# Complete User Guide – MackieControl for X-Touch-Mini – Ableton Live

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#### Disclaimer

This script has been successfully tested on Ableton Live Standard 12.2.1 and Windows 11. It is designed exclusively for the X-Touch Mini and its latest firmware.

The XTouch-Mini must be configured in Mackie Control mode (the MC MODE LED must be lit). If this is not the case, hold down the MC button at the bottom left of the controller, unplug the power cord, and plug it back in. As soon as the MC LED is lit, release the MC button.

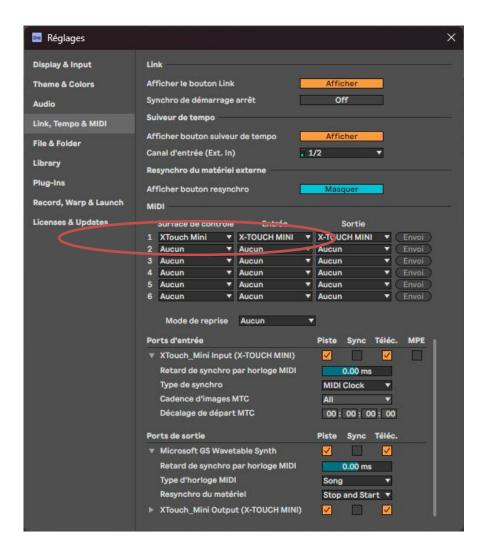
## **Installing the script**

Unzip the XTouchMini.zip file into the "C:\ProgramData\Ableton\Live 12 Standard\Resources\MIDI Remote Scripts\" directory. This will create an XTouch\_Mini directory, with the .pyc files inside.

A license file (license.txt) must be copied into the XTouch\_Mini directory to unlock the script's restrictions. By default, the script launches in demo mode with all functions enabled and deactivates after 10 minutes. A license can be obtained by purchasing it on the website.

Launch Ableton Live and select XTouch Mini from the list of available surfaces. Check the Tracks and Remote boxes for input and output.

<u>Please note</u>: when updating Ableton Live, the XTouch\_Mini directory may be deleted by the installation program. Make sure you have a backup handy so you can restore it. You can also connect to the Github site to download the latest version (without the license file).



**Xtouch Mini Script Selection** 

#### Introduction

This guide will walk you through the process of using the custom script that transforms the X-Touch Mini into a powerful control surface for Ableton Live. The goal is to achieve a smooth, visual, and precise mixing experience—without having to touch the mouse.

In order to compensate for the many shortcomings of the native driver supplied for X-Touch-Mini Mackie mode, I decided to completely redevelop this driver. I started with a blank slate, thinking about the features I would like to have on such a controller, taking into account the limited number of physical buttons it offers.

First, I wanted to be able to use it in full mixer mode, with the top buttons controlling solo tracks and the bottom buttons controlling mute tracks. The potentiometers (VPOT) are assigned to volume.

Then an advanced mode per track where the top buttons are assigned to the SOLO or MUTE function and the bottom buttons to transport functions, as well as to advanced functions such as intelligent modification of the parameters of an EQ8 equalizer or the ADSR functions of a synthesizer.

# Physical structure of the controller

The X-Touch Mini includes:

- 8 rotary encoders called "VPots" with circular LEDs that light up in different ways
- 2 rows of 8 buttons:
  - o Top row → track buttons (SOLO, MUTE, display of the current track or plugin, etc.)
  - o Lower row → additional functions (mode switching, transport, etc.)
- 2 A/B navigation buttons (on the right) → allow you to switch between track banks, parameter pages, or plugins
- Fader controls the master volume (managed directly by Live)

The whole thing is controlled by the script, which dynamically assigns functions to the VPots and buttons depending on the active mode.

Full bidirectional synchronization allows the status of Live to be reflected on the controller. Track and plugin changes, additions, and deletions are displayed (depending on the mode) on the controller.



Assigning functions to keys

The XTouch-Mini controller does not include a display, so, where relevant, we will use the Live status line as a display to show useful information such as the current mode, the selected bank, etc.

## Simplified glossary

- **VPot:** rotary encoder with circular LED
- Strip: individual channel (track 1 to 8, etc.)
- Bank: group of 8 tracks, plugins, or parameters. The A and B buttons allow you to move backward or forward through the banks
- **Device:** plugin, instrument, rack, or effect used in a Live track
- Parameters: device parameters: plugin, instrument, rack, or effect used in Live
- Active device or plugin: plugin selected in the chain of plugins available in the track
- Active track: This is the selected track. If the active track is in the visible bank, the top button corresponding to the active track flashes to make it easier to find the corresponding VPOT. Example: track 13 is active (from the second bank), button 5 flashes (9 + 5 = 13) in bank 2. The active track indicator takes precedence over the track's SOLO or MUTE status, but does not prevent any action on this button.
- Active plugin: this is the selected plugin. If the active plugin is in the visible bank, the top button corresponding to the active plugin flashes. If it does not appear as a flashing button, move to the next bank(s) until you see the corresponding button flashing.

Note: The Live Standard version does not allow you to see the selected plugin change in real time through its APIs. This is why the 1 **VOLUME | PAN | SENDS** button allows you to refresh the position of the selected plugin.

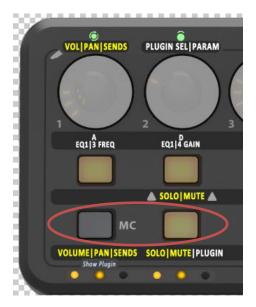
## **Main modes**

Each interaction is based on an "operating mode." You can switch between modes using two dedicated buttons:

**BUTTON 1 VOLUME | PAN | SENDS**: Selects the mode for assigning VPOTs to volume, pan, and sends.

**BUTTON 2 SOLO | MUTE | PLUGIN:** Assigns the upper keys to the solo, mute, or plugin function.

BANK A | BANK B: Navigation mode between tracks, plugins or plugin parameters





**Modes and Banks** 

# **Navigation**

## **Navigating tracks**

- Use the `PREV BANK` (button A) and `NEXT BANK (button B) buttons to move to the next or previous tracks in groups of 8 tracks
- The A/B buttons flash briefly when a change is made and remain lit if navigation is possible

The controller displays **8 tracks at a time**, but you can switch to other tracks using the A/B buttons.

- PREV BANK (button A): 8 previous tracks
- NEXT BANK (button B): 8 next tracks
- Feedback LED:

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- o **ON** = navigation possible
- o **OFF** = end or beginning of the list
- o **BLINK** = action in progress

#### **Navigating plugins and settings**

The page buttons allow you to navigate between groups of 8 plugins. Please note that when you have a drum kit, each pad will be considered a plugin, so the plugin following the drum rack will be relegated 16 plugins further and accessible via the next page button (twice). Scroll through the groups of 8 plugins until you see the selected plugin flashing.

Once in settings mode, a plugin can have more than 8 settings, which will be accessible via the previous (back) pages. The VPOTs are automatically reassigned to the following settings.

#### Automatic selection of the track bank

Each time you select a track in Live, the controller automatically switches to the bank of 8 tracks that contains it.

## Example:

If you select track 14 in Live, the X-Touch immediately select bank [9-16] — no need to press NEXT/PREV BANK.

Mode	Activation	LED indicator
BUTTON 1 VOL PAN SENDS	VPOTs assignment. Not active in certain modes (full-mixer, plugin parameters)	On, Flashing, Off
VOLUME	Assignment of VPOTs to track volume (priority to Utility) LED on (steady)	LED on (steady)
PAN	Assignment of VPOT to pan control LED flashing	LED flashing
SENDS	Assignment of VPOT to track SENDS (RETURN) controls	LED off
BUTTON 2 SOLO MUTE PLUGIN	Mode selection. Not active in certain modes (full-mixer)	On, Flashing, Off
SOLO	Press the "SOLO/MUTE" button	LED on (steady)
MUTE	Press the "SOLO/MUTE" button again	LED flashing
PLUGIN	Press the "SOLO/MUTE" button again	LED off
BANK A/B	Change bank in tracks, plugin chain, plugin parameters. Banks contain up to 8 tracks or elements.	On, Flashing, Off
BANK A - B	Go to previous/next page in tracks, plugins, or parameters. Off if first/last page reached, flashing or steady if other pages are available before/after the current track	On, Flashing, Off
FULL-MIXER	Simultaneous press of A + B (action when keys are released)	A/B LEDs flash
Fonctions Spéciales	Improves flow and mode management	
BUTTON 1	In PLUGIN   PARAMETERS mode, returns to PLUGIN   DEVICE mode to select another plugin	N/A
BUTTON 1	In <b>PLUGIN DEVICE</b> mode, allows you to refresh the selected plugin on the top row of buttons.	N/A

XTouch-Mini modes table for Ableton

#### **SOLO Mode**

- **Purpose:** To put a track in exclusive solo mode; the lead track is solo, the other tracks are muted.
- Activation: Press SOLO/MUTE until the LED stays lit. A message on Live indicates the current mode.

#### Operation:

- The 8 buttons at the top correspond to the 8 visible tracks
- Press one of the buttons at the top → puts the track in exclusive solo mode.
   All tracks are muted except the selected track.
- Press again → deactivates solo mode. Tracks that were not initially muted are unmuted.

#### LED feedback:

 The button LED is lit when the track is in solo mode. Note that the solo value is hidden by the flashing indicator for the current track, but this does not prevent you from switching to the solo value.

#### Track navigation:

- o Use the A/B buttons to navigate in groups of 8 tracks (bank).
- The LED on the A/B buttons flashes if navigation is possible, and is off at the end or beginning of the list.
- Active track: if the active track is in the visible bank, the top button corresponding to
  the active track flashes. Example: track 13 is active (from the second bank), button 5
  flashes (9 + 5 = 13). The active track indicator takes precedence over the track's SOLO
  or MUTE status.

#### **■** MUTE Mode

- Purpose: Mute or unmute tracks individually
- Activation: Press SOLO/MUTE until the LED flashes. A message on Live indicates the current mode

#### Operation:

- The 8 buttons at the top correspond to the 8 visible tracks
- o Press one of the top buttons → mutes the track
- Press again → unmutes

Several tracks can be muted at the same time

#### LED feedback:

- The button LED flashes if the track is muted. Note that the mute value is hidden by the flashing but does not prevent the track from being muted
- Active track: if the active track is in the visible bank, the top button corresponding to
  the active track flashes. Example: track 13 is active (from the second bank), button 5
  flashes (9 + 5 = 13). The active track indicator takes precedence over the track's SOLO
  or MUTE status

#### PLUGIN Mode

This mode allows you to **browse through the effects/instruments** of the selected track and **modify their parameters** via the VPots. A number of effects, racks, or instruments are specially treated to make updating parameters more intuitive.

## **Step 1: Selecting a plugin**

- **Purpose**: Select a plugin in the track to modify it
- Activation: Press SOLO/MUTE until the LED turns off. A message on Live indicates the current mode

#### • Operation:

- The 8 buttons at the top correspond to the first 8 plugins in the track. Each illuminated VPot corresponds to a plugin present on the selected track
- You can move through the plugin chain using the Bank A/B buttons
- To make selection easier, when a plugin is selected, it is indicated by the top button flashing to correspond to its position in the plugin chain
- o Press the VPOT corresponding to the desired plugin (it should be lit up).
- The name of the selected plugin appears in Live's message bar.

Racks, Drum Racks, and grouped effects are all recognized and "flattened" to be listed correctly. A rack counts as a plugin, since it can have associated parameters that can be controlled by the VPOTs.

**Important**: due to limitations of the Live Standard version (which I have) and to avoid CPU consumption, the refresh of a selected plugin is not automatic. However, to make it easier to quickly select the right plugin, simply press the **VOL|PAN|SENDS BUTTON 1** to refresh the flashing of the correct button corresponding to the selected plugin. The corresponding bank A/B of the plugin is automatically selected. Then press the corresponding VPOT to select it for editing its parameters.

Please note that you may need to scroll through the plugins in Live to get the selected plugin on screen.

An upgrade of the script may be considered for the Live Suite version.

## **Step 2: Editing parameters**

- The VPots control each of the parameters of the selected plugin
- Press a VPot → return to default value or increment
- Use the A/B buttons to navigate between pages if the plugin has more than 8 parameters
- After editing, press PAN again → return to plugin selection mode
- Pressing the **SOLO|MUTE|PLUGIN BUTTON 2** again switches to the next mode (SOLO)
- Pressing the **VOL|PAN|SENDS BUTTON 1** returns you to DEVICE mode, allowing you to select a new plugin.

The circular LEDs on the VPOTS adapt to the type of parameter being controlled: wrap (gain), boost/cut (EQ), single point (filter type, etc.)

## **EQ Eight example:**

4 VPOTs are assigned in groups of 2 VPOTs to manage the 4 parameters accessible per filter point:

- Frequency (full circle)
- Gain (boost/cut)
- Q Resonance (boost/cut)
- Curve type (bright spot)

You must change banks to access the following filter points, up to 8 points.

Bank 1: points 1 and 2, bank 2: points 3 and 4, bank 3: points 5 and 6, bank 4: points 7 and 8

#### **Case of Drum Kit:**

Drum kit racks are managed as racks, with plugin 1 being the rack parameters, and the other instruments (or pads) in the rack being managed in the order of the MIDI notes (position in the rack). The name of the pad is assigned to the device.

Note: The drum rack contains many instruments, which are considered plugins. The effects or plugins following the drum rack will be accessible by navigating with A/B to the plugin in question after 16 or 32 instruments in the drum rack, 3 or 4 pages later. If it has been selected, the corresponding button will flash to indicate its position.

#### Case of synthesizers and other internal or external plugins

The Attack, Decay, Sustain, and Release (ADSR) parameters can be easily assigned to internal or external plugins. Up to 8 parameters can be assigned to VPOTs, such as filter frequency and resonance. Depending on the name of the setting, the VPOT will display differently.

To do this, expand the plugin's macro mode and click on Configure. Open the external plugin if necessary. Then click on the 8 parameters that you want to control with the VPOTs. Save the plugin's macro preset as the default value, this will avoid having to reassign them each time. Simply recall the plugin to access the preset settings again. Saving a preset allows you to restore the name of the selected preset.

**Tip**: Assign the same parameters in the same order for each of the macros of the different plugins managed, which will make it easier for you to remember the VPOT assignment.



**External Plugin** 





Add parameters and save default preset



default preset backup

#### **FULL-MIXER** mode

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Important: Full-mixer mode can only be selected outside of PLUGIN mode. You must therefore exit PLUGIN mode using the SOLO/MUTE MODE button in order to activate it.

Place both fingers on buttons A and B and hop! SOLO and MUTE activated on both rows, the VPots in Volume mode = **instant overview**.

- **Purpose**: To have an immediate overview of the SOLO and MUTE statuses of the 8 tracks in the bank
- Activation: Simultaneously pressing the Bank A and B buttons activates this special mode (in fact, the switch is made when the keys are released). The A/B LEDs flash briefly when entering/exiting the mode
- **Upper row:** SOLO buttons for all tracks in the bank
- Lower row: MUTE buttons for all tracks in the bank
- VPots: control the Utility gain (if present) or the track volume
- LEDs: all tracks in the bank are displayed, clear feedback
- Track navigation:
  - Use the A/B buttons to navigate in groups of 8 tracks (bank)
  - The LED on the A/B buttons flashes if navigation is possible, and is off at the end or beginning of the list
- Active track: if the active track is in the visible bank, the top button corresponding to the active track flashes. Example: track 13 is active (from the second bank), button 5 flashes (9 + 5 = 13). The active track indicator takes precedence over the track's SOLO or MUTE status

This mode is perfect for live performances or mixing, as it provides an immediate overview of the status of the 8 tracks and allows you to act quickly.

When you exit **FULL-MIXER** mode, you return to the previous mode used and the track initially selected.

## **Assigning VPOTs to VOLUME**

- Purpose: Assign VPOT settings to track volume
- Activation: Press the VOL|PAN|SENDS button until the LED lights up. A message in Live indicates the current assignment mode
- Operation:
  - The 8 VPOTs at the top correspond to the 8 tracks in the current bank. Each illuminated VPOT corresponds to a track in the song.
  - You can move through the track list using the Bank A/B buttons, 8 tracks at a time
  - To make it easier to select the **VPOT** for the desired track, if it is present in the displayed bank, the button on the top line flashes to indicate its position.
     Note that the mute or solo value is hidden by the flashing, but this does not prevent you from switching to the mute or solo value.

- If the **Utility** plugin is present on the track, its gain is managed automatically;
   otherwise, the track volume is modified.
- Pressing the VPOT resets the default value to either the gain of the Utility plugin, if present, or the track volume, i.e., 0db.

# **Assigning VPOTs to PANORAMIC**

- Purpose: Assign VPOT settings to panoramic.
- Activation: Press BUTTON 1 VOL|PAN|SENDS until the LED flashes. A message on Live indicates the current assignment mode.

#### Operation:

- The 8 VPOTs at the top correspond to the 8 tracks in the current bank. Each illuminated VPOT corresponds to a track in the song.
- You can move through the track list using the Bank A/B buttons, 8 tracks at a time.
- To make it easier to select the VPOT for the desired track, if it is present in the displayed bank, the button on the top row flashes to indicate its position.
   Note that the mute or solo value is hidden by the flashing, but this does not prevent you from switching to the mute or solo value.
- Depending on whether the VPOT is rotated to the right or left, the pan is moved to the right or left.
- Pressing the VPOT resets the track pan to its **default value**, i.e., the center value C.

# **Assigning VPOTs to SENDS**

Note: We manage the insertion of main tracks into RETURN tracks using SENDS mode. Only the PLUGIN function is managed directly in RETURN tracks. We do not manage the MUTE, SOLO, VOLUME, PANORAMIC, and SEND functions in these tracks.

- **Purpose**: Assign VPOT settings to the insertion volume in the return tracks.
- Activation: Press BUTTON 1 VOL|PAN|SENDS until the LED turns off. A message in Live indicates the current assignment mode.
- Operation:
  - The 8 VPOTs at the top correspond to the 8 tracks in the current bank. Each illuminated VPOT corresponds to a track in the song.
  - o Currently, no more than 8 return tracks are supported.

- To facilitate selection of the desired track's VPOT, if it is present in the displayed bank, the button on the top row flashes to indicate its position.
   Note that the mute or solo value is hidden by the flashing, but this does not prevent you from switching to the mute or solo value.
- o The insert volume starts at -infinity.
- Pressing the VPOT resets the default value of the insert volume in the return track, i.e. the value -∞ (-infinity).

## **Transport buttons**

- **Purpose**: The transport functions allow you to start playback, stop playback, fast forward or rewind, and start recording.
- **Activation**: The transport panel is active in SOLO, MUTE, PLUGIN modes and not available in **FULL MIXER** mode.
- Operation:
  - o the PLAY button starts playback,
  - the STOP button stops playback,
  - the RECORD button starts recording,
  - the REWIND and FORWARD buttons quickly move the playback cursor backward or forward in 2-beat increments.

# **User FAQ**

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#### Q: I don't see the navigation LEDs lit up?

→ You may be at the beginning or end of the tracks, where navigation is not possible.

#### Q: A VPot is turning but has no effect?

→ You are in PLUGIN mode (selection). You need to click on a VPOT to select a plugin, or on a track without audio.

## Q: I pressed SOLO/MUTE several times and now I'm confused.

→ Look at the LED: steady = SOLO, flashing = MUTE, off = PLUGIN

#### Q: How do I return to classic mode?

→ Press SOLO/MUTE until SOLO or disable FULL-MIXER (A+B)

#### Q: I don't know if I'm in plugin selection mode or plugin settings mode

→ Press BUTTON1 (VOL|PAN) to return to plugin mode if you were in settings mode.

#### Q: I press BUTTON1 or BUTTON2 and nothing happens:

→ You are probably in FULL-MIXER mode, and pressing BUTTON1 and BUTTON2 probably changes the mute value of tracks 1 and 2 in the bank. Disable FULL-MIXER mode (A+B)

## **Troubleshooting**

If, despite all the care taken in testing this script, there are still errors or malfunctions, below are two ways to obtain more information about a problem. This will be useful to the developer, if requested, in order to remedy the situation.

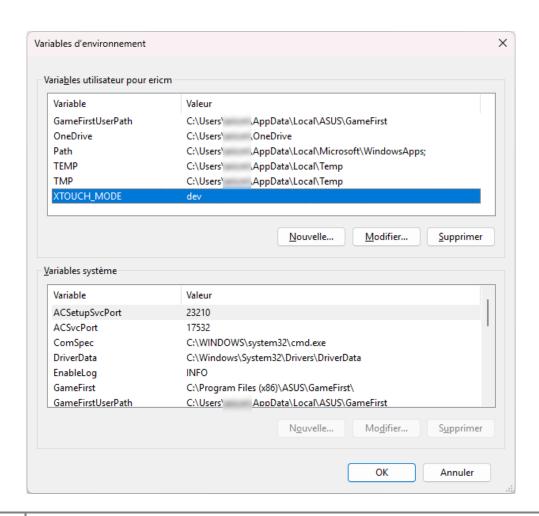
#### **Configuring DEBUG mode**

If you encounter problems running the script, you can enable debug mode. To do this, set the local variable XTOUCH\_MODE to "dev"; to return to normal execution mode, delete the local variable or set it to "prod".

Debug mode creates the xtouch debug.log file in the user directory:

- Windows: C:\Users\<YourName>\xtouch\_debug.log
- macOS: /Users/<YourName>/xtouch debug.log

The file is reset each time it is launched. All important actions are logged. Can be used by the developer to analyze a malfunction.



## **Ableton Live log file**

You can obtain additional information about Ableton Live's operation and errors from the  $\log . \text{txt}$  file in the directory: C:\Users\YourName\AppData\Roaming\Ableton\Live 12.2.1\Preferences.

You will be asked to send this file if any operational problems are encountered.

#### **Future releases**

If successful, a future version of the script will include:

- Custom calibration of the MASTER fader
- Specific features for Live Suite
- Customization of Utility, OTT, and many other plugins, as done for EQ8
- Multi-surface X-Touch-Mini up to 24 tracks = 3 devices
- Customization of options
- RETURN track management
- Migration to API 3.0
- ...