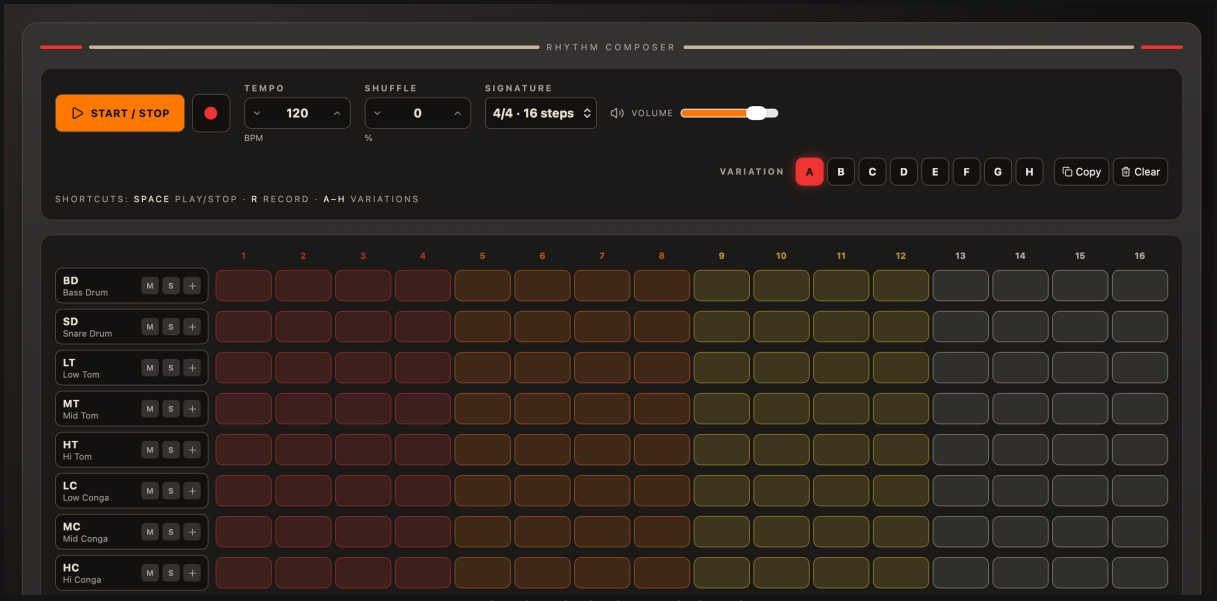
CogitoErgoDrum

MANUALE UTENTE · USER MANUAL

Rhythm Composer · 808 Inspired · v2.0

Web Audio · 16 Voci · 16 Step · 8 Pattern · Master FX · WAV / MP3



Interfaccia principale · Main interface

v 2.0 · 2026 · cogitoergoboom

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1 · Introduzione / Introduction

CogitoErgoDrum *è una drum machine web ispirata alla leggendaria Roland TR-808, costruita interamente con tecnologie browser (Web Audio API). Unisce l'estetica vintage della TR-808 originale a un motore audio moderno, pannelli di controllo per-voce espandibili, una sezione Master FX professionale e un sistema di preset/pack per condividere i propri groove.*

- 16 step per pattern, 8 variazioni (A–H)
- 16 voci 808 sintetizzate (BD, SD, toms, congas, percussioni)
- Parametri originali TR-808 per ogni voce (Tune, Decay, Tone, Snappy…)
- Drive (overdrive) e Delay send per ogni voce
- Total Accent row per accentuazione dinamica globale
- Mute, Solo e pannello + per ogni voce
- Shuffle/Swing regolabile con frecce ▲▼
- Time signature: 4/4, 3/4, 5/4, 7/8, 6/8
- Master FX: EQ, Saturation, Bus Compressor, Transient Shaper, Clipper, Limiter
- Waveform live nella sezione Master FX
- Registrazione live multi-take, export WAV e MP3
- Preset singolo e pack .json (import/export)
- Scorciatoie da tastiera (Space, R, A–H)
- Audio continuo anche cambiando tab del browser
- Registrazione sempre dal primo battito

2 · Installazione & Avvio / Setup & Launch

*CogitoErgoDrum è un'applicazione web a file singolo (**HTML + CSS + JS**). Non richiede installazione, server o plugin aggiuntivi. È sufficiente aprire il file **.html** in un browser moderno. La prima interazione con l'interfaccia (click su START/STOP) inizializza il contesto audio Web Audio API.*

REQUISITO	DETTAGLIO
Browser	Chrome 90+, Firefox 88+, Edge 90+, Safari 14+
Export MP3	Connessione internet (libreria lamejs CDN)
Audio in background	Scheduler su Web Worker — il suono prosegue anche cambiando tab
Avvio	Nessun preset attivo; campo nome mostra il placeholder "project name"

3 · Interfaccia Principale / Main Interface

*L'interfaccia è organizzata verticalmente in cinque aree: **Header** (controlli globali), **Griglia Sequencer** (16 voci × 16 step con pannelli espandibili), **Total Accent** row, **Master FX** e **Recordings**.*

3.1 · Header & Controlli Globali

PARAMETRO	ITALIANO	ENGLISH
START / STOP	Avvia/ferma il sequencer. Prima pressione inizializza l'audio.	Starts/stops sequencer. First press initialises Web Audio.
● REC	Avvia/ferma registrazione. Stop rec ferma anche il play.	Starts/stops recording. Stopping rec also stops playback.
TEMPO ▲▼	BPM con frecce su/giù (range 20–300). Rotella mouse supportata.	BPM with up/down arrows (range 20–300). Mouse wheel supported.
SHUFFLE ▲▼	Swing 0–99%. Frecce ▲▼ e rotella mouse.	Swing 0–99%. Arrow buttons and mouse wheel.
SIGNATURE	Selettore time signature: 4/4, 3/4, 5/4, 7/8, 6/8.	Time signature selector: 4/4, 3/4, 5/4, 7/8, 6/8.
VOLUME	Slider volume master.	Master volume slider.
VARIATION A–H	8 pattern indipendenti. Tasto destro su una variation = paste.	8 independent patterns. Right-click a variation = paste.
Copy / Clear	Copia o azzera il pattern corrente.	Copy or clear the current pattern.

3.2 · Griglia Sequencer — Pad e Voci

La griglia mostra 16 righe (una per voce) × 16 colonne (step). I pad sono colorati a gruppi di 4 secondo la palette TR-808: rosso (beat 1), arancio (beat 2), giallo (beat 3), crema (beat 4). Un leggero lampeggio evidenzia i pad nel momento in cui vengono suonati. Il cursore di riproduzione si sposta da sinistra a destra.

PARAMETRO	ITALIANO	ENGLISH
M	Mute: silenzia la voce senza rimuoverla dal pattern.	Mute: silences the voice without removing it from the pattern.
S	Solo: isola la voce, silenzia le altre.	Solo: isolates the voice, mutes all others.
+	Espande/collassa il pannello parametri sonori per quella voce.	Expands/collapses the sound parameters panel for that voice.

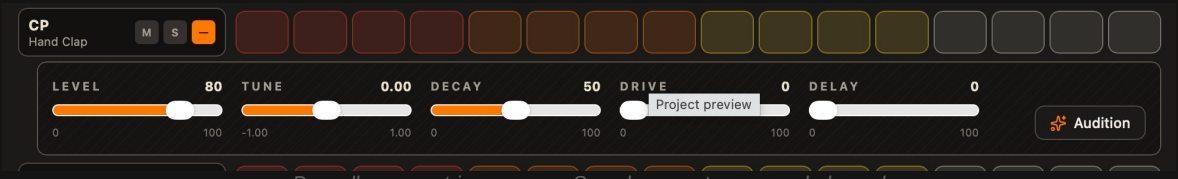
SIGLA	NOME	PARAMETRI
BD	Bass Drum	Level · Tune · Decay · Drive · Delay
SD	Snare Drum	Level · Tone · Snappy · Drive · Delay
LT	Low Tom	Level · Tune · Drive · Delay
MT	Mid Tom	Level · Tune · Drive · Delay
HT	Hi Tom	Level · Tune · Drive · Delay
LC	Low Conga	Level · Tune · Drive · Delay
MC	Mid Conga	Level · Tune · Drive · Delay
HC	Hi Conga	Level · Tune · Drive · Delay

RS	Rimshot	Level · Drive · Delay
CL	Claves	Level · Drive · Delay
CP	Hand Clap	Level · Drive · Delay
MA	Maracas	Level · Drive · Delay
CB	Cowbell	Level · Drive · Delay
CY	Cymbal	Level · Decay · Drive · Delay
OH	Open Hi-Hat	Level · Decay · Drive · Delay
CH	Closed Hi-Hat	Level · Decay · Drive · Delay

3.3 · Total Accent Row

*La riga arancione **TOTAL ACCENT** in fondo alla griglia aggiunge un boost di volume globale agli step attivati, simulando il comportamento dell'accento della TR-808 originale.*

3.4 · Pannello Parametri Sonori (per voce)

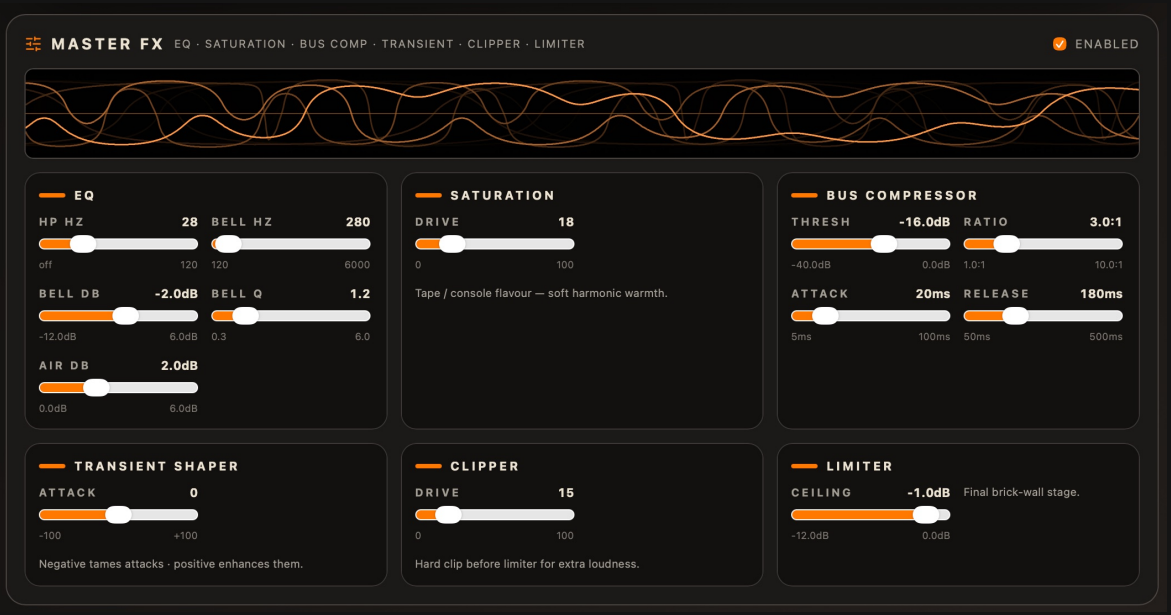


Pannello parametri espanso — Sound parameters expanded panel

*Premere il pulsante **+** accanto a M/S per espandere il pannello della voce. Il nome dello strumento non viene ripetuto nel pannello per ottimizzare lo spazio. Ogni slider mostra il valore minimo (sinistra), massimo (destra) e valore corrente (centro in grassetto). Il pulsante **Audition** suona la voce per testare le impostazioni.*

PARAMETRO	ITALIANO	ENGLISH
Level	Volume individuale 0–100%	Individual voice volume 0–100%
Tune	Intonazione in semitoni (BD/Toms/Congas: ±semitoni)	Tuning in semitones
Decay	Tempo di decadimento 0–100%	Envelope decay time 0–100%
Tone	Bilanciamento tono (SD): 0=scuro, 100=brillante	Tone balance (SD): 0=dark, 100=bright
Snappy	Quantità di rumore snap del rullante (SD)	Snappy noise amount for snare (SD)
Drive	Overdrive/waveshaper per la voce 0–100	Per-voice overdrive/waveshaper 0–100
Delay	Send verso delay con feedback 0–100	Delay send with feedback 0–100
Audition ✦	Riproduce la voce per ascoltare le impostazioni	Plays the voice to preview settings

3.5 · Master FX



Sezione Master FX con waveform live · Master FX section with live waveform

*La sezione **MASTER FX** si trova tra la griglia sequencer e la sezione Recordings. In cima mostra una **waveform live** (AnalyserNode a 60 fps). Il toggle **ENABLED** in alto a destra bypassa l'intera catena. Ogni modulo ha il proprio pannello con slider min/max/valore.*

PARAMETRO	ITALIANO	ENGLISH
EQ	HP Freq (0–120 Hz), Bell Hz, Bell dB, Bell Q, Air dB (boost 10 kHz).	HP Freq (0–120 Hz), Bell Hz, Bell dB, Bell Q, Air dB (10 kHz boost).
Saturation	Drive 0–100 (tape/console flavour, distorsione armonica leggera).	Drive 0–100 (tape/console flavour, soft harmonic distortion).
Bus Comp	Threshold (dB), Ratio, Attack (ms), Release (ms).	Threshold (dB), Ratio, Attack (ms), Release (ms).
Transient	Attack -100…+100 (negativo = attacchi più morbidi).	Attack -100…+100 (negative = softer attacks).
Clipper	Drive 0–100 hard-clip prima del limiter.	Drive 0–100 hard-clip before limiter.
Limiter	Ceiling dB: livello massimo di uscita.	Ceiling dB: maximum output level.

3.6 · Sezione Registrazioni

Sezione Recordings con 4 take · Recordings section with 4 takes

*La registrazione parte sempre dal **primo battito** (step 0). Fermando la registrazione si ferma automaticamente anche il play. Ogni take può essere rinominato, riprodotto, esportato in WAV o MP3, o eliminato.*

PARAMETRO	ITALIANO	ENGLISH

NEW TAKE / STOP	Avvia nuova registrazione o ferma (ferma anche il play).	Starts new recording or stops (also stops playback).
■ Play	Riproduce il take.	Plays back the take.
WAV	Export audio non compresso PCM 16-bit.	Uncompressed PCM 16-bit export.
MP3	Export MP3 compresso (richiede internet per lamejs).	Compressed MP3 (requires internet for lamejs).
■	Elimina il take.	Deletes the take.

4 · Parametri Sonori per Strumento / Per-Voice Sound Parameters

*Ogni strumento espone solo i parametri pertinenti al suo modello di sintesi, fedeli all'originale TR-808. Tutti i pannelli aggiungono inoltre **Drive** (overdrive/waveshaper) e **Delay** (send con feedback).*

STRUMENTO	PARAMETRI
BD — Bass Drum	Level 0–100 · Tune ±50 · Decay 0–100 · Drive 0–100 · Delay 0–100
SD — Snare Drum	Level 0–100 · Tone 0–100 · Snappy 0–100 · Drive 0–100 · Delay 0–100
LT — Low Tom	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
MT — Mid Tom	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
HT — Hi Tom	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
LC — Low Conga	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
MC — Mid Conga	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
HC — Hi Conga	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
RS — Rimshot	Level 0–100 · Drive 0–100 · Delay 0–100
CL — Claves	Level 0–100 · Drive 0–100 · Delay 0–100
CP — Hand Clap	Level 0–100 · Drive 0–100 · Delay 0–100
MA — Maracas	Level 0–100 · Drive 0–100 · Delay 0–100
CB — Cowbell	Level 0–100 · Drive 0–100 · Delay 0–100
CY — Cymbal	Level 0–100 · Decay 0–100 · Drive 0–100 · Delay 0–100
OH — Open Hi-Hat	Level 0–100 · Decay 0–100 · Drive 0–100 · Delay 0–100
CH — Closed Hi-Hat	Level 0–100 · Decay 0–100 · Drive 0–100 · Delay 0–100

5 · Master FX — Dettaglio / Master FX — Detail

*La catena Master FX è in coda all'intera mix. Il toggle **ENABLED** ne permette il bypass istantaneo per confronto A/B. L'ordine della catena è: EQ → Saturation → Bus Compressor → Transient Shaper → Clipper → Limiter.*

EQ

HP Freq: taglio sotto il valore scelto (0 = off, max 120 Hz). Bell Hz/dB/Q: filtro campana parametrico per attenuare o boostare risonanze. Air dB: shelf a 10 kHz per aggiungere aria e brillantezza a hi-hat e clap.

HP Freq: high-pass cut below the selected value (0 = off, max 120 Hz). Bell Hz/dB/Q: parametric bell filter for resonances or presence boost. Air dB: 10 kHz shelf to add air and brightness to hi-hats and claps.

Saturation

Drive 0–100: saturazione tape/console con distorsione armonica leggera. Rende la drum machine più "costosa" e meno sterile.

Drive 0–100: tape/console saturation with soft harmonic distortion. Makes the drum machine sound warmer and more expensive.

Bus Compressor

Threshold: soglia di compressione (dB). Ratio: rapporto di compressione (es. 3:1). Attack lento (10–30 ms) lascia passare il transiente della cassa. Release veloce compatta il groove.

Threshold: compression threshold (dB). Ratio: compression ratio (e.g. 3:1). Slow attack (10–30 ms) lets kick transients pass. Fast release tightens the groove.

Transient Shaper

Attack -100…+100: valori negativi smorzano gli attacchi, positivi li enfatizzano. Utile su techno, house e EDM.

Attack -100…+100: negative values tame attacks, positive values enhance them. Useful in techno, house and EDM.

Clipper

Drive 0–100: hard-clip prima del limiter. Taglia i picchi estremi e aumenta la loudness percepita mantenendo il punch.

Drive 0–100: hard-clip before the limiter. Shaves extreme peaks and increases perceived loudness while keeping punch.

Limiter

Ceiling dB: livello massimo di uscita. Ultimo stadio brick-wall della catena.

Ceiling dB: maximum output level. Final brick-wall stage of the chain.

6 · Scorciatoie da Tastiera / Keyboard Shortcuts

TASTO	AZIONE (IT)	ACTION (EN)
Space	Play / Stop sequencer	Play / Stop sequencer
R	Avvia / ferma registrazione	Start / stop recording
A – H	Passa alla variazione A–H	Switch to variation A–H

7 · Preset & Pack / Presets & Packs

*CogitoErgoDrum supporta il salvataggio di preset singoli e di **pack** di preset. Ogni preset include: nome, BPM, shuffle, time signature, tutti gli 8 pattern (con le variazioni A–H) e i parametri sonori di tutte le 16 voci.*

Preset inclusi (Cinematic Vibes pack + Boom Bap Origins pack):

PRESET	DESCRIZIONE (IT)
Snake Plissken	92 BPM · Groove post-apocalittico oscuro. Kick pesante, rullante aggressivo, cowbell sparse.
Neon Fugitive	118 BPM · Beat cyberpunk veloce. Kick incalzante, snare sincopato, hi-hat croccanti.
VHS Dreams	98 BPM · Ritmo nostalgico e caldo. Kick morbido, clap classico, maracas.
After Midnight	104 BPM · Groove notturno minimale. Kick profondo, rimshot asciutto.
Nakatomi	110 BPM · Beat action-movie corporate. Kick solido, snare tagliente, tom fill.
Bronx Street	92 BPM · Boom Bap di strada. Kick secco, snare crack, campione soul.
Madlib Digger	85 BPM · Lo-fi dusty. Kick boomy, snare swingato, hi-hat irregolari.
Dilla MPC Drunk	88 BPM · Drunk timing MPC. Kick spostato, snare anticipato.
Shaolin Basement	96 BPM · Hard boom bap. Kick profondo, snare aggressivo.

Esportare un preset singolo:

*Inserire il nome nel campo **project name**, poi premere **"Preset"**. Il browser scarica un file .json con l'intera composizione.*

Esportare / Importare un pack:

*Un pack è un file .json con struttura { "pack": "Nome Pack", "presets": [...] }. Importare con il pulsante **"Load"** — l'app riconosce automaticamente se si tratta di un preset singolo o di un pack e carica di conseguenza.*

8 · Esportazione Audio / Audio Export

1. Avviare il sequencer con START/STOP.
2. Premere NEW TAKE per iniziare la registrazione (parte dal beat 1).
3. Suonare: cambiare variazioni, regolare BPM, modificare parametri.
4. Premere STOP per fermare (ferma anche il play automaticamente).
5. Nella sezione Recordings: click WAV per export non compresso, MP3 per compresso.
6. Per rinominare: click sul nome del take e digitare.

9 · Riferimento Rapido / Quick Reference

AZIONE	COME (IT)
Avvia/ferma	Click START/STOP o Space
Registra	Click NEW TAKE o tasto R
Attiva step	Click sul pad
Cambia pattern	Click su A–H
Apri parametri voce	Click + sulla riga
Mute voce	Click M sulla riga
Solo voce	Click S sulla riga
Salva preset	Inserisci nome → click Preset
Carica preset/pack	Click Load → seleziona .json
Export WAV	Click WAV accanto al take
Export MP3	Click MP3 accanto al take
Bypassare Master FX	Toggle ENABLED in alto a destra
Cambiare time signature	Selettore SIGNATURE nell'header
Incolla pattern	Tasto destro su variazione di destinazione

CogitoErgoDrum

USER MANUAL

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1 · Introduction / Introduzione

CogitoErgoDrum is a browser-based drum machine inspired by the legendary Roland TR-808, built entirely with Web Audio API. It combines the vintage aesthetics of the original TR-808 with a modern audio engine, per-voice expandable control panels, a professional Master FX chain and a preset/pack system for sharing grooves.

- 16 steps per pattern, 8 variations (A–H)
- 16 synthesised 808 voices (BD, SD, toms, congas, percussion)
- Original TR-808 parameters per voice (Tune, Decay, Tone, Snappy…)
- Drive (overdrive) and Delay send per voice
- Total Accent row for global dynamic accentuation
- Mute, Solo and + expand panel per voice
- Adjustable Shuffle/Swing with ▲▼ arrows
- Time signatures: 4/4, 3/4, 5/4, 7/8, 6/8
- Master FX: EQ, Saturation, Bus Compressor, Transient Shaper, Clipper, Limiter
- Live waveform display in Master FX section
- Live multi-take recording, WAV and MP3 export
- Single preset and pack .json (import/export)
- Keyboard shortcuts (Space, R, A–H)
- Continuous audio even when switching browser tabs
- Recording always starts from beat 1

2 · Setup & Launch / Installazione & Avvio

CogitoErgoDrum is a single-file web application (**HTML + CSS + JS**). No installation, server or plugins required. Simply open the **.html** file in a modern browser. The first user interaction (click on START/STOP) initialises the Web Audio API context.

REQUIREMENT	DETAIL
Browser	Chrome 90+, Firefox 88+, Edge 90+, Safari 14+
MP3 Export	Internet connection required (lamejs CDN)
Background audio	Scheduler on Web Worker — audio continues when switching tabs
On boot	No preset active; name field shows placeholder "project name"

3 · Main Interface / Interfaccia Principale

The interface is organised vertically into five areas: **Header** (global controls), **Sequencer Grid** (16 voices × 16 steps with expandable panels), **Total Accent** row, **Master FX** and **Recordings**.

3.1 · Header & Global Controls

CONTROL	ENGLISH	ITALIANO
START / STOP	Starts/stops sequencer. First press initialises Web Audio API.	Avvia/ferma sequencer.
● REC	Starts/stops recording. Stopping rec also stops playback.	Avvia/ferma registrazione.
TEMPO ▲▼	BPM with arrow buttons (range 20–300). Mouse wheel supported.	BPM con frecce ▲▼.
SHUFFLE ▲▼	Swing 0–99% with arrows and mouse wheel.	Swing 0–99% con frecce.
SIGNATURE	Time signature: 4/4, 3/4, 5/4, 7/8, 6/8.	Time signature: 4/4, 3/4, 5/4, 7/8, 6/8.
VARIATION A–H	8 independent patterns. Right-click = paste copied pattern.	8 pattern indipendenti.
Copy / Clear	Copy or clear the current pattern.	Copia o azzera il pattern.

3.2 · Sequencer Grid — Pads & Voices

The grid shows 16 rows (one per voice) × 16 columns (steps). Pads are coloured in groups of 4 following the TR-808 palette: red (beat 1), orange (beat 2), yellow (beat 3), cream (beat 4). A brief flash animation highlights pads as they fire. The playback cursor moves left to right.

SIGLA	NOME	PARAMETRI
BD	Bass Drum	Level · Tune · Decay · Drive · Delay
SD	Snare Drum	Level · Tone · Snappy · Drive · Delay
LT	Low Tom	Level · Tune · Drive · Delay
MT	Mid Tom	Level · Tune · Drive · Delay
HT	Hi Tom	Level · Tune · Drive · Delay
LC	Low Conga	Level · Tune · Drive · Delay
MC	Mid Conga	Level · Tune · Drive · Delay
HC	Hi Conga	Level · Tune · Drive · Delay
RS	Rimshot	Level · Drive · Delay
CL	Claves	Level · Drive · Delay
CP	Hand Clap	Level · Drive · Delay
MA	Maracas	Level · Drive · Delay
CB	Cowbell	Level · Drive · Delay
CY	Cymbal	Level · Decay · Drive · Delay
OH	Open Hi-Hat	Level · Decay · Drive · Delay
CH	Closed Hi-Hat	Level · Decay · Drive · Delay

3.3 · Total Accent Row

The orange **TOTAL ACCENT** row at the bottom of the grid adds a global volume boost to activated steps, simulating the original TR-808 accent behaviour.

3.4 · Per-Voice Sound Parameters Panel

Press the **+** button next to M/S to expand the voice panel. The instrument name is not repeated inside the panel to save space. Each slider shows min (left), max (right) and current value (centre, bold). The **Audition** button plays the voice to preview settings.

PARAMETRO	ITALIANO	ENGLISH
Level	Volume individuale 0–100%	Individual voice volume 0–100%
Tune	Intonazione in semitoni (BD/Toms/Congas: ±semitoni)	Tuning in semitones
Decay	Tempo di decadimento 0–100%	Envelope decay time 0–100%
Tone	Bilanciamento tono (SD): 0=scuro, 100=brillante	Tone balance (SD): 0=dark, 100=bright
Snappy	Quantità di rumore snap del rullante (SD)	Snappy noise amount for snare (SD)
Drive	Overdrive/waveshaper per la voce 0–100	Per-voice overdrive/waveshaper 0–100
Delay	Send verso delay con feedback 0–100	Delay send with feedback 0–100
Audition ✦	Riproduce la voce per ascoltare le impostazioni	Plays the voice to preview settings

3.5 · Master FX

The **MASTER FX** section sits between the sequencer grid and Recordings. A **live waveform** (AnalyserNode at 60 fps) is displayed at the top. The **ENABLED** toggle in the top-right bypasses the entire chain. Each module has its own panel with min/max/value sliders.

PARAMETRO	ITALIANO	ENGLISH
EQ	HP Freq (0–120 Hz), Bell Hz, Bell dB, Bell Q, Air dB (boost 10 kHz).	HP Freq (0–120 Hz), Bell Hz, Bell dB, Bell Q, Air dB (10 kHz boost).
Saturation	Drive 0–100 (tape/console flavour, distorsione armonica leggera).	Drive 0–100 (tape/console flavour, soft harmonic distortion).
Bus Comp	Threshold (dB), Ratio, Attack (ms), Release (ms).	Threshold (dB), Ratio, Attack (ms), Release (ms).
Transient	Attack -100…+100 (negativo = attacchi più morbidi).	Attack -100…+100 (negative = softer attacks).
Clipper	Drive 0–100 hard-clip prima del limiter.	Drive 0–100 hard-clip before limiter.
Limiter	Ceiling dB: livello massimo di uscita.	Ceiling dB: maximum output level.

3.6 · Recordings Section

Recording always starts from **beat 1** (step 0). Stopping the recording automatically stops playback too. Each take can be renamed, played back, exported to WAV or MP3, or deleted.

PARAMETRO	ITALIANO	ENGLISH
NEW TAKE / STOP	Avvia nuova registrazione o ferma (ferma anche il play).	Starts new recording or stops (also stops playback).
■ Play	Riproduce il take.	Plays back the take.

WAV	Export audio non compresso PCM 16-bit.	Uncompressed PCM 16-bit export.
MP3	Export MP3 compresso (richiede internet per lamejs).	Compressed MP3 (requires internet for lamejs).
■	Elimina il take.	Deletes the take.

4 · Per-Voice Sound Parameters / Parametri Sonori per Strumento

Each instrument exposes only the parameters relevant to its synthesis model, faithful to the original TR-808. All panels additionally include **Drive** (overdrive/waveshaper) and **Delay** (send with feedback).

STRUMENTO	PARAMETRI
BD — Bass Drum	Level 0–100 · Tune ±50 · Decay 0–100 · Drive 0–100 · Delay 0–100
SD — Snare Drum	Level 0–100 · Tone 0–100 · Snappy 0–100 · Drive 0–100 · Delay 0–100
LT — Low Tom	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
MT — Mid Tom	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
HT — Hi Tom	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
LC — Low Conga	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
MC — Mid Conga	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
HC — Hi Conga	Level 0–100 · Tune ±50 · Drive 0–100 · Delay 0–100
RS — Rimshot	Level 0–100 · Drive 0–100 · Delay 0–100
CL — Claves	Level 0–100 · Drive 0–100 · Delay 0–100
CP — Hand Clap	Level 0–100 · Drive 0–100 · Delay 0–100
MA — Maracas	Level 0–100 · Drive 0–100 · Delay 0–100
CB — Cowbell	Level 0–100 · Drive 0–100 · Delay 0–100
CY — Cymbal	Level 0–100 · Decay 0–100 · Drive 0–100 · Delay 0–100
OH — Open Hi-Hat	Level 0–100 · Decay 0–100 · Drive 0–100 · Delay 0–100
CH — Closed Hi-Hat	Level 0–100 · Decay 0–100 · Drive 0–100 · Delay 0–100

5 · Master FX — Detail / Master FX — Dettaglio

The Master FX chain is at the end of the entire mix. The **ENABLED** toggle allows instant bypass for A/B comparison. Chain order: EQ → Saturation → Bus Compressor → Transient Shaper → Clipper → Limiter.

EQ

HP Freq: high-pass below the chosen value (0 = off, max 120 Hz). Bell Hz/dB/Q: parametric bell filter to attenuate resonances or boost presence. Air dB: 10 kHz shelf to add sparkle to hi-hats and claps.

Saturation

Drive 0–100: tape/console saturation with soft harmonic distortion. Makes the drum machine sound warmer and less sterile.

Bus Compressor

Threshold (dB), Ratio, Attack (ms), Release (ms). Slow attack (10–30 ms) lets kick transients pass; fast release tightens the groove.

Transient Shaper

Attack -100…+100: negative values tame transients, positive values enhance them. Widely used in techno, house and EDM.

Clipper

Drive 0–100: hard-clips before the limiter to shave peaks and increase perceived loudness while maintaining punch.

Limiter

Ceiling dB: maximum output level. Final brick-wall stage of the chain.

6 · Keyboard Shortcuts / Scorciatoie da Tastiera

TASTO	AZIONE (IT)	ACTION (EN)
Space	Play / Stop sequencer	Play / Stop sequencer
R	Avvia / ferma registrazione	Start / stop recording
A – H	Passa alla variazione A–H	Switch to variation A–H

7 · Presets & Packs / Preset & Pack

CogitoErgoDrum supports single preset and **pack** saving. Each preset includes: name, BPM, shuffle, time signature, all 8 patterns (variations A–H) and sound parameters for all 16 voices.

Included presets (Cinematic Vibes + Boom Bap Origins packs):

PRESET	DESCRIPTION
Snake Plissken	92 BPM · Dark post-apocalyptic groove. Heavy kick, aggressive snare, sparse cowbell.
Neon Fugitive	118 BPM · Fast cyberpunk beat. Driving kick, syncopated snare, crisp hi-hats.
VHS Dreams	98 BPM · Warm nostalgic rhythm. Soft kick, classic clap, maracas.
After Midnight	104 BPM · Minimal late-night groove. Deep kick, dry rimshot.
Nakatomi	110 BPM · Corporate action-movie beat. Solid kick, sharp snare, tom fills.
Bronx Street	92 BPM · Street boom bap. Dry kick, snare crack, soul sample.
Madlib Digger	85 BPM · Lo-fi dusty. Boomy kick, swinging snare, irregular hi-hats.
Dilla MPC Drunk	88 BPM · Drunk MPC timing. Shifted kick, anticipated snare.
Shaolin Basement	96 BPM · Hard boom bap. Deep kick, aggressive snare.

Export a single preset:

Type the name in the **project name** field, then click **"Preset"**. The browser downloads a .json file with the complete composition.

Export / Import a pack:

A pack is a .json file with structure { "pack": "Pack Name", "presets": [...] }. Import via the **"Load"** button — the app automatically recognises whether the file is a single preset or a pack and loads accordingly.

8 · Audio Export / Esportazione Audio

1. Start the sequencer with START/STOP.
2. Press NEW TAKE to begin recording (always starts from beat 1).
3. Play: switch variations, adjust BPM, modify parameters.
4. Press STOP to finish (also stops playback automatically).
5. In Recordings: click WAV for uncompressed export, MP3 for compressed.
6. To rename: click on the take name and type.

9 · Quick Reference / Riferimento Rapido

ACTION	HOW
Start/stop	Click START/STOP or press Space
Record	Click NEW TAKE or press R
Toggle step	Click on a pad
Switch pattern	Click A–H
Open voice params	Click + on the row
Mute voice	Click M on the row
Solo voice	Click S on the row
Save preset	Enter name → click Preset
Load preset/pack	Click Load → select .json
Export WAV	Click WAV next to the take
Export MP3	Click MP3 next to the take
Bypass Master FX	Toggle ENABLED top-right
Change time signature	SIGNATURE selector in header
Paste pattern	Right-click on destination variation