

USER MANUAL

KEYLAB ESSENTIAL
UNIVERSAL MIDI CONTROLLER

ARTURIA®
YOUR EXPERIENCE • YOUR SOUND

Special Thanks

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Congratulations on purchasing the Arturia KeyLab Essential!

Get ready to start your musical journey.

KeyLab Essential is a class-compliant, universal MIDI controller, capable of harnessing the power of practically any software instrument and DAW. It has been designed to enhance your workflow, let you spend less time using a keyboard and mouse to create music, and seamlessly integrate with Arturia Analog Lab 2.

This instruction manual covers the general use and features of KeyLab Essential, and goes into more detail on the technical aspects of the controller so you can make the most of its advanced functionality.

In this package, you will find:

- KeyLab Essential controller keyboard
- USB cable
- Quick Start Guide This small document gives you a few simple steps to get your KeyLab Essential up and running, along with the codes you need to register the controller keyboard and activate the included software titles:
 - Analog Lab 2
 - Ableton Live Lite

Don't lose your registration information! The serial numbers and activation codes detailed in the Quick Start Guide are required to unlock your software.

Remember to register! It sounds boring, but it's worth it. Registering is important because it lets you download and activate Analog Lab 2, as well as the Arturia MIDI Control Center.

Specifications Subject to Change

The information contained in this manual is believed to be correct at the time of printing. However, Arturia reserves the right to change or modify any of the specifications without notice or obligation to update the hardware that has been purchased.

IMPORTANT: Protect your ears!

The product and its software, when used in combination with an amplifier, headphones or speakers, may be able to produce sound levels that could cause permanent hearing loss. DO NOT operate for long periods of time at a high level or at a level that is uncomfortable. If you encounter any hearing loss or ringing in the ears, you should consult an audiologist.

NOTICE: Service charges incurred due to a lack of knowledge relating to how a function or feature works (when the product is operating as designed) are not covered by the manufacturer's warranty, and are therefore the owner's responsibility. Please study this manual carefully and consult your dealer before requesting service.

Precautions include, but are not limited to:

1. Read and understand all the instructions.
2. Always follow the instructions on the instrument.
3. Before cleaning the instrument, always remove the USB cable. When cleaning, use a soft and dry cloth. Do not use gasoline, alcohol, acetone, turpentine or any other organic solutions; do not use a liquid cleaner, spray or cloth that's too wet.
4. Do not use the instrument near water or moisture, such as a bathtub, sink, swimming pool or similar place.
5. Do not place the instrument in an unstable position where it might accidentally fall over.
6. Do not place heavy objects on the instrument. Do not block openings or vents of the instrument; these locations are used for air circulation to prevent the instrument from overheating. Do not place the instrument near a heat vent or any place of poor air circulation.
7. Do not open and insert anything into the instrument that may cause a fire or electrical shock.
8. Do not spill any kind of liquid onto the instrument.
9. Always take the instrument to a qualified service center. You will invalidate your warranty if you open and remove the cover, and improper assembly may cause electrical shock or other malfunctions.
10. Do not use the instrument during a storm; otherwise it may cause long distance electrical shock.
11. Do not expose the instrument to hot sunlight.
12. Do not use the instrument when there is a gas leak nearby.
13. Arturia is not responsible for any damage or data loss caused by improper operation of the instrument.

Table Of Contents

1. Getting Started	2
1.1. Connecting KeyLab Essential	2
1.2. The Front Panel.....	2
1.3. The Rear Panel.....	3
2. Guided Tour.....	4
2.1. Keyboard.....	4
2.2. Pitch & modulation wheel.....	4
2.3. Octave Control & Transpose.....	5
2.3.1. Setting the Octave.....	5
2.3.2. Activating Transpose.....	6
2.3.3. Resetting Transpose.....	6
2.4. Chord mode.....	6
2.4.1. Activating Chord mode.....	6
2.5. Pads	7
2.5.1. Selecting Maps using the pads	7
2.6. MIDI Channel selection.....	8
2.6.1. Changing MIDI Channel.....	8
2.7. Encoders	8
2.8. Faders	8
2.9. Part Controls.....	9
2.10. DAW Command Center.....	10
2.11. Preset Browser & Display.....	11
2.12. Sending a Panic Message.....	11
2.13. Factory Reset.....	12
3. MIDI Control Center	13
3.1. Customize your perfect controller	13
3.1.1. Connecting to MIDI Control Center	13
3.1.2. Device Memories.....	14
3.1.3. Local Templates.....	15
3.2. MCC Controller Map.....	16
3.3. Customizing the Pads.....	17
3.3.1. Pad Off.....	17
3.3.2. Pad MIDI Note.....	17
3.3.3. Pad Switched Control.....	17
3.3.4. Pad Patch Change.....	18
3.3.5. Pad MMC.....	18
3.4. Customizing the Encoders.....	19
3.4.1. Encoder Off.....	19
3.4.2. Encoder Control.....	19
3.5. Customizing the Faders.....	20
3.5.1. Fader Off.....	20
3.5.2. Fader Control.....	20
3.6. Customizing the Keyboard.....	20
3.7. Customizing the Sustain Pedal.....	21
3.7.1. Sustain Pedal Off.....	21
3.7.2. Sustain Pedal MIDI Note.....	21
3.7.3. Sustain Pedal Switched Control.....	21
3.7.4. Sustain Pedal MMC.....	21
3.8. Changing the Global Settings.....	22
4. Software License Agreement.....	23
5. Declaration of Conformity	25

1. GETTING STARTED

1.1. Connecting KeyLab Essential

First of all, we recommend that you install the Analog Lab 2 and the other included software, and be sure to register and authorize them.

Connect KeyLab Essential to your computer using the included USB cable. Power is also supplied through this connection.

As KeyLab Essential is a class-compliant USB device, its drivers are automatically installed when connecting to a computer. Your controller keyboard is now ready to use.

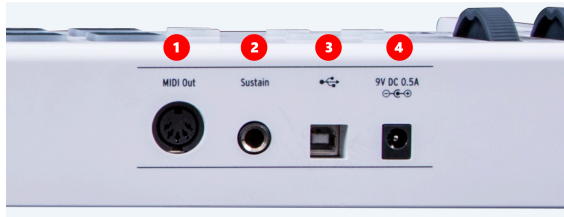
If you wish to use KeyLab Essential as a universal MIDI controller for outboard equipment, simply use the optional 9v DC 500mA PSU, and connect KeyLab Essential's MIDI Out socket to your preferred equipment's MIDI In socket using a standard MIDI cable.

1.2. The Front Panel



1. **Pitch & Mod wheels** These are used to control pitch bend and modulation parameters of your sound.
2. **Octave, Chord & Transpose buttons** These buttons activate KeyLab Essential's various pitch control and chord functions.
3. **Performance Pads** The pads can be used to perform percussive elements, trigger samples within your DAW, or toggle the Map mode of KeyLab Essential between Analog Lab 2, DAW functions, or user-made templates.
4. **DAW Command Center** This section of KeyLab Essential controls various functions within your preferred audio recording software, including transport control and common commands.
5. **Preset Browser & Display** This section of the controller is used to select presets in Analog Lab 2, navigate menus, and display parameter and preset info.
6. **Part Controls** This small section of assignable buttons is used to flick between the 2 parts within Analog Lab 2's Multi Mode, the dedicated Live map and track shifting in DAW mode.
7. **Encoders** The rotary knobs are used to control software instrument parameters, as well as channel pan within your DAW.
8. **Faders** The compact faders are used to alter software instrument parameters, as well as changing your channel volume within your DAW.

1.3. The Rear Panel



1. **MIDI Out** KeyLab Essential's MIDI Out socket can be used to send MIDI information to outboard synths & modules when powered with the optional PSU, rather than via USB.
2. **Sustain Pedal Input** The sustain pedal input automatically detects the polarity of your sustain pedal when KeyLab Essential is turned on, so it can be used with practically any standard pedal.
3. **USB Connection** Use this socket to connect KeyLab Essential to your device. This port provides both power, MIDI data, and control information.
4. **Power Socket** If you wish to use KeyLab Essential in standalone mode using the MIDI Out socket, you can connect the optional 9v DC 500mA PSU here.

2. GUIDED TOUR

2.1. Keyboard



KeyLab Essential features either 49 or 61 velocity sensitive, synth-action keys.

This is obviously used to capture melodic performance, but can also be used in conjunction with the MIDI Channel Select function to change KeyLab Essential's MIDI output channel.

2.2. Pitch & modulation wheel



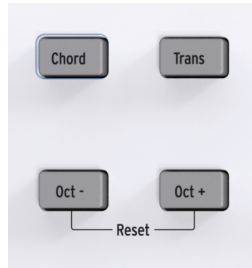
These controllers allow for real-time pitch shifting and modulation control.

Moving the Pitch Wheel up or down will raise or lower the pitch of the sound. This range of this effect is set within the hardware or software instrument it is controlling.

Moving the Modulation Wheel up increases the modulation setting of your selected sound. The effect this has on the sound will depend on the settings of the instrument it is controlling. Occasionally, certain instruments or presets will not use the modulation parameter.

These controls transmit standard MIDI commands, and cannot be customized using the MIDI Control Center.

2.3. Octave Control & Transpose



2.3.1. Setting the Octave

Pressing the Oct - and Oct + buttons will shift the range of KeyLab Essential's keyboard, giving you access to higher and lower pitches.

When activated, the selected octave button will blink at a certain speed, indicating how low or high you have transposed the keyboard. This is indicated as follows:

- **Octave +3:** Oct + blinks quickly
- **Octave +2:** Oct + blinks normally
- **Octave +1:** Oct + blinks slowly
- **Standard:** Neither Octave button blinks
- **Octave -1:** Oct - blinks slowly
- **Octave -2:** Oct - blinks normally
- **Octave -3:** Oct - blinks quickly

To quickly reset the octave shift and set the KeyLab Essential to the neutral position, hit both Oct - and Oct + buttons simultaneously.



NOTE: Both Octave and Transpose settings can be saved within User map presets.

2.3.2. Activating Transpose

The Transpose function lets you shift the pitch of the keyboard to make performance as straightforward as possible.

For example, you may wish to transpose the keyboard to perform with a vocalist who finds it more comfortable to sing a song in a particular key. You can simply transpose the keyboard, and play the song as you normally would.

To transpose in KeyLab Essential, simply press and hold the Trans button, and select the note you wish to hear at the position of C on the keyboard. Notes lower than middle C will transpose down, and notes above Middle C will transpose up.

The Trans button will now brightly light up, letting you know that transpose mode is activated.



NOTE: The range of the Transpose function is -11 to +11 notes. To extend this range, you can use it in conjunction with the Octave function.

You can toggle the previously set transposition on and off. While disabled, the transpose button will remain dimly lit to indicate that it remembers your previous selection.

2.3.3. Resetting Transpose

To reset transpose mode, simply hold the Trans button down and select a C note. The light will then turn off.

This feature can be used in combination with the Octave buttons.

2.4. Chord mode

KeyLab Essential features a Chord mode which lets you perform a chord of your choice using only one finger. This is a great creative tool for thickening up your composition and giving your melodies extra depth.

2.4.1. Activating Chord mode

To activate Chord mode, simply press and hold the Chord button, and then enter your preferred chord on the keyboard, up to a maximum of 10 notes. Once you release the Chord button, this chord can be played by pressing just one note.



NOTE: If you want to program a chord that would be difficult to play with one hand, you can simply hit each note one by one while the Chord button is held.

The lowest note of the chord selected is considered to be the root note, and is automatically transposed to any new note you play. For example, if you wanted to perform a simple 2-note chord using the Chord feature, you would press the Chord button, simultaneously play a C and G, and then release the Chord button. Now this chord can be played on any key.

This function can be toggled on and off but pressing the Chord button, and the previously used chord will be stored while the unit remains powered.

2.5. Pads



KeyLab Essential features 8 dual function performance pads that are both velocity sensitive and pressure sensitive.

The default, the pads output MIDI data that is typically used to perform drum and percussion parts. The output of the 8 pads are:

Pad	MIDI note	Default MIDI Channel
Pad 1	C1 / 36	10
Pad 2	C#1 / 37	10
Pad 3	D1 / 38	10
Pad 4	D#1 / 39	10
Pad 5	E1 / 40	10
Pad 6	F1 / 41	10
Pad 7	F#1 / 42	10
Pad 8	G1 / 43	10

The pads can be reassigned to any MIDI CC parameter or note of your choice within a User map by using the Arturia MIDI Control Center.

2.5.1. Selecting Maps using the pads

The pads can also be used to select the different Map options within KeyLab Essential.

When the Map Select button is pressed, the corresponding pad will light up to show the Map currently in use. The 8 available Maps include:

- **Analog Lab:** Switches KeyLab Essential's controls to work seamlessly with Analog Lab 2. These parameters are marked with blue text.
- **DAW:** Switches the parameters of KeyLab Essential to control different aspects of your recording software.
- **User:** 6 individually programmable user banks to let you create your own custom maps. These are created and edited using the Arturia MIDI Control Center.

2.6. MIDI Channel selection

KeyLab Essential gives you a quick, efficient way of changing the User MIDI Channel it currently outputs on.

2.6.1. Changing MIDI Channel

To change the MIDI channel, simply hold the MIDI CH button, and press the corresponding note on the keyboard below the MIDI channel you wish to select. Now all controls set to follow the "User" MIDI Channel in the MCC will change to that channel.

For example, to make KeyLab Essential's output to MIDI channel 8, hold the MIDI CH button and hit the note E2 on the keyboard.

2.7. Encoders



The 9 rotary knobs of KeyLab Essential are endless encoders with dual functionality.

Using the **Analog Lab map**, the encoders will affect the corresponding parameters displayed within Analog Lab 2. This exact parameter being controlled will vary between different presets.

In the **DAW map**, the encoders will alter the panning of their corresponding channel on the mixer.

While using any of the **User maps**, the knobs can be freely assigned to any MIDI CC parameter you choose using the Arturia MIDI Control Center.

2.8. Faders



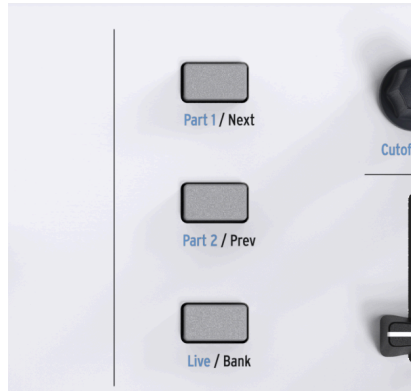
Like the encoders, KeyLab Essential's 9 faders have multiple modes, depending on the map selection being used.

Using the **Analog Lab map**, the faders control their corresponding parameters displayed within Analog Lab 2. As with the encoders, the parameters being controlled change depending on which preset is selected.

While using the **DAW map**, faders 1-8 control the volume of 8 channels within your DAW, and fader 9 controls your master volume.

The faders can also control any other MIDI CC parameter you wish while using any of the **User maps**, and can be assigned using the Arturia MIDI Control Center.

2.9. Part Controls



The 3 control buttons are used to switch the functions of KeyLab Essential's encoders and faders, letting you control different channels while using the DAW map, and control the parameters of all 3 sections of Analog Lab's Multi Mode.

Using the **Analog Lab map**, the control buttons function in the following way:

- **Part 1:** Select and control Part 1 in Analog Lab Multi Mode.
- **Part 2:** Select and control Part 2 in Analog Lab Multi Mode.
- **Live:** Select and control the Macro parameters, levels, panning, Send A & Send B controls.



TIP: To learn more about setting up Macros within Analog Lab 2, and learn how to activate Multi Mode, please consult the Analog Lab 2 user manual.

Using the **DAW map**, the control buttons function in the following way:

- **Next / Prev:** Shifts the focus of the encoders and faders in your DAW. The amount is determined by the Bank button:
 - Bank ON: shifts tracks by 8 channels
 - Bank OFF: shifts tracks by 1 channel
- **Bank:** Toggles the function of the Next/Prev buttons.

When using a User map, these buttons can also be remapped using the MCC, letting you further customize and personalize your KeyLab Essential experience.

2.10. DAW Command Center



Using the industry standard Mackie HUI data language, KeyLab Essential gives you direct access to the most frequently used commands in your recording software, including:

- **Save:** Saves your track.
- **Punch:** Enables “punch in” style recording in your DAW.
- **Undo:** Reverses your last action, such as deleting a track, or capturing a MIDI performance.
- **Metro:** Toggles your DAW’s metronome on and off.

The DAW Command Center also puts popular transport controls at your fingertips:

- **Loop:** Toggles the Loop function in your DAW on and off. The loop region is set within your software.
- **Rewind / Fast-forward:** quickly jogs the playback cursor back and forth, letting you quickly find specific points in your track while editing.
- **Stop:** Stops playback. In some recording software, this will also return the playback cursor to the start of the track.
- **Play / Pause:** Starts and pauses your track at the current position of the playback cursor in your DAW.
- **Record:** Arms the record function in your DAW. Hitting the Record button while the track is stopped will begin playback while recording. If the track is already playing, hitting Record will begin recording from the current playback cursor position.

The buttons in the DAW Command Center send set control messages to your software, and are not configurable.

The output of the DAW Command Center can be toggled between MCU and HUI protocols within the MCC.



NOTE: KeyLab Essential’s compatibility with your chosen DAW will depend on how each manufacturer handles the MCU and HUI protocols. For more information, consult the KeyLab Essential page on the Arturia website, or the documentation of your preferred DAW.

2.11. Preset Browser & Display



KeyLab Essential features a powerful Preset Browser and clickable jog wheel to help you quickly find the sound you're looking for within Analog Lab 2.

With the **Analog Lab map** engaged, the whole Preset Browser becomes a dedicated navigator for Analog Lab 2. Choosing the right sound from over 5,000 presets can be daunting, but KeyLab Essential makes it easy.

The **Cat/Char switch** lets you use the jog wheel to select the type, characteristics, and instrument you are looking for, helping you narrow down your search.

Once you have highlighted something you want, press the jog wheel to select it. Once selected, the choice will be marked with an asterisk *. Your selection can be removed by clicking on the jog wheel again, or by using the "Clear Filter" option inside Analog Lab 2.

Once you have selected your desired characteristics, you can then press the **Preset switch* and use the jog wheel to navigate through the presets that match your selection. To choose a preset, press the jog wheel.

If you want to try lots of presets in a sequence to find the right sound, simply use the **Backward and Forward buttons**. When using these buttons, there is no need to press the jog wheel to make your selection.

Preset names, browsing information, and characteristics are displayed in the **2-line LCD display**.

TIP: If the **DAW map** is selected, the jog wheel can be used to move the playback cursor within your recording software backwards and forwards, speeding up your workflow.

2.12. Sending a Panic Message

Occasionally you may find that some notes continue playing after you have changed a patch on your virtual instrument, or switched between different instruments while playing.

Don't worry, you can easily remedy this by sending what is known as a "Panic Message", which resets all controllers and sends a "note off" message to all MIDI channels.

To do this using KeyLab Essential, press and hold the < and > buttons simultaneously.

2.13. Factory Reset

Sometimes you may wish to factory reset your KeyLab Essential. This will initialize the unit, putting it in its default state.

To factory reset your KeyLab Essential, follow these simple steps:

- Make sure KeyLab Essential's USB cable is disconnected.
- Press and hold Oct+ and Oct- buttons.
- Insert the USB cable.
- The LCD screen will display a factory reset message.
- Confirm the reset by pressing the central knob.



WARNING: Factory resetting your KeyLab Essential will clear all saved internal User maps. Be sure to back up your settings using the Arturia Software Center.

3. MIDI CONTROL CENTER

KeyLab Essential has been designed to give you quick access to the most important, and frequently used controls. Rather than bury its extra functionality in sub-menus, you can use the Arturia MIDI Control Center to access the controller's full range of abilities, such as creating your own personalized maps.



3.1. Customize your perfect controller

You don't need to install the MIDI Control Center to use your new controller keyboard, but if you want to expand its functionality and make full use of KeyLab Essential's wide range of abilities, we recommend that you install it.

Taking a little time to create your own custom User Maps and learn more about what KeyLab Essential is capable of is massively rewarding. We're sure you'll be amazed at what you can achieve with this simple but powerful controller.

3.1.1. Connecting to MIDI Control Center

Once you have downloaded and installed the MIDI Control Center - or MCC - simply open the program while your KeyLab Essential is connected to your computer.

MCC will automatically connect to the controller, and display an image of it in its main window.

i **TIP:** If you have multiple Arturia devices connected at the same time, you can select the one you wish to edit by selecting it from the drop-down menu in the **Device** section of MCC.

Now your KeyLab Essential is connected, let's go over a few of the simple ways to personalize your controller:

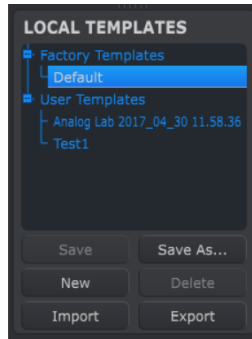
3.1.2. Device Memories



The Device Memories section of MCC displays the 8 banks that correspond to the 8 Maps within KeyLab Essential.

- **Analog Lab** - This map is dedicated to using KeyLab Essential within Analog Lab 2. This particular map is read-only, and cannot be altered.
- **DAW** - This map is dedicated to using KeyLab Essential to control your recording software. Again, this map is read-only, and cannot be altered.
- **User 1-6** - These maps correspond to User Map 1 - 6 on KeyLab Essential, and are the saveable maps you can use to customize your KeyLab Essential experience.
- **Store to** - This function lets you save your current template to the highlighted User slot.
- **Recall from** - This function lets you recall the highlighted map, letting you edit and refine the settings before saving them, or storing them to one of the KeyLab Essential User slots.

3.1.3. Local Templates



The Local Templates section lets you store and organize your custom User maps without needing to save or recall settings from KeyLab Essential. It can also be used to load pre-configured maps generated from the Arturia user community.

- **Factory templates** - This section displays the default settings of KeyLab Essential, giving you a useful 'initialized' patch to start from or return to.
- **User templates** - This section displays the saved User maps contained within your computer. These can either be created by you, or imported maps created by other users.
- **Save** - Save the changes you have made to the current User map.
- **Save As** - Save a copy of the current User map, and give it a new name.
- **New** - Creates a new, default User map.
- **Delete** - Deletes the User map currently highlighted.
- **Import** - Lets you import a pre-made User map by opening a browser. Simply locate the desired file, and hit **Open**.
- **Export** - Lets you export your User map to the location of your choice. Just choose the location and name the file.

3.2. MCC Controller Map



This section of the MCC is where you can customize the way the performance pads, rotary encoders, faders, keyboard, and sustain pedal input react. These settings can then be stored in one of KeyLab Essential's 6 User Maps

Don't worry if this seems confusing at first, there's no way to break KeyLab Essential with the MIDI Control Center. Feel free to experiment, tweak parameter and have fun creating your own maps. You can always reload the default templates if you make a mistake.

To select a parameter to change, simply mouse over the part of the controller you would like to change, and click on it.



NOTE: Some sections of the KeyLab Essential - such as the DAW Command Center - cannot be customized.

In the next part of the manual, we'll take a look at the options available for each the controls.

3.3. Customizing the Pads

The Mode menu lets you choose between the different modes available per pad. Each mode contains a unique set of parameters:

3.3.1. Pad Off

Disables the pad. This can be used to prevent accidentally triggering the pad when it is not required in your personal User Map.

3.3.2. Pad MIDI Note

This option is used to output standard MIDI notes using the pad.

- **Channel:** Select the MIDI channel output for the selected pad, between 1 to 16. This can also be set to "user", which will make the pad output to the default MIDI channel selected in the Device Settings.
- **Color:** Select the color the pad will illuminate on being struck or toggled on.
- **Note:** Select the MIDI note the pad will output when played, from C-2 to G8.
- **Option:** Choose between Gate and Toggle. Gate activates the pad only when struck or depressed and deactivates it when released, and Toggle activates the pad when struck, and deactivates it when struck again.

3.3.3. Pad Switched Control

This option can be selected to use your pads as a parameter controller, rather than outputting specific notes.

- **Channel:** Select the MIDI channel output for the selected pad, between 1 to 16. This can also be set to "user", which will make the pad output to the default MIDI channel selected in the Device Settings.
- **Color:** Select the color the pad will illuminate on being struck or toggled on.
- **CC Number:** Selects the MIDI command you would like to assign to this pad. Standard MIDI assignments are named within the drop-down menu to help you navigate the choices.
- **Option:** Choose between Gate and Toggle. Gate activates the pad only when struck or depressed and deactivates it when released, and Toggle activates the pad when struck, and deactivates it when struck again.

3.3.4. Pad Patch Change

This option allows you to use KeyLab Essential's pads to trigger patch and program changes within virtual instruments, outboard synths, and much more.

- **Color:** Select the color the pad will illuminate on being struck or toggled on.
- **Channel:** Select the MIDI channel output for the selected pad, between 1 to 16. This can also be set to "user", which will make the pad output to the default MIDI channel selected in the Device Settings.
- **Program Number:** Select the MIDI Program number you wish to change when the pad is activated. Use the on-screen rotary to choose a value between 0 and 127.
- **Bank LSB and Bank MSB:** These parameters let you define the Least Significant Byte and Most Significant Byte determined when the pad is activated. Use the on-screen rotaries to choose a value between 0 and 127. To determine how to set these parameters, consult the documentation of the hardware or software instrument you are controlling using KeyLab Essential.

3.3.5. Pad MMC

This simple option lets you use any of KeyLab Essential's pads as an MMC command button.

- **Color:** Select the color the pad will illuminate on being struck or toggled on.
- **MMC:** Choose between the 3 MMC options available for the pads: Start, Stop, and Record.

3.4. Customizing the Encoders

The Mode menu lets you choose between the 2 modes available for each encoder. Each mode contains a unique set of parameters:

3.4.1. Encoder Off

Disables the rotary encoder. This can be used to prevent accidentally moving the knob when it is not required in your personal User Map.

3.4.2. Encoder Control

- **Name:** Lets you enter your personal name for the encoder which will display on the LCD screen when the knob is used. This can be up to a maximum of 12 characters long.
- **Option:** This lets you change the encoders response from Absolute to Relative #1-3.
- **Acceleration:** This parameter alters how the rotary encoder responds to the varying speed you turn it. This can be set as:
 - *None:* The encoders move at a set speed and do not accelerate.
 - *Medium:* The encoders will accelerate when moved faster.
 - *Fast:* The encoders will accelerate quickly when moved faster.
 - *1:1:* The encoders will precisely match the speed that you turn the rotary knob.
- **Channel:** Select the MIDI channel output for the selected encoder, between 1 to 16. This can also be set to "user", which will make the encoder output to the default MIDI channel selected in the Device Settings.
- **CC Number:** Selects the MIDI command you would like to assign to this encoder. Standard MIDI assignments are named within the drop-down menu to help you navigate the choices.
- **Min Value & Max Value:** These parameters let you set the minimum and maximum values the rotary can sweep between.



TIP: Setting the Min & Max Values of the encoders is a great way of ensuring you only ever move within a synth parameter sweet-spot, for example.

3.5. Customizing the Faders

The Mode menu lets you choose between the 2 modes available for each fader. Each mode contains a unique set of parameters:

3.5.1. Fader Off

Disables the fader. This can be used to prevent accidentally moving the fader when it is not required in your personal User Map.

3.5.2. Fader Control

This mode is the standard mode for the fader, and lets you customize how each fader responds when used.

- **Name:** Lets you enter your personal name for the fader which will display on the LCD screen when the fader is used. This can be up to a maximum of 12 characters long.
- **Option:** This lets you set the fader's function between a traditional Fader, and a Drawbar for use with virtual organ instruments.
- **Channel:** Select the MIDI channel output for the selected fader, between 1 to 16. This can also be set to "user", which will make the fader output to the default MIDI channel selected in the Device Settings.
- **CC Number:** Selects the MIDI command you would like to assign to the fader. Standard MIDI assignments are named within the drop-down menu to help you navigate the choices.
- **Min Value & Max Value:** These parameters let you set the minimum and maximum values the fader can move between.

3.6. Customizing the Keyboard

KeyLab Essential's keyboard can also be modified using the MIDI Control Center.

- **Channel:** Select the MIDI channel output for KeyLab Essential's keyboard, between 1 to 16. This can also be set to "user", which will make the fader output to the default MIDI channel selected in the Device Settings.
- **Semi:** This parameter is used to control the transposition of the keyboard. This can be set in semitones, from -11 to +11.
- **Octave:** This parameter is used to set the octave transposition of the keyboard. This can be set from -3 to +3 octaves.



TIP: Don't forget you can change the dynamic range of the keyboard within the Device Settings.

3.7. Customizing the Sustain Pedal

The Mode menu lets you choose between the different modes available for the sustain pedal input. Each mode contains a unique set of parameters:

3.7.1. Sustain Pedal Off

Disables the sustain pedal. This can be used to prevent accidentally changing your sound when it is not required in your personal User Map.

3.7.2. Sustain Pedal MIDI Note

This option is used to output standard MIDI notes using the pad.

- **Option:** Choose between Gate and Toggle. Gate activates the sustain pedal only when pressed and deactivates it when released, and Toggle activates the pad when pressed, and deactivates it when pressed again.
- **Channel:** Select the MIDI channel output for the selected pad, between 1 to 16. This can also be set to "user", which will make the pad output to the default MIDI channel selected in the Device Settings.
- **Note:** Select the MIDI note the sustain pedal will output when depressed, from C-2 to G8.

3.7.3. Sustain Pedal Switched Control

This option can be selected to use your sustain pedal as a parameter controller.

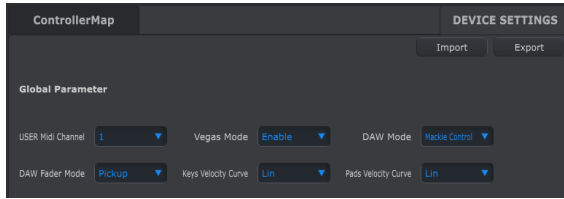
- **Option:** Choose between Gate and Toggle. Gate activates the sustain pedal only when pressed and deactivates it when released, and Toggle activates the pad when pressed, and deactivates it when pressed again.
- **Channel:** Select the MIDI channel output for the sustain pedal input, between 1 to 16. This can also be set to "user", which will make the pad output to the default MIDI channel selected in the Device Settings.
- **CC Number:** Selects the MIDI command you would like to assign the sustain pedal to. Standard MIDI assignments are named within the drop-down menu to help you navigate the choices, but for normal sustain pedal use this should be set to #64.
- **Off Value and On Value:** These parameters let you select the Off and On MIDI values for the sustain pedal. You could use these settings to customize the feel of the pedal and how it reacts to your instruments. Use the on-screen rotaries to choose a value between 0 and 127.

3.7.4. Sustain Pedal MMC

This simple option lets you use KeyLab Essential's sustain pedal input as an MMC command switch.

- **MMC:** Choose between the 3 MMC options available for the pads: Start, Stop, and Record.

3.8. Changing the Global Settings



The **Device Settings** section of MCC lets you alter some of the global settings of the KeyLab Essential. Let's take a closer look at what each parameter does:

- **User MIDI Channel:** This changes the default MIDI channel output for KeyLab Essential from 1 to 16.
- **Vegas Mode:** When KeyLab Essential is left idle and untouched for around 5 minutes, it will begin an eye-catching, colorful light show. You can choose to Enable or Disable this as you see fit.
- **DAW Mode:** This parameter lets you toggle the control language used by the DAW Command Center between Mackie and HUI. Depending on your DAW of choice, you may wish to change this setting to ensure maximum functionality of KeyLab Essential in your recording software.
- **DAW Fader Mode:** This setting changes how KeyLab Essential's faders react within your recording software. The two modes available are:
 - **Pickup:** the faders in your DAW will gradually move to match the current position of the fader on your controller as it moves.
 - **Jump:** the fader in your DAW will jump immediately to the current position of the fader on your controller as soon as it is moved, and follow its movement from there.
- **Keys Velocity Curve & Pads Velocity Curve:** These parameters lets you alter the response of KeyLab Essential's keyboard and performance pads.
 - **Lin:** Linear - provides a balanced response where the strength of your key and pad strikes is equally matched to the MIDI velocity output.
 - **Log:** Logarithmic - shifts the focus of the MIDI velocity output to being softer, making it harder to strike the higher velocities and giving you a wider range of articulation in the softer and central velocities.
 - **Exp:** Exponential - shifts the focus of the MIDI velocity output to being harder, making it harder to strike the softer velocities and giving you a wider range of articulation in the central and hard velocities.
 - **Full:** Forces the MIDI velocity to always output at 127, the maximum value.

You can also **Import** and **Export** these settings, letting you save time by quickly setting all of the global parameters at once.

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