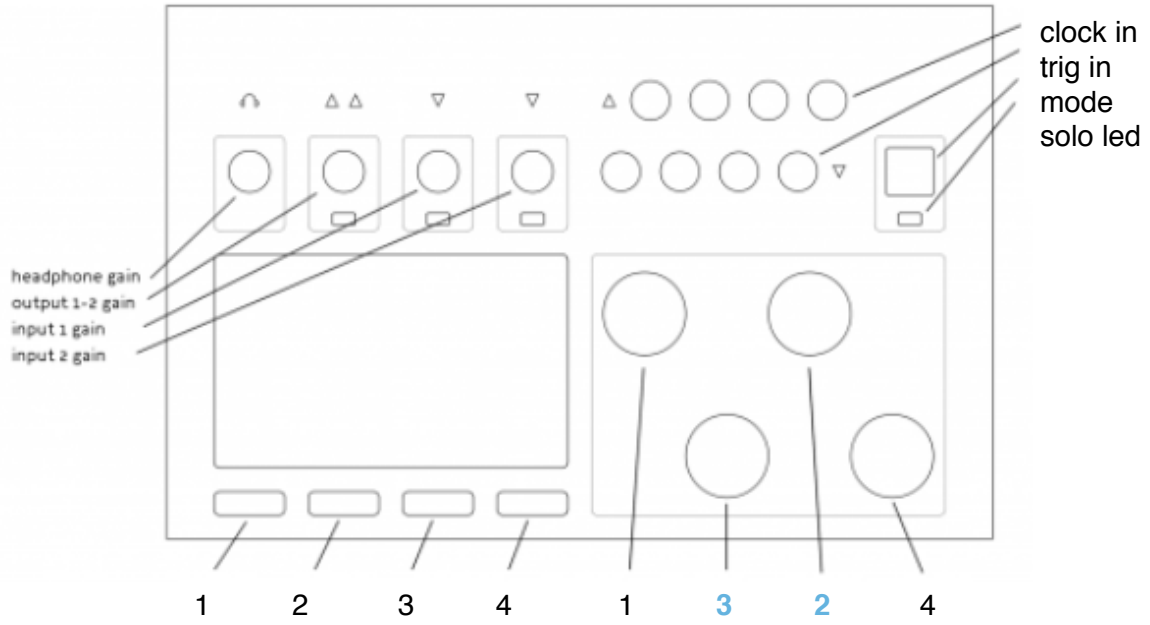


DRAFT - user manual
version: 0.1.7d

UI



building blocks

sequencer

- 6x internal sample tracks + 4 external turntable tracks
- Sample- and parameter-per-step sequencing
- Turntable sequencing with DECK ii extension
- Composition mode
- Up to 32 steps per pattern
- Individual track lengths
- Track shift up/down, Step clone to next measure
- Recall

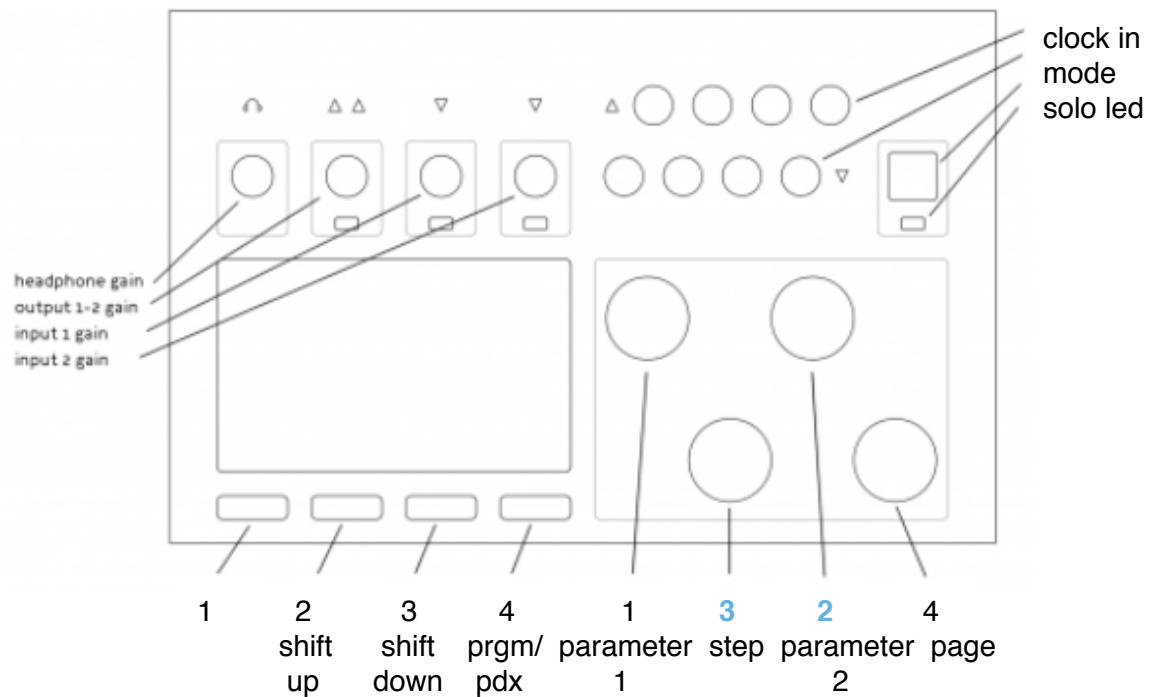
channels (x6)

- Turntable controlled loop mode with DECK ii extension
- 1x AUX, 1x CV AUX
- AUX pre fader/post fader toggle switch
- SEND assign for MIX and GROUP 1-2
- Prepare state change of SEND on/off, execute SET, SWAP and CLEAR on MASTER section
- Click-free audio switching on SEND and SOLO toggle switches
- SOLO AFL or PFL by global setting
- Recall

master section

- GROUP 1-2 fader
- MIX fader
- MASTER out (MIX)
- 2x DIRECT outputs
- SET, SWAP and CLEAR toggle switch
- Recall

CTRL mapping sequencer



switch1 / encoder combinations

measure	encoder 1
track length	encoder 2
clone to next measure	encoder 3

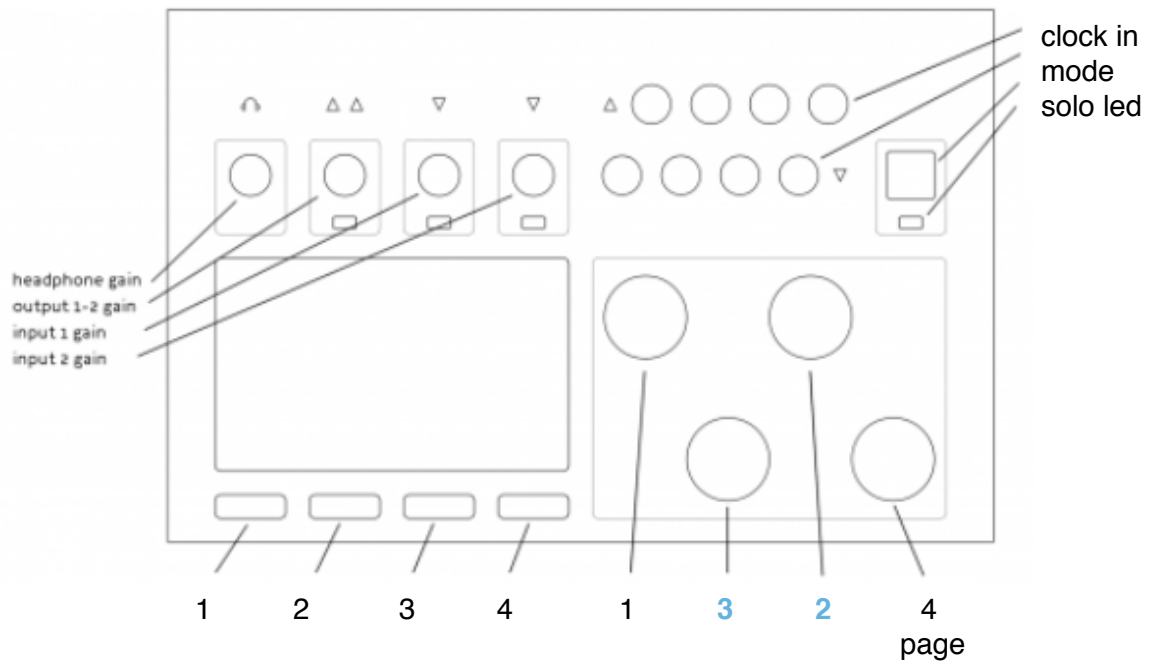
MODE / encoder combinations

save current pattern	
select and load pattern	encoder 1
save to selected pattern	encoder 2

PRGM	parameter 1	parameter 2
PDX	parameter command	parameter value per step speed per step

CTRL mapping

chord helper

**CHORD INSERT PAGE**

insert chord on track 1-4
 add transposition on track 1-4
 clear insert track

encoder 1
 encoder 2
 mode switch

switch1 / encoder combinations

set length for all tracks

encoder 2

CHORD PROGRAMMING PAGE

activates a direct control mode of the turntables by encoder 1-4, sequencing is bypassed
 chords are part of, and recalled by the scene

switch1 / encoder combinations

set speed

encoder 1-4

switch2 / encoder combinations

set pitch

encoder 1-4

switch3 / encoder combinations

add transposition

encoder 1

MODE / encoder combinations

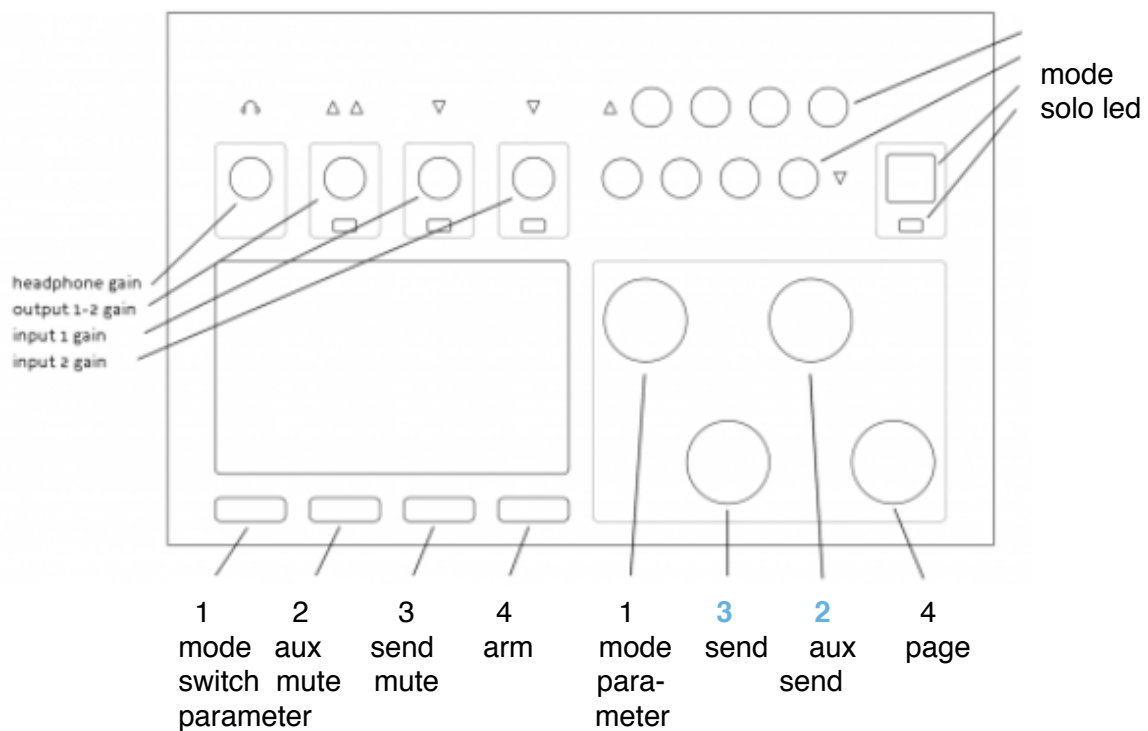
select chord

encoder 1

clone to selected chord

encoder 2

channels

**mode** / switch combinations

aux pre I post
channel mute
solo

switch 2
switch 3
switch 4

mode doubletap

secondary view with parameter control by encoders 1-3

mode / encoder combinations

parameter 1 modulation
aux send modulation
send modulation

encoder 1
encoder 2
encoder 3

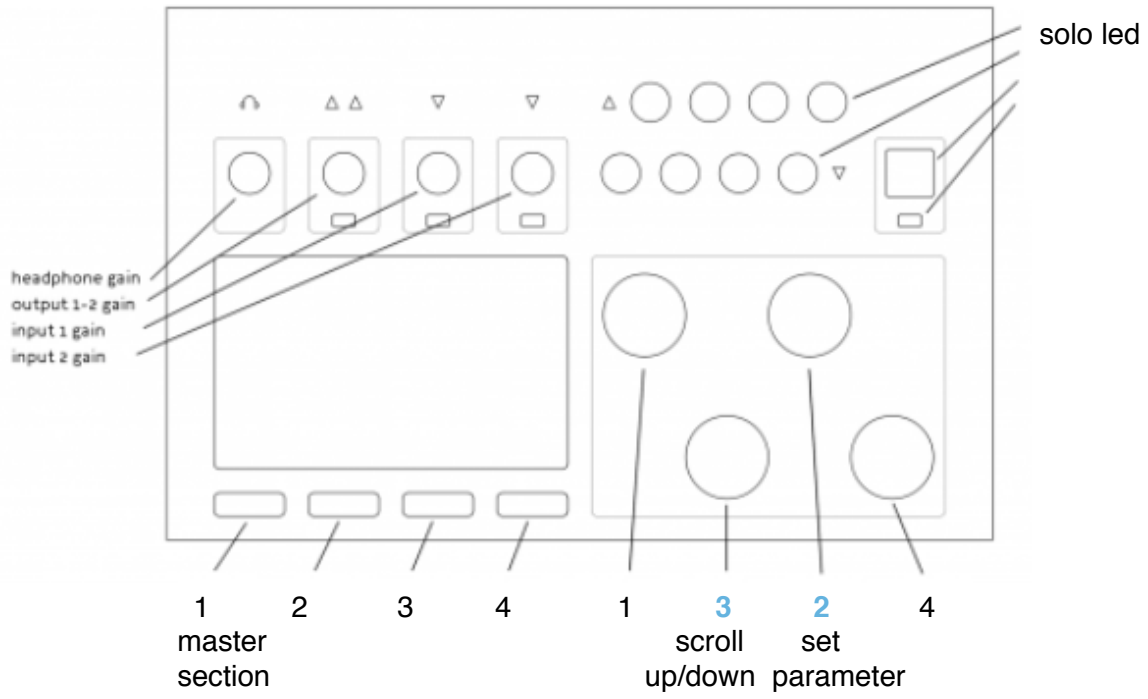
mode	parameters	audio	cv
imp	length	impulse	gate
lin	level	sample	sample
tape	speed, start/stop	sample	-
deck	arm/play/record	loop	-
[pre]	-	audio input	-
[bpf] - NOT READY	-	-	-
[dly]	feedback/time/repeat	delay	lfo
LFO	rate	-	lfo
ENV - NOT READY	-	-	-
GATE - NOT READY	-	-	-

mode / switch combinations

arm clear

switch 4

scene



MODE / encoder combinations

save current scene

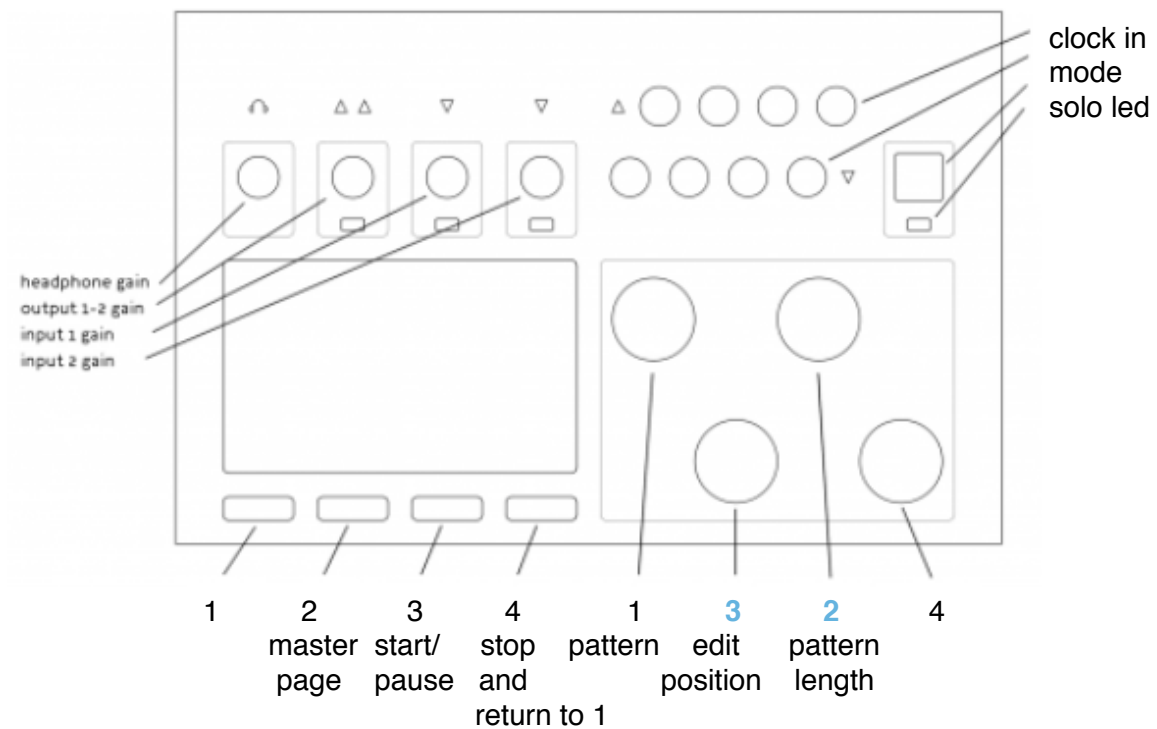
select and load scene

save to selected scene

encoder 1

encoder 2

composition



switch1 / encoder combinations
add/remove position

encoder 2

MODE / encoder combinations
save current composition
select and load composition
save to selected composition

encoder 1
encoder 2

channel modes**imp**

impulse/gate generator with per-step sequencing. gate length can be modulated. can send to TRIG bus on gate end. outputs gate as audio and cv.

lin

linear sample playback with per-step sequencing. sample level can be set modulated. can send to TRIG bus on sample start. outputs sample as audio and cv.

tape

interpolated sample playback. speed can be modulated. the UI also provides manual control of start/stop and forward/reverse playback. can send to the TRIG bus on loop restart. outputs loop as audio, no cv output.

deck

loop recording and playback with turntable integration, see section 'deck with vestax pdx-d3s'. outputs loop as audio, no cv output.

[pre]

input channel. outputs audio input.

[bpf]

not ready.

[dly]

a delay with time and feedback control and an internal lfo. feedback can be modulated. the UI provides a switch between delay and repeat mode. input is freely selectable. outputs delay as audio and its internal lfo as cv.

LFO

an lfo with rate control and modulation. outputs lfo as cv, no audio output.

ENV

not ready.

GATE

not ready.

audio routing

audio input 1 and 2 are patchable to any audio channel that accepts an audio input. it's also possible to route channel outputs to channel inputs to create an audio chain. additionally each channel has an AUX send that can be routed to any audio channel, providing means to achieve internal feedback. inputs can be selected with normal or reversed phase.

channel sends can be routed to MIX, group 1, group 2 or a combination. the master section provides faders for the groups and a master fader for the MIX output. MIX is patched to audio output 1 and 2. channel outputs and AUX can also be routed to the DIRECT outputs, which are patched to audio output 3 and 4.

cv routing

cv routing is performed on the scene page. parameter modulation is engaged by selecting a source and setting a modulation amount, with offset. cv sources can be mixed by sending to the cv aux channel.

possible modulation destinations are:

- mix send
- aux send
- mode parameters

clock and trig routing

an external clock is necessary to drive the sequencer. insert a cable to the CV 1 input with a trig, pulse or a sharp saw+ wave.

the trig bus works as a patch cable or multiple, to send a trig from one source and have it trig others.

audio mixing

this application is designed for hands-on audio mixing, this is an overview of the mixing options, per feature, see page 5 and 6 for how they are mapped

AUX

- send
- modulation amount
- mute
- PRE or POST fader

CHANNEL

- send
- modulation amount
- mute send
- mute channel
- solo
- arm/prepare to create mute groups

MASTER SECTION

- group 1 level
- group 2 level
- master fader
- set/swap and clear to manage mute groups

global mix settings

solo mode can be set to AFL (after fader listening) or PFL (pre fader listening) on the scene page. PFL mode turns off this channel's send modulation when solo is activated.

samples

samples are loaded on startup from this folder on the card:
/data/prgm/samples

supported formats:

- 48k 32bit raw PCM
- 96k 16bit raw PCM

patterns

patterns are stored on the card:
/data/prgm/patterns/

compositions

compositions are stored on the card:
/data/prgm/compositions/

scenes

scenes are stored on the card:
/data/prgm/scenes/

no scenes are loaded on startup, instead the app starts with a set of initialised values, scene s00.scn is meant to be used as an empty scene template. scene s01.scn and s02.scn contain some limited examples with the purpose of providing audio output tests.

deck with vestax pdx-d3s

DECK is an optional hardware for connecting up to 6 PDX-d3S turntables*.

* a single turntable can only use 1 (one) remote connection at once, thus six (6) turntables are required to simultaneously perform dual loop recording and quad turntable sequencing.

setup

>power

DECK usb DEVICE port connects to Aleph usb HOST port

>communication and audio

DECK ii port connects to the Aleph ii port (with a stereo phone connector)

- loop recording:
 - connect PDX-d3S remote outputs to DECK inputs 1 or 2 with mono phono 1/8" cables
 - connect mono audio outputs (from mixer or phono preamp) to ALEPH audio inputs 1 or 2
 - set PDX sync on/off switches to ON to start sending control data
- turntable sequencing:
 - connect DECK outputs 1,2,3 or 4 to PDX remote inputs with mono phono 1/8" cables
 - set PDX sync on/off switches to ON to start receiving control data

loop recording

adjust ALEPH input gain knob(s)

(optional) adjust startup-time compensation, the default startup time is 500 ms.

open the SCENE page by pressing switch 1 on the MASTER page

set channel mode to "deck"

set channel input to "IN1" (audio input 1) or "IN2" (audio input 2)

set channel DECK input to "input 1" or "input 2"

return to the MASTER page by pressing switch 1

scroll to a CHANNEL page with encoder 4

- recording with startup-time compensation
 - (Aleph) press switch 4 to arm channel for recording
 - (PDX) press start/stop button to start recording, and again to stop recording
- record direct with spinning platters
 - start the turntable
 - (Aleph) arm channel(s) for recording
 - (PDX) press the active rpm button to start recording, and again stop recording (changing rpm does not affect recording start/stop)
- record a turntable stop/slowdown
 - start the turntable
 - (Aleph) arm channel(s) for recording
 - (PDX) press turntable start/stop to start recording, and again to stop recording
- record with motor off (for scratching etc.)
 - (PDX) activate motor off, led above "MOTOR OFF" should light up
 - (Aleph) arm channel(s) for recording
 - (PDX) press start/stop button to start recording, and again to stop recording

turntable sequencing

see setup above and page 3,4 and 9 on how to program patterns and compositions.

known bugs/limitations

- first sample does not play when sequenced
- channel solo settings are force saved to OFF
- solo/mute/arm logic have loop-holes
- some modes are not ready