STUDIOSCORE v1.10

Operation Manual

Studio Score

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CHAPTER 1

Introduction

1.1 Welcome

Studio Score is the score editor of Studio Connect. You write music note by note, with a MIDI keyboard or by playing live, and you hear it right away with your own VST or Vienna Ensemble Pro instruments.

- In a single window, you can: write and edit an orchestral score, with its clefs, key signatures, time signatures, dynamics, articulations and playing techniques;
- listen to it with the Studio Score audio engine: each staff plays its instrument, with its expression map;
- record live from a MIDI keyboard while the other instruments play;
- adjust the sound in the mixer, draw dynamics, set a tempo line;
- work to picture, with the video and its timeline;
- move the music into the DAW with a simple drag and drop, or turn Studio Score into a window on the DAW project (SYNC mode).

Studio Score works with the mouse, the keyboard and a finger on a touch screen.

1.2 Conventions used in this manual

- Button names are written in **bold**, as they appear on screen or in their tooltip (the small text shown on hover): **Input**, **Bar +**, **Mixer**...
- “Click” also means “tap” on a touch screen.
- Keys are written like this: `Ctrl`+`Z`. These are the default keys: you can change them in **Settings › Keyboard shortcuts** (chapter 19).
- Numbers in parentheses, such as (7), refer to the numbered images of the chapter where they appear.

> NOTE
>
> Studio Score opens from Studio Connect, which must be running: Studio Connect links Score to the MIDI keyboard, VE Pro, the DAW and Studio Manager.

CHAPTER 2

Getting started

2.1 Opening Studio Score

In Studio Connect, click the **Studio Score** button in the icon bar. Studio Score opens in its own window, in the state you last left it.

2.2 The window at a glance

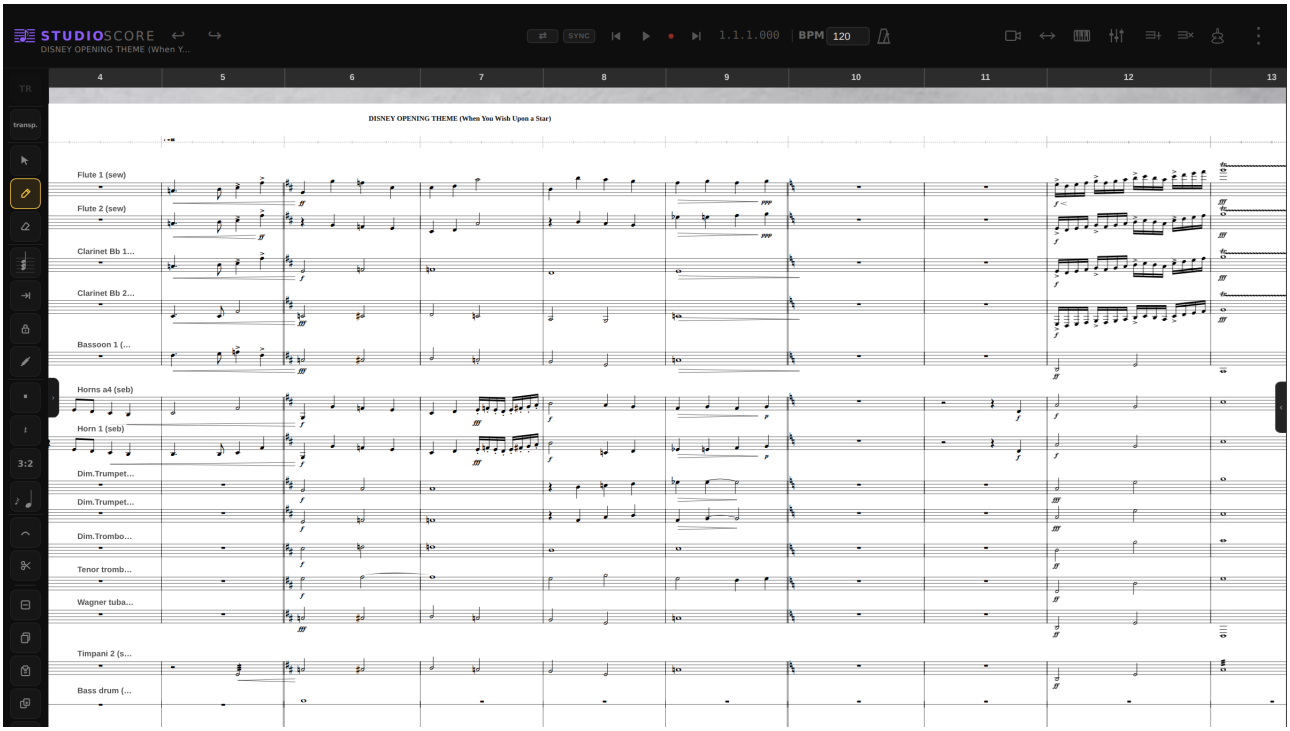


Figure 1 — The Studio Score window

Area	Purpose
Top bar	File menu, undo/redo, transport, tempo, and the buttons that open the panels (video, palette, piano roll, mixer...). See chapter 3.
Bar ruler	The bar numbers. A click sets the playback position, a double-click creates a loop (chapter 11).
Left column	The writing tools: modes, durations, rests, tuplets, cut/copy/paste... It opens fully with the › arrow on its edge (chapter 6).
The score	All the staves, arranged by family. It scrolls with the mouse wheel, the scroll bar and a finger.
Right column	The generators (Ostinato, Run, Glissando, Percussion, Drum, MODE). It opens with the ‹ handle on its edge (chapter 15).
Bottom panels	The mixer, the piano roll and the video open below the score.

2.3 Backup copy

Every 5 minutes, if there are unsaved changes, Studio Score writes a backup copy (never during playback). If the application closed without saving, the next launch asks: **“Recover unsaved work from “name”?”**, with **Recover** or **Don't recover**.

Recovered work opens as “unsaved”: **Save** then asks where to write it.

CHAPTER 3

The top bar



Figure 2 — The top bar

STUDIOSCORE logo — opens the **File** menu (chapter 4). Below the logo is the project name: an orange ● in **1** front of the name means there are unsaved changes; a green ✓ appears for 3 seconds after saving.

Undo (`Ctrl`+`Z`). **2**

3 Redo (`Ctrl`+`Y` or `Ctrl`+`Shift`+`Z`).

⇄ Sync PC — links this Score to another Score on another computer; lights up blue when the link is made **4** (section 17.5).

5 SYNC — turns Studio Score into a window on the DAW project; green = linked, orange = waiting for the DAW, gray = off (section 17.2).

6 Start — return to the start: playback and the score go back to bar 1.

Play / Stop — a single button. Stop stops in place, at the current bar (`Space`). **7**

8 Record — live recording from the MIDI keyboard (chapter 12).

End — goes to the end of the score, and the score scrolls there. **9**

10 The playback position: bar, beat, subdivision. During the count-in, it shows the remaining beats ("– 3 –").

BPM — the tempo at the playback position. **11**

12Metronome — turns the click on or off, during playback and recording.

Video — opens the video panel (chapter 16). **13**

14 Palette — opens the palette of dynamics, ornaments and techniques (chapter 9).

Keyboard — opens the piano roll (chapter 14). **15**

16Mixer — opens the mixer (chapter 13).

Bar + — adds an empty bar at the end. **17**

18 Bar – — deletes the selected bar (or the selected range) on all staves; with no bar selected, the last one.

Instruments — opens the Instruments window (chapter 5). **19**

Settings (⋮) — zoom, language, shortcuts, audio output, MIDI inputs and controllers (chapter 19). **20**

CHAPTER 4

Projects: the File menu

4.1 The File menu

Click the **STUDIOSCORE** logo, at the top left. A click elsewhere closes the menu.

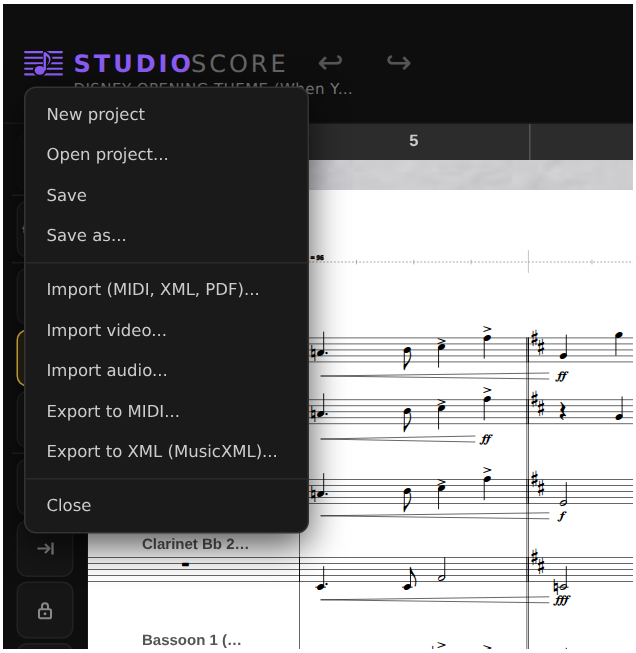


Figure 3 — The File menu

Item	What it does
New project	Asks for a name (“Untitled” by default), then starts from scratch: no instruments or notes, 4/4, C major, 120 BPM, audio engine emptied, mixer, video and loop reset.
Open project...	Opens a `.stsc` project. Everything else is reset, then only the content of the file is loaded.
Save	Overwrites the open file (`Ctrl`+`S`).
Save as...	Always asks where to write.
Import (MIDI, XML, PDF)...	Imports a `.mid` file, a MusicXML file (`.xml`, `.musicxml`, `.mxl`), a PDF or a `.stsc` project (section 4.3).
Import video... / Import audio...	Loads a video, or an audio file into the “audio 2” track (chapter 16).
Export to MIDI...	Writes the whole score to a complete `.mid` file, with tempo and time signatures.
Export to XML (MusicXML)...	Writes a `.musicxml` file, readable by other notation software.
Close	Closes Studio Score. The window's close button does the same.

4.2 The project file and the “Save?” question

A project is saved in a single `.stsc` file. It contains everything: instruments, notes, tempo, bars, mixer, VSTs and their settings, video.

Before any action that replaces the open project (New project, Open, importing a project, a MusicXML file or a PDF, Close), if there are changes left, Studio Score asks: **“Save changes to “name”?”**, with **Cancel**, **Don't save** and **Save**. With no changes, nothing is asked.

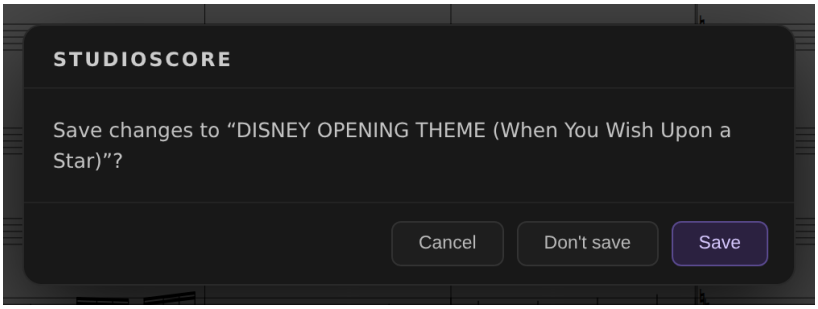


Figure 4 — The question before replacing the project

Every change counts: the score, but also the tempo, the mixer, the VSTs, the effects, the video. Only a setting turned inside a plugin's window is not detected before saving.

> NOTE
>
> Importing a MIDI file does not ask the question: it adds its tracks to the project without replacing it.

4.3 Importing a score

MusicXML

- A bar that is too short is filled with rests; a bar that is too long is cut at the barline.
- One voice per staff: a second voice is not imported.
- Grace notes become appoggiaturas; tremolos between two notes are read.

PDF

- A PDF exported from notation software is read directly by Studio Score.
- A scan or a photo goes through a separate reading module, which must be installed.
- While the PDF is being read, a small line “PDF m:ss ×” is shown at the bottom right; the × cancels. If nothing could be read: “unreadable pdf”.
- A PDF with several movements: only the first one is imported.

MIDI

A `.mid` file is imported from the menu, or by dragging it directly onto the score, for example from the DAW.

CHAPTER 5

Instruments and families

5.1 The Instruments window

Click **Instruments** (19) in the top bar. The window has three columns; ✓ **OK** applies the changes, ✕ **Cancel** discards them.

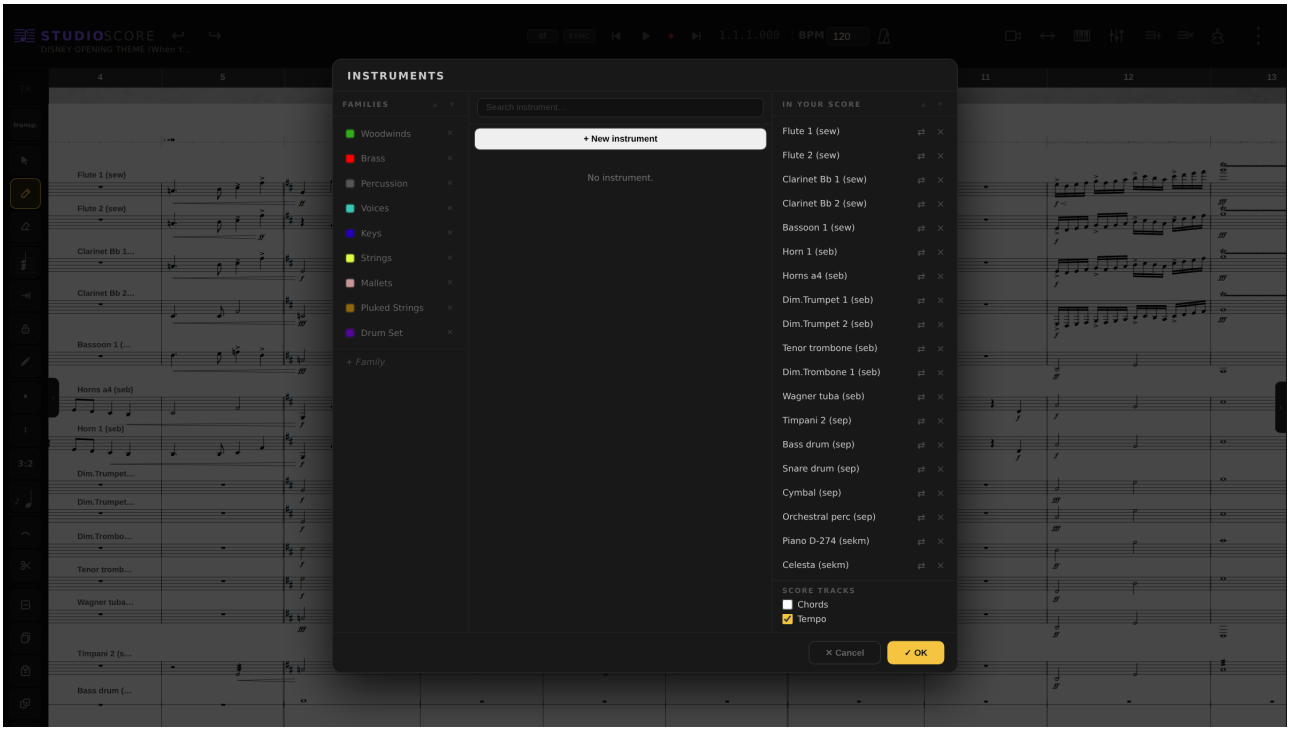


Figure 5 — The Instruments window

Column	Content
Families (left)	The project families: Woodwinds, Brass, Percussion, Voices, Keys, Strings by default. Color dot (color of the channel strips in the mixer), double-click to rename, ✕ to remove, **+ Family** to add one. The ▲ ▼ arrows order the families **in the mixer**.
The catalog (center)	The **Search instrument...** field and the **+ New instrument** button: type a name, choose the instrument from your libraries, and it arrives with its expression map. A click on a row adds the instrument to the score, or removes it.
In your score (right)	The instruments of the score, arranged **automatically in orchestral order**: Woodwinds, Brass, Percussion, Keys, then the added families (Mallets, Drum Set, Pluked Strings...), Voices, Strings; within each family, orchestral order (piccolo before the flutes, horns, trumpets, trombones, tuba...). The ▲ ▼ arrows order **the score** your own way: as soon as you move an instrument and confirm with **OK**, your order is kept, and an instrument added later only takes its own place. The **TR** button, for its part, keeps the order of the DAW tracks. On each row: ⇄ **Replace** and ✕ **Remove**. At the bottom, **Score tracks**: the **Chords** and **Tempo** checkboxes.

- **CHANGING AN INSTRUMENT'S FAMILY** 1. In the catalog, grab the instrument's row.
- 2. Drop it on a family in the left column.
- **Result:** the instrument changes family, and the score is reordered accordingly.

5.2 Automatic rules

- Harp, piano, organ, celesta and harpsichord get two staves.
- An instrument placed in a family named Drum Set, Drums, Drum, Batterie or Kit becomes a drum staff (percussion clef, 5 lines).
- An ambiguous name (for example “Alto”) is not guessed: place it by hand.

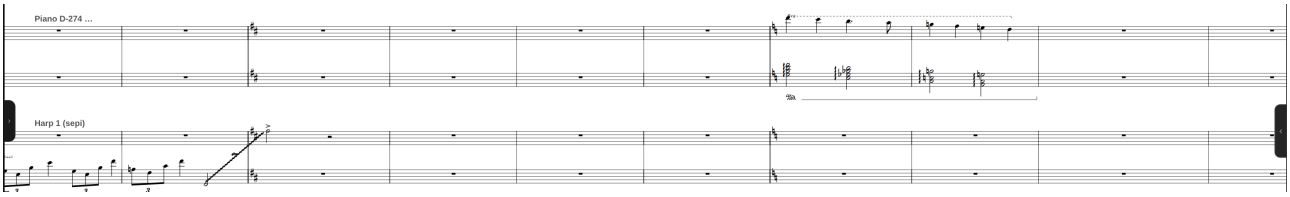


Figure 6 — The piano and the harp: two staves each

5.3 Concert pitch and transposed pitch

The **transp.** button, at the top of the left column, switches transposing instruments (clarinet, horn, trumpet...) between concert pitch and transposed pitch. The sound never changes: only the notation changes. Instruments that transpose by an octave (piccolo, double bass...) are not affected.



Figure 7 — The B♭ clarinets: the same passage at concert pitch, then at transposed pitch

5.4 Connecting an instrument to its sound

An instrument only sounds if it is connected to a VST. If it comes from Studio Manager (**Settings › Import from Studio Manager**), it is already connected. Otherwise:

PROCEDURE

1. Open the **Mixer** and load the VST with the **VST** button of the narrow bar (if it is not already loaded).
2. On the instrument's channel strip, below **M** and **S**, choose the VST strip in the small **VST** menu (10 in the figure of section 13.3).
3. Set the two **port** (11) and **channel** (12) boxes as in your VST (for example port 1, channel 1).

Result: the MIDI keyboard, playback and recording play this VST.

CHAPTER 6

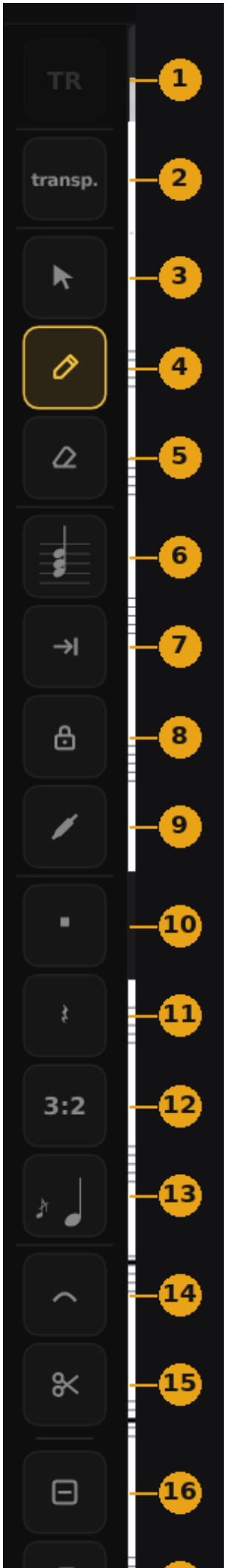
Writing music

6.1 The left column

The narrow column holds the everyday tools. The › arrow on its edge opens it fully: it then also shows durations, the grid, accidentals, articulations and notation.



Figure 8 — The open column


TR
transp.
3:2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

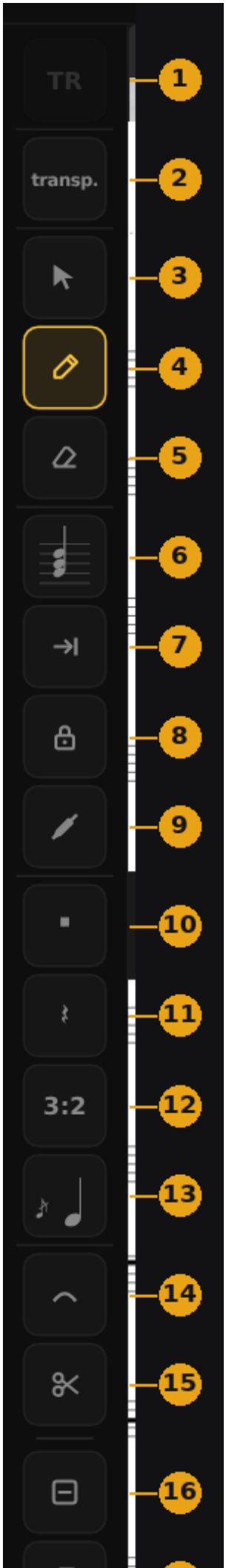

TR
transp.
3:2
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

Figure 9 — The narrow column

1 Tracks (TR) — the list of DAW tracks, in SYNC mode (chapter 17).

Transposition — concert pitch / transposed pitch (section 5.3). **2**

3 Selection — select and move, without writing.

Input — write notes (`E`). **4**

5 Eraser — erase (`G`). An erased note becomes a rest of the same duration.

Chord — stack notes (`Q`). **6**

7 Insert — write while pushing what follows (`I`).

Lock durations — durations no longer change notes already written (`L`). **8**

9 Input lock — the mouse and finger can no longer write (`B`).

Dotted (`.`). **10**

11 Rest (`R`).

Tuplet — triplets, quintuplets… (`N`). **12**

13 Ornament — grace notes (appoggiaturas).

Tie — tie (`T`). **14**

15 Cut the bar (`Ctrl`+`X`).

Clear the bar. **16**

17 Copy the bar (`Ctrl`+`C`).

Paste (`Ctrl`+`V`). **18**

19 Duplicate — inserts a copy right after. Below it, **Notes** selects all the notes of the selected bars.

6.2 The open column

The › arrow on the edge of the column opens it fully. The buttons below act on the selected notes, otherwise on the next note written.



Figure 10 — The open column

1 DURATIONS — from the whole note to the 128th note (`1` to `8`).

2 Grid — the step of the writing grid (`9` / `0`).

Step back — the marker line moves back (section 6.4). **3**

4 Advance — the marker line moves forward.

Repeat (`D`) — copies the selected notes right after themselves. **5**

6 Cut note (`U`) — splits each selected note in two.

Transpose — an interval and a direction; with nothing selected, the whole score. **7**

8 Divisi — gives the instrument a second staff, with the same clef, to divide the section. Pressing again removes it.

Stem — flips the stem of the selected notes; pressing a second time makes the direction automatic again. **9**

Mirror — takes the pitches of the selected notes in reverse order (C D E F → F E D C). The rhythm, dynamics **10** and key signature do not change.

11 Side — the dynamic and articulations of the selected note move to the other side of the staff; pressing a second time puts them back.

Mute — the note stays written, in gray, but no longer plays: not during playback, not in the DAW, not in the **12** .mid file.

13– Double flat, **Flat**, **Natural**, **Sharp**, **Double sharp** (section 6.8). **17**

18 Fit to chord — the selected notes follow the chord written at that point.

Accent, **Marcato**, **Staccato**, **Tenuto**, **Portato**, **Fermata** — placed on the selected notes; pressing a second **19–** time removes them. **24**

25 Phrasing — a phrasing slur on the selected notes.

Clef, **Time signature**, **Key signature**, **Barlines** — on the selected bar (chapter 8). **26– 29**

30 Technique — opens the playing techniques panel (chapter 10). Above it, **TAB FX** appears when the staff has a tablature (chapter 18).

6.3 The three modes

- **Selection**: you select and move. Nothing is written.
- **Input**: a click in the staff writes a note at the target position, on release. If you drag instead of releasing, it is a lasso.
- **Eraser**: a click on a note turns it into a rest; a lasso drawn in empty space erases all the notes it touches, in a single undo step. Rests cannot be erased: they hold the place.

Pressing the mode that is already active returns to Selection. `Esc` deselects.

6.4 The marker line

The marker line shows where the next note will be written. Selecting a bar places it at the bar's start.

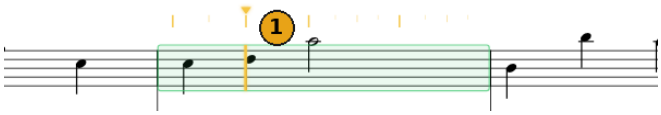


Figure 11 — The marker line (1), in the selected bar (green frame)

- → / ←, or the **Advance** ▶ and **Step back** ◀ buttons: move it.
- `Ctrl`+`Space`: move forward without writing anything.
- `Shift`+`Space` (in Input): erase the note on the left and move back.

6.5 Durations, dots and rests

- The **Whole note**, **Half note**, **Quarter note**, **Eighth note**, **16th**, **32nd**, **64th**, **128th** buttons, or the `1` to `8` keys.
- With a note selected, the duration changes on that note. `Ctrl`+→ / `Ctrl`+←: longer / shorter value.
- A note that gets shorter leaves a rest; a note that gets longer takes the rests that follow, never a note. Beyond the bar, it continues as tied notes.
- **Grid**: the step of the writing grid (`9` wider, `0` finer).
- **Rest**: with no selection, the button arms rest mode (a click in an empty space writes a rest); with notes selected, it turns them into rests.

6.6 Tuplets, chords and grace notes

- **Tuplet** (`N`): the first note sets the whole group, each following note fills the next place. `Shift`+`N`, or a right-click on the button, changes the ratio (triplet, quintuplet…). With notes selected, the button turns them into a tuplet.
- **Chord** (`Q`), with three positions: off (notes follow each other); **Stack** (a click above or below a note adds it to the chord); **Panel** (a click on a note opens the chord editor).
- With a MIDI keyboard, keys played together are written directly as a chord.

Choosing the tuplet — `Shift`+`N`, or a right-click on **Tuplet**, opens the small ratio window. 3:2 is the triplet (3 notes in the space of 2), 5:4 the quintuplet, 6:4 the sextuplet, and so on. The chosen ratio (in purple) is used for the next tuplet written.

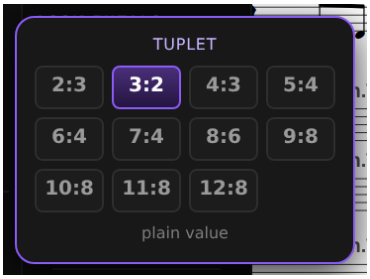


Figure 12 — Choosing the tuplet

The chord editor — with Chord in the Panel position, a click on a note opens the **CREATE CHORD** window. You build the chord column by column, and the small keyboard at the bottom shows the notes it contains.



Figure 13 — The chord editor

1 Root — the note that gives the chord its name (C = do, D = re...).

Chord type — major (maj), minor (min), diminished (dim), sus4, sus2, augmented (aug). **2**

3 Tensions — the added notes: 7, j7 (major seventh), 9, 11, 13 and their alterations (b9, #9, #11...).

Low note — the note played in the bass (inverted chord, or foreign bass note). **4**

The ◀ ▶ arrows rotate the chord: they move from one inversion to another (root position, 1st inversion...). **5**

6Write chord places the notes in the staff; **Cancel** closes without changing anything.

6.7 Insert and locks

- **Insert** on: writing, deleting or changing a duration **shifts what follows**. Off: you overwrite, and gaps are filled with rests. Chord and Insert are never on at the same time.
- **Lock durations**: the duration buttons only set the next note written.
- **Input lock**: the mouse and finger can only select. The keyboard, the MIDI keyboard, the left column and the eraser keep working.

6.8 Pitches and accidentals

- Grabbing a notehead and dragging up or down changes its pitch, one semitone at a time. `Ctrl`+`↑` / `↓`: one semitone. `Ctrl`+`Alt`+`↑` / `↓`: one octave.
- The **Double flat**, **Flat**, **Natural**, **Sharp**, **Double sharp** buttons. Changing a note does not change the following notes of the bar: Score adds the necessary accidental.
- **Fit to chord**: the selected notes follow the chord written at that point in the chord track; each note keeps its role (root, third, fifth...).
- **Transpose**: a click on the button opens the small window below. Choose the direction (↑ up, ↓ down), then the interval: 2m (minor second), 2M (major second), 3m, 3M, 4 (fourth), 4+ (augmented fourth), 5 (fifth), 6m, 6M, 7m, 7M, 8 (octave). The selected notes are transposed immediately; with nothing selected, the whole score.

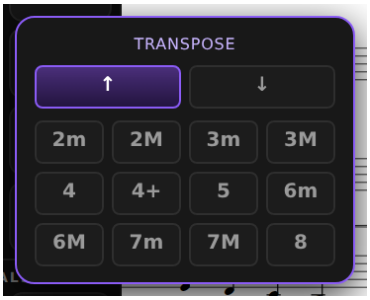


Figure 14 — The Transpose window

6.9 Ties

Tie button (T). With notes selected, it ties (or unties) them immediately. With nothing selected, it arms the tie for the next note written. A tie only connects notes of the same pitch; otherwise: “Same pitch only.”. A tied note plays as a single held note.

6.10 Writing with a MIDI keyboard

- Check your keyboard in **Settings › MIDI** (chapter 19). In **Input** mode, each key writes a note at the marker line, with the selected duration, and the marker line moves forward. On a two-staff instrument (piano, harp), below middle C the note goes to the lower staff; from middle C up, to the upper staff.
- A black key is written as a sharp if the melody goes up, as a flat if it goes down; in minor, the leading tone is written on its own letter.
- The keyboard's sound goes straight to the instrument of the selected staff, with the articulation chosen in the Technique panel (chapter 10).

To play in real time during playback, see live recording (chapter 12).

CHAPTER 7

Selecting and editing

7.1 Selecting bars and notes

- **Right-click in a bar** (Input or Selection): the bar is selected on the clicked staff, with a frame around it. `Ctrl`+**right-click** on other bars: the range extends.
- **Notes** (left column): all the notes of the selected bars turn yellow. `Ctrl`+`A`: the whole bar. `Shift`+→ / ←: extend the selection; `Ctrl`+`Shift`+→: up to the edge.
- The **lasso**: see below.



Figure 15 — Selected notes, with the drag-and-drop handle at the corner of the frame

All the marks of a selected note (dynamic, ornament…) turn yellow with it.

The lasso

The lasso lets you take several notes in a single gesture, even scattered across several bars or several staves. It is also the way to select several notes with a finger on a touch screen, where there is no Ctrl key.

PROCEDURE

1. In **Input** or **Selection**, press in an empty area of the score (not on a note).
2. Without releasing, draw a loop around the notes: a yellow line follows the mouse or finger (1).
3. Release.
4. lasso only needs to touch the note, its stem or its beam: a notehead that sticks out is still taken.

Result: all the notes the lasso touches turn yellow (2), with their marks (dynamics, articulations…). The

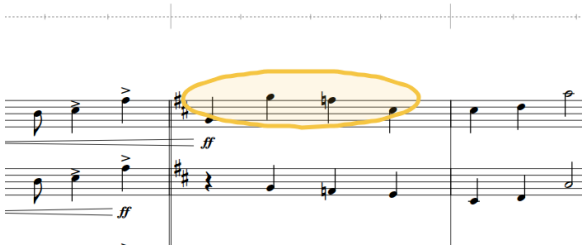


Figure 16 — (1) The lasso while it is being drawn

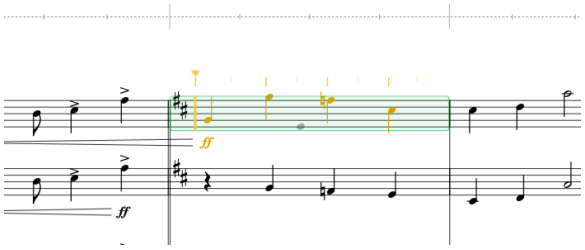


Figure 17 — (2) The notes taken, in yellow

- In Input, a simple click without moving writes a note; the lasso only starts when you move while holding down. The notes taken are edited together: duration, pitch, Ctrl+C, Delete, palette marks...
- In **Eraser** mode, the lasso erases: all the notes it touches become rests, in a single undo step (Ctrl+Z brings them all back). Rests are not affected.

7.2 Cut, clear, copy, paste, duplicate

These actions apply to the selected bar or range, **on the selected staff only**. They do the same thing from the keyboard, the left column or the right-click menu.

Action	Effect
Cut (`Ctrl`+`X`)	Copies then clears: the bar stays, rests take the place. In Insert mode, the bar is removed.
Copy (`Ctrl`+`C`)	Keeps the content in memory.
Paste (`Ctrl`+`V`)	Replaces the content of the target bar, even on another staff.
Clear	Clears the selected bar of the selected instrument, never the whole column of instruments.
Duplicate	Inserts the copy right after, without replacing anything.
Repeat (`D`)	Copies the selected notes right after themselves; the copy becomes the selection.
Cut note (`U`)	Splits each selected note in two.
	Deletes the selection.

- `Delete`

7.3 Undo and redo

`Ctrl`+`Z` undoes, `Ctrl`+`Y` redoes, up to 200 steps. Everything written is covered: notes, staves and their

dynamics lines, tempo, bars, clefs, key signatures, time signatures, chords, markers. The mixer, the VSTs, the video and the panels are not included.

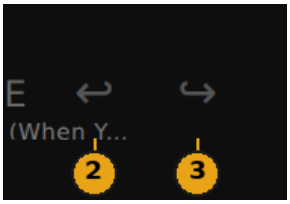


Figure 18 — Undo (2) and Redo (3), in the top bar

CHAPTER

Bars, clefs, key signatures and time

CHAPTER 8

signatures

8.1 The barline menu

Right-click the left barline of a bar (with a finger: a long press). The menu acts from that bar onward.

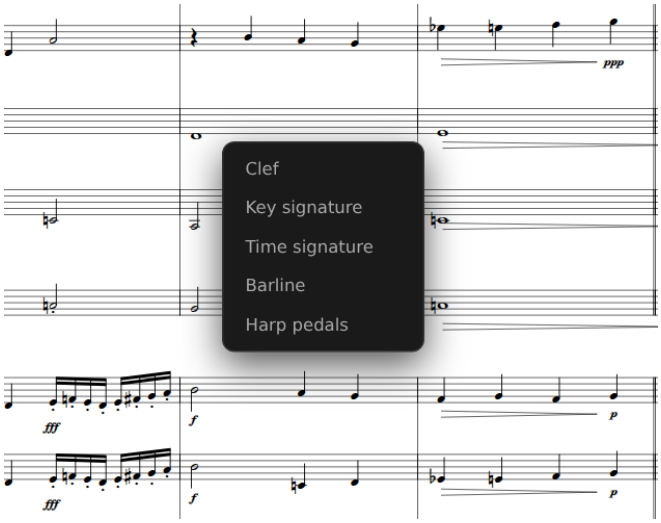


Figure 19 — The barline menu

Item	Choices
Clef	Treble clef, French violin clef, C 1 to C 5, Bass clef, Sub-bass clef, Percussion, Tablature, and the octave clefs (8 and 15, above and below). The clef applies to the clicked staff.
Key signature	No key signature, then from 7 flats to 7 sharps.
Time signature	𝄴, 𝄵, 4/4, 3/4, 2/4, 2/2, 3/2, 6/8, 9/8, 12/8, 5/4, 7/4, 5/8, 7/8 and the additive time signatures (2+3, 3+2+2, 2+3+2). A time signature applies until the next change.
Barline	Normal, Double, Final, Repeat start, Repeat end, Double repeat.
Harp pedals	Opens the harp pedal editor for this bar.
Percussion	On a one-line staff: the percussion editor.

Harp pedals

A harp has seven pedals, one per note (D, C, B with the left foot; E, F, G, A with the right foot). Each has three positions: ♭, ♮ or ♯. They decide which notes the harp can play, and the harp Glissando follows them.

PROCEDURE

1. Right-click the left barline of a harp bar, then choose **Harp pedals**.
2. Click ♭, ♮ or ♯ for each note; or choose a ready-made setting at the top: **Major (C)**, **Minor (A)**, **Pentatonic**, **Diminished**, **Whole-tone steps**, or **From the notes** (Score reads the notes written in the bar).
3. Press **OK**.

Result: the pedal setting is placed at this bar, and applies until the next change.

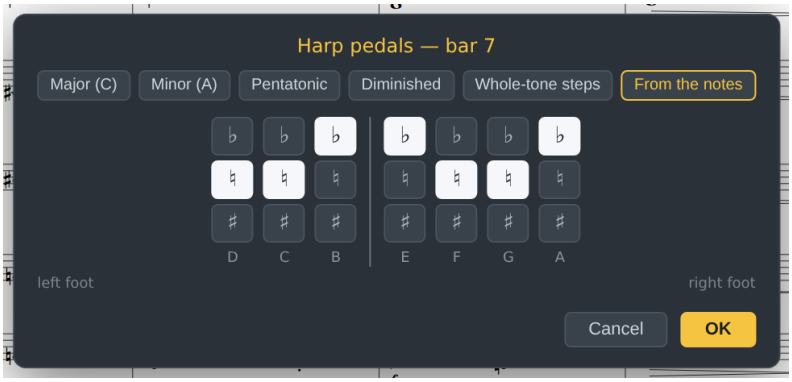


Figure 20 — The harp pedals: in white, the selected position of each pedal

The percussion editor

On a one-line percussion staff (bass drum, cymbal…), a note can be placed above the line, on the line or below it. Each position plays a different MIDI note of the library: for example a stroke in the center, on the edge, or muted.

PROCEDURE

1. Right-click the left barline of a bar of the staff, then choose **Percussion**.
2. For each position (**Above**, **Line**, **Below**), choose the MIDI note in the menu; ▶ plays the sound.
3. Press **OK**.

Result: each note written on the staff plays the sound of its position.

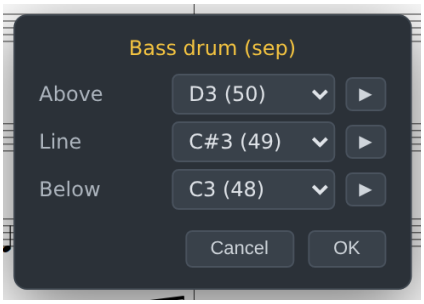


Figure 21 — The percussion editor

The Clef, Time signature, Key signature and Barlines buttons

The **Clef**, **Time signature**, **Key signature** and **Barlines** buttons of the open column do the same thing as the menu, on the selected bar. Each one opens a bar of tiles at the bottom of the screen; the yellow tile is the current setting.

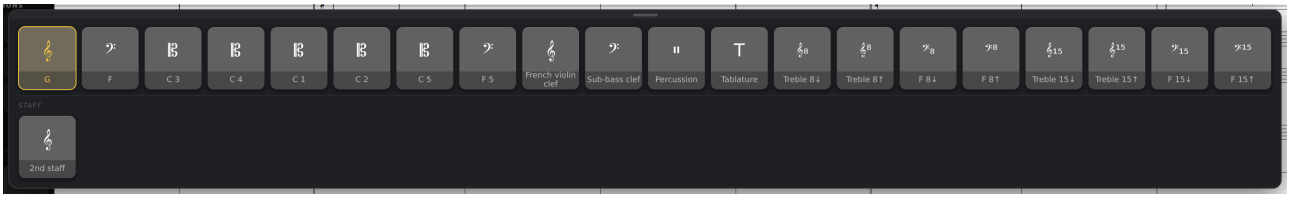


Figure 22 — Clef: all the clefs, and at the bottom the 2nd staff

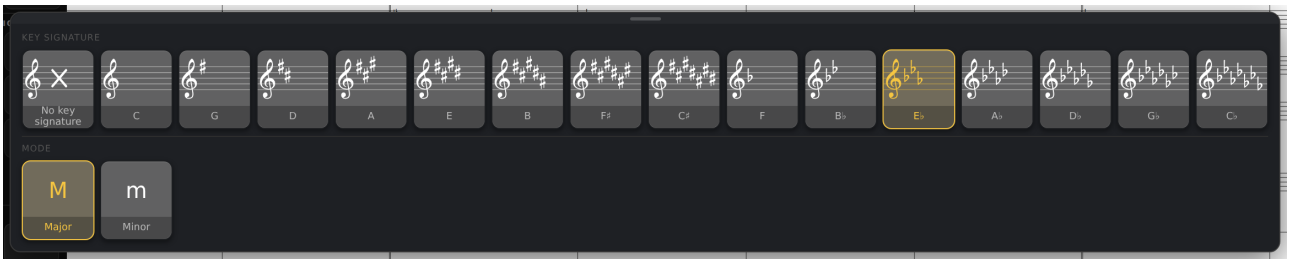


Figure 23 — Key signature: from 7 flats to 7 sharps, then Major (M) or minor (m)



Figure 24 — Time signature

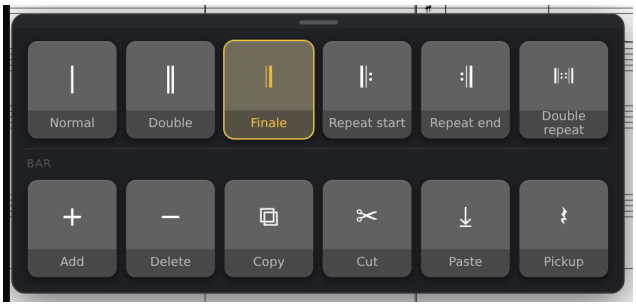


Figure 25 — Barlines: the barlines, and the actions on the bar

In **Barlines**, the **Bar** row acts on the selected bar: **Add** an empty bar, **Delete**, **Copy**, **Cut**, **Paste**, and **Pickup**, which turns the first bar into a pickup (a shorter bar at the start of the piece). Pressing Pickup again removes it.

8.2 Adding and deleting bars

Bar + adds an empty bar at the end; **Bar –** deletes the selected bar or range on all staves. When writing beyond the end (in the piano roll, while recording), the necessary bars are created.



Figure 26 — Bar + (17) and Bar – (18)

CHAPTER

The palette: dynamics, ornaments,

CHAPTER 9

techniques

9.1 Opening the palette

Click **Palette** (14). A bar of tiles opens below the top bar; it scrolls with the mouse wheel or a finger.

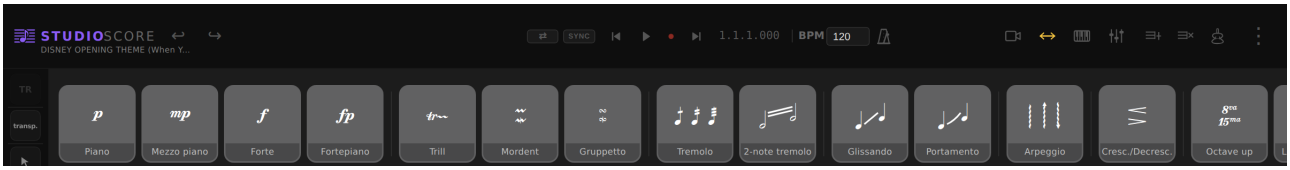


Figure 27 — The palette

Group	Tiles
Dynamics	Piano, Mezzo, Forte, Combined (fp, sfz, sf)
Ornaments	Trill, Mordent, Gruppetto
Tremolos and lines	Tremolo, 2-note tremolo, Glissando, Portamento, Arpeggio, Cresc./Decresc., Octave up, Lower octave
Techniques and articulations	Mute, Harmonic, Pizz/Arco/Snap, Bowings, Doit/Fall, Scoop/Plop, Accents, Staccatos, Tenuto, Appoggiatura, Chord, Change notehead, Fermata, Breath mark, Pedal
Markers and structure	Rehearsal mark, Bar repeat, Endings, Da Capo, Dal Segno, Segno, Coda, To Coda, Fine
Slurs and ties	Hold, Phrasing
Bar tools	Staff, Bar, Time signature, Key signature
At the end	Undo, Redo, Clear

9.2 Placing a mark

PROCEDURE

1. Select a note.
2. Press the tile.
3. above, articulations on the side opposite the stem, dynamics on a common line).

Result: the mark is placed on the note, and Score positions it according to engraving rules (ornaments

Some tiles cycle: each press moves to the next value, then turns off. For example **Piano**: ppp → pp → p; **Forte**: f → ff → fff → ffff; **Tremolo**: 1, 2, 3 strokes; **Pizz/Arco/Snap**: pizz → arco → snap; **Endings**: 1. → 2. → 3.

9.3 Editing a mark

- Click a placed mark (dynamic, mordent, gruppetto, trill, pizz./arco...): it turns yellow.
- Drag up or down: its value changes within its group. At the very bottom, it is removed.
- Spanning marks (hairpin, phrasing slur, octave line, pedal, glissando) are created by dragging from the start note to the end note. When selected, they show three handles to lengthen or shorten them.
- At the end of a selected hairpin, you can place a target dynamic, even with no note at that point.



Figure 28 — A selected hairpin: it turns yellow, with its handles

CHAPTER 10

Playing techniques and articulations

10.1 The Technique panel

Click **TECHNIQUE**, at the bottom of the open column. The **Playing techniques** panel opens on the right; it stays open until you press again or click its ✕ close button.



Figure 29 — The Technique panel

At the top is the name of the active staff. The sections: **COMMON**, one section per family (STRINGS, WOODWINDS, BRASS…), **GUITAR**, then **INSTRUMENT ARTICULATIONS**. Each section opens and closes with a click on its title.

A technique (sul pont., con sord., col legno…) is placed on the first selected note and applies until the next technique. It is played by the matching articulation of the instrument's expression map.

10.2 The instrument's articulations

- The **INSTRUMENT ARTICULATIONS** section lists all the articulations of the active instrument's expression map (Sustain, Staccato, Pizzicato…). One articulation is always lit: the one the selected note will play, otherwise the current one. **With notes selected**: a click places this articulation on them, without changing the notation. A second click returns them to their default articulation.
- **The articulation stays pressed** for this instrument until you choose another one: the MIDI keyboard plays with it, the generators write it, and so does live recording.
- Example: you write a staccato and the library offers four; here you choose the exact sound.

> NOTE
>
> The same choice exists in the piano roll (**articulation** menu). In SYNC mode, nothing is sent when you press: the articulation travels in the file dragged to the DAW.

CHAPTER 11

Playback, loop and tempo

11.1 The transport



Figure 30 — The transport: Start (6), Play / Stop (7), Record (8), End (9), position (10), BPM (11), Metronome (12)

- **Play / Stop** (`Space`): playback starts from the green playhead, with a two-beat count-in. Stop stops in place.
- **Start**: returns to bar 1; **End**: goes to the end of the score.
- A click on a number in the ruler sets the playback position to that bar.
- During playback, the score follows the playhead. You can scroll or zoom freely: two seconds after the last gesture, the view returns to the playhead on its own.
- The **Metronome** counts the beats of each time signature, with an accent on the first beat; in 6/8, 9/8 and 12/8, it beats dotted quarter notes.

11.2 The loop



Figure 31 — A loop on bars 14 and 15

- **Double-click a number** in the ruler: a loop is created on that bar (amber band).
- Drag its two yellow handles to enlarge or shrink it: they snap to the barlines.
- Double-click inside the loop: it is removed. Double-click elsewhere: a new loop on that bar.

11.3 The tempo line

Check **Tempo** in **Instruments › Score tracks**. The line appears above the score, with the values "♩= N".



Figure 32 — The tempo line

- A click in the line opens a tempo box, snapped to the nearest beat. A tempo word can come before the number: "Maestoso ♩= 108".
- A click on the word **Tempo** (1) shows the tempo curve: a brown line, with a point (2) at each tempo change. Another click on the word hides it.

- In **Input**, a click on the curve places a point; you move it by dragging it (up = faster, right = later). The **Eraser** removes a point.
- Right-click a point (long press with a finger): a small menu (4) offers **Step** — the tempo jumps at once to the new value — or **Ramp** — the tempo changes gradually from the previous point (3), for an accel. or a rit. Then the number box opens so you can type the value.



Figure 33 — The tempo curve: the word Tempo (1) and the points (2)

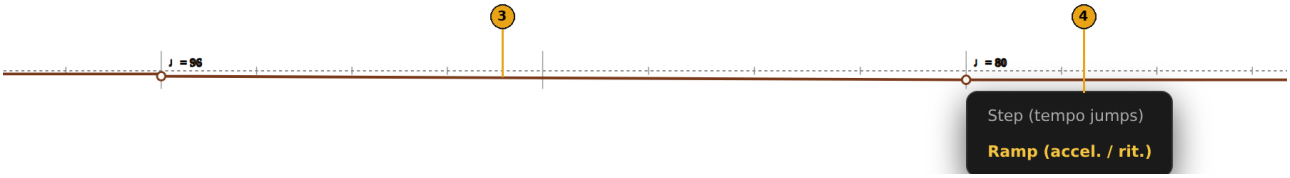


Figure 34 — A ramp from ♩=96 to ♩=80 (3) and the Step / Ramp menu (4)

- The **BPM** field in the top bar shows the tempo at the current position.

CHAPTER 12

Live recording

12.1 Recording a take

PROCEDURE

1. Check your keyboard in **Settings › MIDI**.
2. Switch to **Selection** mode: recording does not start in Writing mode.
3. Choose the instrument (the staff) and place the **playhead** where the take should start.
4. Press **Record** (●). The playhead turns red.
5. After a count-in bar, play: the score scrolls, the other instruments play, the metronome beats if it is on. At the end of the score, Studio Score adds bars as long as the take continues; they remain after stopping.
6. Press **Play / Stop** or ● again to stop.
7. undoes the whole take.

Result: what you played is written on the selected instrument, exactly where you played it. `Ctrl`+`Z`

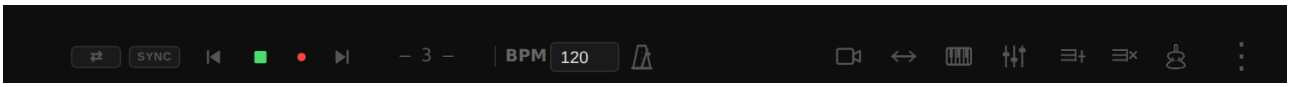


Figure 35 — During the count-in: the record button is red, the position shows the remaining beats

While you play, the score fills in as playback moves, roughly beat by beat. The final transcription is written when you stop.

12.2 What Studio Score writes

- **Rhythm**: the grid is chosen automatically according to what you play. Eighth-note, quarter-note and 16th- note triplets (sextuplets) are recognized.
- **Rests**: a small gap between two notes is filled; a real rest (one beat or more) is written.
- **Barlines**: a note that crosses one is split and tied.
- **Latency** between the key and the sound is measured on the take and corrected automatically.
- **Placement**: the take replaces what was underneath, without shifting what follows. One voice per staff.
- **Piano**: from middle C up on the upper staff, below it on the lower staff.
- **Grace notes**: a very short note just before a held note becomes a grace note.
- **Trills and tremolos**: two neighboring notes alternated very fast become a note with “tr”; the same note repeated very fast becomes a note with tremolo strokes.
- **Legato playing**: a key held until the next one = phrasing slur (except piano and drums).
- **Velocity** of each note is kept for playback.
- **Pedals** (sustain, sostenuto, una corda) become pedal lines, with re-pedal marks.

- **Mod wheel and expression** (CC1, CC11) are written in the staff's Dynamic or Expression line.
- **Articulation** chosen in the Technique panel is placed on the notes.

> **NOTE**
>
> With a loop, what you play on each pass is merged into the same voice. In SYNC mode, ● controls the DAW's recording.

CHAPTER 13

The mixer and sound

13.1 Opening the mixer

Click **Mixer** (16). The mixer opens below the score: one channel strip per instrument, arranged by family, then the VST strips and the **OUT** output.

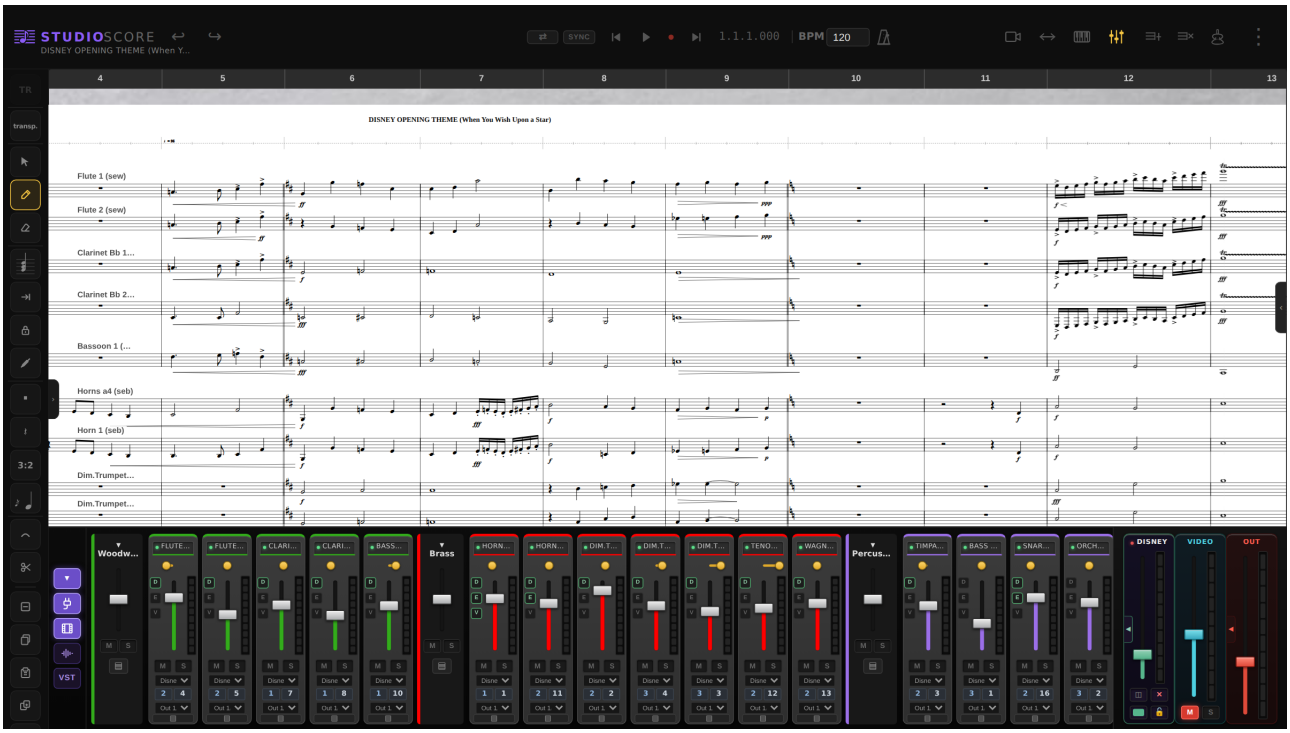


Figure 36 — The mixer open below the score

13.2 The narrow bar

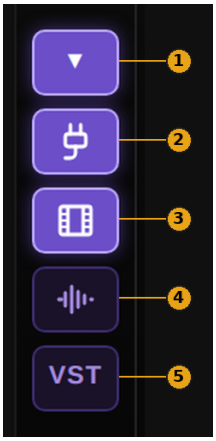


Figure 37 — The mixer's narrow bar

Directories ▾ — opens or closes all the family directories. **1**

2 Instances — shows or hides the VST instance strips.

Video — shows or hides the video sound strip. **3**

4 Audio 2 — shows or hides the audio 2 track strip.

VST — opens the **Add a VST** window to load a VST3 instrument into a new strip (see below). **5**

In **SYNC** mode, the narrow bar stays with **Directories**, **Video** and **Audio 2**; **Instances** and **VST** disappear, because the DAW plays the instruments.

The Add a VST window

It lists the VST3 instruments found on the computer. Type a few letters in **Search instrument...** to filter, then click the instrument: it loads into a new strip. At the bottom, a counter gives the number of instruments; a bar advances while plugins are being scanned.

Button	What it does
Rescan	Restarts the plugin scan, for example after installing a new one. You can choose a plugin as soon as it appears, without waiting for the end.
Unidentified	Only appears if there are any: shows the plugin files the engine could not read. A second click returns to the normal list.
Discarded	Only appears if there are any: the plugins set aside because they crashed on loading. **Retry** puts them back in the list at the next scan.
Close	Closes the window (a click outside does too).

13.3 An instrument's channel strip

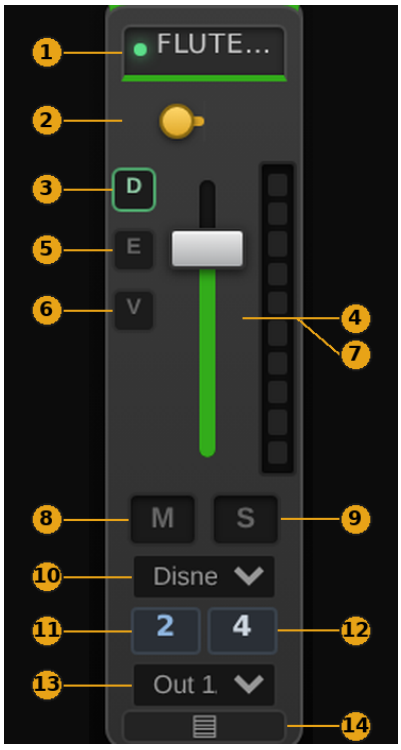


Figure 38 — An instrument's channel strip

1 Name of the instrument — a click turns it on or off (On/Off).

Pan — the position of the sound, from left to right. **2**

3 D — shows the **Dynamic** line (CC1) in the staff (section 13.5).

Volume — the instrument's fader. **4**

5 E — shows the **Expression** line (CC11).

V — shows the **Volume** line (CC7). **6**

7 The level meter.

8M — mute.

9 S — solo. M and S are mutually exclusive.

VST — the VST that plays the instrument (section 5.4). **10**

11MIDI **Port**.

12MIDI **Channel**.

13 Output — the VST output where the instrument's sound arrives (Out 1, Out 2...).

Isolate ▤ — the score only shows this staff. The sound does not change: the other instruments still play. **14** Pressing again shows everything again; you can isolate several staves together.

13.4 Families, VSTs and output

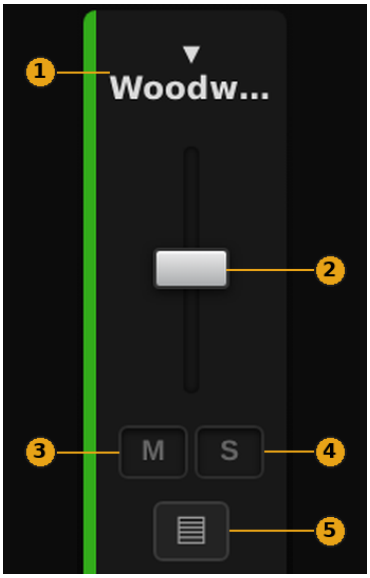


Figure 39 — A family header

Family name — ▾ opens or closes its directory (its strips). **1**

2 VCA — in the middle it is neutral; it attenuates or boosts the whole family while keeping the differences between instruments. Double-click: back to neutral.

3M — mutes the whole family (the M of each instrument lights up).

S — solo of the whole family: you only hear that family. **4**

5 Isolate ▤ — the score only shows the staves of this family (for example only the brass), so you can write without being distracted by the others. The sound does not change: the other families still play, they are only hidden. Pressing again shows everything again. Several families can be isolated together.

- **PROCEDURE — SHOWING ONLY ONE FAMILY** 1. Open the **Mixer**.
- 2. On the family header (here **Brass**), press **Isolate** ▤ (1). It turns green, as does the ▤ of each instrument of the family.
- **Result:** the score only shows the staves of this family: the horns, trumpets, trombones and tuba. The other staves are hidden, but they still play. Pressing ▤ again shows the whole score again.

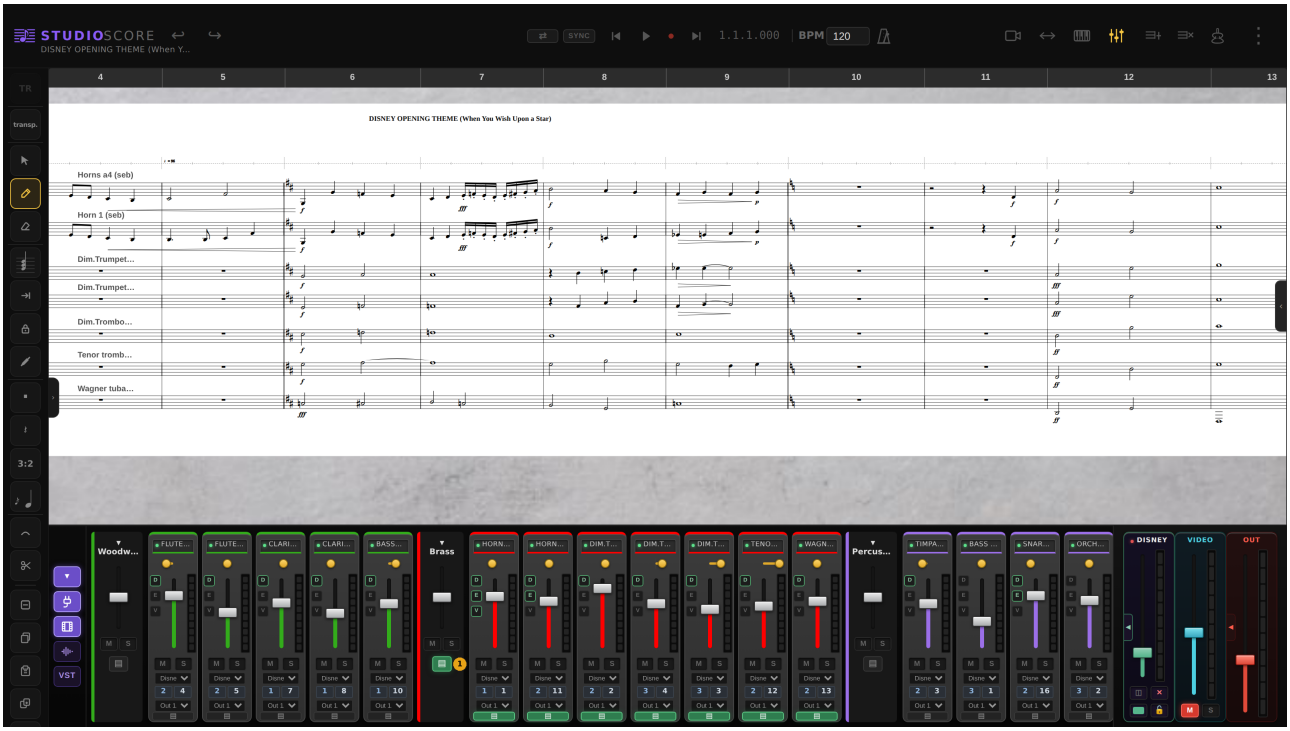


Figure 40 — Isolate (1) on the Brass family: the score only shows the brass

VST strips and effects (inserts)

Each loaded VST has its strip on the right of the mixer, before VIDEO and OUT. A VST strip and the OUT strip each have **8 inserts**: 8 slots for effect plugins (reverb, equalizer, compressor...), played in order, from top to bottom.

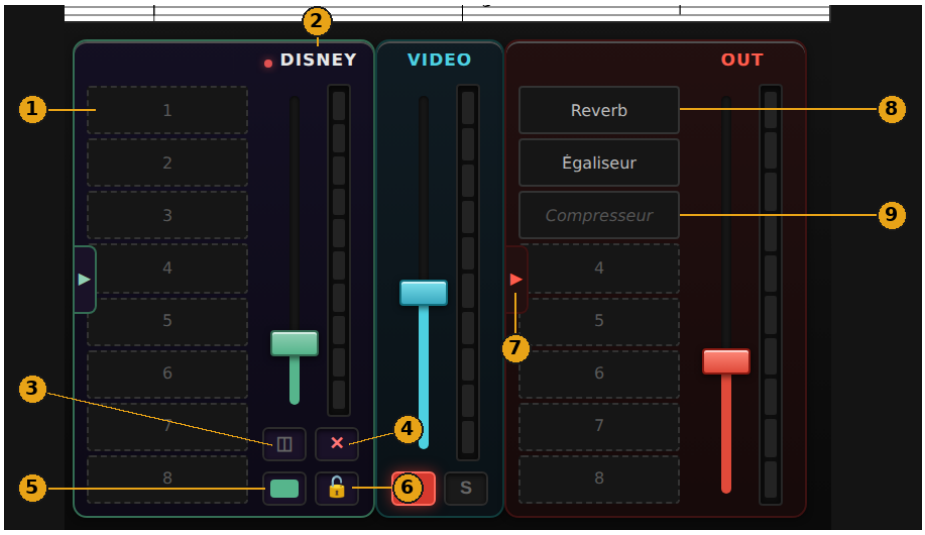


Figure 41 — An open VST strip, VIDEO, and OUT with three effects (example)

1 An empty slot — a click opens the list of effect plugins: the one you choose loads into that slot.

2 The name of the VST — click to rename it. The indicator shows whether it is connected (green) or not (red).

Open — shows the VST's window (its settings, its sounds). **3**

4 Delete — removes this VST from the project.

Color — the color of the strip. **5**

6 For a VE Pro instance: **Free**, **Kept** (it stays loaded in VE Pro when the project is closed) or **Detached**. Each click moves to the next state.

The ◀ / ▶ handle opens or closes the inserts column (it opens to the left). The VST strip has the same handle, **7** on the left.

A loaded effect — a click opens its settings window. **8**

9 A bypassed effect (name in gray) — right-click an effect: it is bypassed (the sound passes without it); another right-click puts it back.

- An instrument that plays in a VST of the engine (not in VE Pro) also has its ◀ handle on its strip: its own inserts, for that instrument only. The audio output of the engine is chosen in **Settings › Audio output**.

13.5 Drawing dynamics

Each mixer strip has three small buttons, **D**, **E** and **V** (3, 5 and 6 in the figure of section 13.3). Each one shows a control line in its instrument's staff:

Button	Line
D	**What it controls** Dynamic (CC1) The playing intensity: the library moves from a soft sample to a loud sample.
E	Expression (CC11) The volume within the dynamic, for small movements.
V	Volume (CC7) The overall volume of the instrument.

Only one line at a time per staff: turning on D turns off E and V. The line is shown in the staff itself: bottom of the staff = 0, top = 127.

PROCEDURE

1. Open the **Mixer** and press **D** on the instrument's strip.
2. Switch to **Input** and click in the staff to place points.

Result: the blue line goes up and down with your points; playback plays it.

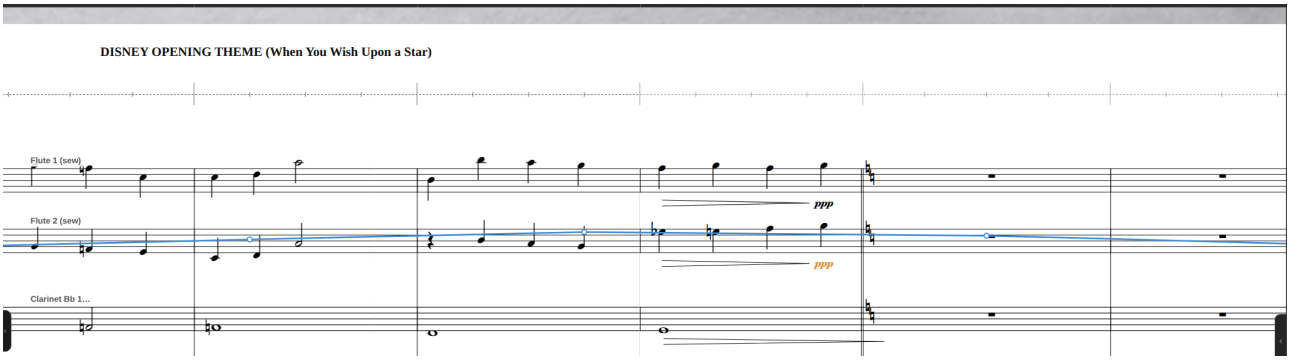


Figure 42 — The Dynamic line (D) in the Flute 2 staff

- In **Input**, a click places a point; points are joined by ramps; a point is moved by dragging it; a freehand stroke draws a curve.
- The **Eraser** removes a point or a range. A long press on D, E or V resets the line.
- Only the **D** line follows the written dynamics and hairpins: a dynamic gives a step, a hairpin a ramp.
- With a line shown, Copy, Cut and Paste act on the line, not on the notes.

- In SYNC, D, E and V control Quick Controls 1, 2 and 3 of the selected track in the DAW.

CHAPTER 14

The piano roll

14.1 Opening the piano roll

Click **Keyboard** (15). The piano roll opens below the score: the notes of the active staff are rectangles (horizontal = time, vertical = pitch), with an 88-key keyboard on the left. What is selected in the roll is also selected in the score, and vice versa.



Figure 43 — The piano roll, with the velocity lane at the bottom

14.2 Tools and settings

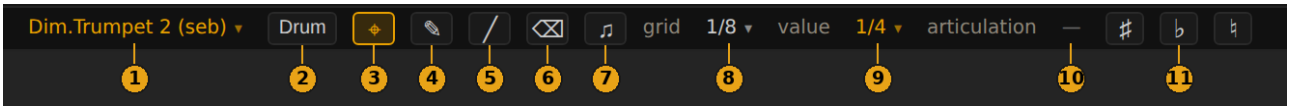


Figure 44 — The piano roll bar

- The roll bar: (1) the menu of the displayed instrument, (2) **Drum**, (3) **Selection**, (4) **Pen**, (5) **Line**, (6) **Eraser**, (7) **Played durations** ♫, (8) **grid**, (9) **value** (the duration written with the Pen), (10) **articulation**, (11) the accidentals ♯ ♭ ♮. At the far right, **width** and **height** – / + zoom the roll.
- **Pen**: a click writes a note under the pointer (a shadow shows where it will land); dragging further lengthens it. Writing on a sounding note stacks a chord.
- Dragging a note: up or down, one semitone per row; right or left, to another position (it never overwrites another note). Its right edge lengthens or shortens it. `Alt`+`↑` / `↓`: one step; `Alt`+→ / ←: one cell.
- **Played durations** ♫ (7): when on, each note shows the duration of its **sound** (light rectangle) and its written value (thin dark bar). Dragging the start or end of a note with **Selection** moves the sound earlier, later or shortens it, in grid steps; the notation in the score does not change (a quarter note stays a quarter note). The shortened sound is used for playback and for the file dragged to the DAW. If the written value changes later, the sound follows it. When off: the edge changes the written value, as usual. `Ctrl`+mouse wheel: horizontal zoom; `Ctrl`+`Shift`+mouse wheel: vertical zoom; two-finger pinch: both.
- The bottom lane: **Velocity**, **Dynamics**, **Expression** or **Volume**. In Velocity, one bar per note, which you drag with the Pen or in a straight line with the Line tool.

14.3 The drum piano roll

In a drum kit, a pitch means nothing: what matters is the kit instrument (bass drum, snare drum, hi-hat…). The piano roll's **Drum** mode therefore replaces the keyboard with a column of names: **one row = one kit instrument**.

PROCEDURE

1. Select the drum staff, then open the piano roll with **Keyboard** (15). On a drum staff, it already opens in Drum mode.
2. Otherwise, press **Drum** (1). Pressing again returns to the keyboard.
3. hit is a rectangle on its instrument's row.

Result: the drum column (3) is shown: one row per kit instrument, in the order of the drum map. Each

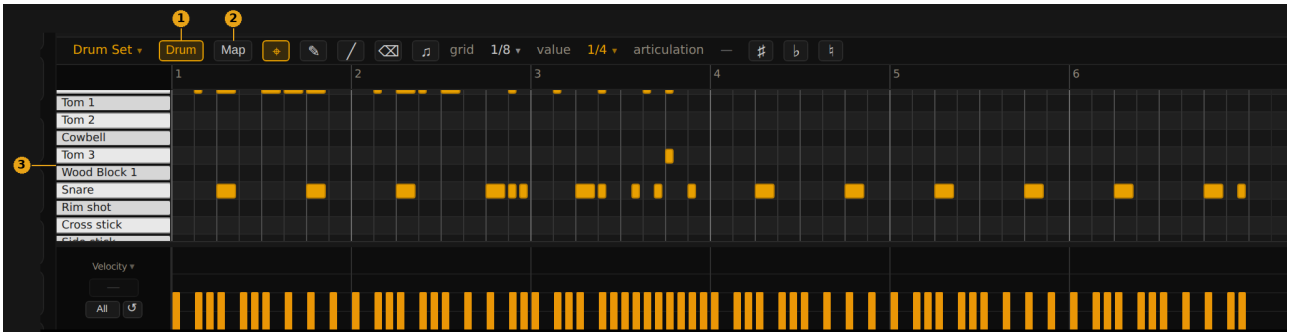


Figure 45 — The piano roll in Drum mode: Drum (1), Map (2), the drum column (3)

1 Drum — switches from the keyboard to the kit rows, and back. This button is on all staves.

2Map — opens the staff's drum map (see below). It only appears in Drum mode.

The drum column — the name of each kit instrument, one row each. **3**

- **Writing and editing** The **Pen** writes a hit on the target row, at the grid position. Dragging further lengthens it.
- Each kit instrument keeps its own rhythm: a whole note on the bass drum does not cut the hi-hat eighth notes. The score follows: each instrument is written on its line, with its notehead.
- Writing at a position where an instrument on the same line is already placed (for example Rim shot on a snare drum) replaces the instrument: the note stays, its notehead and its sound change.
- Dragging a hit up or down moves it to another instrument; right or left, to another position. The Eraser deletes it.
- The bottom lane (Velocity) sets the force of each hit.
- On a staff that is not a drum kit, Drum mode shows the General MIDI notes of the kit (Snare = 38, Kick = 36…). A note that does not match any row is not shown.

The drum map

The drum map says, for each kit instrument, which MIDI note plays it. Each drum library places its sounds on its own notes: the drum map makes the link between the score and the library.



Figure 46 — The Drum map window

1 The staff's map. **General MIDI** is the default map: it cannot be edited.

2 New — makes a copy of the displayed map, which you can adjust.

Rename — renames the map. **3**

4 Delete — deletes the map; the staves that used it go back to General MIDI.

Import — reads a saved map (`.drummap.json`) or a `.drm` drum map from the DAW. **5**

6 Export — saves the map to a file, to reuse it in another project. One map per library, made only once.

The MIDI note that plays this instrument (0 to 127). Change it to match your library. **7**

8 The name of this note (G3, C#3…).

▶ — plays the sound, with the staff's VST. **9**

- **PROCEDURE — MAKING A MAP FOR A LIBRARY** 1. In Drum mode, press **Map** (2).
- 2. Press **New**, then **Rename** to give it the library's name.
- 3. For each instrument, listen with ▶ and change the note until you get the right sound.
- 4. Press **Export** to keep it.
- **Result:** playback, the MIDI keyboard and drag and drop to the DAW play the right notes of the library.

With an imported `.drm` map, each sound of the library is assigned to a row of the kit (menu to the right of the sound); the ★ star chooses the row's default sound.

CHAPTER 15

Generators and MODE

15.1 The generators column

The ‹ handle on the right edge opens the column: **Ostinato**, **Run**, **Glissando**, **Percussion**, **Drum** and **MODE**. Each tile opens a window, which you move by its title.

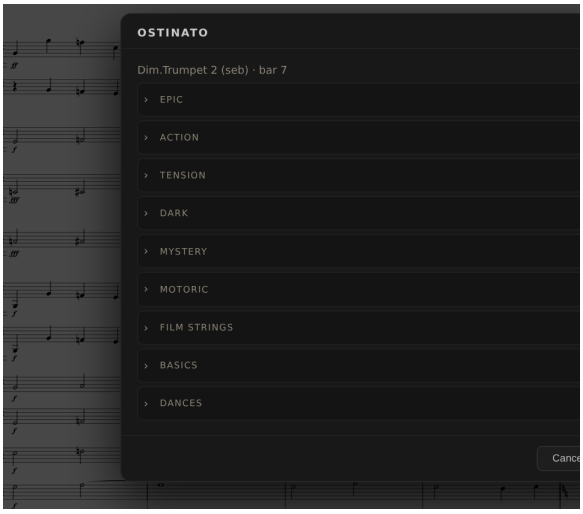


Figure 47 — The Ostinato window



Figure 48 — The generators column

Where it is written: on the selected range of bars, otherwise on the selected bar, otherwise on the selected notes. The sentence at the top of the window says so. What is there is replaced, and `Ctrl`+`Z` brings everything back.

Listen: the ▶ button on each row plays the pattern with the sound of the selected instrument, with the articulation pressed in the Technique panel.

Generator	What it writes
Ostinato	Patterns arranged by character (epic, action, tension…). The pattern follows the chord of the bar and fills it. **Place** button.
Run	A fast scale (Scale, Direction, Range, Speed) that lands exactly on its target; on selected notes, it takes their place and their duration.
Glissando	The notes of a scale (including the harp pedals of the bar) between two selected notes, or over at least one octave. “Notes per beat” from 2 to 12.
Percussion	Rhythms arranged by instrument, with accents, rolls, flams.
Drum	The drum MIDI files of your folder, on a drum staff: listen, place, organize into folders.

Your own patterns: write a pattern in a bar, then drag it onto a tile; give it a name. It is kept on disk and available in all projects.

Run



Figure 49 — The Run window

- At the top, the staff and bar where the run will be written; ▶ (top right) plays it. You set four things, then press **Place**: **Scale** — Major, Natural, harmonic or melodic minor, Dorian, Mixolydian, Lydian, Chromatic, Whole-tone steps, Diminished, Pentatonic; **Score scale** follows the key signature; **Bar chord** only uses the notes of the chord (an arpeggio).
- **Direction** — Up, Down, Up then down, Zigzag.
- **Range** — 1, 2 or 3 octaves.
- **Speed** — eighth notes, eighth-note triplets, 16th notes, sextuplets or 32nd notes.

Glissando

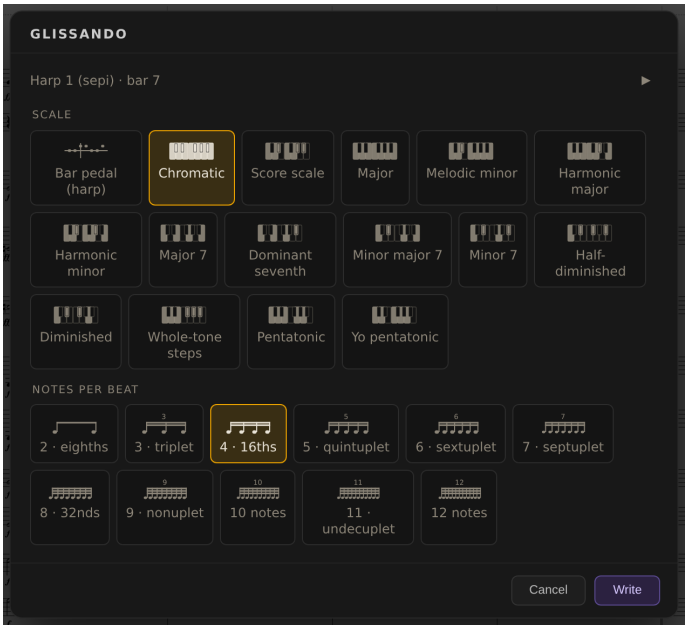


Figure 50 — The Glissando window, here on the harp

- **Scale** — the notes the glissando goes through. On a harp, **Bar pedal (harp)** takes exactly the notes the pedals allow (section 8.1). The other choices: Chromatic, Score scale, Major, Minor, Dominant seventh, Diminished, Whole-tone steps, Pentatonic…
- **Notes per beat** — from 2 (eighth notes) to 12: the more there are, the faster the glissando.
- **Write** places the glissando between the two selected notes (or over at least one octave).

Percussion

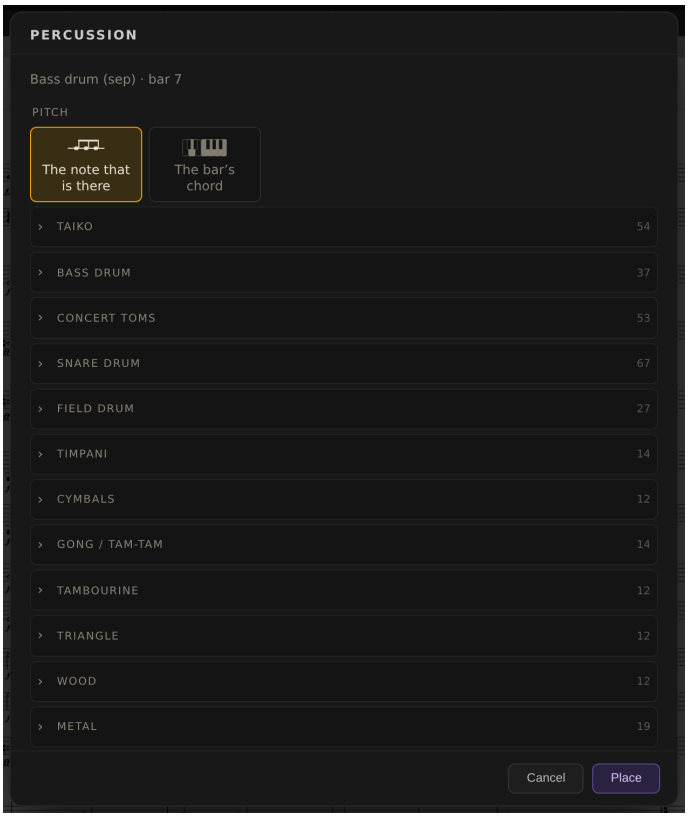


Figure 51 — The Percussion window

- The rhythms are arranged by instrument: Taiko, Bass drum, Concert toms, Snare drum, Field drum, Timpani, Cymbals, Gong / Tam-tam, Tambourine, Triangle, Wood, Metal. The number on the right says how many there are. A click on a row opens it; ▶ plays a rhythm.
- **Pitch** (for pitched percussion, such as timpani): **The note that is there** keeps the note already written; **The bar chord** takes the notes of the chord.
- Choose a rhythm, then press **Place**.

Drum

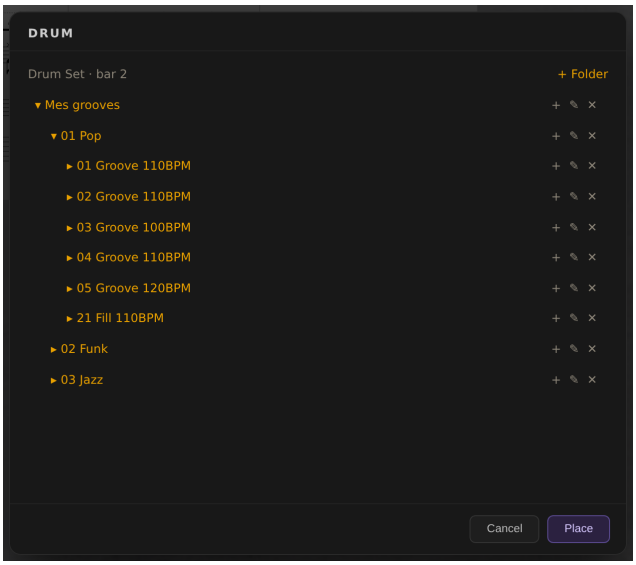


Figure 52 — The Drum window: your groove folders (the name of the top folder is an example)

- Drum shows the drum MIDI files stored in the `MIDI FILE/Drum` folder of Studio Connect, folder by folder. It acts on a drum staff. ▸ opens a folder, ▾ closes it. Choose a groove, listen to it with ▶, then press **Place**: it is written in the selected bars.
- **+ Folder** creates a folder. On each folder: **+** creates a subfolder, ✎ renames, ✕ deletes (a second click on “Delete” confirms).
- Your own groove: drag drum bars from the score onto a folder and give it a name; it is saved in that folder. A `.mid` file dragged from Windows onto a folder is stored there as is.

15.2 MODE: transforming a theme

MODE creates nothing: it **transforms** what is already written, on the selected bars, on several instruments at once (percussion staves are not affected).

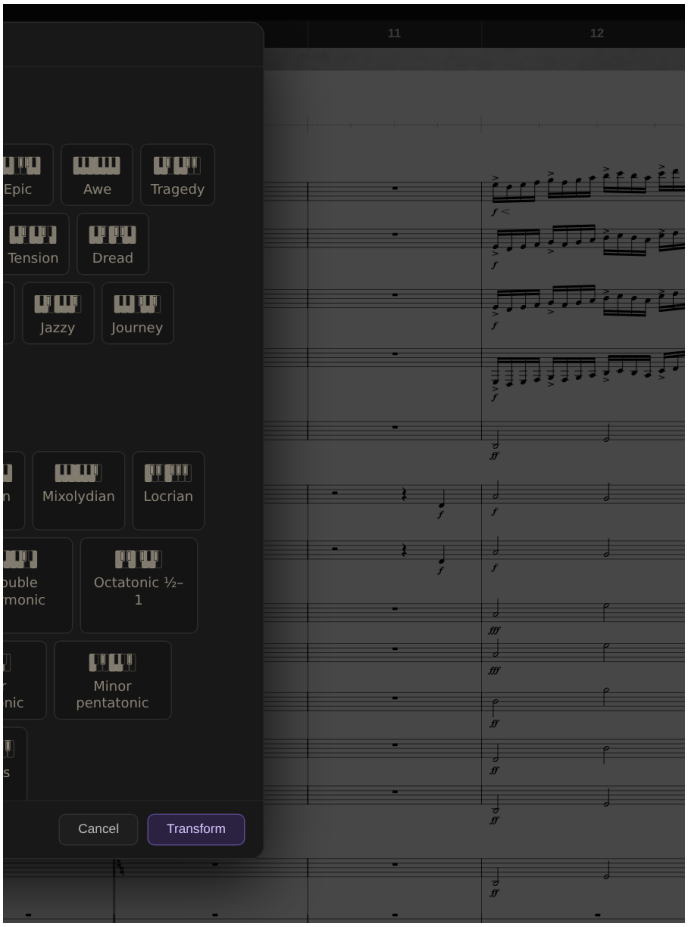


Figure 53 — The MODE window

- Choose a **Character** (joy, triumph, heroic, magical, tragedy…), a **Scale** (major, Dorian, octatonic, pentatonic…) or a **Tonic**.
- The **+ rhythm** switch also changes the rhythm (the bar keeps its length).
- **Transform**: each scale degree becomes the same degree of the new scale, the shape of the melody is kept, the chords follow. `Ctrl` + `Z` lets you compare before and after.

15.3 The degrees pad

The **VII** tile in the generators column opens the **degrees pad**: a bar that **floats above the score**. Grab it anywhere on the strip — except on a pad, a tool, a button or the menu — and drop it where you like; the cross closes it. It comes back to the same place next time.

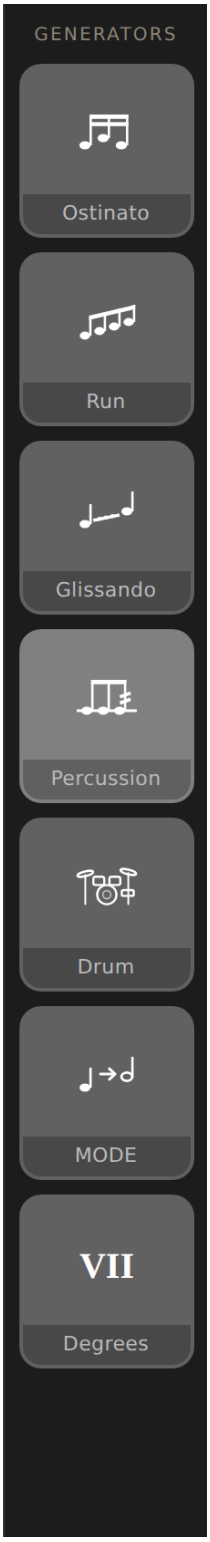


Figure 54 — The VII tile, in the generators column



Figure 55 — The degrees pad

Choosing the key

The menu on the left sets the **tonic**, and the two buttons **Major** / **Minor** set the mode. The seven pads follow at once: their chord, their name and their roman numeral (I, ii, iii, IV, V, vi, vii° in major; i, ii°, III, iv, v, VI, VII in minor).

Place key signature writes that key signature in the bar you are writing in. In minor it is the relative major's signature (A minor gives C major). Until you press it, choosing a key changes nothing in the score: you are free to look for your colour.

The seven pads

Each pad shows its chord name and, underneath, its **degree**. The pads are ordered from degree 1 to degree 7 and sound rising.

- In **write mode**, a press **writes the chord** at the position bar, with the **duration chosen in the left column**; the bar moves on, as with a MIDI keyboard. A single **Undo** removes the whole chord.
- In **select mode**, a press only **plays the chord**: nothing is written.
- The **blue frame** marks the degrees that most often follow the one just heard. It is a help, not a fence: every pad stays playable.

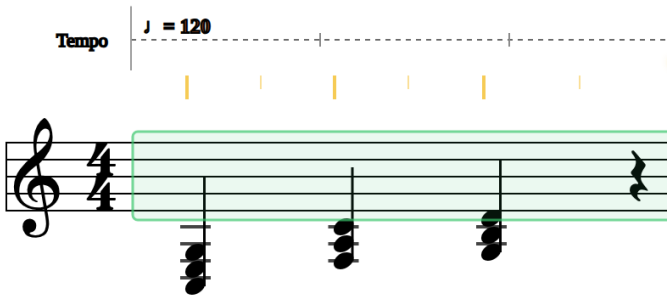


Figure 56 — Three presses (I, IV, V) written one after another

The five modulation tools

On the right, five tools offer a **door to another key**, starting from the chord just heard. Each press offers a new one; the chord you land on becomes **degree 1** of the new key, and the seven pads are rebuilt on it. The colours tell you where you are: **grey** = no door here, **yellow** = available, **blue** = the one just pressed.

Modulation	Reads the chord as another degree, then cadences into the new key. The doors come in the order 1, 4, 5, then 3, 6, 2, 7.
Chromatic	Slides the chord a semitone down, then up, then swaps its third (major ↔ minor, the parallel chord).
Diminished 7	Goes through a four-note diminished chord: each of its notes can drop a semitone and opens a different way out. You land on **degree 5** — pad 1 resolves it.
Augmented	Goes through an augmented chord: one note moving up gives a minor chord, one note moving down a major chord.
Mediant	Fetches the chord a third above or below, outside the scale — the film-music colour.

> NOTE
>
> Pressing a pad, or changing the tonic or the scale, sends the tools back to their first door. Degree 7 opens neither modulation nor slide: its button stays grey.

CHAPTER 16

Video

16.1 The video panel

Click **Video** (13). The panel opens above the score: the small video on the left, the timeline on the right, with three tracks (video, audio, audio 2).

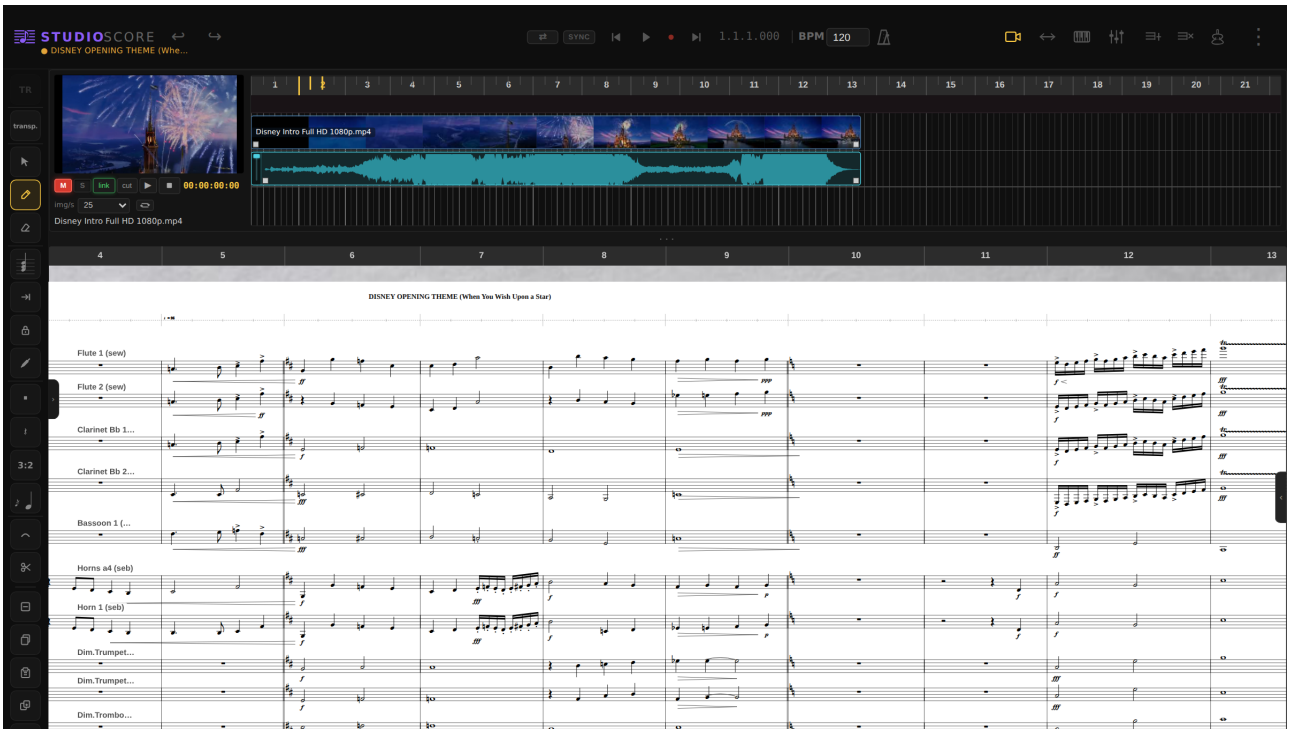


Figure 57 — The video panel: the picture on the left, the video clip and the sound waveform on the timeline

- Import from the File menu, or drag a file onto the timeline: a video goes into the video track, its sound into the audio track; an audio file on its own goes into **audio 2**.
- The project keeps the path of the file, not a copy. A format that Score cannot read is automatically converted into a copy “name (Score).webm” next to the original.
- Choose the frame rate in **Frames/s**; a red sentence warns you if it does not match the video.

16.2 The floating video

PROCEDURE

1. In the video panel, click **Detach**.
2. Move and resize the window with the mouse or a finger. It can go to another screen.

Result: the video stays visible above the score while you write, and it follows playback frame by frame.

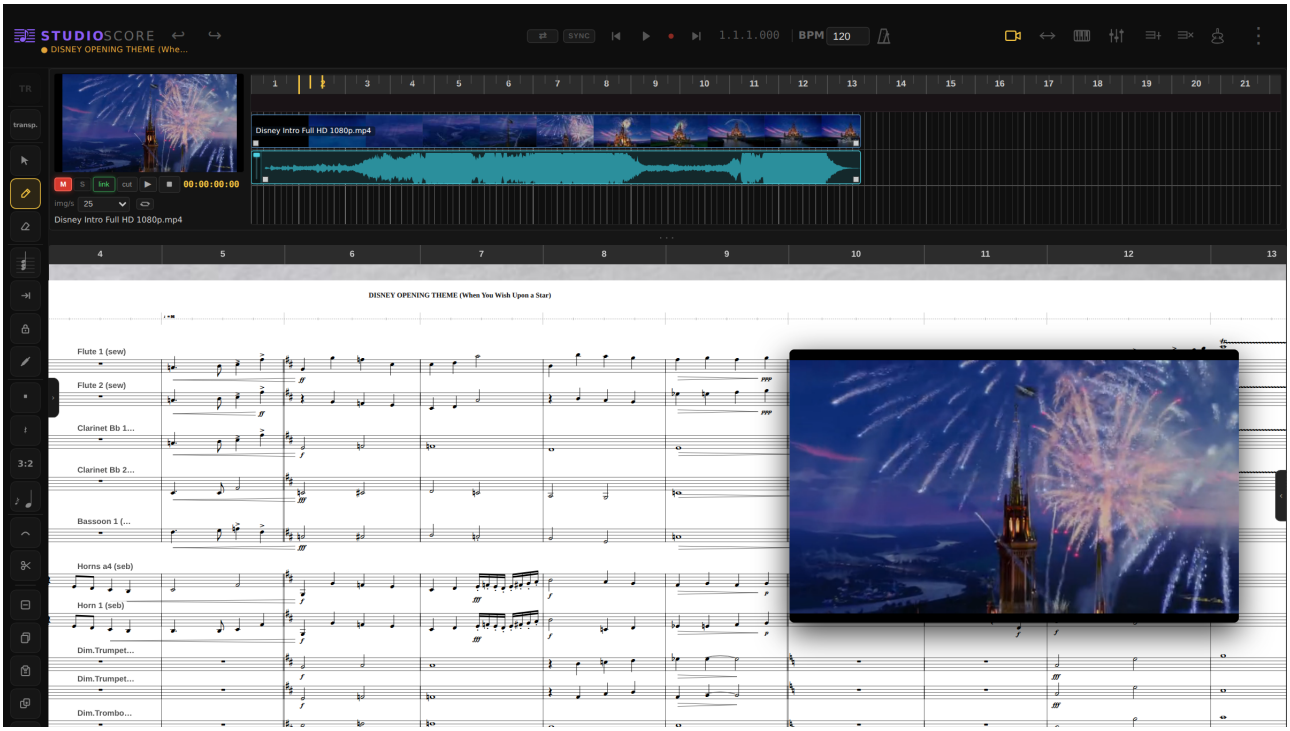


Figure 58 — The floating video, placed over the score

- Double-click the picture: full screen.
- The window's close button puts it back in the panel.

16.3 Clips, alignment and markers

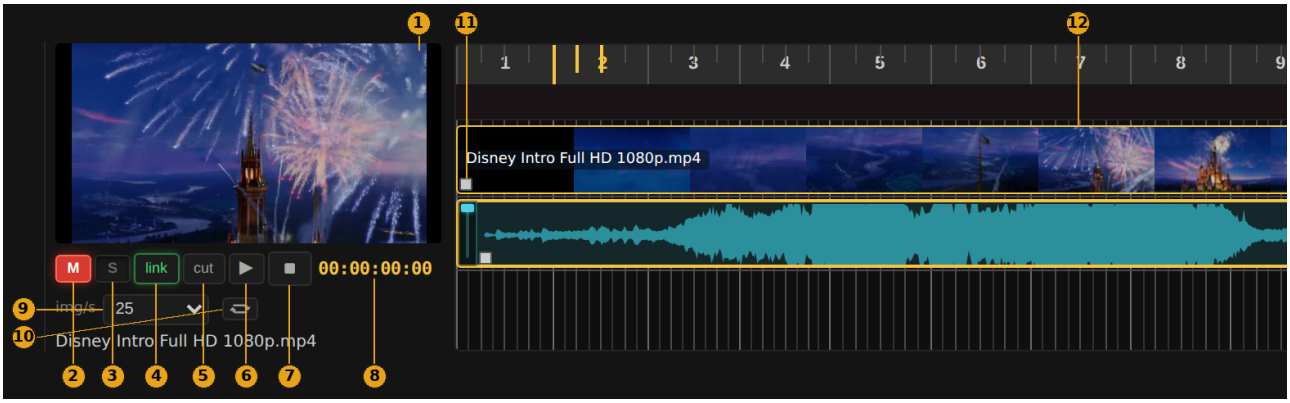


Figure 59 — The video panel controls

1 Detach — the floating video (section 16.2).

2– M and **S** — mute and solo for the video sound. **3**

Link (link) — the picture and the sound move together. **4**

5 Cuts (cut) — detects shot changes.

Play and **Stop** — the video alone, without the score. **6– 7**

The timecode. **8**

9 Frames/s — the frame rate.

Loop. **10**

11 A trim square, at the corner of the clip.

The video clip; below it, the sound clip with its waveform. **12**

- A click selects a clip (outlined in yellow); Cut, Copy, Paste, Duplicate, Clear and Delete act on it. The squares at its lower corners trim it. **Link** makes the picture and the sound move together.
- **Time Warp**: grab a barline in the ruler and drag it onto a point in the picture: the tempo is recalculated and written in the tempo line.
- **Cuts** (5 in the figure): opens the **Video Cut Detection** window, which finds the shot changes in the video.

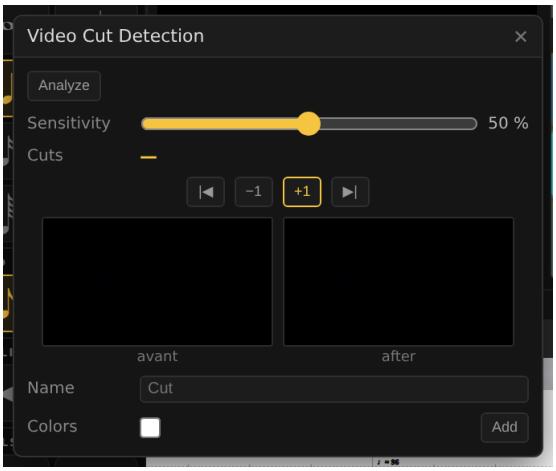


Figure 60 — Shot change detection

PROCEDURE

1. Press **Analyze**: Score goes through the video and counts the shot changes (**Cuts**).
2. Set the **Sensitivity**: higher finds more changes; lower finds only real, clean changes.
3. Move from one change to the next with |◀ −1 +1 ▶|: the two **before** / **after** pictures show the shot that ends and the one that begins.
4. Give the markers a **Name**, check **Colors** so that each marker has its own color (otherwise they are all red), then press **Add**.
5. picture. **Loop**: a loop on the timeline, shared with the score's ruler.

Result: a “Cut n” marker is placed on the timeline at each shot change, to align the music with the

CHAPTER 17

Working with the DAW

17.1 Dragging music into the DAW

PROCEDURE

1. Select bars or notes: a yellow frame surrounds them, with a small handle at the top right corner (1).
2. Grab the handle and drop it on a DAW track.



Figure 61 — The yellow frame and its handle (1)

- **Result:** the music arrives in the track, with its articulation keyswitches, its slurs, its CC1/CC11 curves, the pedal and the ornaments. A single instrument framed: a one-track file, with no tempo or time signature — the DAW project is the reference.
- The two staves of a piano form a single instrument.
- Setting to make once in the DAW: **Preferences › MIDI › MIDI File › Import Options**, uncheck “Automatically Dissolve Format 0”.
- In the other direction, drag a `.mid` file from the DAW onto the score.

17.2 SYNC mode

The **SYNC** button, at the top left of the transport, links Studio Score to the project open in the DAW. When it is on, Studio Score becomes a window on that project:

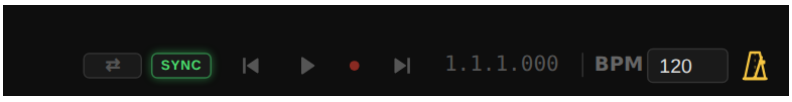


Figure 62 — SYNC on: the transport controls the DAW

- the transport (▶, ■, ⏮, ●, metronome) controls the DAW and follows its state; a click on the ruler moves the DAW cursor there;
- Score's audio engine pauses: the DAW does the playing;
- the mixer controls the DAW tracks (volume, pan, mute, solo);
- a note already dragged into the DAW is no longer played again by Score;
- the **TR** column gives the list of DAW tracks (section 17.3);

- D, E and V control the Quick Controls of the selected track in the DAW;
- Studio Manager can no longer create instruments for Score: its **Export Score** button is grayed out.

Button color	What it means
Green	SYNC is on and the DAW responds: everything is linked.
Orange	SYNC is on, Score is waiting for the DAW to respond.
Gray	SYNC is off: Score works on its own.

Turning SYNC on and off

- **Automatically:** when the DAW starts, SYNC turns on by itself. When the DAW closes, SYNC turns off by itself.
- **Manually:** a click on **SYNC** turns it on or off. If you turn it off while the DAW is running, it stays off until the next time the DAW starts.

When SYNC is **off**, Score becomes standalone again: its audio engine plays the instruments again, the transport no longer controls the DAW, the mixer adjusts Score's strips, and the position returns to 1.1.1.000.

> NOTE
>
> To put music from Score into the DAW, whether SYNC is on or not, drag it with the MIDI handle (section 17.1).

17.3 DAW tracks in Score

PROCEDURE

1. In SYNC mode, click **TR** (1) at the top of the left column: the list of active DAW tracks is shown, with their names, colors and order.
2. To find a track, type its name in **Search** (2).
3. Click a row (3): the track enters the score (a second click takes it out, without erasing its notes) and it is selected in the DAW.

The ✕ at the end of a row is used when you have deleted the track in the DAW: the row leaves the list, and the staff with that name leaves the score with its notes. `Ctrl` + `Z` brings the staff back.

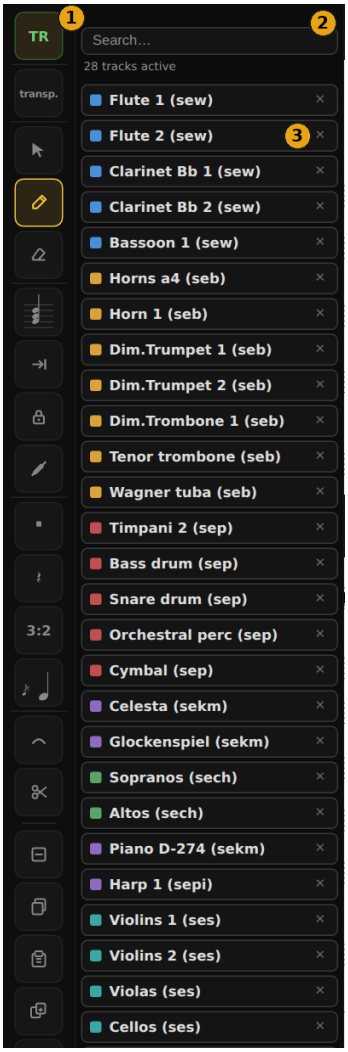


Figure 63 — The list of DAW tracks

17.4 The DAW project and its score

In **SYNC** mode, each DAW project has its own score, with the same name, in the **Projets Score** folder: the project “Film 1” goes with **Projets Score/Film 1.stsc**. Score does this on its own, only while it is open.

In the DAW	What Score does
You open a project	If its score exists, Score opens it. Otherwise, Score creates nothing: the tracks arrive through **TR**, as usual.
You close the project, or you quit the DAW	Score **saves automatically** the score under the project's name, then empties itself. Nothing is asked.
You switch to another project	Score saves the score of the first one, then opens the score of the second one (or empties itself if it does not exist).
Save as a new name	The score is saved under the new name and stays open.
Project never saved (“Untitled”)	Nothing: the score is only linked to a project that has a name.

NOTE

If you opened another file in Score (with **Open**), it is never linked to the DAW project nor saved automatically. To keep its changes, use **Save**.

17.5 Sync PC (⇄): two Scores on two computers

The ⇄ button, just to the left of **SYNC**, is called **Sync PC**. It links this Score to another Studio Score, open on another computer on the network, so two people can write on the same staves.

Requirements: Studio Connect and Studio Score open on **both** computers, on the same network. Messages go through Studio Connect.

PROCEDURE

1. Click ⇄ (1). Score looks for the other Score on the network. If it finds several, it asks you which one to choose.
2. The link is made: ⇄ lights up blue on both computers, and a small box appears to the right of each staff name.
3. Check the box of the staves to share (2): one, several, or all.
4. writing, erasing, moving, changing a duration, a dynamic… — appears immediately in the other Score, like a mirror.

Result: each checked staff is sent to the other Score. From then on, everything you do in that staff —

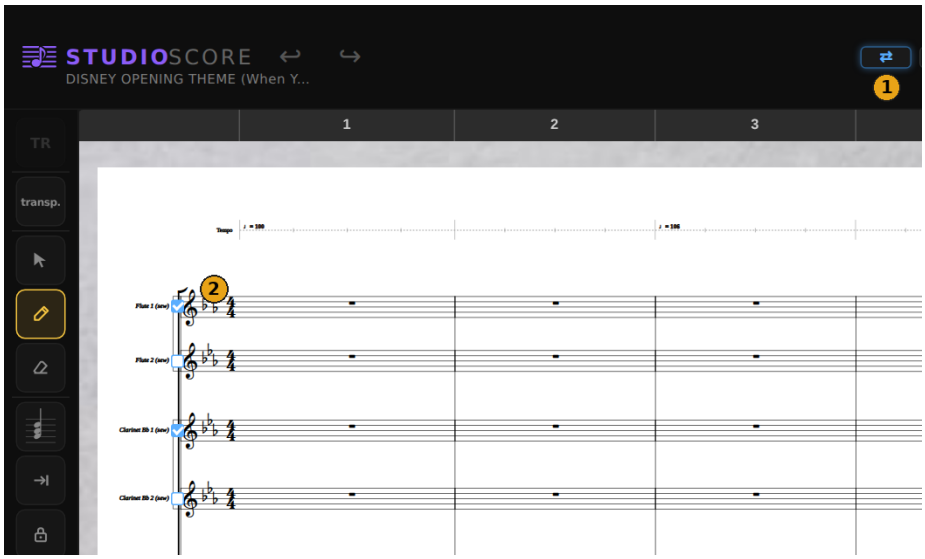


Figure 64 — Sync PC linked (1), two staves shared (2)

Case	What happens
The staff does not exist in the other Score	It is created there, with all its music.
The staff already exists in the other Score	A message warns you: ""Violins 1" exists in the other Score: all its content will be replaced." **Replace** sends the staff; **Cancel** does not check the box.
Two staves with the same name	A staff is recognized by its **name**: the "Violins 1" staff of one Score goes into the "Violins 1" staff of the other.
Unchecking a box	The staff is no longer shared. What has already been sent stays in the other Score.
No other Score found	Message "No other Score found." Check that the other computer has Studio Connect and Studio Score open.
The other Score closes or stops responding	Message "The other Score stopped responding." The link is cut and ⇄ turns off.

> NOTE
>
> The **sound is never sent**: each computer keeps its own instruments, plug-ins and mixer for the staff. Only the written music travels. Each Score can also check its own staves to send them to the other.

Another click on ⇄ cuts the link on both computers.

CHAPTER 18

Tablature and drums

18.1 Tablature

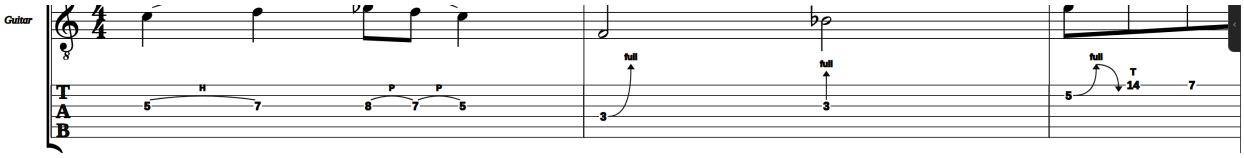


Figure 65 — A guitar: the staff and its tablature, with bends, hammer-on and pull-off

- A tablature staff is written like a staff: click a string in Input, then type the numbers.
- Dragging a number up or down: same note on another string. Right or left: the duration changes. `Alt`+`N` / `Alt`+`M`: upper / lower string.
- The **TAB FX** button (open column, when the staff has a tablature) opens the guitar effects: attack (ghost note, palm mute, let ring...), pitch (bends, whammy bar, vibrato, trill), legato and slides (hammer-on, pull- off, slides), harmonics, right hand (pickstroke, tapping, slap...), volume (fades, wah) and fingerings. Bends and vibratos are played as pitch bend.

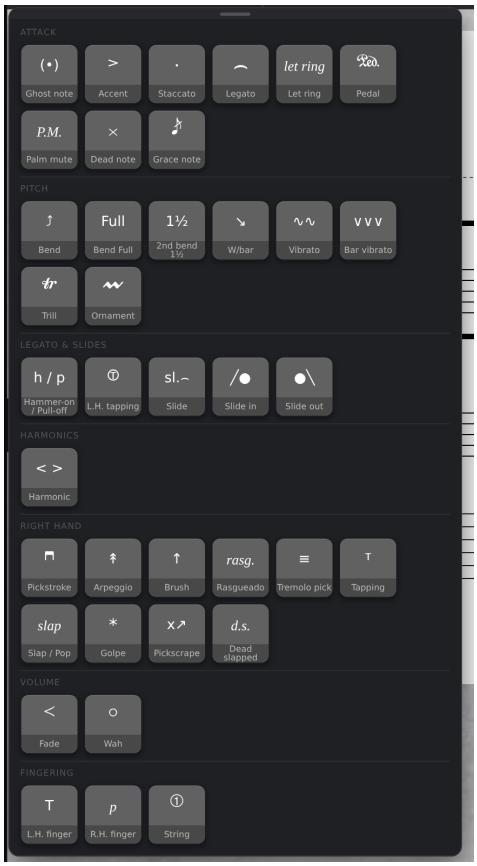


Figure 66 — The TAB FX window

18.2 Drums

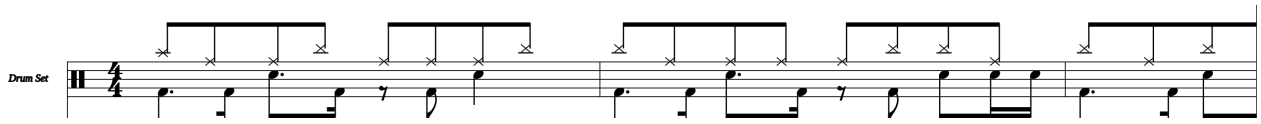


Figure 67 — A drum staff: hi-hat at the top, bass drum and snare drum at the bottom

- A drum staff has its **drum map**: each kit instrument is on its own line, with its notehead.
- Each kit instrument keeps its own rhythm: a whole note on the bass drum under hi-hat eighth notes.
- With a MIDI keyboard, each key goes to the kit row that plays it.
- The **Drum** generator places grooves from your MIDI files.

CHAPTER 19

Settings and shortcuts

19.1 The Settings panel

Click ⋮ (20), at the far right of the top bar.

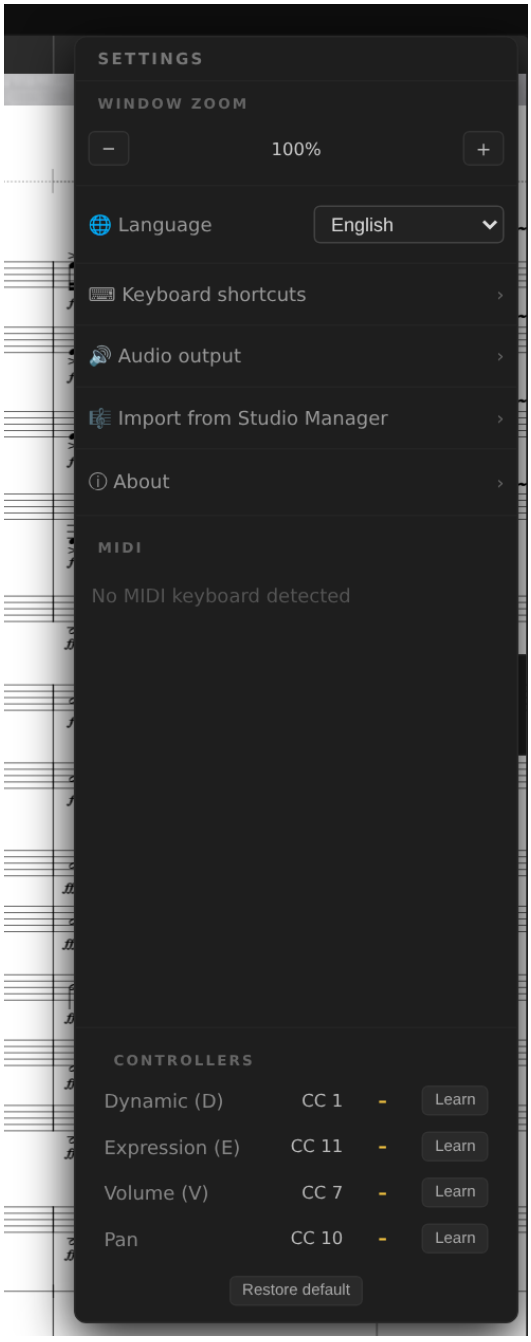


Figure 68 — The Settings panel

Setting	Purpose
Window zoom	− / +; a click on the percentage returns to 100 %. Shared by Studio Connect, Studio Manager and Score.
Language	The language of the whole software.
Keyboard shortcuts ›	Opens the keyboard shortcuts window (section 19.2).
Audio output ›	The output device of the audio engine.
Import from Studio Manager ›	Takes the instrument list prepared in Studio Manager, already connected to VE Pro.
About ›	Version and licenses.
MIDI	The computer's MIDI inputs, to check. You can check several (a keyboard and a fader controller).
Controllers	Which physical fader controls Dynamic, Expression, Volume, Pan: **Learn**, then move the fader. **Restore default**: CC1, CC11, CC7, CC10.

19.2 Keyboard shortcuts

Settings › Keyboard shortcuts opens the **Keyboard shortcuts** window: search, tabs **All**, **Assigned**, **Custom**, **Unassigned**. Click a command, then the “click here” field, and press the new key. If the key is already taken, Score says by which command and changes nothing.

At the bottom of the window: **Reset** restores all the default keys (message “Default shortcuts.”); **Clear all** removes the key from all commands (message “Keys removed.”).

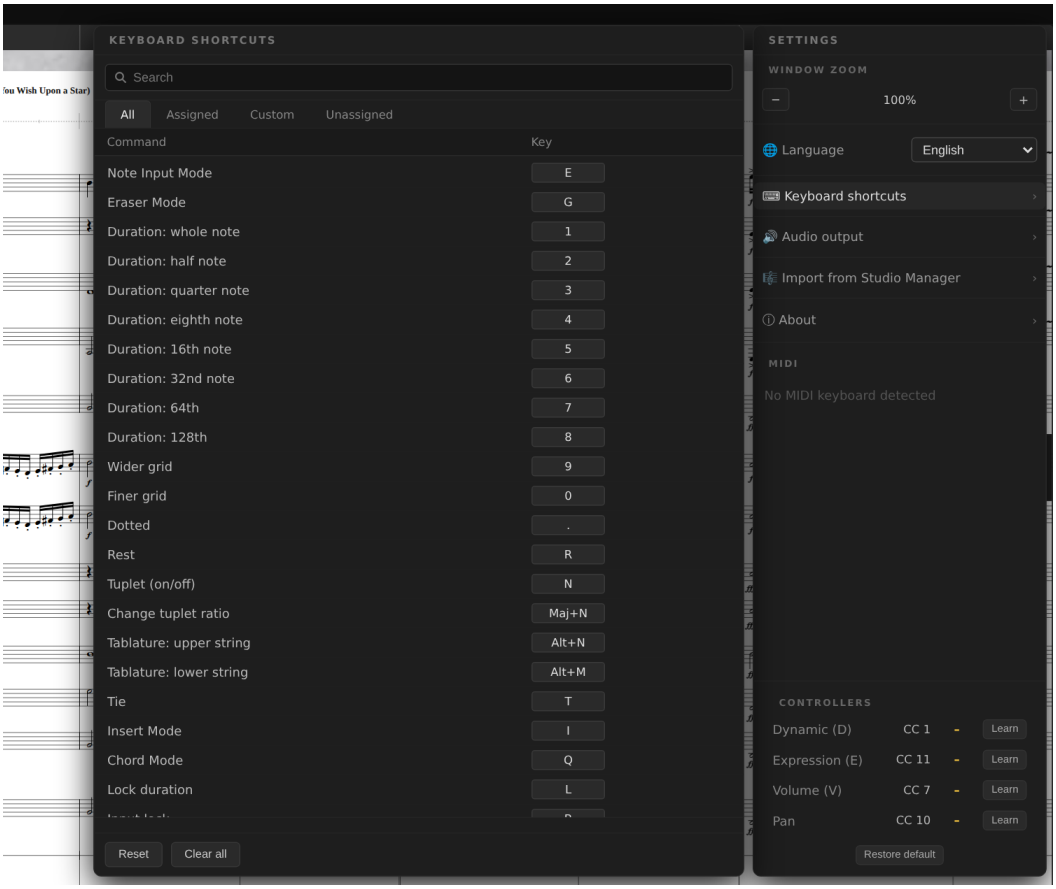


Figure 69 — The Keyboard shortcuts window

Command	Key
Note Input Mode	**Command Key** Eraser Mode

> **E**

> **G**
>
> Whole note … 128th `1` … `8` Wider grid / Finer grid `9` / `0`
>
> Dotted Rest

> **.**

> **R**
>
> Tuplet Change tuplet ratio `Shift`+`N`

> **N**
>
> Tablature: upper / lower `Alt`+`N` / `Alt`+`M` Tie

T

string

Insert Mode Chord Mode

I

Q

Lock duration Input lock

L

B

Repeat selection Cut note

D

U

Play / Stop Advance the caret without `Ctrl`+`Space`

`Space` writing

Clear left `Shift`+`Space` Marker line: right / left → / ←

Up a semitone / Down a `Ctrl`+`↑` / `↓` Up an octave / Down an `Ctrl`+`Alt`+`↑` /

semitone octave

↓

Piano roll: one step Alt + ↑ / ↓ Piano roll: one cell Alt + → / ←

Longer value / Shorter value Ctrl + → / ← Extend selection Shift + → / ←

Extend to edge Ctrl + Shift + → / ← Undo Ctrl + Z

Redo Ctrl + Y, Copy bar / Cut bar Ctrl + C /

Ctrl + Shift + Z Ctrl + X

Paste Ctrl + V Save project Ctrl + S

Select entire bar Ctrl + A Deselect / change mode Esc

Delete selection Delete, Backspace Deselect Ctrl + D

Play from selection Playhead to selection Alt + P

P

Record (REC) Ctrl + R Mixer

F3

Zoom in / Zoom out Ctrl + = / Ctrl + - Clef Shift + C

Key signature Shift + K Time signature Shift + M

Barline Shift + B Flat / Sharp - / =

Natural no key (to assign)