

THETA X DSP

GUITAR PREAMP / EFFECT PROCESSOR



ISP
Technologies

ISP Technologies Theta X DSP™ is a Floor controlled guitar system with a fully programmable digital Theta preamp, Vintage preamp plus Studio quality effects processing with a built in full function precision tuner. This is not a modeling processor. The THETA X allows the player to create the best tone possible with incredible flexibility. The preamp section delivers more tone shaping and gain flexibility than any other processor available. Don't settle for bass, mid and treble when you can have the world of Theta.

The ISP Technologies hardware design uses a novel stacked converter topology with 124db dynamic range between input and output. This incredible I/O dynamic range feeds a 32 bit floating point architecture with greater than 1500db internal DSP dynamic range. Add to all this ISP's proprietary oversampled clipping algorithm and the result is the only digital preamp that can offer massive amounts of usable gain (more than any DSP processor available) with zero aliasing or noise. The THETA X allows preamp adjustment of tone, gain, saturation and dynamic modulation in the form of "SAG" to emulate the dynamic aspects of vintage tube amplifiers, which provides the actual feel of vintage guitar amps with tube rectifiers. The THETA X DSP is not only the best high gain digital preamp, but combines stunning performance for any playing style from clean to jazz to blues to classic rock.

The THETA X is fully programmable with a DSP software implementation of the ISP Technologies Theta Preamp, which provides the THETA X with super high gain and zero aliasing that is typical in other digital preamps. The THETA X also includes ISP Technologies new Decimator X Technology with a new "Differential Integration" algorithm for silky smooth sustained note decay and super fast staccato tracking. With the built in Decimator X and more gain than any other digital processor, the THETA X has mind blowing sustain with zero noise. The THETA X has a full pre distort tone section with adjustable bass and bass corner frequency, two full parametric swept mid bands, plus treble with an adjustable corner frequency. Select Vintage or THETA preamp, add SAG for a dynamic feel, and adjust post distort tone with another full complement of EQ including adjustable bass, bass corner frequency, two full parametric mid bands plus treble again with an adjustable corner frequency, for a unique amazing tone. Use the Vintage preamp to dial in any of the classic sounds to add to the sound library.

The THETA X has stereo outputs for stage rigs to drive a power amp and typical guitar cabinets, plus balanced XLR outputs with selectable TRUE SPEAKER™ digital guitar speaker cabinet emulation, and a headphone output also with TRUE SPEAKER. ISP's ground breaking TRUE SPEAKER is a departure from typical speaker simulated outputs, which provide a simple filter response. ISP's TRUE SPEAKER provides convolved speaker outputs providing the actual time domain and frequency response aspects of vintage speakers including adjustable microphone placement. With TRUE SPEAKER, the THETA X DSP is the ultimate direct recording guitar system with the total realism of several different styles of guitar speaker cabinets and a microphone. TRUE SPEAKER captures the sonic magic of a classic guitar cabinet transduced in air with a microphone in from of the cabinet. Previous attempts to provide a speaker simulated output simply did not duplicate an actual guitar cabinet recorded with a microphone. Also included is a library of studio quality 32 bit floating point digital effects including wha wha, auto wha / envelope follower, compressor, multistage stereo phaser, stereo flanger, four voice chorus, pitch shifter, stereo rotary speaker (leslie) 1200 millisecond delay, ping-pong delay and a stunning studio reverb with multiple selectable parameters. Also included is a 1/8 inch input to connect an external audio source for rehearsal. MIDI dump / load for archiving your preset and song data. There are rear panel inputs for use with both an external expression pedal for countless map-able parameters for on the fly control and a dedicated input for volume pedal. The THETA X DSP provides triple encoders for easy programmability plus 224 user programmable presets for user sound library storage and also includes a SONG mode with 124 songs to arrange your patches into songs for live performances. The THETA X DSP is designed and manufactured in the USA and is covered under US Patent 7,532,730 with other patents pending.

THETA X DSP SPECIFICATION

- Pedal Type: Multi-FX
- Dynamic Range between input and Output: greater than 124db
- Digital Decimator X Technology / greater than 80db noise reduction
- 224 Presets with 124 Songs – 3 preset patches per Song
- **Effects Types:** Wah, Envelope Follower, Compressor, Phaser, Flanger, Chorus, Pitch Shift, Rotary Speaker, Delay, and Reverb
- **Amp Modeling:** No
- **Inputs:** 1 x 1/4" (instrument) , 1/8" external audio
- **Outputs:** 2 x 1/4" (stage outputs), 2 x XLR (direct outputs)
- **MIDI I/O:** In, Out
- **Headphones:** 1 x 1/8"
- **Other I/O:** 3 x 1/4" (volume, expression, expression switch)
- **Power Source:** 9V AC power supply (included)
- **Height:** 4"
- **Width:** 17"
- **Depth:** 7"
- **Weight:** 6.5 lbs.