

Cocon

Le Barrail

Version 1.11.2

Help

32 / 64-bit bridge and modular rack for VST plugins

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Cocon's window is in French. In this guide, each French label is given as it appears on screen, followed by its English meaning in brackets the first time it is used.

What is Cocon?

Cocon is a VST 3 and CLAP plugin that does two things at once:

- **a 32 / 64-bit bridge**: it loads VST 2 and VST 3 plugins, both 32-bit and 64-bit, inside a 64-bit music program. Each plugin runs in its own process: if it crashes, only that plugin stops — the music program and the other plugins keep going;
- **a modular rack**: plugins become modules placed on a canvas and connected with audio and MIDI cables, in any order you like. A 32-bit plugin can feed a 64-bit plugin, and the other way round.

Cocon works in any music program that hosts VST 3 or CLAP plugins. Everything you build in Cocon is saved with your music program's project: when you reopen the project, the rack, its cables and every

plugin's settings come back.

> A help strip at the bottom of Cocon's window explains whatever is under the mouse pointer: when in doubt, hover.

Installing and updating

First installation

1. Unzip “Installer Cocon *x.y.z*.zip”: it contains “Installer Cocon *x.y.z*.exe” and “Cocon.pak”. Keep both files in the same folder.
2. Close your music program, then run “Installer Cocon *x.y.z*.exe”.
3. Choose the installer language, read the licences, then the **Formats** page: VST 3, CLAP, or both (at least one).
4. Choose the folder for each format. By default: `C:\Program Files\Common Files\VST3` and `C:\Program Files\Common Files\CLAP`. If Cocon is already installed somewhere else, that folder is offered instead.
5. If other copies of Cocon are lying around in your plugin folders, the installer offers to delete them, so that your music program only sees one.
6. When the installation is finished, reopen your music program and let it scan for new plugins if needed.

Updates

Later versions come as a single file, “Cocon *x.y.z*.coconmaj”. Close your music program, double-click the file, then **Installer** (Install) → **Terminé** (Done). The formats chosen at installation (VST 3, CLAP) are updated in place. If the music program is still open with Cocon loaded, the update refuses to overwrite the file in use: close it and try again.

Files created by Cocon

In `%LOCALAPPDATA%\Le Barrail\Cocon` (the usual case, as Windows' plugin folder is protected); if Cocon is installed in a folder you can write to, next to `Cocon.vst3` / `Cocon.clap`:

File or folder	Contents
`Cocon_hotes\`	the two host programs, 32-bit and 64-bit, which Cocon unpacks by itself
`Cocon_options.txt`	the Options: folders, appearance, keyboard shortcuts, collapsed groups

`Cocon_catalogue.txt`	the list of plugins found or added
`Racks\`	folder offered the first time for exported racks (`.cocon`); after that, Cocon offers the last folder used
`Cocon_journal.txt`	the log, useful when something goes wrong

Cocon's window

Insert Cocon on a track like any other plugin (effect or instrument), then open its window. It has four parts:

- **the header**, at the top: the name “Cocon / Le Barrail” (followed by the rack's name if it has one), the latency compensation switch, memories **A** and **B**, the 32-bit and 64-bit bridge indicators, and the buttons **Ajouter un plugin…** (Add a plugin), **Importer…** (Import), **Exporter…** (Export), **Annuler** (Undo), **Rétablir** (Redo) and **Options**;
- **the plugin list**, on the left;
- **the canvas** (*la toile*), in the middle: the rack itself;
- **the help strip**, at the bottom: the name and explanation of whatever is under the mouse, and Cocon's messages.

The window size is saved with the project. When the window is too small for the rack, scroll bars appear: modules are never squashed. To scale everything up or down (text included), see Options ▸ Apparence ▸ Taille de la fenêtre.

The 32 / 64-bit indicators

“Pont 32 bits” and “Pont 64 bits” (32-bit / 64-bit bridge) show how many plugins are running in each kind of host. Green dot: all is well; red dot: a plugin has stopped. When the window is narrow, these indicators are the first to make room.

The plugin list

Adding a plugin, with nothing to set up

You don't need to declare any folder to add a plugin. Three direct ways:

- the **Ajouter un plugin…** (Add a plugin) button in the header (Ctrl + O) opens the Windows Browse dialog; you can pick several `.vst3` or `.dll` files, 32-bit or 64-bit;
- drag `.vst3` / `.dll` files from Explorer onto the canvas;
- right-click the canvas ▸ **Ajouter un plugin depuis un fichier…** (Add a plugin from a file).

Plugins added this way stay in the list under **AJOUTÉS DIRECTEMENT** (added directly). Right-click one ▸ **Retirer de la liste** (Remove from the list).

Using the list

- **Drag** an item onto the canvas, or **double-click** it, to add it to the rack.
- **Tous / Effets / Instruments** (All / Effects / Instruments): filters the list.
- **Search** (Ctrl + F): type part of the name or the maker; Esc clears.
- Clicking a **group title** (AJOUTÉS DIRECTEMENT, a folder, MODULES DE COCON) collapses or expands it; when collapsed, it shows how many items it holds. During a search, every match is shown, even inside a collapsed group.
- The **double chevron** to the right of the search field (Ctrl + L) folds the whole list into a narrow "PLUGINS" strip, giving its room to the canvas. Click the strip to unfold it.
- A plugin marked **défaillant** (faulty) caused a problem during the scan; you can still try to add it.

To fill the list from your plugin folders, see Options ▸ Dossiers.

The canvas

Gesture	Effect
Drag the background	move the view
Mouse wheel	zoom around the pointer
Shift + wheel	scroll sideways
Ctrl + wheel	scroll up and down
Ctrl + drag the background	rectangle selection of modules (Ctrl + Shift: add to the selection)
Home or right-click ▸ **Recentrer la toile** (Recentre the canvas)	frame the whole rack
Ctrl + + / Ctrl + −	zoom in / out

Right-clicking the background offers: add a Cocon module (mixer, gain / pan, stereo utility, MIDI filter, keyboard split, empty sub-rack), add a plugin from a file or from the **Instruments** and **Effets** (Effects) sub-menus, paste, select all, undo, redo, latency compensation, recentre the canvas, shrink or expand all modules.

The view cannot drift off into empty space: an edge of the rack never goes past the middle of the canvas.

Modules

Every plugin you add becomes a module. Its **inputs** are on the left, its **outputs** on the right. It shows a thumbnail picture of its plugin's window, taken when added and then each time that window is closed.

The buttons in a module's header

Button	Purpose
On / off	bypasses the module: sound and MIDI pass through untouched. Off (grey) when the module is bypassed. A bypassed plugin keeps its delay, so the track doesn't jump.
Window	opens the plugin's window (so does double-clicking the module, or Enter)
Chevron	shrinks the module: it no longer shows the plugin's window; click again to expand it
Loudspeaker	volume of what leaves the module (from −∞ to +12 dB; 0 dB snaps)
Left-right bar	panning of what leaves the module (centre snaps)
Circle (dry / wet)	on plugins with audio both in and out: blend between the dry sound and the processed (wet) sound

For the last three, a click opens a slider under the icon; the mouse wheel adjusts directly on the icon or the slider; double-click returns to neutral (0 dB, centre, 100 % wet); Esc or a click elsewhere closes it. The icon lights up when the setting is no longer neutral. When latency is compensated, the dry signal is delayed by the plugin's latency, so dry and wet stay aligned.

Level meters

Under the header of every module that carries audio, two bars (left on top, right below) run from −54 to +6 dB: green, yellow from −18 dB, orange from −6 dB, red above 0 dB. The light line holds the peak for 1.5 s. The box at the end turns red when the sound has gone over 0 dB and stays red until you click it off. Meters read after the module's volume and pan. They can be hidden in Options ▸ Apparence.

Right-clicking a module

Open the plugin's window, restart the plugin, refresh the thumbnail, shrink / expand the module, bypass, mute (Ctrl + M), rename (F2), group into a sub-rack, copy, duplicate, delete.

Selecting, moving, deleting

- Dragging a module moves it; Ctrl + click adds it to or removes it from the selection; Ctrl + A selects all.
- Dragging any selected module moves the whole selection.
- Delete deletes the selection (a single undo brings it back).

The Presets bar

When a plugin comes with several presets, a bar appears under its window: ◀ and ▶ step to the previous / next one, the **Presets** button opens the list, and the current preset's number and name are shown. Changes made in the plugin's own window are followed.

When a plugin crashes

Only its process is closed. The module says so; **Relancer** (Restart) starts it again with its last known settings.

When a plugin has moved

When a project opens and a plugin is no longer where it was, Cocon says so, naming the plugin and its old path:

- **Utiliser celui-ci** (Use this one): Cocon found it elsewhere thanks to the folder scan;
- **Chercher…** (Find): the Windows Open dialog opens on the old folder (or the nearest one that still exists) so you can point to the file;
- **Plus tard** (Later): the module stays red with its settings and cables; its **Chercher…** button or the right-click menu will let you find it later.

In every case, the plugin gets back the settings it had before it moved.

Cables

- Drag a cable from an **output** (right side of a module) to an **input** (left side of another). Audio and MIDI each have their own pins and colour.
- One output can feed several inputs; several cables arriving at the same input are mixed.
- Dragging from an input that is already connected moves its last cable.
- Clicking a cable selects it; Delete removes it.
- **Right-clicking a cable**: its colour, line style (solid, dotted, dashed, dash-dot), thickness, back to the default look, or delete it. The default look is set in Options ▸ Apparence.

Cocon's own modules

Besides plugins, Cocon has modules of its own, in the **MODULES DE COCON** group of the list and in the canvas right-click menu. Their knobs are set by dragging vertically (`Shift`: fine adjustment) or with the mouse wheel, and a double-click returns them to neutral.

Module	Purpose
In	what comes into Cocon from the track: the track's audio (L, R), the side-chain input and MIDI. Always present; its name can't be changed.
Out	what leaves Cocon for the track: L and R go back to the track; outputs 3 to 8 are extra outputs that your music program can route elsewhere; MIDI goes out too. Always present; its name can't be changed.
Mélangeur (Mixer)	mixes four stereo pairs, each with its own level (“Voie 1” to “Voie 4”).
Gain / panoramique (Gain / pan)	volume (−60 to +12 dB) and left-right position of a stereo pair, constant-power law.
Utilitaire stéréo (Stereo utility)	in this order: **Canaux** (channels: normal, L ↔ R, left only, right only), **Phase** (invert L, R or both), **Largeur** (width: 0 % = mono … 200 %; 100 % snaps), **Basses** (bass in mono below a frequency, 50 to 500 Hz), **M/S** (encode L/R → Mid-Side, or decode).
Filtre MIDI (MIDI filter)	lets through only the MIDI of a chosen channel (or of all).
Partage du clavier (Keyboard split)	see below.
Sous-rack (Sub-rack)	a rack inside the rack: see Sub-racks.

Keyboard split

One MIDI input, three zones, each with its own MIDI output and three knobs: **Bas** (lowest note), **Haut** (highest note; C3 = note 60) and **Transpo** (−48 to +48 semitones). By default: zone 1 below C3, zone 2 from C3 up, zone 3 across the whole keyboard.

- Overlapping zones layer their sounds.
- A released note always leaves the way it came in (same zone, same transposition), even if a knob was turned in between.
- Controllers, pitch bend and program changes go to every zone.

Example: connect output 1 to a bass and output 2 to a piano to play bass with the left hand and piano with the right.

Sub-racks

A sub-rack is a module that contains other modules: it gathers part of the rack under a single module, with its own inputs and outputs.

- **Create**: select modules, then right-click ▸ **Grouper en sous-rack** (Group into a sub-rack, `Ctrl` + `G`). Cables crossing the boundary become pins of the sub-rack. You can also start from an **empty sub-rack** (list or canvas right-click).
- **Enter**: double-click, or the two-frames button. The canvas then shows the sub-rack's contents between two gates: **Entrées du sous-rack** (sub-rack inputs) and **Sorties du sous-rack** (sub-rack outputs).
- **Go back up**: the path at the top left ("◂ Rack ▸ Sub-rack", each level is clickable), or `Backspace`.
- **Inputs and outputs**: right-click the sub-rack or a gate ▸ add an audio input or output (L / R pair) or a MIDI one, remove the last one (with its cables).
- **Ungroup**: right-click ▸ **Dégrouper**; the contents return to the level above and the cables are reconnected directly.
- The on / off button bypasses the whole sub-rack (its inputs go straight to the outputs of the same rank); mute silences it.
- Deleting, copying, pasting or duplicating a sub-rack takes all its contents along. Sub-racks can be nested.

> A sub-rack costs nothing: no extra processing, no latency. Latency compensation takes it into account.

A / B memories

The **A** and **B** buttons in the header hold two states of the rack so you can compare them. The lit memory is the one playing: whatever you adjust goes into it. Clicking the other one recalls it (if it is empty, it starts from the current settings).

A memory keeps, for every module: volume, pan, dry / wet, bypass, mute, the knobs of Cocon's own modules, and the full state of every plugin. It does not change which modules are present, nor the cables.

Right-click A or B: switch to the other memory, copy A to B or B to A, and **Changement par MIDI** (switch by MIDI):

- **Program Change**: 0 → A, 1 → B;
- **Controller**: values 0–63 → A, 64–127 → B;
- **Toggling controller**: each press switches (pedal);
- **Controller number**, **Channel** (or all channels);
- **Apprendre** (Learn): move the controller or send the Program Change, and Cocon remembers it;

- **Laisser passer ce message vers les modules** (pass this message on to the modules) — otherwise it stops at Cocon.

A small green dot on B means MIDI can switch memories; orange: Cocon is waiting for a message to learn.

Latency compensation

Some plugins delay the sound (latency). When **Compenser la latence** (Compensate latency) is on (green dot in the header), Cocon reports the delay of the longest path to your music program, so it can realign the track, and shorter branches wait for the longest before they join: everything stays in time. The header then shows the latency in samples and milliseconds.

When off (orange dot, “latence non compensée”), nothing is delayed or reported: handy for live playing without waiting, but branches with different latencies recombine out of step.

Click the switch in the header, use the canvas right-click menu, or a shortcut (to be chosen). The setting belongs to each rack and is saved with it. A plugin's status line shows its own latency.

Automation

Cocon exposes 896 automatable parameters to your music program:

- **512** for module settings: every setting of each plugin (up to 256 per plugin), “Gain” and “Pano” of the Gain module, “Voie 1” to “Voie 4” of the Mixer, the settings of the Keyboard split and of the Stereo utility. They are named “Module : setting”; unused slots are named “(libre n)” (free n);
- **384** more, three per module: “Volume du module”, “Pano du module”, “Dry/wet du module” (module volume, pan, dry/wet).

Names follow modules being added, removed and renamed. Each module keeps its slot, so curves already drawn stay on the right setting. The other way round, a setting changed in a plugin's window or a Cocon knob is written to automation when your music program records it.

Undo, copy, paste

- **Annuler** (Undo, Ctrl + Z) and **Rétablir** (Redo, Ctrl + Y or Ctrl + Shift + Z) cover: adding, deleting, cables, moving, knobs, volume, pan, dry / wet, bypass, mute, names, shrinking, latency compensation, sub-racks. Quick successive steps of the same knob are undone in one go.
- **Copy** (Ctrl + C), **Paste** (Ctrl + V, under the pointer), **Duplicate** (Ctrl + D): the selected modules, with their plugins' settings and the cables between them. The clipboard is Windows' own: you can paste into another Cocon or another project.

Exporting and importing a rack

- **Exporter…** (Export, Ctrl + E) saves the whole rack to a `.cocon` file that you name: modules, cables and their look, every plugin's settings, volumes, pans, shrunk modules, thumbnails, sub-racks, A / B memories, as well as the window size, the canvas view, the folded list and the appearance. The file name becomes the rack's name.
- **Importer…** (Import, Ctrl + I) opens a `.cocon` file with the Windows Browse dialog and replaces the current rack; the window gets back its size, view and appearance. **Annuler** (Undo) brings back the previous rack.

> The appearance is shared by every Cocon: importing a rack that contains one changes it for the other instances too.

Options

The **Options** button in the header opens a panel with four tabs. **Fermer** (Close) or Esc closes it.

Dossiers (Folders)

The folders where Cocon looks for plugins to fill the list (their sub-folders are searched too): **Ajouter un dossier** (Add a folder), **Dossiers habituels** (Usual folders: Windows' VST folders, and those Reaper scans if it is installed), **Retirer ce dossier** (Remove this folder), and **Analyser maintenant** (Scan now). Only new or changed files are opened; a plugin that crashes during the scan is simply marked “défaillant” (faulty). While scanning, a progress strip appears under the list.

Apparence (Appearance)

- **Canvas background**: plain, horizontal gradient, vertical gradient, or a picture (jpg, png, bmp, gif, tif) chosen with Browse; colours through the Windows colour dialog.
- **Cables**: for audio and for MIDI, default colour, line style and thickness.
- **Modules**: soft shadow (with its intensity and offset), colour of the on / off button of an active module, level meters, size of the icons at the top of modules (70 to 150 %).
- **Thumbnails** of the plugins' windows.
- **Taille de la fenêtre** (window size): 60 to 200 %, for every instance of Cocon.
- **Réglages d'origine** (factory settings) restores the whole original appearance.

Raccourcis clavier (Keyboard shortcuts)

Click an action, then press the new key combination. Esc: leave it as it is; Backspace: no shortcut. A shortcut already in use is taken away from the other action. **Raccourcis d'origine** (factory shortcuts) restores them all. See the list.

À propos / Aide (About / Help)

Cocon's name and version, and Le Barrail. At the bottom, a reminder that this help comes separately, as PDF and HTML, in French and English.

Default keyboard shortcuts

Action (as shown in Cocon)	Shortcut
Annuler (Undo)	Ctrl + Z
Rétablir (Redo)	Ctrl + Y (or Ctrl + Shift + Z)
Supprimer la sélection (Delete selection)	Delete
Renommer le module (Rename module)	F2
Ajouter un plugin… (Add a plugin)	Ctrl + O
Ouvrir la fenêtre du plugin (Open plugin window)	Enter
Contourner le module (Bypass module)	Ctrl + B
Couper le son du module (Mute module)	Ctrl + M
Recentrer la toile (Recentre canvas)	Home
Zoom avant / arrière (Zoom in / out)	Ctrl + + / Ctrl + −
Rechercher un plugin (Search plugin)	Ctrl + F
Exporter le rack… (Export rack)	Ctrl + E
Importer un rack… (Import rack)	Ctrl + I
Replier / déplier la liste des plugins (Fold / unfold plugin list)	Ctrl + L
Copier / Coller / Dupliquer les modules (Copy / Paste / Duplicate)	Ctrl + C / Ctrl + V / Ctrl + D
Tout sélectionner (Select all)	Ctrl + A
Grouper en sous-rack (Group into sub-rack)	Ctrl + G
Remonter d'un niveau (Up one level, sub-rack)	Backspace (plus a shortcut of your choice)
Options · Compenser la latence · Passer à l'autre mémoire (Options · Compensate latency · Switch memory)	none by default (your choice)

> In Reaper, so that keys reach Cocon rather than Reaper: the plugin window's **+** menu ▸ “Send all keyboard input to plug-in”.

Frequently asked questions

A keyboard shortcut does nothing.

Your music program may be keeping the keys for itself. In Reaper, tick “Send all keyboard input to plug-in” (window's **+** menu). Also check the shortcut in Options ▸ Raccourcis clavier.

A plugin has stopped.

Only that plugin is affected. Click **Relancer** (Restart) in its module (or right-click ▸ Relancer le plugin).

A module is red when the project opens.

The plugin's file was moved or deleted. Use **Chercher…** (Find) to point to its new location: it gets its settings and cables back.

I hear nothing.

Check that the last module is connected to **Out**, that no module is muted or bypassed by mistake, and watch the level meters to see where the sound stops. For an instrument, check that MIDI comes from **In**.

The canvas looks empty.

Press `Home` or right-click ▸ **Recentrer la toile**. If the “◂ Rack ▸ …” path shows at the top left, you are inside a sub-rack: `Backspace` goes back up.

Two branches are out of time.

Turn on **Compenser la latence** (green dot in the header).

Does a 32-bit plugin really work in my 64-bit program?

Yes: Cocon runs it in its 32-bit host and passes it the sound and MIDI. The “Pont 32 bits” indicator in the header counts these plugins.

Cocon 1.11.2 — Le Barrail. This help is also available in French (“Cocon - Aide”).