

User Manual — Drum Score Editor

Illustrated guide to compose, edit, play back, and export drum beats and sheet music

Welcome to DrumFreePlay. This platform integrates an intuitive drum tablature matrix sequencer with a professional standard staff music engraver (ABCjs) and a low-latency Web Audio engine featuring real acoustic drum samples.

1. Main Editor Layout

The workspace is divided into three perfectly synchronized real-time components:

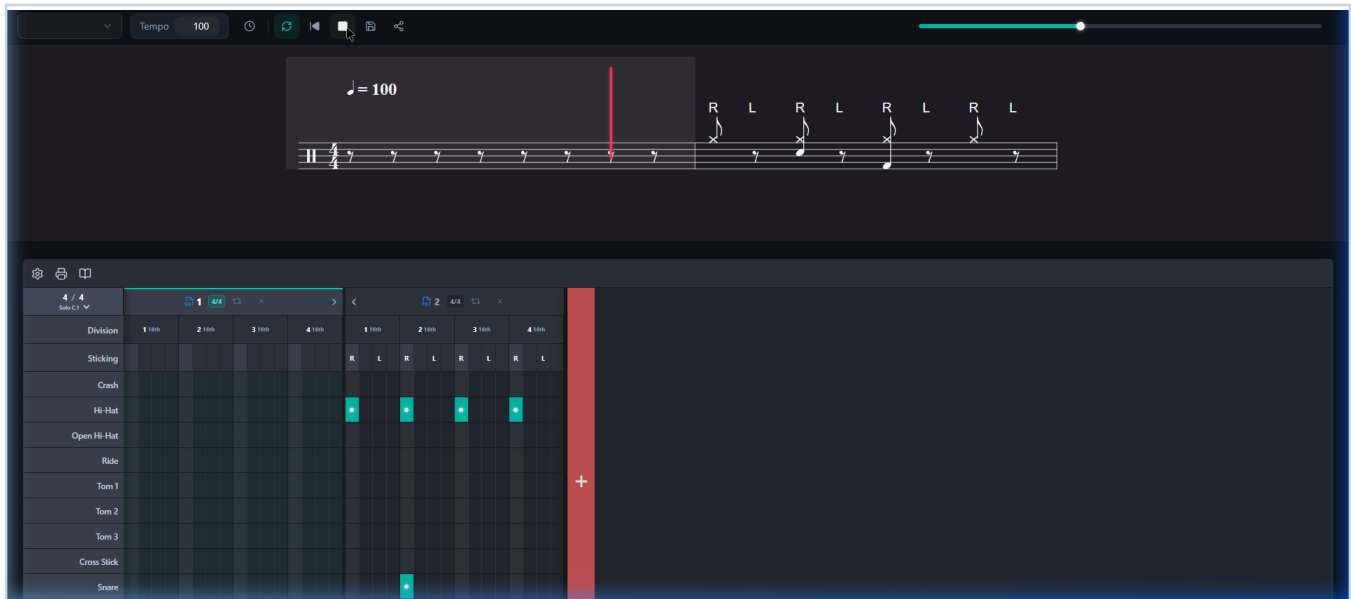


Figure 1: DrumFreePlay Editor Overview (Control Bar, Sheet Music, and Tablature Grid).

- **[1] Top Toolbar:** Transport controls, tempo (BPM), kit selector, continuous loop, save, share URL, and timeline progress.
- **[2] Score Sheet:** Standard international drum notation on staff with a real-time red playback cursor line.
- **[3] Tablature Grid:** Step sequencer matrix to place notes per instrument, stroke dynamics, sticking, utilities, and beat divisions.

2. Top Toolbar and Transport Controls

The top toolbar lets you manage all global session and audio playback parameters:



Figure 2: Top toolbar with kit selector, tempo BPM, transport buttons, and progress timeline.

Control	Name	Function & Description
Kit Selector	Drum Kit	Selects the acoustic sample soundbank (Default, etc.).
Tempo (BPM)	Playback Speed	Numeric tempo adjustment from 20 to 300 beats per minute.
Metronome	Pulse Click	Toggles the audible reference click on/off.
Loop	Loop Mode	Continuous seamless playback restart when the song reaches the end.
Rewind	Jump to Start	Stops playback and rewinds the playhead to measure 1, beat 1.
Play / Stop	Play / Pause	Starts or stops playback with real-time visual tracking on the score.
Save	Save Composition	Saves your groove to your browser storage or user library.
Share	Interactive Link	Generates and copies a shareable URL containing the full encoded score.
Progress Bar	Timeline	Displays elapsed playback time and timeline progress in real time.

3. Sheet Music Engraver (Score Sheet)

The score sheet displays authentic drum notation according to standard international percussion guidelines:

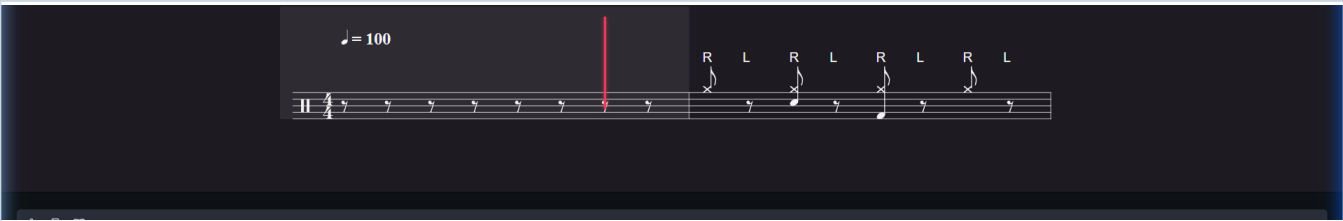


Figure 3: Interactive drum sheet music with automatic beaming, rests, and sticking annotations.

- **Automatic Rests:** Empty steps are grouped and displayed with standard musical rests.
- **Beaming:** Notes are grouped per beat according to the active division for clean, effortless sight-reading.
- **Live Red Playhead:** During playback, a vertical red line tracks every played note with millisecond accuracy.

4. Tablature Grid and Drum Instruments

Click on any grid cell to toggle notes. Each measure features a dedicated header with meter, divisions, sticking, and repeats:

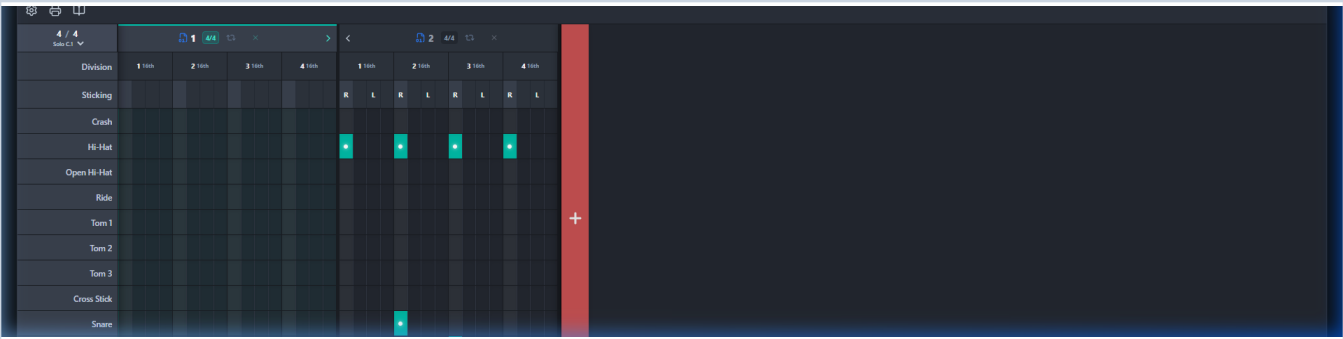


Figure 4: Tablature matrix sequencer with instrument tracks, divisions, and active steps.

Instrument	Staff Notation	Description & Function
Crash	Top line (cross / 'x')	Accent cymbal marking phrases and transitions.
Hi-Hat	Top space (cross)	Primary closed rhythmic groove pattern.
Open Hi-Hat	Top space + circle (o)	Open hi-hat with acoustic sustain.
Ride	Ride cymbal line (cross)	Driving continuous rhythm pattern cymbal.
Tom 1 / Tom 2	Top space / Middle line	High and mid toms for fills and roll patterns.
Tom 3 (Floor)	Lower tom line	Low acoustic floor tom.
Cross Stick	Snare line with 'x'	Soft rim cross-stick stroke.
Snare Drum	Third space (oval notehead)	Main snare with advanced velocity and dynamic accents.
Kick 1 / Kick 2	First bottom space	Primary and secondary kick drum (double bass pedal).
HH Pedal	Below staff with 'x'	Hi-hat foot pedal chick.

- Snare Dynamics (Right-Click on active Snare notes):**
- **Normal:** Full volume standard drum stroke.
 - **Ghosted (·):** Quiet ghost note enclosed in parentheses (·) on the score.
 - **Accentuated (>):** Powerful accented stroke with > mark above the note.
 - **Flam (f):** Grace note stroke for a thick, impactful hit.

Grid Utilities Bar (Top Left Corner of Grid):

Control	Name	Function & Description
Settings	Notation Settings	Toggle dark/light background and set 2 or 4 bars per line.
Print / PDF	Export Score	Opens a clean black-and-white printable score in a new tab without freezing the editor.
Manual (PDF)	User Manual	Opens this comprehensive PDF user manual in a new tab.

5. Beat Divisions, Sticking, and Measure Header

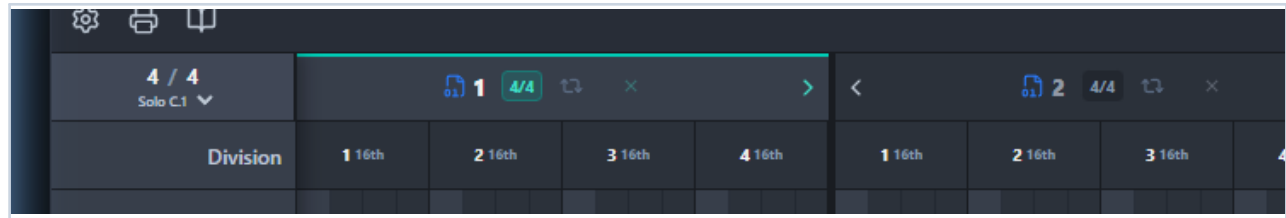


Figure 5: Measure header detail with time signature selector, duplicate, and repeat group.

- **Beat Divisions:** Click on any beat division button to cycle between: 16th (4 notes), 8th (2 notes), 8th triplet (3 notes), 16th triplet (6 notes), or 32nd (8 notes).
- **Sticking Row:** Type sticking letters like R (right hand), L (left hand), K (kick), or F (flam) to engrave sticking directly beneath the notes.

6. Time Signatures (Dynamic Meter per Measure)

You can configure measures with different time signatures anywhere within the song:

1. Click on the **meter badge** (e.g., 4/4) on the measure header or left sidebar.
2. Set the **Numerator** (1 to 16 beats) and **Denominator** (4, 8, 16).
3. Choose the **Application Scope**:
 - *Only this measure:* Changes only the selected measure (e.g., only measure 4 in 2/4).
 - *From here onwards:* Changes from the active measure to the end of the song.
 - *All measures:* Applies the meter globally across all measures.
4. The score will automatically render the inline meter change symbol (e.g., [M:2/4]).

7. Measure Repeats & Loops

1. Click the **Repeat icon (Set repeat)** on the header of the measure ending the repeat group.
2. Select the starting measure (**From measure**) and the repeat count (**Times**, e.g., 2, 4, 8).
3. Click **Apply**. A solid amber bracket bar will span across the group, showing an xN badge on the end measure and repeat bars |: and :| on the score.
4. The audio playback engine will automatically loop the repeat group the exact number of times.

DrumFreePlay — Learn, compose, and share your drum grooves with the world.
Visit <http://localhost:3000/editor> and start creating your own rhythms today.