

User guide (3.1.0)

Introduction

This user manual describes the functionalities of the keyboard used without the Exquis application, that is to say connected via USB, MIDI DIN or CV, to third-party software, hardware synthesizer, or modular synthesizer.

The features currently available and presented here are subject to change. Don't forget to watch for updates!

For any questions about your use of Exquis, do not hesitate to contact the community of players through its various points of contact; members of the Intuitive Instruments team or other users will be able to respond and share it with the community.

For technical issues, contact support at dualo.com/en/support.

Essential to know

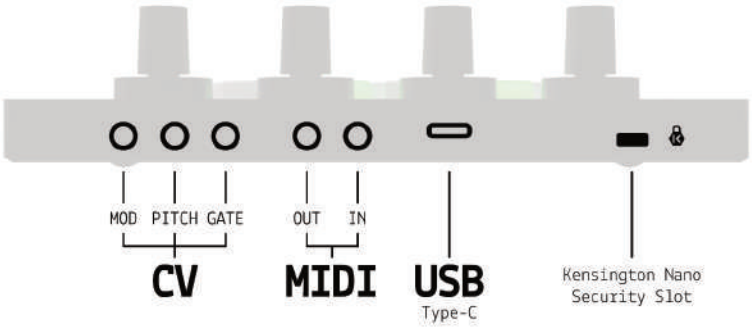
You can use Exquis:
- in *MPE* (*MIDI Polyphonic Expression*) on multiple MIDI channels simultaneously, with synthesizers and software that are specifically compatible or that partially support it
- in "classic" MIDI (*Polyphonic aftertouch*) on a single MIDI channel, with any synthesizer and software

Configure Exquis accordingly from the **Settings (2)** menu.

Also configure your synthesizer or software accordingly; if you use Exquis in MPE on a synthesizer or software that isn't officially compatible, the latter is probably able to listen to all MIDI channels (often labeled "*All*" or "*Omni*" in the MIDI input channel selector). Otherwise, use Exquis in *Polyphonic aftertouch* mode on the same selected channel.

If you are using Exquis with MIDI cables, the two communication types A and B are incompatible (and rarely indicated); make sure to use the supplied adapters or any other MIDI TRS Type A adapter.

Connectors



The Exquis keyboard allows connection:

- in USB (USB-C connector), for power supply and use with third-party software (e.g. Ableton Live, Garage Band, etc.)

- in MIDI (MIDI IN and OUT minijack connectors), for use with third-party software or hardware synthesizers

- in CV 0-5V (“GATE”, “PITCH” and “MOD” minijack connectors), for use with modular synthesizers

The Exquis keyboard has a Kensington Nano Security Slot™ for a suitable anti-theft device.

Startup

The Exquis keyboard simply requires power supply via USB (5 V and 0.9A max), for example from a computer, a suitable power supply, or even an external battery. The keyboard starts automatically once plugged.

Controls

From bottom to top, the Exquis keyboard features:
- 10 backlit action push buttons
- 1 continuous capacitive slider divided into 6 zones with light feedback
- 61 backlit hex keys, sensitive to:
    - velocity: strike and lift force
    - horizontal tilt: X, *Pitch Bend*
    - vertical tilt: Y, CC#74
    - pressure: Z axis, *Channel Pressure* or *Polyphonic Aftertouch*
- 4 clickable rotary encoders with light feedback

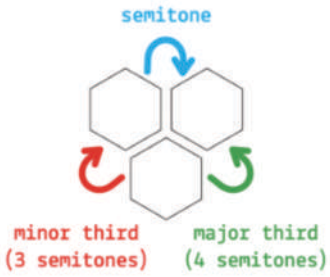
MIDI THRU

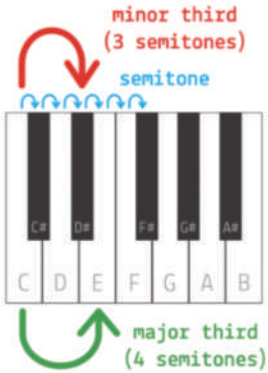
When received in MIDI IN, following CC MIDI are sent via USB and MIDI OUT:
- CC#64: sustain pedal (standard)
- CC#11: expression pedal (standard)
- CC#65: portamento on/off
- CC#67: soft pedal

Keyboard

By default, the Exquis keyboard arranges consecutive notes (semitones) horizontally, and harmonious notes (thirds) vertically, from the lowest at the bottom to the highest at the top:







Harmonious chords (several notes played simultaneously), stacking of thirds, are embodied in simple, continuous and ergonomic shapes:



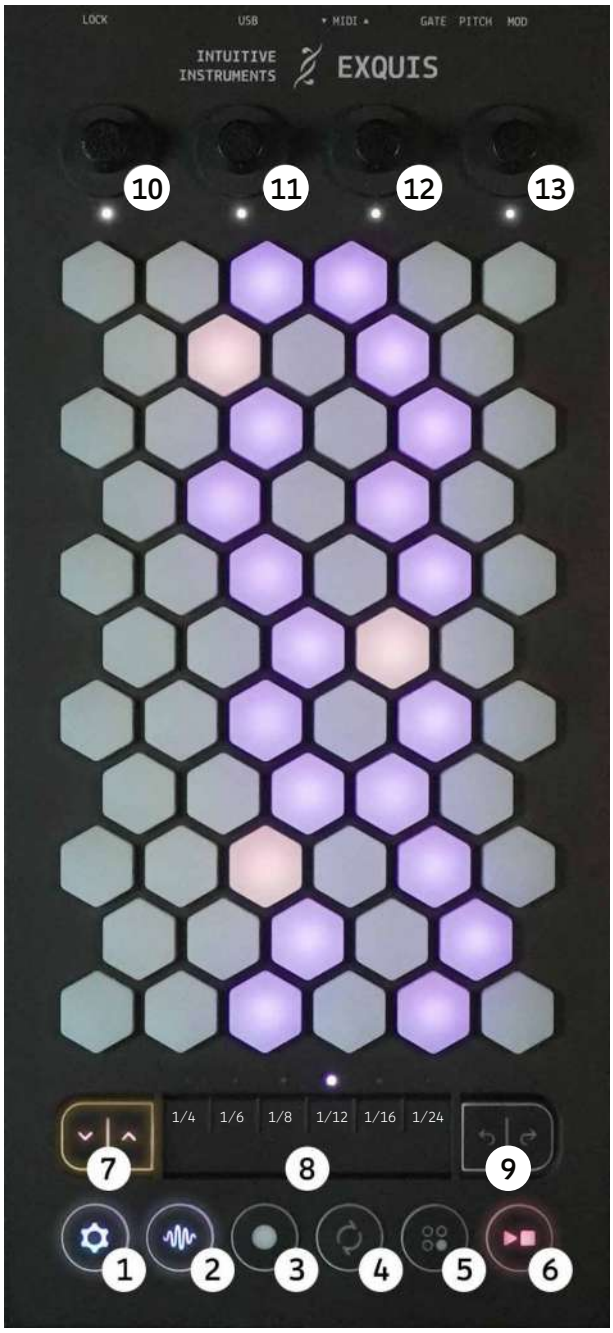
The most common scales (selection of notes giving the tone of a piece) result from the assembly of two 4-note chords; they are thus embodied on the keyboard in the form of a continuous luminous double-strand, allowing you to play in tune and improvise effortlessly.

When plugged in, the keyboard displays the C major scale by default (C D E F G A B).

Playing chords within the scale allows you to construct coherent and harmonious chord charts.

With one hand or two hands, explore and compare the different scales to create ever more different pieces!

Play



1. Settings (1) **(hold):** keyboard settings.

2. Settings (2) **(hold):** MIDI and layout settings.

3. MIDI CC#32* (latch)
4. MIDI CC#33*, (momentary)
5. MIDI CC#34* (momentary)

6. MIDI clock play (green) / stop (orange)

7. Octave: transpose the keyboard, one octave (12 semitones) at a time, to play higher or lower.

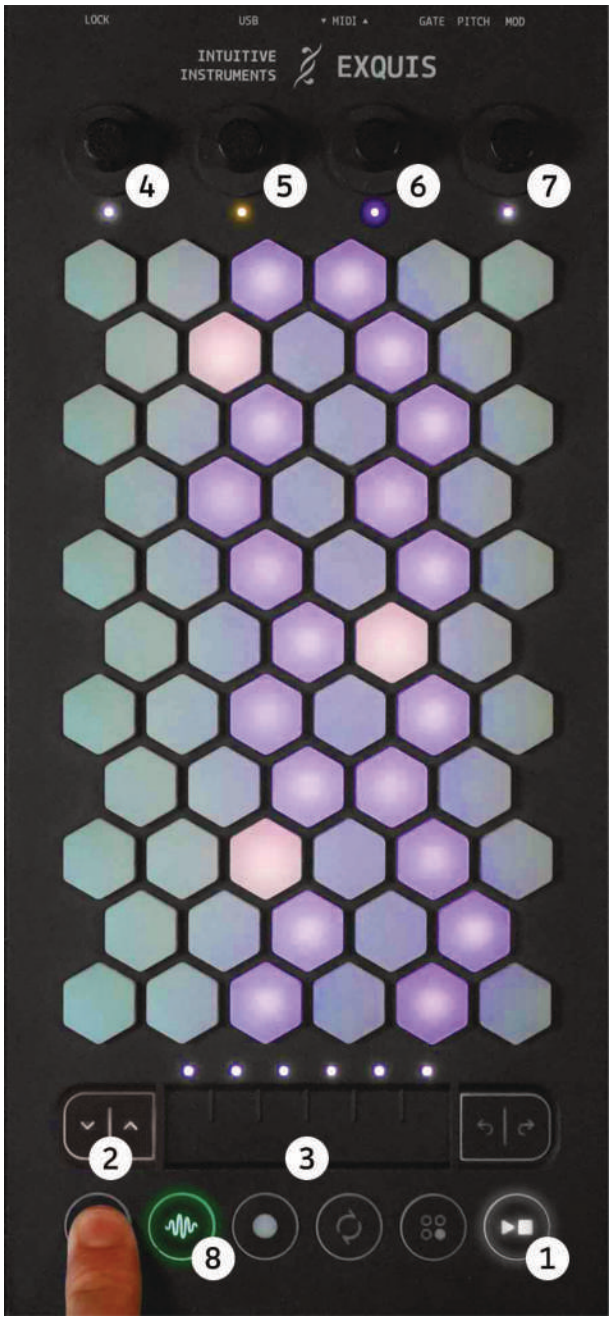
8. Slider: arpeggiator speed (ordered repetition of notes held on the keyboard). The pattern and mode are to be set in the settings (1) menu. The values are expressed according to the units of time: 4 = quarter note, 8 = eighth note, 16 = sixteenth note,… 1/4 is equivalent to 1 note per beat, 1/8 to 2 notes per beat, 1/16 to 4 notes per beat,...

9. MIDI CC#35* and CC#36* (momentary)
10. MIDI CC#41*, click CC#21*
11. MIDI CC#42*, click CC#22*
12. MIDI CC#43*, click CC#23*
13. MIDI CC#44*

13. MPE Freeze (click): Freeze notes ! Hold and modulate notes with your fingers then briefly click the rotary encoder to lock them. Add more notes the same way, or unfreeze notes by touching them again. Disable all frozen notes by briefly clicking the rotary encoder when no notes are being held. You can use this function in combination with the arpeggiator.

**Default values are editable in the Exquis app: Menu > Standalone settings*

Settings (1)



1. MIDI clock output: USB (red), DIN (blue), both (magenta), none (white).

2. Transpose: keyboard shift one semitone at a time. Particularly useful for recentering the scale on the keyboard.

3. Slider: arpeggiator pattern. The animation of the 6 LEDs of the slider shows the chosen pattern. Briefly touch the slider to change the pattern:
- *Order*: in order of note triggering
- *Up*: from the lowest to the highest
- *Down*: from the highest to the lowest
- *Convergent*: from outside to inside
- *Divergent*: from inside to outside
- *Note repeat*: notes are repeated simultaneously

Hold your finger on the slider for a second to switch from « latch » mode (hold while playing) to « toggle » mode (touch to activate/deactivate).

4. Internal tempo: used by the arpeggiator and MIDI clock, 120 by default. Follows the MIDI clock received via USB or MIDI DIN (if two clocks are received, follows the first). Click to enable disable the light metronome on the settings (1) button, hold the click to reset to 120.

5. Tonic note (root): central note of a song, around which to build your melodies and chord charts (A=la, B=si, C=do,…). Not inspired? Click to set a random tonic note, hold the click to reset to C=do.

6. Scale: notes giving the tone of the piece. By default:

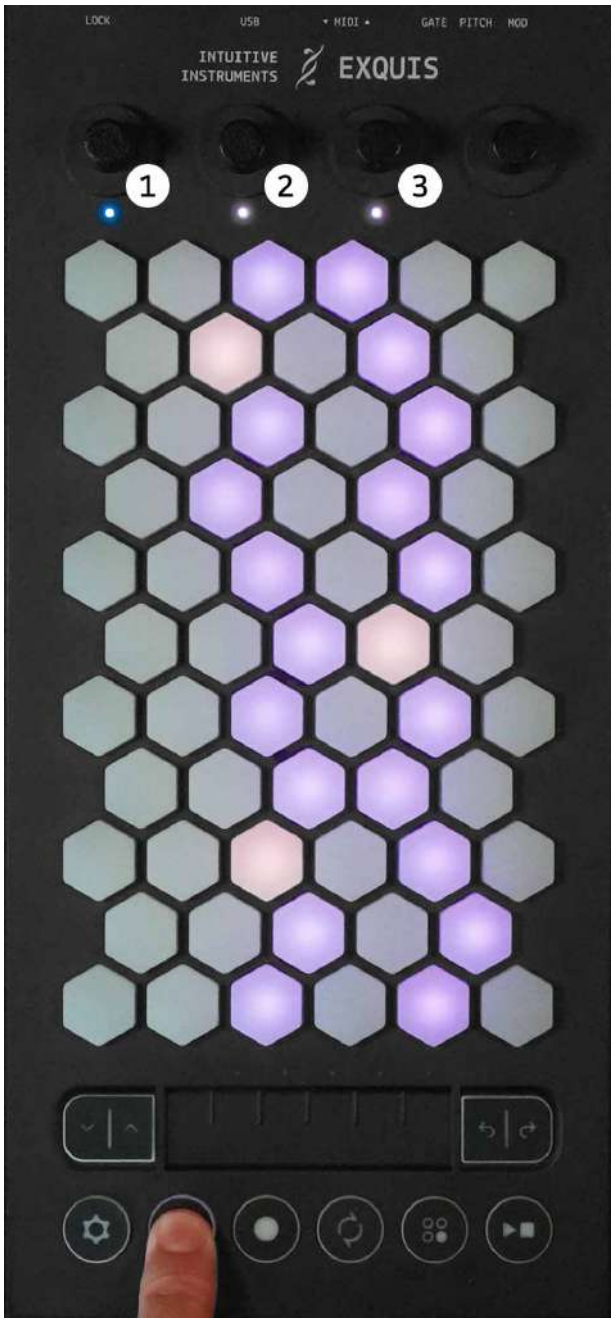
1. Major
2. Natural Minor
3. Melodic Minor
4. Harmonic Minor
5. Dorian
6. Phrygian
7. Lydian
8. Mixolydian
9. Locrian
10. Phrygian dominant
11. Major Pentatonic
12. Minor Pentatonic
13. Whole Tone
14. Chromatic

Not inspired? Click to set a random scale slot, hold the click to reset to slot 1.

7. Keyboard brightness (turn) / sensitivity (click + turn) : adjustment of the keyboard global key trigger resistance, by default at 50%. Warning: a low setting can cause unwanted note triggers.

8. Firmware version (hold): X.X.X = major.minor. patch = top.middle.bottom

Settings (2)



1. *MPE / Poly aftertouch*: behaviour of MIDI channels sent via USB or MIDI DIN. Switch the mode by clicking on the rotary encoder:
- *MIDI Polyphonic Expression* (blue LED): control on the X Y and Z axes independent by key, one note per channel. Channel 1 is used for global messages, rotating the rotary encoder allows you to edit the number of additional MIDI channels, shown on the keyboard (1 to 14). A setting of 14 is recommended unless specific need. Channel 16 is used for communication with DAWs (e.g. Remote Script for Ableton Live).
- *PolyAfterTouch* (yellow LED): independent Z-axis control per note. You can choose the channel on which you send the notes**,** shown on the keyboard (1 to 16).

2. Per note *pitchbend range*: in MPE, expressed in forty-eighths of the maximum range. Two use cases:
- Set the Pitchbend range of the synthesizer used to 48 (generally the default value), then set this parameter.
- Set this parameter to 48, then set the Pitchbend range of the synthesizer used.
In CV, expressed in semitones.
Hold the click to reset to 48.

3. Note layout. By default:

1. Exquis
2. Exquis with duplicates (duplicate notes of the scale are on)
3. Chromatic
4. 4x4 for drums (MIDI values from 36 to 51)
5. General MIDI percussion (MIDI values from 35 to 81)
6. Rainbow (MIDI values from 0 to 60)

Click to enable/disable the display of duplicate notes when you play them.
Hold the click to reset to slot 1.

MIDI score

The Exquis keyboard will display, in green, all notes it receives via MIDI IN or USB. If a note is lower or higher than the notes displayed on the keyboard, the associated octave button lights up instead.

The display algorithm is optimized for Exquis note layout, showing no duplicate notes but prioritizing notes of the scale or the closest.

Saving and resetting

All settings are automatically saved when exiting the settings menu, and kept when the keyboard is unplugged.

You can reset default settings by holding the 2nd rotary encoder clicked while plugging into a power source (you can release the click right after plugging Exquis in).

Scale color

From Exquis app you can edit the default colors of each degree of the scales, from Menu > Key Colors > Edit.

Sensitivity curves

From Exquis app you can edit the key sensitivity curves (velocity on and off, pressure, X and Y tilt) via Menu > Sensitivity Curves > Edit.