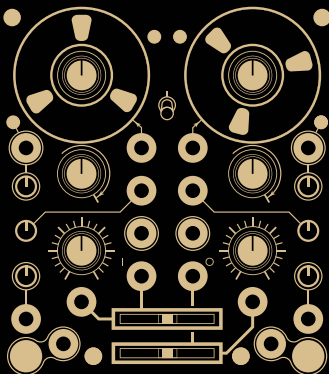




INSTRUO

SPECIALIST
SYNTHESIZERS



Lúbadh
(Version 2 Firmware)
Dual Looper

Overview

PLAYHEAD SPEED



LINKED PLAYHEADS



LINK FOR STEREO FUNCTIONALITY

INPUT & INPUT GAIN

OUTPUT & OUTPUT LEVEL

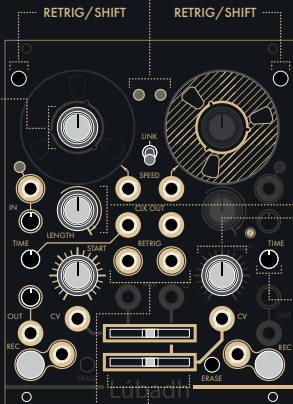
RECORD / PLAY / OVERDUB

NORMALISED SIGNAL PATH



ALLOWS EASY BOUNCING OF AUDIO BETWEEN LEFT AND RIGHT PLAYHEADS

LED'S
LIGHT ON TO INDICATE STALLED, HALF, ORIGINAL AND
2 x PLAYBACK SPEEDS (FORWARD AND REVERSE)



RETRIG JACKS
RETRIG LOOP AND SYNCING
PLAYBACK TO EXTERNAL CLOCK

CAPACITIVE TOUCH PLATE
USED TO CREATE WARBLE EFFECTS
OR STALL THE PLAYHEAD

CAPACITIVE TOUCH PLATE
SENSITIVITY TRIMMER

SELECT LOOP LENGTH



SELECT LOOP START POINT



CLOCK DIVISIONS



CV OR MANUAL CONTROL

AUX INPUT AND
OUTPUT SECTION

DUB LEVEL

USER DEFINABLE
CROSSFADE DURATION
TAPE EMULATION AMOUNT
SPEED SLEW

Version 2 Firmware Features



EXPANDED SAMPLE MANAGEMENT

NAVIGATE FILES AND FOLDERS IN ORDER
TO LOAD FROM MULTIPLE LOOP OPTIONS

LINK

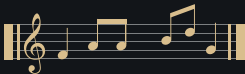


STEREO CAPABILITIES

SAMPLE LOCKED LINKING FOR STEREO
PLAYBACK, RECORDING AND SAVING

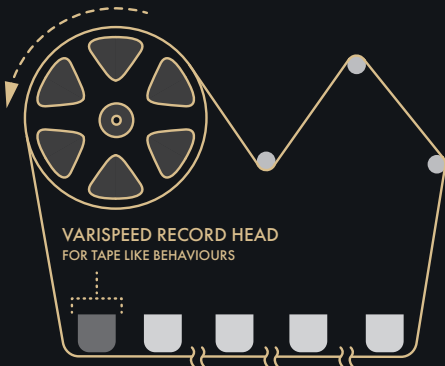
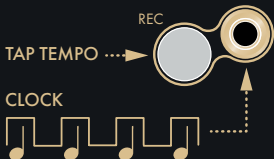
1V/OCT

MUSICALLY SEQUENCE THE PITCH
OF YOUR LOOPS



SYNC OPTIONS

LOOPS CAN BE SET USING
EXTERNAL CLOCKS OR TAP TEMPO



MULTIPLE PLAYHEADS

ENABLING MULTITAP DELAYS, POLYPHONIC
OR GRANULAR EFFECTS AND MORE

Presets

Each deck of the Lùbadh can independently toggle between two user defined presets. Presets can be curated and accessed via the USB drive. **Note:** see manual for more details



To toggle between presets: hold down buttons 1 and 2, then press button 3. (This action is mirrored for the opposite deck.)

Note: Preset settings are also autosaved between power cycles.



Preset A (example)

Exponential (1V/Oct) speed

Tape Saturation ON

Tap Tempo



Preset B (example)

Linear speed

Tape Saturation OFF


Punch In Record

Time Functions



There are three separate functions for the **Time** pot: **Clock Divisions**, **Dub Level** and **User Definable Parameter**. You can toggle through these functions by holding down button 1 and pressing button 2 for the left deck, this action is mirrored for the opposite deck.

Note: CLK triggers indicated in white.

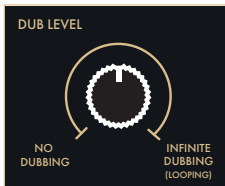
 The current time function is indicated by the Amber LED next to the 'CLK OUT' jack.

Amber LED Off



Time pot sets the number of clock divisions per loop. These are displayed by the white 'CLK OUT' LED.

Amber LED Solid Lit



Sets the rate at which old recordings fade out. Akin to feedback in a delay

Amber LED Pulsing



Controls parameter amount.

- Crossfade Duration
- Tape Emulation Amount
- Speed Slew

Monitoring Options



There are three options for input monitoring: **Monitoring On**, **Armed Monitoring** and **Monitoring Off**. You can toggle through these options by holding down buttons 1 and 2, then pressing button 3 for the left deck, this action is mirrored for the opposite deck.

Monitoring On - Record Button Solid White

Armed Monitoring - Record Button Pulsing White

Monitoring Off - Record Button Off

Monitoring On - When monitoring is on, throughput audio is always present at the output and summed with any recorded loops. **(DEFAULT)**.

Armed Monitoring - When armed monitoring is selected, throughput audio is muted by default, pressing the record button 'arms' the deck and throughput audio is toggled on, pressing record again records a loop, pressing record to finish the recording disables throughput audio and only the recorded audio is heard. When armed the erase button will disarm the deck without erasing the loop.

Monitoring Off - When monitoring is off only the recorded material appears at the output.

Looping or One-Shot Modes

Toggle between looping/one-shot modes by holding button 1 and pressing button 2 for the left deck, this action is mirrored for the opposite deck.



Looping or One-Shot Record

In one shot-record, recording starts from current playback position, records one full loop (set by start position and length) and stops recording automatically. (Looping by **DEFAULT**).

Note: Idle record button is lit mixed amber/white when monitoring is on, pulsing mixed when armed monitoring is on and remains off when monitoring is off.



Looping or One-Shot Playback

When looping is disabled (i.e. one-shot mode) playback stops after each loop. Retriggert will prompt the recording to play once. (Looping by **DEFAULT**)

Note: The record button will blink white when loop playback is selected and blink mixed when one-shot playback is selected.

Save and Load



Save

To save a recording onto the Lúbadh USB hold down buttons 1 and 2, then press button 3, this action is mirrored for the opposite deck.

Note: Recordings and settings are also autosaved between power cycles.

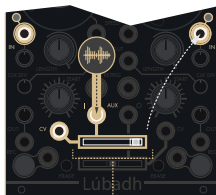
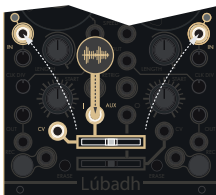
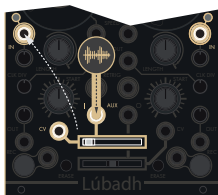


Load

To enter the load menu hold down button 1 and press button 2. When in the load menu, left time pot selects which file and right time pot selects which folder to load (deck LEDs indicates which file/folder is selected). This action is mirrored for the opposite deck. Press button 3 to load selected loop.

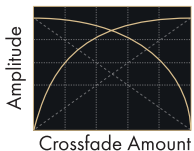
Auxiliary Input & Output Crossfaders

Auxiliary Audio Input



In addition to the left and right input/output sections, the Lúbadh also has auxiliary input and output crossfaders which allow additional audio to be sent to the input sections or monitored from the outputs. Voltage control allows for modulation up to audio rate.

Crossfader Curve



Auxiliary Audio Output



Capacitive Touch & Pre/Post Switches

Capacitive Touch Switch

The switch on the lower side of the rear PCB toggles the capacitive touch on /off.

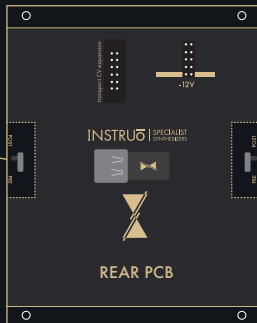
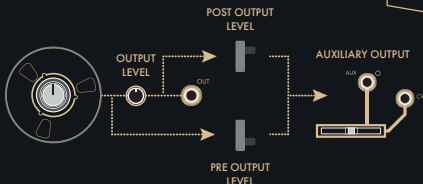


Capacitive Touch Switch

* See Overview Graphic

Pre/Post Output Level

Pre/Post switches on the rear of the pcb are used to toggle the output fader to being either pre or post output level.



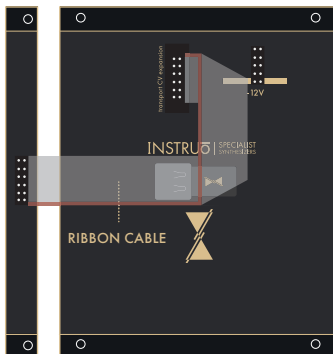
CV Expander

Included with the Lúbadh is a CV expander, which is connected to the module via a ribbon cable. The expander allows for additional CV control over all remaining parameters.

Note: All CV inputs are bipolar (5Vpp).



Front



Back

Cheat Sheet

Functions	Button Combinations	Display
Monitoring Modes	Both Shifts & Record	On - REC LED Solid White Armed - REC LED Pulse White Off - REC LED Off
Time Pot Function	Shift & Record	CLK Divisions - CLK LED Off Dub Level - CLK LED Solid Lit User Definable Parameter - CLK LED Pulsing
Looping Record One-Shot Record	Shift & Opposite Record	Looping - Unchanged One-Shot - REC LED Mixed
Looping Playback One-shot Playback	Shift & Opposite Erase	Looping - REC LED Blinks White One-Shot - REC LED Blinks Mixed
Punch In Record /Tap Tempo	Erase & Record	REC LED Lights Amber /Mixed
Toggle Preset	Both Shifts & Erase	Preset A - REC LED Blinks White Preset B - REC LED Blinks Mixed
Flip Playback Direction (in 1V/Oct Mode)	Opposite Erase + Erase	Speed Indicator LED's Blink
Delete Taps	Erase & Shift	N/A
Save	Shift, Erase & Record	Deck LED Animation
Load	Shift & Erase	Deck LED Animation
Reset	Both Shifts & Both Records	Speed Indicator LED's Pulse