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INTRODUCING

SYNAPSE

PERSONAL PA SYSTEM

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SYNAPSE

PERSONAL PA SYSTEM

FROM INPUT TO OUTPUT

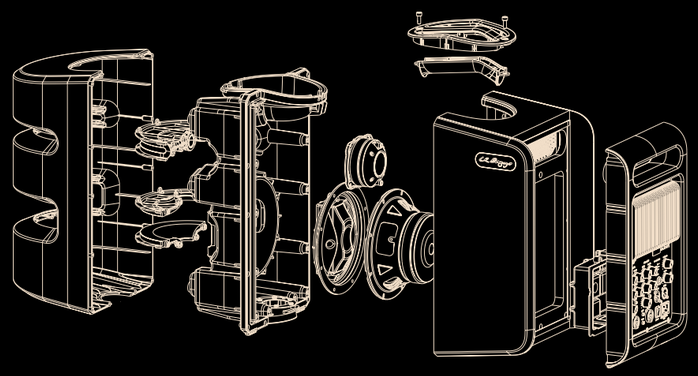
After decades of consistently raising the bar in acoustic amplification with the pickups and electronics we have become known for, we are naturally compelled to add another level of quality to your sound by completing the chain from input to output.

Introducing The Synapse – Personal PA System, the result from nearly four years of our most advanced engineering to date. Developed primarily for the singer songwriter and solo acoustic performer, this revolutionary approach to the portable loudspeaker isn't just visually unique, it will fill a room and impact your audience like no other speaker can.

THE SPEAKER

A radical departure from conventional loudspeakers and portable line array systems, the Synapse employs a unique, all-horn speaker design that projects a full 180 degree horizontal waveform at all frequencies, connecting both you and your audience together in the exact same sound. We've also eliminated the disconnect inherent in two way systems with a groundbreaking compression woofer that propagates sound in the same fashion as the high frequency driver, seamlessly blending the two as if they were one cohesive source for uniformity across all frequencies. The combination of compression, the ease and intimacy created by the horns, and the ultra-wide dispersion fills the room with a dynamically rich, natural sound.

Speaker Baffle



Exploded view of speaker components

THE ELECTRONICS

PREAMPLIFIERS

The electronics feature two channels of all-discrete preamplifiers with independent gain controls, 3-band EQ, and a custom voiced reverb. The circuit is composed of carefully selected, top-shelf components chosen to retain the purity of the signal and deliver studio quality sound for live performance.

POWER AMPLIFIER

The 500 watt, Class-D power amplifier is compact and lightweight, with more than enough power to propel the drivers loudly and efficiently. After an in depth blind audition of more than a dozen amplifier modules, we unanimously fell in love with this power amplifier and then went even further by working with the manufacturer to tailor it for our purposes.

THE HOUSING

The design of the housing is purely "form follows function". The front cover was shaped to present a full 180 degree horizontal waveform in a hemispherical pattern. We then constructed a cabinet that would yield our desired frequency response and SPL, while remaining compact for easy portability. The combination of a high quality, walnut veneer plywood cabinet with a speaker baffle and an interlocking front cover made from high density, structural foam minimizes resonances to preserve fidelity of sound.

We went to great lengths to design a handle that is both comfortable and well-balanced for easy portability.

FEATURES

- Compression woofer and tweeter
- 500 watt, Class-D amplifier
- 2 Channels featuring separate:
  - Gain control
  - 3 Band EQ for shaping your sound
  - Reverb level control
  - Phase inversion
  - Mute
  - 20 dB pad
  - 48 V phantom power
  - 1/4"/XLR combo input
- Custom reverb with 3 length settings
- 1/4" and 1/8" Auxiliary inputs
- Auxiliary volume
- Master volume
- Mix input and Mix output
- 118 dB max, 115 dB continuous

Tru•Mic Technology

STUDIO MIC'D SOUND WHEREVER YOU PERFORM

There's no argument that a mic recreates the most accurate sound of an acoustic guitar, but using a mic for most live performances has been an elusive dream. We engineered our patented TRU•MIC technology to finally realize this dream. The featherweight mic, each high-graded for ideal response, mounts to the underside of the bridge plate with simple peel-and-stick adhesive to preserve the integrity of your instrument. Leveraging the "pressure zone" principle by positioning the capsule just 3mm from the surface of the top, the mic hears the entire soundboard for even balance and tone. The TRU•MIC's noise canceling design to reject boxy reflections combined with its close proximity to the guitar top provides unprecedented isolation and feedback suppression for a studio mic'd performance anywhere you plug in.

"I've been absolutely LOVING the Lyric. I get comments every show I play on how great it sounds."
– Sean Watkins

Model available for nylon string guitars

LYRIC™

ACOUSTIC MICROPHONE

The Lyric is a stand-alone microphone system that combines TRU•MIC technology with an all-discrete, high-fidelity mic pre and soundhole mounted volume control. In a studio, you would have to use an entire rack of gear to achieve what we have built into the Lyric's tiny circuit board. The circuit innovations unlock the potential of the microphone as a single source by tightening lower frequencies for a punchier attack with natural dynamics and maintaining the mic's sweetness no matter how hard you play. The system also includes an adjustable "presence" control to balance high frequency response perfectly for your guitar.

FEATURES

- TRU•MIC technology
- Analog signal conditioning
- All-discrete mic preamplifier
- Output jack electronics
- Soundhole volume control
- Mic presence control
- Quick & easy installation

Tru•Mic & Pickup

The Award-winning Anthem series, featuring our patented TRU•MIC technology, seamlessly combines a proprietary condenser microphone with our acclaimed Element pickup to impart the warmth and fidelity of a studio mic'd guitar with the freedom of a pickup.

SL model available for nylon string guitars

At the heart of the system, the patented TRU•MIC handles the majority of the guitar's personality, with the Element pickup augmenting the fundamental frequencies for enhanced warmth and punch. Our innovative, built-in crossover employs both sources to create a rich, studio mic'd sound with a wide range of versatility.

"Just what you expect from a very good mic. Everything else simply vanishes beyond the horizon in comparison."
– Laurie Williams / Luthier

ANTHEM™

The Anthem has all the essential tools in one complete system. The lightweight preamp and controls of the Anthem include volume, mix, phase, and multi-segment battery check. Blend between the mic augmented with low frequency support and full range Element pickup.

FEATURES

- No-cut preamp/control unit
- Includes TRU•MIC and Element pickup
- Mix control for mic and pickup settings
- Phase inversion for minimizing feedback
- Master volume
- Mic level control
- Multi-segment battery check
- Battery life: 170hrs, single 9V

ANTHEM SL™

For those who prefer a minimalist approach to controls, we offer a streamlined version of the Anthem. The Anthem SL's preset balance between the TRU•MIC and Element pickup has the same ground-breaking fidelity as the Anthem in an endpin preamp format. A mic-level trim control ensures perfect balance for every installation. The preamp has our famous all-discrete, studio quality circuitry and is outfitted with an easy-to-use soundhole mounted volume control.

FEATURES

- Endpin preamp
- TRU•MIC
- Element pickup
- Mic level control
- Volume control
- Battery life: 170+ hrs, single 9V

Magnetic Pickups

BODY SENSITIVE

M1 ACTIVE™

ACOUSTIC GUITAR SOUNDHOLE PICKUP

Our patented magnetic soundhole pickups are for players who love big acoustic tone with high feedback resistance on any stage. Combining the natural characteristics of your guitar's soundboard with a punchy string attack, the M1 Active's body-sensitive design provides realism while cutting through a loud mix. The plug-and-play design has built-in electronics with audiophile-grade circuitry for that sweet and pure acoustic sound we are known for. The internal electronics boost the pickup's output for a full and direct signal to any acoustic amplifier or P.A. system, eliminating the need for any external preamps. The addition of a built-in volume control provides the player quick access for any performance.

FEATURES

- Highly feedback resistant
- Volume control
- Long battery life - 1,000 hours on one 3V lithium coin cell
- Adjustable pole pieces
- Installs in minutes
- Includes a pre-wired strapjack harness

Also available in a completely passive design

M80™

FULL RANGE 3D BODY SENSITIVITY

The soul of your guitar is in the body - from the tone woods that it's made of, to the fine details in the way it was put together. Our iconic M1 series was the first magnetic soundhole pickup to capture the upper frequency resonances of the guitar's body for a more natural sound. The M80 pushes this idea to the limit by sensing the entire frequency range of the top, back, side, and neck resonances in all three dimensions. Tap on the body and you'll swear that there's a full range mic inside of the guitar - but it's all coming from the M80. Includes built-in volume control, preamp, multi-segment battery check, and passive/active switch.

FEATURES

- Full-range body sensitivity
- Active or passive operation
- Multi-segment battery check
- Feedback resistant
- Adjustable pole pieces
- Installs in minutes
- Includes a pre-wired strapjack harness

Undersaddle Pickup

UNRIVALED DYNAMIC RANGE

ELEMENT™

MIRRORS THE SOUNDBOARD'S MOVEMENT

Common undersaddle pickups depend on string attack to directly compress the sensors for their sound. This direct pressure is a root cause of the infamous "quack." In contrast, our patented Element derives output from the movement of the soundboard and rejects string attack to minimize quack. Its flexible film sensor, thin as a human hair, mirrors the soundboard's movement as you play to capture the guitar's actual voice and its most delicate nuances. In addition, the pickup's minimalist construction removes most of its influence on the acoustic properties, creates an intimate coupling between the sensor and guitar for the highest fidelity possible, and makes the Element amazingly reliable. Every pickup is made here at our California factory and is pre-tested in a guitar for output and balance.

ELEMENT VTC™

VOLUME, TONE, AND COMPRESSION

Multi-band compression has long been a secret of mastering rooms worldwide to unlock the warmth and natural dynamics of recorded instruments. The Element VTC's all-discrete, Class A preamp leverages this studio elixir with a proprietary analog compressor that operates below 400 Hz. The compressor is tuned to reflect the actual dynamics of the acoustic guitar, creating in live performance, the superior warmth and natural balance of tone achieved in professional studio mastered sound. Includes soundhole mounted volume and treble tone controls.

Model available for nylon string guitars

FEATURES

- All-discrete endpin preamp
- Soundhole mounted volume and tone controls
- Prewired Element pickup
- Battery type: Single 9V
- Fits both 3/32" and 1/8" saddle slots
- Battery life: 1,000 hrs

ELEMENT ACTIVE SYSTEM™

Our original Element system features impressive body sensitivity, warmth, and articulation in a streamlined design. The system includes a prewired Element pickup, all-discrete electronics, and a soundhole mounted volume control.

SESSION VTC™

OUR PREMIER UNDERSADDLE PICKUP SYSTEM

Inspired by the LR Baggs Handcrafted Video Sessions and our experience in some of Nashville's great studios, the Session electronics were designed to impart the rich sonic character that you'd expect from an experienced audio engineer using some of the world's finest studio gear. We've captured this studio magic and made it an integral part of your guitar for live performance with the Session VTC. The Session VTC pairs studio electronics with our patented Element pickup for a polished sound on stage. The onboard preamp features built-in multi-band compression, variable saturation, volume, tone, phase, and a multi-segment battery check.

FEATURES

- Analog warmth enhances sonic character and harmonic content
- Dynamic EQ smoothes out common problem frequencies
- Tone control sweeps between a wide range of warmth, clarity, and everywhere in between
- Phase inversion for best sound and feedback control
- Master volume
- Multi-segment battery check

Bridge Plate Pickup

"MIC-LIKE" FIDELITY

IBEAM™

CAPTURES EVEN THE MOST DELICATE NUANCES

The iBeam's patented and MIPA award-winning design employs a matched pair of virtually weightless film sensors, each suspended across a slot near the ends of the pickup. As the guitar top vibrates, the slots open and close, flexing the sensors like the diaphragms in a stereo mic. The film sensors effortlessly trace the guitar's personality – from the lightest picking, to the hardest strumming without compression, distortion, or a hint of "piezo quack." Another key advantage over typical bridge plate sensors is the iBeam's "cardioid-like" response pattern. This inhibits feedback and string squeak while selectively admitting the rich tone-producing vibrations.

Weighing less than 1/3 oz, the iBeam does not alter the guitar's natural acoustics, has natural string balance, and does not require any modification to the instrument. An external preamp is recommended.

Model available for nylon string guitars

IBEAM ACTIVE SYSTEM™

The iBeam Active pairs the iBeam with an all-discrete, Class A endpin preamp with a soundhole volume control. The ultra-quiet, audiophile-grade preamp faithfully amplifies every nuance of the pickup. Superior sound and EQ are built in for easy plug-and-play performance.

The iBeam Active is also great for direct studio or home recording. Comparison tests have demonstrated that the fidelity of this system is a great alternative to studio microphones.

FEATURES

- Quick and easy installation
- Includes iBeam placement jig (pin bridge guitars only)
- Natural string-to-string balance and dynamics
- All-discrete, Class A preamp for warm, analog sound
- Available in steel and nylon string versions
- Fits most X-Braced guitars
- Peel-and-stick

Unitary Saddle Pickup

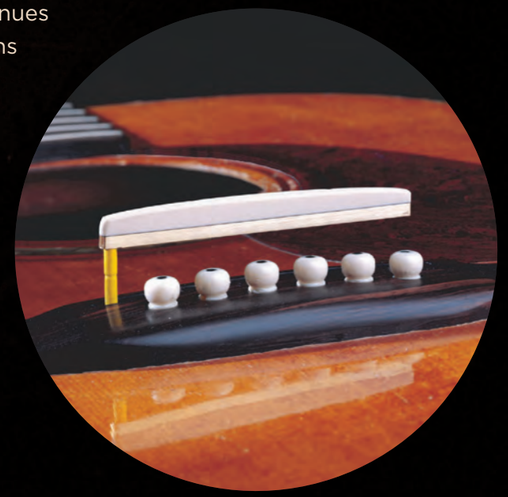
OUR BEGINNING

Before becoming a pioneer in acoustic amplification, **Lloyd Baggs** began his career as a custom guitar builder with a clientele including Ry Cooder, Jackson Browne, Janis Ian, and Graham Nash. During these early days, he gained an immense understanding of the physics of acoustic instruments by continuously pushing the envelope and never making the same instrument twice. In the late 70's, Lloyd refocused his attention to serve performing musicians and created our company's first amplification product, the LB6.

LB6 SERIES

The LB6, with its great presence and warmth, continues to be the pickup of choice for professional musicians like James Taylor, Vince Gill, Lenny Kravitz, and Phil Keaggy. Six individual vibration sensors are cast right into the pickup base and epoxy bonded to the micarta saddle to ensure optimum sound transfer. It's built-in feedback-canceling design makes it ideal for high-SPL performance situations.

SPACING OPTIONS (E to E): LB6: 2 1/8", LB6X: 2 1/4", LB12: 2 3/8"



Banjo Pickup

Leveraging the unitary design that made our Violin Pickup a staple for thousands of performing musicians, we now mold our same miniature vibration sensor directly into a 5/8” banjo bridge. As an integral part of the bridge, the pickup captures inherent characteristics of the instrument fluently at the source without altering any acoustic properties. It comes with a fully custom jack and mounting system we engineered to be reliable, easy to install, and aesthetically compatible with the finest instruments.

FEATURES

- 5/8” maple bridge with pickup
- Unitary design for maximum sensitivity and signal transfer
- Custom jack and mounting system
- Installs in minutes

RADIUS MANDOLIN™

The Radius Mandolin pickup is a hi-tech contact sensor that installs in minutes. It is a passive accelerometer-based pickup that emulates the sound of a mic without the instability associated with microphones. At the heart of the pickup is a highly flexible beam with a .004" thin film sensor, similar to mic diaphragm material, attached to its surface. The beam is held in equilibrium and damped by another LR Baggs innovation—opposing neodymium magnets. The Radius-M can be mounted to the outside surface of the instrument with a removable, non-destructive adhesive or to the inside with VHB adhesive. An external preamp is recommended.

FEATURES

- Radius pickup
- Mounting putty
- Clear adhesive pads
- Permanent VHB adhesive pads
- External jack mount

VIOLIN PICKUP

Our Violin Pickup is a miniature vibration sensor cast directly into a Superieur Despiau "Two Tree" maple bridge for maximum sensitivity and signal transfer. As an integral part of the bridge, it effortlessly captures the instrument's inherent dynamics. Furthermore, its selective admittance pattern is aligned so that the signal is generated as the bridge moves in a left-right motion (in response to the string vibrations). The pickup also rejects any impulse directed to the plane of the bridge – minimizing annoying finger squeaks, body noise, and feedback. It is the pickup of choice for top pros like Sara Watkins, Mark O'Connor, Darol Anger, Jean-Luc Ponty, and Lindsey Stirling. An external preamp is recommended.

FEATURES

- Superieur Despiau "Two Tree" maple bridge
- Even string-to-string balance
- Highly feedback resistant
- External jack mount

FIVE.O™

UKULELE SYSTEM

The L.R. Baggs FIVE.O Ukulele system is small, lightweight, and best of all, specifically engineered to track the uke's unmistakably unique voice and natural dynamics.

The system combines a custom version of our award winning Element undersaddle pickup with a 3V miniature endpin preamp and soundhole mounted volume control. The entire system weighs less than one 9V battery and tucks away neatly inside the small instrument for a non-invasive installation. The pickup features an Easy-In pull guide to assist installation.

The FIVE.O's all-discrete preamp delivers pure, analog sound. We also included a built-in low frequency compressor that tames unnatural and annoying thumps common in other systems.

FEATURES

- Custom Element pickup
- Miniature endpin preamp
- Soundhole mounted volume control
- Easy-In pull guide
- Super lightweight
- Battery type: Single 3V
- Battery life: 300 + hrs

Acoustic Preamps
RULE THE STAGE

WHY GET A PREAMP?

A preamp will bring your pickup to life by enhancing tone, boosting the signal, and providing equalization for the most challenging conditions. If you are a gigging musician, an acoustic preamp is one of your most important pieces of gear – one that you will take everywhere you perform. For more than a decade, LR Baggs has been recognized as the leader in acoustic preamps with award winning products like the Para DI and Venue DI. Plug in and have complete mastery over your sound.

"So, for us, it's bye-bye separate pedals and patch leads and hello to improved EQ, DI, and superb feedback busting. If you're a gigging acoustic musician, just buy one – you'll thank us."

– Guitarist Magazine

VENUE DI™

5-BAND EQ & DIRECT BOX WITH TUNER

Considered the best sounding preamp ever created for acoustic instruments, the Venue DI features an all-discrete signal path with powerful 5-band EQ, notch filter, full isolation DI output, chromatic tuner, and adjustable volume boost. The Venue DI gives you complete control over your sound and performance with an all-in-one acoustic pedal. Assembled in the USA with 100% quality control testing.

FEATURES

- Adjustable gain for both passive and active pickups
- 5-band EQ with tunable low-mid and high-mid bands
- Garret Null notch filter for effective feedback control
- Phase inversion for best sound and feedback control
- Full chromatic tuner with footswitch mute/tune function
- Adjustable volume boost footswitch
- 4 segment clip meter to visually optimize gain setting
- Works with 9V battery or DC adapter (not provided)
- Series FX loop (separate jacks for send and return)
- Full isolation audio transformer coupled DI
- 4 segment battery status gauge
- XLR and 1/4" outputs

PARA DI™

5-BAND EQ & DIRECT BOX

Due to its rich and pristine sound quality, powerful EQ, versatility, and rock-solid reliability, the Para DI has become an indispensable staple for performing musicians around the world. This roadworthy box effortlessly tames the stage, enhances the sound quality of all passive and active acoustic pickups, and fits in the string pocket of most guitar cases. It runs on either 48V phantom power or a 9V battery. Assembled in the USA with 100% quality control testing.

FEATURES

- Adjustable gain for both passive and active pickups
- 5-band EQ with tunable notch and midrange bands
- Phase inversion for best sound and feedback control
- Works with 48V phantom power or 9V battery
- XLR and 1/4" outputs

Studio Tools
FOR THE STAGE

SESSION DI™
STUDIO GRADE ACOUSTIC DI FOR THE STAGE

Inspired by the LR Baggs Handcrafted Video Sessions and our experience in some of Nashville's great studios, the Session Acoustic DI brings our signature studio sound to your live rig. The Session DI enhances your acoustic pickup and imparts the rich sonic character that you'd expect from an experienced audio engineer using some of the world's finest studio gear. We've captured this studio magic and put it into a compact, easy-to-use DI that will transform your live sound.

ANALOG SATURATION
Often used by studio engineers in post-production, saturation adds warmth, dimension, and pleasing harmonics while smoothing the signal for an enhanced mix. The Session DI's proprietary saturation is voiced specifically for the acoustic guitar and transports studio analog warmth and inspiring playability to the stage.

COMPRESSION EQ
Unlike standard compression that can squash the entire range of your signal, the Session DI's Comp EQ features 3 narrowly focused bands of compression that tame common problematic frequencies and uncover the voice of your guitar. The low, mid, and high frequency compressors are essentially "touch-sensitive" EQs that respond in real-time to your dynamics. The harder you strum, the more they compress, and vice versa.

FEATURES
- Analog Saturation enhances warmth and harmonic content
- Compression EQ smoothes out common problem frequencies
- Garret Null notch filter tames resonant feedback
- Variable high-pass filter attenuates extraneous low frequencies
- VU meter visually optimizes gain for passive and active pickups
- All-discrete signal with XLR and 1/4" outputs
- 48V phantom power, 9V battery, or 9V DC
- Mute footswitch
- Ground lift switch
- Rugged enclosure

STADIUM DI™
STUDIO GRADE BASS DI FOR THE STAGE

Originally developed by the bass playing engineers at LR Baggs for their own use, the Stadium Electric Bass DI infuses your signal with a blend of studio-grade circuitry and a vibrant palette of unique, tone shaping tools. Composed of carefully selected, "top shelf" components, the all-discrete electronics provide a level of fidelity that rivals even the most sought after studio DIs. Then engage the effects to unveil an expansive range of colorful tones shaped by just a few powerful and easy-to-use controls. Built in a rugged enclosure constructed of aluminum, steel, and ABS plastic, the Stadium DI ensures over-the-top reliability for life on the road. Hand assembled in California.

TONE SHAPING TOOLS

GROWL
Unlike overdrives that employ full-range distortion, the Growl saturates a focused range of low frequencies, enhancing warmth and creating harmonically rich overtones without too much breakup. The effect compliments dynamics and is responsive to even the lightest touch, providing just the right amount of edge to cut through the mix. For added versatility, a paired Drive button pushes the Growl to a full-range overdrive.

COMP EQ
The Comp EQ features 3 bands of compression for bringing evenness to your tone while retaining the natural feel of your playing dynamics. The low, mid, and high frequency compressors are essentially "touch-sensitive" EQs that respond in real time as you play. The harder you dig in, the more they compress, and vice versa.

ATTACK
This highly specific EQ affects a unique, medium sized bandwidth to adjust the attack of the strings for a wide range of tones, covering all playing styles. Sweep left for warmer, muted jazz tones or right for added clarity and a punchier attack.

FEATURES
- Growl control adds low end distortion for thickness and rich, harmonic content
- Drive button pushes the Growl to a full overdrive
- Comp EQ enhances the feel of playing while evening out your tone
- Attack sweeps between a wide range of warmth, clarity, and everywhere in between
- Fat switch boosts 150Hz +3dB or +6dB for a fuller, rounded tone
- VU meter visually optimizes gain for passive and active pickups
- All-discrete signal path with XLR and quarter inch outputs
- 48V phantom power, 9V battery, or 9V DC powering options
- Ground lift switch effectively eliminates ground-loop noise
- Pad boosts or cuts XLR out (-10dBV or +4dBu) to meet the needs of the PA
- Rugged enclosure constructed of aluminum, steel, and ABS plastic
- Includes custom LR Baggs carrying case