

PANA-TREM

Oh the delicate coaxing of bias-modulating tremolo. Truly one of the earliest and greatest effects created for our beloved guitars. Welcome to the finest, true-stereo harmonic-vibrato/tremolo/panner pedal ever created: **Pana-Trem**. The **Pana-Trem** pedal is 100% handmade by Mr. Black in South-East Portland, Oregon U.S.A., and it does a whole lot more than your standard tremolo pedal. The **Pana-Trem** can be outright disorienting when usings its True-Stereo outputs, and it gives you the tools to tailor your sound from a rich throbbing tremolo all the way into an extremely lush harmonic-vibrato (almost “vibe”-like), as well as all shades in-between— easily tuned with a quick twist of the SHIFT control. When we say True-Stereo, we mean: **True-Stereo!** Each channel is completely independent from one another and each feature a special “Sweet’ner” pre-amp specially designed to fatten, sweeten and add that little extra something to your tone. Easily select between **PULSER** and **PANNER** modes with one simple button. If only one input is available and true-stereo outputs are desired, simply plug into the L input and the **Pana-Trem** will smartly take care of everything for you, internally routing the signal to create a wondrous true-stereo sonic field. An expression pedal can be assigned to any, or all, of the control knobs on the fly by simply connecting a standard expression pedal to the EXP. jack and then turning the desired control(s) to be managed by expression to the little blue dot. A preset can be saved by pressing the **SAVE** button once, and activated/de-activated by pressing the **PRESET** foot-switch. *see back for operation, configuration & technical specifications*





Technical Specs:

Input Impedance: ~500k Ω
 Output Impedance: ~2k Ω
 Bypass: Buffered-bypass
 Power Requirement: 9VDC (100mA)
 Current Draw: <70mA

Control Knobs:

INTENSITY: Adjusts intensity/strength of tremolo

SHIFT: Sets the center frequency of tremolo/harmonic vibrato
 (full CCW: 0 Hz/standard trem, full CW: approx. 850 Hz center frequency)

FREQUENCY: Adjusts the speed of the tremolo pulse/pan rate

Input/Output Jacks:

POWER: 9VDC Input*

OUT-L: Left/Mono Output

OUT-R: Right Output

EXP: Expression pedal input

IN-L: Left/Mono Input

IN-R: Right Input

Changing modes:

Press the **PULSER/PANNER** button. The LEDs will display mode color.

PULSER: Left and Right channels pulse in synch with each other

PANNER: Left channel increases, right channel decreases & vice-versa ("ping-pong" style)

Saving a setting:

Set controls and mode to desired setting & press the **SAVE** button once.

PRESET light will blink 3 times and remain lit while the controls are aligned with the saved control knob settings.

Recalling a saved setting:

Press the **PRESET** button once. All control settings and mode saved will be activated. Press the **PRESET** button again to resume current knob settings and previously active mode, if different than saved mode.

Expression Pedal Use: (10K Ω or greater)

Connect expression pedal to **EXP** jack, turn control(s) to be assigned to expression pedal to the **blue dot** marker. Wiring Connections:

Tip - Wiper

Ring - Positive Voltage

Sleeve - Ground

*Power Adapter Polarity:

