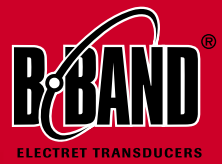


Foremost Technology for Absolute Acoustic Reproduction

A man with glasses and a black t-shirt is playing an acoustic guitar. He has his eyes closed and a joyful expression. The guitar is a light-colored acoustic model. In the background, several other acoustic guitars are visible, slightly out of focus. The entire scene is set against a vibrant red background.

Hear
the Truth™

B-Band Transducer Systems
for Acoustic Guitar

:: B-BAND ARTISTS ::

Larry Carlton
Scott Henderson
Allen Hinds
Rodney Sheppard
John Stowell
El Teye
Carl Verheyen
Paul Keim
Jamie Kime
Stuart Mathis
Michael James
Vern Monnett
Tim Pierce
Chuck Pyle
Jeff Richman
Philip Sheeran
Jake White
Tim Farrell
Ulli Bögershausen
Steve Vai
Wayne Johnson
Justin King
California Guitar Trio
Sal Di Troia
Richard Boukas
Larry Pattis
El McMeen
Art Turner
Roger Ball
Sean Harkness
Jason Carter
Ernest Bango
Scott Bradoka
George Landress
Pat Bolliger

Michael Langer
John Gilliat
Jarmo Nikku
Micke Nord
Niclas Strömstedt
Ottmar Liebert
Allan Olsen
Meike Koester
22 Pistepirkko
Kevin Head



:: COMPANY ::

B-Band Ltd has been remarkably swift to succeed in taking a place for itself in the music transducer industry. Fundamental to this success is the support and input of many who we have the highest respect, and also our mission to continually exceed customers' increasing expectations. The spirit of the community of people at B-Band is to focus on innovation and commitment to continuous improvements of quality. We believe that to contribute to a customers' success we have to go beyond what they expect.

B-Band Ltd, known in the 1990's as

EMF Acoustics Ltd, was founded in 1991. The starting point of the company's new business in 1995 was the introduction of the proprietary material EMFIT, an invention of the well known Finnish innovator Kari Kirjavainen. Lasse Räisänen, an associate of Kari's, and Lasse's brother Heikki Räisänen, founder and managing director of B-Band, nurtured Kari's idea - that EMFIT would make an excellent transducer for acoustic instruments. That idea was realized and continues to be a source of new inspirations for the accurate reproduction of acoustic

sound. EMFIT is used in every B-Band transducer.

We care what the performers, luthiers, dealers, distributors and musical instrument manufacturers want. We know that they express their industry not only in finances but, more importantly, in artistic pursuit of a great sounding, quality product.

All at B-Band are honestly committed to help you reach your audience and customers through quality.

Heikki Räisänen

Managing director, B-Band Ltd

:: UST ::


The B-Band UST (Under-Saddle Transducer)* still stands as the first transducer, that alone, sounds better than many pickup / microphone combinations. An instrument equipped with a B-Band UST has enhanced countless productions, in the studio and in live performance, by being able to produce a great acoustic tone quickly.

Designated as the "4th Gen UST", the 2002 UST has been stiffened for better string balance qualities, higher output, greater durability and even lower background noise. The many knowledgeable and fantastic artists that B-Band works with have prompted evolution of

the revolutionary B-Band UST. This significantly updated UST is a testament to that spirit.

Even though these changes have been made, the UST remains very thin – only 0.4 mm – and usually does not require a new string saddle or adjustment to saddle cavity. Since the UST is all one piece – i.e.: not segmented – positioning for string spacing is a thing of the past. The UST is a flexible, rugged and constant structure all the way to the preamp. Connection to the preamp is an easy "plug in " without soldering.

(* Patented, patents pending.)

 <p>UST</p>	 <p>AST</p>
<p>Features of UST and AST:</p> <ul style="list-style-type: none">• Condenser acoustic soundboard transducers and under saddle transducers• Operation based on a worldwide-patented elastic electret film• UST has sizes to fit a wide range of guitars• 1470 AST will fit a wide variety steel-string and nylon-stringed acoustic guitars• Reproduces original tone without affecting the instrument acoustically• Ultra thin• High gain before feedback• Wide dynamic range• Easy installation <p>Order Codes:</p> <p>UST:</p> <ul style="list-style-type: none">• 22L, for narrow saddle slot instruments (3/32")• 29L, for wide saddle slot instruments (1/8")• 22S, for nylon string instruments (3/32") with A1 and A2 preamps• 29S, for nylon string instruments (1/8") with A1 and A2 preamps• SS, for split saddle instruments (3/32") <p>AST:</p> <ul style="list-style-type: none">• 1470, for steel and nylon string acoustic guitars	



A close-up photograph of a guitar's pickup area, illuminated with a strong red light. The image shows the pickup coils and the surrounding body wood. The text is overlaid on the upper portion of the image.

*"I got very positive comments about
my sound."*

:: AST ::

Advanced redevelopment at B-Band brings a totally new AST (Acoustic Soundboard Transducer)*. A vast improvement in controlling the AST transducers own resonance frequency makes for a unprecedented natural acoustic sound, even at high volume levels. Also, this AST is compatible with all B-Band onboard preamps (except 2150 preamp)!

The newly designed B-Band AST, with a bigger pickup surface (14mm x 70mm), acts to capture all the detailed acoustics of the instrument without sounding boxy. It has all the advantages of a microphone, without the negatives of feedback and positioning.

Positioning of the AST is not critical making installation fast. The AST attach-

es to the guitar with a special two sided tape. String balance is always even.

The AST is an ultra-thin flexible and rugged constant structure all the way to the preamp. Connection to the preamp is an easy "plug in " without soldering.

(* Patented, patents pending.)

:: A1 ::

This is A1! The best comes in small packages. B-Band has always thought small and unobtrusive, to let the wood work.

A direct descendant of the classic Core99 preamp, the new, single input, A1 preamp has a direct frequency response and 24 dB of gain. The electronics are mounted in a very small tube that is directly coupled with a high quality endpin jack making an all-in-one structure. This makes for easy mounting without adding much mass to the instrument.

Mated to either a UST or AST, the reproduced sound is amazingly clear and pure.

The A1 kit provides all the mounting hardware, 9-volt battery clip and wire harness.

"It's all about sound, isn't it? Well, this is the best amplified acoustic guitar sound that I've heard!"



A1 Features:

- One input / output for UST or AST
- High quality endpin jack
- Battery life about 750 hours

A1 Specifications:

- Frequency response: 50 Hz – 23 kHz.
- Low-cut slope: -12 dB/oct.
- Voltage gain: 24 dB
- Input impedance: 50 MOhm \parallel < 10 pF
- Output impedance 1 KOhm
- Power supply: 9 V battery (not included)
- Current consumption: 0.8 mA typical
- Weight: (with accessories): 57 g
- Dimensions: 13 x 89 mm

Order Code: A1

:: A2 ::

For users, the Core99 has been vital for their performance. Further, significant changes and updates have been made to enhance this performance – the new A2 is the better result.

The two input A2 preamp allows for an UST / AST combination: a new way for all the instrument's nuances to be reproduced, making the sound more alive. This system gives the player more freedom at high sound levels while retaining all the qualities of the former UST / sound-hole condenser mic system.

The B-Band UST / AST are accessed separately with the use of a standard

1/4" stereo cable. Both outputs are compatible with virtually all outboard equipment inputs.

The A2's UST channel has a unique contour filter for upper register tone enhancement. Inside there is a DIL-switch for switching a high frequency (HF) enhancer on or off. When the switch is in the off position, frequency response is flat. When on, the LF enhancer gives a mild boost to the highs.

The A2's preamp second channel will, if preferred, accept a sound-hole condenser microphone or magnetic pickup as an alternative to the AST. There is DIL-switches to turn on bias

voltage for the 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 provides a high quality endpin jack, all mounting hardware, 9-volt battery clip and wire harness.

B-Band Condenser Microphone can be used instead of AST on A2 preamp's 2nd channel.



Order Code:
AG-MIC

A2 Features:

- Two 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
- Battery life about 400 hours.

A2 Specifications:

- Frequency response: 50 Hz... >> 20 kHz 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 MOhm || < 10 pF
- Ch 2 input impedance: 20 MOhm (2.2 with mic phantom on)
- Output impedance: 150 Ohm on both channels
- Nominal output level: -10 dB ref. 775 mV r.m.s. on both channels
- Mic bias voltage: 9 V through 2.2 KOhm
- Preset treble enhancer boost: +3 dB @ 6,3 KHz; +5 dB @ 14 KHz (when on)
- Power supply: 9 V battery (not included)
- Current consumption: 1.5 mA typical (2 mA with mic)

- Weight (complete w accessories): 49 g
- Dimensions: W 32 mm, H 18 mm, L 82 mm (incl. jack)

Order Code:

- A2



:: A3 ::

Breaking away from B-Band's heritage, the A3 is pure tradition. In respect to all previously made tone designs, the A3 brings together the modern with the future, by melding a in-line 3-band equalizer with B-Band transducer technology.

Formerly called 3Tone, the A3's new graphic EQ design, with rotary cut /

boost bass, middle and treble controls, has the mid and treble controls affecting the higher frequencies more than before and features linear potentiometers for greater range.

Simple in thought, comfortable to use but powerful to the ear, this single input side mount preamp works with a choice of UST or AST.

The A3 kit comes complete with all hardware for installing and includes a pre-wired high quality endpin jack with battery power switch and a 9-volt battery clip. For quicker battery changes, an optional side mount battery box can be ordered.

:: A4 ::

Combining B-Band's past and future, the A4 takes the place of the New Frontier range of preamps. Great sounding, simple and easy high tech is what past New Frontier side mount preamps have been called. Now with UST /AST combining and the exclusive, effective, enhancer EQ, the A4 is true artistic / industrial minimalism.

The two input A4 preamp is for use only with a UST / AST combination: a

new way for all of instrument's nuances to be reproduced, making the sound more alive. This system gives the player more freedom at high sound levels while retaining all the qualities of the former UST / sound-hole condenser mic system.





Essential rotary controls including volume, edge, bottom and UST / AST mix on a small sound painter's palette control field, let the user create a huge

spectrum of sound. In addition to all this, at the back of the preamp there are individual input gain controls for both the UST and AST.

The A4 kit comes complete with all hardware for installing including pre-wired high quality endpin jack and a 9-volt battery clip. For quicker battery changes, an optional side mount battery box can be ordered.



*“to hear it from the face of the soundboard,
it was perfect. But from the studio monitors
there was more.”*

<p>A3 Features:</p> <ul style="list-style-type: none"> • Single input for either UST or AST • Bass, middle, treble and volume controls • Battery status LED • Pre-wired high quality endpin jack • Complete metal enclosure • 750 hours battery life typical 	<p>A3 Specifications:</p> <ul style="list-style-type: none"> • Bass control range: ± 11.6 dB @ 70 Hz • Mid control range: ± 11.3 dB @ 1.1 KHz • Treb control range: ± 11.3 dB @ 10 KHz • Frequency response: 50 Hz...>> 20 KHz • Nominal output level: -10 dB ref. 775 mV r.m.s. • Power supply: 9 V battery (not included) • Input impedance: 50 MOhm • Output impedance: 150 Ohm • Voltage gain: 21 dB 	<ul style="list-style-type: none"> • Current consumption: 0.8 mA typical • Weight: (with accessories): 87 g • Dimensions: L 60 mm, W 47 mm, H 26 mm 	
<p>A4 Features:</p> <ul style="list-style-type: none"> • 2 channel input (UST and AST only) • Mix control for blending UST / AST • "Bottom" and "Edge" enhancer controls • UST / AST gain trim controls • UST / AST mix control • Master volume • Battery status LED • 250 hours battery life typical 	<p>50 Hz...>>20 KHz</p> <ul style="list-style-type: none"> • UST channel voltage gain: 0 dB...>>+24 dB • AST channel voltage gain 0 dB...>>+24 dB • Output impedance: 150 Ohm • Nominal output level: -10 dB ref. 775 mV r.m.s. • UST channel input impedance: 50 MOhm. • AST channel input impedance: 20 MOhm. • Power supply: 9 V battery (not included) • Current consumption: 2.4 mA typical • Weight (with accessories): 87 g • Dimensions: 60 mm, W 47 mm, H 26 mm 		
<p>A4 Specifications:</p> <ul style="list-style-type: none"> • "Bottom" enhancer boost range: +9 dB @ 80 Hz • "Edge" enhancer boost range: +6dB @ 4 KHz; +12.5 dB @ 10 KHz • Both channels frequency response: 	<p>Order Code:</p> <ul style="list-style-type: none"> • A4 	<p>Optional wood-image frontplate is available for both A3 and A4.</p>	
<p>Order Codes:</p> <ul style="list-style-type: none"> • WFP-A3 • WFP-A4 			

**A5 Features:**

- Single channel input (UST or AST)
- Single channel output
- Volume
- 4-band equalizer
- Notch frequency and depth controls
- Phase switch
- Battery status LED
- 150 hours battery life typical

A5 Specifications:

- Bass control range: Shelving ± 11.9 dB @ 70 Hz (± 3 dB @ 300 Hz)
- Middle control range: Peaking ± 11.5 dB @ 400 Hz; (Q = 0.5)
- Treble control range: Peaking ± 12.3 dB @ 2.7 kHz; (Q = 0.5)
- Presence control range: Shelving ± 12.4 dB @ 10 kHz (± 3 dB @ 2.2)
- Notch frequency range: 100 Hz...>>330 Hz
- Notch depth range: -15 dB; Q 3.3
- Frequency response: 50 Hz...>>20 KHz
- Input channel voltage gain: +24 dB
- Output impedance 1 KOhm
- Nominal output level: -10 dB ref. 775 mV r.m.s.
- Input impedance: 50 MOhm
- Power supply: 9V battery (not included)
- Current consumption: 4 mA typical
- Weight (with accessories): 139 g
- Dimensions: H 79 mm, W 56 mm, L 61 mm

Order Code:

- A5

:: A5 ::

The A5 is for the player who takes a more straightforward approach to their sound and wants more EQ possibilities. The single input A5 takes its basic design from the A6 and can be used with either a UST or AST transducer. Easy to view and use slider controls are used for the volume and the 4-band EQ. The volume slider is at a right angle from the EQ sliders controls providing a "smart" read and use for quick changes.

Rotary feedback controls, notch depth and frequency, differentiate the control field for less control error. Nestled between the rotary knobs there are a phase switch and a low battery LED. The A5 kit comes complete with all hardware for installing. Includes a pre-wired high quality endpin jack and 9-volt battery clip. For quicker battery changes an optional side mount battery box can be ordered.

:: A6 ::

The A6 preamp is something totally different from what B-Band has done in the past. Raised from the beginning to give guitarists everything they need from their fingertips to their ears.

The sonic journey starts with A6's support for a B-Band UST / AST transducer combination. This combination achieves the best reproduction, with more freedom at higher sound levels, of a universe of sound called The Acoustic

Guitar. The output is a mono mix of the UST / AST.

For total sound control, the A6's tactile controls include sliders for volume, 3 band EQ and UST / AST mix. The volume slider is at the nearest edge to the soundboard and is at 90 degrees from UST / AST mix control for fast virtual access.

Rotary feedback controls, notch depth and frequency, differentiate the control

field for less error. Nestled between the rotary knobs is a phase switch. Dual gain trim controls, at the control field, makes perfecting the balance of the UST / AST combination easy.

The A6 kit comes complete with all hardware for installing. Includes a pre-wired high quality endpin jack and 9-volt battery clip. For quicker battery changes, an optional side mount battery box can be ordered.

A6 Features:

- Two channel input (UST and AST only)
- UST / AST gain trim controls
- Mono output mix of UST / AST
- UST / AST mix control
- Volume
- 3 band equalizer
- Notch frequency and depth controls
- Phase switch
- Battery status LED
- 150 hours battery life typical

A6 Specifications:

- Bass control range: Shelving ± 11.9 dB @ 70

- Hz (± 3 dB @ 300 Hz)
- Middle control range: Peaking ± 11.5 dB @ 400 Hz; (Q = 0.5)
- Treble control range: Peaking ± 12.3 dB @ 2.7 kHz; (Q = 0.5)
- Presence control range: Shelving ± 12.4 dB @ 10 kHz (± 3 dB @ 2.2)
- Notch frequency range: 100 Hz...>>330 Hz
- Notch depth range: -15 dB; Q 3.3
- Frequency response: 50 Hz..>>20 KHz
- Input channel voltage gain: +24 dB
- Output impedance 1 KOhm
- Nominal output level: -10 dB ref. 775 mV r.m.s.
- Input impedance: 50 MOhm

- Power supply: 9V battery (not included)
- Current consumption: 4 mA typical
- Weight (with accessories): 139 g
- Dimensions: H 79 mm, W 56 mm, L 61 mm

Order Code:

- A6



:: TECHNOLOGY WITH SPIRIT! ::

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.

How is it different? We could give you a whole white paper to read that discusses 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", the B-Band transducers act in much the same way a condenser microphone does. This results in excellent reproduction of your acoustic instrument's unique sound.



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