

AKAI[®] PROFESSIONAL

APC64



User Guide English

Manual Version 1.0.0

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1.0 Introduction

1.1 Box Contents

APC64

USB-C® Cable

USB-C®-to-USB-A Cable

3 1/8"-to-5-pin MIDI Adapters

Software Download Card

Quickstart Guide

Safety & Warranty Manual

1.2 Support

For the latest information about this product (documentation, technical specifications, firmware updates, etc.), visit akaipro.com.

For additional product support, visit akaipro.com/support.

For product registration and account access, visit profile.inmusicbrands.com.

1.3 About This User Guide

This manual should help you get familiar with using your APC64. For consistency, the terminology throughout is based on the Ableton Live nomenclature. We also used specific formatting to indicate particular topics of significance:

Important/Note/Tip: Important or helpful information on a given topic.

Names of buttons, controls, parameters, settings, and other options are written in **bold** characters throughout the manual.

Examples: Press the **CLIP STOP** button to set the function of the **Control Row**.

Hold **SHIFT** and use the **cursors** to move the 8x8 focus by eight rows or columns at a time.

The display will show **Sending...** as it prepares the clip, and then **Done!** once it has completed.

If the configuration has been set to **Show Non-Scale Notes**, these will be unlit.

Some parts of this manual refer to other relevant chapters or sections, which are cited in **bold, italic blue** characters. Click the text to skip immediately to that section.

Examples: See **5.1 Operation > Session View** for more information.

When in **5.3 Step Sequencer** mode, press this button to set the Note Modifier pads to control Velocity.

Use the **Clear** button, as described in the **following** section.

You can also click on certain images to jump to specific sections of the manual.

2.0 Setup

Important: From time to time, we may update APC64's firmware to add exciting new features and improvements. Visit akaipro.com and go to the APC64 product page to check for available updates.

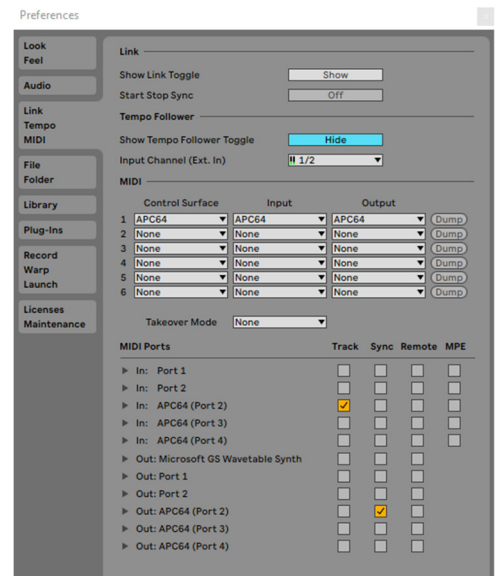
1. Make sure you have downloaded and installed the latest version of Ableton Live (11 or newer) on your computer. Then, open Ableton Live.
2. Use the included USB cable to connect APC64's **USB Port** to an available USB 3.0 port on your computer (powered on).

Note: If connecting to a USB hub, make sure a powered hub is used.

3. In Ableton Live, open the **Preferences** menu.
4. Click the **Link/MIDI** tab.
5. Click an available **Control Surface** drop-down menu and select **APC64**.
6. Click an available **Input** drop-down menu and select **APC64**.
7. Click an available **Output** drop-down menu and select **APC64**.
8. The remainder of the MIDI port settings should automatically be selected according to the image shown. If you are having issues, ensure the settings are still set to these defaults.

Note: MPE should not be enabled with APC64.

9. Close the **Preferences** window. You can now use APC64 with Ableton Live.



For an overview of APC64's controls, proceed to the following **3.0 Features** section.

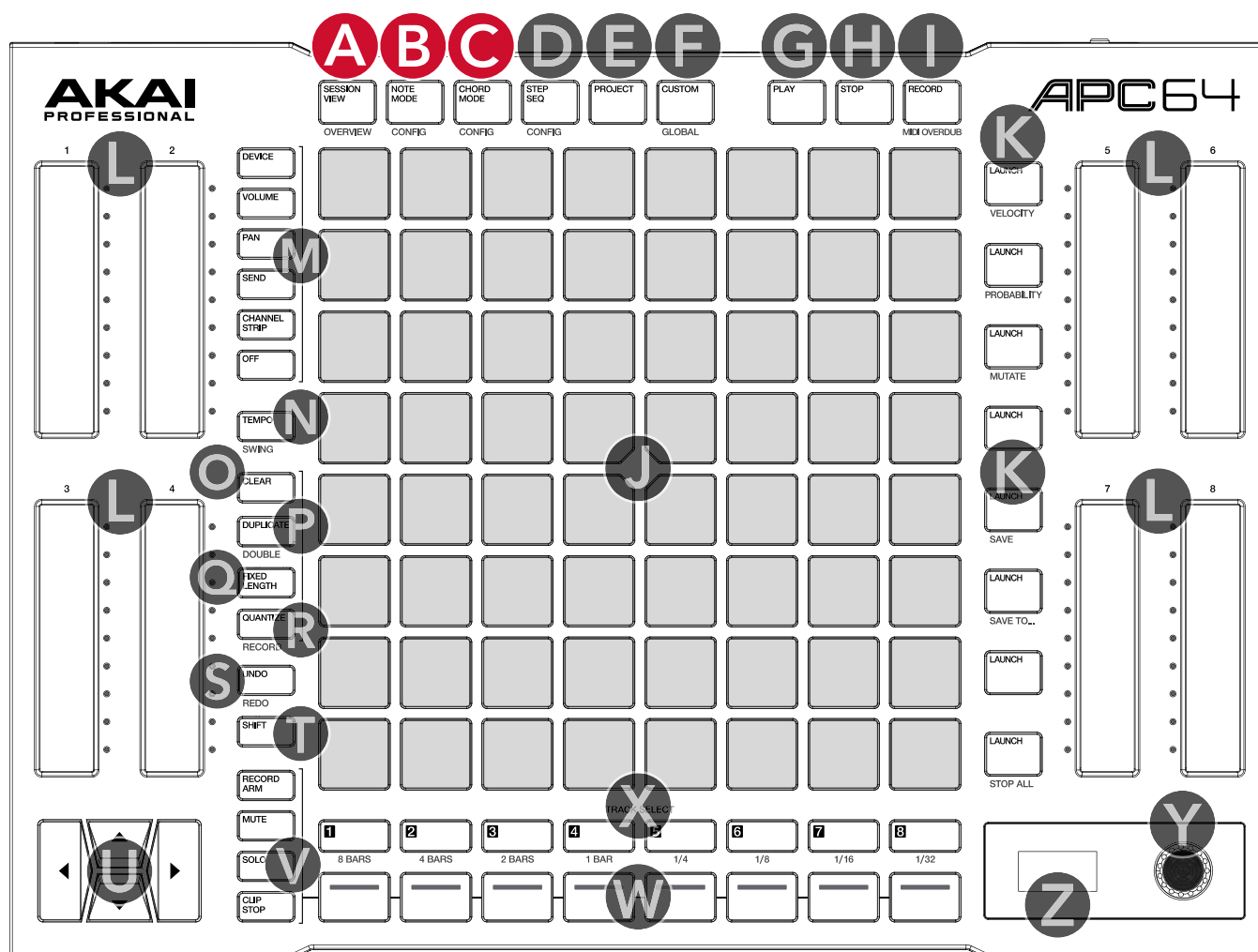
For a walkthrough of using APC64 with Ableton Live, proceed to the **4.0 Tutorial** section.

For a complete breakdown of all of APC64's features and functions, proceed to the **5.0 Operation** section.

3.0 Features

Click on the picture to jump directly to the selected control.

3.1 Top Panel



- A. SESSION VIEW / OVERVIEW:** Press this button to cycle between Session View, which displays the clip matrix on the Pad Grid, and Overview, which provides a snapshot of your entire project.

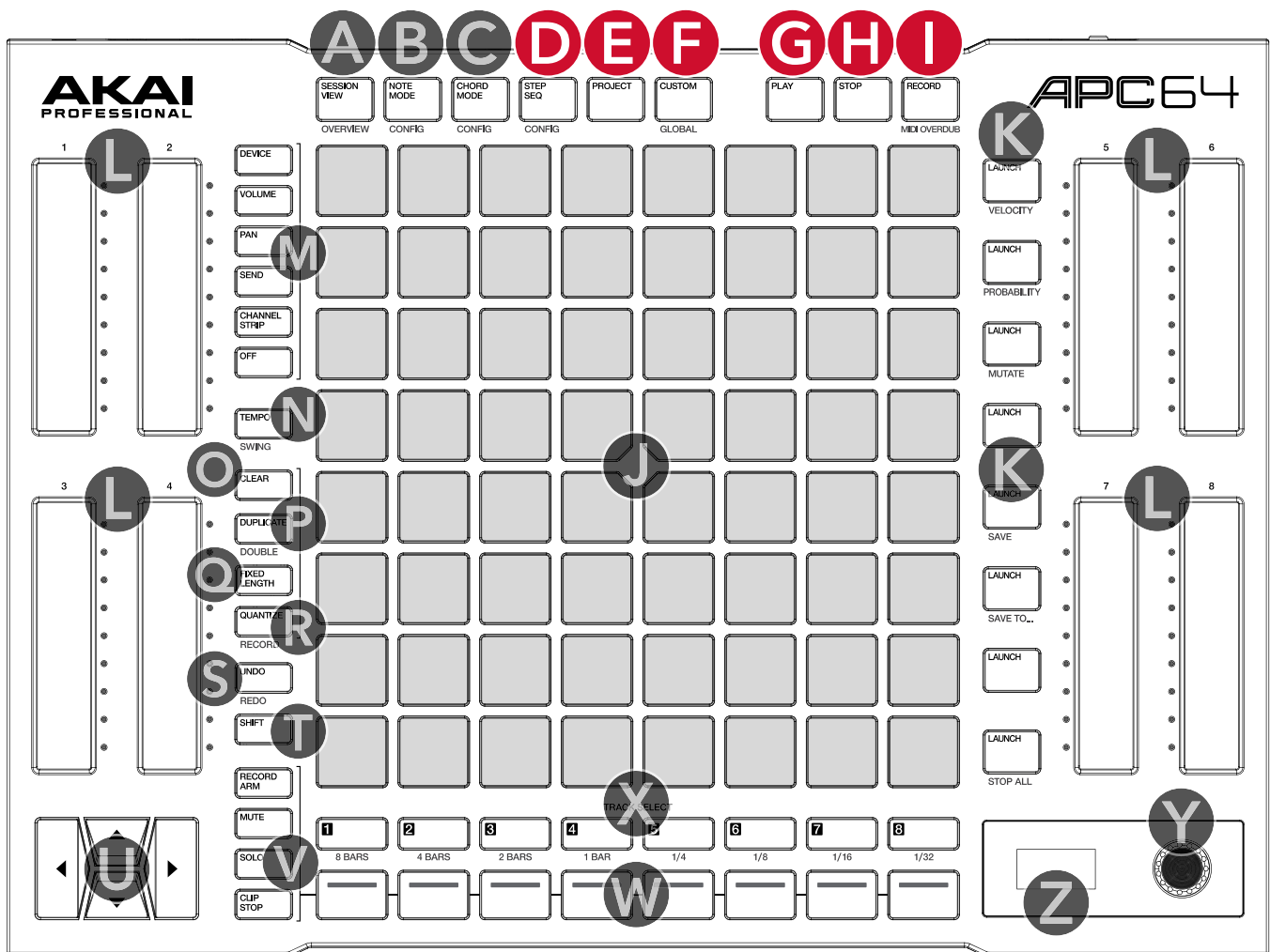
While in either Session View or Overview, you can press and hold this button to momentarily access the other view. When you release this button, you will return to the previous view.

See [5.1 Operation > Session View](#) for more information.

- B. NOTE MODE:** Press this button to enable the Pad Grid to play configurable scales of MIDI notes.
- C. CHORD MODE:** Press this button to enable the Pad Grid to play configurable MIDI Chords.

Note: For both **NOTE MODE** and **CHORD MODE**, press either button a second time, or press and hold **SHIFT** and then press either button, to open Note and Chord Modes Configuration. You can also momentarily view the Configuration mode by pressing and holding either button. When you release, you will return to Note Mode or Chord Mode.

See [5.2 Operation > Note Mode and Chord Mode](#) for more information.



D. STEP SEQ: Press this button to enable the Pad Grid to function as a Step Sequencer.

Press this button a second time, or press and hold **SHIFT** and then press this button, to open the Step Sequencer configuration. You can also momentarily view the configuration mode by pressing and holding this button. When you release, you will return to the Step Sequencer.

See [5.3 Operation > Step Sequencer](#) for more information.

E. PROJECT: Press this button to view, save, and load APC64 projects, which contain step sequence patterns, device parameters, and custom mode assignments.

See [5.4 Operation > Project Mode](#) for more information.

F. CUSTOM / GLOBAL: Press this button to open the custom control layout, where you can access modified control functions assigned using the APC64 Project Editor Software. See [5.7 Operation > Custom Mode](#) for more information.

Press this button a second time to open the Global Menu. You can also momentarily view the Global Menu by pressing and holding this button. When you release, you will return to Custom Mode. See [5.6 Operation > Global Menu](#) for more information.

G. PLAY: Press this button to start or restart playback.

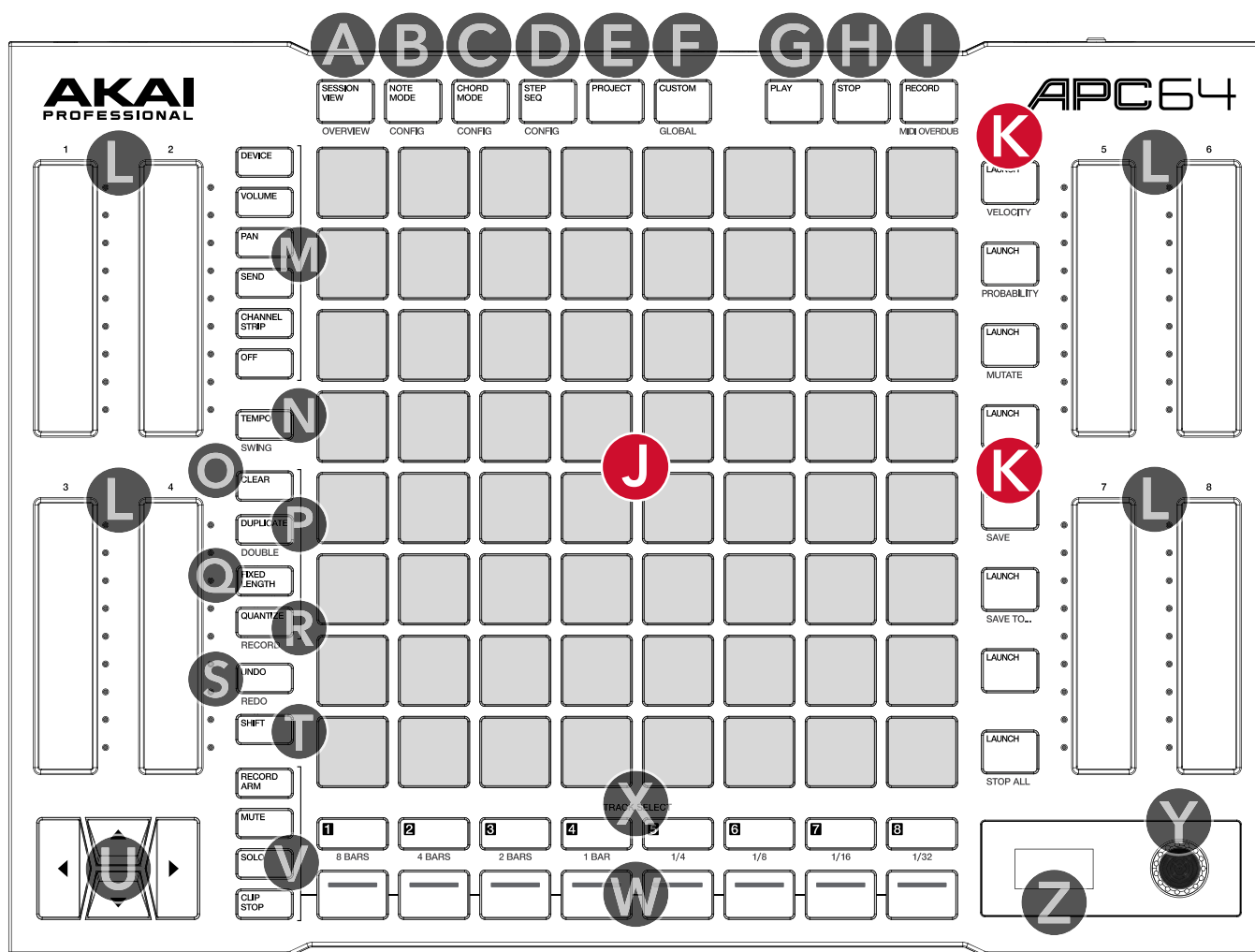
Press and hold **SHIFT** and this button to pause playback or resume playback from the paused point.

H. STOP: Press this button to stop playback.

Double-press this button to stop playback and return to the start of the arrangement.

I. RECORD: Press this button to begin recording in Ableton Live.

Press **SHIFT** and this button to enable MIDI overdub recording in Ableton Live.



J. Pad Grid: This 8x8 grid of LED backlit touch-sensitive pads displays active clips or notes based on the mode selected. The columns represent tracks, and the rows represent scenes. Use the **cursors** to change the 8x8 view in focus when using Ableton Live, represented by a red outline.

K. Scene LAUNCH Buttons: Press these buttons to launch the adjacent scene.

Press and hold **SHIFT** and press the Scene Launch button with the following written below to access additional features:

VELOCITY: When in **5.3 Step Sequencer** mode, press this button to set the Note Modifier pads to control Velocity.

PROBABILITY: When in **5.3 Step Sequencer** mode, press this button to set the Note Modifier pads to control Probability.

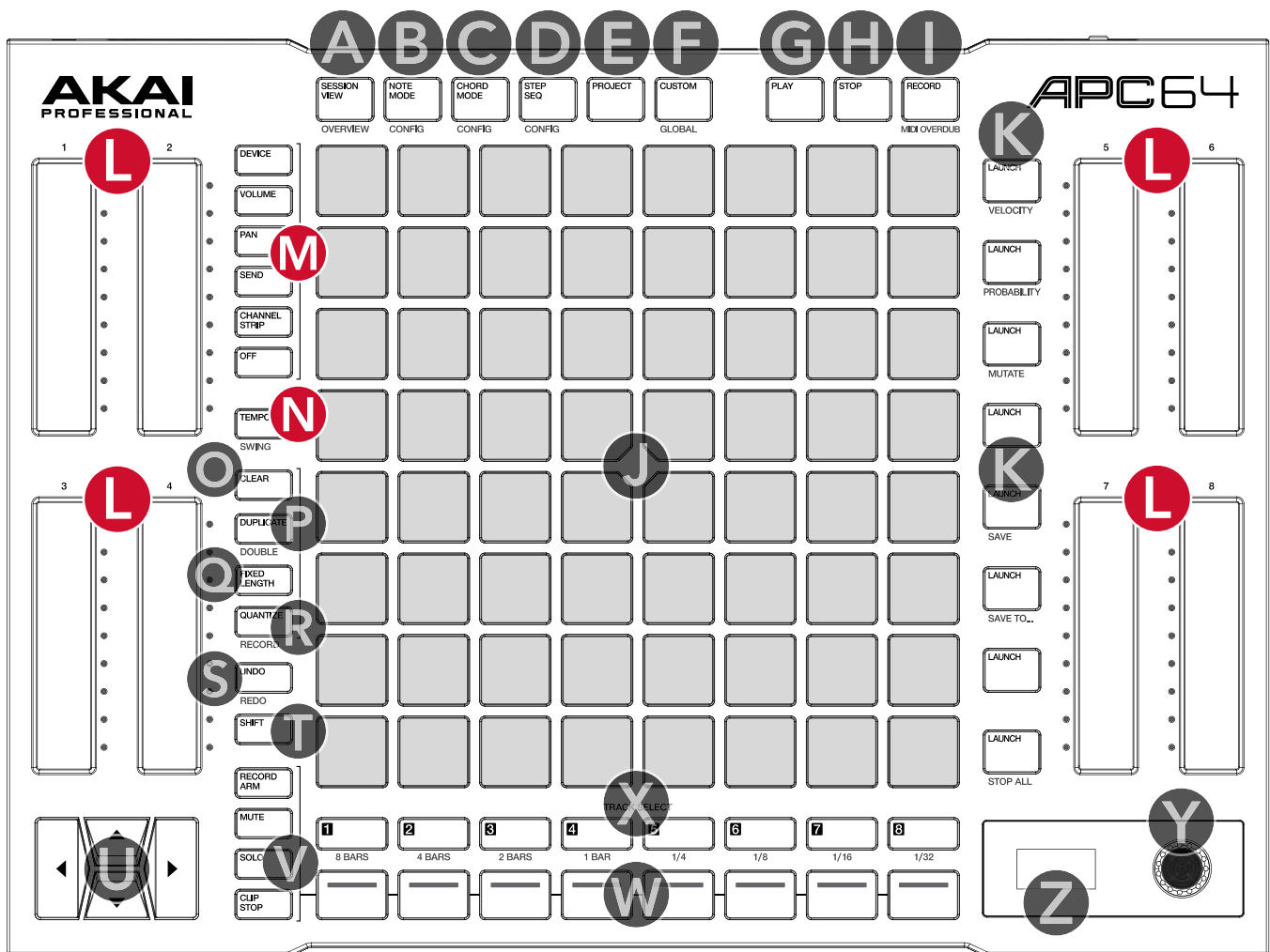
MUTATE: When in **5.3 Step Sequencer** mode, press this button to set the Note Modifier pads to control the Mutate function.

SAVE: Press this button to save the device settings to the currently selected Project.

SAVE TO...: Press this button to open the Save As dialog on the **display** to save the device settings to a Project slot.

Note: Saved projects are for internal device settings only. Ableton Live projects must be saved from the software. See **5.4 Operation > Project Mode** for more information.

STOP ALL: Press this button to stop all playing clips in all tracks.



L. Touch Faders: Slide your finger up and down these touch-sensitive strips to control selected session parameters. Touching a spot on the fader will set the parameter to that level immediately. The current fader position is represented by a white dot in the LEDs next to each fader. When automation has been recorded to a touch fader, the white dot will turn red. The remaining LEDs will be lit according to the track color and the current position of the parameter relative to its default value.

Press and hold **SHIFT** and touch a fader to finely adjust the selected parameter.

M. Touch Fader Controls: Use these buttons to set the control parameter for the Touch Faders:

DEVICE: Device controls. While holding this button, use the **up** and **down cursors** to cycle between banks of controls in a device. Use the **left** and **right cursors** to switch focus between multiple devices on one track.

VOLUME: Track volume.

PAN: Track stereo panning.

SEND: Track Sends. Press this button again to cycle between Send channels when more than one is in use.

CHANNEL STRIP: Combination of Volume, Pan, and Sends for the selected track.

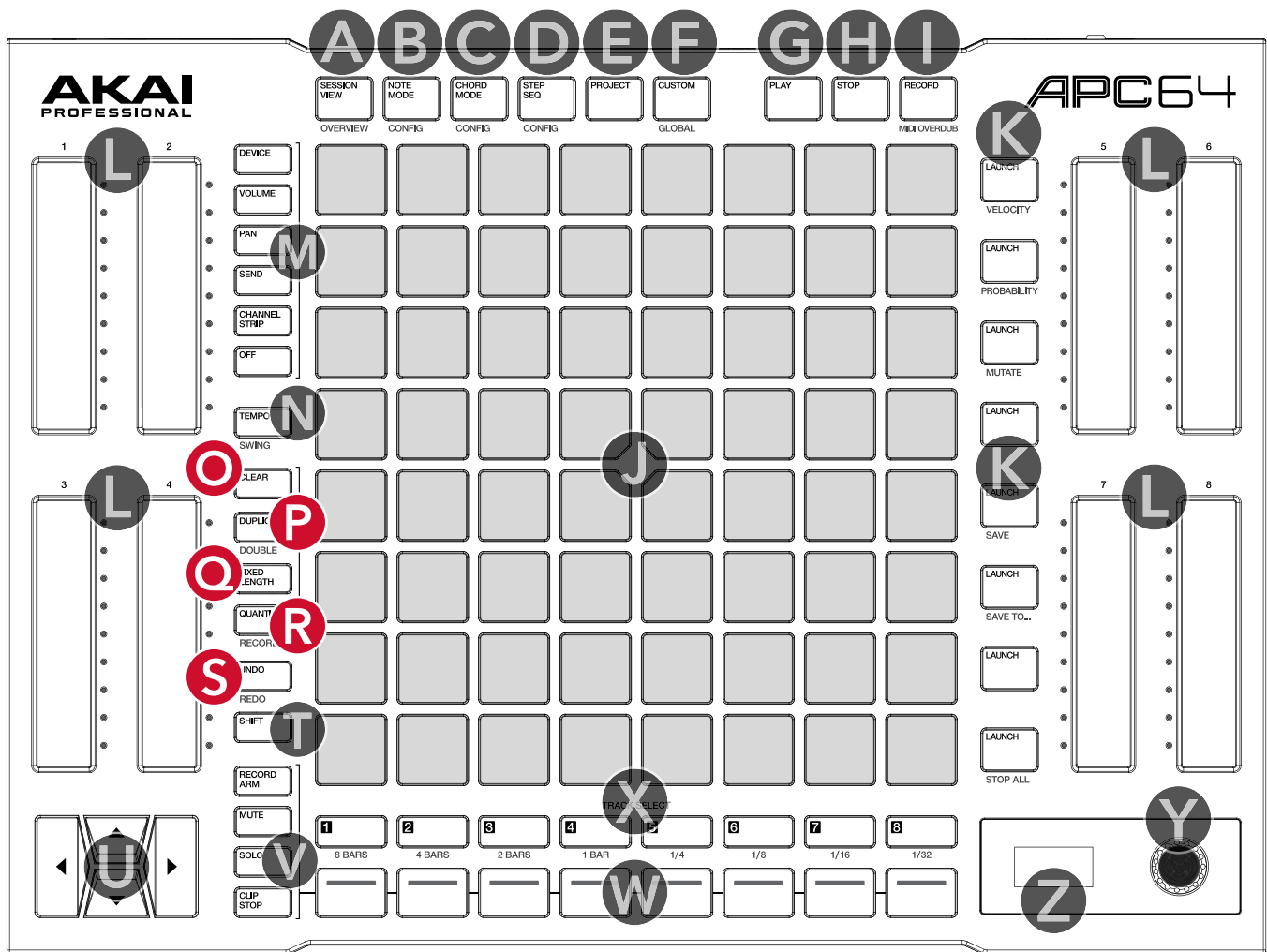
OFF: Disables the touch faders.

See [5.5 Operation > Touch Faders](#) for more information.

N. TEMPO: Press this button in time with the desired tempo to enter a new tempo.

Press and hold to view session tempo on the display and then use the **encoder** to adjust it.

Press and hold **SHIFT** and this button and then use the **encoder** to adjust the **SWING** percentage of the internal Step Sequencer, as shown on the display.



O. CLEAR: Press and hold this button and then press a pad, scene launch button, step, touch fader, or project to clear it.

P. DUPLICATE: Press and hold this button and then press a pad containing a clip to duplicate it into the next available clip slot.

Press and hold **SHIFT**, then press and hold this button and press a pad containing a clip to **DOUBLE** the length of the selected clip.

Q. FIXED LENGTH: Press to enable fixed length recording. This will stop recording once the set length has been reached.

Press and hold this button and then use the **encoder** to change the fixed length recording size, as shown in the **display**. See [5.1.3.1 Operation > Recording Clips > Fixed Length](#) for more information.

R. QUANTIZE: Press and hold this button and then press a pad containing a clip to apply quantization to its notes.

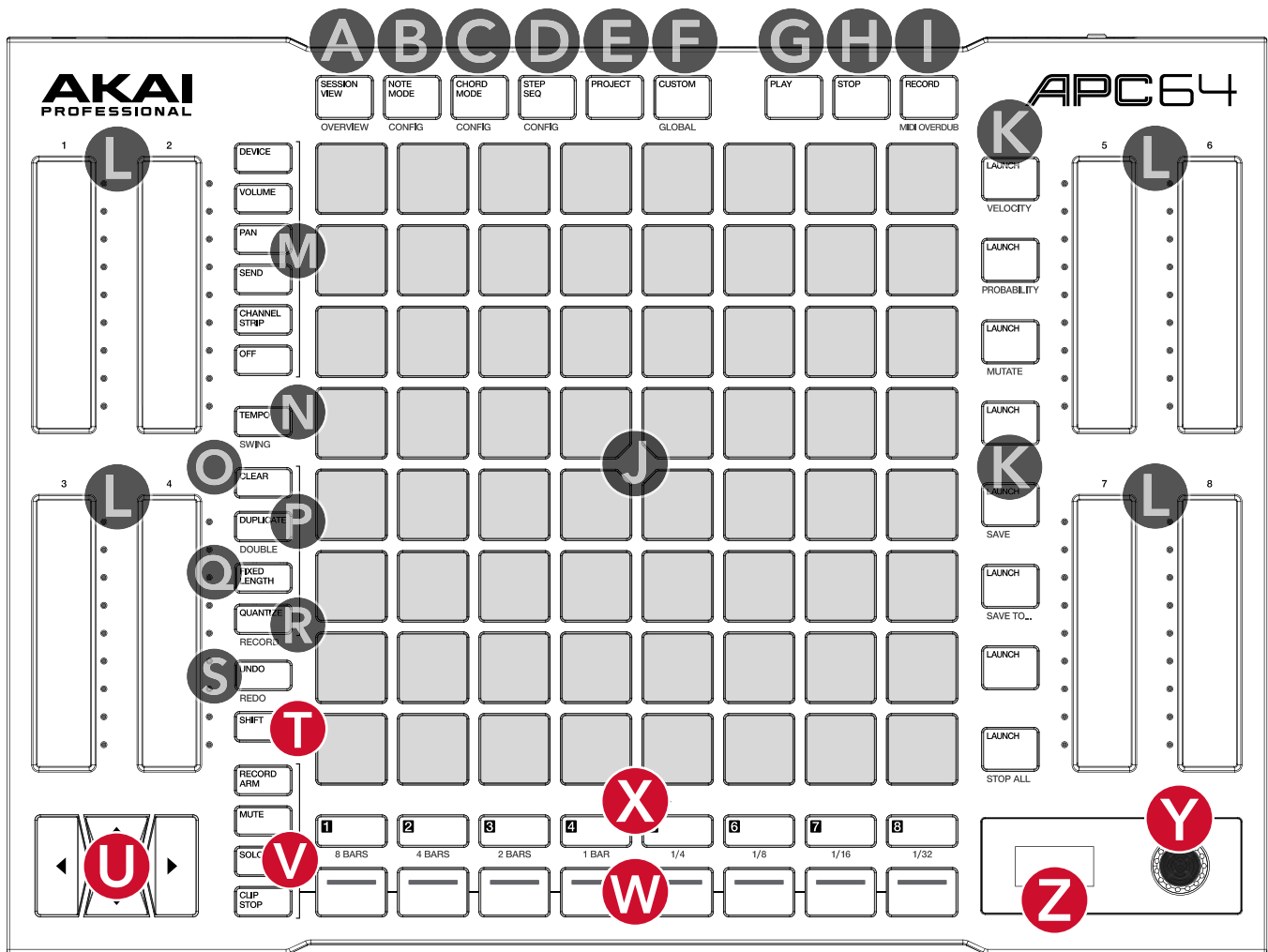
Press and hold this button and then turn the **encoder** to set the quantization value, as shown in the **display**.

Press and hold **SHIFT** and then press this button to enable or disable **RECORD** Quantization. When enabled, notes will be quantized to the set value as you record.

Note: Record Quantization values must be set in Ableton Live; the **SHIFT** functionality only turns Record Quantization on and off.

S. UNDO: Press to undo the last action performed in Ableton Live.

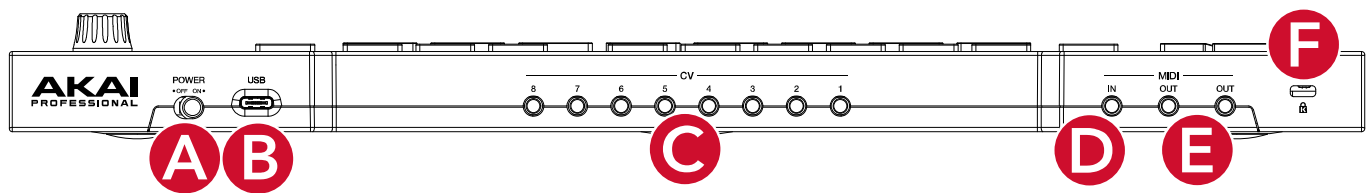
Press **SHIFT** and this button to **REDO** the last action.



- T. SHIFT:** Press and hold this button to access secondary button functions, printed below the buttons.
- U. Cursors:** Use these directional buttons as a cursor to navigate tracks and scene banks on the Pad Grid, as well as device parameters in **DEVICE** touch fader mode.
- V. Control Row Function Select:** Press one of these four buttons to set the function of the Control Row buttons:
 - RECORD ARM:** Arm the selected track for recording.
 - MUTE:** Mute the selected track.
 - SOLO:** Solo the selected track.
 - CLIP STOP:** Stop clips in the selected track.
- W. Control Row:** Press to perform selected **Control Row Function** on the corresponding track only.
- X. TRACK SELECT:** Press to select the corresponding track.
Press and hold **SHIFT** and press these buttons to set the launch quantization value.
- Y. Encoder:** Turn this knob to select options on the display screen and push it to select.

Note: When connected to Ableton Live, pressing this encoder will also enable or disable the metronome if you are not in another editing menu.
- Z. Display:** This screen shows track and device information from your Ableton Live session and information about the device's controls.

3.2 Rear Panel



- A. Power Switch:** Use this switch to power APC64 on and off.
- B. USB Port:** Connect the included USB cable here and connect the other end to your computer's USB 3.0 port to use APC64 with Ableton Live or send MIDI data over USB. You can also connect this port to a standard USB power adapter (sold separately) to power the unit for standalone use.
- C. CV/Gate Outputs:** Insert a 1/8" (3.5 mm) TS cable into one of eight outputs and connect to an external device's CV input to send CV/Gate signals from APC64 to the connected device. See [5.8 Operation > CV Operation](#) for more information.
- D. MIDI Input:** Use the included 1/8" (3.5 mm)-to-MIDI adapter and a standard 5-pin MIDI cable (not included) to connect APC64 to another MIDI controller.
- E. MIDI Outputs:** Use the included 1/8" (3.5 mm)-to-MIDI adapter and a standard 5-pin MIDI cable (not included) to connect to an external device to send MIDI messages to.
- Note:** The two MIDI Output ports are mirrored and send the same data.
- F. Kensington® Lock Slot:** You can use this slot to secure your APC64 to a table or other surface.

4.0 Tutorial

This chapter describes basic terminology and how to get started doing basic tasks using your APC64. To get the most out of this chapter, we recommend reproducing each of the described steps in order.

To start using APC64 with Ableton Live, first make sure you have downloaded and installed the latest version of Ableton Live (11 or newer).

Connect your APC64 hardware to your computer running Ableton Live using one of the included USB-C cables, and set the **Power Switch** to **On**. By default, APC64 will power on in Ableton Live Device Mode. If you are having issues connecting to Ableton Live, make sure this setting has not been changed in the **Global Menu**.

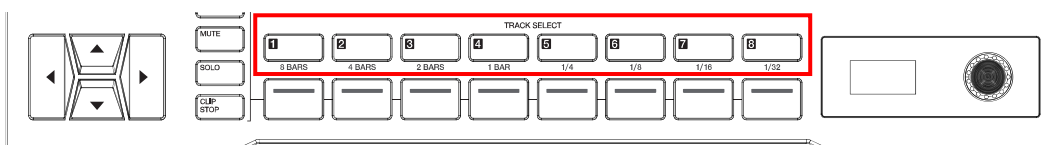
Ensure that APC64 has been selected as a Control Surface and MIDI Input and Output source in Ableton Live's Preferences, as described in **2.0 Setup**.

APC64 will begin with **SESSION VIEW** in focus. This display mode gives you an overview of your project, which is represented by a red outline in Ableton Live. Use the **cursor** buttons to move the current view of the **pad grid** by one row or column at a time.

Each column in Session View represents a *track*. Tracks can be used to hold audio samples, drum kits, instrument plugins and more. Use the **TRACK SELECT** buttons to select the track in focus.



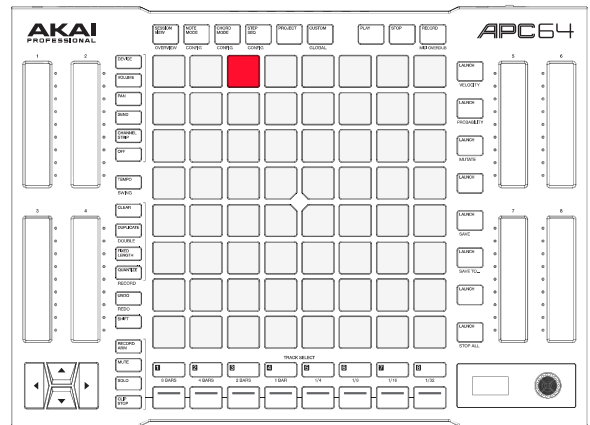
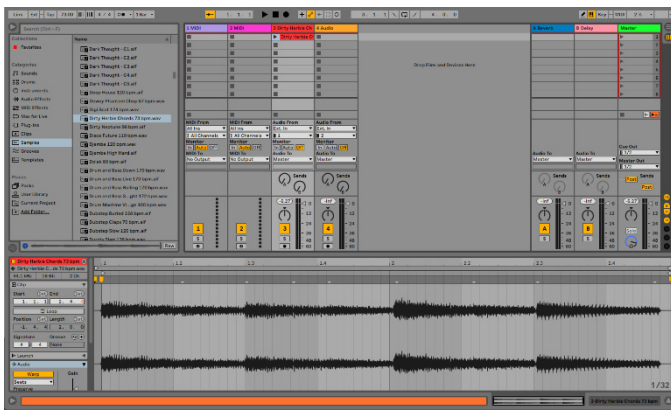
Session View in Ableton Live, showing MIDI and Audio tracks (left side) and Send and Master tracks (right side)



Track Select Buttons on APC64

Each track is made up of *clips*, which are short sequences of audio or MIDI. Only one clip in a track can play at a time. When a pad has a clip loaded to it, press it to launch it. Let's start by adding a sample from Ableton Live's library to a track and launching it.

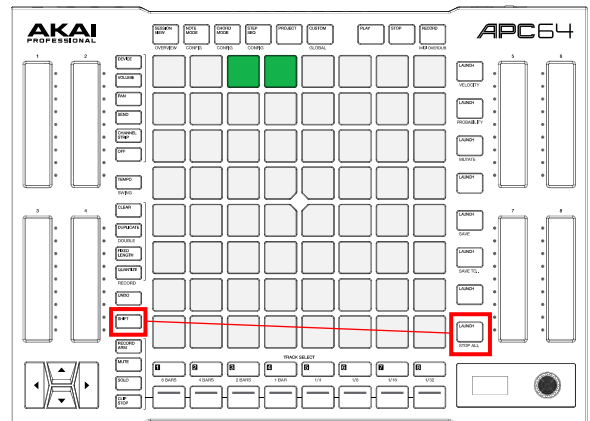
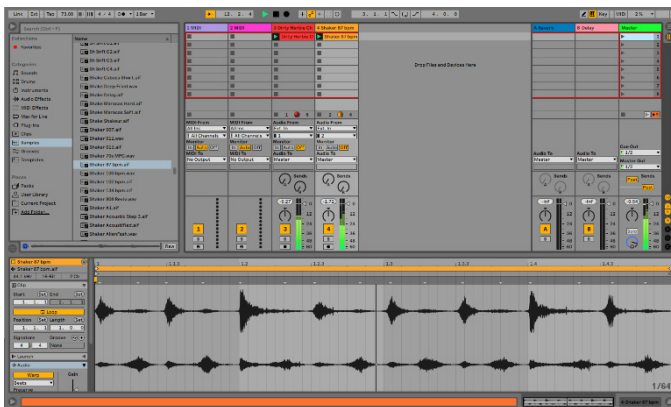
1. Use the Ableton Live Browser to find a sound from the **Samples** Category.
2. Add this to an available Audio Track in the first clip slot.
3. Once the clip has been loaded, you will see the corresponding pad on APC64 light up.
4. Press the pad to launch the clip. You will hear the sample playing, the **PLAY** button will light up, and the pad will begin pulsing green to indicate playback is active.
5. To stop playback of the project, press the **STOP** button. The pad will continue to pulse green, meaning it will relaunch once playback is resumed. To stop clip playback, press the **CLIP STOP** button, and then press the **TRACK SELECT** button for the track containing the audio clip.



A clip added in Session View.

Clips that are aligned in the same row are called a **scene**. You can trigger clips in a scene at the same time by pressing the **LAUNCH** button on the right side of the row. Let's try loading another clip to another Audio Track.

1. Use the Ableton Live Browser to find another sound from the **Samples** Category.
2. Add this clip to a second Audio Track in the same clip row as your first sample.
3. Press the row 1 **LAUNCH** button to launch both clips at the same time. Now both pads will pulse green and both samples will play.
4. To stop both clips from playing at the same time, press and hold **SHIFT** and then press the row 8 **LAUNCH / STOP ALL** button.



Two clips launched together.
Press SHIFT+STOP ALL to stop both clips.

In addition to loading audio samples, you can create your own clips using MIDI instruments. Let's start a new clip recording. We'll begin by adding and recording a drum track.

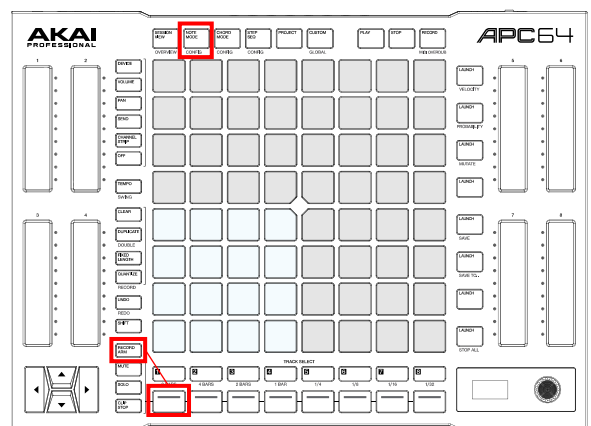
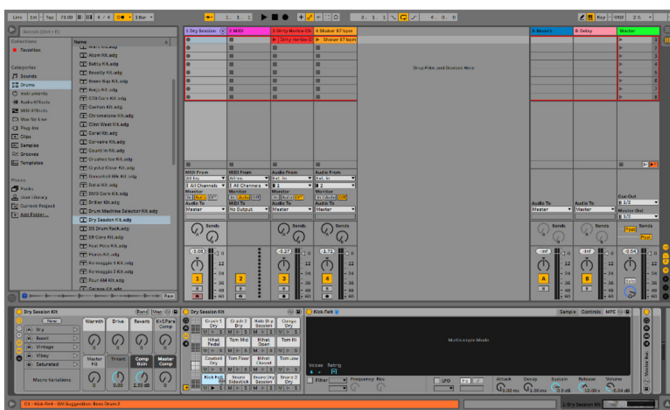
1. Use the Ableton Live Browser to load a kit from the **Drums** Category. Add this to an available MIDI track.
2. Press the **NOTE MODE** button, and then select the MIDI track using the **TRACK SELECT** button.

APC64's **pad grid** will change, and the bottom-left quadrant of pads will be lit. You can now use these pads like a traditional 4x4 drum pad layout to play samples.

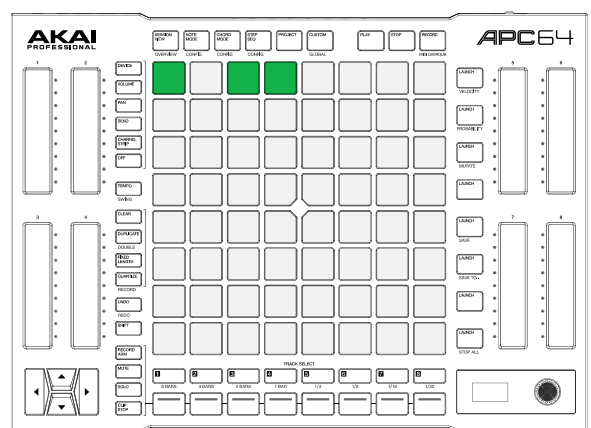
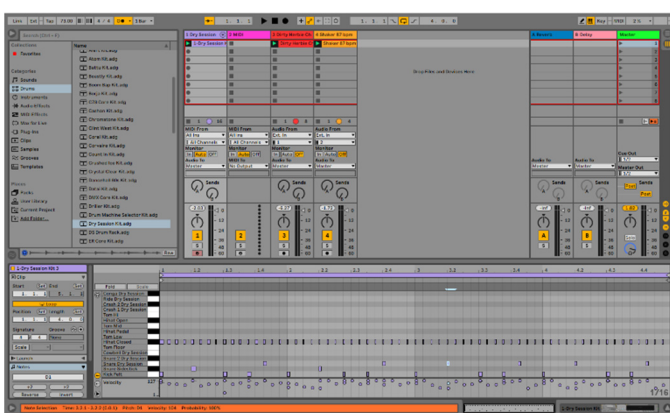
3. When a MIDI track is selected from APC64, the selected track's **track arm** button in Ableton Live will turn light red to indicate it has been automatically record-armed. This allows you to immediately play the pads and hear the sample playback.

You can also manually arm the track for recording by pressing **RECORD ARM** button on APC64, and then pressing the **Control Row** button for the MIDI track. The **track arm** button in Ableton Live will then be lit bright red to indicate the track is armed, and it will stay armed even if you navigate away from the track.

4. Press the **encoder** to enable the metronome while you record.
5. Press the **RECORD** transport button. A new clip will be created on the track and begin recording immediately.
6. Tap out a drum pattern on the pads to record it.
7. When you are finished, you can press **RECORD** again and the clip will begin playback. You can edit the clip in Ableton Live as needed.



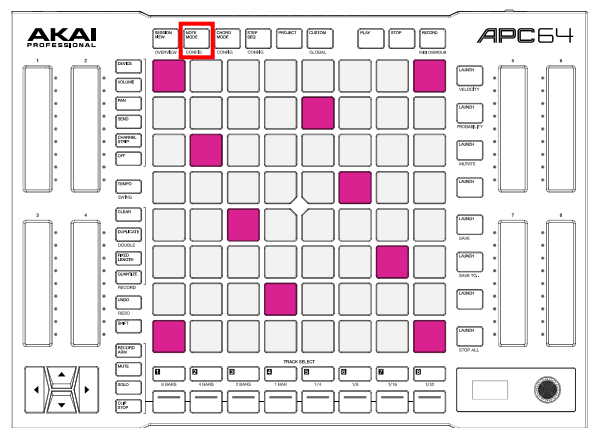
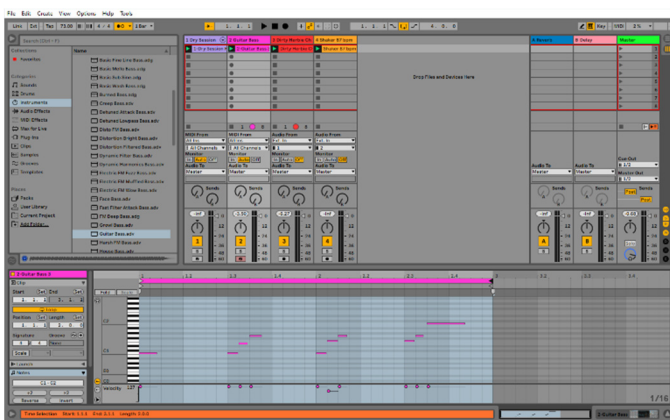
Note Mode for a Drum Track.
Arming the track for recording.



Playing back the recorded clip.

Next, let's continue to build out the track by adding a melodic bass line.

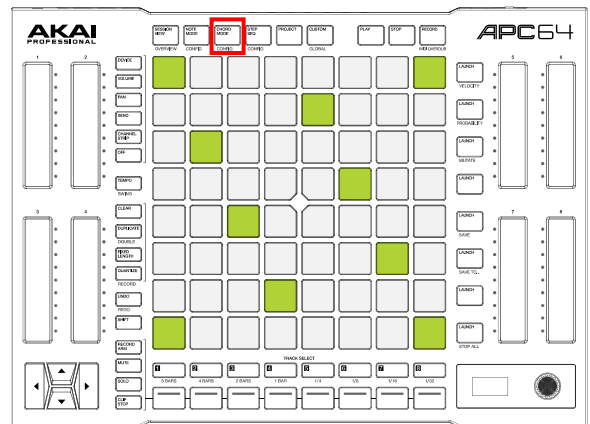
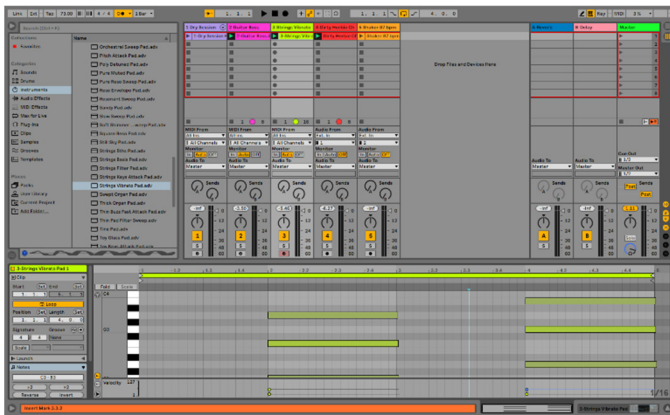
1. Use the Ableton Live Browser to load a bass melodic instrument from the **Instruments** Category. Add this to a second MIDI track.
2. Press the **NOTE MODE** button, and then select the MIDI track using the **TRACK SELECT** button. APC64's **pad grid** will change to a melodic note layout. The root notes will be lit according to the track color.
3. Press **NOTE MODE** a second time to configure the Note Mode settings. Use the pads or the **encoder** to adjust the root note, scale, and pad layout as needed. Press **NOTE MODE** a second time to return to the melodic pad layout.
4. Once you are ready to record, ensure that the track is armed for recording, and then press the **RECORD** transport button. A new clip will be created on the track and begin recording immediately.
5. Tap out a bass line on the pads to record it.
6. When you are finished, you can press **RECORD** again and the clip will begin playback. You can edit the clip in Ableton Live as needed.



Note Mode for a Melodic Track.

Finally, let's add harmonic chords to tie everything together.

1. Insert a new MIDI track into your Ableton Live project as needed.
2. Use the Ableton Live Browser to load a harmonic instrument like a synth pad from the **Instruments** Category. Add this to a third MIDI track.
3. Press the **CHORD MODE** button, and then select the MIDI track using the **TRACK SELECT** button. APC64's **pad grid** will change to the same melodic note layout as Note Mode, but this time each pad plays multiple notes simultaneously to create a chord.
4. Press **CHORD MODE** a second time to configure the Chord Mode settings. The Chord Mode configuration shares its scale and mode settings with Note Mode configuration to ensure your tracks are harmonically synced. Use the pads or the **encoder** to adjust the chord type as needed. Press **CHORD MODE** a second time to return to the melodic pad layout.
5. Once you are ready to record, ensure that the track is armed for recording, and then press the **RECORD** transport button. A new clip will be created on the track and begin recording immediately.
6. Tap out a chord progression on the pads to record it.
7. When you are finished, you can press **RECORD** again and the clip will begin playback. You can edit the clip in Ableton Live as needed.

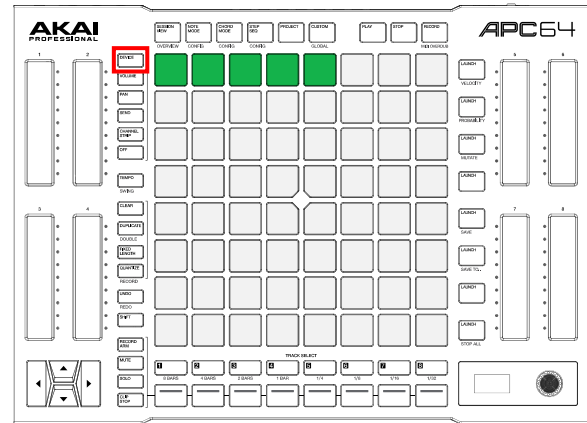


Chord Mode.

These steps give you the basic building blocks to launch clips and create clips in Ableton Live using your APC64. Try recording a few more clips with variations, and then experiment with launching different clips or scenes.

As you play your project, you can also begin using APC64 for editing and mixing using other controls on the device. Try using the **Touch Fader Controls** for hands-on adjustments to various track parameters:

1. By default, the touch strips will be set to **DEVICE** control, with this button lit on APC64.
2. Select a track with a MIDI device or effect using the **TRACK SELECT** buttons.
3. Try adjusting one of the touch faders. The device parameter being adjusted will be shown in APC64's **display**, and you will see the parameter being adjusted in Ableton Live.



Device control mode for the Touch Faders.

You can change the active **Touch Fader Control** by pressing the **VOLUME**, **PAN**, **SEND**, or **CHANNEL STRIP** buttons. Try selecting another control and making further adjustments, like turning the track volume up or down or adjusting a track's **Send** control to add an effect.

For an in-depth review of APC64's features and functions, proceed to the following **5.0 Operation** chapter.

5.0 Operation

This chapter describes APC64's functions. Click a link below to jump directly to that section:

[5.1 Session View](#) - Create, launch, organize, and edit clips.

[5.2 Note Mode and Chord Mode](#) - Play configurable notes, chords, and drum pads.

[5.3 Step Sequencer](#) - Create sequence patterns.

[5.4 Project Mode](#) - Create and manage project templates.

[5.5 Touch Faders](#) - Adjust track parameters.

[5.6 Global Menu](#) - Adjust APC64 internal settings.

[5.7 Custom Mode](#) - Edit the MIDI assignments of APC64 using the Project Editor.

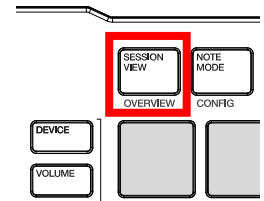
[5.8 CV Operation](#) - Connect to and control external CV devices.

5.1 Session View

Session View in Ableton Live is where clips are organized and launched. This view is great for developing ideas before recording to an arrangement, or for live and on-the-fly performances.

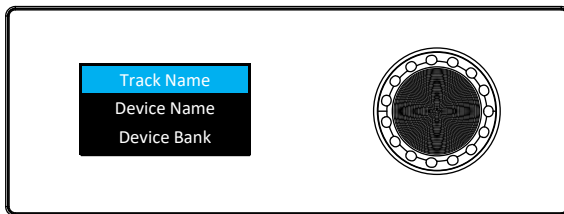
Note: Session View is only available when connected to Ableton Live. When using APC64 as a standalone controller, this button will be deactivated.

To open Session View mode on the pads, press the **SESSION VIEW** button.



The current focus of APC64's 8x8 pad grid in Ableton Live will be shown by a red outline. The eight columns of APC64's **pad grid** will correspond to the available tracks in Ableton Live, including the Return tracks and the Master track. The **TRACK SELECT** buttons will be lit up in the same color of the track in Ableton Live. If you have less than eight tracks, including Returns, unused columns will have their **TRACK SELECT** buttons dimmed, and the Master track will automatically be mapped to the eighth column.

To select a track, press the **TRACK SELECT** buttons. The selected track's button will be lit white. The **display** will also show the track name (highlighted by the track color), device name (if one is loaded), and current device bank (if a device is loaded).

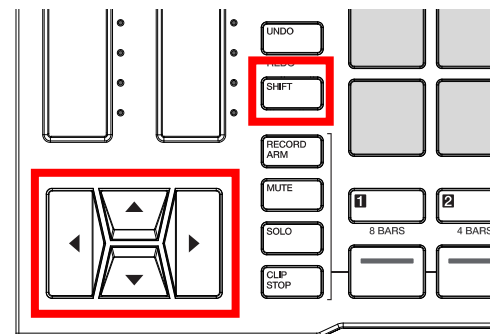


The eight rows of APC64's **pad grid** correspond to eight scenes of clips. See [5.1.2 Launching Clips](#) for more information on launching clips and scenes.

As your project grows, you may have more tracks and scenes than can be shown on the pad grid.

To move the 8x8 focus by one track or scene at a time, press the **cursor keys**. As you move, the red outline will also move in Ableton Live's Session View.

To move the 8x8 focus by eight tracks or scenes at a time, press and hold **SHIFT** and press the **cursor keys**.



5.1.1 Overview Mode

In very large projects, you may have more than the eight tracks and eight scenes that are immediately visible on APC64's **pad grid** while in Session View. Although you can move the current 8x8 focus in Session View using the **cursor**s, Overview mode provides another way to quickly and easily navigate between large amounts of tracks and scenes and give a snapshot of the current clip statuses.

To open Overview mode, press **SESSION VIEW / OVERVIEW** while in Session View. Alternatively, press and hold **SESSION VIEW / OVERVIEW** while in Session View to temporarily view Overview mode. When you release the button, the pad grid will return to Session View.

In Overview mode, each pad on the pad grid (starting in the upper-left corner) represents a block of eight tracks and eight scenes in your session. This is represented by the red outline in Ableton Live.

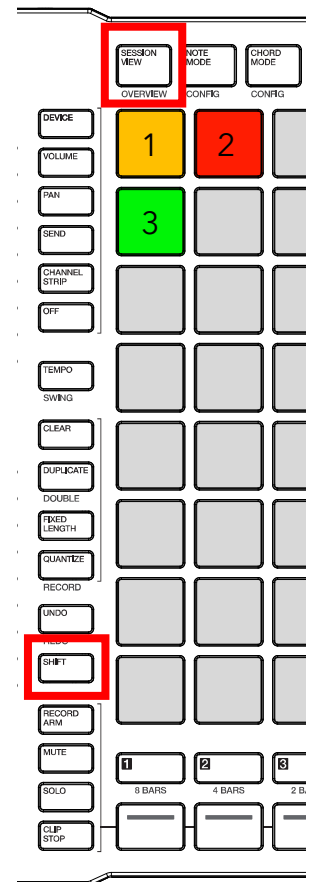
To move between 8x8 blocks, press a lit pad in Overview mode. The number of pads available will depend on the size of your project.

For instance, in the image to the right, you could press the pads to access the following:

- Pad 1 (amber):** Tracks 1-8, Scenes 1-8
- Pad 2 (red):** Tracks 9-16, Scenes 1-8
- Pad 3 (green):** Tracks 1-8, Scenes 9-16

The pads in Overview mode will also change color depending on the the current 8x8 block in focus and the behavior of clips in each block:

- Amber:** The current 8x8 block in focus.
- Green:** An 8x8 block where clips are currently playing.
- Red:** An 8x8 block where no clips are playing.
- Off:** Empty 8x8 blocks.



5.1.2 Launching Clips

When Session View is active, pressing the pads in the pad grid will launch a clip if one is loaded. If the clip slot is empty, it will stop playback on the selected track, or create a new clip if the track is record-armed.

To launch a clip, press a pad. Depending on the launch quantization value, the selected pad will begin flashing green as it prepares to play. Once the clip begins playing, the pad will slowly pulse green.

If a track is selected and record-enabled, a new clip will be created if there is not one in the selected clip slot. See [5.1.3 Recording Clips](#) for more information on creating clips.

To select a clip without launching it, press and hold **SHIFT** and then press the pad.

In addition to launching individual clips, you can also launch an entire row of clips (called a *scene*). This is useful for creating distinct song sections where you want several clips to begin playing simultaneously.

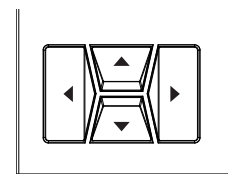
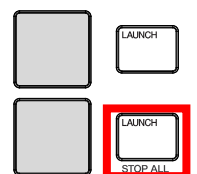
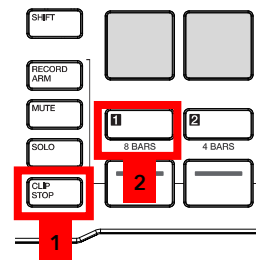
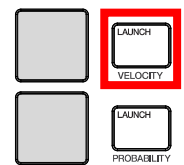
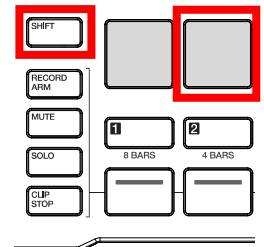
To launch a scene (or row of clips), use the **LAUNCH** buttons on the right side of the pad grid.

To stop a clip:

1. Press the **CLIP STOP** button to set the function of the **Control Row**.
2. Press the **Control Row** button that corresponds with the track of the clip you would like to stop. The Control Row button will begin flashing until the clip stops (depending on the global launch quantization value).

To stop all clips, press and hold **SHIFT** and press the Row 8 **LAUNCH / STOP ALL** button.

To move the current matrix display view, use the **cursors**. Hold **SHIFT** and use the **cursors** to move the 8x8 focus by eight rows or columns at a time. The red outline in Ableton Live will move accordingly.

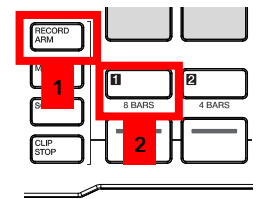


5.1.3 Recording Clips

To create a new clip:

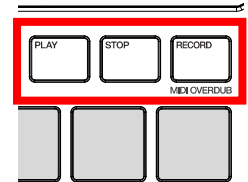
1. Press the **RECORD ARM** button, and then press the **TRACK SELECT** button for the track where you want to add a clip.
2. Tap an empty clip slot on the pads. A new clip will be created and begin recording immediately.

Alternatively, press the **RECORD** transport button. A new clip will be created in the selected track in the next available clip slot.



To stop recording, do any of the following:

- Press the **CONTROL ROW** button again while **RECORD ARM** is still selected. The clip will exit recording and begin playback.
- Press the clip slot pad you are recording to. The clip will exit recording and begin playback.
- Press the **RECORD** transport button. The clip will exit recording and begin playback.
- Press the **STOP** transport button. The clip will exit recording and playback will stop.



In addition to recording a new clip, you can also use MIDI overdub recording to add on to an existing clip.

To begin MIDI overdub recording:

1. Press and hold **SHIFT** and press the **RECORD** transport button.
2. Select the track with the clip you want to overdub record onto using the **TRACK SELECT** buttons.
3. Launch the desired clip, or press **PLAY** to begin playback of the clip if it is prepared for launch.
4. Begin recording. Your new performance will be layered on top of the existing MIDI data in the clip.

To stop MIDI overdub recording:

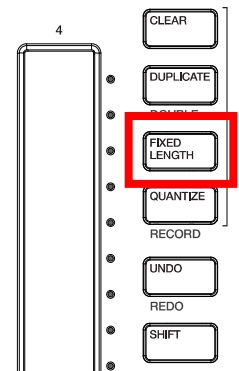
- Press the **CONTROL ROW** button again while **RECORD ARM** is still selected. The clip will exit recording and begin playback.
- Press the **RECORD** transport button. The clip will exit recording and begin playback.
- Press the **STOP** transport button. The clip will exit recording and playback will stop.

5.1.3.1 Fixed Length

By default, when you begin recording a clip, it will continue playing and recording until the clip is stopped or transport playback is stopped. However, you can also set a clip to only record for a certain time by using the Fixed Length function.

To enable Fixed Length recording, press the **FIXED LENGTH** button. When enabled, this button will light up.

To adjust the Fixed Length value, press and hold the **FIXED LENGTH** button. The APC64 **display** will show "Fixed Length" and the current value. Turn the **encoder** to adjust the value, and then release the **FIXED LENGTH** button to set it.

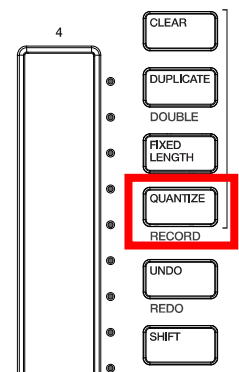
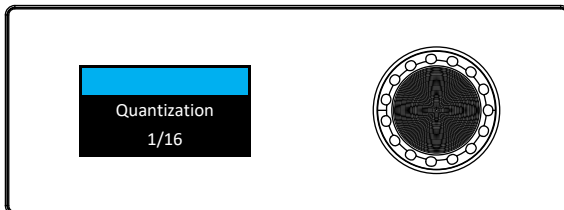


5.1.4 Quantization

As you record new clips, your playing may not be perfectly aligned to a given tempo subdivision. This can be easily corrected by using quantization, which will snap notes (either already recorded or as you record) to the timing grid.

Before you apply quantization, set the tempo subdivision that you want your notes to align with.

To adjust the quantization value, press and hold the **QUANTIZE** button. The APC64 **display** will show "Quantization" and the current value. Turn the **encoder** to adjust the value, and then release the **QUANTIZE** button to set it.

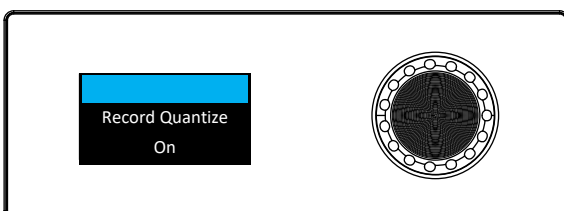


Once your quantization value is set, you can apply it to recorded clips or apply it as you record notes.

To apply quantization to a recorded clip, press and hold the **QUANTIZE** button, and then tap the desired clip. The notes in the clip will be shifted to align with the closest quantization value subdivision.

To apply quantization as you record, press and hold **SHIFT**, and then press the **QUANTIZE** button. When pressed, the APC64 **display** will show "Record Quantize" and its current status, either **On** or **Off**. Set this to **On** to enable quantization as you record. This will automatically snap new notes to the closest quantization value subdivision as you record. When enabled, the **QUANTIZE** button will be lit while **SHIFT** is also being held.

Note: This feature only toggles Record Quantization on and off. To set the Record Quantization value, use the **Edit > Record Quantization** menu option in Ableton Live.



5.1.3 Managing Clips

Basic clip editing and management can be done directly from the APC64 hardware using the following controls.

Use the **CLEAR** button to erase clips and scenes:

To erase a clip, press and hold the **CLEAR** button, and then press the desired pad.

To erase an entire scene, press and hold the **CLEAR** button, and then press the **LAUNCH** button for the desired scene. All clips in that row will be removed.

Use the **DUPLICATE** button to copy clips and scenes.

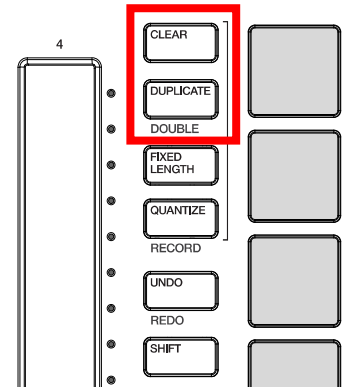
To duplicate a clip, press and hold the **DUPLICATE** button, and then press the desired pad. The clip and all its note and performance data will be copied to the next clip slot below.

To duplicate a scene, press and hold the **DUPLICATE** button, and then press the **LAUNCH** button for the desired scene. All clips in that row will be copied to the next row below.

Note: If another clip or scene is in the next clip slot or row, its contents will be overwritten by the duplicated clip or scene.

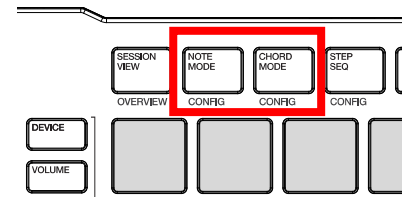
To double the length of a clip, press and hold both **SHIFT** and the **DUPLICATE / DOUBLE** button, and then press the desired pad. The clip's total length will instantly be doubled. If note or performance data is already recorded into the clip, it will also be doubled to the new length.

Note: Audio clips cannot be doubled.



5.2 Note Mode and Chord Mode

APC64 features two modes for playing melodic content from the pad grid. In **Note Mode**, each pad plays an individual note. In **Chord Mode**, each pad plays a chord comprised of three or more notes in sync.



To open Note Mode, press the **NOTE MODE** button.

To open Chord Mode, press the **CHORD MODE** button.

Both Note Mode and Chord Mode may be used in conjunction with Ableton Live MIDI tracks, or when using APC64 as a standalone MIDI or CV device.

5.2.1 Configuration

Both Note Mode and Chord Mode have Configuration options which can be accessed by pressing and holding **SHIFT** and then pressing either **NOTE MODE** or **CHORD MODE**. You can also press and hold the **NOTE MODE** or **CHORD MODE** buttons while viewing either mode to momentarily access the Configuration view. When you release the button, you will return to the previous mode.

Although they can be accessed separately, the configurations of these two modes are identical and the settings are shared across both modes to ensure your tracks are harmonically synced. When you press **SHIFT** and either button, both buttons will be lit up, and you will see **Note/Chord Cfg** on the display along with the following pad layout:

	C1	C2	C3	C4	C5	C6	C7	C8
R1		Db	Eb		Gb	Ab	Bb	
R2	C	D	E	F	G	A	B	C
R3						1-3-5	1-2-5	1-4-5
R4	Separate Rows by 3rd	Separate Rows by 4th	Separate Rows by 5th	Separate Rows by 6th		1-3-5-7	1-3-5-6	1-3-5-9
R5	Separate Rows by 7th	Separate Rows by Octave		Show/Hide Non-Scale Notes	Send Poly On/Off	Maj	Min	Dim
R6	Chromatic	Major	Melodic Minor	Harmonic Minor	Major Pentatonic	Minor Pentatonic	Dorian	Phrygian
R7	Lydian	Mixolydian	Aeolian	Locrian	Blues	Flamenco	Hungarian	Whole Tone
R8	OCT -2	OCT -1	OCT 0	OCT 1	OCT 2	OCT 3	OCT 4	OCT 5

In the example above, the following is selected:

Key: C

Chord: 1-3-5

Chord Type: Major

Layout: Separate rows by 5th

Non-Scale Notes: Hidden

Send Poly Aftertouch: On

Scale: Major

Octave: 1

See the following page for descriptions of each parameter.

Use **Rows 1-2** to set the root note of the scale. These pads are laid out like the keys of a piano, from C to C in the lower row.

When one of these pads is pressed, the selected root note will be lit green. The remaining scale notes will be lit amber, and any non-scale notes will be lit red. These colors will automatically update as you change root notes and other scale parameters.

Use **Rows 3-5, Columns 6-8** to select a chord type. For five- and seven-tone scales, press one of the Rows 3-4 pads:

1-3-5 (major/minor)	1-2-5 (sus2)	1-4-5 (sus4)
1-3-5-7 (major7/minor7)	1-3-5-6 (major6/minor6)	1-3-5-9 (major9/minor9)

For six- or twelve-tone scales, press one of the Rows 3-4 pads and one of the Row 5 pads to change the Alt Chord Type.

Major	Minor	Diminished
-------	-------	------------

When selected, the chosen chord will play in the set scale each time a pad is pressed while Chord Mode is active. The selected pad will be lit green.

Use **Rows 4-5, Columns 1-4** to determine how notes are laid out on the 8x8 pad grid:

Separate Rows by 3rd	Separate Rows by 5th	Separate Rows by 7th
Separate Rows by 4th	Separate Rows by 6th	Separate Rows by Octave

Press the **Show/Hide Non-Scale Notes** pad (**R5,C4**) to enable or disable notes from outside the selected scale from being shown on the pad grid. Non-scale notes will be unlit in the pad grid when enabled.

Press the **Send Poly Aftertouch** pad (**R5,C5**) to enable poly aftertouch messages from the pad grid.

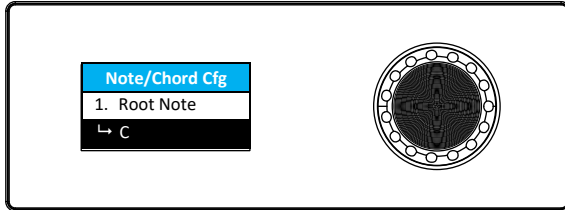
Use **Rows 6-7** to set the scale type:

Chromatic	Major Pentatonic	Lydian	Blues
Major	Minor Pentatonic	Mixolydian	Flamenco
Melodic Minor	Dorian	Aeolian	Hungarian
Harmonic Minor	Phrygian	Locrian	Whole Tone

Use **Row 8** is used to set the base octave for the pads in Note Mode, starting from the lower-left pad:

Octave	-2	-1	0	1	2	3	4	5
Lowest Note	C-2	C-1	C0	C1	C2	C3	C4	C5

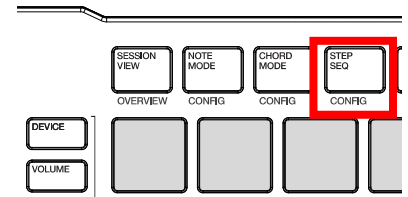
As an alternative to using the pads to change the note mode, you can also use the **encoder** to change these values as shown on the **display**. Turn the **encoder** to browse each note mode category. Press the encoder to open it, and then turn the encoder to browse the available options. When you are finished, press the encoder again to confirm your selection.



5.3 Step Sequencer

The Step Sequencer is used to create or edit clips by using the pad matrix as "step buttons," simulating the experience of a traditional step-sequencer-style drum machine.

To enter Step Sequencer mode, press the **STEP SEQ** button.



Use the **Track Select 1-8** buttons to select one of the eight available Step Sequence tracks. You can also switch between tracks using the **left** and **right cursors**. The **Track Select** button for the current track will be brightly lit in white.

Step Sequence tracks are internal to APC64 and do not correspond with Ableton Live tracks as shown in Session View. This means you can send any of the eight Step Sequence tracks to any available track in Ableton Live.

By default, Ableton Live monitors and records MIDI on all available MIDI channels at once. To send specific Step Sequencer tracks to specific Ableton Live tracks for recording, use the track-specific **5.3.1 Configuration** menu described in the following section to set the Step Sequencer tracks to individual MIDI channels (for instance, Channels 4, 5, and 6). Then, set the **MIDI From** of desired tracks in Ableton Live to Channels 4, 5, and 6. Each channel will now receive the correct MIDI data from the corresponding Step Sequencer track.

5.3.1 Configuration

The Step Sequencer has two Configuration modes: a Global Configuration mode for setting defaults across all tracks, and a Track Configuration mode for setting parameters on specific tracks.

To configure the global Step Sequencer settings, press the **STEP SEQ** button a second time while in Step Sequencer mode, or press and hold **SHIFT** and press **STEP SEQ**. You can also momentarily access the Configuration view by pressing and holding the **STEP SEQ** button while in Step Sequencer mode. When you release the button, you will return to Step Sequence mode.

From here, you can adjust the following settings directly from the pads:

	C1	C2	C3	C4	C5	C6	C7	C8
R1	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
R2	Step 9	Step 10	Step 11	Step 12	Step 13	Step 14	Step 15	Step 16
R3	Step 17	Step 18	Step 19	Step 20	Step 21	Step 22	Step 23	Step 24
R4	Step 25	Step 26	Step 27	Step 28	Step 29	Step 30	Step 31	Step 32
R5								
R6	Time Div: 1/4	Time Div: 1/4T	Time Div: 1/8	Time Div: 1/8T	Time Div: 1/16	Time Div: 1/16T	Time Div: 1/32	Time Div: 1/32T
R7								
R8								

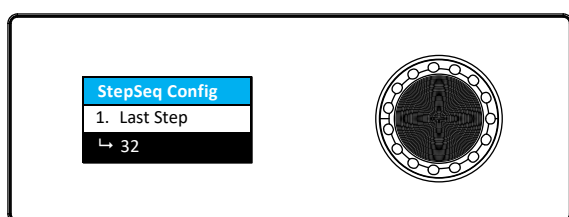
Use **Rows 1-4** to set the total length of the sequence in steps. When all tracks are set to the same length, the pad for the value of the last step in the sequence will be lit green. If there are tracks with differing lengths, no selection will be shown.

Use **Row 6** to set the **Time Division** for the step sequencer. This determines the note length of each step:

1/4	1/8	1/16	1/32
1/4T	1/8T	1/16T	1/32T

If all tracks are set to the same time division, the selected value will be lit green. If there are tracks with differing time divisions, no selection will be shown.

You can also use the **encoder** to change these values as shown on the **display**. Turn the **encoder** to browse each Step Sequencer category. Press the encoder to open it, and then turn the encoder to browse the available options. When you are finished, press the encoder again to confirm your selection. Some options in the display will prompt you to select a track. See the following section for track-specific Step Sequencer settings.



To configure the track-specific Step Sequencer settings, press a **TRACK SELECT** button while the global Step Sequencer configuration is open. You can also press and hold multiple **TRACK SELECT** buttons to edit more than one track at a time. The **TRACK SELECT** button for the selected track(s) will be brightly lit in white. When editing multiple tracks at once, selections may not be shown on the pad if they differ between the selected tracks.

From here, you can adjust the following settings directly from the pads:

	C1	C2	C3	C4	C5	C6	C7	C8
R1	Step 1	Step 2	Step 3	Step 4	Step 5	Step 6	Step 7	Step 8
R2	Step 9	Step 10	Step 11	Step 12	Step 13	Step 14	Step 15	Step 16
R3	Step 17	Step 18	Step 19	Step 20	Step 21	Step 22	Step 23	Step 24
R4	Step 25	Step 26	Step 27	Step 28	Step 29	Step 30	Step 31	Step 32
R5	Track Type: Note	Track Type: Drum		Swing Enable		Send to USB	Send to MIDI	Send to CV
R6	Time Div: 1/4	Time Div: 1/4T	Time Div: 1/8	Time Div: 1/8T	Time Div: 1/16	Time Div: 1/16T	Time Div: 1/32	Time Div: 1/32T
R7	MIDI Ch: 1	MIDI Ch: 2	MIDI Ch: 3	MIDI Ch: 4	MIDI Ch: 5	MIDI Ch: 6	MIDI Ch: 7	MIDI Ch: 8
R8	MIDI Ch: 9	MIDI Ch: 10	MIDI Ch: 11	MIDI Ch: 12	MIDI Ch: 13	MIDI Ch: 14	MIDI Ch: 15	MIDI Ch: 16

Use **Rows 1-4** to set the total length of the track's sequence in steps. The pad for the value of the last step in the sequence will be lit green. This will be set to the global Step Sequence length by default, but can be set to a different value per track.

Use the **Track Type** pads (**R5,C1-2**) to set the type of track controlled by the step sequencer. Use **Note** type for melodic tracks, and **Drum** type for drum tracks. The pad for the selected type will be lit green.

Use the **Swing Enable** pad (**R5,C4**) to turn swing timing **On** or **Off** when using the Step Sequencer. When enabled, this pad will be lit green. The swing value can be set by pressing and holding the **SHIFT** and **TEMPO** buttons, and then using the **encoder** to adjust the value between **50%** (no swing) and **75%** (heavy swing).

Use the **Send To** pads (**R5,C6-8**) to select where the track's step sequencer data is sent: **To USB** (to a computer connected to the **USB Port**), **To MIDI** (to devices connected to the **MIDI Outputs**), and/or **To CV** (to devices connected to the **CV Outputs**). When enabled, the selected pad will be lit green.

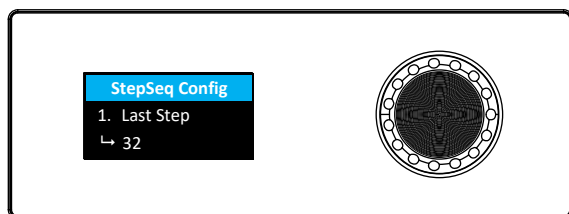
Use **Row 6** to set the **Time Division** for the the track's step sequencer. This determines the note length of each step:

1/4	1/8	1/16	1/32
1/4T	1/8T	1/16T	1/32T

This will be set to the global Time Division by default, but can be set to a different value per track.

Use **Rows 8-9** to select the **MIDI Channel** that the track's Step Sequencer data is sent on when connected to USB or MIDI, from **1-16**.

You can also use the **encoder** to change these values as shown on the **display**. Turn the **encoder** to browse each Step Sequencer category. Press the encoder to open it, and then turn the encoder to browse the available options. When you are finished, press the encoder again to confirm your selection.



5.3.2 Note Input Pads

The bottom-left quadrant of pads can be used to input notes. The function of these pads depends on the mode selected:

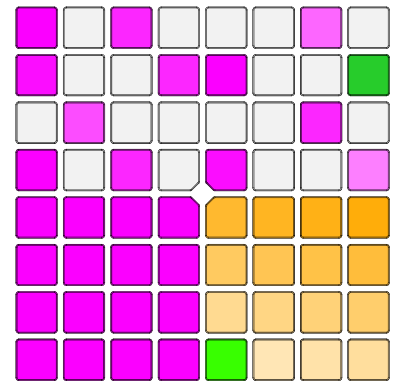
- **Drum Mode:** In Drum Mode, the bottom-left quadrant of pads is used like a traditional 4x4 drum pad layout. You can adjust the MIDI note assignments for these pads in the [5.6 Global Menu](#).
- **Note Mode:** In Note Mode, the bottom-left quadrant of pads represents notes in a scale. The root note of the scale will be lit in the color of the selected track. Use the **Note and Chord Mode Configuration** to set the root note and scale type. You can also use the **up** and **down cursors** to move the starting note octave.

After selecting a mode, all the pads (in Drum Mode) or the root note pads (in Note Mode) will be lit according to the selected track's color. Press a pad to select the note and audition the pad's sound. Press and hold **SHIFT** and then press a pad to silently select it.

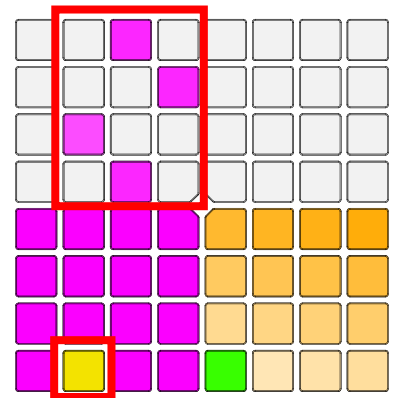
5.3.3 Step Pads

In Step Sequencer mode, the top four rows of pads represent the steps of the sequence. The number of pads available depends on the size and number of the steps. These can be adjusted using the Step Sequencer [5.3.1 Configuration](#) settings.

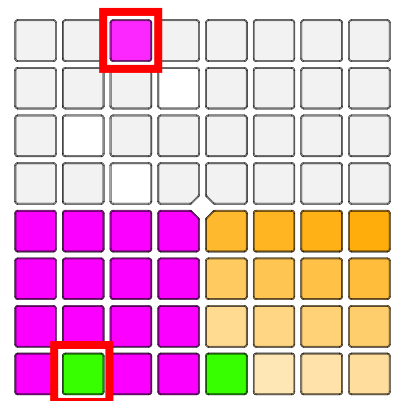
When no pads from the Note Input pads are selected, the top four rows will show an overview of the sequence, where all steps with a note event added to it are lit according to the track color. The brightness of the pad will also reflect the velocity value or other modifier value for the note event. Unused steps will be unlit.



When a single Note Input Pad is pressed and selected, only steps with the selected note added to it will be lit in the top four rows. You can press unlit pads in the top four rows to add the selected note to the selected step. See the [5.3.5 Recording Sequences](#) section for more information.



If you press and hold on a filled step pad, all notes assigned to that step in the Note Input Pads will be lit green. You can press these green pads in the Drum Mode or Note Mode pad matrix to add or remove the notes assigned to that step.

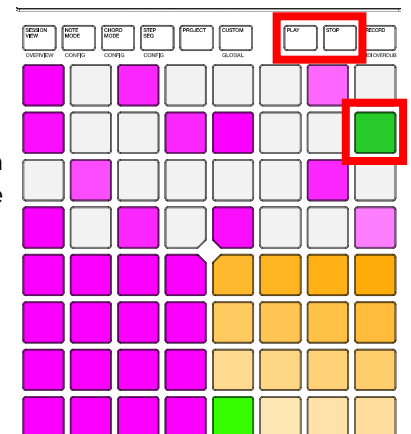


The current play position will be indicated by a **green pad**.

To play the step sequence, press **PLAY**.

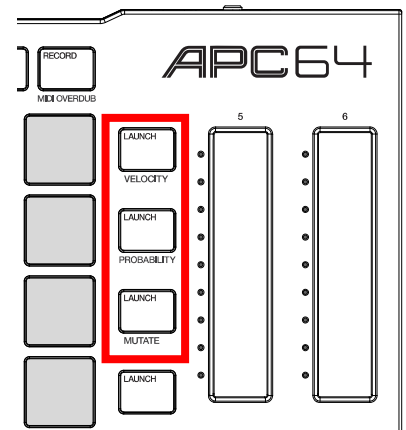
To stop the step sequence, press **STOP**.

Step Sequences may also be managed and launched using APC64's built-in Project save slots. See the following [5.4 Project Mode](#) chapter for more information.



5.3.4 Modifier Pads

The bottom-right quadrant of pads is used to set the velocity or other modifier value for each note. By default, this controls the **Velocity** value of each step. You can swap between viewing **VELOCITY**, **PROBABILITY**, or **MUTATE** by pressing the Rows 1-3 **LAUNCH** buttons on the right side of the pad grid when in Step Sequencer mode.



When **Velocity** is selected, the pads control the note dynamics as follows:

	C5	C6	C7	C8
R5	103	111	119	Full
R6	71	79	87	95
R7	39	47	55	63
R8	As Played	15	23	31

When **Probability** is selected, the pads control the likelihood that the selected note is played, as follows:

	C5	C6	C7	C8
R5	81%	87%	93%	100%
R6	56%	62%	68%	75%
R7	31%	37%	43%	50%
R8	3%	12%	18%	25%

When **Mutate** is selected, the pads determine whether a step will be played at its set pitch or be transposed up or down within one octave, as follows. The specific notes are determined by the currently selected key and scale.

Note: Mutate is available for **Note** type Step Sequencer tracks only.

	C5	C6	C7	C8
R5	81%	87%	93%	100%
R6	56%	62%	68%	75%
R7	31%	37%	43%	50%
R8	3%	12%	18%	25%

5.3.5 Recording Sequences

When you are ready to add notes to your sequence, you can do this in two ways. You can use the **Note Input Pads** to manually add notes to steps, or you can record a performance from the pads into the sequence.

Note: You can add up to sixteen notes per step in a Drum sequence, and up to eight notes per step in a Note sequence.

To manually add a note to the sequence:

1. Select a note pad from the bottom-left quadrant Note Input Pads.
2. Press a pad in the Step Pads.

The selected note will be added at the selected step.

To remove a note from the sequence, do either of the following:

- Select a note pad from the bottom-left quadrant Note Input Pads, and then press the Step Pad where you want to remove the note.
- Use the **Clear** button, as described in the [following](#) section.

When inputting notes using the Note Input Pads, you can also create a tie so that a note is held over multiple steps. This is not available when controlling a Drum Track.

To add a tied note that stretches over multiple steps, press and hold **SHIFT** and then press the pad or pads adjacent to the step that you want tied. These pads will then be lit in white, and the note will be held throughout the number of steps marked.

For instance, if you want to tie a note between Step 1 and Step 4, add the first note at Step 1, then press and hold **SHIFT** and press the Steps 2, 3, and 4 pads.

Note: Tied notes will not be shown when viewing the sequence overview with no Note Input Pad selected.

To remove a tie, release **SHIFT** and press the tied pad so it is dimly lit again.

In addition to inputting notes manually using the Step Pads, you can also record a performance from the Note Input Pads, or even Note and Chord Modes directly, into the Step Sequence.

To record a performance into the Step Sequencer:

1. Press the **RECORD ARM** Control Row Function button.
2. Press the **Control Row** button for the Sequencer track that you want to record on. The button will be lit red, and the bottom line of the **display** will turn red to indicate recording is armed. Only one track may be armed at a time.

Once the track is armed, the **Note Input Pads** will trigger sound on the selected track.

3. Press **PLAY** to begin playback and recording of the sequence. (If the sequence is already playing, arming the track in the previous step will enable it to begin recording immediately.)
4. Use the **Note Input Pads** to add notes, or switch to **Note Mode** or **Chord Mode** to add notes or chords. Notes will be added to the nearest step, snapping backward or forward as needed.

Note: When connected to Ableton Live and live recording into the Step Sequencer using Note Mode or Chord Mode, it is recommended to set the Sequence MIDI Channel to **Ch 1** in the track **Configuration** menu in order to match the Ableton Live track assignment and hear the audio as you play it.

5. Recording will continue and begin overdubbing when the sequence returns to the beginning.
6. To end recording, press the **Control Row** button for the selected track to disarm recording. Alternatively, press the **STOP** button to stop the sequence playback.

To disable recording, disarm the track by pressing the **RECORD ARM** Control Row Function button and then pressing the **Control Row** button for the Sequencer track again.

When recording into the Step Sequencer, note lengths and note ties will not be recorded, and you will not be able to manually enter notes using the Step Pads.

5.3.6 Editing Sequences

Use the **CLEAR** button to erase notes, steps, or tracks:

To clear a note from a step, press the lit pad.

To clear all steps containing a specific note, press and hold **CLEAR** and then press the desired Note Input pad.

To clear all notes from a specific step, press and hold **CLEAR** and then press the desired Step Input pad.

To clear an entire step sequence, press and hold **CLEAR** and then press the desired **Track Select** button.

Note: Step Sequencer editing cannot be undone.

Use the **MUTE** button to mute notes, steps, or tracks:

To mute all notes on a specific step, press and hold the **MUTE** Control Row Function button, and then press the desired Step Input pad. The muted step pad will be lit bright yellow to indicate it has been muted. Repeat this process to unmute the step. No **Note Input Pad** may be selected when muting a specific step.

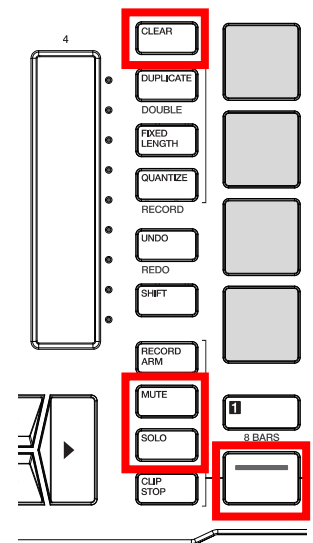
To mute a specific note, press and hold the **MUTE** Control Row Function button, and then press the desired **Note Input Pad**. The muted Note Input Pad will be lit bright yellow to indicate it has been muted. Repeat this process to unmute the note.

To mute an entire track, press the **MUTE** Control Row Function button, and then press the **Control Row** button for the desired track. Repeat this process to unmute the track.

To clear all Mutes from the current track, press and hold **CLEAR**, and then press **MUTE**. All steps and notes will be unmuted and return to their previous state.

Note: Note, step, and track mutes are not saved as part of the sequence. Mutes will render when using the [5.3.7 Send to Clip](#) function to export the sequence into Ableton Live.

Use the **SOLO** button to solo tracks. Press the **SOLO** Control Row Function button, and then press the **Control Row** button for the desired track. Repeat this process to disable solo for the track.



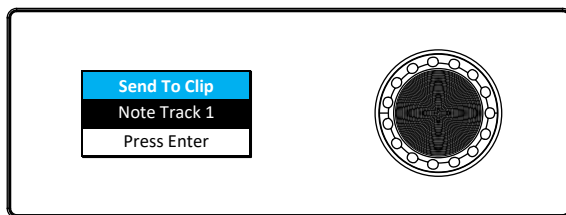
5.3.7 Send to Clip

If you would like to export the sequence you have made into Ableton Live, you can use the **Send to Clip** option to capture the sequence data into a new clip.

1. While connected to Ableton Live, select a MIDI track and a blank clip slot.
2. On APC64 (while in Step Sequencer mode), select the track containing the sequence you want to send to a clip.
3. Press and hold **SHIFT** so **Send to Clip** is shown in the display.
4. Press the **encoder** to continue, or release **SHIFT** to return.

Note: Only one track can send to a clip at a time. The sequencer must also be stopped to send to a clip. The display will show **Stop Seq 1st** to remind you to stop playback before continuing.

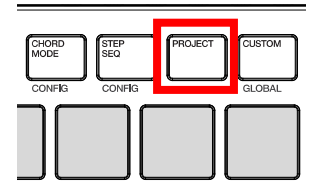
5. The display will show **Sending...** as it prepares the clip, and then **Done!** once it has completed. You will now see the exported sequence clip in Session View.



5.4 Project Mode

APC64 can save and load up to 24 projects in its internal memory. These projects contain device and performance information, including:

- Step Sequence Mode parameters and patterns
- Note and Chord Mode parameters
- Global parameters
- Custom Mode assignments



These can be used to recall parameters for certain projects or as larger sequences for building a track for recording or performance.

To view the current projects, press the **PROJECT** button. The top three rows of pads will represent the 24 available project slots.

To load a project, press one of the 24 available project slot pads.

Projects may be selected and loaded while playback is active. In this way, you can queue up different sequences or parameters sets during a performance without stopping playback.

To initiate playback of a project, press **PLAY**. This will begin playing the data in the current project's [5.3 Step Sequencer](#).

To stop project playback, press **STOP**.

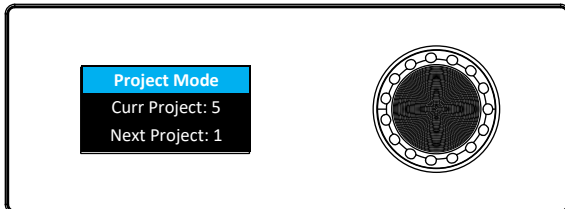
The color of each Project pad provides information about its current save status and playback state:

Pad Color	Project State
Dim White	Empty project slot, playback stopped.
Amber (Solid)	Selected project, playback stopped.
Amber (Blinking)	Project with unsaved changes, playback stopped.
Blue	Saved project, unselected.
Green (Solid)	Selected project, playback in progress.
Green (Pulsing)	Selected project with unsaved changes, playback in progress.
White (Blinking)	Project in queue to play after playback of the current project is finished.
Red (Blinking)	Project with unsaved changes is being navigated away from. Press the encoder to confirm you wish to proceed without saving your changes.

Playback of project sequences can also be chained together to create longer sequence patterns.

1. Press and hold a pad containing the first Project sequence you want to use.
2. While still holding the pad, press another Project slot. The currently selected Project pad will remain amber, and all pads between it and the second Project pad pressed will turn yellow.
3. Press **PLAY** to begin playback of the project sequence.

All Projects between the two pads will then be chained together and play in sequence. For instance, if you press and hold Project 1 and then press Project 5, playback will move through Projects 1, 2, 3, 4, and 5 before circling back to Project 1 again. The current and next projects will be shown in the **display**.



The sequence length for chained projects is determined by the project with the most steps, regardless of the track's time division setting. For example, if Project 1 contains thirty-two 1/16 notes, and Project 2 contains sixteen 1/4 notes, when chained together the sequence length will follow Project 1.

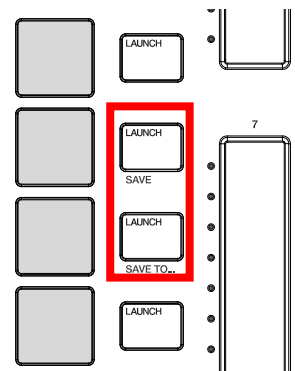
Note: Only adjacent projects can be chained together to play in sequential order. You can rearrange your projects using the **SAVE AS** function to place them in the correct order for sequential playback. See the following [5.4.1 Managing Projects](#) section for more information.

5.4.1 Managing Projects

To save changes to a project in the current slot, press the row five **LAUNCH / SAVE** button.

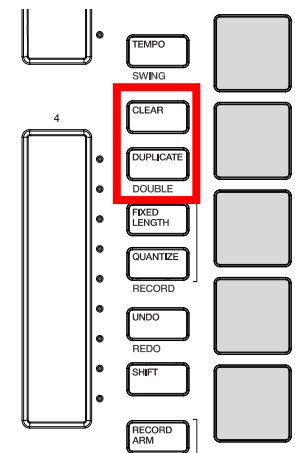
To save your changes to a new project slot:

1. Press the row six **LAUNCH / SAVE TO...** button.
2. Select another one of the 24 Project slots. The pad will begin blinking red.
3. Press the **encoder** to save the project to the selected slot.



To delete project information from a slot:

1. Press and hold the **CLEAR** button, and then press the desired Project pad.
2. Press the **encoder** to confirm deletion of the project.
To cancel, press any other button on APC64.



To copy a project to another pad:

1. Press and hold the **DUPLICATE** button, and then press the desired Project pad.
2. Press the pad where you want to have the selected project copied. The project and all its settings will be saved into the new Project slot.

5.5 Touch Faders

APC64's Touch Faders act as continuous controllers which can be used to control the following parameters, selectable by pressing the desired **Touch Fader Control** button:

DEVICE: Device controls.

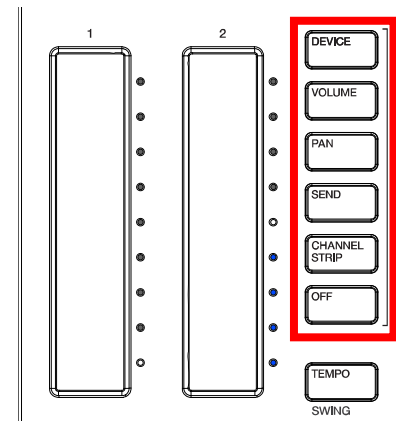
VOLUME: Track volume.

PAN: Track stereo panning.

SEND: Track Sends.

CHANNEL STRIP: Combination of Volume, Pan, and Sends for the selected track.

OFF: Disables the touch faders.



To adjust a touch fader parameter, tap or drag your finger along the touch strip.

The current position of the touch fader is indicated by a white LED to the right of the fader. The remaining LEDs may be lit according to the track color to indicate the current value position and its direction relative to the default value.

To finely adjust a touch fader parameter, press and hold **SHIFT** and drag your finger along the touch strip. While **SHIFT** is held, this will act as an increment/decrement control. Moving your finger up will increase the value in small amounts, and moving your finger down will decrease it, regardless of where your finger was initially placed along the touch fader.

To record automation with a touch fader:

1. Press the **RECORD ARM** button, and then press the **TRACK SELECT** button for the track(s) that you would like to record automation to.
2. Press the **RECORD** button to begin recording.
3. Touch or slide your finger along the touch strip to control the selected parameter.
4. When you are finished, press **RECORD** or **STOP** to stop recording.

When automation has been recorded to a parameter that is being controlled by a touch fader, the white current position LED will be red instead of white.

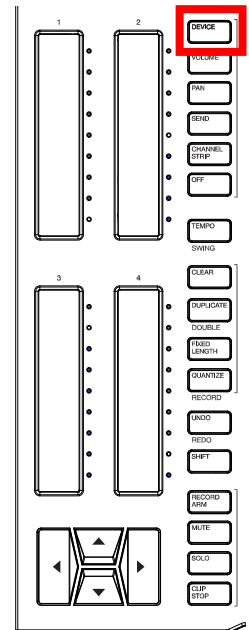
To remove touch fader automation, press and hold **CLEAR** and then tap the desired touch fader.

Device

In Device Mode, the touch faders adjust up to eight parameters in a loaded instrument or effect device on the current track.

Press and hold the **DEVICE** button and then use the **up** and **down cursors** to navigate between banks of device parameters.

If you have more than one device on a track, press and hold the **DEVICE** button and then use the **left** and **right cursors** to navigate between them.

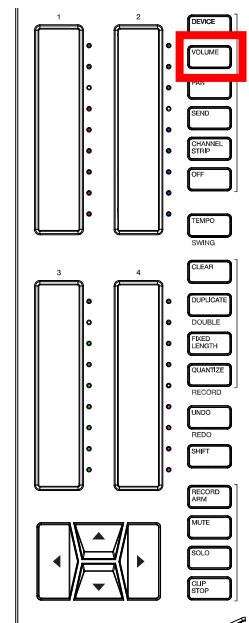


Volume

Press the **VOLUME** button to adjust track volume with the touch faders. This includes Audio and MIDI tracks, as well as Return tracks and the Master track.

If you have more than eight tracks (including Return tracks and the Master track), use the **cursors** to change the track focus, and the touch faders will automatically map to the new selection.

If you have less than eight tracks (including Return tracks), touch faders that are not currently controlling a track will have their LEDs off, and the Master track will automatically map to track eight.



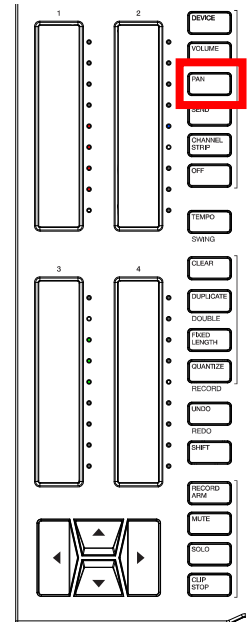
Pan

Press the **PAN** button to adjust track panning with the touch faders. This includes Audio and MIDI tracks, as well as Return tracks and the Master track.

If you have more than eight tracks (including Return tracks and the Master track), use the **cursors** to change the track focus, and the touch faders will automatically map to the new selection.

If you have less than eight tracks (including Return tracks), touch faders that are not currently controlling a track will have their LEDs off, and the Master track will automatically map to track eight.

When controlling Pan, the Center stereo field position will be represented by a single white LED in the middle of each touch fader's LED layout. As you adjust the panning left or right, the white dot will indicate the stereo position, and LEDs between this value and the center position will be lit according to the track color.



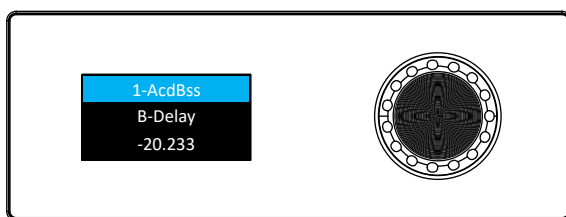
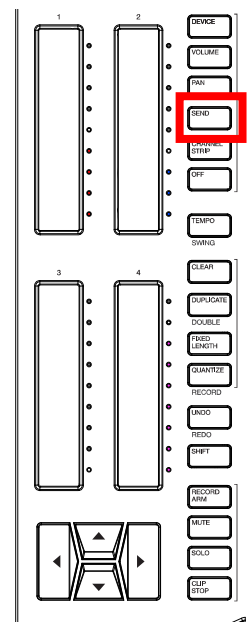
Send

Press the **SEND** button to adjust track send controls. These controls send track audio to the associated Return track.

Each touch fader will control a single Send level for the associated track. If you have more than eight tracks (including Return tracks), use the **cursors** to change the track focus, and the touch faders will automatically map to the new selection.

If you have less than eight tracks (including Return tracks), touch faders that are not currently controlling a track will have their LEDs off.

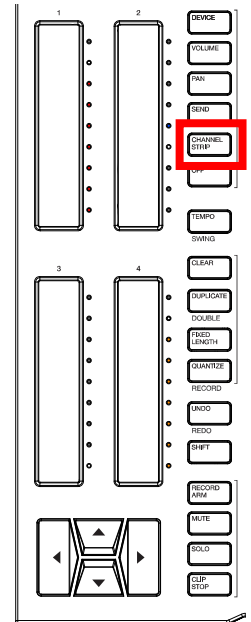
If you have multiple Return tracks, press the **SEND** button again to cycle between the Send controls for each track. For instance, if you have Return Tracks A, B, and C, the touch faders will control the A Sends for all tracks on first press, then B Sends for all tracks on second press, and so on. As you move your finger along the touch fader, the **display** will indicate which Send control is being adjusted.



Channel Strip

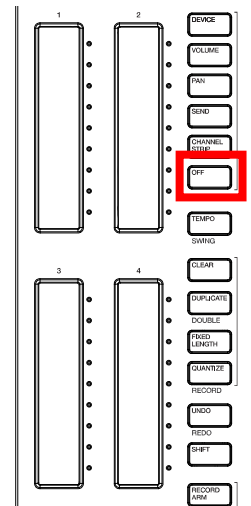
Press the **CHANNEL STRIP** button to control multiple parameters on a single channel. This includes Volume (fader 1), Pan (fader 2), and Send controls. The number of available touch faders will depend on the number of Return tracks in your session.

Use the **Track Select** buttons to choose which track is in focus, or press the **left** and **right cursors** to change track focus.



Off

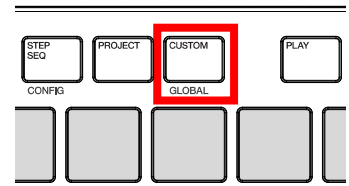
Press the **OFF** button to disable the touch fader controls.



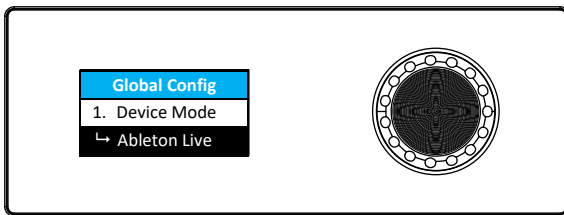
5.6 Global Menu

The Global Menu is used to customize the hardware device settings of APC64, including swapping between Ableton Live control and Standalone Mode.

To open the Global Menu, press and hold **SHIFT** and then press **CUSTOM**. You can also press and hold the **CUSTOM / GLOBAL** button while in Custom Mode to momentarily view Global Mode. When you release the button, you will return to Custom Mode.



Turn the **encoder** to browse the menu options on the **display**. Press the **encoder** to open a setting, and then turn the encoder to browse the available options. Press the **encoder** again to select an option and return to the Global configuration menu.



#	Setting	Values	Notes
1.	Device Mode	Ableton Live Standalone	The device may be used while connected to a computer running Ableton Live. The device may be used disconnected from the computer as a standalone device.
2.	Standalone Sync	Internal USB MIDI-DIN	Tempo is synced by the internal MIDI clock. Tempo is synced by MIDI clock data sent to the USB port. Tempo is synced by MIDI clock data sent to the MIDI In port.
3.	Sync Out USB	Off, On	Enables or disables the USB port from sending out internal MIDI clock.
4.	Sync Out MIDI	Off, On	Enables or disables the MIDI Out port from sending out internal MIDI clock.
5. - 19. (odd)	CV1-8 Source	Pitch-Last Pitch-Low Pitch-High Gate-Last Gate-Low Gate-High Gate-Legato Vel-Last Vel-Low Vel-High Vel-Legato Aftertouch CC16-23 Fader 1-8 Drum Pad 1-16 None	See the 5.8 CV Operation chapter for more information.

#	Setting	Values	Notes
6. - 20. (even)	CV1-8 Channel	1-16	See the 5.8 CV Operation chapter for more information.
21. - 36.	Drum1-16 Note:	C-2 - G+8	Selects the MIDI note value for the 4x4 pad layout when controlling a drum instrument. These values are by default mapped to correspond with Ableton Live's Drum Rack. Changing the values could result in misaligned mapping when controlling Ableton Live.
37.	LED Level	25, 50, 75, 100%	Sets the overall brightness level of the device LEDs.
38.	Factory Reset	Off, On	Select On to perform a factory reset, reverting all settings to default. After selecting On , a second menu will appear asking you to confirm. Press the encoder again to initiate the reset. Press any other button to return to the Global Configuration menu.

You can also select menu options directly from the pads. When the **Device Mode** is set to **Ableton Live (R3,C1 selected)**, the pads can be used as follows:

	C1	C2	C3	C4	C5	C6	C7	C8
R1	CV1 Source	CV2 Source	CV3 Source	CV4 Source	CV5 Source	CV6 Source	CV7 Source	CV8 Source
R2								
R3	Device Mode: Ableton Live	Device Mode: Standalone						
R4								
R5	Drum13 Note	Drum14 Note	Drum15 Note	Drum16 Note				
R6	Drum9 Note	Drum10 Note	Drum11 Note	Drum12 Note				
R7	Drum5 Note	Drum6 Note	Drum7 Note	Drum8 Note				
R8	Drum1 Note	Drum2 Note	Drum3 Note	Drum4 Note				

Press a **CV Source (Row 1)** or **Drum Note (R5-8, C1-4)** pad to open that menu option, and then use the **encoder** to adjust the value. Press the **encoder** to confirm.

Press the **Device Mode** buttons (**R3, C1-2**) to select the active mode.

When the **Device Mode** is set to **Standalone** (**R3,C2** selected), the pads can be used as follows:

	C1	C2	C3	C4	C5	C6	C7	C8
R1	CV1 Source	CV2 Source	CV3 Source	CV4 Source	CV5 Source	CV6 Source	CV7 Source	CV8 Source
R2								
R3	Device Mode: Ableton Live	Device Mode: Standalone				Standalone Sync: Internal	Standalone Sync: USB	Standalone Sync: MIDI-DIN
R4						SyncOut USB On/Off		
R5	Drum13 Note	Drum14 Note	Drum15 Note	Drum16 Note		SyncOut MIDI On/Off		
R6	Drum9 Note	Drum10 Note	Drum11 Note	Drum12 Note				
R7	Drum5 Note	Drum6 Note	Drum7 Note	Drum8 Note				
R8	Drum1 Note	Drum2 Note	Drum3 Note	Drum4 Note				

Press a **CV Source** (**Row 1**) or **Drum Note** (**R5-8, C1-4**) pad to open that menu option, and then use the **encoder** to adjust the value. Press the **encoder** to confirm.

Press the **Device Mode** pad (**R3, C1-2**) to select the active mode.

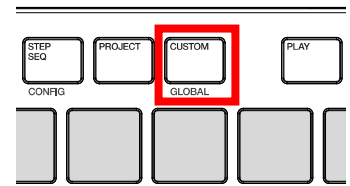
Use the **Standalone Sync** pads (**R4-5, C6-8**) to select where APC64's internal tempo is synced from: **Internal** (the tempo is generated by APC64's built-in MIDI Clock), **USB** (from a computer connected to the **USB Port**) or **MIDI** (from a device connected to the **MIDI Input**). When enabled, the selected pad will be lit green.

Use the **Sync Out** pads (**R4-5, C6**) to select where APC64's internal tempo is sent to: **USB** (to a computer connected to the **USB Port**) or **MIDI** (to devices connected to the **MIDI Outputs**). When enabled, the selected pad will be lit green. Both options may be enabled at once, or neither.

5.7 Custom Mode

APC64's Custom Mode allows you to modify the functions of the pad grid and touch faders, particularly for using APC64 in standalone mode. You can adjust MIDI assignments, pad and fader LED colors, and even create customized pad layouts for any use.

To open Custom Mode, press the **CUSTOM** button.



Custom Mode assignments are edited using the **APC64 Project Editor** software, which is described in the following section.

5.7.1 Using the APC64 Project Editor Software

5.7.1.1 Download and Installation

To download the included APC64 Project Editor software, register your device at profile.inmusicbrands.com. If you do not already have an account, you will be prompted to create one. Once you are signed in, you can download the editor from your Account by selecting APC64 from your registered products.

You can also visit akaipro.com to find the latest system requirements and compatibility information.

For additional product support, visit akaipro.com/support.

Windows®

1. Follow the instructions above to register your product and download your software.
2. Double-click the **.exe** installer file you downloaded.
3. Follow the on-screen instructions.

macOS®

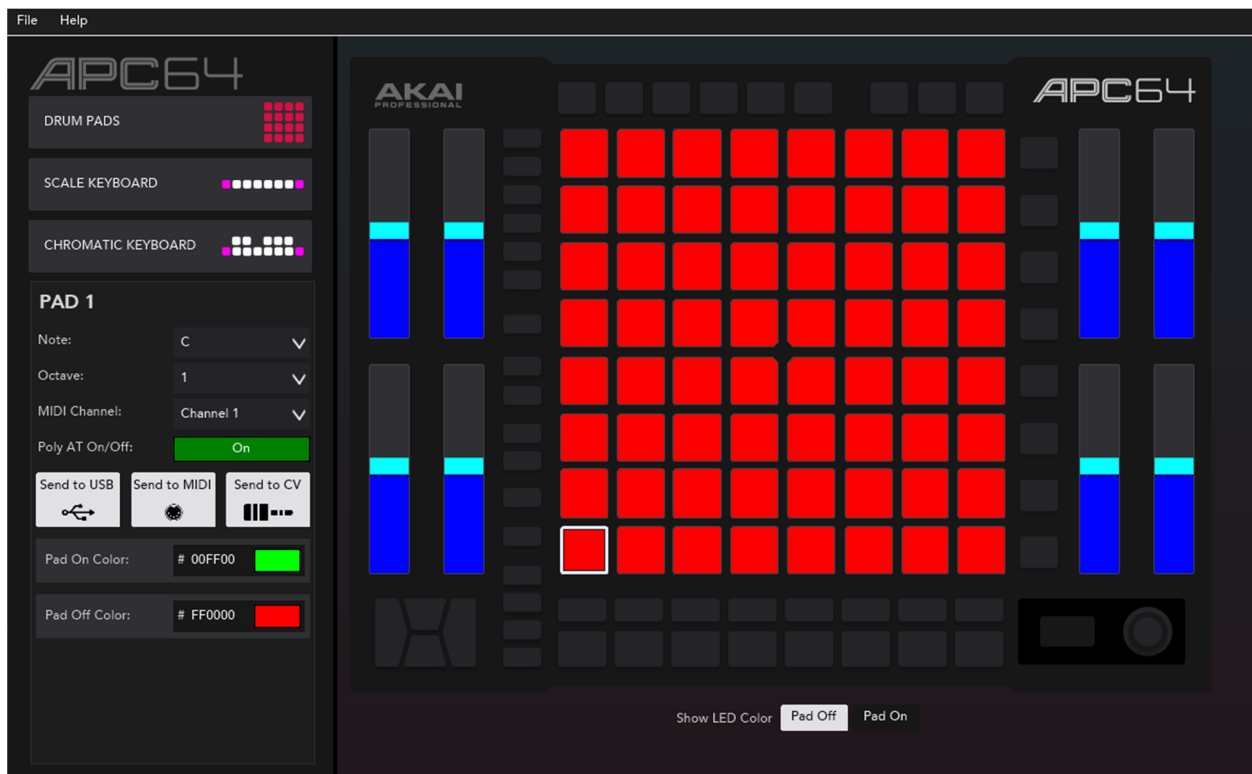
1. Follow the instructions above to register your product and download your software.
2. Double-click the **.pkg** installer file you downloaded.
3. Follow the on-screen instructions.

5.7.1.2 Setup and Overview

To use the APC64 Project Editor:

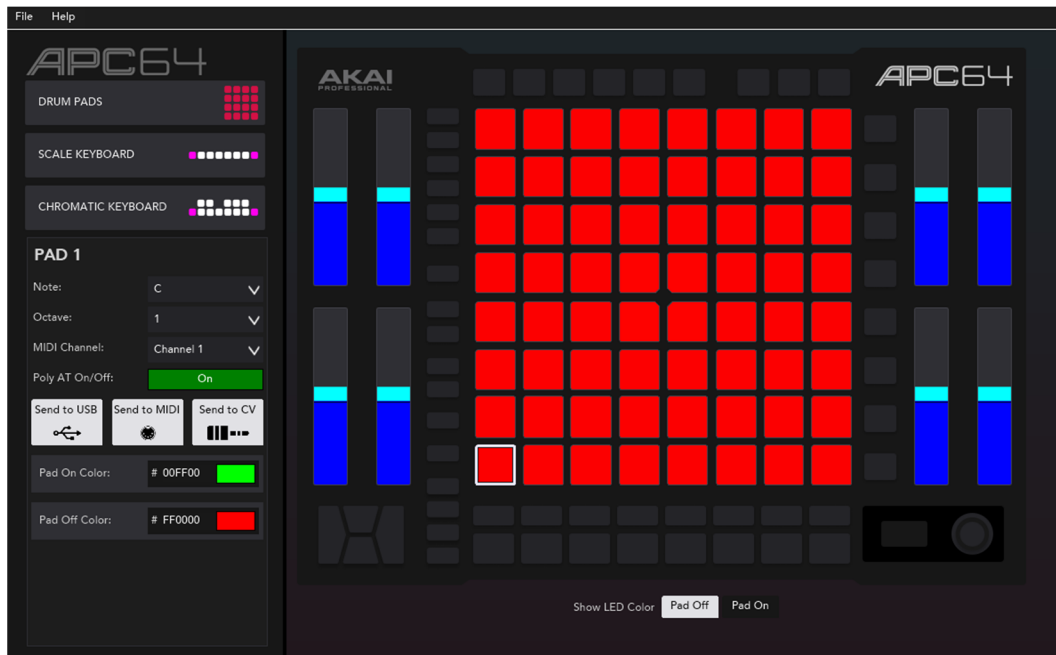
1. **Optional:** Connect APC64 to your computer using one of the included USB-C® cables. You can still use the editor without connecting an APC64, but you will not be able to send Projects to it or load (get) Projects from it.
2. Open the APC64 Project Editor. The right side of the window will show a graphical representation of your APC64, and the left side of the window will show the pad layout presets and editable parameters for the selected control.

Click a part of the image below to jump directly to that section.



5.7.1.3 Editing

Click a **pad** in the pad grid to edit the assignments for an individual pad.



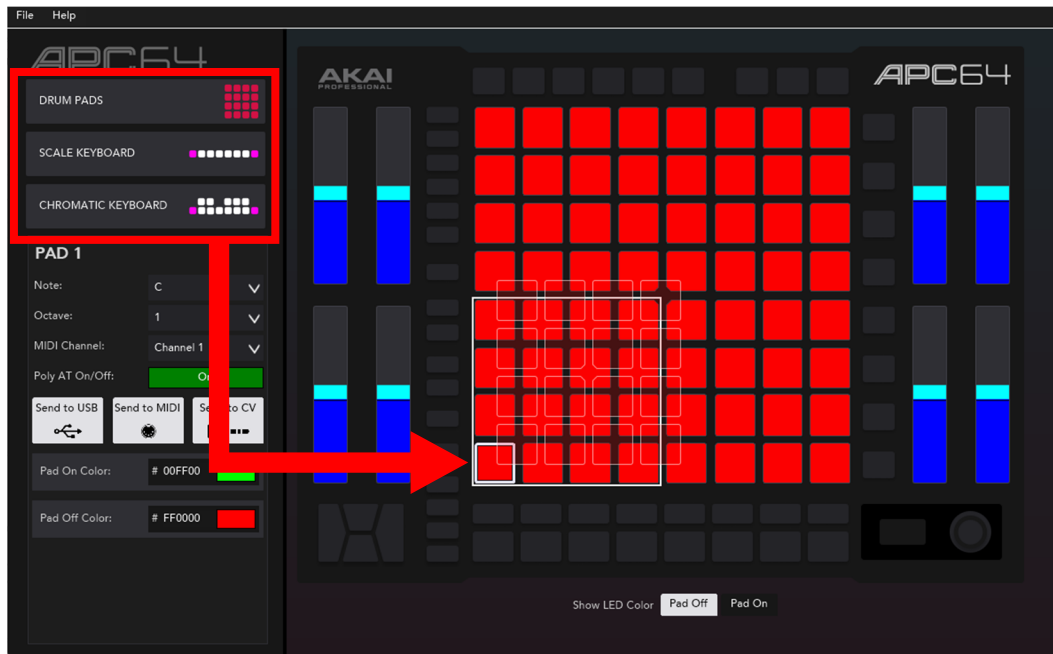
- **Note:** Sets the MIDI note that the pad will play.
- **Octave:** Sets the octave of the MIDI note.
- **MIDI Channel:** Sets the MIDI channel that the note is played on.
- **Poly On/Off:** Enables or disables the pad from sending poly aftertouch messages.
- **Send to USB:** Enables or disables the pad from sending note data over USB.
- **Send to MIDI:** Enables or disables the pad from sending note data over MIDI.
- **Send to CV:** Enables or disables the pad from sending note data over CV.
- **Pad On Color:** Sets the color of the pad when the note is pressed.
- **Pad Off Color:** Sets the color of the pad when the note is released.

Note: When editing colors, you can click on the color swatch to open the color picker to select a new color. You can also directly enter a hex code in the field next to the color swatch, or in the color picker window.

Use the **Show LED Color** option to switch between the **Pad Off** color and **Pad On** color from displaying in the window.

In addition to setting assignments per pad, you can choose from three preset pad layouts to add to the pad grid.

- **Drum Pads:** Adds a classic 4x4 drum layout.
- **Scale Keyboard:** Adds a configurable scale to a single row of pads.
- **Chromatic Keyboard:** Adds a representation of a traditional chromatic piano key layout over two rows of pads.

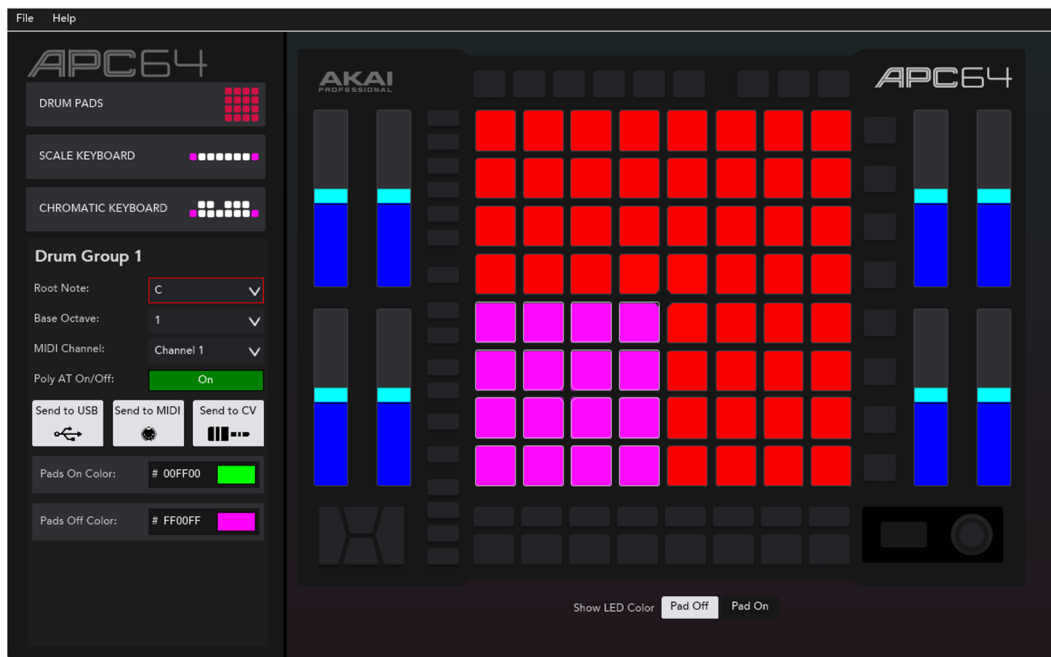


To apply a pad layout, click and drag a pad layout to the desired location on the pad grid.

To edit the pad layout assignments, click the outlined layout in the pad grid. You can then edit the assignments shown below.

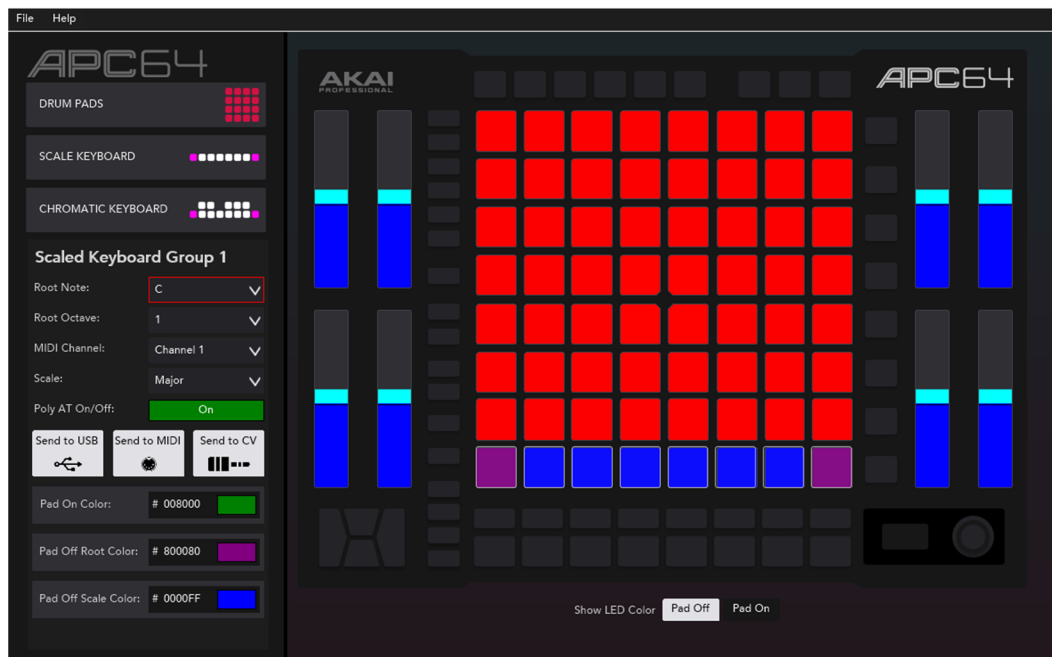
To remove a pad layout, right-click on the group in the pad grid, and then select **Remove Pad Group**.

Drum Group



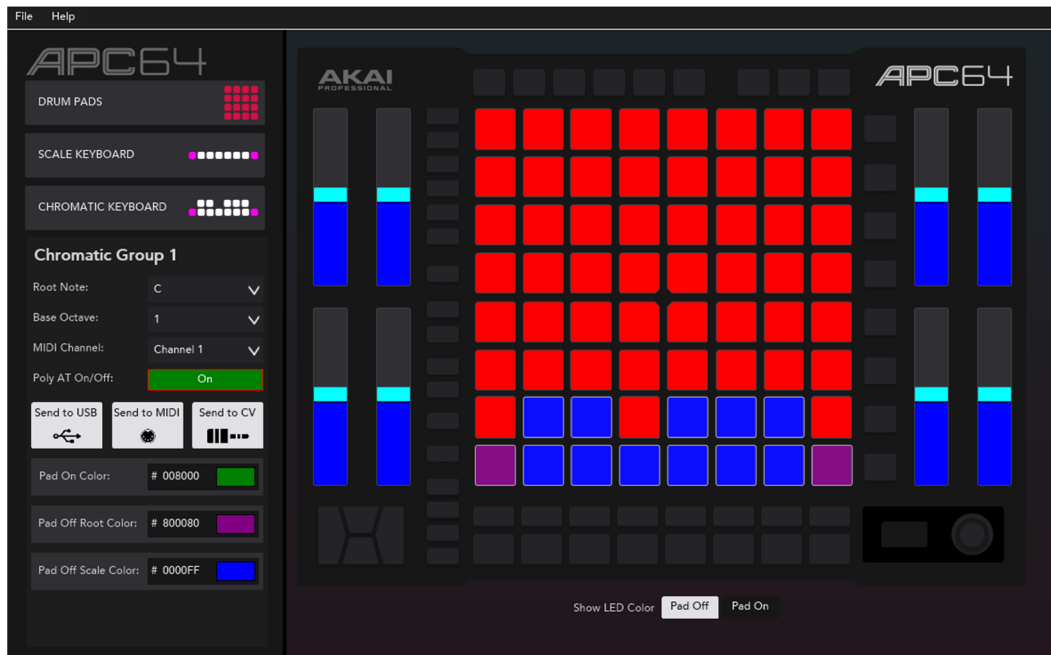
- **Root Note:** Sets the starting note of the pad group.
- **Base Octave:** Sets the starting octave for the pad group.
- **MIDI Channel:** Sets the MIDI Channel of the pad group (**1-16**).
- **Poly On/Off:** Enables or disables the pad group from sending poly aftertouch messages.
- **Send to USB:** Enables or disables the pad group from sending note data over USB.
- **Send to MIDI:** Enables or disables the pad group from sending note data over MIDI.
- **Send to CV:** Enables or disables the pad group from sending note data over CV.
- **Pads On Color:** Sets the color of the pad when the note is pressed. You can enter a hex value or use the color picker to select a color.
- **Pads Off Color:** Sets the color of the pad when the note is released.

Scaled Keyboard Group



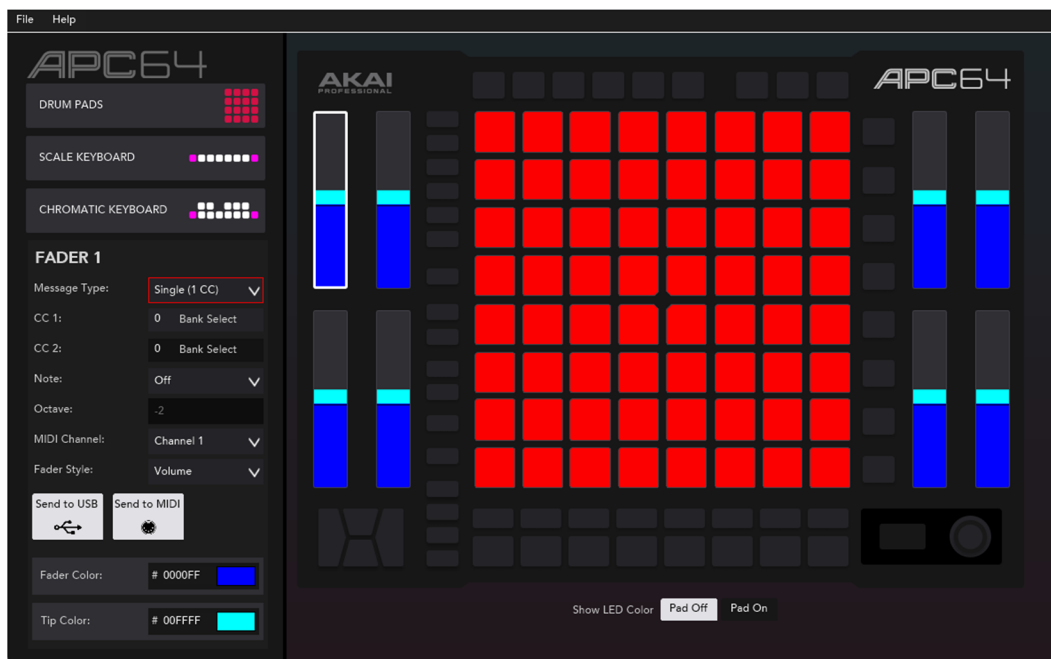
- **Root Note:** Sets the starting note of the scale.
- **Root Octave:** Sets the starting octave for the root note for the scaled keyboard group.
- **MIDI Channel:** Sets the MIDI Channel of the scaled keyboard group.
- **Scale:** Sets the type of scale used for the keyboard group.
- **Poly On/Off:** Enables or disables the scaled keyboard group from sending poly aftertouch messages.
- **Send to USB:** Enables or disables the scaled keyboard group from sending note data over USB.
- **Send to MIDI:** Enables or disables the scaled keyboard group from sending note data over MIDI.
- **Send to CV:** Enables or disables the scaled keyboard group from sending note data over CV.
- **Pad On Color:** Sets the color of the pad when the note is pressed. You can enter a hex value or use the color picker to select a color.
- **Pad Off Root Color:** Sets the color of the root note pad when the note is released.
- **Pad Off Scale Color:** Sets the color of the non-root note pads when the note is released.

Chromatic Group



- **Root Note:** Sets the starting note of the scale.
- **Base Octave:** Sets the starting octave for the chromatic group.
- **MIDI Channel:** Sets the MIDI Channel of the chromatic group.
- **Poly On/Off:** Enables or disables the chromatic group from sending poly aftertouch messages.
- **Send to USB:** Enables or disables the chromatic group from sending note data over USB.
- **Send to MIDI:** Enables or disables the chromatic group from sending note data over MIDI.
- **Send to CV:** Enables or disables the chromatic group from sending note data over CV.
- **Pad On Color:** Sets the color of the pad when the note is pressed. You can enter a hex value or use the color picker to select a color.
- **Pad Off Root Color:** Sets the color of the root note pad when the note is released.
- **Pad Off Scale Color:** Sets the color of the non-root note pads when the note is released.

Click on a **Fader** to edit the assignments for the associated touch fader control.



- **Message Type:** Sets whether the fader message type is **Single (1 CC)** or **Double (2 CC)**.
- **CC 1 / CC 2:** Sets the continuous controller value for the fader. CC 2 is only available when Message Type has been set to Double (2 CC). They CC function will be shown when a new value is entered.
- **Note:** Sets the note value sent by the fader. Set this to **Off** to disable sending a note value.
- **Octave:** Sets the octave of the set note value. This option is not available when Note has been set to **Off**.
- **MIDI Channel:** Sets the MIDI Channel of the fader.
- **Fader Style:** Sets whether the Fader Tip begins at the bottom of the fader (**Volume**) or the middle of the fader (**Pan**). Use Volume for unidirectional parameters, and Pan for bidirectional parameters.
- **Send to USB:** Enables or disables the fader from sending note data over USB.
- **Send to MIDI:** Enables or disables the fader from sending note data over MIDI.
- **Fader Color:** Sets the main fader LED color.
- **Tip Color:** Sets the fader LED color for the fader position LED.

5.7.1.4 Managing Presets

APC64's Projects can be saved as preset files that contain all the MIDI assignments you make in the editor. Using Projects lets you maintain many different control configurations to use in different situations. For instance, you may use different presets for different performances, or use other presets for production with different software.

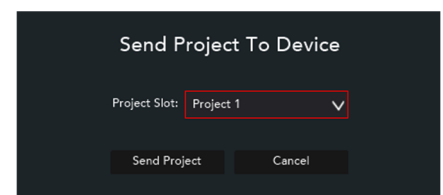
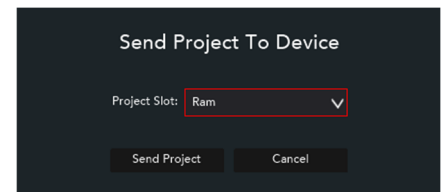
APC64 can store a maximum of **24** Projects, and you can store additional Projects on your computer to load onto APC64 with this editor.

Send Project

After you create custom MIDI assignments using the editor, you can send that preset to be stored in one of APC64's Project slots.

To send a Project:

1. Go to **File > Send Project** (Windows) or **APC64 Project Editor > Send Project** (macOS).
2. In the window that appears, select the desired Project slot. Use the **RAM** option to send the preset to the device without saving it to a slot. This lets you try out the preset's assignments without "committing" them to a particular Project. If you decide that you like the results, you can save them to your computer or send them to a specific Project slot.
3. Click **Send Project** to send it to the device, or **Cancel** to return to the Editor.

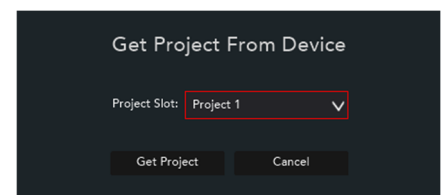
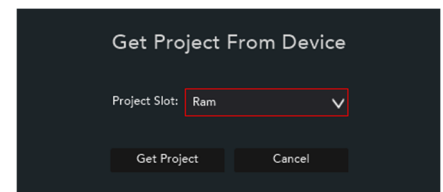


Get Project

If you want to edit an existing preset on APC64 using the Editor, you can use the Get Project option to retrieve the current MIDI assignments.

To import a Project:

1. Go to **File > Get Project** (Windows) or **APC64 Project Editor > Get Project** (macOS).
2. In the window that appears, select the Project slot that you want to import into the Editor. Use the **RAM** option to retrieve the active MIDI assignments, even if they have not been saved to a Project slot.
3. Click **Get Project** to send it to the device, or click **Cancel** to return to the Editor.



Save Project

If you want to save a particular Project on your computer so you can access it later, use the Save Project option.

To save a Project:

1. Go to **File > Save Project** (Windows) or **APC64 Project Editor > Save Project** (macOS).
2. Select a desired location on your computer to store the file.
3. Click **Save** to save the file as an **.APC64** file, or click **Cancel** to return to the Editor.

Open Project

Projects saved to your computer can be reopened in the Editor to make further changes or send them to your device:

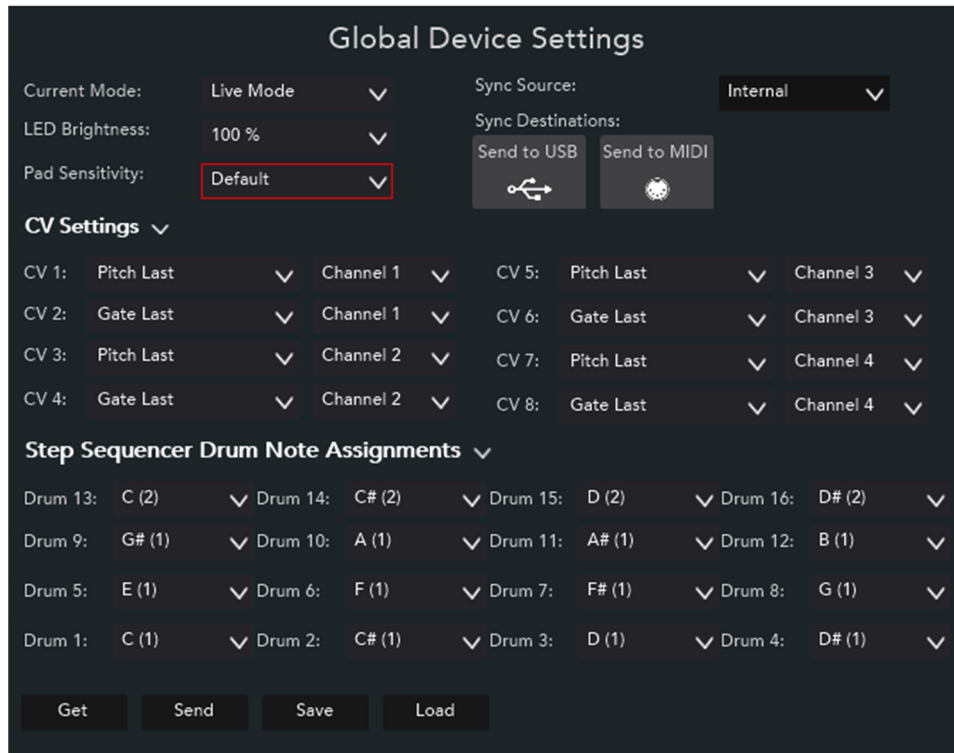
To open a saved Project:

1. Go to **File > Open Project** (Windows) or **APC64 Project Editor > Open Project** (macOS).
2. Locate the desired **.APC64** file using the file browser.
3. Click **Open** to load the Project into the editor, or click **Cancel** to return to the Editor.

5.7.1.5 Global Settings

In addition to managing Projects using the Project Editor, you can also manage the APC64 Global Settings. Your APC64 must be connected to the computer in order to open this window and adjust the settings.

To open the Global Settings, Go to **File > Global Settings** (Windows) or **APC64 Project Editor > Global Settings** (macOS).



From this window, you can adjust the following settings:

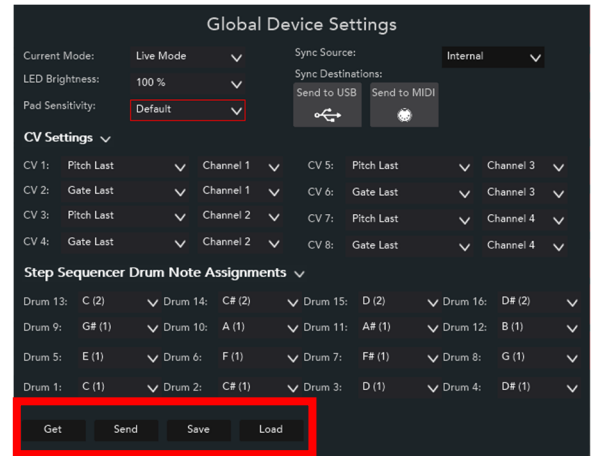
- **Current Mode:** Sets whether APC64 is operating in **Live Mode** or **Standalone Mode**.
- **LED Brightness:** Adjusts the overall brightness level of the device LEDs to **25%**, **50%**, **75%**, or **100%**.
- **Pad Sensitivity:** Adjusts how responsive the pads are. Set to **Default** for standard sensitivity. Set to **Low** to allow for stronger playing, or **High** to lighter playing.
- **Sync Source:** Sets whether the Tempo is synced by the **Internal** MIDI clock, by MIDI clock data sent to the **USB** port, or by MIDI clock data sent to the MIDI **DIN** input.
- **Sync Destination:** Enables or disables whether the internal MIDI clock is sent from the USB port (**Send to USB**) or MIDI DIN output (**Send to MIDI**).
- **CV Settings:** These settings determine what type of MIDI messages each CV port receives, and what MIDI channel each CV port receives messages from. See the following [5.8 CV Operation](#) chapter for more information.
- **Step Sequencer Drum Note Assignments:** Selects the MIDI note value for the 4x4 pad layout when controlling a drum instrument in the Step Sequencer. These values are by default mapped to correspond with Ableton Live's Drum Rack. Changing the values could result in misaligned mapping when controlling Ableton Live.

To retrieve the current Global Device Settings from APC64, click the **Get** button. The changes will be applied immediately.

To send the Global Device Settings to APC64, click the **Send** button. The changes will be applied immediately, and the Global Settings window will close.

To save the Global Device Settings from the Project Editor, click the **Save** button. Use the file browser to select a desired location on your computer to store the **.APC64GlobalSettings** file, and then click **Save**.

To load a previously saved Global Device Settings file into the Project Editor, click the **Load** button. Use the file browser to locate the desired **.APC64GlobalSettings** file, and then click **Open**.



5.8 CV Operation

APC64 features eight CV/Gate ports which can be used to connect to and control other CV-compatible devices, such as synthesizers or drum machines. Use standard 1/8" (3.5 mm) TS cables to send a single CV/Gate signal per output.

Use APC64's [5.6 Global Menu](#) to access the following CV setup options:

The **CV1-8 Source** options (odd numbers between 5 and 19 in the Global Menu) determine what type of MIDI messages the CV port receives.

Pitch: Note messages are sent as CV Pitch messages.

- **Last:** The pitch will change to its new value each time a note message is received.
- **Low:** The pitch will change when the new note value is lower than the current value.
- **High:** The pitch will change the new note value is higher than the current value.

Gate: Note messages are sent as Gate messages, which open and close to trigger note ons and note offs.

- **Last:** The gate is retriggered each time a note message is received.
- **Low:** The gate is retriggered when the new note value is lower than the current value.
- **High:** The gate is retriggered when the new note value is higher than the current value.
- **Legato:** The gate is only retriggered when all held notes are released and then a new note is triggered.

Velocity: Note messages are translated into velocity values, variable between 0-5 V.

- **Last:** The velocity will change each time a note message is received.
- **Low:** The velocity will change when the new note value is lower than the current value.
- **High:** The velocity will change when the new note value is higher than the current value.
- **Legato:** The velocity will change when all held notes are released and then a new note is triggered.

Aftertouch: Channel aftertouch messages on the current channel are sent as a variable CV signal between 0-5 V.

CC 16-23: Continuous controller (CC) messages on the current channel are sent as a variable CV signal between 0-5 V.

Fader 1-8: Messages from the selected fader are sent as a variable CV signal between 0-5 V.

Drum 01-16: The selected drum pad will send a gate message when pressed.

The **CV1-8 Channel** options (even numbers between 6 and 20 in the Global Menu) determine what MIDI channel each CV port receives messages from.

5.8.1 CV Connection Examples

The following examples describe how to connect the CV/Gate outputs on your APC64 to an external device such as a modular or semi-modular analog synthesizer with CV/Gate inputs. In these examples, APC64 will connect to the Moog Music Mother-32 semi-modular analog synthesizer, but the instructions can apply to any device with comparable connections.

5.8.1.1 Standalone Connections

First, set up pitch and gate control to send note information from APC64 in standalone mode to your device.

1. In the [5.6 Global Menu](#), set the **CV1 Source** option to **Pitch-Last**. This will send pitch information (such as notes being played in Note Mode) to your device. Since the CV output is monophonic, the pitch will change each time a new note is received when set to Pitch-Last.
2. Next, set the **CV2 Source** option to **Gate-Last**. This will trigger a new note on message each time a new note is played.
3. Connect the **CV1** output to your external CV device. This will usually be connected to a VCO input; in this case, connect to the **VCO 1V/OCT** input on Mother-32.
4. Connect the **CV2** output to your external CV device. This will usually be connected to a Gate input; in this case, connect to the **Gate** input on Mother-32.
5. Enter Note Mode on APC64 and begin playing the pads. Your external device should begin responding to each new note event.

For even greater note control, you can continue by setting up Velocity and Aftertouch.

1. In the [5.6 Global Menu](#), set the **CV3 Source** option to **Velocity-Last**. This will send velocity MIDI data to your device each time a new value is received.
2. Next, set the **CV4 Source** option to **Aftertouch**. This will send send poly aftertouch MIDI data to your device.
3. Connect the **CV3** output to your external CV device. This will usually be connected to a VCA or Velocity input; in this case, connect to the **VCA CV** input on Mother-32.
4. Connect the **CV4** output to your external CV device. This will usually be connected to some kind of modulation input; in this case, try connecting to the **VCO Mod** input on Mother-32 to use aftertouch to control the amount of modulation applied to the signal.
5. Enter Note Mode on APC64 and begin playing the pads. Your external device should now respond to velocity and aftertouch messages.

Next, try setting up fader control to use APC64's touch faders to control other parameters on your device.

1. In the [5.6 Global Menu](#), set the **CV5 Source** option to **Fader 1**. This will send data from APC64's Touch Fader 1 to your device.
2. Connect the **CV3** output to the CV input of the external device parameter that you want to control. In this case, connect to the **Mix CV** input on Mother-32, allowing you to use the fader to crossfade between the VCO waveform and external audio/white noise.
3. As you move your finger up and down the touch fader, the fader's values will be converted by APC64 and sent to your external CV device to control the selected parameter.

Note: You can customize the CC number, range, and behavior of the touch fader using the APC64 Project Editor Software to further customize fader control. For instance, in the example above you could set the **Fader Style** to **Pan** so that the fader begins at the midpoint of the **Mix** control and can be moved up or down to adjust the mix balance.

You can also use the internal Step Sequencer as a control for your external device. You can use the same setups as above to control pitch, gate, and velocity from the Step Sequencer data, or you can use the **Drum Pad** source options to use the CV outputs as gate triggers based on your sequence.

1. In the **5.6 Global Menu**, set the **CV1-8 Source** options to **Drum Pad 1-8**.
2. Connect the **CV1-8** outputs to the inputs of an external CV device. In this example, you could connect these to trigger inputs or to the inputs of other settings that can be open and closed using a gate.
3. Open the **5.3 Step Sequencer**, and then use drum pads 1-8 to create a rhythmic sequence.
4. When you play the sequence, each drum pad note event will send a gate message to the CV device. You can use this to trigger notes or rhythmically manipulate other parameters.

5.8.1.2 Connections with Ableton Live

In addition to controlling note information from APC64 in standalone mode, you can use APC64 as an interface between Ableton Live and your external CV device.

Begin again by setting up pitch, gate, and velocity control, except this time the MIDI data will come from a track in Ableton Live.

1. Make sure your device is in Ableton Live mode in the **5.6 Global Menu** and open Ableton Live.
2. Follow the same steps **above** to set the **CV1 Source** option to **Pitch**, the **CV2 Source** to **Gate**, and the **CV3 Source** to **Velocity**, and connect the **CV1-3** outputs to the same inputs on your device.
3. In the Global Menu, set the **CV1-3 Channels** to the desired MIDI Channel; in this example, set this to **11**.
4. In Ableton Live, create a new MIDI Track, and then set the **MIDI To** output to **APC64**.
5. Set the track's **MIDI To** channel to the same channel as the **CV1-3 Channels**, in this case **Ch. 11**.
6. Create a new MIDI clip in your Ableton Live track, and then use the clip editor to add note information to it.
7. When you launch the clip in Ableton Live, the pitch, note on/off, and velocity MIDI note data will be converted by APC64 and sent to your external CV device.

You can also use Ableton Live to send MIDI CC data to control other parameters like modulation on your external CV device. Continue by building on the setup above.

1. In the **5.6 Global Menu**, set the **CV4 Source** option to **CC 16**, and the **CV4 Channel** to **11**.
2. Connect the **CV4** output to the CV input of the external device parameter that you want to control. In this case, try connecting to the **VCO Mod** input on Mother-32 to use MIDI CC to control the amount of modulation applied to the signal.
3. In the MIDI track you created above (with **MIDI To** set to **APC64** and **Ch.11**), add automation using MIDI CC 16. You can add this to your clip in Session View (using Clip Envelopes) or to your recording in Arrangement View (using Automation Mode).
4. Launch the clip again, and this time the MIDI CC 16 automation will be converted by APC64 and sent to your external device to control the selected parameter.

6.0 Appendix

6.1 Technical Specifications

Display	Graphical full color LCD
Connections	USB-C® 8 1/8" (3.5 mm) CV/Gate 2 1/8" (3.5 mm) MIDI Output 1 1/8" (3.5 mm) MIDI Input
Dimensions (width x depth x height)	10.7" x 14.6" x 1.4" 272 x 371 x 34.5 mm
Weight	3.5 lb 1.6 kg

Specifications are subject to change without notice.

Model: ADAB

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