# Atlas Digital BlueBridge

BB-88, BB-816, BB168, BB1616

BB-1616 Front



BB-1616 Back

#### Overview

The BlueBridge DSP platforms are powerful and flexible tools offering mission critical solutions to successfully satisfy your customers' application needs. Engineered to strict standards with the highest quality internal components, BlueBridge DSP solutions provide pure clean audio, Ethernet connectivity for cost effective TCP/IP control and open architecture with Drag and Drop programmability. Atlas Sound offers the widest range of open architecture DSP platform I/O configurations of any manufacturer in the industry using the same easy to program software, high quality THAT Corporation microphone preamps, and the same powerful 48KHz, 40 Bit Floating DSP Engine.

### Features:

- 8X8, 8X16, 16X8, & 16X16 I/O Configurations
- Open Architecture Programmability
- High Quality THAT Corporation Mic Preamps
- Touch Panel Options Available
- TCP/IP Third Party Control Capability
- Four Logic Inputs & Outputs
- 48KHz, 40 Bit Floating DSP Engine
- Remote Control Using Optional Wall Plates
- Output Peak & Signal Indicator LED's
- Safety Listed to UL60005

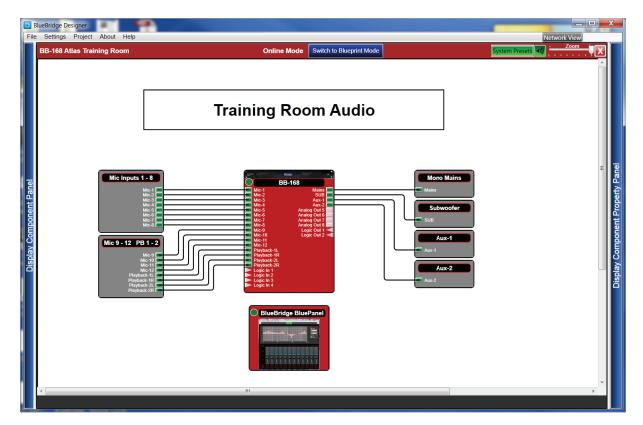
# **Product Description:**

The Atlas Sound BB-88, BB-816, BB168, and BB1616 models are part of the new BlueBridge family of products. The open architecture drag and drop DSP models are offered in an 8x8, 8x16 16x8 and 16x16 I/O configurations with all inputs and outputs balanced. BlueBridge models utilize high quality THAT Corporation microphone preamps and 24 Bit converters to obtain an ultralow noise floor and pure clean sound. BlueBridge models use a 40 Bit Floating Point DSP engine to prevent digital clipping that can occur in other DSP products and to provide the processing power for complex systems. BlueBridge DSP units can operate on an Ethernet network and the optional controls work on a PoE Network

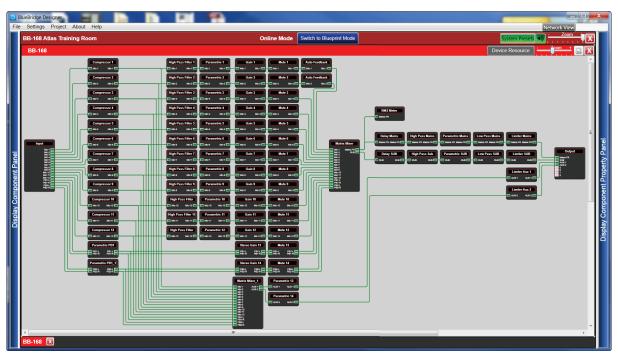
BlueBridge software provided with each system is an intuitive program used to configure audio processing and control capabilities within the device. BlueBridge DSP platforms offer all of the processing tools necessary for complex systems including; EQ's, anti-feedback EQ's, crossovers, delays, gain-sharing and gating auto-mixers, matrix mixers, standard mixers, filters, meters, generators, compressors, expanders, limiters, duckers, and an assortment of logic components to expand system control capabilities. BluePanel controls can be created in the BlueBridge software to create control pages for easy system operation by users of varying levels of system familiarity and knowledge. Blue Panel software can be installed on Windows computers for wireless remote control without consuming large amounts of storage space or slowing down a system.

The BlueBridge DSP platforms are cost effective solutions for the most demanding applications including house of worship, presentation rooms, conference rooms, background & foreground music, courtrooms, zoned paging and many other sound reinforcement and AV applications.

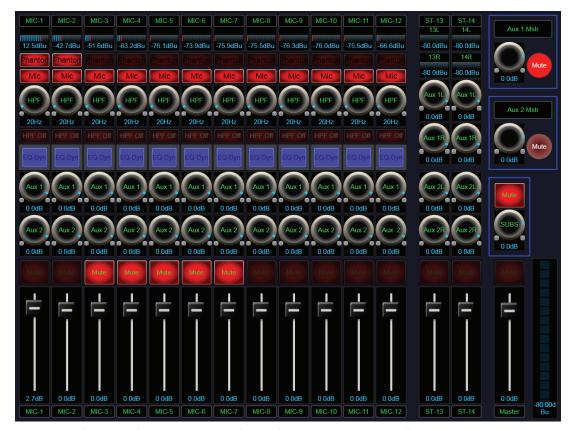




BlueBridge Software Offers the Capability of Displaying Components Connected to Inputs and Outputs



BlueBridge Open Architecture Software Provides Flexibility to Customize For Any Application



BluePanel Controls Can Include Level Slider Controls or Additional Sends, Filters, and Meters

## **WALL CONTROL OPTIONS:**

BlueBridge TouchPanel and Wall Controls are a natural extension of the Blue Bridge DSP platforms and provide a simple and cost effective way to ensure a sophisticated system is user friendly. The wall controls are available in five configurations and can be configured to fit the unique needs of a particular application. The BBWP-TOUCH7B, like the wall controls, makes a complex system easy for the user to operate. The BBWP-TOUCH offers greater flexibility by providing a way for the controls to be customized to meet the exact needs for an application. Even better, the process of creating the graphic interface for BBWP-TOUCH7B is fast, easy and intuitive.



20NE 1
20NE 2
20NE 3
20NE 4
20NE 5
20NE 6
20NE 6



BBWP-S4B



BBWP-S4K1B





BBWP-TOUCH7B



## Specification

## BB-88, BB-816, BB168, BB1616

Input Type

Quantity 8 or 16

Type Mic or Line, GUI Selectable

Configuration Electronically balanced

Gain -40 to +15dB in 0.25 dB steps

Polarity +/- GUI Selectable

Connection PHX Style, 3 Position, 3.5mm spacing

Input Impedance  $>10k\Omega$ 

Maximum Input Level +20dBu

Phantom Power 48V, GUI enabled

**Output Type** 

Quantity 8 or 16

Type Line

Configuration Electronically Balanced

Polarity +/- GUI Selectable

Gain -40 to +15dB in 0.25 dB steps

Connection PHX Style, 3 Position, 3.5mm spacing

 $\begin{array}{ll} \mbox{Output Impedance} & 50 \Omega \\ \mbox{Maximum Output Level} & +20 \mbox{dBu} \\ \mbox{Self-Configuring Dante Digital Ethernet} \end{array}$ 

Self-Comigating Dante Digital Etherne

Digital Audio Performance

**Processor** 40-bit Floating Point

Sampling Rate 48kHz

Analog Converters High Performance 24-bit

Propagation Delay 3ms

General Audio Performance

Frequency Response +/- 0.1dB (20 to 20kHz)

Dynamic Range +10dB type (unweighted)

**CMMR** > 100dB (50 to 10kHz)

Crosstalk < -100dB

Distortion 0.002% (1kHz @+4dBu)

**Network Control** 

Ethernet Network Control TCP/IP

IP Master Reset Push Switch with Security Cover

Logic Control

Input L1, L2, L3, L4, GND, GND, 6 Position

PHX Style 3.5mm

Output NC 1, COM 1, NO 1, NC 2, COM 2,

NO 2, 6 Position PHX Style 3.5mm

DSP modules

EQ Parametric, Graphic, Anti Feedback

Crossover Butterworth, Linkwitz Riley, Bessel,

Slopes: 6 to 48dB per Octave

Filters High Shelf, Low Shelf, All Pass,

Delay 10mS - 2 Second

Mixers Gain Sharing Auto-mixer, Gating Auto-

mixer, Matrix Mixer, Standard Mixer,

LR Mixer, LCR Mixer

Generators Sine Tone, Sign Sweep, White, Pink

Meters: RMS

**Dynamics** Compressor, Expander, Limiter,

Ducker

Logic AND, OR, NOT, NAND, NOR, FlipFlop,

Multiplexor, Encoder, Decoder

System Parameters

Preset Programs 70

Delay Units ms, ft, m

Security locks Password

Front Panel Features

LED's Input & Output One per channel, multi-color type

Signal LED Green

Peak LED Red, -3db before Clip

Status LED

Data Yellow Power Blue

**Rear Panel Connectors:** 

Analog Inputs Oty. 16, 3 Position Phoenix Plug-in

3.5mm

3.5mm

Logic Ports Oty. 2, 6 Position Phoenix Plug-in

3.5mm

Ethernet Port RJ-45

Dante Port: Dual RJ-45

AC Mains Power Standard IEC Socket

General

Rack Space 1RU, 19"

Power 90-240VAC (50-60Hz),

Internal Power Supply

 Dimensions
 19"x1.75"x9" (483x44x229 mm)

 Weight
 7.2 lbs / 3.25 kg (BB-1616)

 Safety
 Safety Listed to UL60005

Power Consumption 18.5W Thermal Dissipation 63 BTU

