

Foremost Technology for Absolute Acoustic Reproduction



ELECTRET TRANSDUCERS

B-BAND A6T

B-BAND A6T USER'S GUIDE (EN)

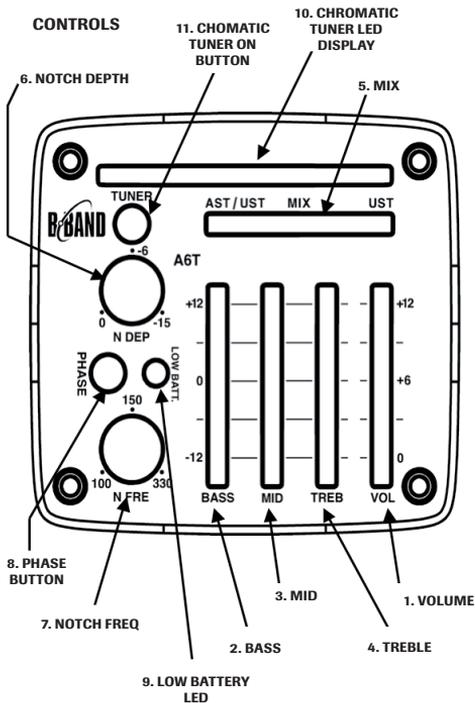
B-BAND A6T USER'S GUIDE

Congratulations and thank you for purchasing this fine instrument with the included B-Band pickup system. B-Band is committed to providing the highest quality product that is manufactured in the true spirit of acoustic / electric instrument aficionados.

Reading this manual thoroughly will give you the information necessary to fully understand the capabilities of this instrument and make the operation a simple and pleasurable experience.

CONTROLS

1. VOLUME (VOLUME SLIDE CONTROL)
2. BASS (BASS SLIDE CONTROL)
3. MID (MIDDLE SLIDE CONTROL)
4. TREB (TREBLE SLIDE CONTROL)
5. MIX (AST / UST - UST XOM SLIDE CONTROL)
6. N DEP (NOTCH DEPTH ROTARY CONTROL)
7. N FREQ (NOTCH FREQUENCY ROTARY CONTROL)
8. PHASE (PHASE BUTTON)
9. LOW BATT. (LOW BATTERY LED LIGHT)
10. CHROMATIC TUNER LED DISPLAY
11. CHROMATIC TUNER ON BUTTON



DESCRIPTION OF CONTROLS

1. VOLUME (VOLUME SLIDE CONTROL)

The VOLUME slider controls the output volume. At "0" it is completely OFF. At "+12" it is LOUD!

2. BASS (BASS SLIDE CONTROL)

3. MID (MIDDLE SLIDE CONTROL)

4. TREB (TREBLE SLIDE CONTROL)

The BASS, MID, and TREB slider controls are a 3-band equalizer for controlling tone.

The BASS tone control is a normal boost / cut shelving controls.

The MID (midrange) and TREB (treble) tone controls are normal boost / cut tone filters.

The center detent on these tone controls yields a flat tone response. "+12" boosts the tone; "-12" cuts the tone.

5. MIX (AST / UST - UST XOM SLIDE CONTROL)

Your guitar is equipped with the exclusive B-Band XOM mix control and two pickups - the UST (Under Saddle Transducer) pickup and AST (Acoustic Soundboard Transducer) pickup.

The UST pickup is under the saddle of the guitar. This pickup gives fullrange tones and is the fundamental sound that is always present in the sound mix.

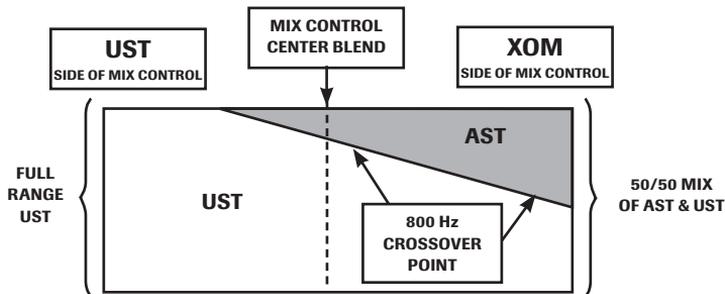
The AST pickup is attached to the bridge plate or the soundboard inside the guitar. This pickup adds some extra sonic tone to the mix.

XOM is an acronym for Cross-Over-Mix. This function is at the "MIX" control of the guitar and its use is described below.

When the mix control is turned all the way towards the (XOM) UST / AST side, which is the XOM position - a 50 / 50 mix of AST and UST is heard. This is the crossover mix of the AST and UST. The crossover point is 800 Hz. From 800 Hz and up is AST. 800 Hz and down is the UST. 50% is the high tones of the AST and 50% is the low tones of the UST. See diagram below.

When the mix control is turned all the way towards the UST side the sound is ONLY the UST pickup sound. Full range sound of the UST. No AST sound.

With the mix control at any position you always hear the low tone part of the UST pickup. This provides a very round and solid



low tone sound at any position.

The XOM mix control blends the higher tone sounds of both the UST and AST.

BALANCE ADJUSTMENT OF THE PICKUP'S INPUT GAIN

The A6T has a dedicated input gain balance control located at the backside of the preamp. The control is accessed through a small hole with a screwdriver. This control is used to set the basic balance of the UST and AST so the pickups can have equal output signal strength. This works in conjunction with the XOM circuit. The control is set at the factory at 50 / 50 equal blend.

When using the XOM control and the sound is not balanced – for example, if the UST side sounds louder than the AST – OR – the AST side sounds loud or distorted – the input gain control can be adjusted to get a more balanced mix.

As the control is at the back of the preamp (inside the guitar), the strings will need to be loosened to get access the back of the preamp.

With the back, or bottom, of the A6T preamp up (so you are looking at the bottom) turning the input gain control counter-clockwise will blend more of the UST pickup into the mix. Turning the input gain control clockwise will blend more of the AST into the mix.

To check this, play the system through an amp system and listen to sound of both sides of the mix control. Most likely the UST can have a little hotter output (louder) than the AST.

6.N DEP (NOTCH DEPTH ROTARY CONTROL)

7.N FREQ (NOTCH FREQUENCY ROTARY CONTROL)

The two rotary controls are for feedback control. Feedback is the undesirable sound that sometimes occurs at medium to

loud volume levels and sometimes when standing close to the speaker that is reproducing the guitar sound.

The N DEP (notch depth) and N FRE (notch frequency) can help control feedback.

The N DEP at “0” is off; at “-6” it cuts the level of the N FRE by six decibels; and “- 15” by fifteen decibels.

The N FRE indicates a range of frequencies that can be affected from 100 Hz to 330 Hz.

Set up by first turning the N DEP off to the full counter clockwise position “0”. Set the rest of the controls to suit your taste taking care that as you do this control any initial feedback by turning down the volume control. Once you set your sound turn the volume control up. As you reach a feedback threshold and hear feedback, turn the N DEP up half way and using the N FRE find the frequency where the feedback is reduced. Once this is found you can move the N DEP either way to make this effect stronger or weaker.

The Notch Depth and Frequency should be used sparingly as they will affect the tone.

Once you experiment with the settings of these controls you will find more about how they work.

8. PHASE (PHASE BUTTON)

The PHASE button controls the phase of the pickup in relationship to the phase of the speaker(s) that are being used with the system.

Pushing this button in will put the pickup “out of phase” with the speaker(s). When the button is out the pickup are “in phase.”

This control is most useful for feedback control and will provide a tone color. Once you experiment with the settings of this control you will find more about how it works.

9. LOW BATT. (LOW BATTERY LED LIGHT)

The LED will light when the battery has lost power. Replace the battery when this light is on.

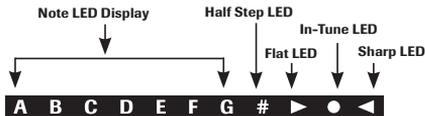
This LED light will flash when a cable is connected to the output jack of the pickup system. This shows the battery is good.

BATTERY

A 9-volt battery powers the B-Band A6T preamp. Before connecting the instrument to an amplifier or mixer please check that a fully charged 9-volt battery is connected.

10. CHROMATIC TUNER LED DISPLAY

11. CHROMATIC TUNER ON / OFF BUTTON



The tuner will work with or without a cable plugged into the output jack.

Pushing the tuner button (11) turns ON the tuner. When the tuner is active the pickup system output is muted. No sound will go to the amplifier or mixer when the tuner is active.

Pushing the tuner button (11) again turns the tuner OFF and the pickup system output will be active and sound will go to the amplifier.

If the tuner is ON and the tuner button is not pushed within 2 minutes the tuner will turn OFF automatically and sound returned to the output.

The tuner has a seven Note LED Display; Half-step (#) LED;

Sharp arrow LED; Flat arrow LED and In-Tune LED.

The tuner Note Display shows the nearest note of one plucked string's sound. If the note showing is a half step (for example A#; C#; D# and so), the half-step (#) LED will light.

If the Sharp LED is showing the string needs to be lowered in pitch.

If the Flat LED is showing the string needs to be raised in pitch.

When the In-Tune LED lights the string is at the correct pitch of the note displayed at the Note Display LED.

SETTING UP THE PREAMP FOR USE

Tune the guitar. See the tuner instructions at 10 and 11.

Before plugging a cable into the guitar's output jack, slide the volume control OFF ("0"), slide the 3-band EQ controls to "0"; slide the mix control to "UST"; turn the Notch Filter and Frequency rotary controls fully counter-clockwise; push the phase button so it is OUT (in phase); and turn the tuner OFF.

Make sure that the amplifier or mixer volume is OFF and the EQ tone controls are at flat or off. Plug a guitar cable into the output jack of the guitar and into the input of the amplifier or mixer.

Slide the volume control of the A6T half way up ("6"). Turn the volume of the amplifier or mixer up enough to get a good level of sound. Refer to the amplifier or mixer instructions on how to set up best gain structure with an instrument for the cleanest possible sound.

Once the desired volume level is found use the EQ on the A6T preamp to find your tone.

Try moving the MID slider down a little to cut this tone. This will bring some smoothness to the sound. Turn up the BASS slider some to add fullness to the sound. Use the TREB



ELECTRET TRANSDUCERS

B-BAND CONTACT INFO:

B-Band Ltd

Konttisentie 8
FI-40800 VAAJAKOSKI
FINLAND

Tel: +358 14 332 9050

Fax: +358 14 332 9001

Email: sales@b-band.com

Internet: www.b-band.com

USA:

B-Band, Inc.
10909 Vanowen Street, Suite 300
North Hollywood, CA 91605
USA

Tel: (818) 508 9412

Fax: (818) 508 9413

Email: sales@b-bandusa.com

Internet: www.b-band.com

Germany:

B-Band GmbH
Ofener Str. 19
80689 München
GERMANY

Tel: 089-990 176 41

Fax: 089-990 176 42

Email: hans.herrmann@b-band.com

Internet: www.b-band.com

B-Band, B-Band logo, A6T, XOM and XOM logo, are either registered trademarks or trademarks of B-Band Ltd in the United States and / or other countries. All specifications are subject to change without prior notice. All rights reserved. Copyright © 1996 - 2008 B-Band Ltd.