MIRAGE

THE MASTER OF REFLECTIONS

crazy tube circuits

Mirage features two powerful and fully independent reverb engines - **R1 and R2** - each offering **16 immersive algorithms,** from vintage realism to deep ambient dreamscapes.
With flexible routing options and autonomous control over each engine, Mirage lets you:
• Run **distinct reverbs on the left and right stereo channels.**
• **Cascade the engines in series** for layered, evolving spaces.
• Shape sonic environments that range from subtle and natural to massive and surreal.
Mirage puts **studio-grade reverb control** at your feet - with endless room for creativity.

CONTROLS:

Each reverb engine (R1 and R2) features its own set of dedicated controls:

mix: Adjusts the level of the reverb effect relative to your dry signal.
volume: Sets the output level. Use at unity gain or dial up for clean boost.
swell: Controls the length or size of the reverb effect. On select algorithms, it may trigger additional behaviors – see chart below.
excite: A context-sensitive control. Its function changes depending on the selected algorithm – see chart below.

ALGORITHM SELECTION & BANKS

Note: Each reverb algorithm has its own unique decay curve, tone voicing, and wet mix level. This means that the behavior of the Swell, Excite, and Mix (wet level) controls may feel slightly different across algorithms to best suit their character.

SHIFT PUSH SWITCH

Toggles between the two available algorithm banks:

Outer Circle (Switch Up)
NATURAL / VINTAGE / FAMILIAR REVERBS
Classic reverb types found in nature or vintage gear - plates, springs, rooms, halls, and more.

Inner Circle (Switch Pressed Down)
AMBIENT / EXPERIMENTAL / MODERN REVERBS
Surreal, ambient tools designed for textures, pitch shifts, modulation, and immersive environments.

VOICE SELECTOR (ROTARY SWITCH)

Selects from 8 reverb algorithms within the currently active bank. Each position on the rotary switch corresponds to a specific reverb "voice." – see chart below

Notes:
• Each algorithm responds differently, decay time, tone, and wet level may vary. After selecting a new algorithm, you may need to adjust the Swell, Excite, Volume and Mix controls for optimal results.
• After switching banks, you may need to turn the Voice Selector to activate the new algorithm.

VOICE (REVERB ALGORITHMS) – **DWELL & EXCITE FUNCTION CHART** (DEDICATED FOR R1, R2)

OUTER CIRCLE (SHIFT SWITCH UP)			
SYMBOL	**VOICE**	**SWELL KNOB**	**EXCITE KNOB**
	Plate = classic studio plate reverb - rich with a bright sheen and dense, even decay.	Plate size/decay	Brightness/presence
	Cathedral = captures the massive space of a grand cathedral - long, echoing, and full of air.	Cathedral size/decay	Brightness/presence
	Hall = the sound of a large concert hall, natural and immersive.	Hall size/decay	Brightness/presence
	Room = A mic'd-up room that can feel close or surprisingly big - simple, real, and flexible.	Room size/decay	Dark to bright room (absorption)
	Spring = classic tube amp spring reverb - bouncy, and full of vintage twang.	S well/ reverb tank drive	Tone/Splash
	Springier = a longer spring reverb modeled after studio/external spring reverb units.	Swell/ reverb tank drive	Tone/Splash
	Inchindown = inspired by the Scottish oil tanks with the longest man-made reverb - metallic, haunting, and huge.	Reverb length/decay	Brightness/presence
	Gated = Sharp '80s-style gated reverb with a quick cutoff for rhythmic punch.	Gate time	Brightness/presence

VOICE (REVERB ALGORITHMS) – **DWELL & EXCITE FUNCTION CHART** (DEDICATED FOR R1, R2)

INNER CIRCLE (SHIFT SWITCH PRESSED DOWN)			
SYMBOL	**VOICE**	**SWELL KNOB**	**EXCITE KNOB**
▲	Up Shimmer = reverb trails pitched one octave up - bright, airy, angelic, and endlessly uplifting.	Decay	Octave up mix
▼	Down Shimmer = octave down reverb tails - deep, dark, moody, and grounding your sound in low-end bloom.	Decay	Octave down mix
▲▼	Dual Shimmer = crossfade between octave down and octave up shimmer - from dark and deep to bright and ethereal.	Decay	Octave down/up crossfade
⧗	Pitch Shimmer = pitch-shifted reverb tails with a stable pitch set anywhere from one octave down to one up.	Decay	Pitch shift
	Repeater = echoes trapped in reverb = rhythmic, cascading reflections that evolve into ambient textures.	Decay	Tone
	Moduverb = modulated reverb tails - lush, fluid, and constantly shifting beneath your sound.	Decay	Mod depth & speed
	Frozen Hall = acts like a classic hall until you crank decay to max and it freezes into endless sustain.	Decay (freeze at max)	Brightness
∞	Infinite = captures and holds a reverb loop indefinitely - can keep accepting new signal or freeze what's already there.	Loop input threshold, freeze = no input at max setting	Tone

FOOTSWITCHES & EXPRESSION CONTROLS

Mirage offers flexible control via two footswitches and an expression pedal input. Footswitches can be assigned to different functions depending on the **FSW Assign Switch.**

FSW ASSIGN SWITCH

Sets how the footswitches behave:

IND SW (Independent Mode)

- Right Footswitch: Bypass/engage R1
- Left Footswitch: Bypass/engage R2

R1 XF

- Right Footswitch: Controls either the **Swell** or **Excite** knob for R1
- Left Footswitch: Bypasses or engages **both** reverb engines simultaneously

RIGHT FOOTSWITCH – XF MODE

When assigned to Swell or Excite via the **R1 Control Assign Switch,** the right footswitch behaves as follows:

- **Press and Hold:** Ramps up the selected control (Swell or Excite). The assigned knob's position affects the range of the ramp.
- **Release:** Ramps back down to the value set by the corresponding knob.

(Ramp down time is determined by the knob's position - lower knob settings result in faster ramping)

Note: XF footswitch control only affects R1 parameters.

R1 CONTROL ASSIGN SWITCH

Selects whether the right footswitch controls Swell or Excite in R1 XF mode:

- **Up Position:** Swell
- **Down (Pressed):** Excite

R2 CONTROL ASSIGN SWITCH

Sets which parameter is controlled by an external expression pedal (XP input):

- **Up Position:** Swell
- **Down (Pressed):** Excite

XP INPUT (EXPRESSION PEDAL)

- Controls R2 only
- Plug in a TRS expression pedal with up to a 100k linear pot
- The knob position sets the range of the expression pedal

POWER-UP BEHAVIOR

When Mirage powers up, **both LEDs will blink,** then **go to bypass mode by default.**
To change the power-up state to **engaged (on):**

1. Hold down **one or both footswitches** during power-up
2. The pedal will save this new state automatically
3. Repeat the process to revert to the previous setting

Note: The **right footswitch** will only respond to this power-up preset if the **FSW Assign Switch** is set to **IND SW.**

INTERNAL SWITCHES & ROUTING OPTIONS

KILL DRY SWITCH (PER ENGINE: R1 & R2)

Sets the behavior of the **Mix** knob at maximum:

- **OFF:** Standard 50/50 wet-dry mix
- **ON (KD):** 100% wet / 0% dry (kill dry)

Important:

- Use **Kill Dry (KD)** only with **true bypass**
- If KD is ON and **buffered bypass (TAILS)** is active, the pedal will output **no sound** when Mix is at max

BYPASS MODE SWITCH (PER ENGINE: R1 & R2)

Sets bypass behavior per engine:

- **TRUE:** True bypass via high-quality relay
- **TAILS:** Buffered bypass with trails preserved

Some algorithms (e.g. Infinite, Frozen Hall) can sustain indefinitely even after bypass - adjust decay settings accordingly.

ROUTING ASSIGNMENT SWITCH (GLOBAL)

Controls how the two engines are routed together:

- **MISO (Mono In, Stereo Out):**

  Use for mono input with stereo output

  TAILS must be enabled, and KD must be OFF

- **SOS (Stereo or Series or Separate):**

  Use for stereo setups, separate operation, or for running the engines in series

  TAILS or TRUE bypass can be used freely

ROUTING OPTIONS

Routing is one of Mirage's standout features. With series routing, you can stack the two reverb engines for massive atmospheric depth or use each engine independently for 2 mono reverb presets - engaging either footswitch as needed. Want to insert another pedal between the two engines? The SEND/RETURN loop between R1 and R2 is perfect for adding modulation, delay, filters, or even distortion/fuzz pedals for expanded textures.

Choose stereo or separate routing to process L and R channels independently, assigning distinct reverbs to each - or dial in slight differences on the same algorithm to widen the stereo image. You can even run two completely independent mono setups, each with its own activation footswitch. This is especially handy for one acoustic and one electric guitar setups, dual mono synth setups or setups using an external looper or switcher system. There's also a Mono In Stereo Out (MISO) mode, ideal for mono guitars, synths, or front-of-house reverb sends.

JACK CONFIGURATIONS

1. SERIES ROUTING

Connect:

- Input → **MASTER IN** (top right jack)
- Output ← **MASTER OUT** (top left jack)
- *Optional:* Use the **SEND / RETURN** loop jacks to place another effect between R1 and R2

Internal Switches:

- **Routing:** Set to **SOS**
- **Bypass Mode:** Use **TRUE** or **TAILS** for each engine
- **Kill Dry:** Use **ONLY** with **TRUE bypass**

2. STEREO OR SEPARATE ROUTING

Connect:

- R1: **IN1 / OUT1**
- R2: **IN2 / OUT2**

Internal Switches:

- **Routing:** Set to **SOS**
- **Bypass Mode:** Use **TRUE** or **TAILS**
- **Kill Dry:** Use **ONLY** with **TRUE bypass**

Tip: This routing is ideal for use with **remote or external looper/switcher systems,** where each engine can be controlled or routed independently.

3. MONO IN / STEREO OUT

Connect:

- Input → **MASTER IN**
- Outputs ← **OUT1** and **OUT2** (for stereo operation)

Internal Switches:

- **Routing:** Set to **MISO**
- **Bypass Mode: TAILS** must be enabled on both engines
- **Kill Dry:** Must be **OFF**

POWER, SAFETY & WARRANTY

Power supply : 9V DC center negative, regulated / stabilized. Isolated power supply is recommended for best performance. Max current consumption 210mA. Power supply is not included.

SAFETY INSTRUCTIONS:

- This unit was designed for 9V DC input only. **Do not use a higher than 9V DC voltage power supply as it will cause malfunction and void warranty!**

Warranty: Mirage comes with 5 years warranty from date of manufacture. We will provide service/repair at no labour or internal parts cost within 5 years from date of manufacture - buyer is responsible for all shipping costs and/or customs fees and taxes that may apply. This warranty excludes normal cosmetic wear and damages done due to misuse or improper handling or exposure to liquids/moisture.

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