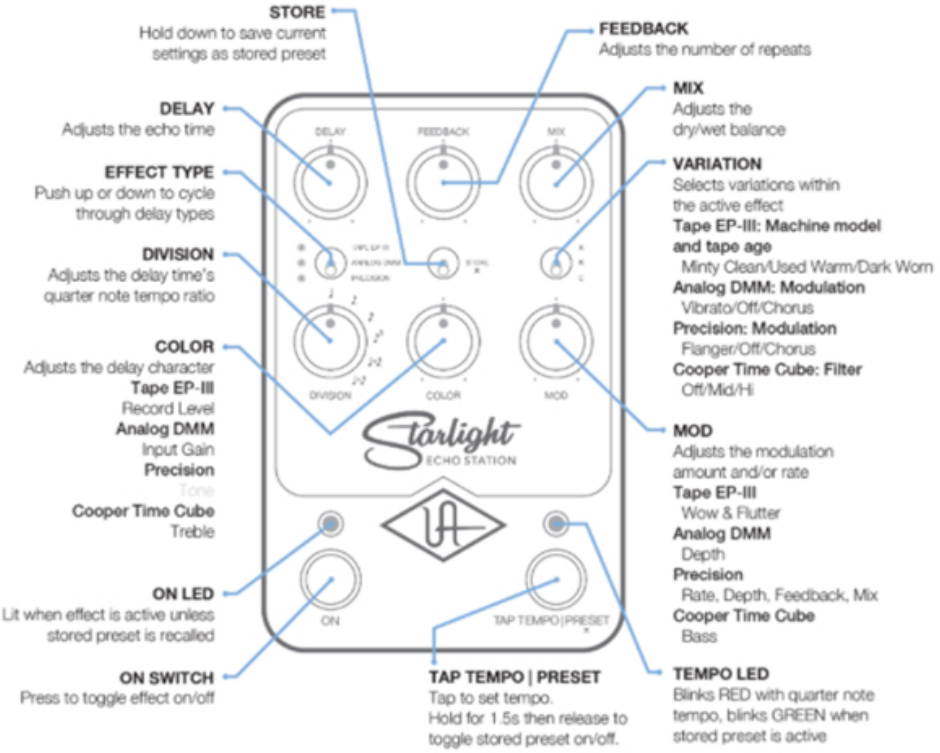
Starlight Quick Start



Download Starlight Quick Start Diagram

Starlight Power

Note: Power supply sold separately.

UAFX pedals require an isolated 9 volt DC, center negative, 2.1 x 5.5 mm barrel connector (same as standard Boss connectors) power supply, which can provide 400 mA (milliamps) of current. Each UAFX pedal must be connected to a separate power supply, or connected to an isolated power connection from a multi-output power supply. Connect the power supply to the 9VDC connector on the pedal's rear panel.

When you first connect your UAFX pedal to a power supply, the Effect LEDs cycle, showing that the pedal is starting up. The startup sequence takes about 15 seconds. Your dry audio signal passes through the pedal during startup.

If power to your UAFX pedal is interrupted during operation, processed audio stops. However, your dry audio signal still passes through the pedal. When the pedal is unpowered, and when it's starting up, the signals are pure analog dry-through from input to output, without buffering or any other circuitry, via mechanical relays.

Important Power Notes

- Each UAFX pedal requires 400 mA of current. Make sure your power supply can deliver at least 400 mA to the pedal for proper operation and performance.
- An isolated supply provides power and grounding that is electrically separated, usually by means of a transformer for each connector. Some low-cost power supplies might have separate connectors, but might not provide true ground and power isolation, causing noise and ground loop hum.
- If your power supply has multiple outputs, make sure that each output provides true isolation, or that you connect your pedal to its own power supply.
- It's OK to connect a power supply that can deliver more than 400 mA. The pedal only draws the current it needs and will not be damaged if the supply is 9VDC.
- If your power supply is not isolated, you might hear additional hum in the pedal signals. If the supply cannot provide 400 mA of current, the pedal might not operate properly, even if the LEDs and switches seem to be working.

Starlight Connections

All UAFX audio jacks accept 1/4" (6.35 mm) unbalanced TS (Tip-Sleeve) instrument cables. Although TRS (Tip-Ring-Sleeve) cables may be used, they offer no benefit over TS cables.

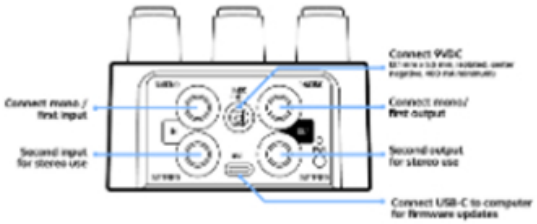
Important: You must connect to UAFX's IN 1/MONO jack. The IN 2/STEREO jack doesn't work by itself without the IN 1/MONO connection.

UAFX pedals are designed with enough headroom to easily accommodate instrument levels and amp effects loop levels, but they can easily handle line-level gear such as synthesizers and audio interfaces. The pedals are voiced for instrument levels, so you may need to reduce the line out level of the gear you're connecting into the pedals to avoid overdriving the effects.

The USB-C port is for pedal registration and firmware updates only, within the UAFX Control desktop app for Mac and Windows computers. You can connect to any type of USB port on the computer, but you may need an adapter.

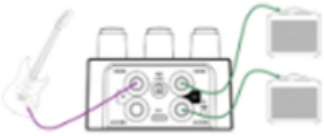
The PAIR button and LED are for pedal registration and global pedal settings (bypass and footswitch modes) only, within the UAFX Control mobile app.*

**UAFX Control mobile app available Spring 2021*

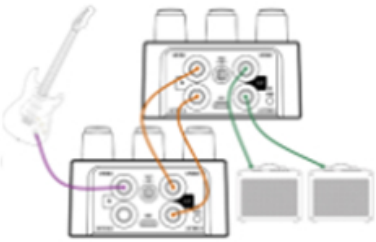


Connection Examples

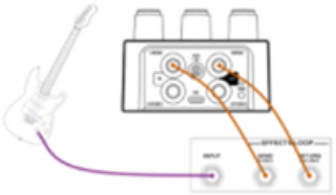
Mono in > Mono Out



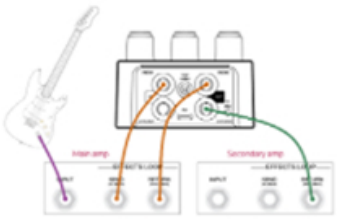
Mono in > Stereo out



Stereo in > stereo out



Pedal in amp's effects loop



Pedal in dual amp stereo setup showing effects loop connections for both amps

Starlight Overview

Unmatched Authentic Vintage and Modern Delay Effects

Fasten your seatbelts for sonic time travel with UAFX Starlight Echo Station, featuring jaw-dropping emulations of classic tape echo, bucket-brigade, and digital delay units in a single, uber-powerful stompbox.

Built upon futuristic UAFX dual-engine processing and unflinching sonic accuracy, Starlight sets a new benchmark in delay effects, beautifully crafted to travel the farthest reaches of your imagination for decades to come.

Dual Stereo Delay Engines for Endless Creativity

Starlight's UAFX engine powers separate stereo instances of each delay effect, thanks to its unique dual-engine processing. It's like having two tape or bucket-brigade hardware units running simultaneously, giving you a full stereo spread of complex, awe-inspiring spatial textures, and seamless delay effect transitions with trails.

With UAFX's dual-engine processing, two completely independent stereo effects are always running concurrently — one in Live mode, and the other in Preset mode. So when you switch between the live and preset sounds, you'll get true stereo spillover from two different stereo effects.

For example, you can switch from a Live mode sound with extremely long ping-pong delay feedback to a preset sound with a short stereo slap delay, and you will continue to hear the long stereo delays spillover seamlessly while playing the preset sound, without audio artifacts.

Analog Dry-Through

Starlight Echo Station features analog dry-through. The analog dry signal is always passed through to the outputs without digital conversion, except when set to 100% wet. When unpowered, or when bypass routing is set for true bypass and the pedal is bypassed, the signals are pure analog dry-through from input to output via mechanical relays, without buffering or any other circuitry. When bypass routing is set for trails bypass,* the dry signal remains analog dry-through when the effect is on and off, except when preamp coloration is enabled.

Silent Switching

UAFX pedals are designed to switch on and off seamlessly and silently, using relays and advanced circuitry. When in true bypass, you may hear the mechanical relay switching from the hardware, but you do not hear the switching in the audio signal. There are no mechanical noises from the pedal with trails bypass* because the physical relay is not used.

**True/Trails bypass selection via UAFX Control mobile app available Spring 2021*

Free Bonus Effect

To get the free Cooper Time Cube bonus effect, register your pedal with UAFX Control software. To get UAFX Control, visit:

uaudio.com/uafx/start

Starlight Operation

Live Mode and Preset Mode

Starlight Echo Station has two main operating modes: Live and Preset. You can store a preset you've made with your own settings by holding down the STORE switch. Note that Starlight's delay times in Live mode and Preset mode are completely independent.

In Live mode, the sound reflects the current positions of the knobs, switches, and LEDs on the pedal, and the left footswitch toggles the Live mode effect on/off.

In Preset mode, you hear the settings that are stored as a preset, and the current positions of the knobs and switches do not reflect the sound. Instead, all knob and switch positions are internally set to their stored positions, and the right footswitch toggles the preset effect on/off.

Live Mode

To enter Live mode, press the left footswitch. Press the left footswitch again to toggle the live effect on/off. The left footswitch LED is lit red when the Live mode effect is on.

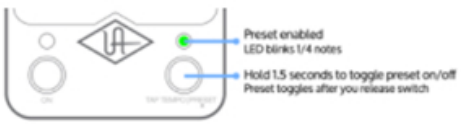
In Live mode, the right footswitch LED blinks red at the Live mode tempo. To tap the tempo in Live mode, short-press (don't hold) the *right* footswitch twice or more.

Preset Mode

To enter Preset mode, press and hold the right footswitch for 1.5 seconds (or longer) until the Effect Type LED blinks rapidly. When you release the switch, the preset is recalled with its stored tempo. Press/hold/release again to toggle the preset effect on/off.

Tip: Tap the left footswitch twice to quickly bypass the pedal from Preset mode.

When the preset is on, the right footswitch LED blinks green with the preset tempo. To tap the tempo in Preset mode, short-press (don't hold) the right footswitch twice or more.



PRESET MODE NOTES

- After holding, the preset is toggled on/off when you *release* the right footswitch.
- The Effect Type LED blinks rapidly when the preset is armed for toggling.
- The right footswitch (see below) can be set to other behaviors in the UAFX Control mobile app.*

Right Footswitch*

**Right footswitch settings via UAFX Control mobile app available Spring 2021*

The behaviors of the right footswitch can be changed to suit your preferences with the UAFX Control mobile app. Note that the left footswitch *always* toggles Live mode, where the knobs and switches are "what you see is what you hear" (except the delay time knob, if tempo is tapped).

Starlight's right footswitch has three available settings:

Preset + Tap*	Live mode, Preset mode, and Tap Tempo for both modes are available.
Preset	Live mode and Preset mode are available. Tap tempo is unavailable.
Tap Tempo	Live mode and Tap Tempo are available. The preset is unavailable.
**Default setting from factory and after restoring defaults*	

Preset + Tap

When set to Preset + Tap, the right footswitch performs multiple functions.

Load Preset: Hold the right footswitch for 1.5 seconds (or longer) to load the preset with its stored tempo when the footswitch is released. The Effect Type LED blinks rapidly when the preset is armed for loading.

Bypass Preset: Hold the right footswitch for 1.5 seconds (or longer) to bypass the preset when the footswitch is released. The Effect Type LED blinks rapidly when the preset is armed for bypass. **Tip:** Tap the left footswitch twice to quickly bypass the pedal from Preset mode.

Tap Live/Preset Tempos: Short-press (don't hold) the right footswitch twice or more to tap quarter note tempo. In Live mode, the right footswitch LED blinks red at the current tempo. In Preset mode, the right footswitch LED blinks green at the current tempo.

Preset

When set to preset, the right footswitch immediately loads the preset with its stored tempo, and toggles the preset on/off. Tap tempo is unavailable with this setting.

Tap Tempo

When set to tap tempo, the right footswitch taps quarter note tempo for Live mode only. The right footswitch LED blinks red at the current tempo. Although you cannot access the stored preset in this mode, its settings remain intact.

Stored Preset

You can store a preset on your UAFX pedal, and recall it using the right footswitch. A default factory preset is included.

When you store a preset while in Live mode, the position of all knobs and switches on the pedal, including the delay time, are saved. So when you make a great sound in Live mode, storing it is as easy as holding down the store switch.

When you store a preset while in Preset mode, only those knobs and switches that have changed since you loaded the preset are saved. So, when saving in Preset mode, what you hear is what is saved, and not the current positions of the knobs and switches.

To store your sound as a preset

1. Set your sound as you want it stored in the preset.
2. Press and hold the STORE switch in the down position until the green PRESET footswitch LED blinks rapidly (about 0.5 seconds).

Preset Notes

- The delay times in Preset mode and Live mode are completely independent.
- When you move a knob or switch in Preset mode, the settings for the sound immediately jump to the new knob or switch position.
- When you switch the effect type in Preset mode, all settings change to their defaults, which are optimized for that effect. Use the defaults as a starting point when you are looking for a great tape, analog, or digital delay.

Effect Bypass Routing

Starlight Echo Station effect bypass routing can be set for true bypass or trails bypass using the UAFX Control mobile app.* Bypass routing determines how the pedal behaves when the effect is off.

**UAFX Control mobile app available Spring 2021*

True Bypass

When bypass routing is set for true bypass and the effect is off, the dry signal is pure analog dry-through from input to output, without buffering or any other circuitry, via mechanical relays. By default, your UAFX pedal is set for true bypass.

When set for true bypass and the effect is on, the dry signal remains analog dry-through (except when preamp coloration is enabled) and the output is buffered.

Trails Bypass

Trails bypass can be set in the UAFX Control mobile app. When bypass routing is set for trails bypass and the effect is off, delays play out naturally, rather than stopping suddenly.

The dry signal remains analog dry-through when the effect is on and off (except when preamp coloration is enabled), and the output is always buffered.

Preamp Coloration*

**Preamp coloration via UAFX Control mobile app available Spring 2021*

Starlight Echo Station can include the preamp tone of the Tape EP-III and Analog DMM effects. The meticulously modeled preamps in these effects are renowned for their smoothness, warmth, and musicality. Preamp coloration is enabled in the UAFX Control mobile app.

Preamp coloration behavior depends on the bypass routing setting. Preamp coloration is unavailable with the Precision and Cooper Time Cube effects.

Preamp Coloration Off

When preamp coloration is off, the dry signal is always uncolored and analog dry-through when the delay effect is on, and also when the delay effect is off, with both true bypass and trails bypass routings.

Preamp Coloration On (True Bypass)

When preamp coloration is on and bypass routing is set for true bypass, the dry signal is preamp colored when the delay effect is on, but uncolored analog dry-through when the delay effect is off.

Preamp Coloration On (Trails Bypass)

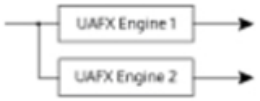
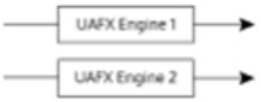
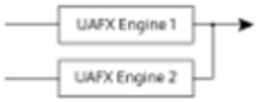
When preamp coloration is on and bypass routing is set for trails bypass, the dry signal is preamp colored when the delay effect is on, and also when the delay effect is off.

PREAMP COLORATION NOTES

- If the pedal is set for preamp coloration with trails bypass, the preamp coloration of the Live mode effect is heard when the effect is bypassed.
- If the pedal is set for preamp coloration with trails bypass, there are no delay trails with the Analog DMM effect. This matches the behavior of the original hardware, which does not have trails when bypassed.

Mono/Stereo Signal Routing

UAFX pedals always use true stereo processing, even when connected in mono. The pedal senses which inputs and outputs are connected and automatically adjusts the internal signal routings.

Mono In Mono Out	The mono input is split into stereo before processing then summed to mono for output.	
Mono In Stereo Out	The mono input is split into stereo before processing.	
Stereo In Stereo Out	The stereo inputs are processed and retain true stereo separation.	
Stereo In Mono Out	The stereo inputs are processed then summed to mono for output.	

Starlight Controls

Starlight Echo Station's knobs and switches control each delay effect similarly, but the functions of the controls vary, depending on the currently selected effect. See the individual delay effect details section for complete control descriptions.

Delay

Adjusts the delay time. Starlight Echo Station's delay time ranges, and whether delay time changes alter pitch, vary per effect. Note that tempo can also be tapped with the right footswitch.

When switching between effect types when very long delay times are set with the Delay knob or by tap tempo, delay times are automatically adjusted to compensate for the maximum available length.

Effect	Delay time range	Pitch altered by delay change
Tape EP-III	80-700 ms	Yes
Analog DMM	110-1068 ms	Yes
Precision	120-1500 ms	No
Cooper Time Cube	120-2500 ms	No

Feedback

Adjusts the number of repeats. The Tape EP-III and Analog DMM will self-oscillate at higher feedback levels, and the Precision will repeat indefinitely at maximum feedback, but does not self-oscillate.

Self-Oscillation/Runaway Audio

When your Preset sound is set to self-oscillate or repeat indefinitely with very high feedback, turning off the pedal does not stop the feedback. In true bypass mode, it continues to run in the background and will return when you turn the pedal back on. In trails bypass mode, it continues to play.

When your Preset or Live mode sound is set to self-oscillate or repeat indefinitely with very high feedback, and you switch to the other mode, you cannot stop the oscillation by adjusting the feedback knob. You must switch back to the Preset or Live mode sound where the oscillation originates to stop the feedback.

STOP RUNAWAY AUDIO

- To immediately stop self-oscillation or indefinite feedback, switch the Effect type switch to a different effect while in the mode (Live or Preset) where the sound originates.
- To reduce and eventually stop self-oscillation or indefinite feedback, reduce the feedback knob while in the mode (Live or Preset) where the sound originates.

Mix

Adjusts the level of delay that is mixed in with the dry signal. When you rotate this knob fully clockwise, the signal becomes 100% wet — you only hear the delayed signal and the dry signal is muted (kill dry).

Division

Sets the division of the tempo. The right footswitch LED always blinks the tempo as quarter notes, but you can change the note ratios. The available divisions are:

- Quarter note
- Dotted eighth note
- Eighth note
- Eighth note triplet
- Dual: quarter note + dotted eight note
- Dual: quarter note + eighth note

Color

Adjusts the delay character. Color has different functions depending on the active effect.

Mod

Mod adjusts the amount and/or rate of modulation added to the selected delay. The Mod control function varies depending on the active effect.

Note: When the Analog DMM or Precision effect with variation B is active, the Mod knob has no function. When you turn the Mod knob in these states, the Effect Type LED blinks rapidly, indicating that the knob is inactive.

Effect Type

Push this switch up or down to change the delay model. When you push the switch repeatedly, the pedal cycles through all available effects.

Tip: Register your pedal to get the bonus Cooper Time Cube effect.

Effect Type LED

The currently selected effect is indicated by this LED. A red LED indicates that the effect printed on the pedal is selected. The bonus Cooper Time Cube effect, which you get when the pedal is registered, is selected when the top LED is green (the bonus effect doesn't have a label).

Store

The STORE switch saves the current sound as the preset. Press and hold the STORE switch in the down position until the green PRESET footswitch LED blinks rapidly (about 0.5 seconds).

See the Stored Preset section for additional details.

Variation A/B/C

Each delay model (Tape EP-III, Analog DMM, Precision, Cooper Time Cube) includes three effect variations that are selectable with the A/B/C switch. These variations are unique voicings within each delay type.

Use the A/B/C switch to select variations within the selected delay type. The variations for each delay are shown in the effect details section.

Left Footswitch LED

The left footswitch LED is lit red when the live knob and switch settings are active.

Left Footswitch

Press to toggle the Live mode effect on/off with current knob and switch settings.

Right Footswitch LED

By default, the right footswitch LED blinks green at the preset tempo when the preset is on, and the right footswitch LED blinks red at the Live mode tempo when the preset is off. Other behaviors are possible, depending on the right footswitch setting.

Right Footswitch

The right footswitch can be set to access the preset, provide tap tempo, or both. See Right Footswitch for more information.

Starlight Effect Details

Each UAFX effect has a unique sound and control set. The specific function of the knobs and switches within each effect varies, depending on which functions are needed for optimal control of the specific effect.

This section contains the specific control details for each effect, along with a controls map diagram for quick reference. You can download the control map diagrams, along with a blank recall sheet for noting your own settings, via the link below.

Download Starlight Control Maps & Recall Sheet

Tape EP-III

Perfectly Captured Tape Delay and Preamp

A glorious system of motors and tape, vintage early-'70s tape echo units are beyond legend — and Starlight Echo Station's Tape EP-III is, soup-to-nuts, the most complete circuit emulation of the classic hardware. From its wow/flutter randomness to the sound of the tape splice, every eccentric trait of the hardware is here, including its incredibly musical preamp circuit. Plus, you can tweak your repeats with New, Used, and Worn tape machines for tons of color and texture.

Control Details

Control	Description	Additional Info
Delay	Delay time range is 80-700 ms.	Delay pitch varies as delay time is changed.
Feedback	Amount of delay repeats.	Past about 3 o'clock, delay repeats begin to self-oscillate.
Mix	Level of delay signal mixed with dry signal.	When fully clockwise, the dry signal is muted (delay is 100% wet).
Division	Sets the subdivision for the delay time relative to the knob or tapped tempo (LED blinks at quarter note intervals).	Settings available range quarter note to an eighth note triplet, plus two dual note settings.
Color	Record level, adjusts gain of tape recording.	Noon position matches gain, increasing beyond noon adds overdrive and saturation.
Mod	Modulation applied to delay repeats.	Increases or decreases tape wow and flutter and tape splice artifacts. Leave this at noon for the setting calibrated to modeled hardware.
Variation A	Mint tape and machine.	A new old stock "closet classic" machine with new old stock tape and snappy compander compression circuit on the record head.
Variation B	Used/warm tape and machine.	Gently used tape, on a medium well-maintained early '70s machine with no compander circuit.
Variation C	Dark/worn tape and machine.	Mid '70s unit, less well-maintained, with very worn tape and plenty of warble, chorus-like repeats.

Analog DMM

Iconic Bucket-Brigade Effects

Syrupy repeats, thick modulation, and mind-bending sci-fi effects are calling cards of this vintage American bucket-brigade delay. Starlight Echo Station captures the best characteristics of multiple handpicked units from the late-'70s/early-'80s, modeling the entire circuit — right down to the colorful preamp and unpredictable clock rate dumping — giving you startling "whoosh" effects, astonishing and vibrato and chorus textures, and all the hazy zaniness of the original.

Control Details

Note: When the Analog DMM effect with variation B is active, the Mod knob has no function. When you turn the Mod knob in this state, the Effect Type LED blinks rapidly, indicating that the knob is inactive.

Control	Description	Additional Info
Delay	Delay time range is 110-1068 ms.	Delay pitch varies as delay time is changed.
Feedback	Amount of delay repeats.	Past about 3 o'clock, delay repeats begin to self-oscillate.
Mix	Level of delay signal mixed with dry signal.	When fully clockwise, the dry signal is muted (delay is 100% wet).
Division	Sets the subdivision for the delay time relative to the knob or tapped tempo (LED blinks at quarter note intervals).	Settings available range from quarter note to an eighth note triplet, plus two dual note settings; changing division while delays sound out will create stepped, pitched delays.
Color	Input gain; adds gain to delay repeats.	Leave at noon to match gain, add more to overdrive the effect and add harmonics.
Mod	Modulation depth.	Speed is fixed to match the original hardware.
Variation A	Vibrato modulation mode.	Use this variation and set Mod to noon to match a famous Irish guitarist's setting.
Variation B	Modulation off.	Mod knob has no effect; when turning, the Effect Type LED blinks to indicate knob is inactive.
Variation C	Chorus modulation mode	Speed is fixed to match the original hardware.

Precision

HI-FI Delays, Inspired Modulation

Featuring pristine, mirror-image repeats with dynamic, shimmering modulation effects, the Precision effect is a goldmine of modern delays. Easily craft with touch-sensitive, studio-grade flange and chorusing textures and pepper your creations with ping-ponging repeats, adding movement and interest to your parts.

Control Details

Note: When the Precision effect with variation B is active, the Mod knob has no function. When you turn the Mod knob in this state, the Effect Type LED blinks rapidly, indicating that the knob is inactive.

Control	Description	Additional Info
Delay	Delay time is 120-1500 ms.	Delay pitch does not vary as the delay time is changed.
Feedback	Amount of delay repeats.	Fully clockwise, delay repeats repeat indefinitely. However, they do not self-oscillate.
Mix	Level of the delay signal mixed with the dry signal.	Fully clockwise, the dry signal is muted (delay is 100% wet)
Division	Sets the subdivision for the delay time relative to the knob or tapped tempo (LED blinks at quarter note intervals).	Settings available range from a quarter note to an eighth note triplet, plus two dual note settings.
Color	Adds/subtracts treble and bass to delayed signal.	Set at noon for no cut or boost.
Mod	Rate, depth, feedback, and mix.	Combines control of multiple parameters to provide light to heavy modulation.
Variation A	Flanger modulation mode.	Uses a second processor to flange the delayed signal.
Variation B	Modulation off.	MOD knob has no effect; when turning, the Effect Type LED blinks to indicate the knob is inactive.
Variation C	Chorus modulation mode.	Uses a second processor to chorus the delayed signal.

Cooper Time Cube

Unique garden hose-based mechanical delay

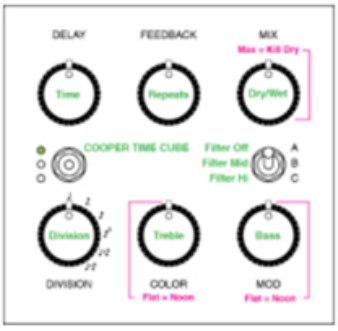
Designed by Duane H. Cooper and Bill Putnam, the Cooper Time Cube is a garden hose-based mechanical delay device introduced in 1971 has achieved cult status as the most unique delay ever made. Famous for its spectacular short delay and doubling effects — as well its uncanny ability to sit perfectly in the mix — the Cooper Time Cube is as character-filled a device as you will ever find. By capturing the sound of the original delay system, while offering modern delay features, the Cooper Time Cube for Starlight is a versatile, fat-sounding space maker without equal.

The original delay times for the Cooper Time Cube were limited by the lengths of garden hose used to create the delay. Approximately 16 and 18 foot lengths of hose gave delay times of 14 and 16 milliseconds respectively, and when the lengths were connected for 34 feet of hose, the result was 30 milliseconds. The 2.5 seconds of delay you can use with the bonus UAFX Cooper Time Cube equates to 2813 feet of garden hose!

Register to get this effect

This additional effect is available after you register your Starlight Echo Station. To select the Cooper Time Cube effect, push the Effect Type switch to cycle through the delay effects. The Cooper Time Cube effect is selected when the top Effect Type LED is lit green (the bonus effect doesn't have a label).

Control Details



Control	Description	Additional Info
Delay	Delay time is 120-2500 ms.	Delay pitch does not vary as the delay time is changed.
Feedback	Amount of delay repeats.	Repeats do not repeat indefinitely or self-oscillate.
Mix	Level of delay signal mixed with dry signal.	When fully clockwise, the dry signal is muted (delay is 100% wet).
Division	Sets the subdivision for the delay time relative to the knob or tapped tempo (LED blinks at quarter note intervals).	Settings available range from a quarter note to an eighth note triplet, plus two dual note settings.
Color	Adds/subtracts treble to delayed signal	Set at noon for a flat response.
Mod	Adds/subtracts bass to delayed signal	Set at noon for a flat response.
Variation A	High pass filter off	
Variation B	High pass filter at 240 Hz	
Variation C	High pass filter at 1 kHz	

Starlight Default Preset

The default preset for Starlight Echo Station provides a useful standard DMM sound with 0.5 seconds of delay, light modulation, and fairly heavy feedback. You can replace this preset by storing your own.

Note that when you switch effect types in Preset mode, all settings change to their defaults, which are optimized for that effect. Use the defaults as a starting point when you are looking for a great tape, analog, or digital delay.

Starlight Specifications

All specifications are subject to change without notice.

Power requirements (power supply sold separately)	Isolated 9VDC, center-negative, 400mA minimum
Inputs	2 x ¼" unbalanced TS (input 2 for stereo connections)
Outputs	2 x ¼" unbalanced TS (output 2 for stereo connections)
Dry signal	Analog dry-through in all modes except preamp coloration
Bypass modes (switchable within UAFX Control mobile app*)	True bypass via mechanical relays or buffered/trails bypass
Input impedance	500 Kilohms (Mono In) 1 Megohms (Stereo In)
Output impedance	500 Ohms
Maximum input level	12.2 dBu
Maximum output level	12.1 dBu
Frequency response	20 Hz to 20 kHz, ±3 dB
Maximum throughput latency	0 ms for dry signal, input to output (Analog dry-through in all modes except preamp coloration)
USB Type-C	For registration and firmware updates via computer
Wireless technology	Bluetooth v5
Dimensions (with knobs and protrusions)	Height: 2.56 inches, 6.5 cm Width: 3.62 inches, 9.2 cm Depth: 5.55 inches, 14.1 cm
Weight (unboxed)	1.24 lbs 0.567 kg