

BASIC OPERATION

We sent a team of sonic scientists deep into the arctic circle on a secret mission: to capture bits of the Aurora Borealis so we could transmute them into a pedal. What emerged was Luminous, equal parts phaseshifter and swirly glowing haze machine. It dances and hovers with the utmost mystery, occasionally imperceptible while frequently vivid. And it glows in the dark, because of course it does.

Using the pedal is pretty simple: plug your instrument into the INPUT jack and your amplifier or other effect into the L jack, power up the pedal with 9V 250mA or more, and turn some knobs. As soon as you touch a knob, the display will change to show what is happening. You can also tell the pedal to stay in the knobs display mode in the Setup menu.

The lower-right knob has a pushbutton switch, tap that to access extra parameters on the back pages of the user interface. We've put the most common controls up front, tweaking stuff on page 2, and utility items on page 3. Three small boxes at the bottom of the display indicate the currently selected page.

This guide covers the basics of the pedal including its connections, controls, and features. For more detailed information you can scan the code in this section to be taken to our website for access to the full manual, MIDI information, firmware updates, and more.



scan me for
more info!

A NOTE ABOUT POWER:

Leap Series pedals are digital and require a lot of power. They also don't like sharing power supply grounds with other pedals, so please don't use a "daisy chain" type power supply. Use name-brand isolated supplies for the best possible performance.

PRESETS

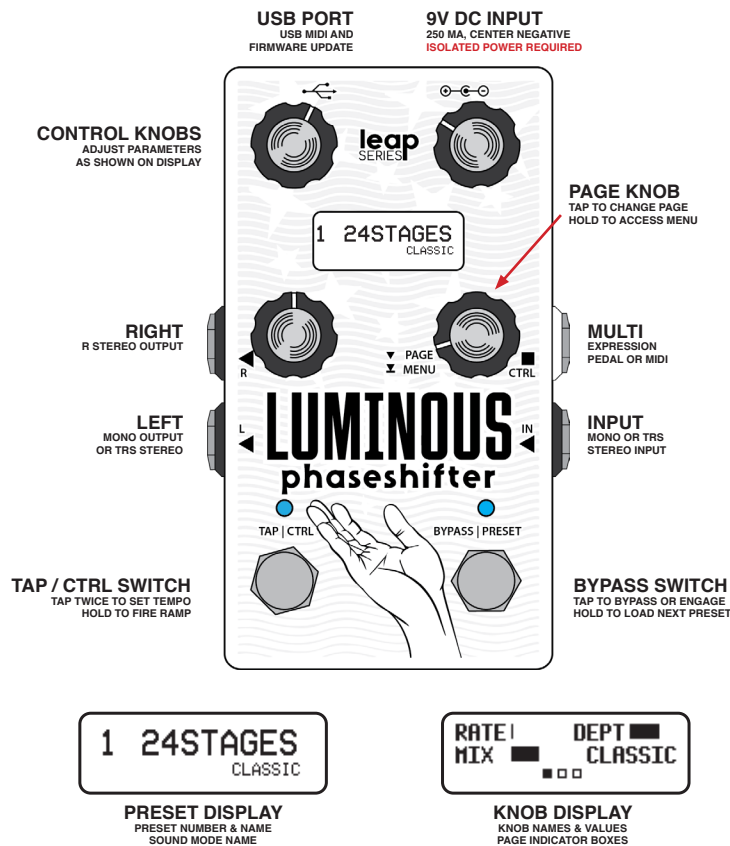
How do you make quick changes on a pedal that has 12+ knobs? PRESETS. Every Leap Series pedal allows you to save up to 32 presets that contain the entire state of the pedal.

Loading a preset recalls **all knob positions** and expression pedal mappings.

To load a preset, hold the BYPASS / PRESET footswitch. You can set the number of available presets in the Setup Menu, from 1 to 8. You can also access the other preset banks 9-16, 17-24, and 25-32.

To save a preset, first use the pedal knobs to tweak the sound, then hold the PAGE knob. Press and hold the BYPASS / PRESET footswitch to enter the save menu.

To save to the current preset, just hold down the BYPASS / PRESET footswitch again. To rename the preset, turn the lower-left knob to select a character in the name and then turn the PAGE knob to edit that character. Use the lower-left knob to select the preset number and edit to change the save location.



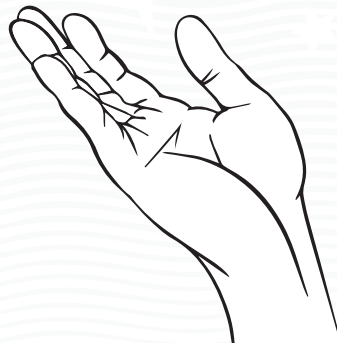
GLOBAL SETUP MENU

To enter the global setup menu, first hold down the PAGE / MENU knob (lower right,) then hold the left footswitch. Turn the lower left knob to select the parameter you want to change, then turn the lower right knob to set its value. Hold the PAGE / MENU knob (lower right) to save your settings and exit the menu.



M.JACK	EXPRESN	MultiJack is expression pedal input
FOOT. SW		MultiJack is foot switch input
MIDI		MultiJack is MIDI input (requires MIDI to TRS adapter)
PRST.EX		Preset selection using ALEXPANDER footswitch
SCRL.EX		Preset scroll using ALEXPANDER footswitch
CHANNL		Sets MIDI input channel
STEREO	MONO IN	INPUT jack is mono
	INP. SUM	INPUT jack sums to mono
	STEREO	INPUT jack is stereo
RPHASE		Sets phase of R output, allows correction for amp or effect phase.
PRESET		Sets number of presets available on device. Does not affect MIDI.
DISPLY	PRESET	Display shows preset except when turning knobs
	KNOBS	Display shows knobs except when loading preset
	BLANK	Display is off when not adjusting knobs
KNOBS	JUMP	Knobs jump to new value when turned
	PICKUP	Knobs don't move until turned to previous value first
RETURN		Pedal will return to the main control page after 5, 10, 30 seconds
MIDOUT	OFF	Pedal does not send MIDI CC values
	JACK	Pedal sends MIDI CC from MultiJack
	USB	Pedal sends MIDI CC from USB MIDI
	BOTH	Pedal sends MIDI CC from both
TRAILS	OFF	hard bypass, ON - trails bypass, AUTO - trails fade out
EXP LO / HI		Sets heel and toe calibration for expression pedal
PWR ON		Choose BYPASS or ENGAGE to set the power-on state of pedal
RESET		Turn to reset CONFIG , PRESETS , or ALL . Hold PAGE knob to reset. Select MIDIDUMP to export presets over USB MIDI

LUMINOUS phaseshifter



QUICK START GUIDE

SOUND MODES

Luminous has ten selectable sound modes, each based on a different phaser effect type. You can tweak these modes to your taste, and you can save any sound to any preset. To change sound modes, turn the lower right knob on page 1. Tap the lower right knob to advance to the next page. Knobs marked * do not respond to expression or ramp controls.

NOTE: selecting a sound mode with the knob doesn't change any of the other knob parameters, so you may need to tweak the controls after changing sound modes.

The following controls are common to all modes on page 3:

DIV* - tap division for modulation or delay, not available in DYNAMIC mode
LEVL - overall volume for the pedal (wet + dry)

FILT* - Low-cut filter, higher settings reduce mud or low-end rumble.

RAMP* - Ramp rate and trigger mode, please see EXPRESSION AND RAMPING below.

CLASSIC

Versatile and powerful studio phaser, configurable between 2 and 24 phase stages. Try a 4-stage phaser with low resonance for stomptbox-type phasing, or a 12-stage phaser set to slow sweep for studio style phasing.

RATE - phase speed from 10-0.1s	STAG* - phase stages from 2-24
DEPT - phase LFO intensity	RESO - phase feedback
MIX - mix of wet and dry signals	WAVE* - LFO wave shape
	CENT - LFO wave center point

INFINITE

This one will spin you right round! Combines a Bode-inspired frequency shifter with phaser bank to produce infinitely rising or falling phase using the DIR control on page 2. The Rate and Depth controls affect the phaser bank to add motion.

RATE - phase speed from 10-0.1s	DIR - infinite direction and speed
DEPT - phase LFO intensity	RESO - feedback
MIX - mix of wet and dry signals	WAVE* - phase LFO wave shape
	CENT - phase LFO center point

DUAL PHASE

Two independent phase shifters, configurable as SERIES (A into B,) PARALLEL (A and B summed together,) STEREO (A on left, B on right,) or SPLIT (stereo inputs to each phaser.) Phaser B may be LOCKED or INVERTED to the LFO for Phase A.

RAT1 - phaser A rate	RAT2 - phaser B rate or LOCK / INV
DEP1 - phaser A intensity	DEP2 - phaser B intensity
MIX - mix of wet and dry signals	WAVE* - sine or square for A/B
	ROUT* - phaser A and B routing

FLYING PAN

Classic '70s style panned phaser. Warning - this one only works to its full potential in stereo, but it's still a cool tremolo phaser in mono. The phase signal may be placed anywhere in the stereo spectrum before it hits the panning engine.

RATE - phase speed from 10-0.1s	PRAT - panning rate
DEPT - phase LFO intensity	PDEP - panning intensity
MIX - mix of wet and dry signals	PWAV* - panning LFO wave shape
	PAN - phaser panning location

PHASE DELAY

Clean digital delay (up to 800ms) with an 8-stage phaser on the delay trails. The delay is controlled by the tap tempo in this mode instead of the phaser.

TIME - delay time from 0-800ms	RATE - phaser rate
REPT - delay repeat level	DEPT - phaser intensity
MIX - mix of wet and dry signals	WAVE* - LFO wave shape
	CENT - LFO center point

PATTERN

Rhythmic step-sequenced phaser with 8 selectable patterns.

RATE - pattern step speed	STAG* - phase stages from 2-24
STEP - number of pattern steps	RESO - phase feedback
MIX - mix of wet and dry signals	PATT* - pattern selection
	DIR* - DOWN, UP, or UP&DOWN

K-TREM

Inspired by vintage tuck-and-roll amps, this is phase vibrato combined with tremolo. Try 2 stages with low Image settings for amp-type effects, or 3 stages for more of a vibro thang. Sync sets tremolo to mute during high or low phase sweep.

RATE - modulation speed	STAG* - phaser stages from 2-5
VIB - phase / vibrato intensity	IMAG - phaser resonance
TREM - tremolo intensity	WAVE* - LFO wave shape
	SYNC* - trem mutes high or low phase

DYNAMIC

8-stage phaser controlled by your playing dynamics. Dynamic engine may control phaser RATE, DEPTH, or set to MANUAL mode to control the phaser directly like an auto-filter.

RATE - phaser speed	SENS - gain for volume sensing
DEPT - phaser depth	RISE - time for volume sensing
MIX - mix of wet and dry signals	SOFT - control value at low volume
	LOUD - control value at high vol
	MODE* (pg3) RATE, DEPTH, MANUAL

UNIQUE

Special mode inspired by an incandescent-powered Japanese effect from the 1960s. The second page has controls to go way beyond the original effect, set these at their minimum position to start at the vintage sound. Set the Mix control to 50% for "chorus" or 100% for "vibrato."

RATE - phase speed from 10-0.1s	STAG* - normal (4) or double (8)
DEPT - phase LFO intensity	RESO - phase feedback
MIX - mix of wet and dry signals	BEAT - amount of "throb"
	SYNC* - sets "throb" polarity

PHLANGER

Takes inspiration from a classic DIY kit. While the original was just a funny spelling of "flanger," our version combines phaser and flanger in a single mode. Use the Time control to mix and swirl between the two effects.

RATE - LFO speed from 10-0.1s	TIME - phase at min, flange at max
DEPT - LFO intensity	RESO - feedback
MIX - mix of wet and dry signals	WAVE* - LFO wave shape
	CENT - LFO wave center point

EXPRESSION AND RAMPING

Every Leap Series pedal allows you to get as expressive as you want, any time you want. Any of the pedal knobs may be controlled with an external expression pedal, a MIDI controller, or even automatically using the Ramp function.

Connect a TRS expression pedal to the MultiJack input on your pedal, then enter the setup mode and make sure that M.JACK is set to EXPRESSN. Save and exit setup.

Sweep the expression pedal to its fully heel-back position, then turn any or all of the pedal knobs. Sweep the pedal to the opposite toe-down position and turn the knobs again. That's it! Note: some knobs don't respond to expression, they're indicated by with an * in the Sound Modes section

If you don't have an expression pedal or would prefer not to use one, you can hold the TAP / CTRL switch to trigger the automatic expression ramp function. The ramp controls are on page 3 of the pedal interface.

RAMP sets how fast the built-in expression ramp function will run, with clockwise settings ramping more slowly. The range of this knob is divided into three sections that also select the ramp trigger type.

(T)OGGLE: Ramp will trigger when the Tap / Ctrl switch is held, then remain at the "toe" position until Tap / Ramp is held again.

(M)OMENTARY: Ramp will trigger while the Tap / Ctrl switch is held, then return when the switch is released

CLR*: Ramp / EXP reset. Hold the Tap / Ctrl switch to set the "toe" values of each knob to match the "heel" values.

Ramping and expression use the same "heel" and "toe" values. You can set these values in ramp mode by firing the ramp in T mode, then turning the knobs while the ramp is at full / "toe" position. Fire the ramp again to return to minimum / "heel" position to set the other values.