



Over 130 Optimized Signal Topologies

- Twin Mic Preamps — M-2B vacuum tube or HV-3 discrete solid state
- Twin NSEQ-2 Mastering-Grade Parametric EQs — vacuum tube or discrete solid state
- Three Opto Compressor/Limiter Paths — TCL vacuum tube, discrete solid state, passive
- Twin Opto De-Esser Paths — vacuum tube or discrete solid state
- Vacuum tube or discrete solid state line level paths
- Input coupling with or without MIT-01 audio transformer
- 1/4" vacuum tube DI input — route via tube or solid state gain path
- Effortless, lifelike musical performance at all levels
- Musically rich vacuum tubes available
- Gold audio connectors, tube sockets, relays and switches
- 3/8" thick radius extruded aluminum face plate
- Durable black mirror-gloss anodized finish
- Mil spec 16 gauge cold-rolled steel chassis
- Ultra-clean toroid power supply: internal sub-chassis
- Hand machined aluminum knobs, illuminated IT&T pushbuttons
- Mogami Neglex OFC audio wiring
- Silver Teflon power wiring
- True audio VU meter for output level or dynamics gain reduction

Options

- Musically rich vacuum tubes

Not Quite What You Need?

- TD-1 Direct Recording Channel

Absolute Accuracy, Plus a Rich Tonal Palette

With over 130 signal topologies – everything from minimalist, pure Class A gain to complex “larger than life” processor chains – STT-1 could be the only front end you’ll ever need. For the producer / engineer / musician who needs fast, easy access to a vastly expanded sonic palette with uncompromised signal integrity, there’s no better tool. Easily and quickly patch vacuum tube pre-amplifiers or processors with discrete solid state Class-A circuits. Use transformer or transformerless coupling through wide-ranging inputs and outputs. The choice – and the sound – is entirely yours.

Authentic Sonic Signatures

All Origin signal processing circuits are identical to the acclaimed stand-alone Millennium products used by world-class recording and mastering engineers. This kind of purity means you can adjust dynamics or EQ without compromising the integrity of the source. The track will sit exactly where you want it in the

mix, yet the processing is so clear it seems part of the original.

Input Transformer Option

Millennia circuits are inherently transformerless: it’s the truest path to the accuracy and realism we seek. But on aggressive sources such as drums and electric bass, we’re also fans of transformer-coupled inputs such as Rupert Neve’s original Class-A, all-discrete designs from the 1960s. Our custom MIT-01 transformer provides its own “fat,” euphonic coloration, adding pleasing distortion at high dynamic levels and wide frequency excursions. It may not be lifelike, but the larger than life sound can really cut through a mix.

Digital Needs Warmth, Demands Total Clarity

Microphone preamplifiers magnify the input as much as 1000:1. There’s no “Undo” after this point. Coloration or distortion become part of the signal. Lost information can never be recovered. Data compression algorithms (MPG, AC3, DTS etc.) are unable to distinguish

signal from noise, so preserving the clarity and integrity of the signal through the recording and production process is critical to communicating the artist’s intention and individuality. Millennium’s unique designs avoid circuit-induced artifacts, giving you total control. Amplify the original sonic information with an absolute minimum of alteration, or apply tonal colors so authentic they seem to become part of the source itself.

You Can Pay More, You Can’t Spend Less

Initial purchase price is never a design target at Millennium Media. We strive to maximize return on investment and minimize lifetime cost. Designed for the world’s most critical recordings, STT-1 is the choice of top audio professionals worldwide. This is a toolbox you can build a career around, one that will remain essential no matter how far your sonic explorations take you. Acquiring an Origin is a step off the upgrade treadmill: a step that will ultimately save you much more than your initial investment.



STT-1 Specifications

Microphone Preamplifiers & General:	
Twin Topology Mic Preamp Selection	Switchable, Vacuum Tubes or Solid-State
Twin Topology EQ & Compressor	Switchable, Vacuum Tubes or Solid-State
Twin Topology Input Coupling	Switchable, Transformer or Transformerless
Maximum Output Level (Balanced)	+ 32 dBu
Frequency Response +0 / -3 dB (S/S)	sub 5 Hz to beyond 300 kHz
Equivalent Input Noise	-131 dBu (SS, Common Source, Direct Out)
THD + NOISE, 20 Hz - 22 kHz (S/S)	< .05 %, typ < .003 %
Common Mode Rejection Ratio (S/S)	> 40 dB, Typ > 70 dB @ 60 Hz.
Input Impedance (Mic)	6,200 ohms
Input Impedance (Line)	2,200 ohms (x2)
Input Impedance (Di - Instrument)	> 1 megohm
Output Impedance (Balanced)	24.3 ohms (x2)

Parametric Equalizer:	
Maximum EQ Boost/Cut Range (21 Step Detented)	+/- 15 dB
EQ Frequencies:	
Low Range Switch (Centers - Peak/Shelf Selectable)	20, 34, 56, 100, 180, 270
Low Mid Sweep	20 Hz - 220 Hz or 200 Hz - 2.2 kHz 10X Range switch selectable.
Hi Mid Sweep:	250 Hz - 2.5 kHz or 2.5 kHz - 25 10X Range switch selectable.
High Range Switch (Centers - Peak/Shelf Selectable)	4.8 k, 5.8 k, 8.0 k, 10 k, 16 k, 21 k
"Q" Range	Q = 0.4 to 4.0 Adjustable on middle ranges Q = 1.0 Fixed on low & high ranges

Optoelectronic Compressor/Limiter	
Threshold Range	Infinite to +20 dBu
Attack Range	2 ms to 100 ms
Release Range	80 ms to 3.0 s
Compression Ratio Range	minimum 1.4 : 1, maximum 30 : 1
De-Essing Frequency Switch	OFF, 4.9 k, 6.8 k, 8.2 k, 10.7 k, 12.0 k
Power Consumption,	50 watts maximum
Power Requirements	Selectable: 100-120, 200-240 V ac, 50/60 Hz
Dimensions/Shipping Weight	19" W x 3.5" H x 15.5" D, 25 lbs.



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Hand made in the USA.
 One year limited warranty.
 Specifications and delivery subject to
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I'm an independent producer / engineer who has fallen in love with your products. I now own two 8-channel HV-3Ds and an STT-1 Origin. You've really got it down. Thank you for making it all work. Thank you, also, for taking the time to write decent manuals, and to ensure they're proofread.

Chris Walla, Death Cab for Cutie

I love this box. It has a million colors, so long as you are after shades of clean. I also love the fantastic sounding EQ and piece-of-cake-to-make-sound-good compression that tracks so beautifully.

Jim Dugger

She has a huge dynamic range and they were having to ride the gain. They loved the STT-1 on the voice. She said "It's not squashing me," when in fact it was cutting 9 dB on her loud notes. We had to look over at the needle to verify that it was compressing her: very transparent. It retained the integrity of her voice over the full dynamic range of the compressor. The STT-1 has both depth and presence.

Jim Meyer, Bass & Vocals, Jimmy Buffet Band

I love my STT-1s. Major league sound - clean, crisp and the tubes are marvelous, just really love 'em. I'm using a little bass rolloff and barely 1 dB of compression. The compression is the finest I've ever heard and the EQ just blends and enhances the whole. Simply amazing. I'm using vacuum tube out on both stages, transformer out, and the loud sections just float gracefully, making the whole thing sound even better. Bravo.

Dr. Alexander Lim, DMA / Musica Records, New York

Way to go John - as usual! I shudder to think of what our sound might be like today without Millennia electronics in the chain. Thanks a million times over.

Jack Renner, founder & chief engineer, Telarc International

I finally got a new STT-1, and I suppose there's a million good things I could say about it, but in a nutshell, I'm really impressed with how it offers 128 shades of transparent sound. For bass, I love the tube pre for old school sound, and the J-FET pre for more modern tones, and I love the DC-to-light frequency response and infinite headroom. There's nothing like a clean preamp. And they have more gain than a Marshall factory. I could go on and on...

Walt Hyde, Seattle, WA