MAGNETO

—Four Head dTape Echo & Looper—

USER MANUAL

strymon®

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Introduction

Create expansive soundscapes and evolving, otherworldly tones. Add layers upon layers of harmonic and rhythmic complexity within an enveloping stereo field. Infuse your rack with vintage warmth and retrofuturistic soul.

Packed with powerful features while maintaining intuitive playability, Magneto is a stereo multi-head tape delay that also functions as a looper, phrase sampler, vintage spring reverb unit, phase-aligned clock multiplier, chaotic oscillator, zero latency suboscillator and more, with extensive CV I/O.

Turn simple monophonic signals into complex orchestrations. Create new oscillator tones using self-oscillation. Add rich stereo dimension to your sound, and enjoy the inherent warmth and sweet, subtle distortion characteristics of magnetic tape. Magneto transforms even the smallest rack into a fully expressive, immersive instrument.

Features

- Tape-Voiced Delay machine with four playback heads, one record head
- Processor-intense dTape algorithm delivers meticulously nuanced recreations of vintage tape echo systems
- Three operational modes: Echo, Sound-on-Sound Looper, Phrase Sampler
- Varispeed algorithm with dynamic machine mechanics, 8:1 speed range
- Input record level (REC LVL) for clean reproduction to warm, fat saturation
- Maximum Delay/Loop Time: 15 seconds at max Speed, two minutes at min Speed

- Self-oscillating for tone generation
- Transport controls (buttons and CV inputs) for real-time performance options
- Independent Spring Reverb
- Individual Playback Head Level controls
- Individual Head feedback assignment independent of playback level
- Phase aligned clock out (CLK OUT) CVs synched with clock in (CLK IN) CV
- Clock In CV Range: 50ms – 15s
- TAP Button Range: 50ms – 15s
- TAP CV Range: 10ms – 15s

MODES & TAP Button
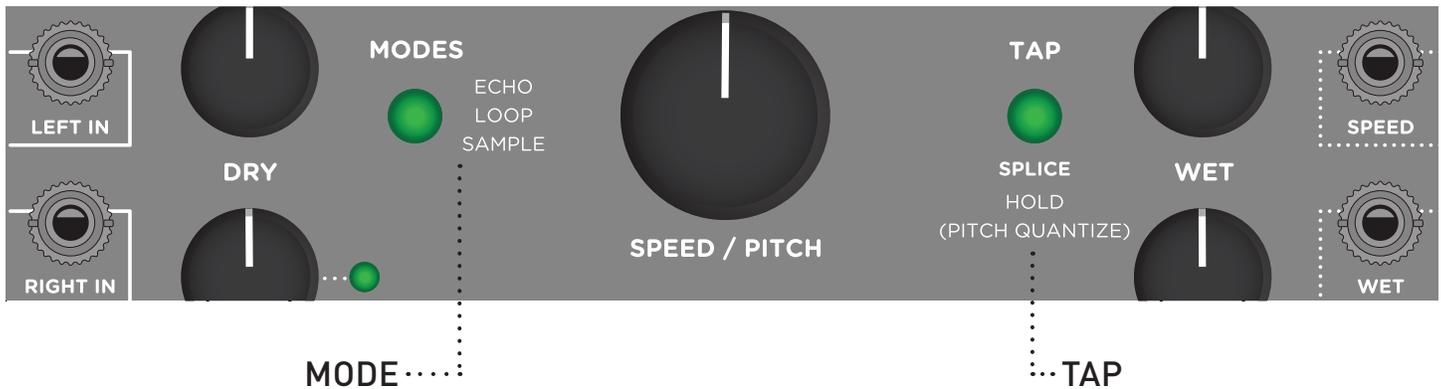
The **MODES** button toggles between **ECHO**, **LOOP** and **SAMPLE**.

The **TAP** button changes the head spacing to achieve the desired delay time at the current machine speed.

ECHO mode: (GREEN LED) Four head tape delay, with four playback heads and one record head.

Tap a delay time with two successive presses.

> **NOTE:** The delay **TAP** range is 50ms-15s, regardless of tape speed setting.

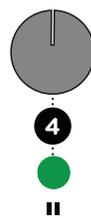**TAP** + **TAP** = **Delay Time at Head 4**

LOOP mode: (AMBER LED) Sound-on-Sound looper. Tape head 4 is the looper playback head while tape heads 1-3 provide delay repeats for the incoming signal.

Adjust Playback Level 4 to set Loop playback level.

The **FEEDBACK ON/OFF** button for Playback Head 4 must be ON to enable S.O.S. loop playback.

Feedback 4 must be engaged for Loop Playback.

To Record a Loop:

Press the **TAP** button once to Splice In. Press **TAP** a second time to Splice Out and begin loop playback. Pressing **TAP** a third time will clear the recorded loop.

TAP Tap to splice in and begin recording loop

TAP Tap again to splice out marking the end of the loop and begin loop playback

The **REPEATS** knob controls regeneration strength. Set lower **REPEATS** level for loops that evolve over time.

TAP Tap a third time to clear loop

MODES & TAP Button (cont.)
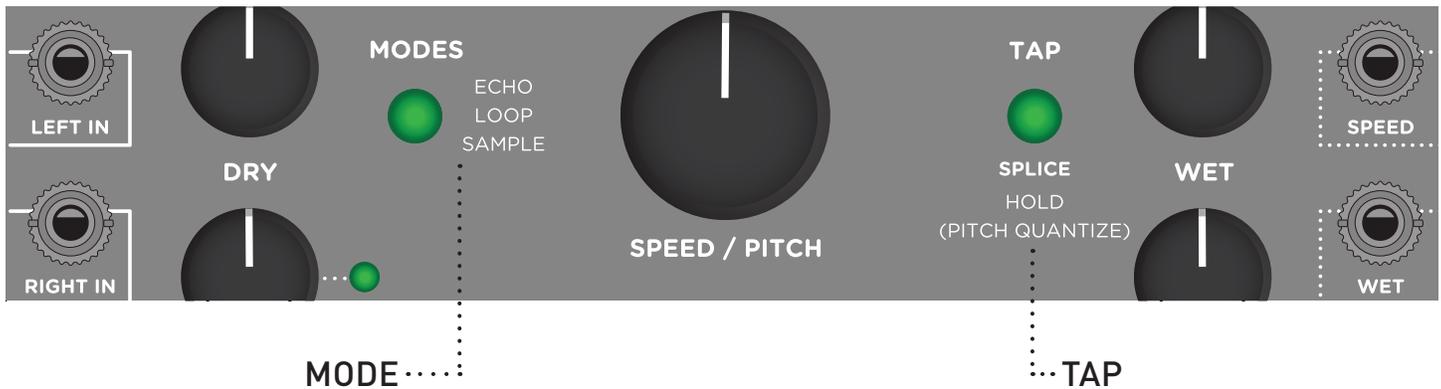
SAMPLE mode: (RED LED) Phrase sampler records an audio phrase between two taps of the **TAP** button. Transport **RESTART** (�▶) triggers phrase playback.

Press the **TAP** button once to start sample recording, again to stop recording, and a third time to clear the sample memory.

Trigger sample playback with the **RESTART** transport button or **RESTART** CV input.

TIP: Connect **CLK OUT 4** to **RESTART** CV for continuous re-triggering of the recorded sample.

NOTE: In **LOOP** and **SAMPLE** mode, the maximum time between SPLICE IN and SPLICE OUT (or SAMPLE START and SAMPLE END) is determined by the tape Speed.
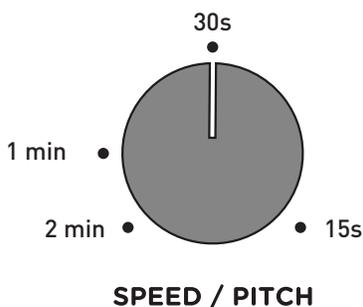

SPEED / PITCH

TAP
Tap to start sample record

TAP
Tap again to stop recording

Press **RESTART** (▶) in the Transport to playback the sample once

TAP
Tap a third time to clear the sample memory

SPEED/PITCH & Delay Time

Setting Delay Time with TAP & SPEED/PITCH

The delay time for any analog tape delay is determined by a combination of two factors – the distance between the heads and the speed of the tape. On Magneto, both of these can be adjusted independently.

Magneto's **TAP** button adjusts the delay time by changing the distance between the heads and does not affect the pitch or fidelity of the delay signal.

The **SPEED/PITCH** knob adjusts the delay time by controlling the speed of the tape. Magneto features a true varispeed tape system with pitch artifacts as the **SPEED/PITCH** knob is adjusted faster (higher pitch, shorter delay time) or slower (lower pitch, longer delay time). Higher tape speeds result in higher fidelity delay repeats, while lower lower tape speeds yield lower fidelity delay. With slower tape speeds, the **CRINKLE** and **WOW & FLUTTER** controls affect the sound much more than at faster speeds.

NORMAL

HALF

QUARTER
(Lowest Fidelity)

DOUBLE
(Highest Fidelity)
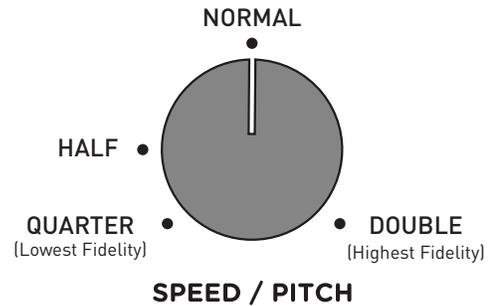
SPEED / PITCH

The total range of the **SPEED/PITCH** knob is a factor of 8, where 12 o'clock noon position is normal speed, max **SPEED/PITCH** knob setting is 2x speed, minimum **SPEED/PITCH** knob setting is 1/4 speed, and 1/2 speed is available at about 9 o'clock on the **SPEED/PITCH** knob.

Delay RANGE: 200µs minimum, 120 seconds max.

NOTE: The maximum delay time is achieved by tapping in a 15 second delay with the **SPEED/PITCH** knob at maximum (double SPEED). Reducing the speed to minimum will multiply this delay time by a factor of 8, resulting in a 2 minute (240 second) delay at HEAD 4.

NOTE: The minimum delay time is achieved by applying a 10ms clock to the **TAP** CV with the **SPEED/PITCH** knob at minimum (quarter SPEED). Turning the **SPEED/PITCH** to maximum will divide this delay time by a factor of 8, resulting in a delay time of 1.25ms at HEAD 4. Selecting HEAD 1 in **TRIPLET** mode further divides this by a factor of 6, resulting in a delay of 200µs.

Audio I/O

INS AND OUTS

LEFT/RIGHT IN: Left and Right audio inputs. Use **LEFT IN** for mono input.

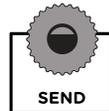**LEFT/RIGHT OUT:** Left and Right audio outputs. If only one output is connected, Delay output sums to mono.

FEEDBACK LOOP

An insert between the summed input signal + delay repeats and the Record Head. Can be used for sending delays and loop playback out to be processed by external effects via the SEND jack, and looped back into Magneto via the RETURN jack.
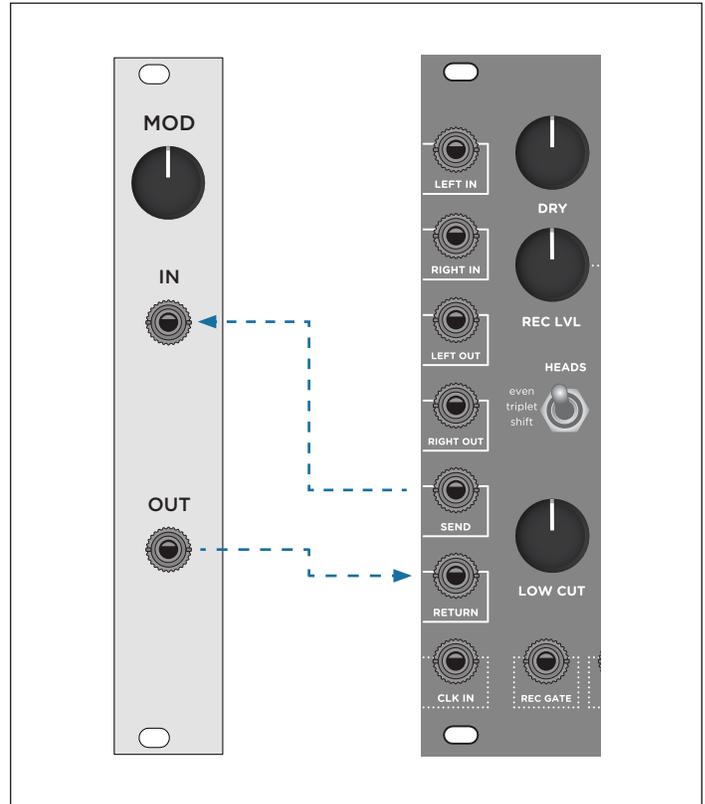
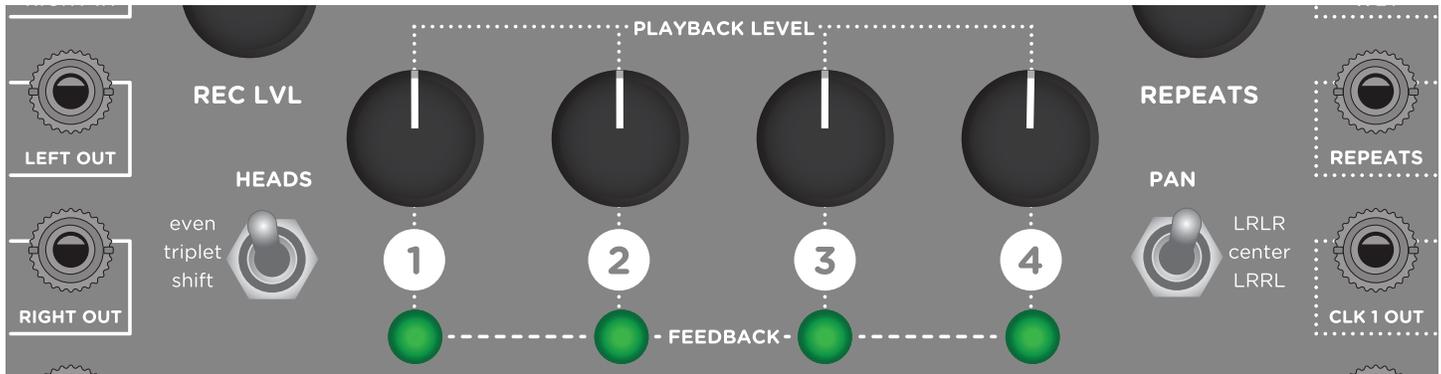**SEND:** Summed input signal + delay repeats are sent out to be processed by other devices.

RETURN: Externally processed signal is returned and fed to the Record Head.

Delay repeats are summed to mono when both SEND/RETURN jacks are connected; dry signal retains stereo image.
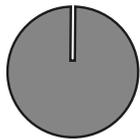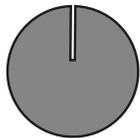
PLAYBACK LEVEL & FEEDBACK ON/OFF

PLAYBACK LEVEL

Knobs 1-4: Controls the individual level of the delay repeats for each of the four tape heads.

WET: Sets the overall delay signal level sent to the output after the Playback Level knobs.

REPEATS: Controls the feedback level of the delay repeats for the tape heads that have their **FEEDBACK** toggle set to **ON**.

FEEDBACK ON/OFF

Enables or disables **FEEDBACK** of the corresponding tape head signal to the record head. Buttons are GREEN during this operation.

Example 1: If **FEEDBACK** button 1 is **OFF**, this will disable the feedback of Playback Head 1 back into the delay line.

Example 2: If **FEEDBACK** button 1 is **ON**, the delay signal at Playback Head 1 will feed back into the delay line.
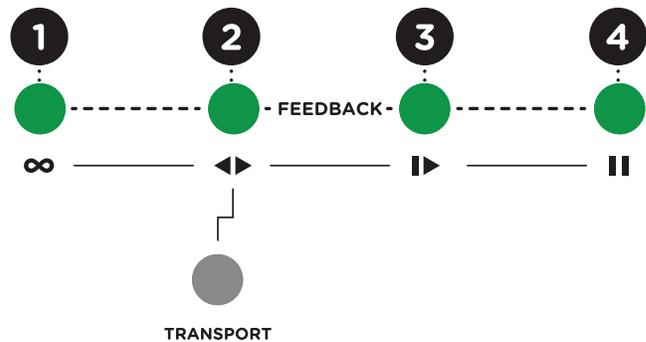
NOTE: A head can be fed back to the input even if its **PLAYBACK LEVEL** knob is set to zero.

Playback Head Mechanics

The following diagrams illustrate the difference between how **Head 4** functions in **ECHO** mode and in **LOOP** and **SAMPLE** modes.

Head Configuration in ECHO Mode

(forward)

TAPE

PLAYBACK HEADS

1   2   3   4

RECORD HEAD

INPUT

REC LVL

FEEDBACK
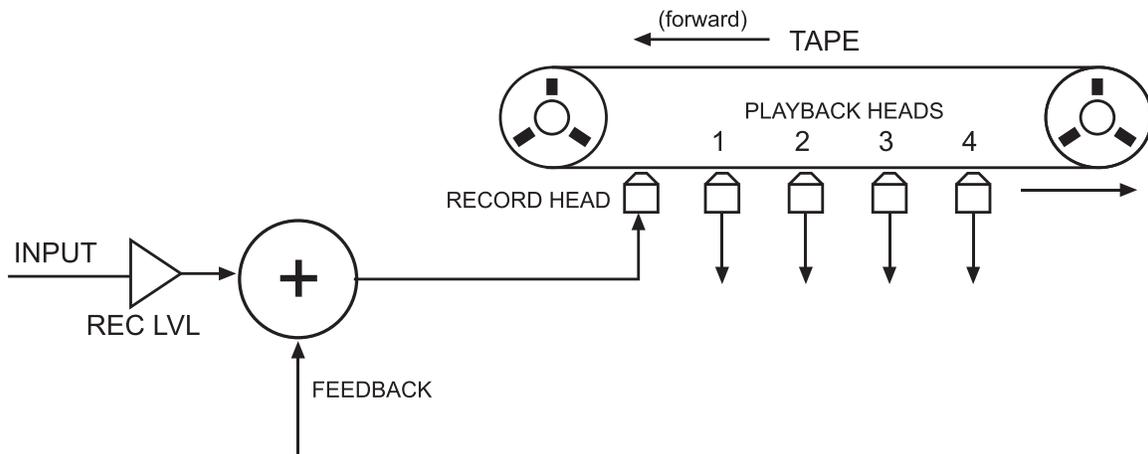
Head Configuration in LOOP and SAMPLE Mode

(forward)

TAPE

PLAYBACK HEADS

LOOP/SAMPLE PLAYBACK HEAD

4   1   2   3

INPUT

REC LVL

RECORD HEAD

FEEDBACK
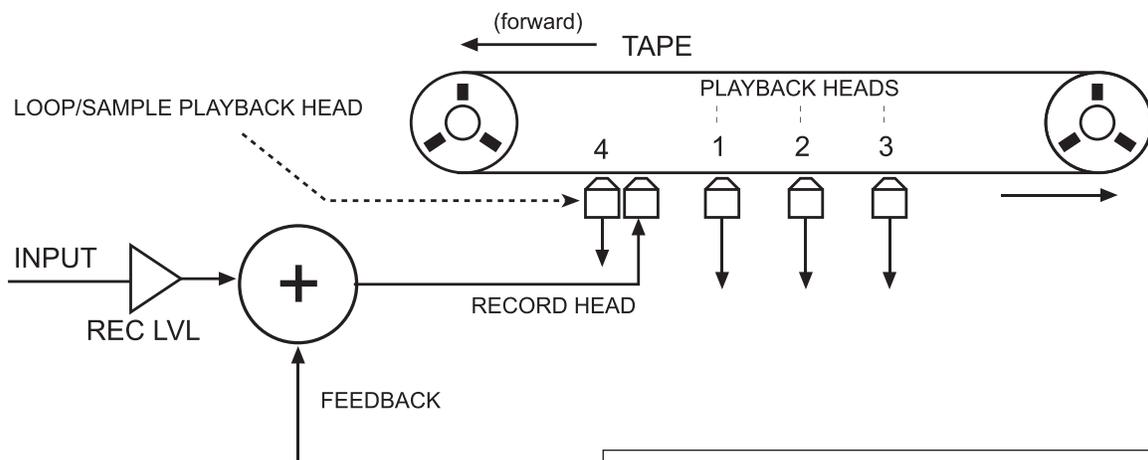
NOTE: The **LOOP** or **SAMPLE** time is determined by the TAP IN/TAP OUT interval, while the Delay time of the HEADS 1, 2, and 3 is determined by the Delay Time when entering **LOOP** or **SAMPLE** mode, or by the CLOCK IN CV.

Playback Head Spacing In ECHO Mode

HEADS: Selects between three different modes for the tape heads. Even spacing, triplet spacing, and rhythmic shifted pitches.

EVEN: Sets the Playback heads with even spacing between each other.

Head 1: 1/16th note delay

Head 2: 1/8th note delay

Head 3: dotted 8th note delay

Head 4: quarter note delay
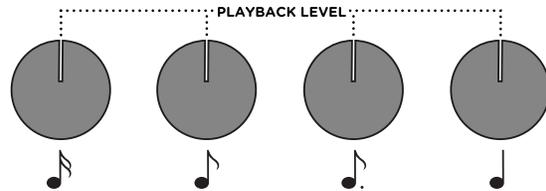
TRIPLET: Sets the Playback heads with triplet spacing between each other.

Head 1: 1/16th note triplet delay

Head 2: 1/8th note triplet delay

Head 3: quarter note triplet delay

Head 4: quarter note delay
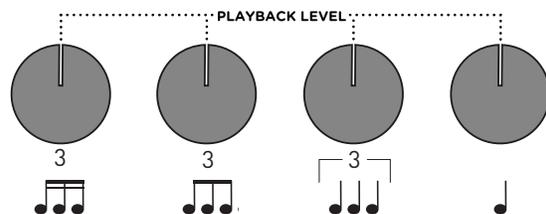
SHIFT: Changes the playback speed of each of the four Playback heads with varispeed resulting in pitch-shifted delay repeats. In **LOOP** and **SAMPLE** modes, **SHIFT** head configuration results in playback at the speed and pitches noted below.

Head 1: +1 octave+5th; 3x speed

Head 2: +1 octave; 2x speed

Head 3: -1 octave; half speed

Head 4: No shift; quarter note repeats
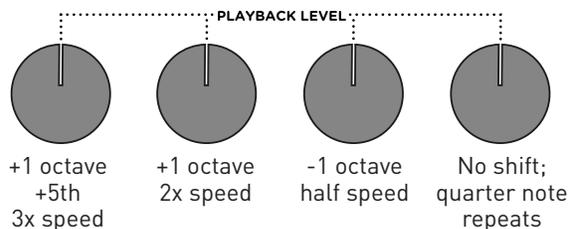
NOTE: In **LOOP** and **SAMPLE** modes, HEAD 1, 2 and 3 Delay times are determined by the Delay Time when entering **LOOP** or **SAMPLE** mode. Head 4 time is determined by the TAP IN/TAP OUT action.

Effect Level

DRY: Sets the level of **DRY** (input) signal sent to the output. Controls the output level of the incoming unprocessed signal from the LEFT and RIGHT INPUTS to the LEFT and RIGHT OUTPUTS. With a mono input connected to LEFT INPUT, the dry signal will appear simultaneously at both the LEFT and RIGHT OUTPUTS.

REC LVL: Controls the level of the incoming unprocessed signal fed into the Delay Line Record head. LED shows signal level feeding into the tape machine with BLUE LED indicating zero gain (no signal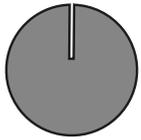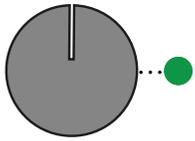 sent to RECORD HEAD), GREEN LED indicating low signal (clean), AMBER LED indicating onset of saturation, and RED LED indicating the input signal is significantly saturating the record head. With high levels of saturation (RED LED), fat and rounded harmonically rich tones are sent into the delay line.

TAPE MECHANICS AND REVERB

SEND

RETURN

LOW CUT   TAPE AGE   CRINKLE   WOW & FLUTTER   SPRING

TRANSPORT

CLK 2 OUT

CLK 3 OUT
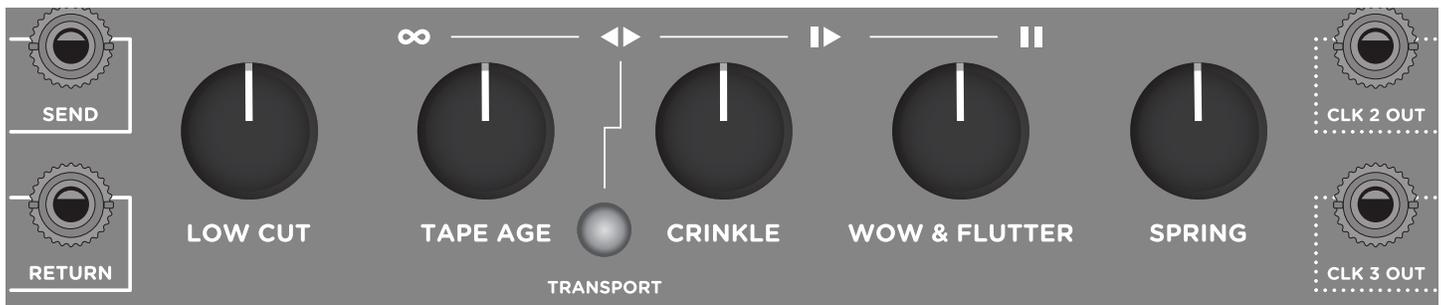
LOW CUT: Controls the low frequency shaping of the echo repeats. Set to minimum for extended low frequency bandwidth. Set to maximum for extremely high-passed, magnetic drum style repeats with a peaking response.

TAPE AGE: Controls the bandwidth of the tape. Set to minimum for a fresh, full bandwidth tape. Turn clockwise for warmer repeats. At maximum setting, a mildly peaking filter response creates atmospheric repeats at high feedback settings.

CRINKLE: Controls the amount and severity of tape irregularities including friction, creases, splices, and contaminants. Set to minimum for a fresh, clean tape. Set to maximum for a tape that has been mangled and chewed.

WOW & FLUTTER: Controls the amount of mechanically related tape speed fluctuations. Turn the knob fully counterclockwise for a perfectly tuned tape machine or fully clockwise for a tape machine in need of service.

SPRING: Controls the output mix of the integrated spring reverb tank. The **DRY** and **WET** knobs control the signals feeding into the spring reverb effect.

Preset Panning Options

PAN: Selects between three different stereo panning modes for the tape heads. When only one output jack is connected, all head signals will appear at that output summed to mono.

LRRL: Tape heads **1** and **4** are panned **100%** to the **LEFT**, and tape heads **2** and **3** are panned **100%** to the **RIGHT**.

PLAYBACK LEVEL

LEFT RIGHT RIGHT LEFT
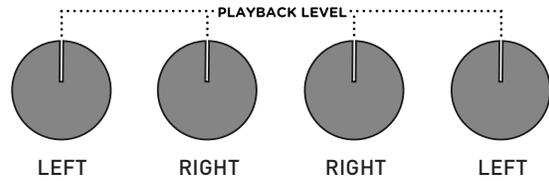
CENTER: All tape heads are centered, and a psycho-acoustic stereo image is produced when using stereo monitoring.

PLAYBACK LEVEL

CENTER CENTER CENTER CENTER
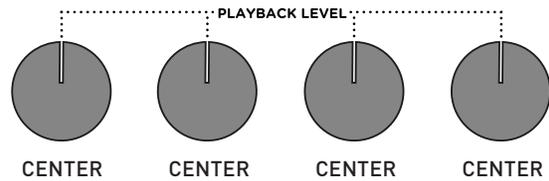
LRLR: Tape heads **1** and **3** are panned **100%** to the **LEFT**, and tape heads **2** and **4** are panned **100%** to the **RIGHT**.

PLAYBACK LEVEL

LEFT RIGHT LEFT RIGHT
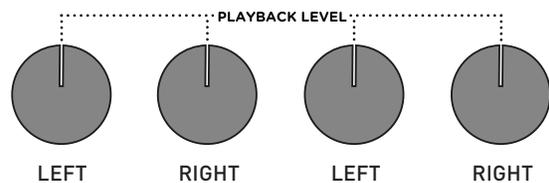
Custom Panning

The panning for all four tape heads can be set manually when **PAN** switch is set to **CENTER**. To set the panning for each of the playback heads, turn the **PLAYBACK LEVEL** knob while pressing and holding down that head's corresponding **FEEDBACK** button while in **FEEDBACK** (GREEN) mode. Turn left for left panning, right for right panning, or set to 12 o'clock noon for center panning.

To adjust the panning for Playback Head 1:

1. Set **PAN** to **CENTER**

PAN

LRLR
center
LRRL

2. Press and hold GREEN **FEEDBACK ON/OFF** button under **PLAYBACK LEVEL 1** knob.

1
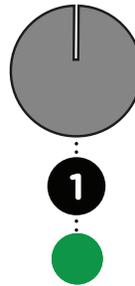
3. While holding down **FEEDBACK ON/OFF**, turn **PLAYBACK LEVEL 1** knob to adjust panning for **PLAYBACK HEAD 1**.

L   R

1

NOTE: When all 4 tape heads are centered, a psycho-acoustic image is produced when monitoring in stereo.

TRANSPORT CONTROLS

Allows for control of the corresponding transport function. To activate transport controls press **TRANSPORT** button below. Buttons are RED during this operation.

SCRUB AUDIO: When tape is paused, the **SPEED/PITCH** knob scrubs audio.

> **NOTE:** The audio in the scrub buffer represents about 1 foot of tape, so the length of audio in the buffer depends on the **SPEED** knob position when **PAUSE** is engaged. Slower speeds result in more recorded audio in the scrub buffer.

∞ **INFINITE:** Disables the Record head and continuously plays the most recent delay cycle or loop length audio.
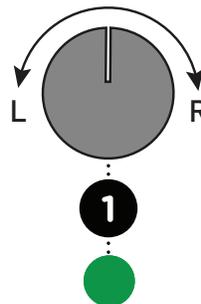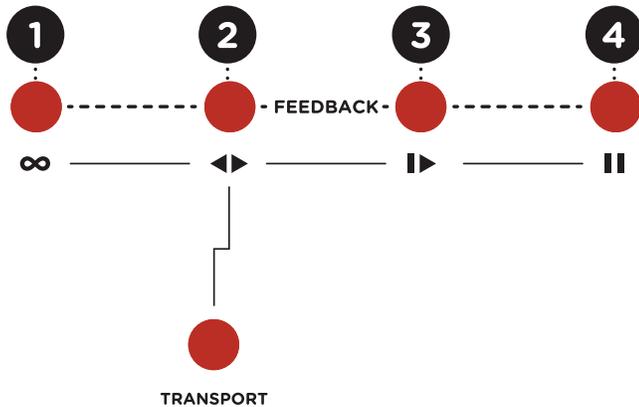
◀▶ **FORWARD/REVERSE:** Reverses the playback direction of the tape from the moment the function is engaged.

In ECHO mode, the entire tape length is heard in reverse until **REVERSE** is pressed again.

In LOOP or SAMPLE Mode, the loop or sample is played in reverse.

▮▶ **RESTART:** Restarts the playback of the loop or sample from the starting point in **LOOP** or **SAMPLE** mode. Aligns shifted head audio in **ECHO** operation. Restarts deck immediately from **PAUSE**, without mechanical lag.

▮▮ **PAUSE:** Stops/Starts the playback of the tape with mechanical slowdown/startup effect. The speed of the slowdown/startup effect can be adjusted by **PLAYBACK LEVEL 4** knob when the **TRANSPORT** and **PAUSE** buttons are RED (transport is paused).

MOMENTARY MODE: Power up Magneto while holding the desired transport control button to change between Momentary (flashes RED) and Latch (flashes GREEN) for that transport function. CV control will also be changed for the desired function to either Gate (RED) or Trigger (GREEN).

Example: Tape playback is reversed only while pressing and holding **REVERSE** button.

RESTART is always trigger regardless of custom settings. By default, transport controls are all latching switches except for **RESTART**.

PAUSE SPEED
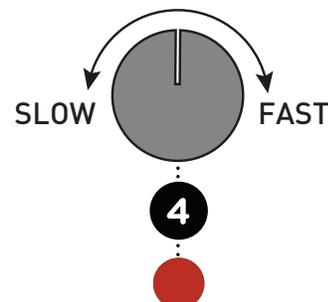
Pitch Quantize

Press and hold the **TAP** button at any time to enter **PITCH QUANTIZE** mode (AMBER **TAP** LED).

This mode restricts the **SPEED/PITCH** knob values to relative speeds corresponding to the pitch intervals of user selectable scales.

To select a scale, press and hold the **TRANSPORT** button and turn the **SPEED/PITCH** knob to scroll through the 15 available scales. The currently selected scale will be displayed via the four **FEEDBACK/TRANSPORT** button LEDs, according to the table below.

SPEED CV voltages are quantized to ½ steps when in **PITCH QUANTIZE** mode.

SPEED CV responds to -3V to +3V, dependent on the position of the **SPEED/PITCH** knob. All scales have a two octave range, except for Chromatic which has a 1.2 octave range.

NOTE: When Pitch Quanitize is active, the **SPEED/PITCH** range is 2 octaves (4:1 speed range).

NORMAL

1st Octave   2nd Octave

HALF   DOUBLE

SPEED / PITCH
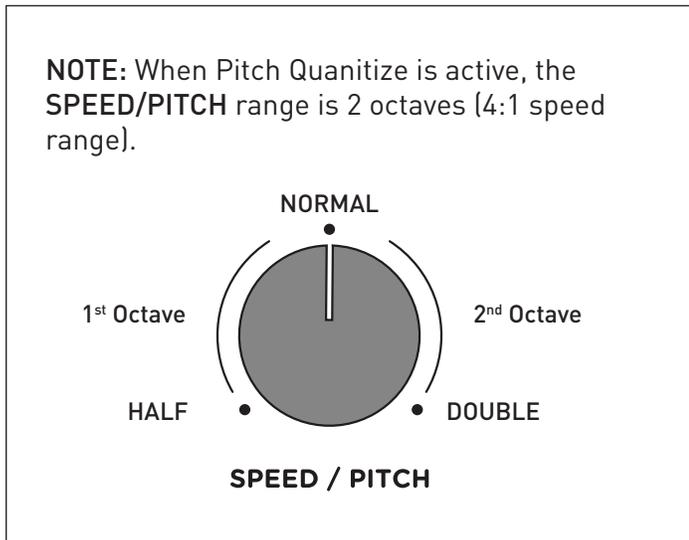
	1	2	3 (FEEDBACK)	4
	∞	◄►	▌►	❚❚
Pentatonic	○	○	○	●
Minor Blues	○	○	●	○
Major	○	○	●	●
Dorian	○	●	○	○
Phrygian	○	●	○	●
Lydian	○	●	●	○
Mixolydian	○	●	●	●
Aeolian	●	○	○	○
Locrian	●	○	○	●
Harmonic Minor 5th	●	○	●	○
Harmonic Minor	●	○	●	●
Whole Tone	●	●	○	○
Major in Octave jumps	●	●	○	●
Harmonic Series	●	●	●	○
Chromatic (1.2 octaves)	●	●	●	●

Self-Oscillation

Self-oscillation can create an infinite variety of inspiring sonic textures and can allow you to play Magneto like a musical instrument. To use self-oscillation, turn the **SPEED/PITCH** knob fully counter-clockwise, turn **REPEATS** up to 100%, and tap a very short delay.

No input signal is necessary for Magneto to self-oscillate. However, the tonality of the sound can be impacted in interesting ways if an input signal is present.

While Magneto is in self-oscillation, try adjusting the **SPEED/PITCH** knob, as well as the tape mechanics knobs (**LOW CUT**, **TAPE AGE**, **CRINKLE**, **WOW & FLUTTER**). The oscillating sound will evolve and change, moving through different pitches and tonalities as the knobs are adjusted.

To lock in the pitch of the oscillating tone, press the **INFINITE** transport control button. Although the sound will still be affected by adjustments to the tape mechanics knobs while **INFINITE** is engaged, the pitch will remain locked. That is, the pitch will stop evolving, but can be controlled with the **SPEED/PITCH** knob and/or the **SPEED** CV input. Note that you have the option to use **PITCH QUANTIZE** mode whether or not **INFINITE** is engaged.

SPEED CV Input and Self-Oscillation

The **SPEED** CV input is calibrated for 1V/octave over a range of -3V to +3V. When voltage is supplied to the **SPEED** CV input, the **SPEED/PITCH** knob still influences the the resultant speed/pitch, and the incoming CV is added to the knob position. Zero volts at the **SPEED** CV input will not cause the speed/pitch to deviate from the knob position value. The **SPEED/PITCH** knob's effective voltage is 0V at minimum, and +3V at maximum. The **SPEED** CV input adds to this effective voltage, being limited at the top end to +3V (fastest speed/highest pitch), and limited to -3V at the bottom end. By using the **SPEED** CV input, you can achieve a six octave range, allowing you to go three octaves lower than would be possible using the **SPEED/PITCH** knob alone without any incoming CV.

Stereo Panning and Self-Oscillation

With the **PAN** switch set to **CENTER** (and no custom panning set), your self-oscillating tone will remain in the center of the stereo image. However, if the **PAN** switch is set to **LRLR** or **LRRL**, the self-oscillating tone will be stereoized in a manner that depends in part on the volume levels of each playback head. This can be great for creating a wide stereo sound. However, one should be aware that, for instance, with **PAN** set to **LRLR** and **PLAYBACK LEVEL** knobs for heads **2** and **4** set to minimum, the self-oscillating tone would primarily be heard on the left side of the stereo image.

TIP: When engaging **INFINITE** with very short delay times, the rapid fading between the endpoints of the delay buffer can add an additional harmonic element to the captured oscillation.

TIP: Let Chaos Reign! Using self-oscillation is an interactive experience where Magneto takes on a life of its own, and a kind of feedback loop is created between Magneto and you. Rather than aiming to dial in a specific sound, try just setting the process in motion and experimenting. You are likely to discover unexpected textures and tonalities that will lead you into inspiring new sonic territory.

Control Voltage Inputs

CONTINUOUS CV INPUTS (-5V TO +5V)

SPEED: Controls the tape speed. (-3V to +3V, calibrated for 1V/octave).

WET: Modifies the WET level.

REPEATS: Modifies the REPEATS level.

SPRING: Modifies the SPRING reverb level.

TIP: Connecting the GATE signal from a source to the RESTART CV will create a zero-latency suboctave from HEAD 3 with Magneto in SHIFT mode.

TIP: The knob corresponding to the continuous CV inputs acts as an offset that is mixed with the CV input.

CV INPUTS (0–5V RISING EDGE TRIGGER)
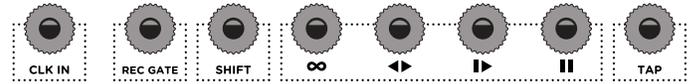
CLK IN: Sets the delay time in quarter notes. (0 – 5v rising edge trigger) Clock period range – 50ms to 15s.

REC GATE: Toggles the record head **ON** and **OFF**, REC LVL LED lit BLUE when input signal to the delay line is muted.

SHIFT: Toggles the SHIFT effect for the Playback heads on and off.

INFINITE (∞): Toggles INFINITE transport control on and off.

FORWARD/REVERSE (◄►): Toggles the FORWARD/REVERSE transport function.

RESTART (▶): Engages the RESTART transport function.

PAUSE (Ⅱ): Toggles the PAUSE transport function.

TAP: Controls the function of the physical TAP button. Sets delay time in ECHO mode. Sets splice in/out/clear in LOOP mode. Sets sample record start/stop/clear in SAMPLE mode.

TIP: When using the SHIFT head mode with a sequenced or clocked system, sending a synchronous clock (or divided clock) to the RESTART CV will align the Shift pointers and create rhythmic pitched delays that are in sync with the input.

Control Voltage Clock Outputs

CLK 1- 4 OUTs send clock outputs of Playback heads 1-4. Dependent on the **HEADS** switch setting and the **ECHO/LOOP/SAMPLE** mode setting, output clocks are always at 50% duty cycle and are phase aligned with incoming Clock or Tap signals. Examples below are for a clocked or tapped delay time of 1000ms.

ECHO MODE

EVEN:

CLK 1 OUT: 1/16 note clock output (ex. 250ms)

CLK 2 OUT: 1/8 note clock output (ex. 500ms)

CLK 3 OUT: dotted 1/8 note clock output (ex. 750ms)

CLK 4 OUT: 1/4 note clock output (ex. 1000ms)

TRIPLET:

CLK 1 OUT: 1/16 note triplet clock output (ex. 167ms)

CLK 2 OUT: 1/8 note triplet clock output (ex. 333ms)

CLK 3 OUT: 1/4 note triplet clock output (ex. 667ms)

CLK 4 OUT: 1/4 note clock output (ex. 1000ms)

SHIFT:

CLK 1 OUT: 1/8 note triplet clock output (ex. 333ms; 3x speed)

**CLK 2 OUT:** 1/8 note clock output (ex. 500ms; 2x speed)

CLK 3 OUT: 1/2 note clock output (ex. 2000ms; half speed)

CLK 4 OUT: 1/4 note clock output (ex 1000ms; full speed)

In **LOOP** and **SAMPLE** modes, **CLK1**, **CLK2**, and **CLK3** are the same as in **ECHO** mode, but **CLK4** is the loop or sample length clock output.

DIP Switches

DIP switches are located on the back of the unit. Adjusting these switches will likely require Magneto to be removed from the rack.
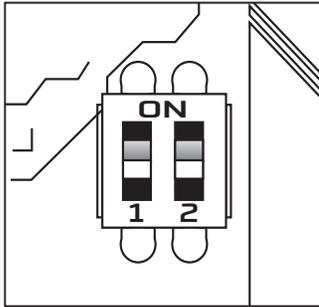
S1 - FEEDBACK CV MODE:

ON: Allows CV trigger control of the **FEEDBACK ON/OFF** buttons when transport CV jack is plugged in while Transport LED is **OFF**. Also provides CV control of the Transport controls when a CV jack is plugged in when Transport LED is RED. Each transport CV can be assigned to either Transport or Feedback **ON/OFF**.

OFF: Standard CV control of transport whenever transport CV jacks are plugged in. (**DEFAULT** is **OFF**.)

S2 - DUAL SPLIT MODE:

ON: Selects Dual Split mode where **LEFT** audio **IN/OUT** is a mono four head tape delay, and **RIGHT** audio **IN/OUT** is mono spring reverb.

OFF: Standard stereo **IN/OUT** with the delay signal feeding into the Spring reverb. (**DEFAULT** is **OFF**.)

LEFT IN – Delay Input

RIGHT IN – Reverb Input

LEFT OUT – Delay Output

RIGHT OUT – Reverb Output

Block Diagram

TRANSPORT CONTROL AND MECHANICS

∞ ◄► ▮► ▮▮   SPEED   WOW & FLUTTER   CRINKLE

TAPE

PLAYBACK HEADS
1   2   3   4

RECORD HEAD

INPUT

REC LVL

DRY
(LEVEL)

OUTPUT

REVERB

SPRING
(LEVEL)

TAPE AGE

LOW CUT

SEND   RETURN

PAN

WET
(LEVEL)

FEEDBACK
SWITCHES   PLAYBACK
1   2   3   4   LEVELS

MONO SIGNAL

STEREO SIGNAL

REPEATS
(LEVEL)
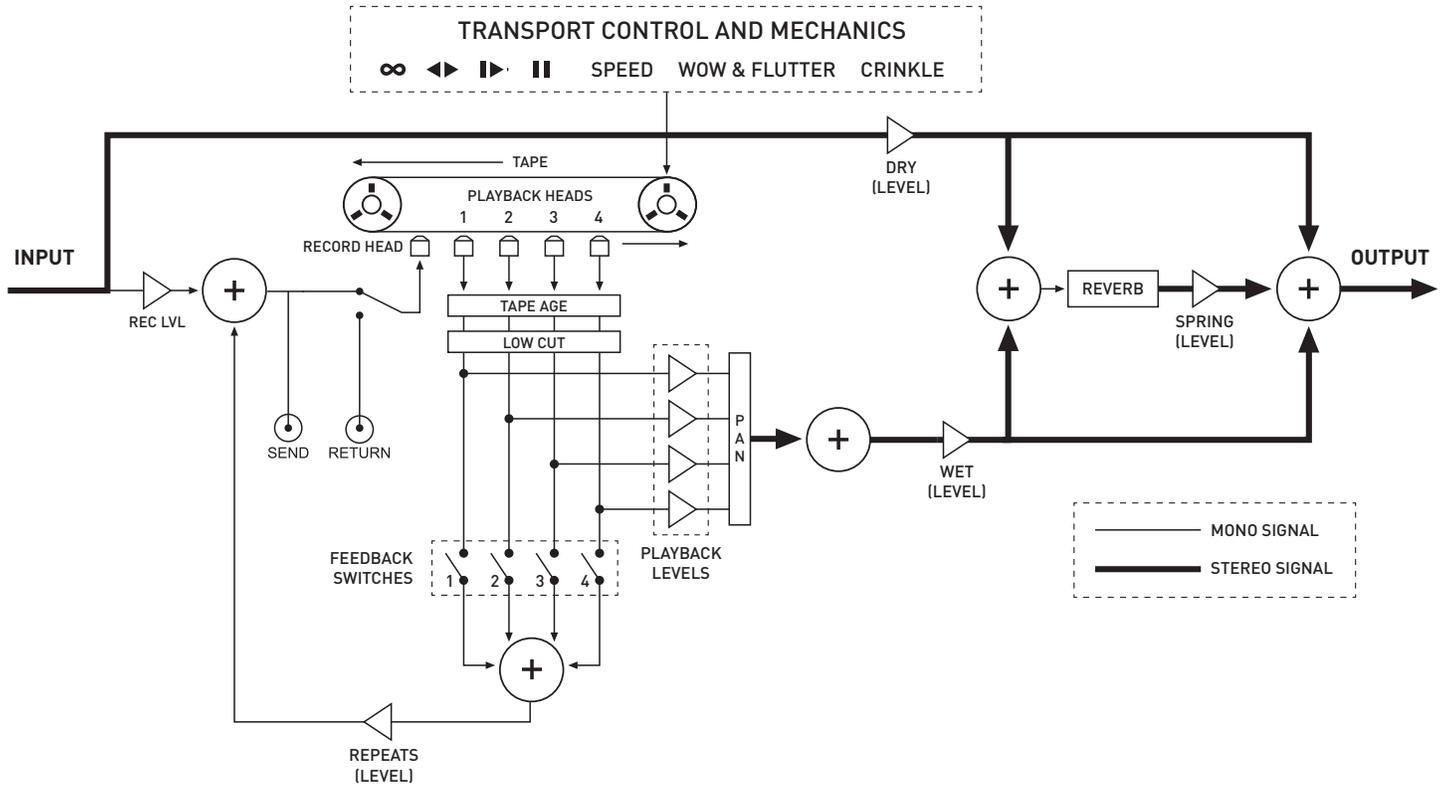
Specifications

- Power
    - +12V rail: 210mA
    - -12V rail: 210mA
    - +5V rail: 0mA
- Rack Width: 28hp
- Rack Depth: 41mm, 1.61"
- Sampling Rate: 96kHz
- Audio Input Impedance: 22 kOhm
- Maximum Audio Input Level: 20 Vpp
- Audio Output Impedance: 1 kOhm
- Maximum Audio Output Level: 20 Vpp
- Signal To Noise Ratio: 114dB typical

Questions?

For additional help with setup, connections, power, and mounting, please visit strymon.net/support/magneto or email us at support@strymon.net.

STRYMON NON-TRANSFERRABLE LIMITED WARRANTY

Warranty
Strymon warranties the product to be free from defects in material and workmanship for a period of two (2) years from the original date of purchase when bought new from an authorized dealer in the United States of America or Canada. If the product fails within the warranty period, Strymon will repair or, at our discretion, replace the product at no cost to the original purchaser. Please contact your dealer for information on warranty and service outside of the USA and Canada.

Exclusions
This warranty covers defects in manufacturing discovered while using this product as recommended by Strymon. This warranty does not cover loss or theft, nor does the coverage extend to damage caused by misuse, abuse, unauthorized modification, improper storage, lightning, or natural disasters.

Limits of Liability
In the case of malfunction, the purchaser's sole recourse shall be repair or replacement, as described in the preceding paragraphs. Strymon will not be held liable to any party for damages that result from the failure of this product. Damages excluded include, but are not limited to, the following: lost profits, lost savings, damage to other equipment, and incidental or consequential damages arising from the use, or inability to use this product. In no event will Strymon be liable for more than the amount of the purchase price, not to exceed the current retail price of the product. Strymon disclaims any other warranties, expressed or implied. By using the product, the user accepts all terms herein.

How to Obtain Service Under this Warranty
For North American customers: Contact Strymon through our website at strymon.net/support for Return Authorization and information. Proof of original ownership may be required in the form of a purchase receipt.

For International Customers: Contact the Strymon dealer from which the product was purchased from in order to arrange warranty repair service.