

## **BAS002** Amplifier

Amplifier used with BAS001 or BAS003 for Measurement of Building Acoustics & Reverberation Time

## Highlights

- Compact, Lightweight Design
- 500W Output Power
- 5 Hz to 60 kHz bandwidth
- THD + N < 0.12%
- Remote control
- Arbitrary waveform using USB memory
- Pre-programmed pink and white noise
- Fast and easy-to-use
- Utilize the 831 noise generator for fully automated reverberation time measurement
- Fully compliant with Standards: ROHS, CE, ISO 140, ISO 3382, ASTM E90, ASTM E336, ASTM C426, ASTM E2235

## **Applications**

- Reverberation Time
- **Building Acoustics**
- **Absorption Coefficient**
- Room Acoustics

## For Use with Optional Speakers:





Model BAS001

Model BAS003



Measurement of reverberation time, sound isolation, and absorption coefficient are generally important measurements when verifying that a space or material complies with design goals. When making these measurements in the field or laboratory it is important to have equipment that is dependable, portable and easy to set up and use. When coupled with the BAS001 omnidirectional speaker or BAS003 directional speaker, the BAS002 amplifier is the ideal sound source for making room and building acoustics measurements.

For a complete measurement system, use the Larson Davis Model 831 sound level meter configured with the 831-RT reverberation time measurement software in order to easily make in-field measurements. Add DNA software and enable computation of a variety of building acoustic metrics compliant with ISO and ASTM standards with results that can be quickly composed into a fully customizable report.



Specifications			
BAS002 Amplifier			
Acoustic Standards			
ISO 140-3	When used with BAS001		
ISO 140-4	When used with BAS001 When used with BAS001		
ISO 140-5			
ISO 3382-1	When used with BAS001	When used with BAS001 or BAS003	
ISO 3382-7	When used with BAS001  When used with BAS001		
ISO 354	When used with BAS001		
ASTM E90	When used with BAS001  When used with BAS001		
ASTM E336	When used with BAS001 or BAS003		
ASTM E966	When used with BAS003  When used with BAS003		
ASTM E2235	When used with BAS003  When used with BAS001		
DIN 52 210	When used with BAS001 or BAS003		
Power	Which data with BA0001 of	BA0003	
BAS002-U	00 122 E VAC EE CE II-		
BAS002-E	90 - 132.5 VAC, 55 - 65 Hz 190 - 265 VAC, 45 - 55 Hz		
	190 - 200 VAC, 40 - 00 HZ		
Connectors			
	Connector	BNC	
Analog In	Input Voltage	+/-10 Vpk (max)	
	Input Impedance	100 kΩ	
	Connector	BNC	
Analog Out	Output Voltage	+/- 10 Vpk (max)	
	Output Impedance	50 Ω	
Speaker	Connector	Neutrik Speak-on 4-pole	
Digital I/O	Connector	Mini XLR 3-pin male	
	Pin 1 (trigger out)	0 - 5 VDC, 30 mA max Pulse on start and stop	
Digital 1/0	Pin 2 (Ground)	0 VDC	
	Pin 3 (Trigger input)	0 - 5 VDC, 30 mA max Pulse high to start and stop	
Physical			
Dimensions	12.2 x 9.4 x 4.7 in	31 x 24 x 12 cm	
Weight	8.8 lbs	4 kg	
Compliance			
Low Voltage Directive	2006/95/EC		
EN 40 D:	2004/108/EC		
EMC Directive	IEC 60065 6'th Ed		
	IEC 60101-1		
Low Voltage	UL 6500 2'nd Ed		
FCC	FCC part 15b	Class A	
EMC Emissions	IEC 61000-6-4	I	
EMC Immunity	IEC 61000-6-1		
CE	I		
ROHS			

Remote Control Specifications		
Frequency	Industrial, Scientific, and Medical (ISM) frequency band (2.400 GHz–2.4835 GHz) based on Direct Sequence Spread Spectrum (DSSS) technique	
Channels	10, 30, 50, 70 (selectable via software)	
Power	7 levels: 15, 13 (default), 10, 6, -1, -6, -10, -14 dBm EIRP	
Compliance	"Modular Approval (MA) Grant for Cypress module CYWM6935 valid in the USA, Canada, Belgium, Denmark, France, Finland, Germany, Italy, Netherlands, Spain, Sweden, UK	
	It is intended for systems compliant with world-wide regulations covered by	
	ETSI EN 301 489-1 V1.4.1, ETSI EN 300 328-1 V1.3.1 (European Countries);	
	FCC CFR 47 Part 15 (USA and Industry Canada)	
	ARIB STD-T66 (Japan).	
Power	PP3 9V, alkaline or Lilon	
Controls	- Left/right: decrease / increase volume (-80, -75, -7030, -25, -20, -19, -18, -173, -2, -1, 0 dB)	
	- up/down: change/select file	
	- central OK button: source toggle on/off	
	- ON/OFF Switch	
LED Indicator	green flashing: in range, stopped	
	green fixed: in range, playing	
	red fixed: out of radio range	

Ordering	Information	
BAS002-U	90-132.5 VAC, 55-65 Hz	
BAS002-E	190-265 VAC, 45-55 Hz	
Standard A	Accessories	
Flight Cas	se for Amplifier	
Technical	Manual & User's Guide	
Power Co	rd	
USB Key	with Signal Sources	
Remote Control w/ Antenna		
Optional A	accessories	
TRP023 - Heavy Duty Loudspeaker Tripod		
BAS001 - Omnidirectional Speaker		
BAS003 - Directional Speaker		
CBL 180 - 831 AC out to BAS002 Analog In, 6 ft (2m)		
CBL181 - BNC M-M 50 ft (15.2m) extension cable, for use with CBL180		
CBL182 -	Speak-on Extension Cable, 50 ft (15.2m)	



For environmental noise monitoring and building acoustics, **Larson Davis** offers a full line of instruments, accessories and software. For personal noise and vibration exposure monitoring, Larson Davis complements this with sound level meters, personal noise dosimeters, human vibration meters, audiometric calibration systems and hearing conservation programs.

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