

Foremost Technology for Absolute Acoustic Reproduction

Introducing
Drum Mics!

B-Band Transducer Systems



for Guitar, Drums and
Stringed Instruments

— 2005 —

B-BAND[®]
ELECTRET TRANSDUCERS

B-BAND ARTISTS

Larry Carlton
Steve Vai
Scott Henderson
Carl Verheyen
Tim Pierce
Steve Trovato
John Rzeznik
California Guitar Trio
John Stowell
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Bernd Heitzler
George Pajon Jr. (Black Eyed Peas)
Ben Verdery
Dave Carpenter
Keb' Mo

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Yamaha

www.b-band.com

Visit the B-Band website! There you will find sound clips, a users discussion forum, installation information and all the latest news.



Company

ORIGINAL

B-Band is original. When outdated piezo crystal technologies have been mutated in countless ways, and extra hardware expanded to make the acoustic instrument to sound "more real", B-Band Ltd has concentrated its efforts in a different direction. B-Band Ltd has developed an unique and innovative transducer material, and manufacturing technology that produces a pickup that more efficiently replicates the natural sound of any instrument.

The material is a permanently charged film with microscopic gas bubbles trapped inside and produces signal in a completely different way than other materials used for pickups. As vibrations are fed to the pickup they pass without multiplying the output signal but with a very wide frequency response and dynamic range resulting in a more natural reproduction of the instrument's sound with none of the dynamic problems that other materials impart.

Even when hitting the strings hard the sound will remain clear and free of synthetic tone. When playing softly all the subtle dy-

namics and nuances of the performance will be heard. Also the pickup has a natural resistance to feedback that enables performances in loud environments.

B-Band transducer systems, in their simplicity, do not color the tone and are so unobtrusive that they do not spoil the natural uniqueness of your instrument.

DETERMINED

B-Band Ltd has sustained a high profile within the music transducer industry. Fundamental to this success are the endeavors and hard work of many, and for B-Band to intuitively rise to the commitment of a mission that is continually set by customer expectations. B-Band's team determination focuses on continuous innovation and the upgrade of quality. B-Band believes that for their customer to succeed, B-Band needs to go beyond what their customer expects.

B-Band Ltd was originally founded in 1991. The starting point of the company's new business in 1995 was the introduction of the proprietary Emfit[®] material, the inven-

tion of the well-known Finnish inventor Kari Kirjavainen. Lasse Räisänen, an associate of Kari, and Lasse's brother Heikki Räisänen, founder and director of B-Band Ltd, nurtured Kari's idea - that the Emfit material can make an excellent transducer of acoustic instruments. That idea was realized and continues to be a source of new inspirations for the articulation of amplified acoustic sound. Emfit is used in every B-Band transducer.

B-Band cares what the performer, luthier, guitar tech, dealer, distributor and musical instrument maker want. They know that their customers not only do business for profit but, more importantly, to be recognized as a leader by using or distributing a great sounding, quality product.

We at B-Band are honestly determined to help you reach your audience, and customers, through quality and innovation.

Heikki Räisänen
Managing director
B-Band Ltd

New for 2005!

DM Series for drums

The B-Band **DM* series** is the best miking solution for drummers and will change the way of miking a drum kit. The DM series includes the **DST*** (Drum Shell Transducer) transducer and DM preamps. Easily attached to any drum, without any modification, the DM system delivers an immediate full-response tone without feedback or the positioning issues associated with standard microphones.

The DM system only picks up the sound of the drum it's attached to! There is no bleed of sound from other drums or instruments on stage or in the studio, making for incredible isolation of the drum that is using the DM system.

In keeping with the B-Band philosophy, the DM system is very lightweight and does not add any noticeable weight to the drum. The DM is unobtrusive and virtually invisible and will not get in the way of any performing style. Yet, even with

these values, the transducer is very durable and robust, and will endure rigorous touring. The DST will work with any trap style drum.

The DM preamp range consists of three different models: **DM-S*** with XOM for snare, **DM-T*** for toms and **DM-K*** for bass drum. All DM preamps fit easily to the drum rim and are held in place by an adjustable standard drum tension rod. The preamps have a standard XLR output jack and are 48-volt phantom powered.

The DM-S has two inputs, one input for the DST and a 1/8" mini jack auxiliary input for an optional condenser or dynamic microphone. When the aux mic input is enabled, the B-Band XOM circuit is activated and a 2 kHz high pass filter is applied to DST and 2 kHz low pass filter for microphone. XOM provides a smooth and wider frequency range to the blended sound. Four mini switches at the preamp

provide settings for the control of tone and optional 9-volt phantom power supply to an extra condenser mic.

The DM-T is a single input preamp and will work with any size rack or floor tom. The DM-T has four mini switches for tone control: 1) +6 dB bass boost; 2) +12 dB boost at 330 Hz; 3) -8 dB cut at 500 Hz; 4) +8 dB boost at 4 kHz.

The DM-K is a single input preamp that has four mini switches for tone control. The tone control selections are 1) +6 dB bass boost; 2) +12 dB boost at 330 Hz; 3) -8 dB cut at 500 Hz; 4) +8 dB boost at 4 kHz.



Read more about XOM on page 7.
(* Patented, patents pending.)



DM-S



DM-T



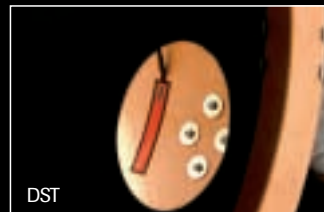
DM-K



DST



DST



DST

DST Features:

- Easily installed with no modification to the drum.
- Flexible and conforms to any shell radius.
- Ultra thin and very light weight.
- Complete isolation of each drum with no bleed from other drums.
- Quick setups, because the DST is mounted on the drum there is no setup time.
- Ultra sensitive, all the performance subtleties are reproduced. All ghost notes and light strikes can be heard.
- The DST is mounted on the shell away from any hits of the drumstick.
- No more danger of hitting a mic or a mic becoming loose and falling or turning.
- Dimensions: 20 mm x 100 mm x 0.3 mm.

Order code: 2100

DM Series Features:

- Complete isolation of each drum with no bleed from other drums.
- Eliminates the need for audio gate effects.
- Ultra quick setups because the DM preamps are mounted to the rim with standard drum tension rods.
- Can be permanently installed for quicker setup time.
- Ready to go! There is no need to position mics or mic stands, just plug a standard XLR cable into the

preamp and it's ready.

- The drum set will have a very clean look without the clutter of mics and stands.
- Mounts to the drum without any modification.
- DM-S has aux input for condenser (9-volt) or dynamic mic.

DM Series Specifications:

• DM-S:

- Mini switch control range: 1) mic power + 9-volt; 2) external mic disable; 3) mid boost 330 Hz +6 dB (peaking Q ~ 1); 4) high cut 3.3 kHz -6 dB (peaking Q ~ 1).
- Frequency response: 60 Hz - 35 kHz (-3 dB)
- Inputs: 1) B-Band 2) aux input for external mic.
- XOM (Cross Over Mix): between ext. mic and B-Band pickup at 2 kHz, B-Band = high pass ext. mic = low pass.
- Output / power: balanced phantom powered 12 - 50 V. Nominal output is similar as common dynamic drum mics.

• DM-T:

- Mini switch control range: 1) +6 dB bass boost (shelving < 80 Hz); 2) +12 dB boost at 330 Hz (peaking Q ~ 1); 3) -8 dB cut at 500 Hz (peaking Q ~ 1); 4) +8 dB boost at 4 kHz (peaking Q ~ 1).
- Frequency response: 22 Hz - 35

kHz (-3 dB).

- Input: B-Band.
- Output / power: balanced phantom powered 12 - 50 V. Nominal output is similar as common dynamic drum mics.

• DM-K:

- Mini switch control range: 1) +6 dB bass boost (shelving < 80 Hz); 2) +12 dB boost at 330 Hz (peaking Q ~ 1); 3) -8 dB cut at 500 Hz (peaking Q ~ 1); 4) +8 dB boost at 4 kHz (peaking Q ~ 1).
- Frequency response: 22 Hz - 35 kHz (-3 dB).
- Input: B-Band.
- Output / power: balanced phantom powered 12 - 50 V. Nominal output is similar as common dynamic drum mics.

• Weight (with accessories):

- DM-S: 88 g
- DM-T: 96 g
- DM-K: 154 g

• Dimensions (L, W, H):

- DM-S: L. 104 mm / 4,09", W. 36 mm / 1,40", H. 47 mm / 1,81"
- DM-T: L. 115 mm / 4,5", W. 38 mm / 1,5", H. 48 mm / 1,9"
- DM-K: L. 90 mm / 3,55", W. 38 mm / 1,5", H. 47 mm / 1,80"

Order code:

- DM-S
- DM-T
- DM-K

The Guitar Systems

UST, AST and XOM

The B-Band **UST*** (Under Saddle Transducer) stands as the first transducer that unaccompanied sounds better than many pick-up and microphone combinations. Instruments equipped with a B-Band UST have enhanced countless productions, whether it is in the studio or on stage, by being able to produce an unparalleled acoustic tone quickly.

The B-Band **AST*** is genetically the same as the UST: made of the same exclusive material but designed to be used at the bridge plate or soundboard of the instrument. AST retains all the attributes including wide frequency response and dynamic range to capture all the detailed acoustics of the instrument. It has all the advantages of a microphone without the draw-

The UST is made of a very special patented electret film material exclusive only to B-Band.

Physically the UST is ultra thin and flexible making it easy to install usually without the need for modifications to the saddle or saddle slot. This makes installation fast. Also because the UST is so thin and very lightweight it does not interfere with

backs of feedback.

The AST is very thin and lightweight. Because of the size, flexibility and the special two-sided tape at the back, the AST it is very easy to fit anywhere inside an instrument without critical positioning. The construction of the AST is a long consistent structure that ends with a connector for easy plug-in fitting to the preamp with-

the signal passing through to the body of the instrument retaining the instrument's original acoustic sound. The construction of the UST is a long consistent structure that ends with a connector for easy plug-in fitting to the preamp without soldering.

(* Patented, patents pending.)

out soldering.

Compatible with all B-Band preamps, the AST can be used as a stand-alone source or in combination with a UST with dual source B-Band preamps. AST can be used with any acoustic instrument that has access to the interior of the instrument.



UST and AST Features:

- Exclusive electret film undersaddle and acoustic soundboard transducers
- Operation based a worldwide-patented elastic electret film
- UST has sizes to fit most guitars
- AST (1470) will fit all acoustic instruments with good access to their interior
- Reproduces original tone without affecting the instrument acoustically
- Ultra thin and light
- Wide dynamic range and frequency response
- High gain before feedback
- Easy and fast plug-in installation without soldering
- No or minimal modification

Order codes:

UST:

- 22L - 2.2 mm / 3/32": for narrow saddle slot. Active area: 80 mm / 3". Overall length: 330 mm / 13".

- 29L - 2.9 mm / 1/8": for wide saddle slot. Active area: 80 mm / 3". Overall length: 330 mm / 13"
- 22S - 2.2 mm / 3/32": for narrow saddle slot. Active area: 80 mm / 3". Overall length: 250 mm / 9".
- 29S - 2.9 mm / 1/8": for wide saddle slot. Active area: 80 mm / 3". Overall length: 250 mm / 9".

Note: There is no difference in performance of "L" (long) and "S" (short) transducers. "S" transducers should be used with A1 and A2 endpin preamps only where the distance is short from the bridge to where the endpin preamp is installed; for example like a classical guitar. Otherwise always use "L" transducers. All UST transducers work with all current B-Band preamps.

AST: 1470 - for all instruments.

Note: Transducers and preamps are sold separately except for the A1N-1470 bundle.

XOM (Cross-Over-Mix) is the next giant step in B-Band's quest for the ultimate authentic acoustic tone.

Leading the market with the UST and AST combination technology, and the preamps that support this, B-Band takes another step ahead to offer an exciting new process that makes the amplified acoustic guitar sound much more complex and more sonically accurate to the actual acoustic tone.

The continuing spirit of innovation of the B-Band research and development team lead them to find a way to achieve an even more realistic acoustic tone from a dual transducer system by combining the best aspects of each transducer into one complete source. Through extensive testing, the clever B-Band R&D discovered that the UST and AST along with a crossover could achieve one really great acoustic sound.

The ideal process for authentic acoustic reproduction comes from combining the high frequencies of the AST and low frequencies of the UST. XOM uses the UST and AST to sense the guitar sound from two different locations making a sound that is much more complete, true and pure. In addition, a pan pot at the preamp controls the mixing of the XOM tone with a full range UST tone giving unlimited possibilities.

The user will find XOM to be an amazingly flexible sound manager resulting in an elegant transparent tone at any performance level.

XOM is now being presented in A2.2, A4.2, A6.2 and the retrofit series A8 and A10 preamps.



"After carefully listening to the B-Band pickups, I have to say that they are truly amazing, I've never heard acoustic pickups sound so realistic."

Steve Vai

A6.2 and new for 2005, A10!

Finally a B-Band retrofit for common, old style sidemount preamps. Since the introduction of B-Band's first side mount preamps many customers have asked B-Band to replace their outdated preamps with B-band systems. Now the new A series retrofit range is the easy drop-in replacement solution!

The A7, A8, A9, and A10 preamps are built upon the specifications of the current model B-Band preamps A3, A4.2, A5 and A6.2 and have similar electronics respectively, with some added features. The features and specifications are listed in the following pages with their counterparts.





The B-Band **A6.2** was the first preamp to initiate a flexible design that used a UST and AST with XOM circuit and mixer bringing control over the sound from the heart of a guitar. The A6.2 pristinely and clearly captures the true character of a guitar's unique voice like no other system before it.

Similar to pro audio hardware the dual inputs of the A6.2 has separate gain trims, at the faceplate for easy access, to guarantee wide dynamic range and enable signal matching of the UST / AST combination. For total sound control and ease of use smooth slider controls are used at the 3-band EQ, XOM mixer and master volume. The volume control is at the leading edge of the faceplate and the mix control is at a right angle to this for easy use even without looking.

Set aside from the from the master control section, for easier application, is the Notch Depth and Notch Frequency rotary controls and a phase switch for feedback suppression, plus a low battery LED.

A6.2 and A10 Features:

- XOM circuit and mixer
- Dual input (UST / AST only)
- Dual input gain trims
- 3-band EQ
- Notch Depth and Frequency controls
- Phase switch
- Battery status LED
- Pre-wired high quality endpin output jack
- 150 hours average battery life

A6.2 and A10 Specifications:

- Bass control range: ± 12 dB @ 70 Hz
- Middle control range: ± 12 dB @ 1.1 kHz
- Treble control range: ± 12 dB @ 10 kHz
- Notch frequency range: 100 Hz – 330 Hz
- Notch depth range: -15 dB; Q 3.3
- Frequency response: 50 Hz – 40 kHz (-3 dB) on both channels
- UST channel voltage gain: +24 dB

The A6.2 is an active preamp that is 9-volt battery powered. A robust high quality pre-wired endpin jack handles the mono mix output signal.

The A6.2 kit comes complete with all hardware for installing including the end-pin jack and a box-tight battery holder. For quicker battery changes an optional side mount battery box is available.

The **A10** is the retrofit version of the A6.2. All specifications are the same as A6.2 but with some added features to make the retrofitting of old outdated preamps to B-Band preamps easy.

The A10 dimensions are larger than that of the A6.2 for easy retrofit. The battery compartment is conveniently mounted next to the controls for easy access and battery changes.



* Read more about XOM on page 7.

- AST channel voltage gain: +24 dB
- Output impedance: < 3.5 k Ω
- Nominal output level: -10 dB u (0.245 Vrms)
- UST channel input impedance: 50 M Ω
- AST channel input impedance: 50 M Ω
- Power supply: 9-volt battery (not included)
- Current consumption: 4 mA typical
- A6.2 weight (with accessories): 139 g
- A10 weight (with accessories): 134 g
- A6.2 dimensions: H 42 mm / 1.65", W 56 mm / 2.20", L 61 mm / 2.40"
- A10 dimensions: H 63 mm / 2.5", W 63 mm / 2.5", H 100 mm / 3.9"

Order code:

A6.2
A10

A6.2 Options: SMB Side mount battery box

A5 and new for 2005, A9!

The **A5** is for the guitarist who takes a straightforward approach to their sound and wants more quality EQ possibilities and feedback control at their fingertips. Easy to use and view slider controls are used for the extra smooth 4-band EQ that include bass, middle, treble and presence bands. The volume slider is set at a right angle from the EQ sliders to provide quick changes when not viewing.

Set aside from the from the master control section, for easier application, is the Notch Depth and Notch Frequency rotary controls and a phase switch for feedback suppression, plus a low battery LED. The single input A5 can take advantage of either the UST or AST transducers and is 9-volt battery powered.

The A5 kit comes complete with all hardware needed for installing. Includes a pre-wired high quality endpin jack and box-tight battery holder. For quicker battery changes an optional side mount battery box is available.

The **A9** is the retrofit version of the A5. All specifications are the same as A5 but with some added features to make the retrofitting of old outdated preamps to B-Band preamps easy.

The A9 dimensions are larger than that of the A5 for easy retrofit. The battery compartment is conveniently mounted next to the controls for easy access and battery changes.





"B-Band guitar transducers render pure, quality acoustic sound."

Pierre Bensusan

A5 and A9 Features:

- Single input (UST or AST)
- 4-band EQ
- Notch Depth and Frequency controls
- Phase switch
- Battery status LED
- Pre-wired high quality endpin output jack
- 150 hours average battery life

A5 and A9 Specifications:

- Bass control range: ± 12 dB @ 70 Hz
- Middle control range: ± 12 dB @ 400 Hz

- Treble control range: ± 12 dB @ 12 kHz
- Presence control range: ± 12 dB @ 10 kHz
- Notch frequency range: 100 Hz – 330 Hz
- Notch depth range: -15 dB; Q 3.3
- Frequency response: 50 Hz - 40 kHz (-3 dB)
- Max voltage gain: +24 dB
- Output impedance: < 3 k Ω
- Nominal output level: -10 dB u (0.245 Vrms)
- Input impedance: 50 M Ω
- Power supply: 9-volt battery (not included)
- Current consumption: 4 mA typical
- A5 Weight (with accessories): 139 g

- A9 Weight (with accessories): 134 g
- A5 Dimensions: H 42 mm / 1.65",
W 56 mm / 2.20", L 61 mm / 2.40"
- A9 Dimensions: L 100 mm / 3.9", W 63 mm
/ 2.5", H 63 mm / 2.5"

Order code:

- A5
- A9

A5 Options: SMB Side mount battery box

A4.2 and new for 2005, A8!

The B-Band **A4.2** is a totally new side-mount preamp that shatters the barriers of its predecessors. The select advanced design includes B-Band's radical XOM circuit with mix control and a great and functional feel. The A4.2 has dual inputs for exclusive use with the combination of B-Band UST and AST.

For the ultimate acoustic guitar mix the A4.2 features the XOM* process mix control, a 3-band "graphic" EQ and master volume that are all of the rotary type. Input gain controls for both the UST and AST are also at the faceplate for easy adjustment. The mono output is done through an included high-quality output jack. The preamp is 9-volt battery powered. All hardware mounting and a box-tight battery

holder are included. Installing the preamp is simple; only requiring the drilling of small holes - no routing is necessary. Options of a wood-like faceplate and side mount battery box are available.

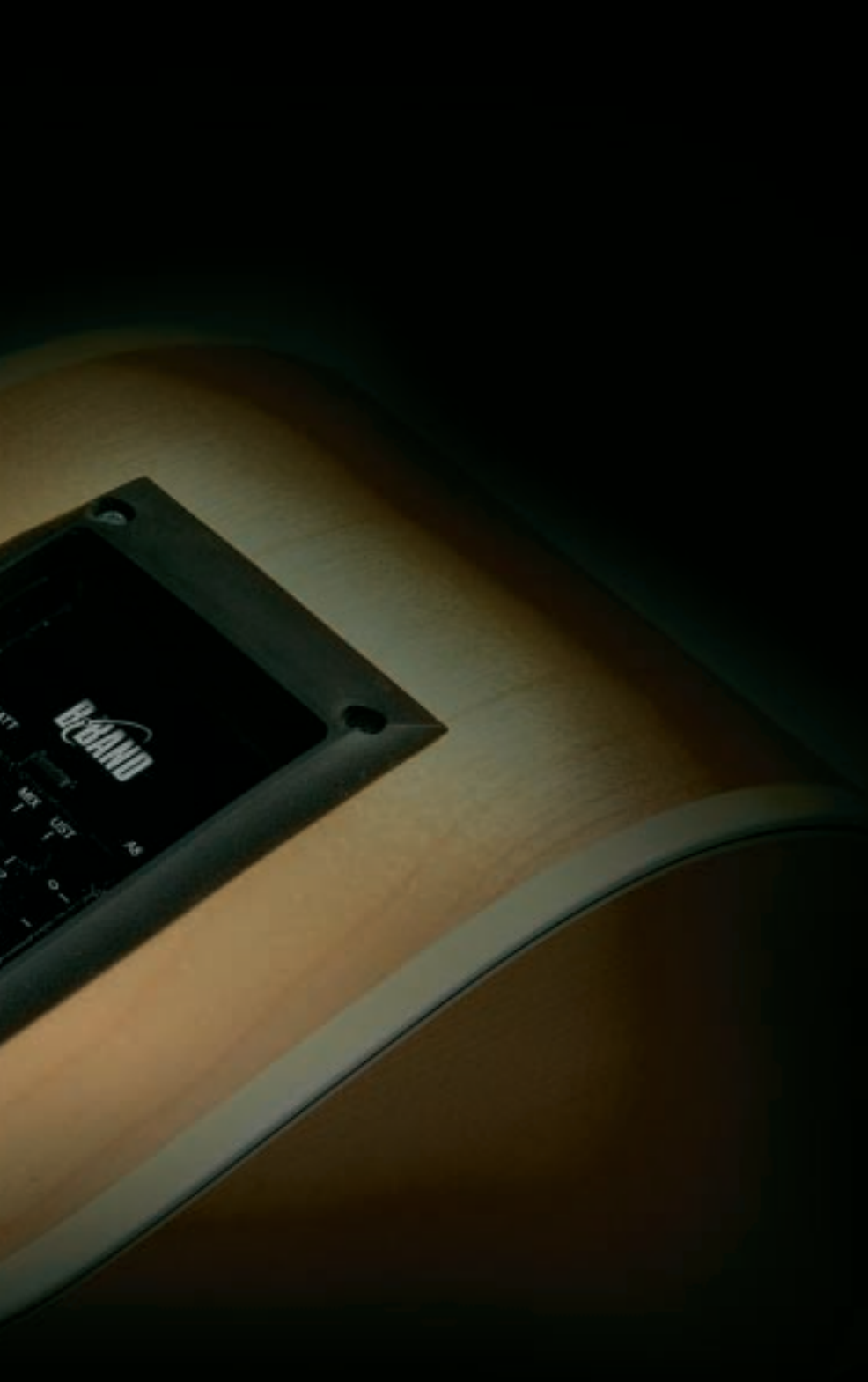
The B-Band XOM process at the A4.2 includes a mix control that is added before the output of the signal. With the mix control panned fully clockwise the sound is only the UST. With the mix control fully counter-clockwise the sound is the XOM of the UST and AST. Turning the mix control from the UST side towards the XOM side, the UST broad high frequencies gradually mixes in the broad high frequencies of the AST. Therefore subtle mixes of XOM tone character can be made with the full range tone of the UST.

The all-new **A8** retrofit follows the design path of the A4.2 as it has two inputs, for UST and AST, with XOM and similar volume and 3-band EQ controls. The XOM mix, volume and tone controls are all of the slider type. The A8 dimensions allow for easy replacement of the smaller version of common old-style preamps. The battery compartment is conveniently mounted next to the controls for easy access and battery changes. All mounting hardware is included with the kit.



* Read more about XOM on page 7.



**A4.2 Features:**

- Dual channel input (UST and AST only)
- XOM / UST rotary mix control
- 3-band "graphic" rotary EQ
- UST / AST input gain trims
- Master volume
- Box-tight battery holder
- Battery status LED
- 250 hour average battery life
- High quality output jack
- Simple preamp installation

A8 Features:

- Dual channel input (UST and AST only)
- XOM / UST slider mix control
- 3-band "graphic" slider EQ
- UST / AST input gain trims
- Master volume slider
- Battery status LED
- 250 hour average battery life
- High quality output jack
- Easy retrofit preamp installation

A4.2 and A8 Specifications:

- S/N ratio: Greater than -90 dB
- Distortion: 0.05 %
- Frequency response, both AST and UST input channels: 50 Hz - 40 kHz (-3 dB)
- Low-cut slope: -6 dB/oct
- Voltage gain: AST channel, 0 - +24 dB; UST channel, 0 - +24 dB
- Input impedance, both channels: 50 M Ω || < 10 pF
- Output impedance: < 3.5 k Ω
- Bass control range: ± 12 dB @ 100 Hz
- Middle control range: ± 11 dB @ 1.1 kHz
- Treble control range: ± 12 dB @ 12 kHz
- Nominal output level: -10 dB u (0.245 Vrms)
- Connections: Transducer input, 2.54 mm header; Output, 1/4" jack
- Power supply: 9-volt battery (not included)
- Current consumption: 2.4 mA typical
- A4.2 Weight (with accessories): 87 g
- A8 Weight (with accessories): 115 g
- A4.2 Dimensions: L 60 mm / 2.36", W 47 mm / 1.85", H 25 mm / 1"
- A8 Dimensions: L 82 mm / 3.2", W 57 mm / 2.2", H 64 mm / 2.5"

Order code:

A4.2

A8

A4.2 Options:

- WFP-A4.2 Wood-image faceplate
- SMB Side mount battery box

A3.2 and new for 2005, A7!

The most popular onboard B-Band guitar product worldwide is the **A3.2**. It can be found as standard equipment on many of the top made guitars around the world. The A3.2 has a 4-band "graphic" EQ and is easy to install.

The transducer choice for the single input A3.2 can either be a UST or AST. The preamp is powered by 9-volt battery. The A3.2 new 4-band graphic EQ design features rotary linear potentiometers. The four bands are cut / boost shelving bass, peak-

ing middle and treble and shelving presence controls.

Installing the preamp is simple; only requiring the drilling of small holes – no routing is necessary.

The A3.2 kit comes complete with all mounting hardware, a pre-wired high quality endpin jack and box-tight battery holder. Options of a wood-like faceplate and side mount battery box are available.

The all-new A7 retrofit follows the design path of the A3.2, as it has similar vol-

ume and 4-band EQ controls. The volume and tone controls are all of the slider type. The A7 dimensions allow for easy replacement of the smaller version of common old-style preamps. The battery compartment is conveniently mounted next to the controls for easy access and battery changes. All mounting hardware is included with the kit.

A3.2



A7



**A3.2 Features:**

- Single input (UST or AST)
- 4-band "graphic" EQ
- Simple preamp installation
- Battery status LED
- Pre-wired high quality endpin output jack
- 750 hours average battery life
- Complete metal enclosure

A7 Features:

- Single input (UST or AST)
- 4-band EQ
- Easy retrofit replacement installation
- Battery status LED
- Pre-wired high quality endpin output jack
- 750 hours average battery life

A3.2 and A7 Specifications:

- S/N ratio: Greater than -90 dB
- Distortion: 0.05 %
- Frequency response: 50 Hz - 40 kHz (+0, -3 dB)
- Low-cut slope: -6 dB/oct
- Input channel voltage gain: 24 dB
- Input impedance: $50\text{ M}\Omega \parallel < 10\text{ pF}$
- Output impedance: $< 3.5\text{ k}\Omega$
- Bass control range: $\pm 12\text{ dB @ } 70\text{ Hz}$
- Middle control range: $\pm 12\text{ dB @ } 400\text{ Hz}$
- Treble control range: $\pm 12\text{ dB @ } 2.5\text{ kHz}$
- Presence control range: $\pm 12\text{ dB @ } 12\text{ kHz}$
- Nominal output level: -10 dB u (0.245 Vrms)
- Transducer connections: Input, 2.54 mm header;
Output, 1/4" jack
- Power supply: 9-volt battery (not included)
- Current consumption: 0.8 mA typical
- A3.2 Weight (with accessories): 87 g
- A7 Weight (with accessories): 115 g
- A3.2 Dimensions: L 60 mm / 2.36",
W 47 mm / 1.85", H 25 mm / 1"
- A7 Dimensions: L 82 mm / 3.2", W 57 mm / 2.2",
H 64 mm / 2.5"

Order code:

A3.2

A7

A3.2 Options:

- WFP-A4.2 Wood-image faceplate
- SMB Side mount battery box

A2.2

The B-Band A2.2 with XOM* is the future of acoustic sound reproduction design. This dual input / single output onboard preamp, for use with the UST and AST combination of transducers, excels in performance over other preamps of this type. The A2.2 includes the XOM technique with mix control to bring the best of the UST and AST characters together resulting in a sound that is true to the guitar's unique voice in any performance venue.

The A2.2 is also great for resonator guitars with spider or biscuit bridges. Using the A2.2 system in a resonator guitar is simple. The UST pickup goes under the saddle and the AST is simply attached to the resonator cone. In this way both pickups pick up the sound like no other system - [At the Source!](#) No other system does this. The control pad of the A2.2 simply mounts at the sound hole of the guitar. An optional 9-volt battery phantom power supply is available.

The A2.2 has a small remote control pad with a volume and mix control that mounts without modification at the inside edge of a guitar's soundhole. The preamp is housed in a lightweight all-metal box and can be mounted inside the guitar at the side or back and is powered with a 9-volt battery.

At the preamp there are two input gain trim controls for both the UST and AST to match input levels. The entire system installs easily with very minor modifications - one small drill hole each for the pickup and endpin jack. For fast connections all components plug in without soldering. All mounting hardware, including a high quality endpin jack and box-tight battery holder, are supplied.



* Read more about XOM on page 7.

A2

The B-Band A2 is a first class endpin preamp: first class in sound and versatility. Even though the name has changed over the years, the classic A2 has endured and provided an important link between artists and their audience.

The A2 is ultimate in flexible design for those who want to keep their instrument original with minimal intrusion. The dual input / dual output preamp accepts the B-Band ideal combination of the UST and AST. This combination of transducers coupled with the sophisticated electronics of the A2 reproduce all the instrument's nuances. Alternatively, input channel 1 will accept either the UST or AST. Input channel 2 will accept an AST, or the B-Band AG-MIC soundhole condenser microphone or a magnetic pickup. Separate output channels, accessed with the use of a standard stereo cable; give the user control of the two sources at a mixer or preamp.

Inside the A2 is a matrix of four DIP-switches that determine specialties. At channel 1 there is a switch for a unique contour filter for upper register tone enhancement. In the off position the frequency is flat. In the on position the LF enhancer gives a mild boost to the highs. At channel 2 there are DIP switches to turn on bias voltage for the AG-MIC, to turn on a high-pass filter for microphone feedback reduction and to lower the gain from 24 dB down to 0 dB.

The A2 kit includes all mounting hardware, box-tight battery holder and wire harness.

A1/A1N-1470

The A1 is the little brother of the classic B-Band A2 preamp and is big on classic B-Band sound. The single input A1 has a direct frequency response with 24 dB of gain making a perfect fit with the B-Band UST (not included). The 1470 AST can alternatively be fitted with the A1 if the user is looking for a more flat response than that of the A1N. Either way, the sound reproduction is amazingly pure and clear.

The B-Band A1N-1470 bundle includes a special version of the A1 that has a slight frequency notch of 6 decibels at 180 hertz giving the system a smooth acoustic sound at louder volume levels and is packaged along with, and for use only, with the 1470 AST. This gives the user great tone at a great value.

The A1N-1470 can be used in any acoustic guitar, or similar instrument, that has good access to its interior.

Both the A1 and A1N 9-volt battery powered electronics are mounted in a small tube that is directly coupled with a high quality endpin jack making an all-in-one structure. The structure is light in mass adding very little weight to the instrument.

Both kits include all mounting hardware, box-tight battery holder and wire harness.

AG-MIC

The B-Band AG-MIC condenser microphone is an alternative, high quality, source for A2 channel 2 that can mount inside the guitar. Use only with the model A2 preamp.



Order code: AG-MIC

A2.2 Features:

- Dual channel input (UST and AST only)
- XOM circuit
- Remote soundhole volume and mix controls
- UST and AST input gain trim
- All plug in connections
- Box-tight battery holder
- 400 hours average battery life
- High quality output jack

A2.2 Specifications:

- S/N ratio: Greater than -90 dB
- Distortion: 0,05 %
- Frequency response: 50 Hz - 40 kHz (-3 dB)
- Low-cut slope: 6 dB/oct at both channels
- Voltage gain: AST channel, 0 - +24 dB; UST channel, 0 - +24 dB
- Input impedance, both channels: 50 M Ω \parallel < 10 pF
- Output impedance: < 3 k Ω
- Nominal output level: -10 dB u (0.245 Vrms)
- Power supply: 9-volt battery (not included)
- Current consumption: 0.8 mA typical
- Connections: Transducer inputs, 2.54 mm header; Output, 1/4" jack
- Weight (with accessories): 45 g
- Dimensions: L 42 mm / 1.65", W 32 mm / 1.26", H 15 mm / 0.6"

Order code: A2.2

A2.2 Options:

- **BB-9** 9-volt battery phantom power box.

A2 Features:

- Dual input and output channels: Channel 1 - UST or AST, Channel 2 - AST or sound-hole condenser microphone or magnetic pickup
- On/off switchable treble enhancer at Ch 1
- On/off switchable high-pass filter at Ch 2 (-6 dB/oct; 500 Hz)
- On/off switchable mic bias (phantom) voltage at Ch 2
- High gain / low gain switch at Ch 2
- 400 hours average battery life

A2 Specifications:

- Frequency response: 50 Hz - 40 kHz (-3 dB) on both channels

- Low-cut slope: -6 dB/oct on both channels
- Ch 1 voltage gain: +24 dB
- Ch 2 voltage gain: +24 dB
- Ch 1 input impedance: 50 M Ω \parallel < 10 pF
- Ch 2 input impedance: 20 M Ω (2.2 k Ω with mic phantom on)
- Output impedance: 150 Ω on both channels
- Nominal output level: -10 dB u (0.245 Vrms) on both channels
- Mic bias voltage: 9 V through 2.2 k Ω
- Preset table enhancer boost: +3 dB @ 6.3 kHz; +5 dB @ 14 kHz (when on)
- Power supply: 9-volt battery (not included)
- Current consumption: 1.5 mA typical (2 mA with mic)
- Weight (with accessories): 49 g
- Dimensions: W 32 mm / 1.26", H 18 mm / 0.71", L 82 mm / 3.29" (incl. jack)

Order code: A2

A1 / A1N-1470 Features:

- A1 can use either UST or AST (sold separately)
- A1N special design preamp (only for use with 1470 AST)
- A1N-1470 bundle includes A1N preamp and 1470 AST transducer
- High quality endpin output jack
- 750 hours average battery life
- Can be 9-volt phantom powered

A1 / A1N-1470 Specifications:

- Integrated notch filter: 6 dB @ 180 Hz (A1N only)
- S/N ratio: Greater than -90 dB
- Distortion: 0,05 %
- Frequency response: 50 Hz - 33 kHz (-3 dB)
- Low-cut slope: -12 dB/oct
- Input channel voltage gain: +24 dB
- Input impedance: 50 M Ω \parallel < 10 pF
- Output impedance: 1 k Ω
- Nominal output level: -10 dB u (0.245 Vrms)
- Power supply: 9-volt battery (not included)
- Current consumption: 0.4 mA typical
- Connections: Transducer input, 2.54 mm header; Output, 1/4" jack
- Weight (with accessories): 42 g
- Dimensions: Diameter ϕ 13 mm / 0.51", L 86 mm / 3.38" (incl. jack)

Order codes:

- A1
- A1N-1470

A1 / A1N-1470 Options:

- **BB-9** 9-volt battery phantom power box.



The Stringed Instrument Systems

STATEMENT DOUBLE BASS SYSTEM

The B-Band **Statement** is like no other Double Bass pickup system. Awarded the Bass Player's magazine Editor's Top Tone Award (January 2002), it is the only system that offers the greatest sonic possibilities for both pizzicato and arco styles. The Statement system allows you to play louder, without feedback, with warm fundamentals and absolute natural tone.

The Statement system includes a mixer and three easy-to-install B-Band transducers*. Two transducers are placed at the wing slots of the bridge, using non-

adhesive cork shims; the third is placed under the foot of the bridge's bass side, using the string pressure on the bridge to hold it in place. Working like sub-compact electret condenser microphones the Statement's transducers reproduce all of the instrument's nuances. The transducers are connected to the Statement Mixer by a standard 3-pin XLR mic cable.

The Statement Mixer is a flexible, rugged floor box that is the main support for the system. The best feature of the mixer is the two constant power mix controls that

allow for two different mixes of the bridge and body transducers. This allows preset selection of an arco or pizzicato sound with a quick flick of the heavy-duty foot switch.

Other features include: an input gain controls, for the bridge and body transducers, a 1/4" line output, XLR balanced line out-put, mute and ground lift switches. Powered by 9-volt battery, AC/DC adaptor (not included), or 48-volt phantom power.

(* Patented, patents pending)

Statement Features - Transducers:

- 3 phantom-powered B-Band transducers serve two different sounds - pizzicato and arco.
- 2 inbuilt J-FET transadmittance preamps
- 3-pin XLR output jack for the transducers

Statement Features - Mixer:

- 2 constant power mix controls for separate pizzicato and arco sounds and a footswitch to switch between them.
- 2 transimpedance input channels
- Master volume control
- Gain trims for both body and bridge transducers
- Mute switch
- Power switch
- 3-pin XLR input connector
- Line level 1/4" output jack
- Balanced line level XLR output with ground switch
- Active mix control
- Battery status LED
- Inbuilt high-pass filter for removing handling and ambient noise from the signal.
- Powered by 9V battery (battery life about 140 hours), 12 V regulated AC/DC adaptor or standard 48V phantom power (battery or DC-adaptor are not included).

Statement Specifications - Transducers:

- Frequency response: 20 Hz - 20 kHz
- Weight (complete): 46 g

Statement Specifications - Mixer:

- Output impedance:
 1. Line level 1/4" output: 150 Ω
 2. Balanced line level XLR output: 2 x 410 Ω
- Nominal output level:
 1. Line level output: -4 dB ref. 775 mV r.m.s.
 2. Balanced line level XLR output -6 dB below line level output @ 10 k Ω , balanced
- Nominal headroom, line level output: > 21 dB
- Frequency response: 35 Hz - 20 kHz
- HPF: -24 dB/oct.
- HPF cut-off frequency: 35 Hz / -3 dB
- Power supply: 9V battery, external 12 V, DC-adaptor or 48-volt phantom power (battery or DC-adaptor not included)
- Current consumption: < 4 mA
- Dimensions: L 126 mm / 5", W 100 mm / 3.9", H 52 mm / 2" (incl. pots)
- Weight: 360 g

Order code: DB-STM-SYS



D1 DOUBLE BASS SYSTEM

Taking experience from the B-Band Statement system and creating a more affordable system for double bass has been a dream for B-Band - now the dream is reality! The **D1** system's sound is warm, tight, and dynamic and has plenty of headroom to play your instrument loud!

The D1 double bass has been developed in close coordination with technicians and artists. The D1 system includes a simple and unobtrusive active preamp that is an all-in-one construction with the 1/4" output jack. This attaches easily onto the two middle strings between the bridge and tailpiece. The 9-volt battery clip simply attaches to the tailpiece with Velcro.

The B-Band D1 system also includes three easy-to-install B-Band Statement series transducers* and are placed - two at the wing slots of the bridge, using non-adhesive cork shims, and the third under the foot of the bridge's bass side, using the string pressure on the bridge to hold it in place. Inside the preamp there is a user mix control to set the balance between the bridge and the body sound for exact replication of your instruments unique tone.

(* Patented, patents pending)



S1 VIOLIN SYSTEM

The S1 violin system makes use of the high performance B-Band AST (Acoustic Soundboard Transducer)* technology to overachieve in any class. The reproduced sound is clear and rich worthy of any performance style.

The B-Band 1345 AST is very thin, lightweight and flexible and attaches to the soundboard between the saddle and the tailpiece. The 1345 AST is fixed to the body with the use of non-evasive putty. The 1345 is connected to a chin-rest type mount that houses a high quality 1/4" stereo output jack and active preamp.

A small, lightweight, remote 9-volt battery supply box that can sit on the floor or be near the sound system powers the active preamp.

(* Patented, patents pending)

D1 Features - Transducers:

- 1 B-Band Statement body transducer
- 2 B-Band Statement bridge transducers

D1 Features - Preamp:

- Attaches easily onto the two middle strings between the bridge and tailpiece with metal clip
- User mix control to set the balance between the bridge and the body sound
- 9-volt battery clip simply attaches to the tailpiece with Velcro

D1 Specifications:

- Frequency response: 35 Hz - 33 kHz
- Low-cut slope: -12 dB/oct.
- Voltage gain: 12 dB
- Input impedance: 50 M Ω || < 10 pF
- Output impedance 1 k Ω
- Power supply: 9-volt battery (not included)
- Current consumption: 0.8 mA typical
- Weight: (with accessories): 57 g
- Dimensions: L 90 mm / 3.5", W 13 mm / .5"

Order Code: D1

S1 Features - 1345 AST transducer:

- Active size 13x45 mm
- Weights only 1 g
- Installs with non-evasive putty
- Easy to install and remove

S1 Features - Preamp:

- Easy to Install and remove
- High quality electronics
- One piece with the output jack
- Mounted on a high quality chin-rest style clamp

S1 Specifications - Preamp:

- Frequency response: 50 Hz - 33 kHz (-3 dB)
- Low-cut slope: -12 dB/oct.
- Voltage gain: 24 dB
- Input impedance: 50 M Ω || < 10 pF
- Output impedance 1 k Ω
- Power supply: 9-volt battery (not included)
- Current consumption: 0.4 mA typical
- Weight: (with accessories): 57 g
- Dimensions: L 90 mm / 3.5", W 13 mm / .5"

Specifications - BB-9 9-volt battery supply box:

- Dimensions: L 66 mm / 2.6", W 81 mm / 3.2", H 35 mm / 1.4"
- 1/4" stereo input for 9V phantom power and signal
- 1/4" mono output

Order code: S1



Hear the Truth™

The outstanding sound reproduction of the B-Band transducer is based on the technology of a novel, world-wide patented high-tech electret film exclusive to B-Band and is manufactured in the spirit of true acoustic instrument aficionados.

The Emfit® material is very different from piezo-electric films and transducers and is entirely unique in the industry. How is it different? We could go into a long discussion about the technical aspects, like the “microscopic lens-like gas bubbles”™ inside the permanently charged film but the most important difference is the sound. Whereas piezo pickups tend to impart a sound of their own (often described as “quacky” or “plastic”), B-Band transducers act in much the same way a condenser microphone does. This results in excellent reproduction of your acoustic guitar’s unique sound.

www.b-band.com

Visit the B-Band website! There you will find sound clips, a users discussion forum, installation information and all the latest news.



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