HORN LOUDSPEAKERS





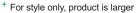
SPT30A⁺, SP308A⁺

BDT30A*

Bogen's Horn Loudspeakers offer high efficiency and excellent intelligibility. Rotary switch-selected power taps make installation quick and easy. SPT and BDT models are compatible with 70V and 25V paging systems, SP models are 8-ohm versions. The KFLDS30T is a 70V/25V wide dispersion, high-intelligibility, reentrant type loudspeaker. The IH8A is a paging horn.

Product Features:

- · Maximum speaker power capacities of 7.5, 15, and 30 watts
- Rotary switch-selected power taps on transformer models Constant voltage (70V/25V) and 8-ohm versions
- (KFLDS30T and BDT30A are 70V/25V only)
- · Tilt & swivel base for easy positioning
- · Sturdy, all-metal construction with mocha enamel finish (KFLDS30T horn flare is constructed of polycarbonate)
- Weatherproof design
- Twin reentrant horns for bi-directional projection (BDT30A only)
- KFLDS30T provides wide-angle projection with a rotatable horn flare



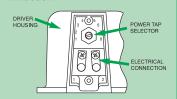
* Some assembly required

KFLDS30T



Special Protection

The SPT15A, SPT30A, BDT30A and KFLDS30T use a cast aluminum end bell specially designed to make them weatherproof. A rotary selector switch is used to set the specific power tap for the speaker. This switch's entry into the end bell is sealed by a special mounting nut with an integral O-ring. A removable plastic panel protects both the rotary switch and the electrical connections. This panel provides a narrow opening for the speaker wires to exit, reducing the chance of water infiltration.



Tilt & Swivel Base

Bogen's 15- and 30-watt horns include a unique and easy-to-use tilt and swivel mounting base that provides nearly 180 degrees of tilt and a full 360 degrees of swivel. A single wing nut locks in the angle of the speaker. Loosening the wing nut frees the speaker in each rotational axis, making it fast and easy to precisely aim the speakers where the sound is needed. The base provides three holes for screw mounting and a slot to allow strapping the speakers to beams. The actual mounting base can easily be removed so that the base can be installed separately. The speakers can then be attached to the bases at a later time.

	Max Power Capacity (Watts)	Frequency Response	Sensitivity (dBspl, 1W @ 4ft.)	Max Sound Level (dBspl, full power @ 4ft.)		e r Taps /atts)	Low-Impedance 8-ohm	Dispersion Angle (degrees)	Connection		Duaduat
Model	Max Pov (Watts)	Freq	Sens (dBsp	Max (dBsp	70V	25V	Low-In 8-ohm	Disp (degr	Conr	Dimensions	Product Weight
SPT5A	7.5	250 Hz-	96	105	7.5, 5, 2.5, 1.25, 0.65	1, 0.62, 0.31	No	120°	Wire	6" dia. x 4" D	1.51b.
SP58A	7.5	14 kHz	96	105	N/A	N/A	Yes	120	Lead	o ula.x4 D	1.510.
SPT15A	15	275 Hz-	109	121	15, 7.5, 3.8, 1.8, 0.9	15, 7.5, 1.8, 0.94, 0.46	No	110°	Screw	9" dia. x 9-1/4" D	4 lb.
SP158A	15	14 kHz	109	121	N/A	N/A	Yes	110	Terminal	5 ula. x 5-1/4 D	3 lb.
SPT30A	30	225 Hz-	110	125	30, 15, 7.5, 3.7, 1.8	15, 7.5, 3.7, 1.8	No	100°	Screw	11" dia. x 10-1/2" D	6 lb.
SP308A	30	14 kHz	110	125	N/A	N/A	Yes	100	Terminal	11 ula. x 10-1/2 D	5 lb.
BDT30A	30	225 Hz- 14 kHz	106**	121**	30, 15, 7.5, 3.7, 1.8	15, 7.5, 3.7, 1.8	No	100°**	Screw Terminal	9-5/8" dia x 12-1/8" D**	7 lb.
IH8A	15	350 Hz- 14 kHz	108	120	N/A	N/A	Yes	130°	Wire Lead	6-1/4" dia. x 6" D	2.5Ib.
KFLDS30T	30	300 Hz- 12 kHz	104	119	30, 15, 7.5, 3.7, 1.8	15, 7.5, 3.7, 1.8, 0.9, 0.5, 0.25	No	70° (Vert.) X 95° (Horiz.)	Screw Terminal	14-3/8" W x 8-1/4" H x 12-7/8" D	6 lb.







for Conduit (For BDT30A, KFLDS30T, SP158A, SP308A, SPT15A, & SPT30A)

HSES10 Horn Speaker **Electrical Box Strap** (pack of 10) (Not for SP58A & SPT5A)

SPEAKERS

EASY DESIGN[™] SPEAKERS



Dimensions	Product Weight
13" dia. x 3-1/4" D	3 lb.

Ceiling Speaker

Bogen's **CS1EZ** is a pre-assembled ceiling speaker comprised of an 8" cone speaker and steel ceiling grille painted with enamel. The **CS1EZ** includes a volume control knob and rear-mounted screw terminal board for easier electrical connection.

Product Features:

- 1-watt, single-tap design
- Screw terminal connections for fast installation
- Designed for 70V amplifier output
- 8" cone speaker for excellent audio quality
- Heavy-duty, wire-wound volume control with knob
- 50 Hz-12 kHz frequency response
- 95 dBspl @ 4 ft. / 1W input sensitivity
- Off-white finish

Horn Loudspeakers HS7EZ, HS15EZ, HS30EZ

Bogen's line of **Easy Design Horn Loudspeakers** are made of weatherproof all-metal construction, thereby making them ideal for both indoor and outdoor use in industrial plants, warehouses, schools, construction sites, and recreational areas. All models come with swivel and tilt mounting bases for greater flexibility in setting the angle of projection.

Product Features:

- 7.5-, 15-, and 30-watt models
- Single-tap design

See p for E

- HS7EZ features 12" lead wire for electrical connections
- HS15EZ and HS30EZ feature screw terminal connections for fast installation
- Designed for 70V amplifier outputs
- Weatherproof design





- Stepped attenuator volume control
- Tilt and swivel mounting base for flexibility in coverage
- Textured mocha enamel

	Model	Frequency Response	Sensitivity	Dispersion	Dimensions	Product Weight
	HS7EZ	250 Hz - 14 kHz	105 dBspl (4 ft./7.5W) input (@1 kHz)	120°	6" dia. x 4" D	2 lb.
pages 17-21	HS15EZ	275 Hz - 14 kHz	121 dBspl (4 ft./15W) input (@1 kHz)	110°	9" dia. x 9-1/4" D	4 lb.
Easy Design.	HS30EZ	225 Hz - 14 kHz	125 dBspl (4 ft./30W) input (@1 kHz)	100°	11" dia. x 10-1/2" D	6 lb.



Wall Baffle Speaker WB1EZ

The **WB1EZ** comes pre-assembled with an 8" cone speaker enclosed in a simulated walnut-finished wooden enclosure with a black grille cloth on front and a recessed volume control.

SIDE

Product Features:

- 1-watt, single-tap design
- Screw terminal connections for fast installation
- Designed for 70V amplifier output
- 8" cone speaker for excellent audio quality
- Recessed volume control
- Designed for easy wall-mount installation; face has 13.5 degree downward angle
- 50 Hz-12 kHz frequency response
- 95 dBspl @ 4ft./1W input sensitivity



EASY DESIGNTM

SELF-AMPLIFIED HORN SPEAKERS

High-Efficiency, Digital Switching, Horn Loudspeakers

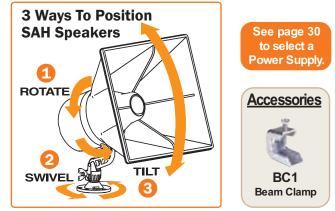
SAH5 (5w) 4, SAH15 (15w) 9, SAH30 (30w)

Using digital switching amplifier technology, these **Self-Amplified Horn Loudspeakers** provide unprecedented low DC current draw and heat dissipation, allowing them to use fewer power supplies, run on longer cable runs, and work at higher ambient temperatures than conventional analog self-amplified horn speakers. The shape of the horn's flare provides a controlled dispersion of sound for better intelligibility. The horn can be rotated on its axis, offering wide dispersion patterns, vertically or horizontally, depending on its position. In addition, these weatherproof, plastic horns are extremely durable and rugged. They can be used in any environment, indoors or outdoors, without affecting sound quality.



Product Features:

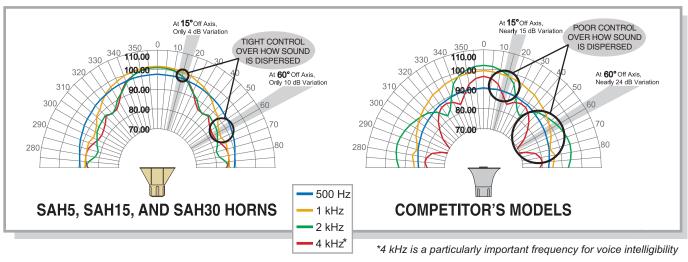
- 5-, 15-, and 30-watt models with built-in amplifiers
- All models operate from 24V DC power source
- Digital switching amplifier technology greatly reduces current consumption when compared to conventional analog self-amplified horn loudspeakers
- Low heat dissipation of the digital switching amplifier allows units to operate with continuous background music and in higher ambient temperatures than conventional analog amplifiers
- Excellent extended frequency response from 1.6" diameter voice coil and 90 mm, 12-ounce magnet structure (SAH5/15), or 100mm, 16-ounce magnet structure (SAH30)
- Rotatable horn allows for the use of a wider (120°) vertical or horizontal dispersion pattern
- Predictable dispersion pattern over the full frequency range ensures excellent intelligibility and ease of layout
- Removable access cover protects terminals and volume control
- Weatherproof, UV-protected mocha finish plastic housing
- Simple, secure, cast aluminum swivel mount
- Screw terminal strip for easy wire connections
- Electrical box mounting strap included



Models	Maximum Power Level	Frequency Response	Maximum dBspl	Dimensions	Product Weight
SAH5	5 watts		119	10-5/8" W	
SAH15	15 watts	275 Hz -14 kHz	124	12"H	6 lb.
SAH30	30 watts		127	11-1/2" D	

Controlled Dispersion

Many horns in the market disperse sound frequencies in a wild and uncontrolled manner. This reduces intelligibility and causes inconsistent sound quality over the horn's coverage angle. Bogen's SAH horns benefit from Bogen's long history as a commercial and pro audio company. Bogen's SAH horns disperse the various frequencies that make up the sound of a page in a very carefully controlled manner. This means that the listener hears clean, crisp intelligible pages over the full coverage area of the horn.



www.bogen.com

SELF-AMPLIFIED METAL HORN SPEAKERS

Traditional Metal Horn Speakers AH5A(5w), AH15A(15w)

The AH5A and AH15A Metal Horn Speakers are rugged, self-contained amplified paging horn assemblies that can be used for high noise paging areas indoors as well as for outdoor use. Their sturdy, weatherproof, all-metal construction allows them to withstand any environment while continuing to provide excellent audio intelligibility for paging and background music.



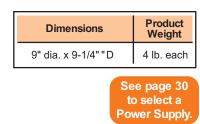




Product Features:

- 5- and 15-watt models with built-in amplifiers
- Screwdriver-adjustable volume controls
- Universal tilt-and-swivel mount
- Banding slots easily secure horns to beams
 and pillars
- 4-conductor, color-coded cable for quick connections to audio and power sources
- Plastic cover protects volume control and provides cable strain relief
- Self-aligning, field-replaceable diaphragm

- Weatherproof, all-aluminum housing
 Speaker and brackets have textured
- mocha enamel finish
- 110° dispersion pattern





Determine Speaker Quantity

Use the chart for the speaker you will use (AH5A or AH15A):

- 1. Choose the level of ambient noise in the area to be covered.
- 2. Locate the area's square footage.
- 3. Where these two measurements meet are two numbers. The number in **GREEN** is the number of speakers required. The number in **RED** is the number of Current Units (CU) needed for that many speakers. (You may need to increase the number of speakers in areas where large objects or shelving project into the coverage area, blocking sound.)

Current Units (min.) = Number in RED

AH5A	

HORN QTY. & MIN. CURRENT UNIT BASED ON AMBIENT		5	10	SI 15	ZE C)F A I 25	REA	TO I 35	BE C	ove	REC) (тн 55	OUS	65	7 5 0	F SC	UAF 80	RE FE 85	ET) 90	95	100
55–65 dB Low Noise – speech is easy	HORNS CU	1 6	1 6	2 12	2 12	3 18	3 18	4 24	4 24	5 30	5 30	6 36	6 36	7 42	7 42	8 48	8 48	9 54	9 54	10 60	10 60
65–75 dB Medium Noise – must raise voice to be heard	HORNS CU	1 6	2 12	3 18	4 24	5 30	5 30	6 36	7 42	8 48	9 54	10 60	10 60	11 66	12 72	13 78	14 84	15 90	15 90	16 96	17 102



HORN QTY. & MIN. CURRENT UNITS (CU) BASED ON AMBIENT NOISE		10	SI 15	ZE C 20						· .			F SQ 75	UAR 80	8 E FE		95	100
75–85 dB High Noise – speech is difficult	1 18	2 36	3 54	4 72	5 90	5 90	6 108	8 144	9 162	10 180		 12 216	13 234		15 270	15 270	16 288	17 306
85–95 dB Very High Noise – speech almost impossible CU	2 36	4 72	6 108	8 144	10 180	12 216	14 252	 		22 396	24 432	 28 504	30 540		34 612	36 648	38 684	40 720

28

www.bogen.com

Ż

PRODUCT ACCESSORIES

	Model #	Accessory Description	Associated Model(s)	Dimensions	Prod. Wt.	Page #	Images
\$	GSRVC	Remote Volume Control	Gold Seal Series Amps	2-3/4" W x 4-1/2" H x 1-3/8" D	2 oz.	41	70
Æ	GSTRC	Gold Seal Series Security Cover	Gold Seal Series Amps	14-3/4" W x 3-1/2" H x 1" D	5 oz.	41	
	MA3	Module Adapter	D-Series, WMA, DPA Amps	Works with advanced modules	1 lb.	39	GSRVC
	PVMC	Power Vector Module Cover	V-Series Amps, M-Class, VMIX	1-1/2" W x 3-1/8" H x 3/8" D	1 oz.	38, 45, 48	MA3
	PVSC	Power Vector Security Cover	V-Series Amps, VMIX	15-1/2" W x 3-1/8" H x 1/2" D	2 oz.	38, 48	e managana (j)
	RVCP	Remote Volume Control Panel	V- & WV-Series Amps, VMIX	1-3/4" W x 4" H	2 oz.	38, 40, 48	PVSC
	TL100	1:1 Ratio Plug-In Transformer	BPA60/HTA125A/HTA250A	1" dia. x 1-1/4" D	1 oz.	46	RVCP TL100/600
	TL600	Plug-In: 600-ohm Transformer	BPA60/HTA125A/HTA250A	1" dia. x 1-1/4" D	1 oz.	46	PVMC

	Model #	Accessory Description	Associated Model(s)	Dimensions	Prod. Wt.	Page #		Images	
	108-2120	Yoke Assembly	AMT-12	24-1/2" W x 12" H x 3" D	7 lb.	1	108-2120		1
	108-2150	Yoke Assembly	AMT-15	27-1/4" W x 13" H x 3" D	8 lb.	1	STORES.	-	108-2150
	109-2140	Rigging Beam Assembly	AMT Series	22" W x 3" H x 2" D	15 lb.	1	. 193		100
	109-2151	Rigging Kit	AMT Series	10" W x 1-1/2" H x 1/4" D	2 lb.	1		09-2140	
	ATS70GB	Tripod Speaker Stand	AMT Series, BP-Series	H: 50"-77"; Base dia.: 40"	6 lb.	1		201	DDF
	BBF	Back Box for Flush Mounting	WV-Series	14-1/2" W x 24-3/4" H x 3-7/8" D	12 lb.	40		109-2151	BBF
	BBS	Back Box for Surface Mounting	WV-Series	16-1/4" W x 26-3/4" H x 3-7/8" D	16 lb.	40			rin an
	BC1	Beam Clamp	Horn Loudspeakers	2-1/8" W x 2" H x 3/4" D	6 oz. 1	3, 16, 26, 28	ATS70GB		5
	CK10	Cable Kit (Silver)	HFCS1/OCS1/OPS1/HFSF1/CSUB/M	PS1/MPS2 10 feet long	4 oz.	2, 6, 7	, allored b	BBS	BC1
	CK10B	Cable Kit (Black)	OPS1B/MPS1B/MPS2B	10 feet long	4 oz.	2, 6	\bigcirc	\bigcirc	\bigcirc
	CK10W	Cable Kit (Off-White)	OPS1W/MPS1W/MPS2W	10 feet long	4 oz.	2, 6	On P	00	20
	GSRPK	Rack Kit	Gold Seal Series Amps	1-1/4" W x 3-1/2" H x 10-1/4" D	2 lb.	41	CK10	CK10B	CK10W
62	HSES10	Horn Speaker Electrical Box Strap	Horn Speakers**	1/2" W x 5-1/2" long	3 oz.	13, 16, 28	\cap		Ń
Ĕ	MR8	Mounting Ring	S86, S810, CS1EZ, ASWG1/DK	12" dia. x 3/4" D	15 lb.*	11, 16, 23	\cup		
X	RE84	Round Enclosure	S86, S810, CS1EZ, ASWG1/DK	12-1/4" dia. x 4-1/2" D	24 lb.*	11, 16, 23	MR8	GSRPK	HSES10
5	RK78	Rack Panel Kit	CDR1	19" W x 3-1/2" H x 7" D	3 lb.	57	1	_	
2	RMPWMK3	Remote Panel Mounting Kit	PM3180	9-1/8" W x 4-3/4" H x 3/4" D	2 lb.	47		RK78	RMPWMK3
Б	RPK35B	Rack Panel Kit	C10/C20/CAM2	19" W x 3-1/2" H x 6-1/2" D	3 lb.	42, 50	RE84		
Ŀ	RPK50	Rack Mount Kit	C35/C60/C100	2-1/2" W x 3-1/2" H x 2-1/8" D	10 oz.	42			
2	RPK53	Rack Mount Kit	BPA60	2" W x 3-1/2" H x 1" D	7 oz.	46	RPK35B	RPK50	RPK53
	RPK79	Rack Mount Kit	PM3180	1" W x 5-1/4" H x 3-1/2" D	14 oz.	47			111100
	RPK82	Rack Mount Kit	TPU35B/60B/100B	3" W x 8-3/4" H	14 oz.	43			
	RPK84	Rack Mount Kit	PCM2000	7" W x 8" H	2 lb.	35		-	
2	RPK86	Rear Rack Support Brackets	M-Class/Black Max Amplifiers	3-3/4" W x 3-1/2" H	7 oz.	44, 45	RPK79	RPK82	RPK84
	RPK87	Rack Mount Kit	V-Series, VMIX	1" W x 3-1/2" H x 3-3/4" D	1 lb.	38, 48			
9	RPK88	Rack Mount Kit	PCM2000	19" W x 10-1/2" H x 2" D	3 lb.	35	DDK00		
\geq	RPK89	Rack Mount Kit (Single)	UDR800	2 Pieces; 1 Rack Space	6 oz.	58	RPK86	RPK87	RPK88
	RPK90	Rack Mount Kit (Double)	UDR800	3 Pieces; 1 Rack Space	4 oz.	58		à 💓	
	RPK91	Rack Mount Kit	TAMB2/TAMB2PS	2 Pieces; 1 Rack Space	7 oz.	32	DDK00	RPK90	RPK91
	RPK93	Rack Mount Kit	CC-Series	1-1/4" W x 3-1/2" H x 8-1/4" D	2 lb.	37	RPK89	RPK90	RPK91
	RPKUTI1	Rack Mount Kit/Security Cover	UTI1	19" W x 5-1/4" H x 2-3/8" D	2 lb.	31	1		= //
	SMTB	Tile Bridge for Easy Install Speakers	ASM1, SM1EZ/SM4T	4-3/8" W x 1-1/4" H x 23-3/4" D	5 lb.*	15, 24			
	TB8	Tile Bridge	S86, S810, CS1EZ, ASWG1/DK	23-3/4" W x 3/4" H x 14-1/2" D	17 lb.*	11, 16, 23	RPK93	RPKU	TI1 SMTB
	TBCR	Tile Bridge Support Ring	HFCS1/OCS1	17" W x 1-1/8" H x 24" D	2 lb.	2, 6	1		
	TBSF	Tile Bridge	HFSF1, SEC4T	10" W x 1/2" H x 24" D	14 oz.	7, 11	Bend	\sim	
	TCSPT1	Terminal Cover for Conduit	Horn Speakers***	1-3/4" W x 3" H x 1-1/4" D		13, 16, 28	TB8	TBCR	TBSF
	TMA812	Tilt Mount Adapter	A12 & A8	7" W x 4-3/4" H x 4-1/2" D	2 lb.	5	1 The	1	1 A - 1
	WMAD	Door for WV-Series Amps	WV-Series	16-1/4" W x 26-3/4" H x 1" D	9 lb.	40	All a	2	-
	WMK1	Wall Mounting Kit	C10/C20/CAM2	14-1/2" W x 16" H x 4" D	10 lb.	42, 50	TMA812	TCSPT1	WMAD WMK1
		ř – – – – – – – – – – – – – – – – – – –							

*Weight based on per carton. Check with Bogen for quantity per carton.

** Horn Speakers: AH5A, AH15A, BDT30A, HS15EZ, HS30EZ, IH8A, KFLDS30T, SP158A, SP308A, SPT15A, & SPT30A.

*** Horn Speakers: AH5A, AH15A, BDT30A, HS15EZ, HS30EZ, KFLDS30T, SP158A, SP308A, SPT15A, & SPT30A.