XERO
POLY LOOPER

INSTRUCTION MANUAL 1.0

The Xero Polylooper is a true bypass, dual-channel looping powerhouse with independent loop controls on each channel, stereo panning, variable playback speed, reverse playback, three looping modes, and intuitive stomp gestures. The Xero is your new partner for perpetually endless ways to create new song ideas, practice your licks, or build endless textures on stage.

9V DC · 300mA
MIDI OUT   MIDI IN
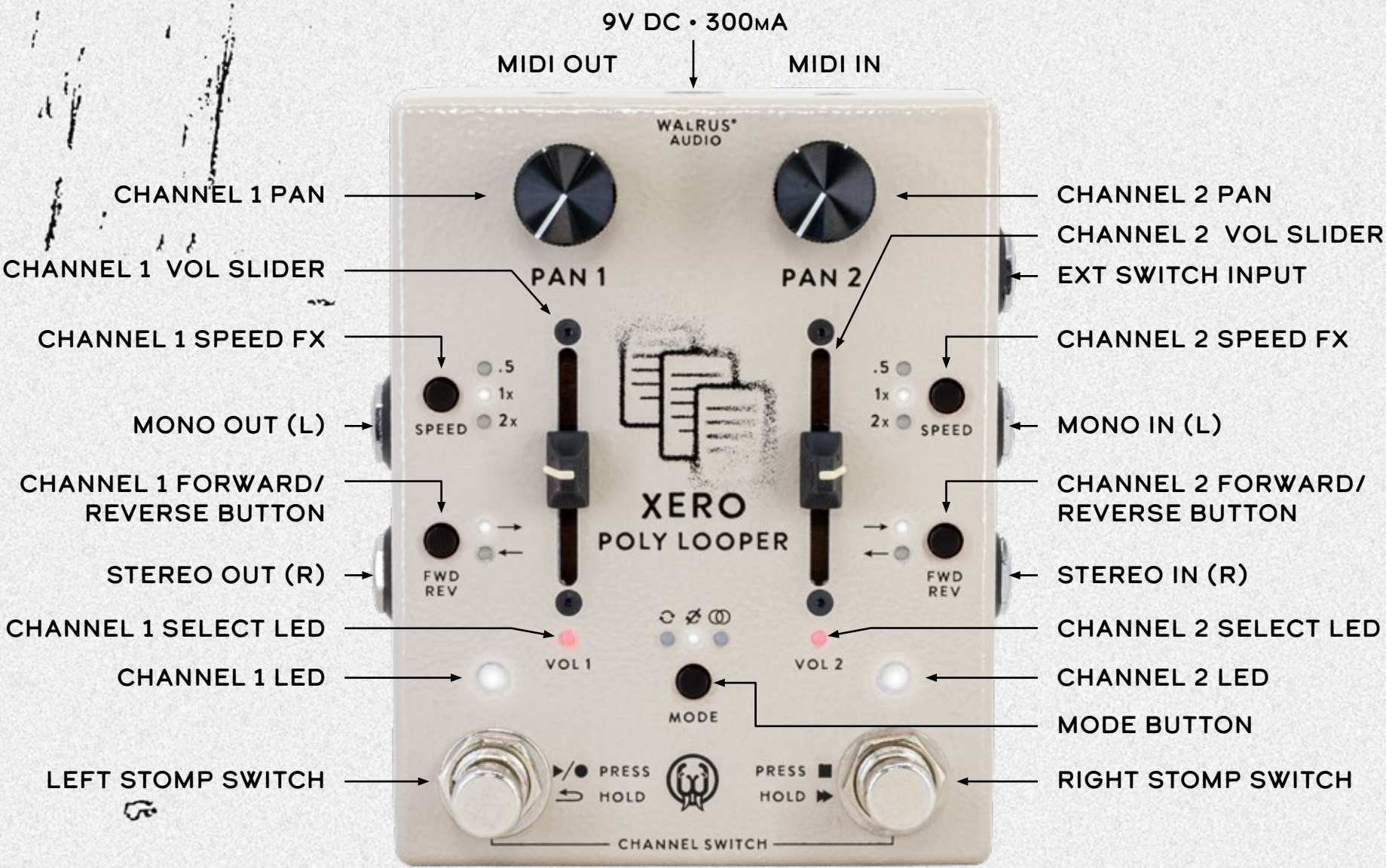
WALRUS AUDIO

CHANNEL 1 PAN	CHANNEL 2 PAN
	CHANNEL 2 VOL SLIDER
CHANNEL 1 VOL SLIDER	EXT SWITCH INPUT
CHANNEL 1 SPEED FX	CHANNEL 2 SPEED FX
MONO OUT (L)	MONO IN (L)
CHANNEL 1 FORWARD/ REVERSE BUTTON	CHANNEL 2 FORWARD/ REVERSE BUTTON
STEREO OUT (R)	STEREO IN (R)
CHANNEL 1 SELECT LED	CHANNEL 2 SELECT LED
CHANNEL 1 LED	CHANNEL 2 LED
	MODE BUTTON
LEFT STOMP SWITCH	RIGHT STOMP SWITCH

PAN 1   PAN 2

.5
1x
2x
SPEED

XERO
POLY LOOPER

VOL 1   VOL 2

MODE

PRESS / HOLD
PRESS / HOLD
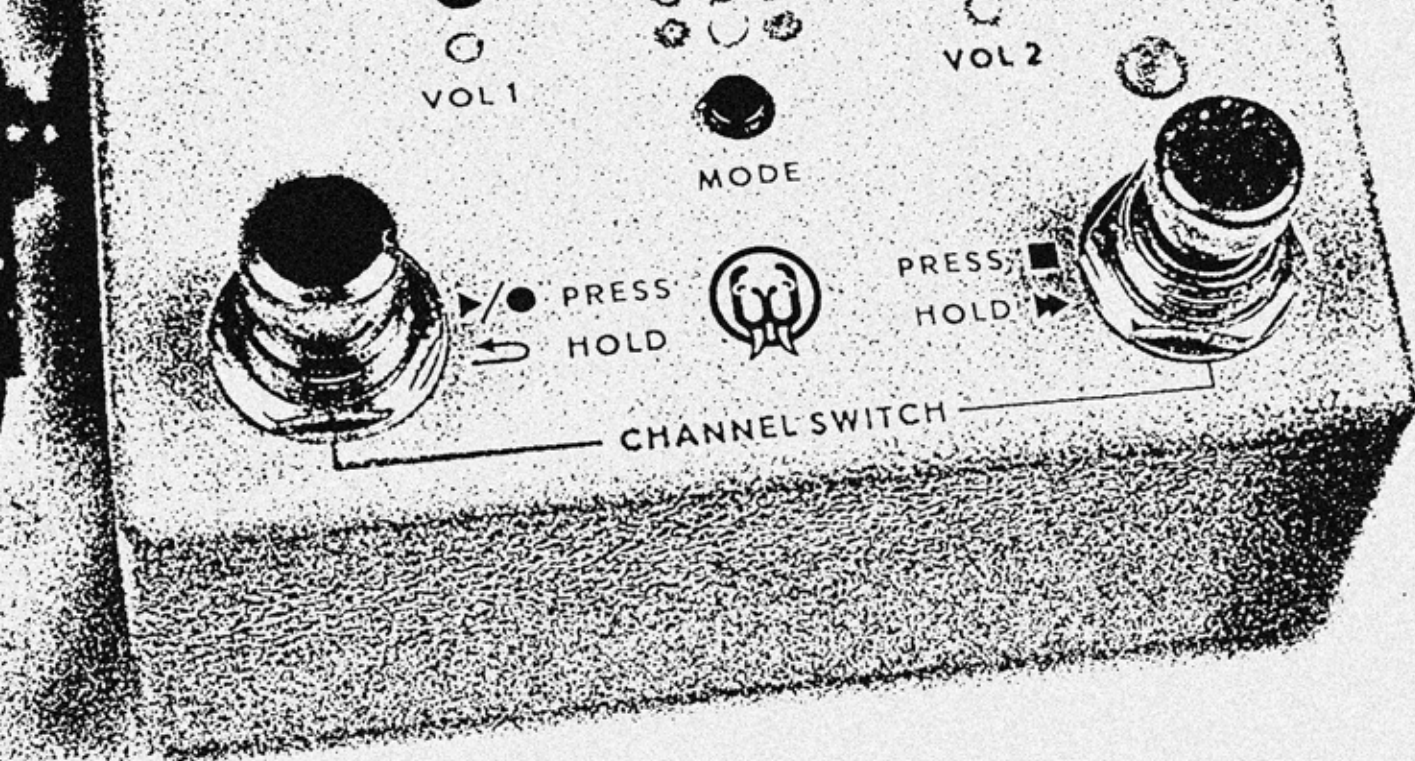
CHANNEL SWITCH

LEFT STOMP SWITCH

● Press to start recording
- Depending on which channel is active, you will see the LED turn red when recording.

▶ Press again to stop recording and automatically begin playing your loop back.
- Depending on which channel is active, you will see the LED turn green when playing back loops. Each time the recorded loop cycles, you'll see the Stomp switch LED blink.

↰ Hold to undo a recording
- Holding once will undo the last loop recorded.
- If you have multiple loops overdubbed, holding a second time will erase all of them.

RIGHT STOMP SWITCH

■ Press to stop loop playback
- Depending on which channel is active and your current state of speed FX, you will see the LED turn white or blue when stopping.
  · White means at least one loop is recorded and stopped, waiting to be played back again.
  · Blue means at least one loop is recorded and stopped, waiting to be played back again, plus Speed FX is active.

▶▶ Hold to activate speed FX
- Depending on which channel is active and your current state of playback/recording, you will see the LED turn yellow, cyan, pink, or blue.
  · If the LED is yellow, that means speed FX is active, but there are no loops recorded.
  · If the LED is cyan, that means a loop is playing back with Speed FX engaged.
  · If the LED is pink, that means you are recording with Speed FX active.
  · If the LED is blue, that means Speed FX is active, there is at least one loop recorded, and playback is stopped.
- Note that when you record another loop while Speed FX is active, turning Speed FX back off will then impact the playback of that loop.
  · For example, if you are in 2x playback speed and record a loop, when you go back to 1x playback speed, that loop will now be in 0.5x speed.
  · Vice versa, if you are in 0.5x playback speed and record a loop, when you go back to 1x playback speed, that loop will now be in 2x speed.

▶▶ Hold again to turn off speed FX
- Depending on which channel is active and your current state of playback/recording, you will see the LED turn white, green, red, or turn off. Continue to the next page for the LED color key.
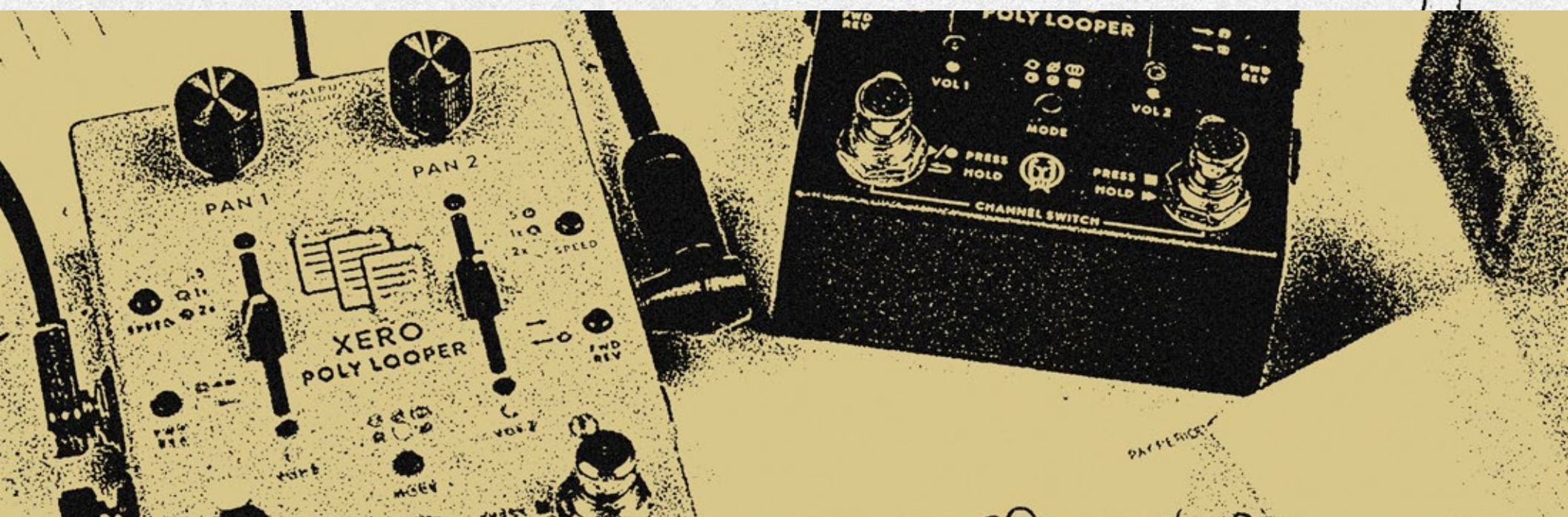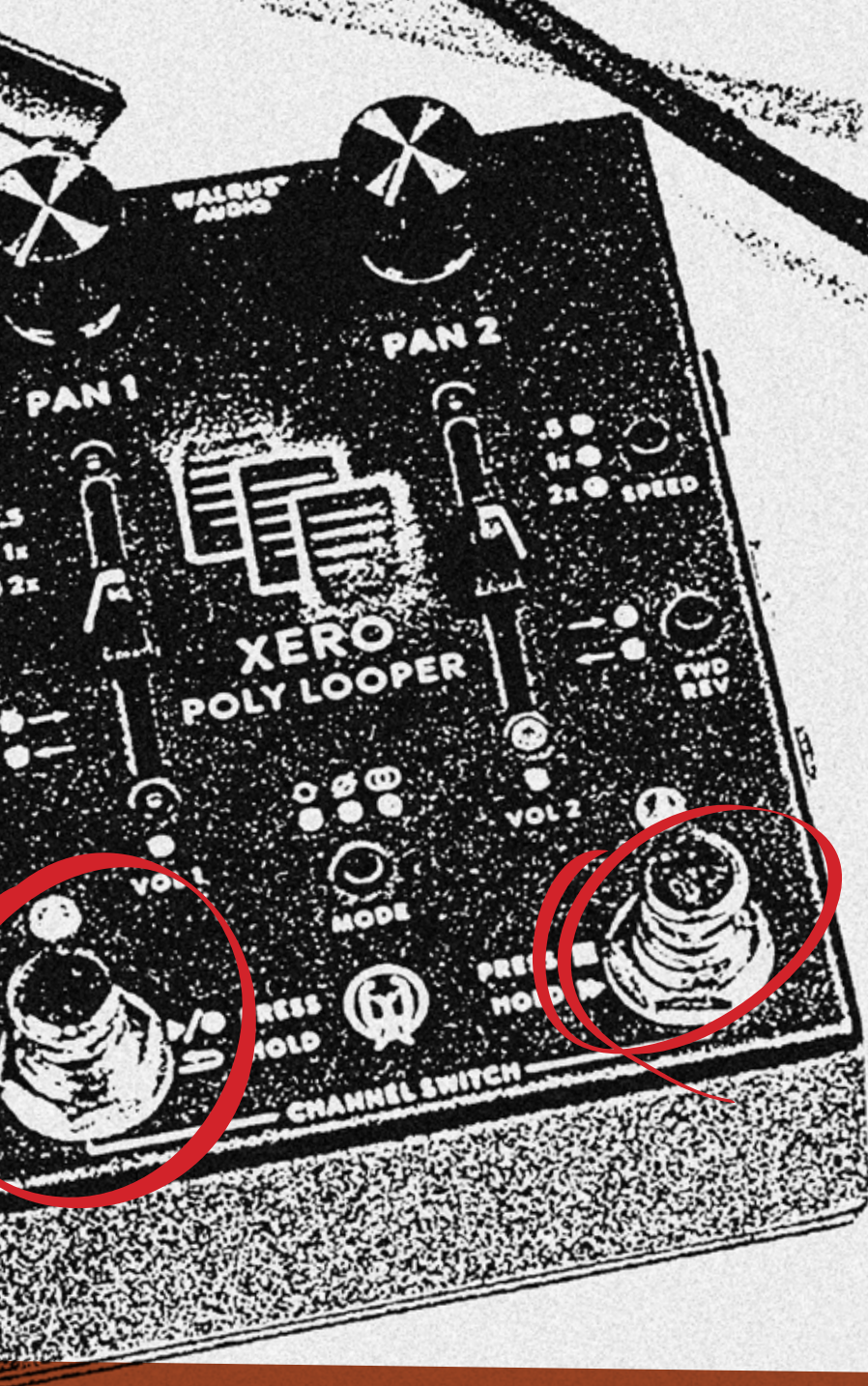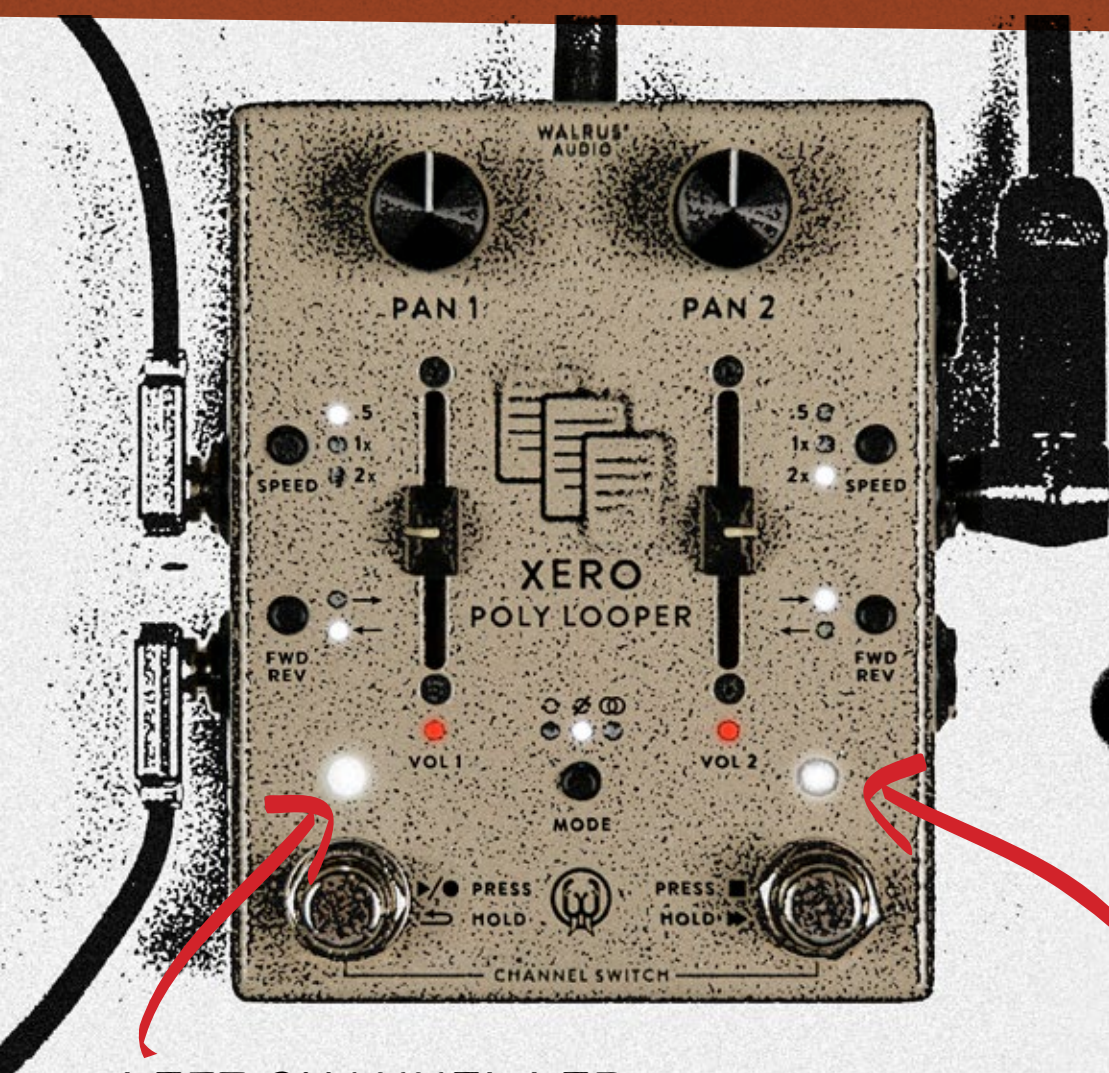
CONTROLS

Press both the left and right stomp switches simultaneously to change which channel is being controlled.
- The default setting controls only channel 1.
- A dual press will change to controlling just channel 2.
- A second dual press will change to control both channel 1 and 2 together.
- A third dual press will cycle back to just channel 1.

Holding both stomps down together for 500 milliseconds (.5 seconds) will trigger a "full stop" where all playback is stopped, regardless of which channel is currently active.

Holding both stomps down together for 5 seconds will trigger a full erase and reset both channels.

CONTROLS

LED FEEDBACK
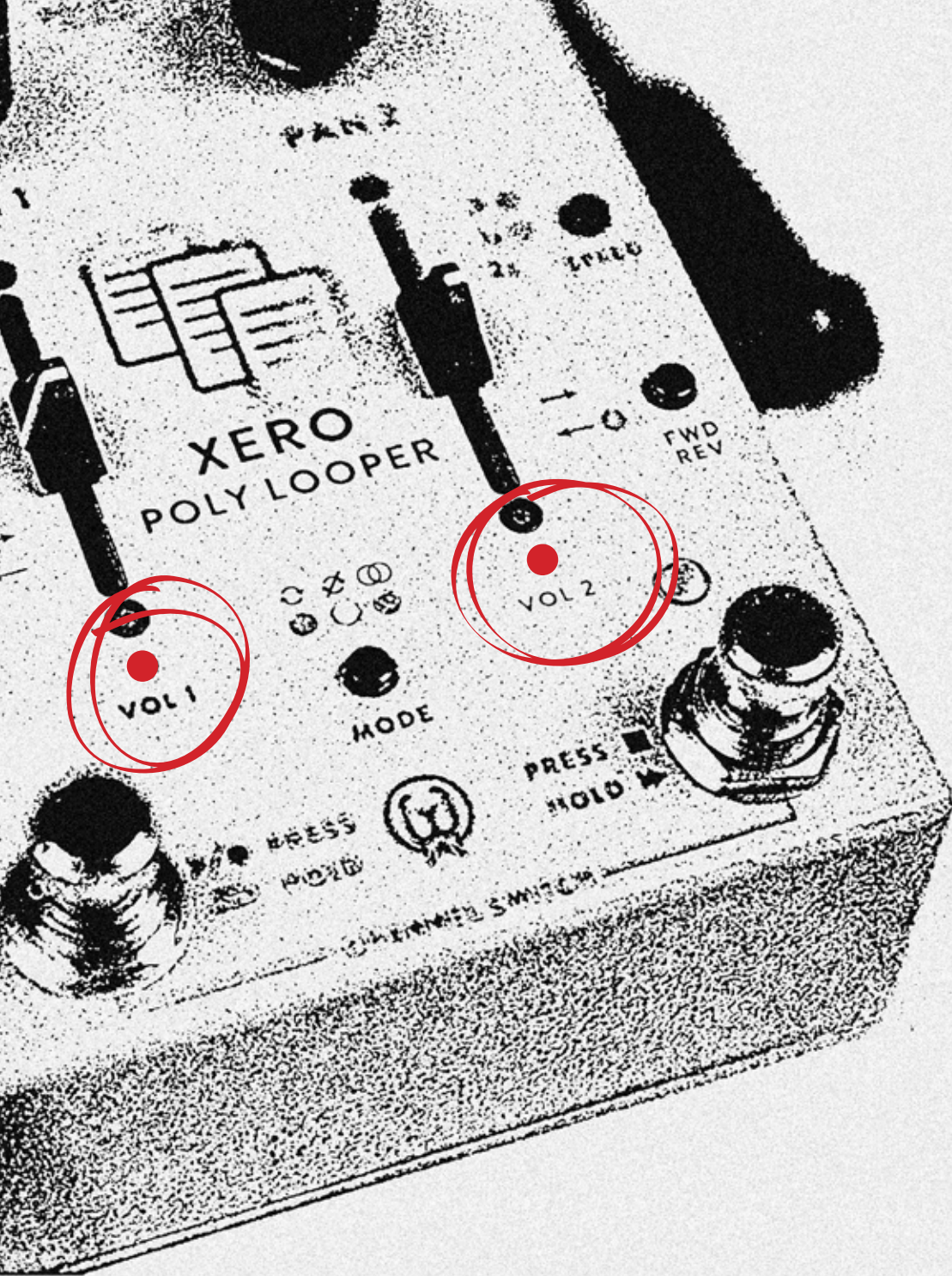
LEFT CHANNEL LED

- ○ Off = nothing recorded or playing back
- ● Red = recording
- ● Green = playing back
- ○ White = stopped, but at least 1 loop is there
- ● Cyan = speed FX activated, and loop is playing back
- ● Yellow = speed FX is active, but there are no active loops recorded
- ● Blue = track has speed FX active, but playback is paused
- ● Pink = recording while speed FX is active
    - Note that what you record with speed FX active, will then be affected again when turning speed FX off
    - For example, recording a loop during 2x playback, then turning off speed FX will cut that loop into half time

RIGHT CHANNEL LED

- ○ Off = nothing recorded or playing back
- ● Red = recording
- ● Green = playing back
- ○ White = stopped, but at least 1 loop is there
- ● Cyan = speed FX activated, and loop is playing back
- ● Yellow = speed FX is active, but there are no active loops recorded
- ● Blue = track has speed FX active, but playback is paused
- ● Pink = recording while speed FX is active
    - Note that what you record with speed FX active, will then be effected again when turning speed FX off
    - For example, recording a loop during 2x playback, then turning off speed FX will cut that loop into half time

CONTROLS
LED FEEDBACK

LEFT CHANNEL SELECT RED LED

- When red, it indicates that channel 1 is being controlled by the stomp switches.
- When off, it indicates that channel 1 is not being controlled by the stomp switches.

RIGHT CHANNEL SELECT RED LED

- When red, it indicates that channel 2 is being controlled by the stomp switches.
- When off, it indicates that channel 2 is not being controlled by the stomp switches.
- When both the left and right channel select are red, that means you are controlling both channels simultaneously.
  - Ex: you can record your playing to both channels at the same time, and then later choose to manipulate them differently via panning, volume, and speed FX.

XERO HAS TWO COMPLETELY INDEPENDENT CHANNELS, EACH WITH ITS OWN SET OF CONTROLS. USE THESE CONTROLS TO GET YOUR LOOPS TO TALK TO EACH OTHER IN CREATIVE AND INTERESTING WAYS!

CHANNEL 1 CONTROLS

PAN 1: Set the stereo panning of the channel 1 playback. All the way to the left will play your loop playback 100% out of the left output. In the middle, you will hear equal playback on both outputs. All the way to the right will play your loop playback 100% out of the right output.
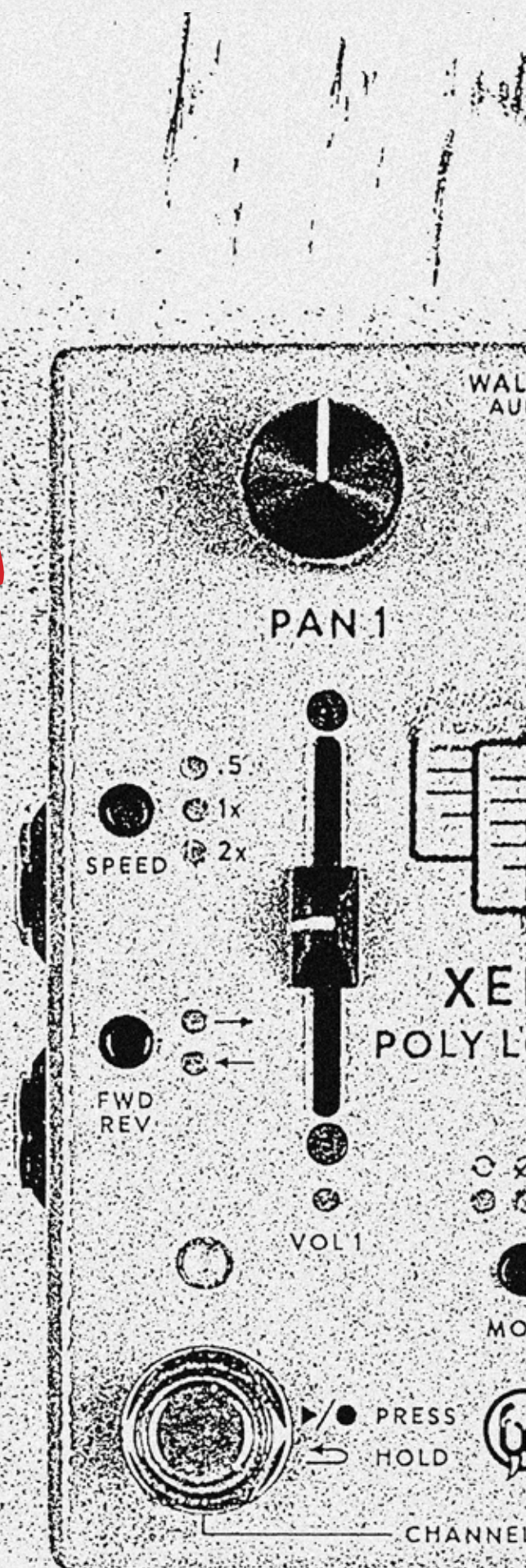
VOL 1: Sets the level of the channel 1 playback. At the bottom, there will be no playback. At maximum, there is an extra +3dB above unity gain.
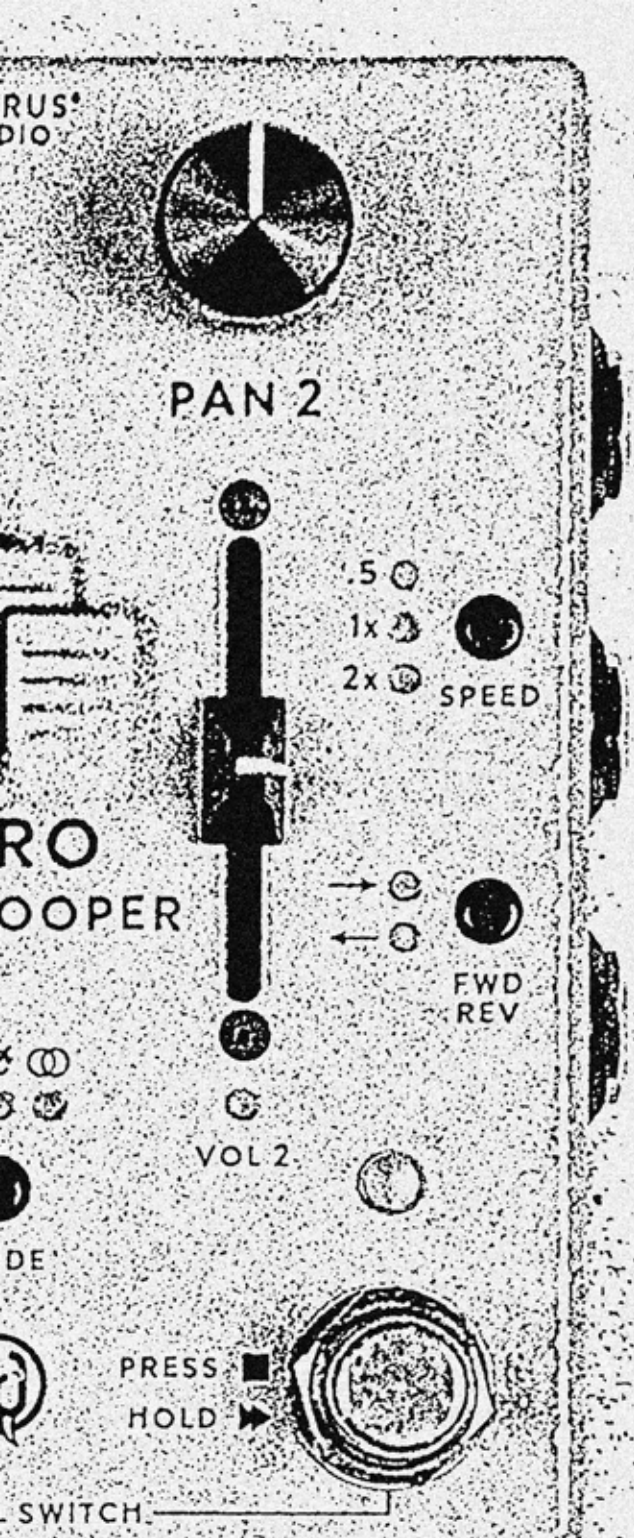
SPEED: Sets the playback speed of the channel 1 playback. Note that speed FX must be activated via the right stomp switch for these controls to affect playback.
- 0.5x: plays back at half speed
- 1x: plays back at normal speed how you recorded the loop
- 2x: plays back at double speed

PLAYBACK DIRECTION: Sets the direction of the channel 1 playback. Note that speed FX must be activated via the right stomp switch for these controls to affect playback.
- FWD: plays back in forward direction, how you recorded the loop
- REV: plays back in reverse direction

CHANNEL 2 CONTROLS

PAN 2: Sets the stereo panning of the channel 2 playback. All the way to the left will play your loop playback 100% out of the left output. In the middle, you will hear equal playback on both outputs. All the way to the right will play your loop playback 100% out of the right output.

VOL 2: Sets the level of the channel 2 playback. At the bottom, there will be no playback. At maximum, there is an extra +3dB above unity gain.

SPEED: Sets the playback speed of the channel 2 playback. Note that speed FX must be activated via the right stomp switch for these controls to affect playback.
- 0.5x: plays back at half speed
- 1x: plays back at normal speed, how you recorded the loop
- 2x: plays back at double speed

PLAYBACK DIRECTION: Set the direction of the channel 2 playback. Note that speed FX must be activated via the right stomp switch for these controls to affect playback.
- FWD: plays back at forward direction, how you recorded it
- REV: plays back in reverse direction

MODE BUTTON
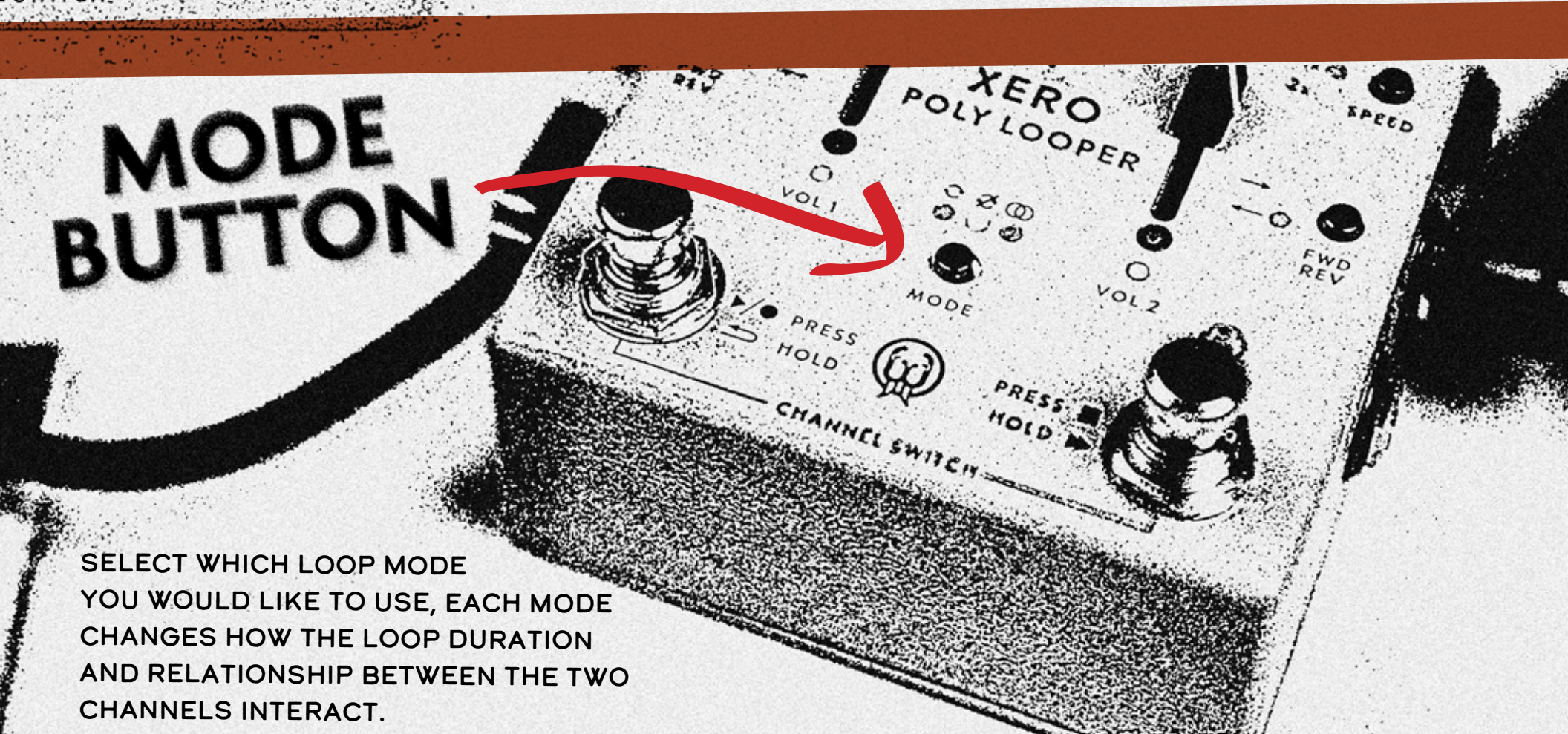
SELECT WHICH LOOP MODE YOU WOULD LIKE TO USE, EACH MODE CHANGES HOW THE LOOP DURATION AND RELATIONSHIP BETWEEN THE TWO CHANNELS INTERACT.

SYNC MODE: The first loop you record becomes the "base" loop - all other loops will be synced to this loop. For example, if you record a 4/4 loop, your recording duration for other loops will not be able to exceed that time length. You can record shorter loops within that time frame at custom start/stop points, but as long as you have that base loop, that will always define the full length. It does not matter whether you record the base loop to channel 1 or 2; the first loop will always be the first loop that defines the base loop.

UNSYNCED MODE: In this mode, channel 1 and channel 2 are no longer synced to each other's time length. The duration of the loop you record will set the "base" amount for that specific channel, but will not influence the other channel. For example, if you record a 4-bar loop on channel 1, all of channel 1 will have the 4-beat length. However, if you switch to channel 2, you can now record a loop of any length; you are not limited to just 4 beats set by channel 1.

POLY MODE: Poly mode syncs both loops to a common division, but allows the loops to be different multiples of that division. If no MIDI clock is present, the division is the master loop length divided by 8. If a MIDI clock is present, the division is the MIDI clock quarter note. This allows one loop to be 4 beats, the other 3, for example, create a 3 against 4 polyrhythm.
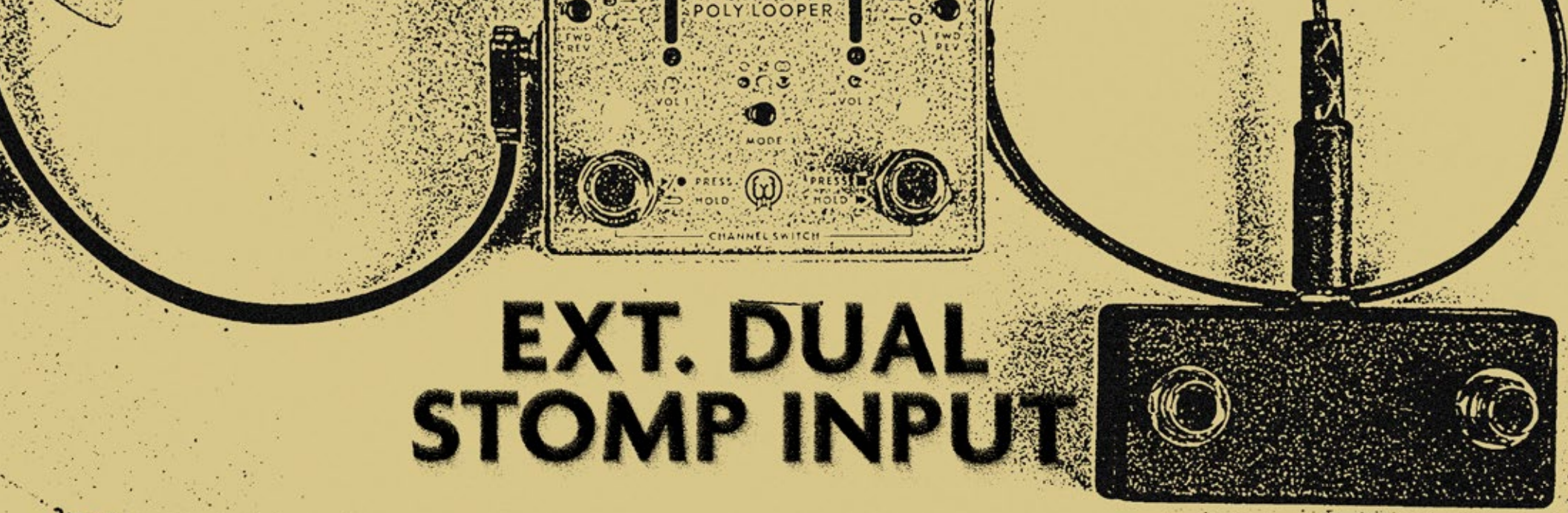
EXT. DUAL STOMP INPUT

Connect a dual-stomp external device via a TRS 1/4" cable to unlock access to dual-channel control mode.

There is an automatic jack detection for when the TRS cable is connected.

Once connected, your onboard stomp switches still retain their usual behavior, but will only operate in channel 1 control mode, or both channels control mode.

The external dual stomp device now solely controls channel 2, with the same functionality as the stomp switches normally have.

This extends your control and allows you to have easier access to both channel 1 and 2 at the same time without having to do the dual-press channel switch gesture.
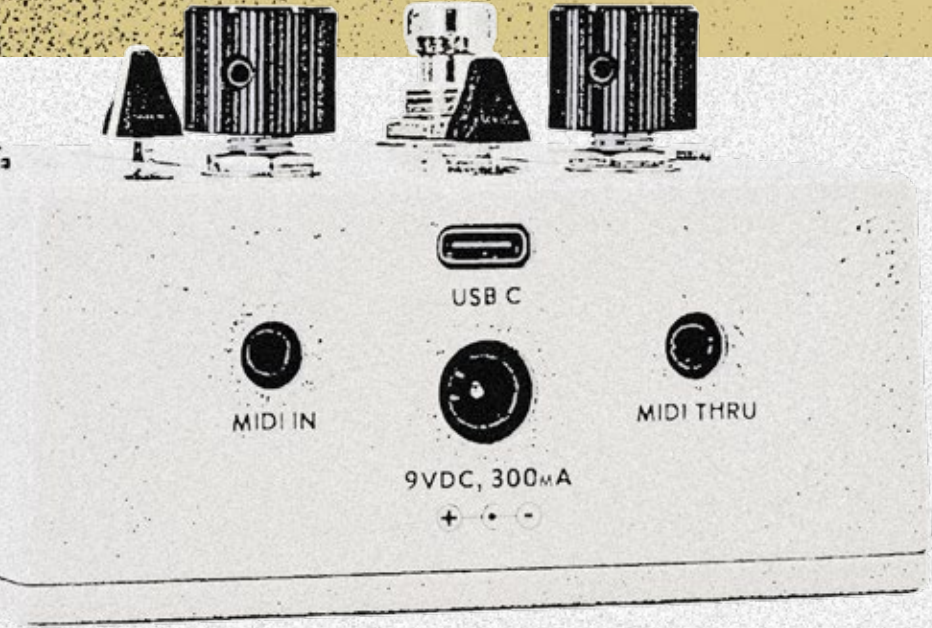
MIDI

The Xero accepts 1/8" Type A MIDI IN, and passes 1/8" Type A MIDI THRU to other downstream devices.

To assign the Xero's MIDI channel, hold the left stomp at startup and then send a MIDI message from your MIDI controller on the desired channel. Once the channel is set, the left LED will blink green, and the pedal will boot up as normal.

PARAMETER	MIDI CC #	MIDI RANGE
Track 1 Pan	0	0–127
Track 2 Pan	1	0–127
Track 1 Volume	2	0–127
Track 2 Volume	3	0–127
Track 1 Speed	4	0 = x0.5 Speed 1 = x1 Speed 2 = x2 Speed
Track 2 Speed	5	0 = x0.5 Speed 1 = x1 Speed 2 = x2 Speed
Track 1 Direction	6	0 = Forward 1 = Reverse
Track 2 Direction	7	0 = Forward 1 = Reverse
Track 1 FX on	8	0 = Off 1 = On
Track 2 FX on	9	0 = Off 1 = On

PARAMETER	MIDI CC #	MIDI RANGE
Loop Mode	10	0 = Sync Mode 1 = Unsynced Mode 2 = Poly Mode
Channel Select	11	0 = Channel 1 1 = Channel 2 2 = Both Channels
Play	20	0 = channel 1 1 = channel 2 2 = channel 1 & 2
Stop	21	0 = channel 1 1 = channel 2 2 = channel 1 & 2
Record	22	0 = channel 1 1 = channel 2 2 = channel 1 & 2
Stop Record	23	0 = channel 1 1 = channel 2 2 = channel 1 & 2
Undo	24	0 = channel 1 1 = channel 2 2 = channel 1 & 2

FACTORY RESET

Use the following procedure to restore the pedal to its factory settings.

1. Hold both stomp switches while applying power.

2. Continue holding and after 10 seconds, the LEDs above the stomp switches will flash, confirming the reset is complete.

Note: Performing a factory reset will cause any stored loops to be deleted.

WALRUSAUDIO.IO

Walrusaudio.io is a simple interface to update your pedal's firmware. Please check your unit upon arrival to see if it has the latest release. Using a Chrome web browser on either Windows or Mac OS, connect a USB-C cable to your Xero and visit walrusaudio.io to access firmware updates.

Xero Polylooper

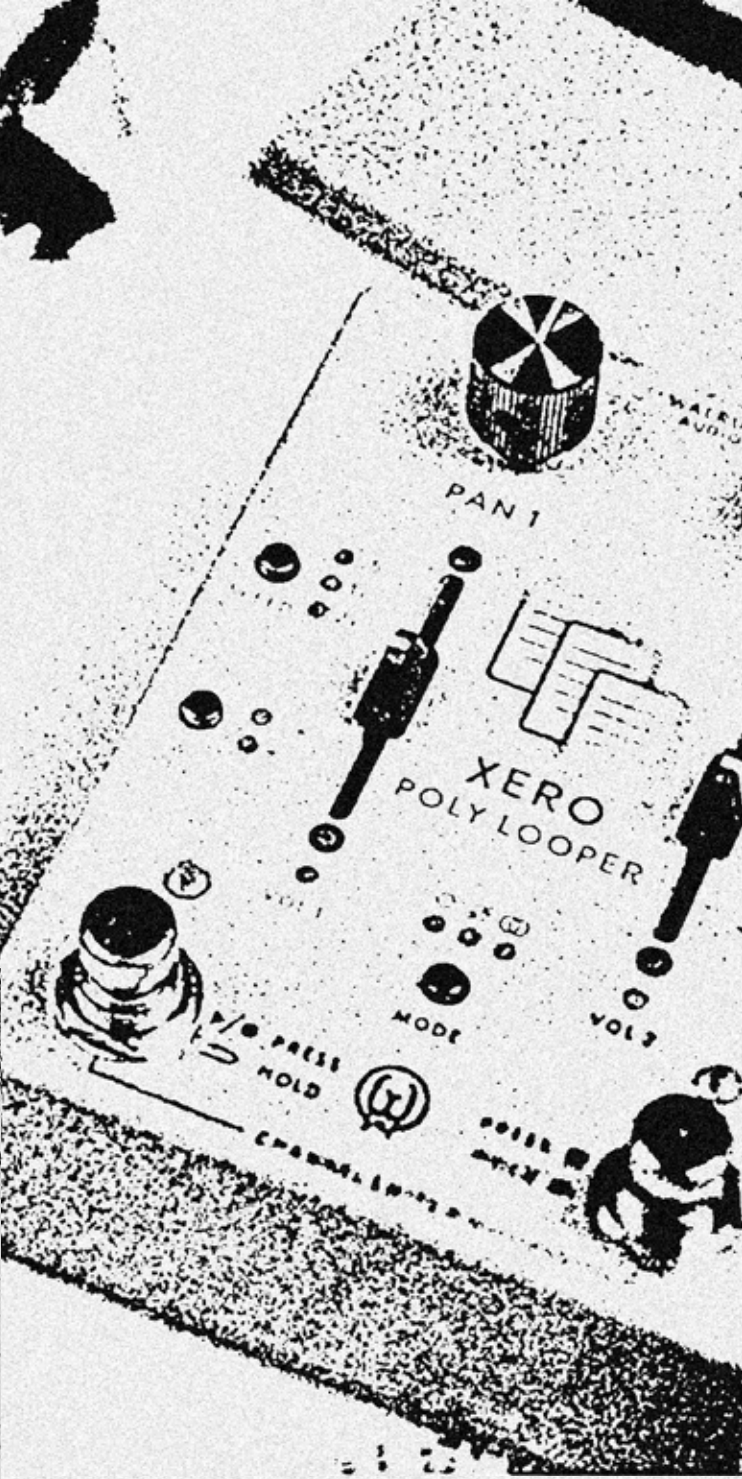CURRENT FIRMWARE xero_v1.00

AVAILABLE FIRMWARE

XERO_v1.00 ▼

RELEASE 2025-07-29
NOTES

Update firmware

This should take about 1-2 minutes

TECHNICAL SPECS

9v 300mA Minimum

Center Negative, 2.1mm center pin, 5.5mm barrel

Exact size of the diecast enclosure is 4.6" x 3.9" x 2.3" including jacks.

Input impedance = 1.1M Ohms

Output impedance = 1k Ohms

SNR engaged = 86dB

SNR bypassed = 110dB

Noise floor engaged = -93dBu

Noise floor bypassed = -116dBu

Headroom engaged =

5.2Vpp / +7.5dBu @ 1k Hz < 1% THD+N

MDSP

DEVELOPED WITH THE WALRUS MDSP MODULE