USER MANUAL

KEYLAB ESSENTIAL

UNIVERSAL MIDI CONTROLLER

ARTURIA

YOUR EXPERIENCE • YOUR SOUND

Special Thanks

DIRECTION

Nicolas Dubois Sebastien Colin Frédéric Brun

PROGRAMMING

Sebastien Colin Leonard Sauget Olivier Delhomme

INDUSTRIALIZATION

Nicolas Dubois

MANUAL

Morgan Perrier Matthieu Courouble Guy Perchard Sebastien Colin

DESIGN

Glen Darcey Sébastien Rochard Axel Hartmann

© ARTURIA SA – 2017 – All rights reserved.
11 Chemin de la Dhuy
38240 Meylan
FRANCE
www.arturia.com

Information contained in this manual is subject to change without notice and does not represent a commitment on the part of Arturia. The software described in this manual is provided under the terms of a license agreement or non-disclosure agreement. The software license agreement specifies the terms and conditions for its lawful use. No part of this manual may be reproduced or transmitted in any form or by any purpose other than purchaser's personal use, without the express written permission of ARTURIA S.A.

All other products, logos or company names quoted in this manual are trademarks or registered trademarks of their respective owners.

Product version: 1.0.0

Revision date: 31 May 2017

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



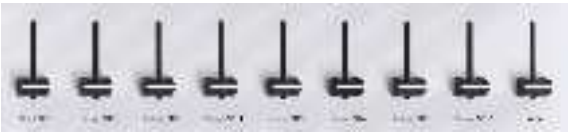
The 9 rotary knobs of KeyLab Essential are endless encoders with dual functionality.

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



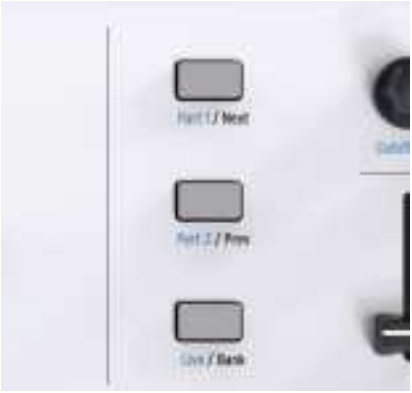
Like the encoders, KeyLab Essential's 9 faders have multiple modes, depending on the map selection being used.

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 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.

> **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 MCC 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.

4. SOFTWARE LICENSE AGREEMENT

In consideration of payment of the Licensee fee, which is a portion of the price you paid, Arturia, as Licensor, grants to you (hereinafter termed "Licensee") a nonexclusive right to use this copy of the Analog Lab Lite Software (hereinafter the "SOFTWARE").

All intellectual property rights in the software belong to Arturia SA (hereinafter: "Arturia"). Arturia permits you only to copy, download, install and use the software in accordance with the terms and conditions of this Agreement.

The product contains product activation for protection against unlawful copying. The OEM software can be used only following registration.

Internet access is required for the activation process. The terms and conditions for use of the software by you, the end-user, appear below. By installing the software on your computer you agree to these terms and conditions. Please read the following text carefully in its entirety. If you do not approve these terms and conditions, you must not install this software. In this event give the product back to where you have purchased it (including all written material, the complete undamaged packing as well as the enclosed hardware) immediately but at the latest within 30 days in return for a refund of the purchase price.

1. Software Ownership Arturia shall retain full and complete title to the SOFTWARE recorded on the enclosed disks and all subsequent copies of the SOFTWARE, regardless of the media or form on or in which the original disks or copies may exist. The License is not a sale of the original SOFTWARE.

2. Grant of License Arturia grants you a non-exclusive license for the use of the software according to the terms and conditions of this Agreement. You may not lease, loan or sub-license the software.
The use of the software within a network is illegal where there is the possibility of a contemporaneous multiple use of the program.
You are entitled to prepare a backup copy of the software which will not be used for purposes other than storage purposes.
You shall have no further right or interest to use the software other than the limited rights as specified in this Agreement. Arturia reserves all rights not expressly granted.

3. Activation of the Software Arturia may use a compulsory activation of the software and a compulsory registration of the OEM software for license control to protect the software against unlawful copying. If you do not accept the terms and conditions of this Agreement, the software will not work.
In such a case the product including the software may only be returned within 30 days following acquisition of the product. Upon return a claim according to § 11 shall not apply.

4. Support, Upgrades and Updates after Product Registration You can only receive support, upgrades and updates following the personal product registration. Support is provided only for the current version and for the previous version during one year after publication of the new version. Arturia can modify and partly or completely adjust the nature of the support (hotline, forum on the website etc.), upgrades and updates at any time.
The product registration is possible during the activation process or at any time later through the Internet. In such a process you are asked to agree to the storage and use of your personal data (name, address, contact, email-address, and license data) for the purposes specified above. Arturia may also forward these data to engaged third parties, in particular distributors, for support purposes and for the verification of the upgrade or update right.

5. No Unbundling The software usually contains a variety of different files which in its configuration ensure the complete functionality of the software. The software may be used as one product only. It is not required that you use or install all components of the software. You must not arrange components of the software in a new way and develop a modified version of the software or a new product as a result. The configuration of the software may not be modified for the purpose of distribution, assignment or resale.

6. Assignment of Rights You may assign all your rights to use the software to another person subject to the conditions that (a) you assign to this other person (i) this Agreement and (ii) the software or hardware provided with the software, packed or preinstalled thereon, including all copies, upgrades, updates, backup copies and previous versions, which granted a right to an update or upgrade on this software, (b) you do not retain upgrades, updates, backup copies und previous versions of this software and (c) the recipient accepts the terms and conditions of this Agreement as well as other regulations pursuant to which you acquired a valid software license.
A return of the product due to a failure to accept the terms and conditions of this Agreement, e.g. the product activation, shall not be possible following the assignment of rights.

7. Upgrades and Updates You must have a valid license for the previous or more inferior version of the software in order to be allowed to use an upgrade or update for the software. Upon transferring this previous or more inferior version of the software to third parties the right to use the upgrade or update of the software shall expire.
The acquisition of an upgrade or update does not in itself confer any right to use the software.
The right of support for the previous or inferior version of the software expires upon the installation of an upgrade or update.

8. Limited Warranty Arturia warrants that the disks on which the software is furnished is free from defects in materials and workmanship under normal use for a period of thirty (30) days from the date of purchase. Your receipt shall be evidence of the date of purchase. Any implied warranties on the software are limited to thirty (30) days from the date of purchase. Some states do not allow limitations on duration of an implied warranty, so the above limitation may not apply to you. All programs and accompanying materials are provided "as is" without warranty of any kind. The complete risk as to the quality and performance of the programs is with you. Should the program prove defective, you assume the entire cost of all necessary servicing, repair or correction.

9. Remedies Arturia's entire liability and your exclusive remedy shall be at Arturia's option either (a) return of the purchase price or (b) replacement of the disk that does not meet the Limited Warranty and which is returned to Arturia with a copy of your receipt. This limited Warranty is void if failure of the software has resulted from accident, abuse, modification, or misapplication. Any replacement software will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer.

10. No other Warranties The above warranties are in lieu of all other warranties, expressed or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. No oral or written information or advice given by Arturia, its dealers, distributors, agents or employees shall create a warranty or in any way increase the scope of this limited warranty.

11. No Liability for Consequential Damages Neither Arturia nor anyone else involved in the creation, production, or delivery of this product shall be liable for any direct, indirect, consequential, or incidental damages arising out of the use of, or inability to use this product (including without limitation, damages for loss of business profits, business interruption, loss of business information and the like) even if Arturia was previously advised of the possibility of such damages. Some states do not allow limitations on the length of an implied warranty or the exclusion or limitation of incidental or Oconsequential damages, so the above limitation or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

5. DECLARATION OF CONFORMITY

USA

Important notice: DO NOT MODIFY THE UNIT!

This product, when installed as indicate in the instructions contained in this manual, meets FCC requirement. Modifications not expressly approved by Arturia may avoid your authority, granted by the FCC, to use the product.

IMPORTANT: When connecting this product to accessories and/or another product, use only high quality shielded cables. Cable (s) supplied with this product MUST be used. Follow all installation instructions. Failure to follow instructions could void your FFC authorization to use this product in the USA.

NOTE: This product has been tested and found to comply with the limit for a Class B Digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide a reasonable protection against harmful interference in a residential environment. This equipment generate, use and radiate radio frequency energy and, if not installed and used according to the instructions found in the users manual, may cause interferences harmful to the operation to other electronic devices. Compliance with FCC regulations does not guarantee that interferences will not occur in all the installations. If this product is found to be the source of interferences, witch can be determined by turning the unit "OFF" and "ON", please try to eliminate the problem by using one of the following measures:

- Relocate either this product or the device that is affected by the interference.
- Use power outlets that are on different branch (circuit breaker or fuse) circuits or install AC line filter(s).
- In the case of radio or TV interferences, relocate/ reorient the antenna. If the antenna lead-in is 300 ohm ribbon lead, change the lead-in to coaxial cable.
- If these corrective measures do not bring any satisfied results, please the local retailer authorized to distribute this type of product. If you cannot locate the appropriate retailer, please contact Arturia.

The above statements apply ONLY to those products distributed in the USA.

CANADA

NOTICE: This class B digital apparatus meets all the requirements of the Canadian Interference-Causing Equipment Regulation.

AVIS: Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

EUROPE

CE

This product complies with the requirements of European Directive 89/336/EEC

This product may not work correctly by the influence of electro-static discharge; if it happens, simply restart the product.