

Alpha Quick Reference Guide

For Setups: Factory Alpha 1, Factory Alpha 2 and Factory Alpha 3

For software version 1.3.28 and above

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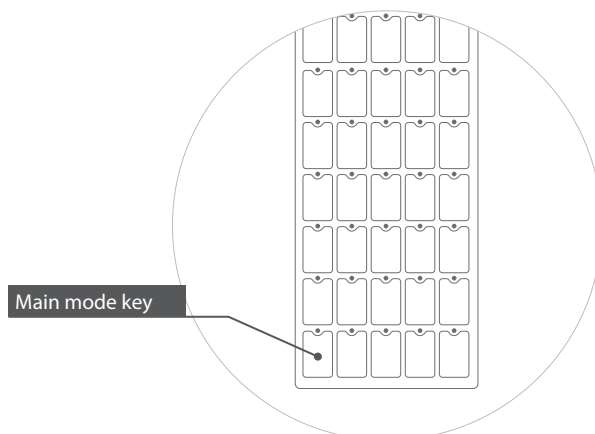
Eigenharp Terminology

1

This is a quick introduction to some of the terminology used in this reference guide. Such terms as *mode key*, *split* and *keygroup* are used throughout so it's handy to become familiar with their meanings.

What is a mode key?

The mode keys allow you to navigate your way around the Eigenharp, and access its various features quickly and easily. For example mode keys are used to choose sounds, access controls for drum loops and recorders, or choose different keyboard layouts.

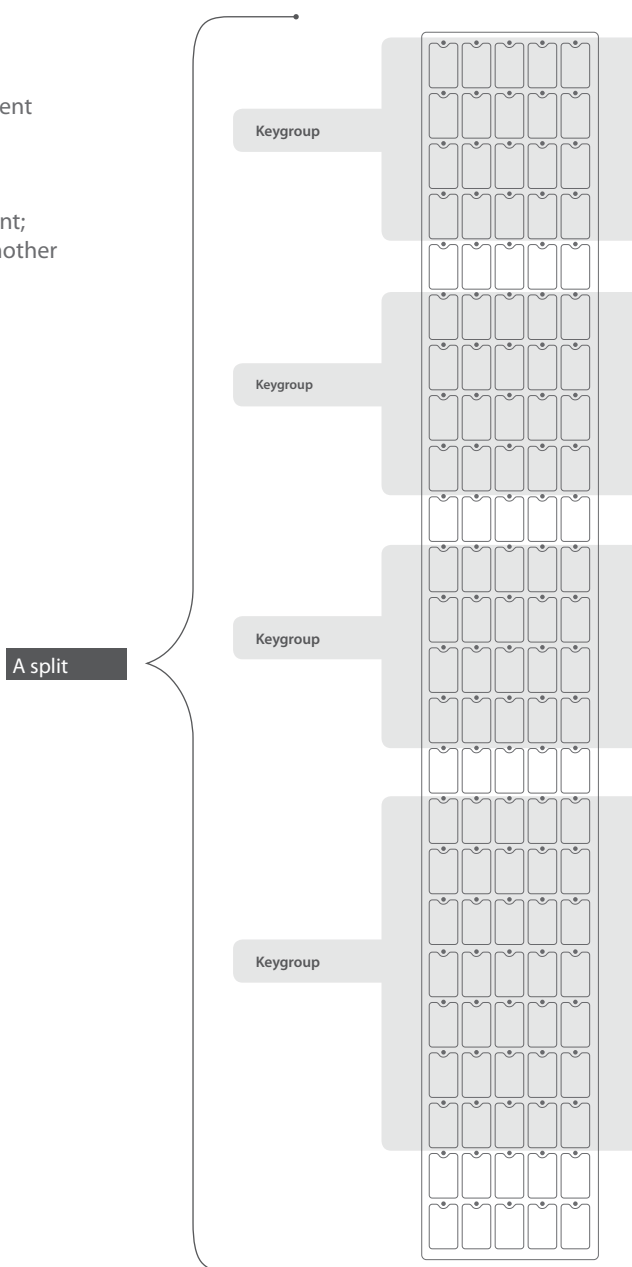


What are keygroups and splits?

It is possible to divide the Eigenharp's keyboard in to independent groups of keys which we call keygroups.

You can access any of the Eigenharp's features from any of the keygroups, and each keygroup can be doing something different; for example you could use one keygroup to play bass, whilst another keygroup controls drum loops.

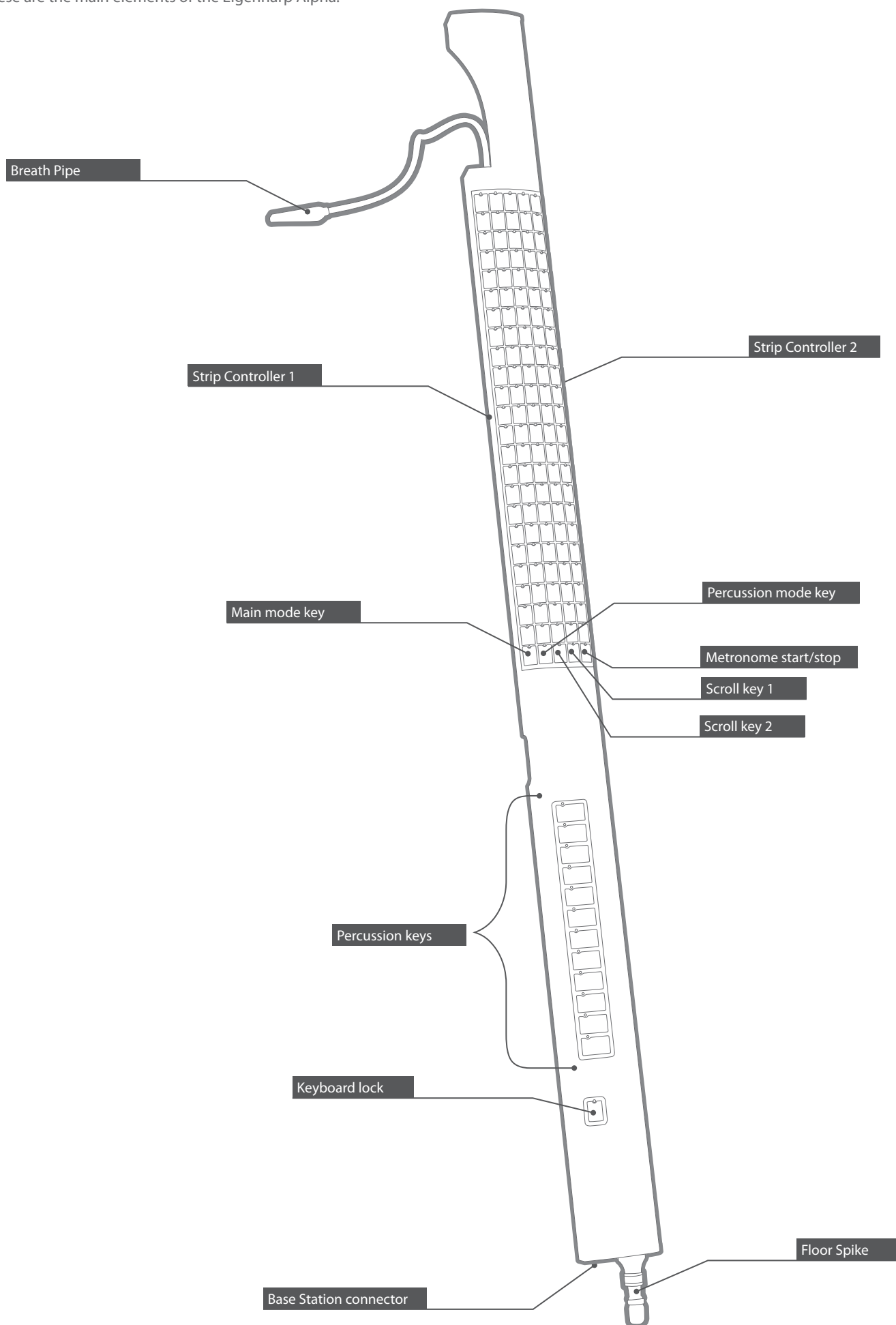
A split is the name we give to an arrangement of keygroups. For example the diagram on the right shows a split with the keyboard divided in to four keygroups.



Layout overview

2

These are the main elements of the Eigenharp Alpha.



Introduction to the Eigenharp Factory Alpha Setups

The Eigenharp Alpha ships with three factory setups, Factory Alpha 1, Factory Alpha 2 and Factory Alpha 3. These setups vary in complexity, Factory Alpha 1 is the simplest, Factory Alpha 3 the most complex. It is recommended that you begin with Factory Alpha 1 and work your way up to Factory Alpha 3.

What is the difference between the Factory Alpha setups?

Factory Alpha 1

This setup has one split containing one large keygroup that covers the entire keyboard (please see page 1, Eigenharp Terms, for an explanation of splits and keygroups).

Factory Alpha 2

This setup has two splits. Split 1 is identical to the split found in Factory Alpha 1. Split 2 contains two keygroups; one large keygroup and another smaller keygroup at the top of the keyboard. There are many things you could do with Split 2, for example you could play two instruments simultaneously, or change your scale and tonic using one keygroup whilst playing on the other.

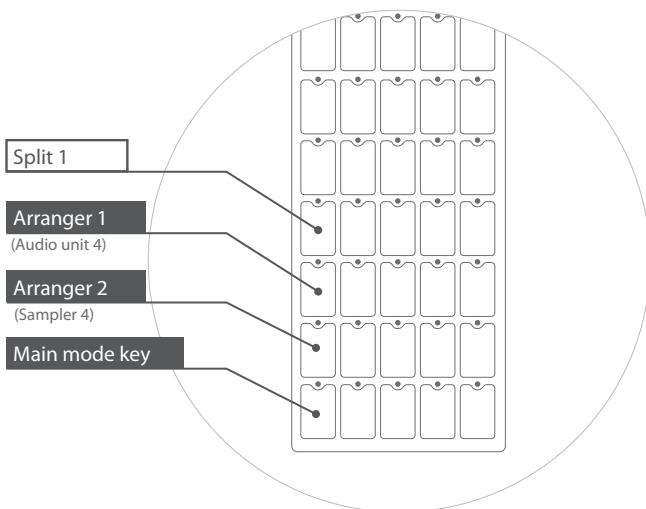
Factory Alpha 3

This setup has five splits. Split 1 and 2 are identical to those found in Factory Alpha 2. Splits 3 and 4 each contain two keygroups. Split 5 has four keygroups, allowing you to play up to four instruments simultaneously.

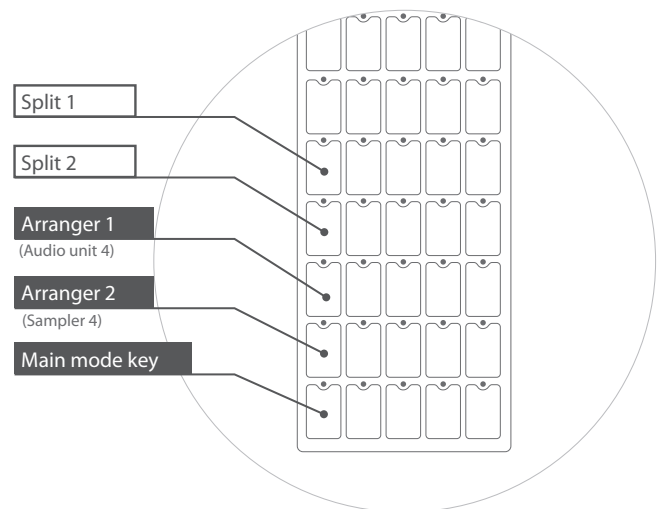
Choosing Splits

Pushing and holding the main mode key gives you access to up to five splits and both of the arrangers (see page 22 for information on arrangers). The currently selected split is lit green. To select the split you want, press its corresponding key and it will turn from red to green, then release the mode key.

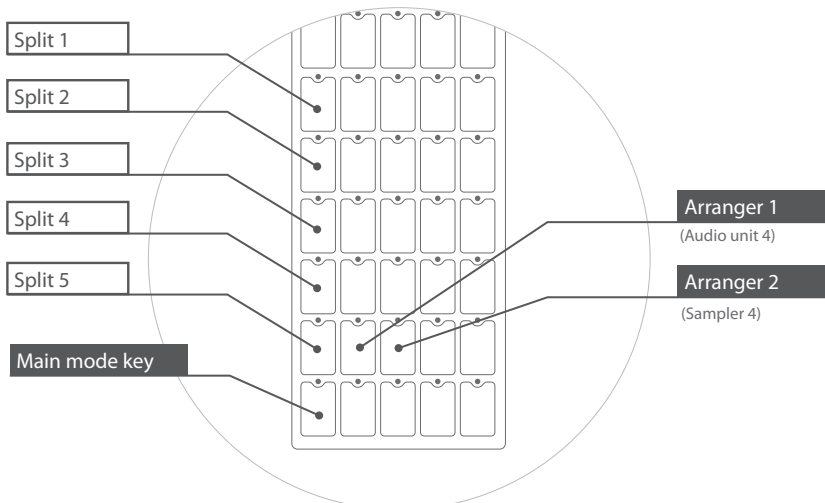
Factory Alpha 1



Factory Alpha 2

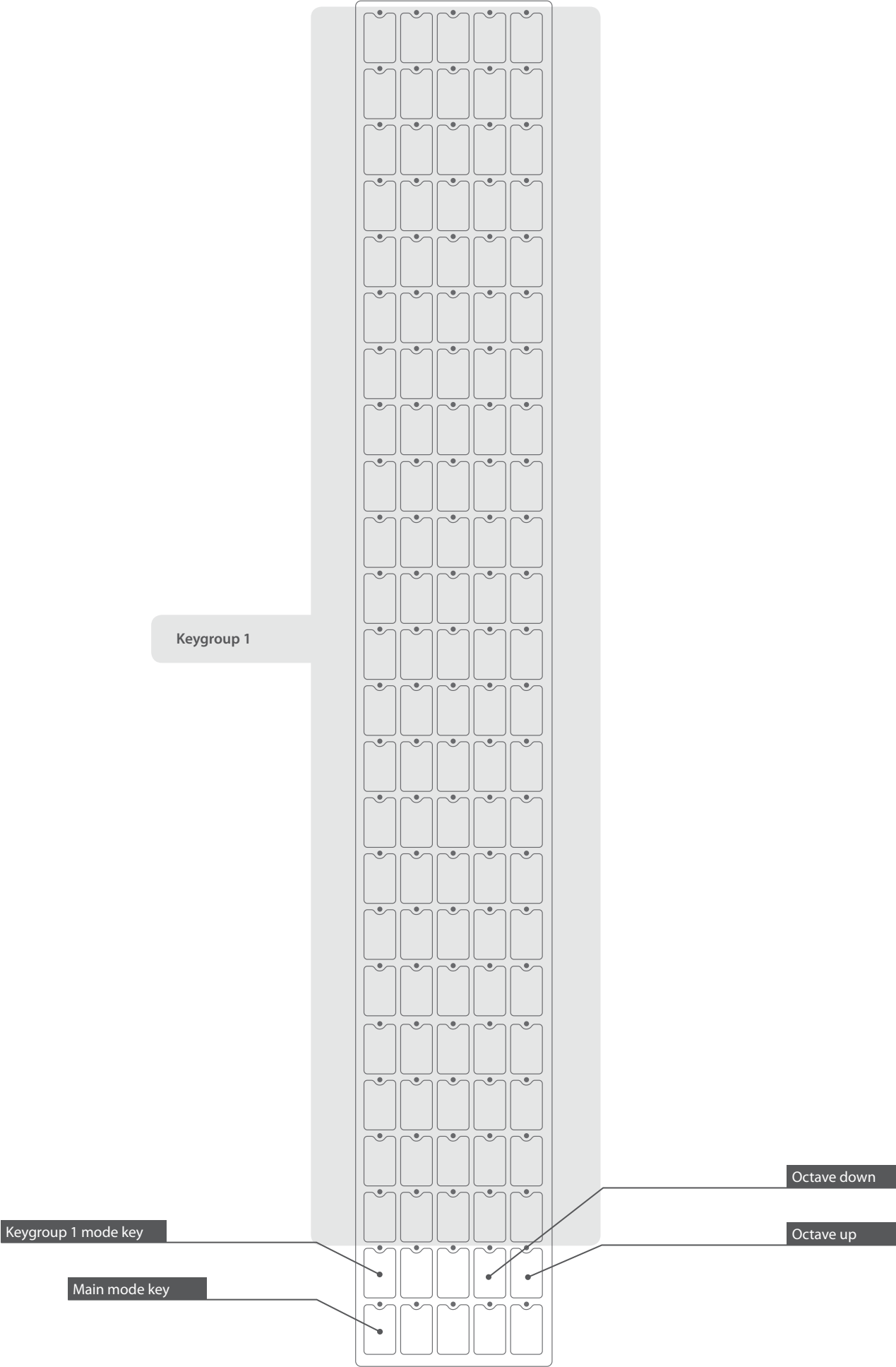


Factory Alpha 3



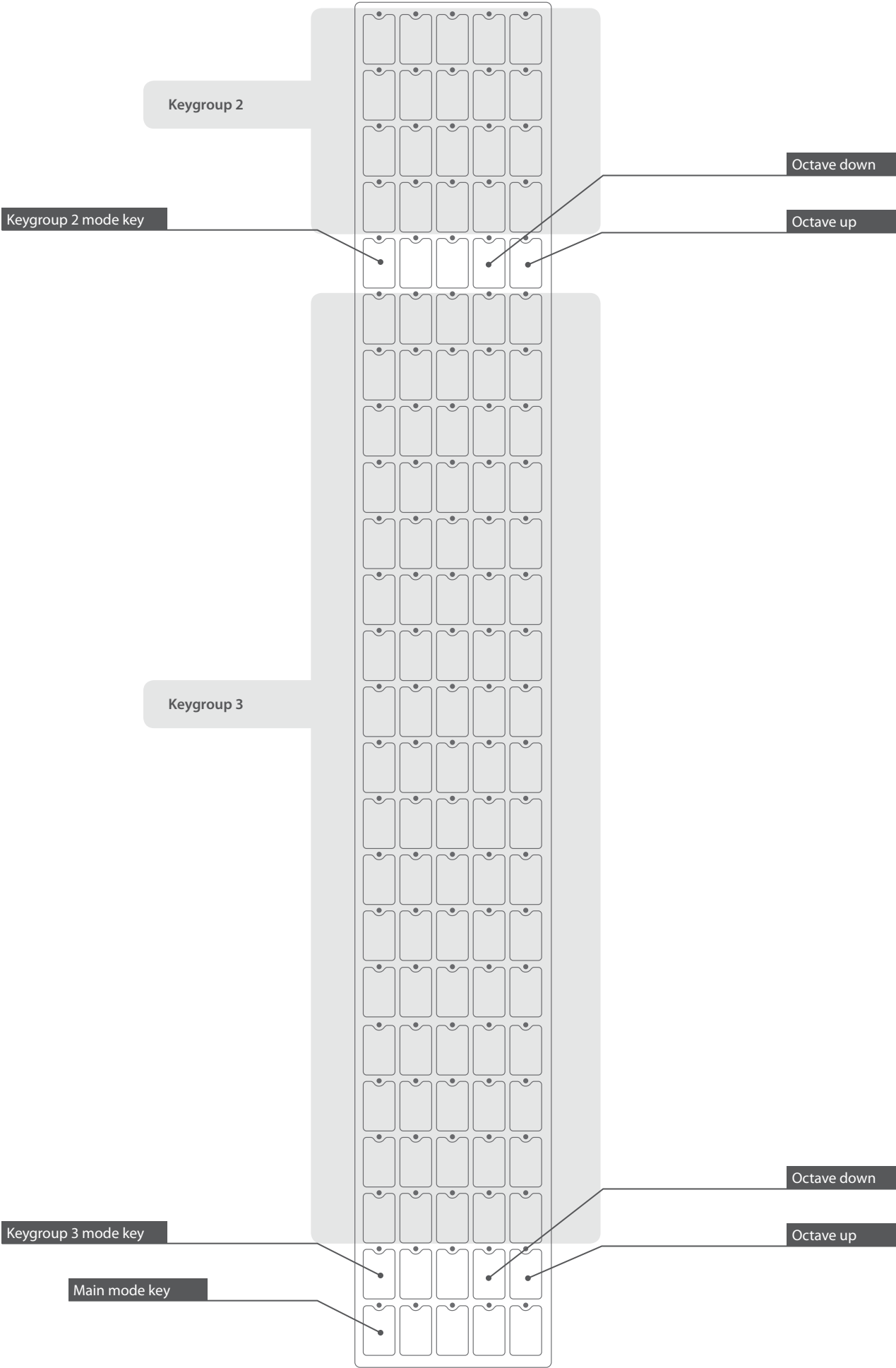
Split 1

This contains keygroup 1.



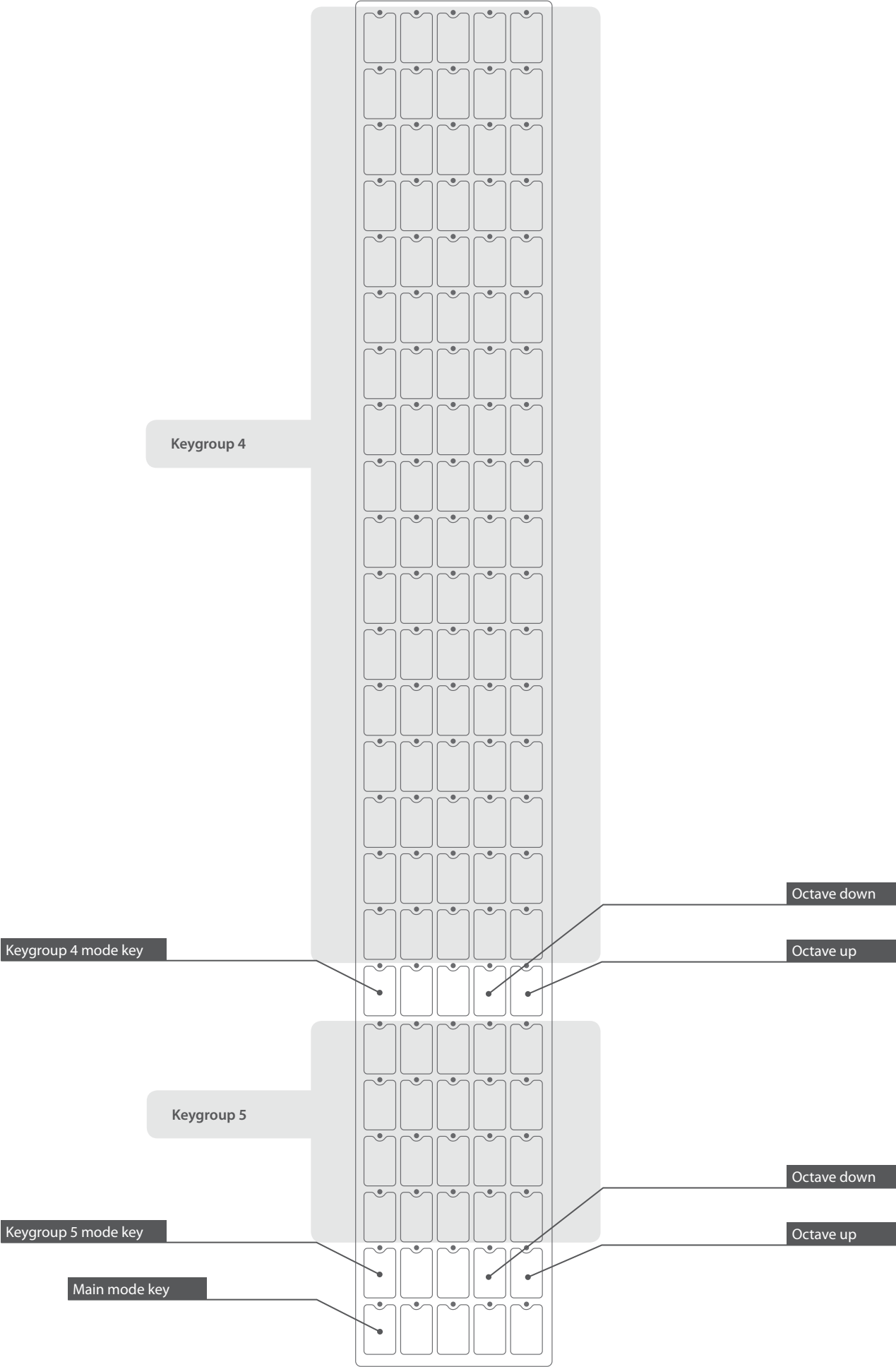
Split 2

This contains keygroup 2 and keygroup 3.



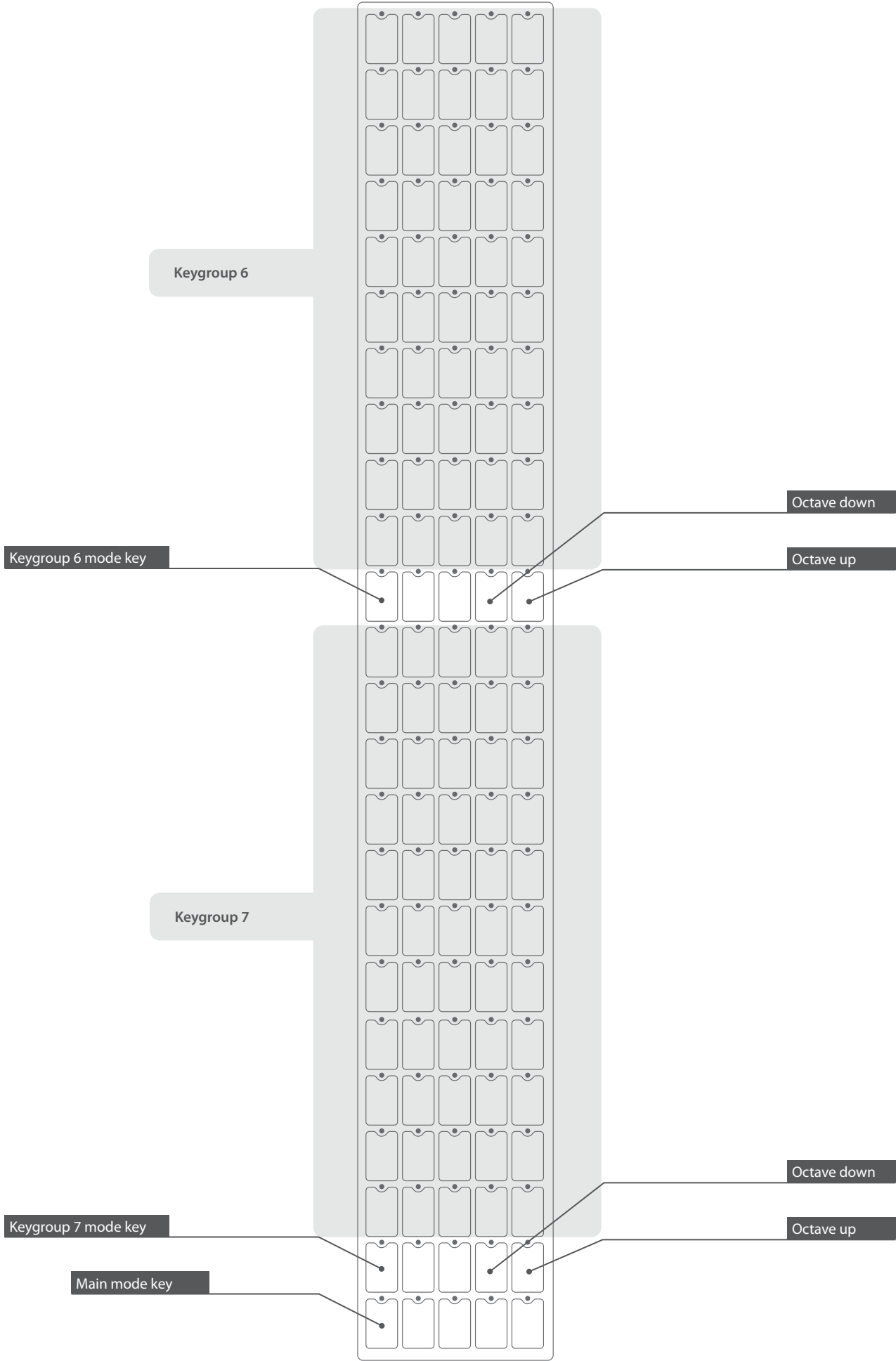
Split 3

This contains keygroup 4 and keygroup 5.



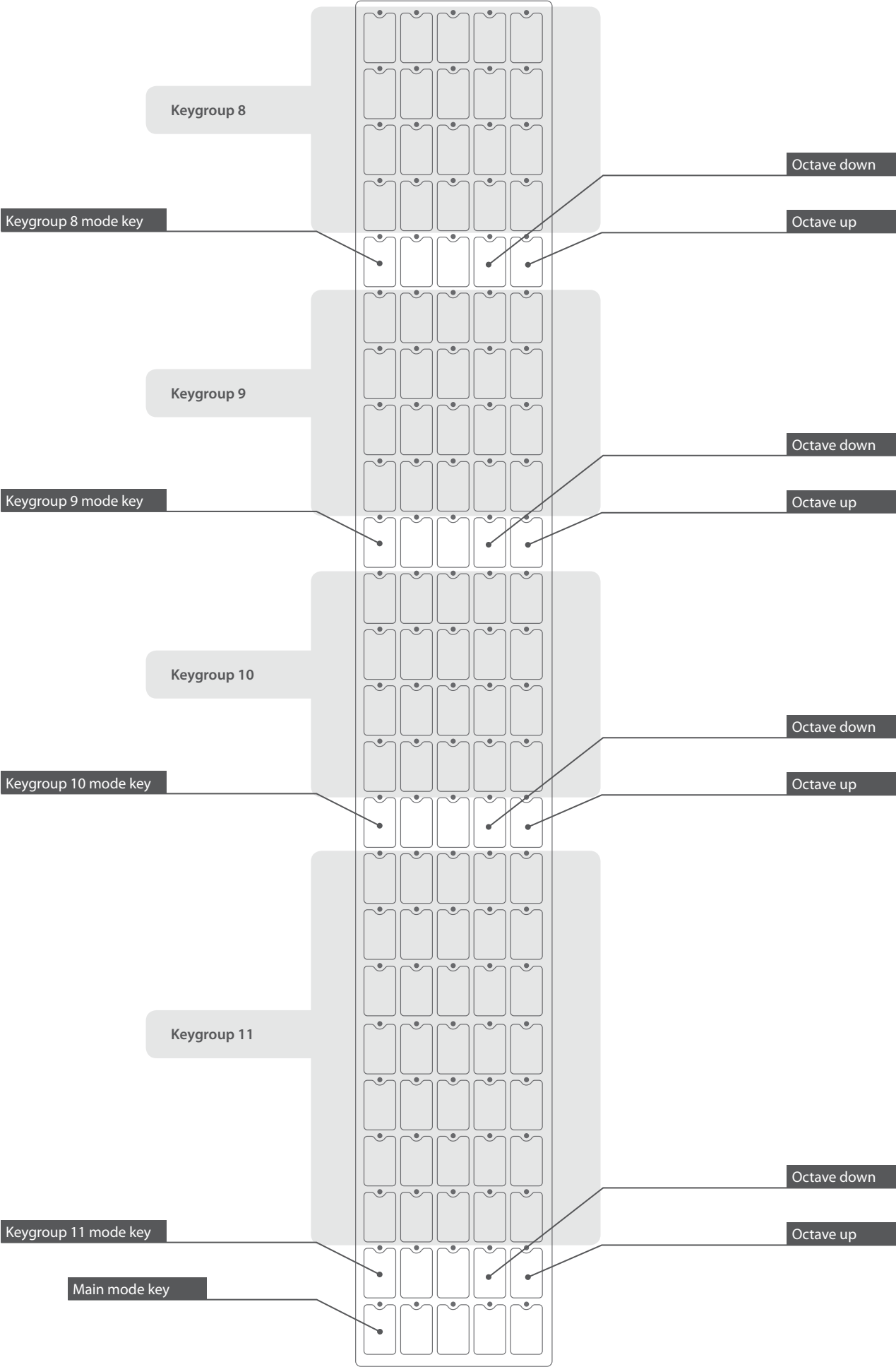
Split 4

This contains keygroup 6 and keygroup 7.



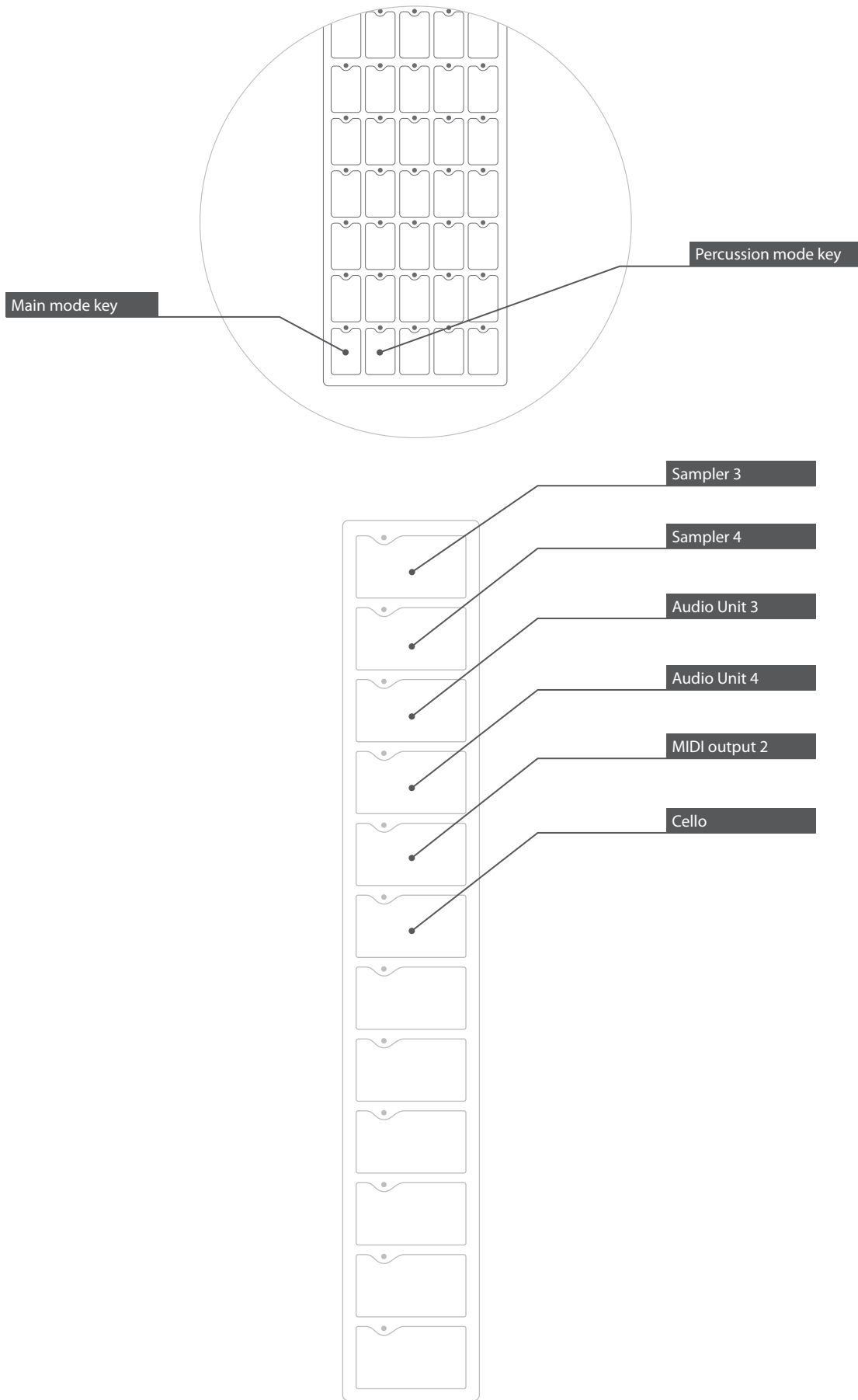
Split 5

This contains keygroup 8, keygroup 9, keygroup 10 and keygroup 11



Percussion Keys

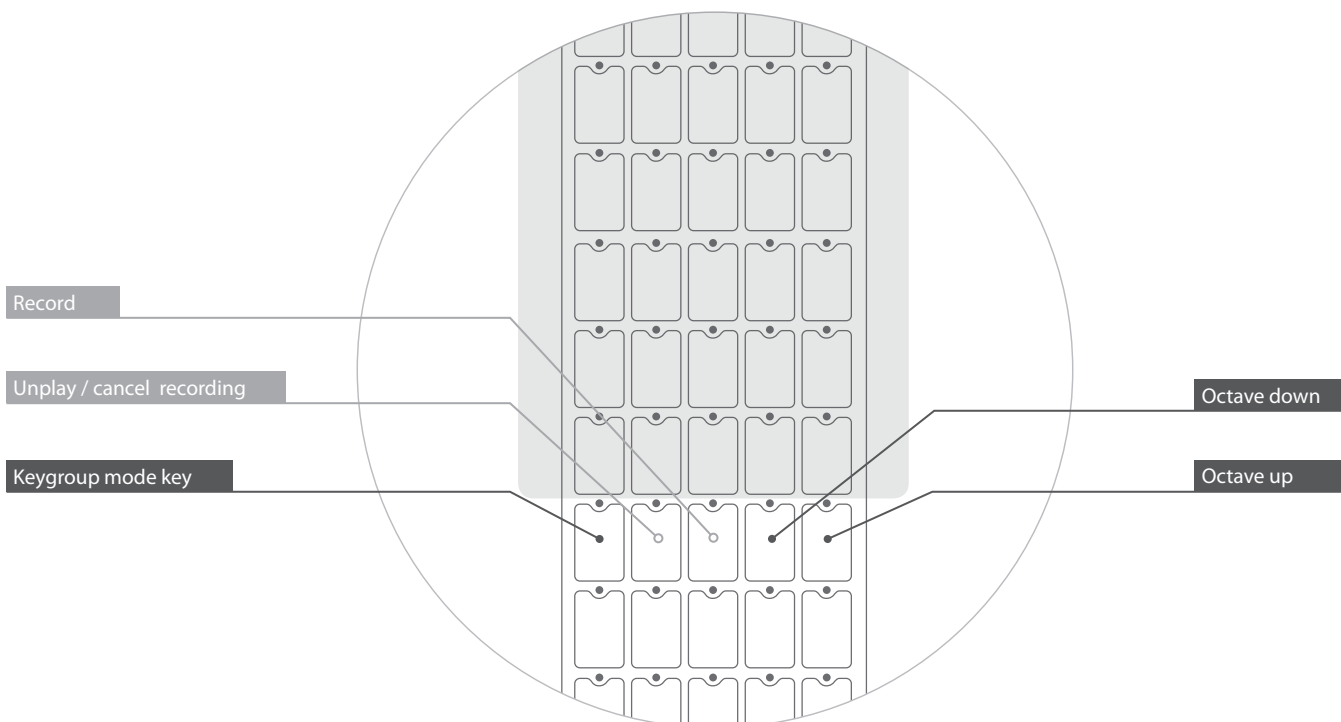
Choose between this keygroup's different functions by pressing the percussion mode key which is located adjacent to the main mode key.



Keygroups

The shaded area represents a generic keygroup. Below it are its main function keys. These keys remain the same for all keygroups.

The Record and Unplay keys are only available when an instrument is selected.



Keygroup Mode Key layout

When you press a keygroup's mode key the following options will show.

This is the same for all keygroups wherever they are on the keyboard.

Below is a summary of what each function is:

Please see the appropriate diagram for detailed information on Drummer controls, recording controls, and scales and tonics.

Key

- 1 – Drummer Controls (See diagram A, Page 11)
- 2 – Scheduler Controls
- 3 – Recorder Controls (See diagram B, Page 11)
- 4 – Scales and Tonics (See diagram C, Page 12)
- 5 – MIDI out 1
- 6 – MIDI out 2
- 7 – Cello
- 8 – Clarinet
- 9 – Synth
- 10 – Audio unit 1
- 11 – Audio unit 2
- 12 – Audio unit 3
- 13 – Audio unit 4
- 14 – Sampler 1
- 15 – Sampler 2 (breath controlled)
- 16 – Sampler 3
- 17 – Sampler 4

Keygroup mode key
(Pressed)

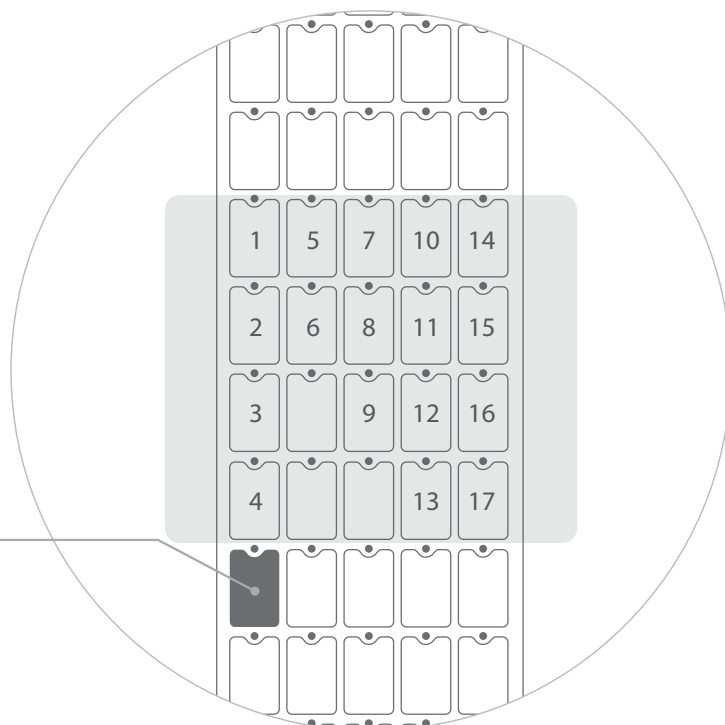


Diagram A - Drummer controls

Each of the keys labelled 1 - 16 represents a drum loop, pressing any of these will turn the loop on or off. To play drum loops the metronome must be started.

Key

- 1 – Drummer voice 1 play/unplay
- 2 – Drummer voice 2 play/unplay
- 3 – Drummer voice 3 play/unplay
- 4 – Drummer voice 4 play/unplay
- 5 – Drummer voice 5 play/unplay
- 6 – Drummer voice 6 play/unplay
- 7 – Drummer voice 7 play/unplay
- 8 – Drummer voice 8 play/unplay
- 9 – Drummer voice 9 play/unplay
- 10 – Drummer voice 10 play/unplay
- 11 – Drummer voice 11 play/unplay
- 12 – Drummer voice 12 play/unplay
- 13 – Drummer voice 13 play/unplay
- 14 – Drummer voice 14 play/unplay
- 15 – Drummer voice 15 play/unplay
- 16 – Drummer voice 16 play/unplay

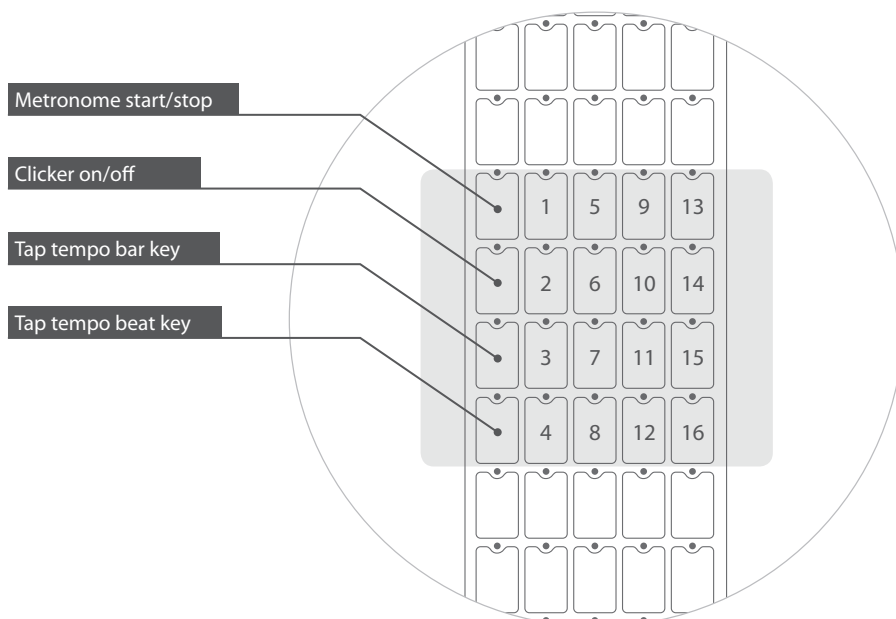


Diagram B - Recorder controls

The recorder controls allow you to set how many bars you will record for, unplay recordings and cancel recordings.

To record you must first start the metronome, please see the drummer controls for more detail.

Each numbered key in the diagram represents the number of bars you will record for, e.g. key 1 = 1 bar, key 2 = 2 bars, key 3 = 3 bars, key 4 = 4 bars, etc.

The key marked 'U' will unplay all recorded loops that are currently playing. The key marked 'C' will cancel all armed recorders. Please be aware that once you unplay a recording it will be deleted. To stop recordings without deleting, use the Scheduler.

The key marked 'O' toggles overdub mode. Turned on, additional recordings for the same instrument create new takes that play simultaneously. Also, the 'unplay' key deletes only the last take, allowing loops to be built up and tore down with one instrument.

Once you have selected how many bars you would like to record for, you must arm the recorder. The record arm key is located at the bottom of your playing keygroup, this key will arm the recorder for your currently selected instrument.

Next to the record arm key you have an unplay/cancel key. Note that these keys will only appear once you have selected an instrument. Please refer to the Keygroups diagram below.

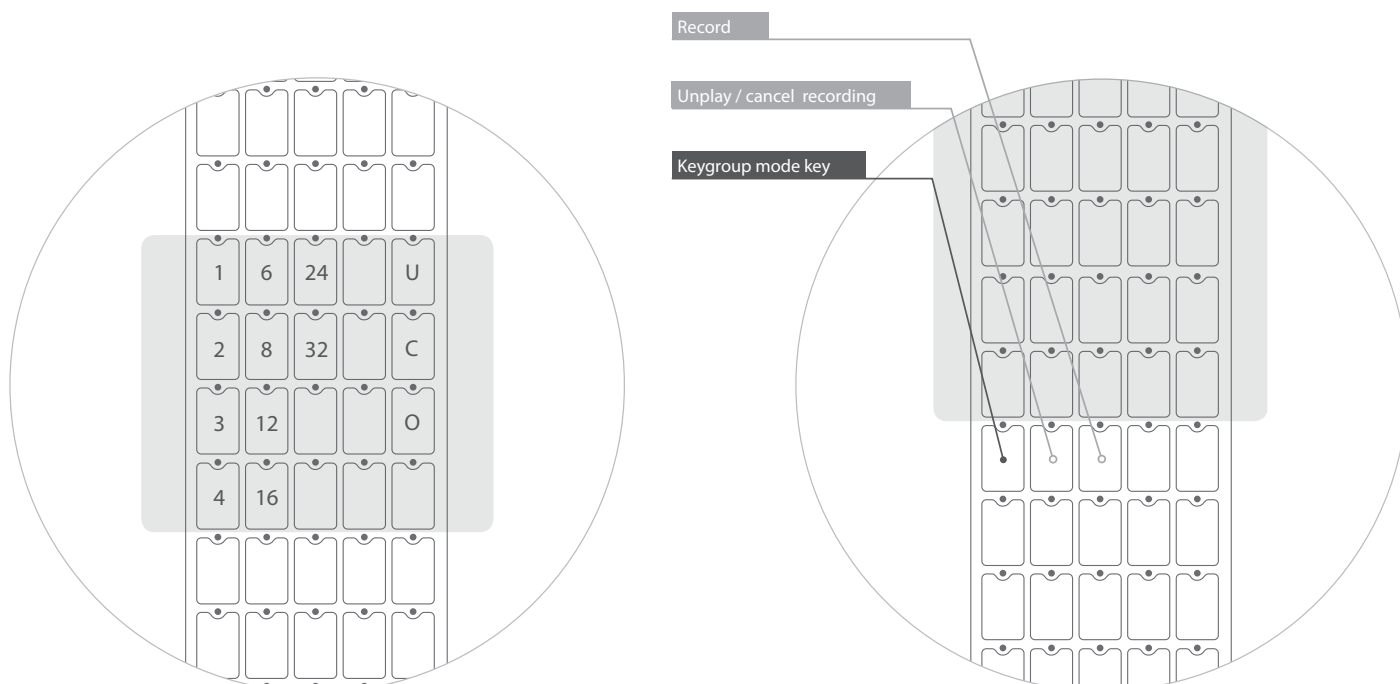
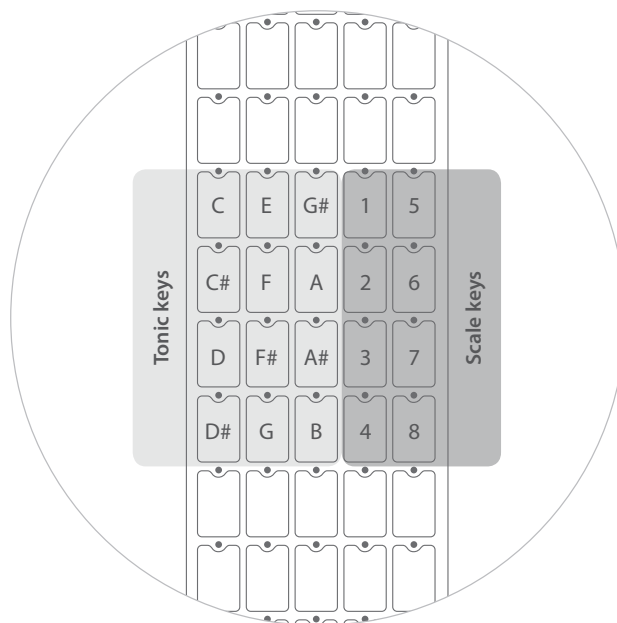


Diagram C - Scale and Tonic controls

This page will allow you to change scales and tonics for each keygroup. As you can see in the diagram the first 12 keys are tonic keys and the remaining 8 keys are scale keys. The scale keys can be customised, however the default scales are arranged as follows:

Key

- 1 – Major
- 2 – Harmonic Minor
- 3 – Melodic Minor
- 4 – Chromatic
- 5 – Blues
- 6 – Pentatonic
- 7 – Diminished
- 8 – Whole Tone



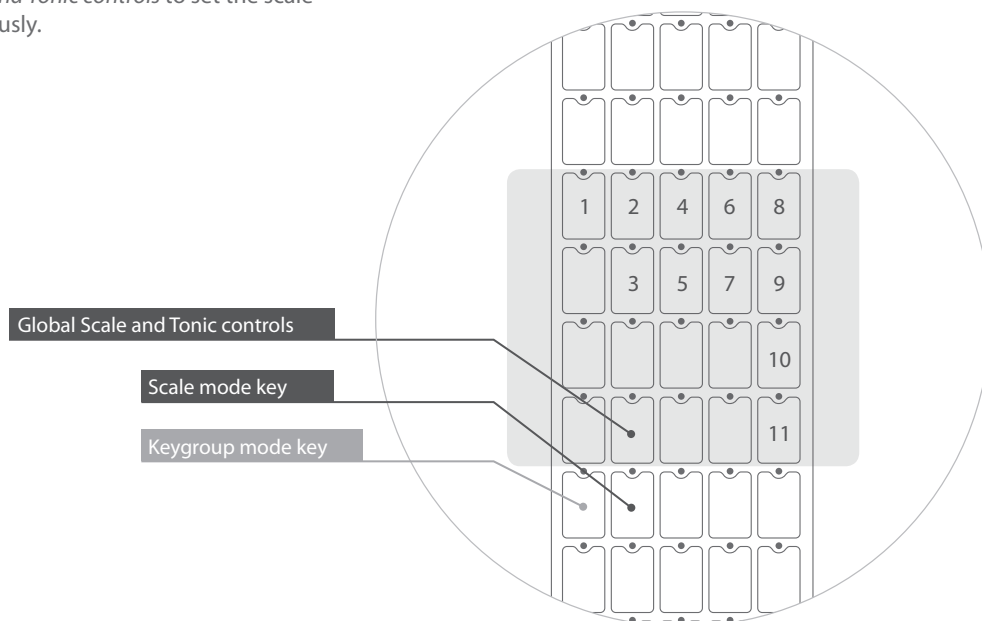
A note about Scale and Tonic controls

Each keygroup can have its own scale and tonic.

As you can see in the diagram, we have a second mode key (scale mode key), this allows you to select which keygroup you are choosing the scale and tonic for.

Press and hold this key and you will see a group of lit keys which represent the available keygroups, the green key is your selected keygroup. Choose key 1 in the diagram to access the Scale and Tonic controls for keygroup 1, key 2 for keygroup 2, etc, through to keygroup 11.

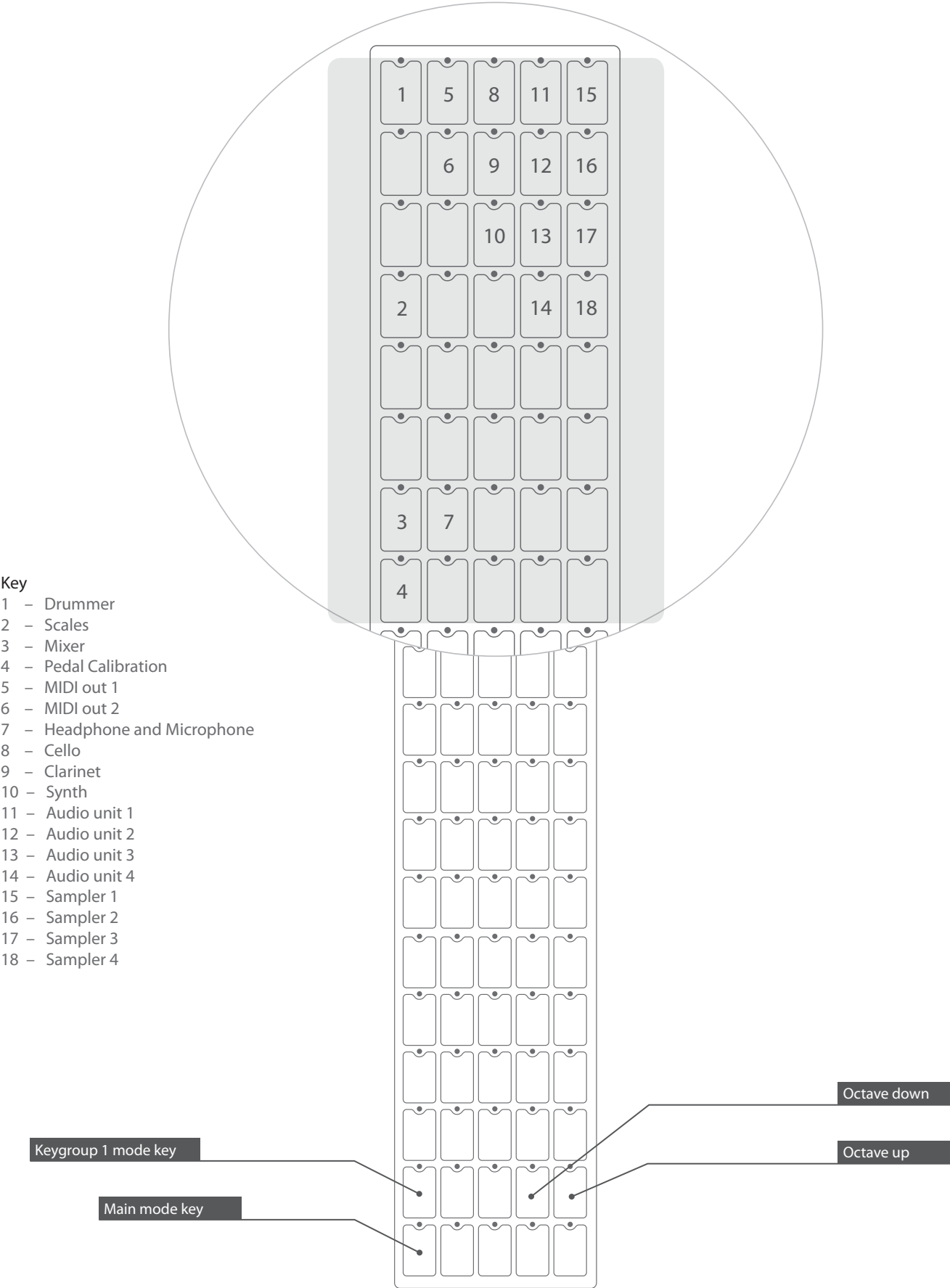
Choose the key marked *Global Scale and Tonic controls* to set the scale and tonic of all keygroups simultaneously.



The advanced controls are accessed on Split 1 by pressing keygroup 1's mode key.

The layout of the advanced control keys corresponds with the layout of the instruments and standard controls that become available when you hold down a keygroup's mode key.

There are no advanced controls for the recorder and scheduler hence the gap between the key labelled 1 (advanced drummer controls) and the key labelled 2 (advance scale controls).



This control page will allow you to edit drummer volumes and browse different drum loops for each drummer voice. The main controls allow you to edit the master volume, pan and FX sends for all drummer loops.

- Key
- 1 – Metronome browse
 - 2 – Tempo nudger
 - 3 – Tap tempo bar key
 - 4 – Tap tempo beat key
 - 5 – Tempo down (1 bpm)
 - 6 – Tempo up (1 bpm)

- Key
- 80 – Tempo to 80 bpm
 - 90 – Tempo to 90 bpm
 - 100 – Tempo to 100 bpm
 - 110 – Tempo to 110 bpm
 - 120 – Tempo to 120 bpm
 - 130 – Tempo to 130 bpm
 - 140 – Tempo to 140 bpm
 - 150 – Tempo to 150 bpm

The Drummer Voice Volume Key numbers refer to their respective Drummer Voice. For example, Key 1 = Drummer Voice 1, Key 2 = Drummer Voice 2, etc.

Drummer Voice Volume Keys

The Drummer Loop Browse Key numbers refer to their respective Drummer Voice. For example, Key 1 = Drummer Voice 1, Key 2 = Drummer Voice 2, etc.

Drummer Loop Browser Keys

Main Controls

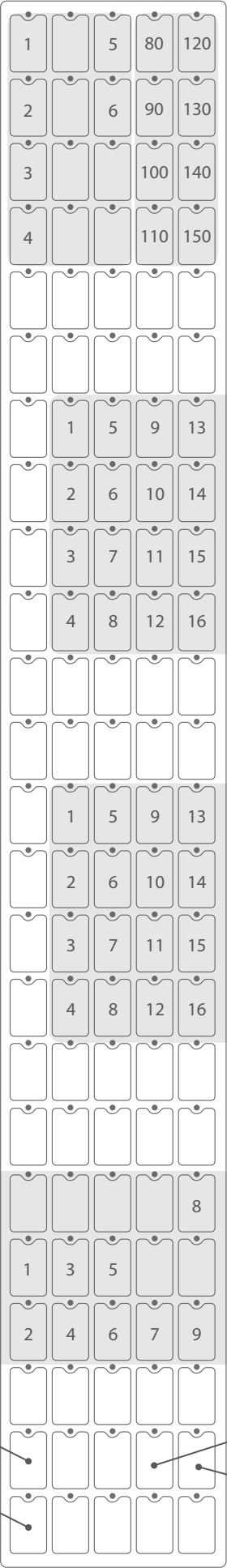
- Key
- 1 – Inline FX plugin browse
 - 2 – Volume
 - 3 – Inline FX GUI show/hide
 - 4 – Pan
 - 5 – Inline FX bypass on / off
 - 6 – FX send 1
 - 7 – FX send 2
 - 8 – Mixer browse
 - 9 – Delay send

Keygroup 1 mode key

Main mode key

Octave down

Octave up



This control page will allow you to change the volume, pan and FX sends for each instrument. You can also choose your audio device or alter the master volume and pan.

- Key
- V – Volume
 - P – Pan
 - FX1 – FX send 1
 - FX2 – FX send 2
 - D – Delay send

V

P

FX1

FX2

D

Sampler 1

V

P

FX1

FX2

D

Sampler 2

V

P

FX1

FX2

D

Sampler 3

V

P

FX1

FX2

D

Sampler 4

V

P

FX1

FX2

D

Audio unit 1

V

P

FX1

FX2

D

Audio unit 2

V

P

FX1

FX2

D

Audio unit 3

V

P

FX1

FX2

D

Audio unit 4

V

P

FX1

FX2

D

Cello

V

P

FX1

FX2

D

Clarinet

V

P

FX1

FX2

D

Synth

V

P

FX1

FX2

D

Drummer

1

6

2

3

4

5

Master Volume

Master Pan

Keygroup 1 mode key

Main mode key

Key

1 – Audio device browse

2 – FX send 1 plugin browse

3 – FX send 1 GUI show/hide

4 – FX send 2 plugin browse

5 – FX send 2 GUI show/hide

6 – Mixer browse

Octave down

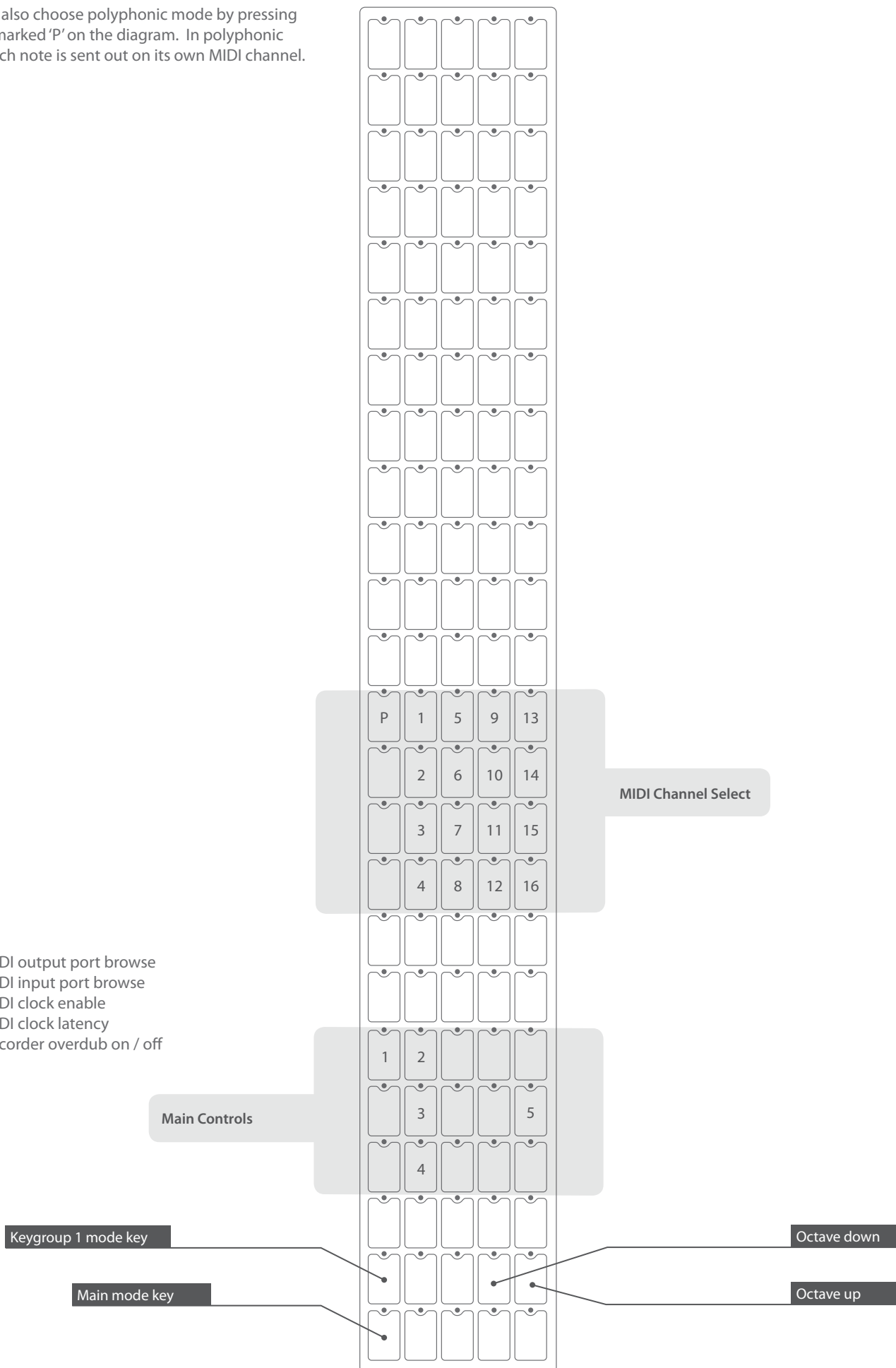
Octave up

This page will allow you to select a MIDI channel, e.g. key 1 = MIDI channel 1, key 2 = MIDI channel 2, etc.

You may also choose polyphonic mode by pressing the key marked 'P' on the diagram. In polyphonic mode each note is sent out on its own MIDI channel.



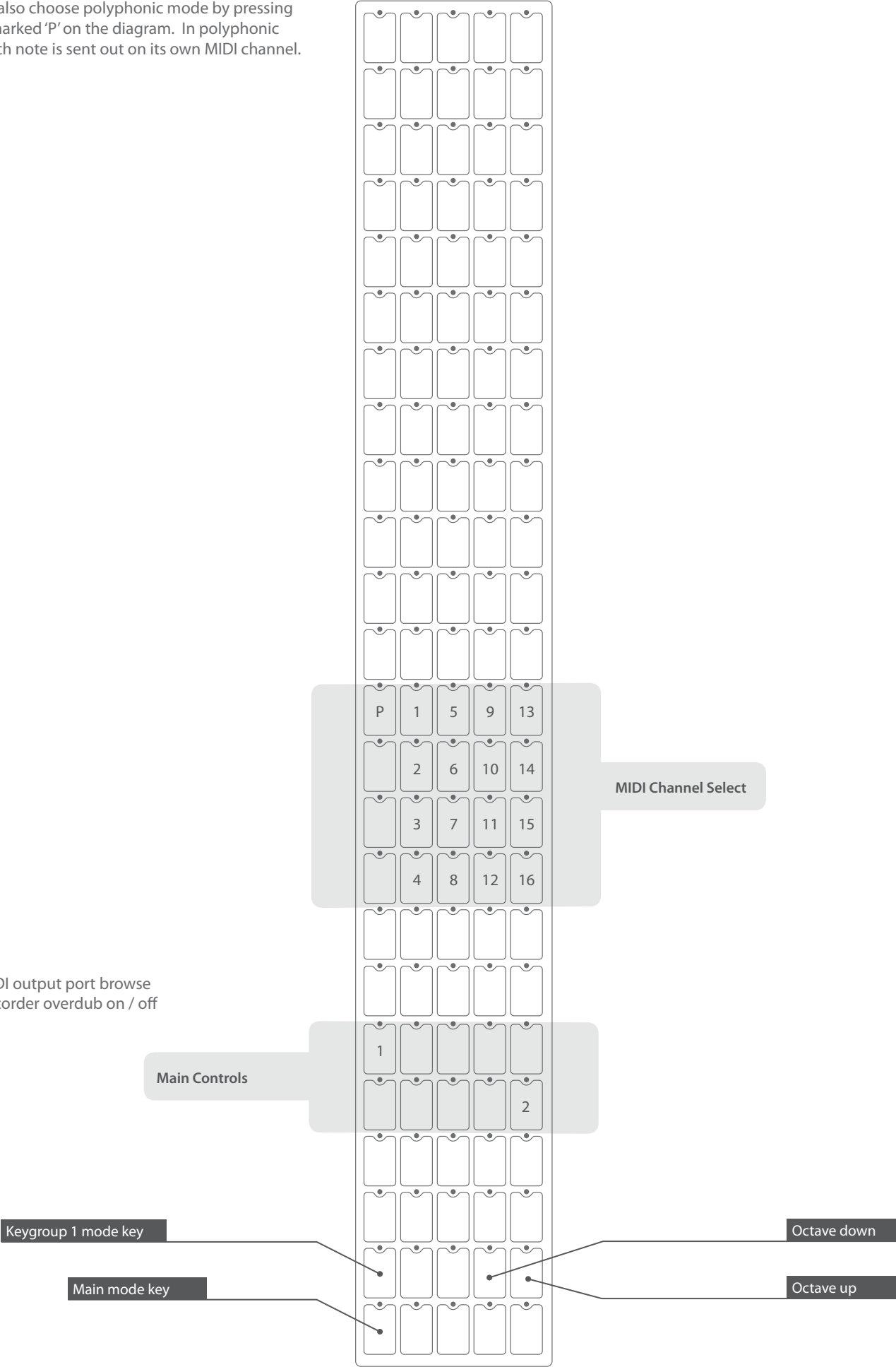
- 1 - MIDI output port browse
- 2 - MIDI input port browse
- 3 - MIDI clock enable
- 4 - MIDI clock latency
- 5 - Recorder overdub on / off

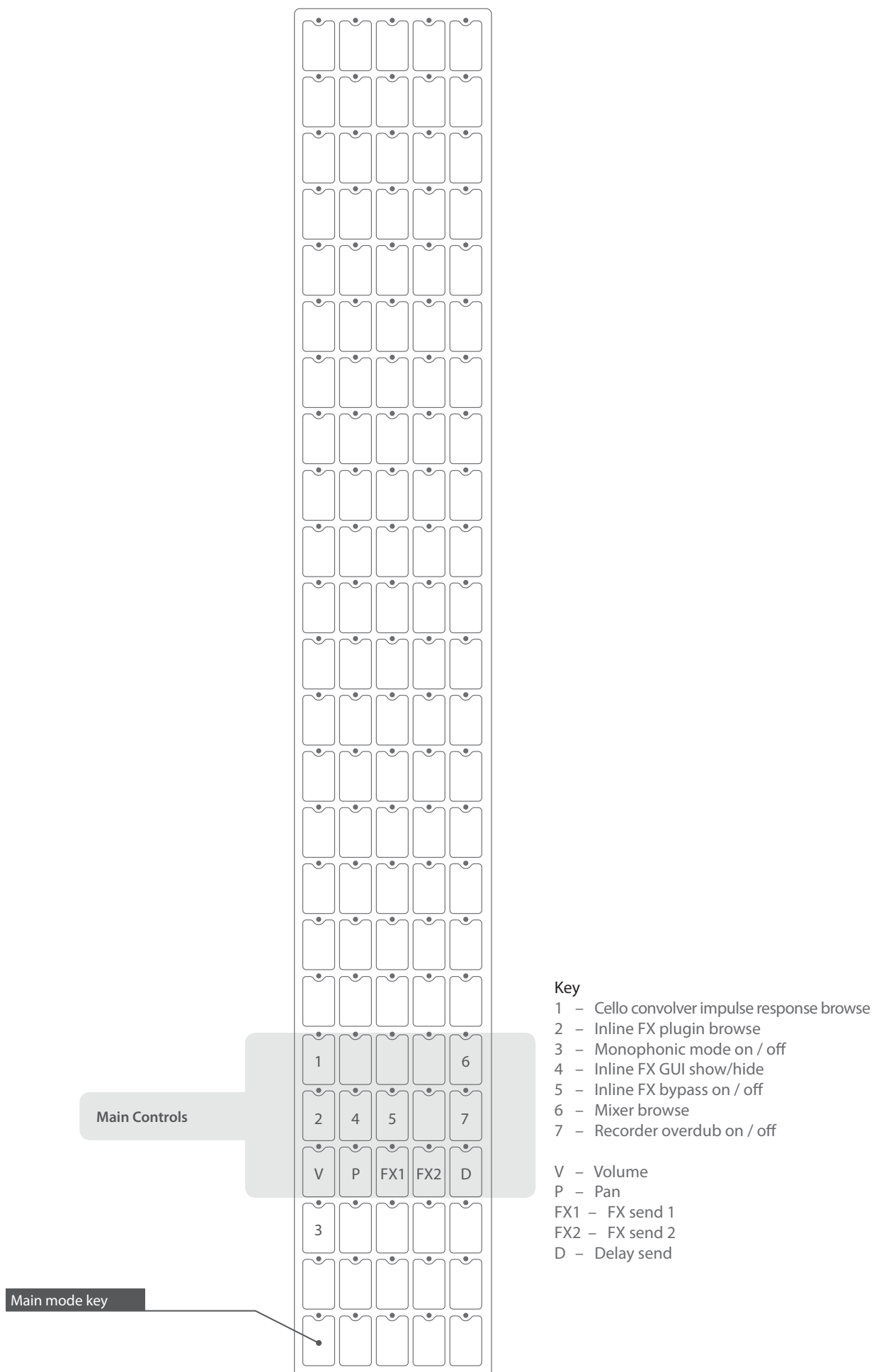


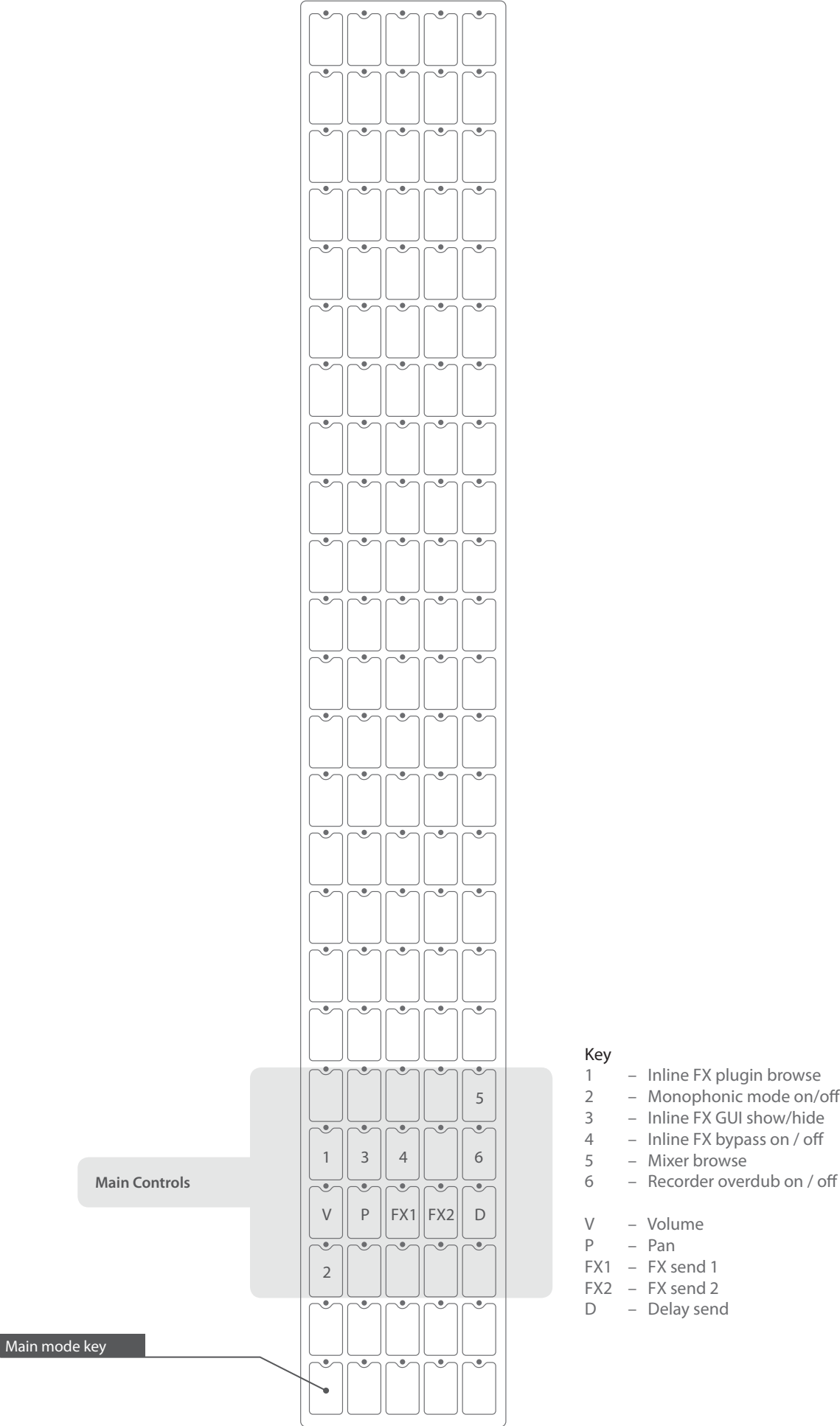
This page will allow you to select a MIDI channel, e.g. key 1 = MIDI channel 1, key 2 = MIDI channel 2, etc.

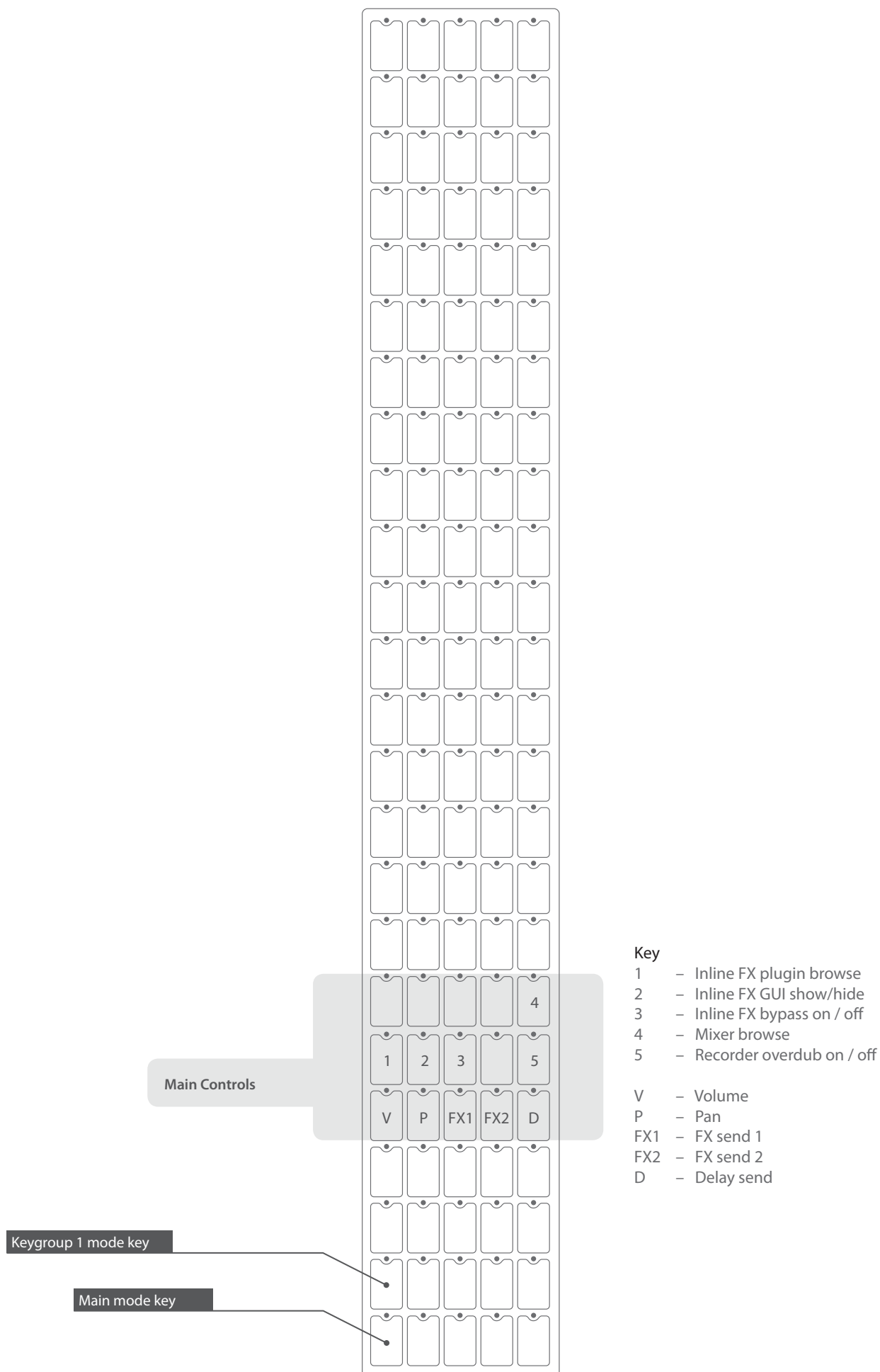
You may also choose polyphonic mode by pressing the key marked 'P' on the diagram. In polyphonic mode each note is sent out on its own MIDI channel.

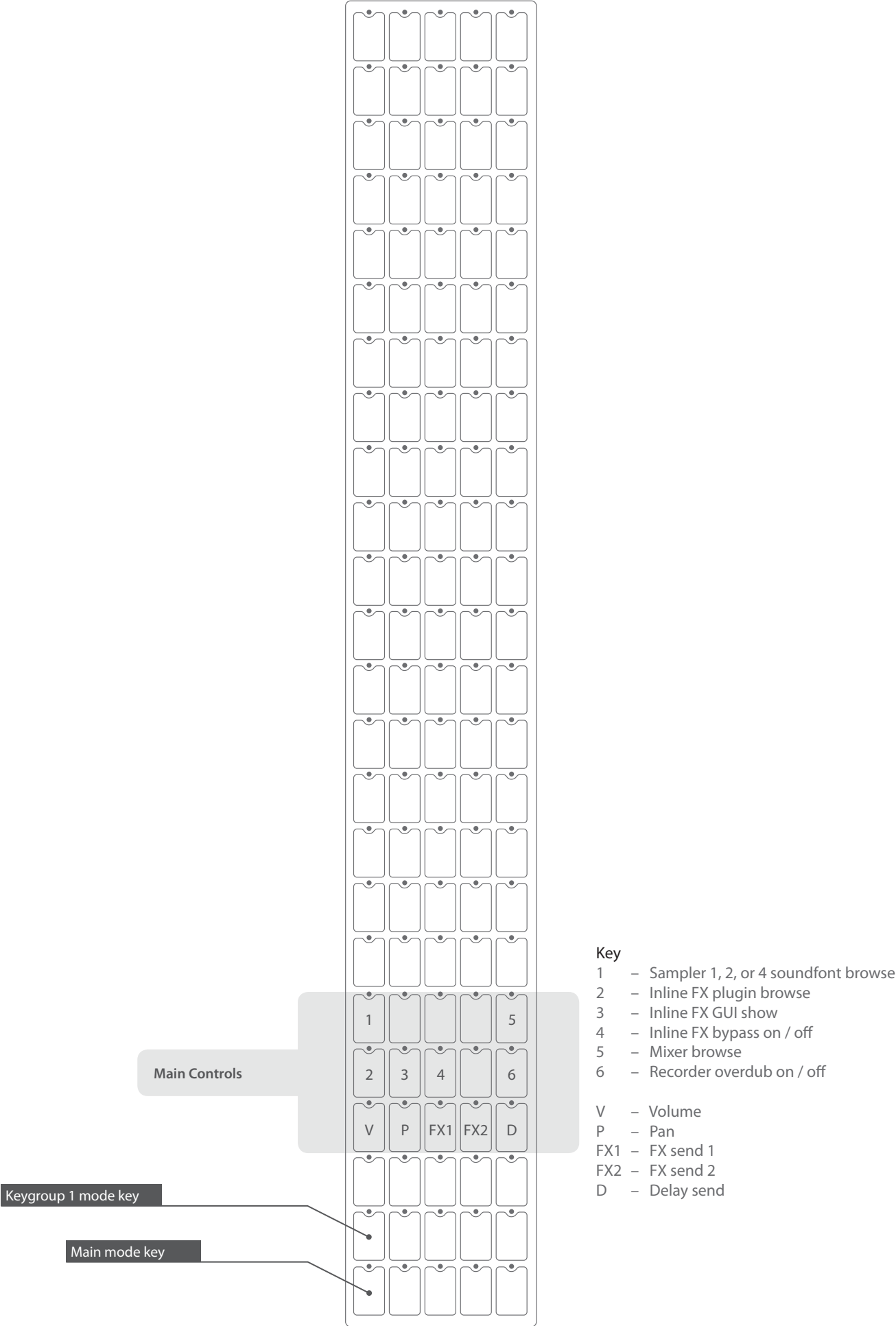
- Key
- 1 - MIDI output port browse
 - 2 - Recorder overdub on / off

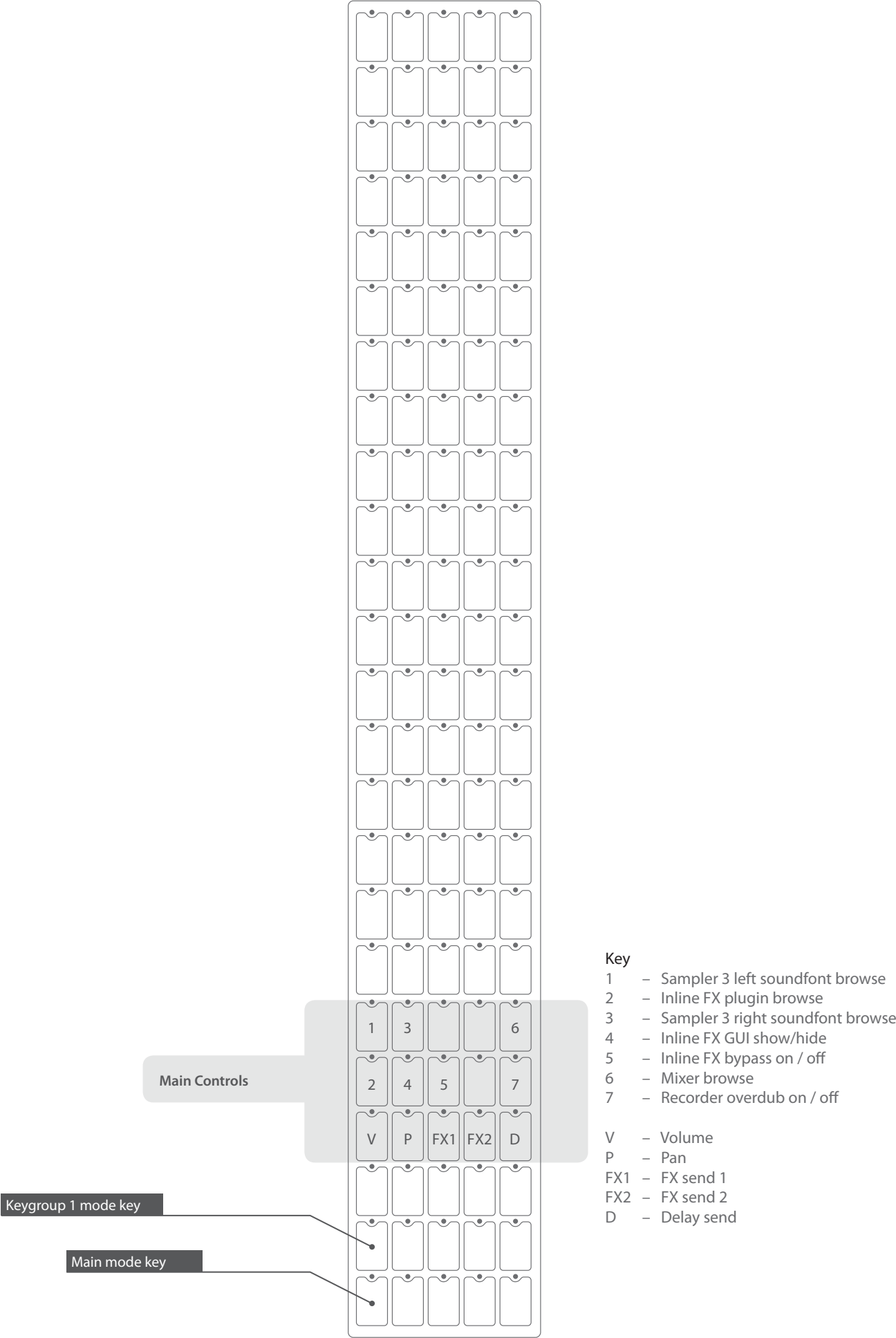






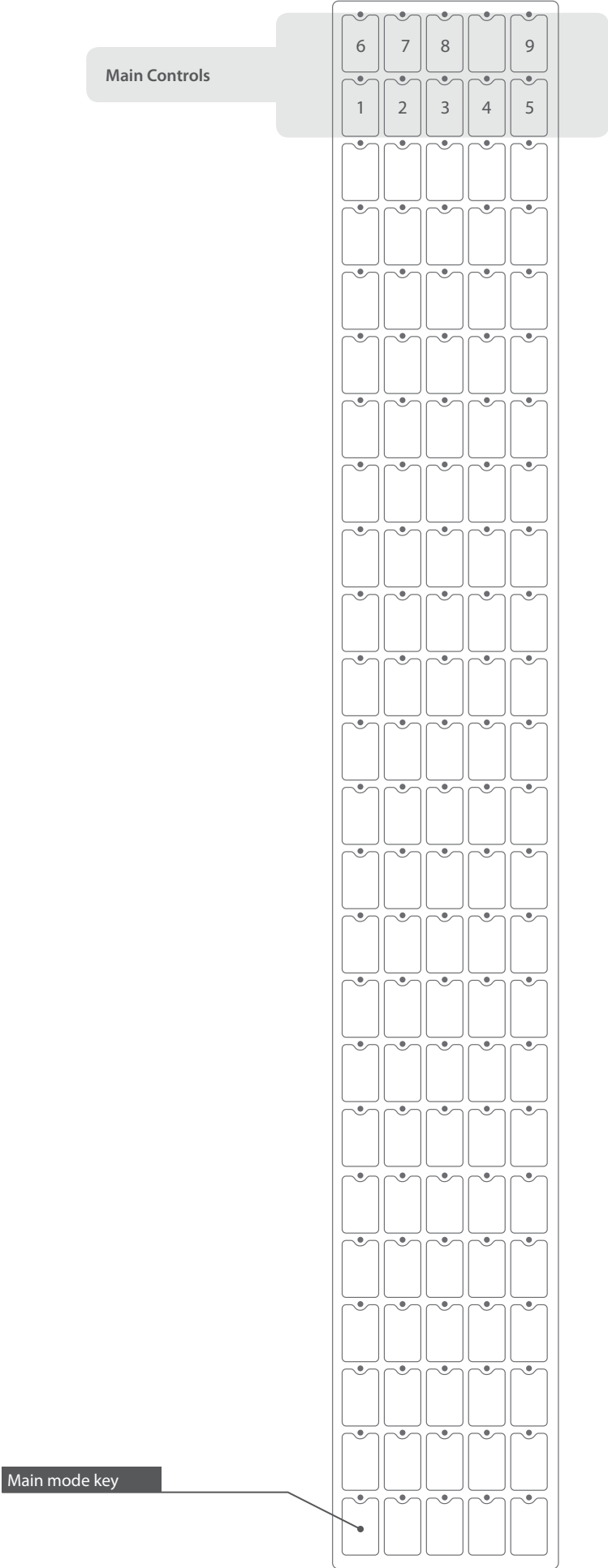






Arranger 1 and 2

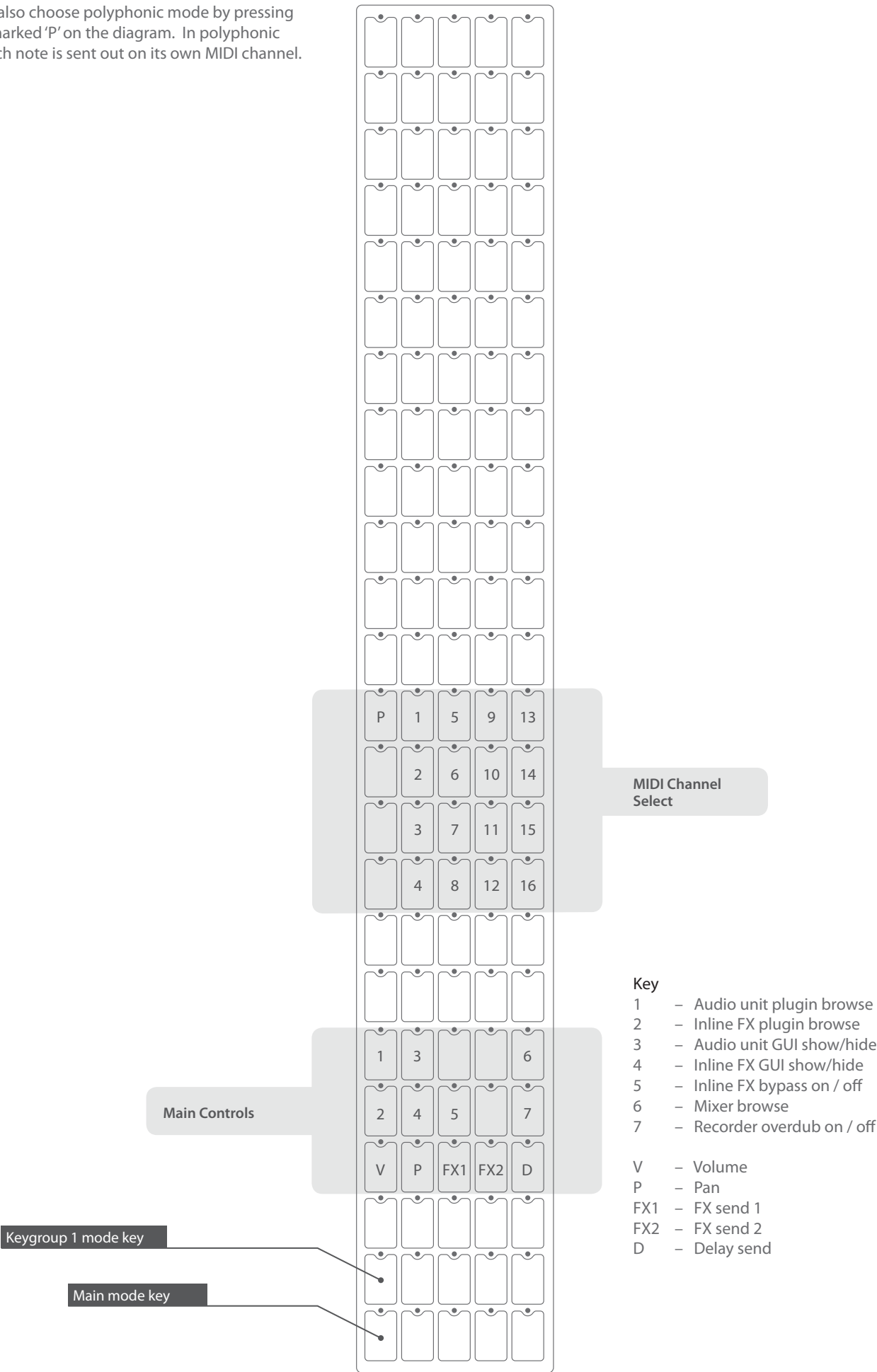
The arranger is the Eigenharp's built in step sequencer. There are two arrangers in Alpha setup 1 which you can use simultaneously. Arranger 1 is used to play sounds on Audio Unit 4 and Arranger 2 is used to play sounds on sampler 4.



- Key
- 1 – Scroll right
 - 2 – Scroll left
 - 3 – Scroll down
 - 4 – Scroll up
 - 5 – Arranger on / off
 - 6 – Event mode
 - 7 – Set loop start and end points
 - 8 – Reset arrange window
 - 9 – Clear events at double tap

This page will allow you to select a MIDI channel, e.g. key 1 = MIDI channel 1, key 2 = MIDI channel 2, etc.

You may also choose polyphonic mode by pressing the key marked 'P' on the diagram. In polyphonic mode each note is sent out on its own MIDI channel.



Audio Unit / VST parameter routing

The Eigenharp's various controllers can easily be connected to any parameter in an Audio Unit/VST plug-in. To do this you first need to access the parameter routing configuration matrix by clicking on the 'Configure' button located in the top left hand corner of your plug-ins GUI window.

You will now see a new window appear similar to the diagram below. The column down the left hand side is a list of parameters that are available in your current Audio Unit/VST plug-in. The headers along the top relate to the controllers that are available on your Eigenharp. The various controllers and their corresponding numbers are listed below.

To make a connection, click in the box where the controller's column meets the parameter's row, e.g. to connect strip controller 1 relative to Control1 you would click in the box shown in the diagram below.

You will see the number '1.0' appear - this is the default scaling factor applied to the value received from the Eigenharp controller. Additionally, a popup dialog will appear with a collection of options. The details of these as well as other features of the routing matrix can be found on the official documentation wiki here: http://www.eigenlabs.com/wiki/Routing_Matrix/

	Strip controller 1	Strip controller 2	Breath blow 3	Breath suck 4	Key pressure 5	Key roll 6	
Control 1	1.0						
Control 2							
Control 3							
Control 4							
Control 5							
Control 6							
Control 7							
Control 8							
XyPad1x							
XyPad1y							
XyPad2x							
XyPad2y							
Attack							
Decay							
Sustain							

This page allows you to control the Eigenharp Alpha's built-in headphone output and microphone input.

Key

- 13 – Drummer
- 14 – Cello
- 15 – Clarinet
- 16 – Synth
- 17 – Audio Unit 1
- 18 – Audio Unit 2
- 19 – Audio Unit 3
- 20 – Audio Unit 4
- 21 – Sampler 1
- 22 – Sampler 2
- 23 – Sampler 3
- 24 – Sampler 4

Headphone
send nudgers

Main Controls

Main mode key

Key

- 1 – Headphone enable
 - 2 – Inline FX Plugin Browse
 - 3 – Bias-Power Microphone
 - 4 – Headphone gain control
 - 5 – Inline FX GUI show
 - 6 – Phantom-Power Microphone
 - 7 – Microphone enable
 - 8 – Inline FX bypass
 - 9 – Dynamic Microphone
 - 10 – Microphone gain control
 - 11 – Mixer browse
 - 12 – Microphone and Headphone browse
-
- V – Volume
 - P – Pan
 - FX1 – FX send 1
 - FX2 – FX send 2
 - D – Delay send

This page allows you to calibrate the Eigenharp Alpha's volume and sustain pedals when using the base station pro.

