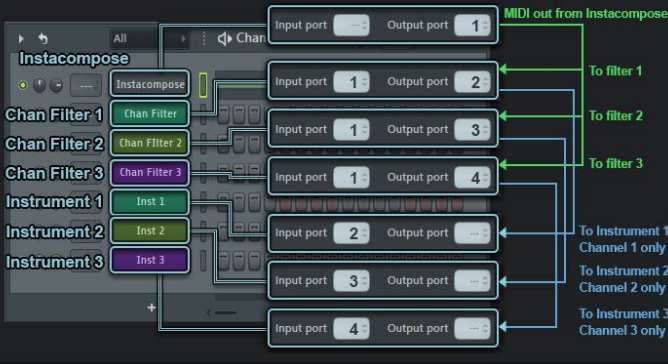
In the example blow we're using the Patcher tool inside FL Studio, which should help visualizing the connections a little bit better. You can see how we have connected Instacompose to 3 different instrument plugins. We're using a channel filter plugin before each instrument. They all receive the same MIDI data but only allow a certain channel to pass through and reach the target instrument.



Don't forget to set the MIDI ports as well.



We don't actually need a tool like Patcher to set things up (except when working with native FL plugins). In this example we have loaded all the instruments the usual way and set the MIDI ports like the previous example.



System Requirements

- Windows 7 or later.
- MacOS 10.11 or later (64 bit).
- CPU: Multicore 2GHz or higher.
- RAM: 2GB or higher.
- Display Resolution: 1920x1080 or higher

The plugin can be used with VST, AU and AAX host applications and it comes with both 32 and 64 bit versions for Windows and universal and arm versions for macOS. Please refer to your host's manual to see how to load a 3rd party instrument plugin.

Note: Running on older systems might be possible but is not guaranteed. Please try the demo version before buying the plugin to make sure it's compatible with your system.

Installation

Run the installer and follow the instructions to install the plugin.

Common locations on Windows:

VST 32bit: 'C:\Program Files (x86)\vstplugins'

VST 64bit: 'C:\Program Files\vstplugins'

VST3 32bit: 'C:\Program Files (x86)\Common Files\VST3'

VST3 64bit: 'C:\Program Files\Common Files\VST3'

AAX 32bit: 'C:\Program Files (x86)\Common Files\Avid\Audio\Plug-Ins'

AAX 64bit: 'C:\Program Files\Common Files\Avid\Audio\Plug-Ins'

Common locations on macOS:

VST2: 'Library/Audio/Plugins/VST'

VST3: 'Library/Audio/Plug-ins/VST3'

AU: 'Library/Audio/Plugins/Components'

AAX: 'Library/Application Support/Avid/Audio/Plug-Ins'

Note: Instacomposer creates a folder named 'WAProduction/Instacomposer' inside application folder when loaded the first time.

Note: AU Version is not an instrument plugin like the VST version. It's a MIDI effect plugin and can only be used by hosts like Logic Pro that supports the type. In hosts like Ableton Live and Reaper that support both AU and VST plugins use the VST version.

Note: Make sure your VST host supports MIDI routing.

Installing presets

WIN: The presets will be installed with the main installer.

Use the "Open Preset Folder" from the menu to reveal the preset folder in the windows explorer and manage them manually.

MAC: Copy the preset folder provided in the installer folder and paste it in the plugin's preset folder. Use the 'Open Preset Folder' option from the plugin's menu to reveal the right folder.

Demo Version Limitations

Will not to load settings with the host's saved projects.

Only 10 melodies can be generated before having to reload the plugin.

Only C Major scale is available. Only two tracks are available.

Authorization

If you have purchased the plugin and finished the payment process, you'll receive the information you need to get the full version.

Please contact info@waproduction.com if you have any questions.

Credits

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Version 1.0.0 released in August 2021.

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