Xtractpler User Manual

Version 3.5.5
Multi-velocity sample capture, slicing, and export

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1. About this manual

This document describes **Xtractpler v3.5.5**: how the application is organized, what each area of the interface is for, and how the capture-to-export pipeline fits together. It replaces the v3.0.0 manual for day-to-day use. Project files (`.xcfg`) created in v3.0 remain **fully compatible** with v3.5.5.

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2. What Xtractpler does

Xtractpler automates **recording**, **transient-aware slicing**, and **batch processing** of **multi-velocity** (and round-robin) samples from audio and/or MIDI sources. Typical uses include:

- Building velocity-layered drum or instrument libraries from a DAW, plug-ins, or live input
- Exporting finished audio in common formats **and** optional **sampler mapping** files (SFZ, Decent Sampler, Ableton, Bitwig, FL Studio FPC)
- Working through a fixed **five-tab workflow** so setup, capture, review, and export stay predictable

The **Next-Gen Audio Engine** also supports **high-resolution audio** across the full workflow (capture, processing, and export), with support for up to **32-bit float** depth and sample rates up to **96 kHz**. This ensures studio-grade fidelity for users who need extended dynamic range and modern production-quality detail.

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3. Supported platforms

Platform	Notes
macOS	Native; optimized for **Apple Silicon**; Intel Macs are **not supported** since 3.5.
Windows	**Windows 10 / 11**, Intel.

Linux	**Intel**; common distributions (e.g. Ubuntu, Fedora, Arch). Typical packages: `.AppImage` (recommended) or `.deb`

Use the build that matches your OS from the official download or purchase page.

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4. Demo vs licensed version

The **Demo** is functionally complete for exploring the v3.5.3 workflow. It applies these limits:

- Capture memory is limited to **3 rows** (velocities) and **1 round-robin** per session

The **licensed** product removes those limits according to your edition.

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5. Core concepts

Before using the tabs, these terms appear throughout the app:

- **Project (`.xcfg`)** — Saves your session: grid, devices, plug-in chain choices, capture settings, export options, etc. You can open v3.0 projects in v3.5.3 without conversion.
- **Velocity layers** — Rows in the configuration grid that correspond to different hit strengths (e.g. MIDI velocity ranges).
- **Round-robins** — Multiple captures per layer for natural variation.
- **Transient / grid** — Slicing aligns to transients; the **grid** and waveform help you verify timing between hits and adjust behavior.
- **Capture methods**
    - **Internal (VST3 / AU)** — Renders through the configured plug-in chain using **offline audio render** for very fast, repeatable captures.
    - **Inter-App/External Hardware** — Automated capture process for other sources of audio beyond VSTs, like other applications or external synths, where MIDI and audio is routed between Xtractpler and apps or devices. This requires third-party audio or MIDI routing applications depending on your system.
    - **Live Capture** — Guided capture for live mic or line-in audio (hardware, DAW output, reactive playing), with **manual** and **automatic** modes.

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6. The main window: five-tab workflow

The graphical interface is organized as **five tabs**. Work **left to right** through the pipeline; each tab has a single job.

6.1 Configure

Purpose: Define **what** you are sampling and **how** the session is wired—velocities, MIDI, audio I/O, and slicing rules at a high level.

You typically use this tab to:

- Set up or edit the **configuration grid** (name for sample or note, MIDI note or note range (e.g., 'C1..C5' or '36..48'), duration, note velocities, velocity curve distribution, fading out milliseconds, silence threshold, round-robins)
- Choose **audio input** and **MIDI output** devices (and verify they match your DAW or routing setup)
- Adjust settings that affect **how many** samples you will capture and **how** they are labeled

Tips:

- v3.5.5 includes **major grid UX improvements**: flawless row deletion, improved `Tab` key navigation for rapid data entry, and strict focus trapping so your keyboard always controls what you expect.
- Use **keyboard navigation** (arrow keys, Tab, Enter to edit, shortcuts where shown) for large grids—see **§9** for a shortcut summary.
- **Undo / redo** applies to the grid and many edit operations—use it freely while experimenting.
- Clicking 'Apply Changes' saves your grid instantly without forcing you to leave the Configure tab, keeping your workflow uninterrupted.

6.2 Plug-ins

Purpose: Manage the **audio plug-in chain** used when capturing through the **internal** path (VST3 on Windows/Linux; VST3/AU on macOS).

Xtractpler works as a native **plug-in host**. In normal installations, it scans the default plug-in locations for your OS, builds the available plug-in list, and lets you open the plug-in's own graphical interface (**UI**) directly inside the workflow.

Default scan behavior (host mode):

- **macOS** — Scans standard **VST3** and **AU** locations used by most installers.
- **Windows** — Scans standard **VST3** locations and indexes compatible plug-ins for internal capture.
- **Linux** — Scans standard **VST3** locations used by your distribution or plug-in manager.

For non-standard installations (portable plug-ins, custom library drives, manually moved binaries), use **Custom Folders** to add additional scan paths. After adding a path, run a rescan so the new plug-ins appear in the list.

You typically use this tab to:

- Load and order **instrument/effect** plug-ins that produce the sound you want to sample.
- Open each plug-in **UI** to set patches, macros, modulation, and output levels before capture.
- Balance **CPU** and **latency** for your machine; heavy chains may affect live responsiveness, while **offline internal** capture favors speed and repeatability.

Testing the Plug-in

Before you run a full capture pass, verify that the loaded plug-in responds correctly:

1. Go to the **Configure** tab.
2. Select your keyboard/controller in **MIDI In**.
3. Keep your target bus/channel in **MIDI Out** as needed for your test context.
4. Play notes or pads from your controller and monitor behavior (velocity response, articulation changes, patch switching).

During this live test, Xtractpler routes the monitored signal automatically to the operating system's default **Audio Out** device, so you can immediately hear whether the loaded VST3/AU is configured correctly.

Tips:

- Keep the chain **minimal** unless you need specific processing baked into the samples.
- If a plug-in fails to load, check the **error console** (see §7) for messages you can share with support.
- If a plug-in is missing, verify its location and add the folder under **Custom Folders**, then rescan.

6.3 Capture

Purpose: Record or **render** audio into Xtractpler according to the grid and the method you choose.

Three complementary approaches:

A. Internal (VST3 / AU) — Offline Audio Render

- Renders audio **through the plug-in tab's chain** without real-time playback constraints.
- Delivers a **large speed-up** compared to purely real-time capture for many sessions.
- Best when your sound is **entirely inside** the plug-in chain and you want repeatable, fast passes.

B. Inter-App/External Hardware

- Execute an **automated capture** when sound comes from other audio applications in the system/DAW or from external connected hardware.
- **Virtual cables might be required depending on your system** — Depending on your system, audio/MIDI between applications requires a third-party extension (free/paid).
- Capture is performed **in real-time**.

C. Live Capture (guided)

- Walks you through capture when sound comes from **live input hardware**, ideal for acoustic instruments or vocals.
- **Manual mode** — You control when passes start/stop; suited to performance-style recording.
- **Automatic mode** — The app drives the pass sequence against your grid; suited to consistent, repeatable takes.
- **Retake** — If you make a performance mistake during a pass (for example, an imprecise drum hit, wrong intensity, or unexpected background noise), use the **Retake** button (or its assigned keyboard shortcut) to discard the current take instantly and re-record only that specific velocity/note target. This lets you correct local errors without aborting or restarting the full Live Capture session.

You typically use this tab to:

- Pick **Internal/Inter-App** vs **Live** capture for the current project.
- Start, monitor, and complete **capture passes** while watching **levels** and **progress**.
- Confirm that MIDI (if used) is firing the intended velocities and channels.

Tips:

- Watch **VU meters** (stereo/mono) to avoid clipping; adjust source levels or plug-in gain early.
- If capture fails mid-session, read the **integrated error console** before re-running (§7).

6.4 Review

Purpose: Listen, **inspect**, and **tune** captured material **before** export—levels, slice boundaries, and grid alignment.

You typically use this tab to:

- Audition individual cells or groups against the **waveform** display.
- Use the improved **waveform view** to judge **time between transients** and refine how slices sit on the **grid**.
- Catch problems (silence, double hits, wrong velocity) while fixing the session is still cheap.

Tips:

- Small timing tweaks here often save hours of rework in the sampler later.
- Combine visual waveform cues with **meters** for level issues that are not obvious by eye.

6.5 Export

Purpose: Write **audio files** and optional **mapping** sidecars in one place.

Audio formats

- **WAV** — Uncompressed; default archival choice.
- **MP3** — Compressed; useful for previews or size-constrained delivery.
- **FLAC** — Lossless compression; smaller than WAV with no quality loss.
- **OGG** — Compressed; useful for engines and pipelines that prefer open codecs.

Sampler mapping & Hardware (Standard vs Pro)

Xtractpler now divides export formats into two tiers.

Standard Formats (Included in base license):

- **SFZ (.sfz)** — Generates mapping data for universal SFZ-compatible players.
- **Decent Sampler (.dsbundle)** — Generates a ready-to-play bundle with UI and effects.
- **Ableton Sampler (.adv)** — Native Ableton Live preset for chromatic instruments.
- **Bitwig Studio (.multisample)** — Native multisample container for Bitwig.
- **FL Studio FPC (.fpc)** — Drum pad mapping for FL Studio (Only visible when capturing 'Drums').

Pro & Hardware Extensions (Coming soon under a new Pro license):

- **Ableton Drum Rack (.adg)** — Advanced native drum rack generation.
- **Akai MPC (.xpm)** — Keygroup programs optimized for modern MPC standalone hardware.
- **Elektron (.wav)** — Mathematically perfect sample chains for Digitakt/Analog Rytm.
- **Roland SPD-SX PRO** — Audio directory structuring for Roland's flagship sampling pad.
- **Studio One Impact (.preset)** — Drum machine mapping for PreSonus Studio One.

(Note: When capturing tonal instruments ("Sound" mode) and generating compatible formats like SFZ, Decent Sampler, and Ableton Sampler (.adv), Xtractpler injects a customizable ADSR envelope to make exported instruments plug-and-play and prevent audio clicks).

Tips:

- Export a **small test batch** (one velocity layer) before running a full multi-hundred-file job.
- Keep `.xcfg` **backups** before major grid changes so you can return to a known-good state.

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7. Feedback, monitoring, and stability

This release emphasizes **visible feedback** and **robust operation**.

- **VU meters (stereo / mono)** — Real-time level monitoring during capture and review.
- **Progress bars** — Clear indication of long jobs (offline render, batch export).
- **Integrated error console** — Central place for routing, device, plug-in, and processing messages.
- **Waveform visualization** — Higher-fidelity display to support **transient** and **grid** decisions.

Under the hood, **memory and CPU** usage are optimized; many stability issues from earlier branches are addressed. If something still misbehaves, note your **OS version**, **audio/MIDI setup**, and any **console** text when contacting support.

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8. Inter-App & External Hardware Routing

This section covers practical routing for real-time capture sources that are not fully internal plug-in renders.

8.1 Inter-App Routing (DAW / Standalone App)

Use this method when the sound source is another app running on the same computer (DAW project, standalone synth, drum app, etc.).

Requirements:

- A **Virtual Audio Cable** (for example: **BlackHole**, **VB-Cable**, **Soundflower**, or equivalent).
- A virtual MIDI bus (for example: **IAC Driver** on macOS, **loopMIDI** on Windows, distribution-specific virtual MIDI ports on Linux).

Audio routing (step by step):

1. In your DAW/source app, set output to the **Virtual Audio Cable** device.
2. In Xtractpler, set **Audio Input** to that same **Virtual Audio Cable** device.
3. Confirm incoming level in Xtractpler meters before starting capture.

MIDI routing (step by step):

1. In Xtractpler, set **MIDI Out** to a virtual MIDI bus and choose the target channel.
2. In the DAW/source app, set **MIDI In** to that same virtual bus and channel.
3. Arm/enable MIDI reception in the source app so incoming notes from Xtractpler trigger the instrument.
4. Run a short test pass and confirm both note triggering and audio return.

Signal flow summary:

- **Audio:** DAW/App **Audio Out** -> **Virtual Audio Cable** -> Xtractpler **Audio Input**
- **MIDI:** Xtractpler **MIDI Out** (virtual bus + channel) -> DAW/App **MIDI In** (same bus + channel)

[Insertar diagrama de ruteo Inter-App aquí]

8.2 External Hardware (Synthesizers / Modules)

Use this method when the sound source is a physical synth, drum machine, or sound module connected to your computer/interface.

Audio routing (physical):

1. Connect the hardware's **Audio Out** (L/R or mono) to your audio interface input(s).
2. In Xtractpler, select that interface as **Audio Input**.
3. Set input gain on the interface and verify a healthy level in Xtractpler (avoid clipping).

MIDI routing (physical):

1. In Xtractpler, select your MIDI interface/device as **MIDI Out**.
2. Connect a physical MIDI cable from the computer/interface MIDI output to the hardware **MIDI In** port.
3. Match MIDI channel settings between Xtractpler and the hardware instrument.
4. Run a trigger test (single note at different velocities) before full capture.

Signal flow summary:

- **Audio:** Hardware **Audio Out** -> Interface input(s) -> Xtractpler **Audio Input**
- **MIDI:** Xtractpler **MIDI Out** -> Physical MIDI cable -> Hardware **MIDI In**

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9. Keyboard shortcuts

Xtractpler uses the same actions on every platform; only the **primary modifier** name changes. **macOS** uses ⌘ **Command**; **Windows** and **Linux** use **Ctrl** for the same roles. The tables below use **Cmd** as shorthand for ⌘ Command.

Role	macOS	Windows / Linux
Primary modifier (equivalent to "control")	⌘ **Cmd**	**Ctrl**

Alt / secondary modifier	⌥ **Option**	**Alt**

Linux generally matches the **Windows / Linux** column. If a shortcut does nothing, your desktop environment may be capturing it (workspace switching, terminal launchers, etc.)—check **Settings** → **Keyboard** or try rebinding the conflicting shortcut.

9.1 Configuration grid (Configure tab)

These shortcuts apply while focus is in the **configuration grid** (and where the UI does not show a different binding).

Action	macOS	Windows / Linux
Move cell focus	← ↑ → ↓	Same
Start editing / confirm edit (context-dependent)	**Enter**	Same
Cancel edit	**Esc**	Same
Open a drop-down cell (when focused)	**Space**	Same
Add row(s)	**Cmd+A**	**Ctrl+A**
Remove selected row(s) (when applicable)	**Delete** or **Backspace**	Same
Undo	**Cmd+Z**	**Ctrl+Z**
Redo	**Cmd+Shift+Z**	**Ctrl+Shift+Z** or **Ctrl+Y** (use the one shown next to **Redo** in the **Edit** menu)

Note: Cmd+A / **Ctrl+A** in Xtractpler is reserved for **adding grid rows**, not “select all text,” while the grid has focus. For text fields elsewhere in the app, **Cmd+A** / **Ctrl+A** usually selects all text in that field.

Additionally, users can now enter a single note (e.g., "60" or "C3") or a range using the ■ delimiter (e.g., "60..72" or "C3..C4") in the "MIDI" column.

9.2 Menus and standard editing

Where Xtractpler exposes standard **Edit** / **File** entries, shortcuts follow the usual conventions for each OS:

Action	macOS	Windows / Linux
Cut / Copy / Paste (in text fields)	**Cmd+X** / **Cmd+C** / **Cmd+V**	**Ctrl+X** / **Ctrl+C** / **Ctrl+V**
Select all (in text fields)	**Cmd+A**	**Ctrl+A**

9.3 Platform-specific differences

- **macOS only: Cmd+Q** quits the application (system convention). **Windows / Linux:** use **Alt+F4** (Windows) or your window manager's close shortcut on Linux.
- **macOS:** Some dialogs list **Return** where Windows lists **Enter**; both behave the same in Xtractpler.
- **Windows vs Linux:** There is **no intentional difference** inside Xtractpler between Windows and Linux shortcuts; divergent behavior usually comes from the desktop capturing **Ctrl+…** or **Alt+…** chords.

Always trust **in-app menus** and tooltips if they disagree with this table—labels in the shipping build win (see the disclaimer at the end of this manual).

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10. Licensing and documentation

- **Activation** — Use the dialog provided with your purchase email; keep your license key private.
- **EULA** — The End User License Agreement ships with the product (e.g. PDF in the bundle or on the website).
- **Updates** — The application can notify you when a new build is available (auto-updater), depending on platform and release channel.

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11. Document history

Version	Summary

3.5.5	Added new Standard export formats (Ableton .adv, Bitwig, FL Studio FPC); Prepared UI and engine for upcoming Pro formats (Ableton Drum Rack, MPC, Elektron, Roland, Studio One); Major UX fixes to the configuration grid (Tab navigation, row deletion stability); Improved 'Apply Changes' workflow.
3.5.3	Added support for note ranges (e.g., C1..C5) in a single grid row via In-Memory Expansion; fixed filename sanitization for sharp notes during export.
3.5.1	Five-tab UI (Configure, Plug-ins, Capture, Review, Export); Internal offline capture; Live Capture (manual/automatic); FLAC/OGG export; SFZ & Decent Sampler mapping; engine and grid improvements; `.xcfg` compatible with v3.0; keyboard shortcut reference (macOS vs Windows/Linux).
3.0.0	Earlier grid-centric workflow and v3.0 feature set (superseded for UI flow by this document).
