

Cone Loudspeakers, Wall Baffle, Ceiling Grills, and Assemblies

Speaker Models S86 and S810



S86



S810

Features

- High quality, direct radiator speakers
- 7 watts and 15 watts power handling capacity
- Provision for quick attachment of transformer
- Available with transformer mounted and wired

Specifications

Cone Diameter:

Magnet Weight:

Magnet Material:

Voice Coil Impedance:

Voice Coil Diameter:

Frequency Response:

Axial Sensitivity (at 4 feet with 1-watt input):

Power Handling Capacity (program material):

Depth:

Shipping Weight:

Optional Speaker/Transformer Combinations:

S86T725, S810T725 – S86, S810 speaker with 25/70V (Model T725) transformer

S86T725BR – S86 speaker with 25/70V transformer and terminal strip

S86T725BRV – S86 speaker with 25/70V transformer, terminal strip and volume control

Accessories:

T725 Transformer – 25V or 70V; Power Taps (watts): 4, 2, 1, 1/2, 1/4, 1/8; Voice Coil: 8 ohms

T72510 Transformer – 25V or 70V; Power Taps (watts): 10, 5, 2.5, 1.25, .625; Voice Coil: 8 ohms

Attenuators – AT10A, AT35A: 10-watt, 35-watt attenuators

S86

8 inches (20.3cm)

6 oz. (170g)

Ceramic

8 ohms

3/4" (1.91cm)

50Hz to 12kHz

95dB

7 watts

3-1/8" (7.9cm)

24 @ 40 lbs. (18.1kg)

S810

8 inches (20.3cm)

10 oz. (284g)

Ceramic

8 ohms

1" (2.5cm)

70Hz to 15kHz

96dB

15 watts

3-1/4" (8.3cm)

24 @ 44 lbs. (20kg)

Description

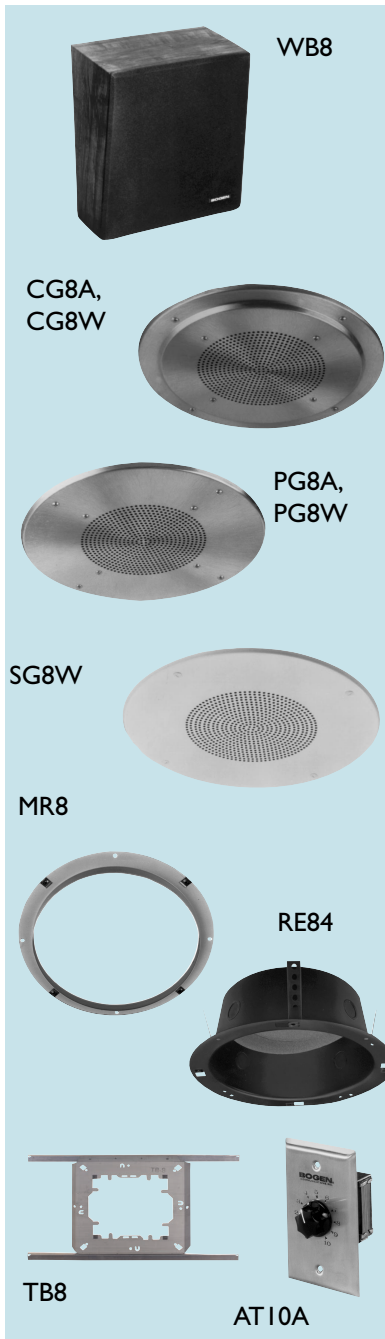
The Bogen Models S86 and S810 eight-inch cone-type loudspeakers provide excellent sound quality and trouble-free operation. Their magnetic structure is designed for maximum air gap energy and the diaphragms have been selected for high sensitivity and optimized response characteristics. The speakers are easy to install in wall baffles or ceiling grilles. Mounting holes have been provided for quick attachment of a transformer.

Transformers include the Model T725, which matches an 8-ohm speaker to a 25- or 70-volt line with six power taps for either voltage (4, 2, 1, 1/2, 1/4, and 1/8 watt), and the Model T72510 which matches an 8-ohm speaker to a 25- or 70-volt line with five power taps for either voltage (10, 5, 2.5, 1.25, 0.625 watt).

The S86 and S810 are available in factory assembled versions, with the Model T725 transformer already mounted. The S86 assembly is also available with a terminal strip and volume control.

Bogen also offers the speakers, fully assembled with a transformer, in an attractively finished wall baffle (Model WBB), or in ceiling grilles for recessed installation. Assemblies are also available with optional volume control and/or terminal strip.

BOGEN



Wall Baffle, Grilles, Accessories

- Sturdily constructed
- Attractively styled and finished
- Wall baffle surface mounts with extra downward sound dispersion

WB8 Wall Baffle

The **WB8** baffle is ruggedly constructed of 3/8" particle board, glued and covered in simulated walnut vinyl with a black grille cloth. Side corner joints are reinforced with glue blocks. It is handsomely styled and looks well in virtually any decor. The sloping front provides extra downward sound dispersion.

Ceiling Grilles

Sturdily constructed and handsomely styled, these metal grilles protect and conceal recessed eight-inch ceiling speakers. They are shipped complete with the hardware needed to mount speaker to grille.

MR8 Steel Plaster Ring

The **MR8** is a cold rolled steel unit which will mount any of the Bogen ceiling grilles, for installations where the **RE84** is not used.

RE84 Round Recessed Steel Enclosure

The **RE84** is a protective enclosure for an eight-inch speaker, designed for recessed installations, and for use with any of the Bogen ceiling grilles. One piece steel construction includes a mounting ring and a foam insert to reduce metallic resonance. The **RE84** is finished in rust-resistant black primer and is tapered for easy stacking.

TB8 Tile Bridge

The **TB8** is a load bearing T-bar support designed to sustain the weight of an eight-inch speaker, grille and protective enclosure in suspended ceiling construction. Use of the **TB8** improves environmental safety and eliminates unsightly sag in 2-by-2 and 4-by-4 acoustic ceiling tiles.

Speaker Line Attenuators

The **AT10A** and **AT35A** are 10-watt and 35-watt attenuators that permit setting the output level at loudspeakers on a 25V or 70V line without altering the amplifier volume setting. They provide a choice of ten stops and an "off" position.

	Wall Baffle		Ceiling Grilles			
	WB8	CG8A	CG8AW	PG8W	PG8A	SG8W*
Speaker Accommodated	8" cone	8" cone	8" cone	8" cone	8" cone	8" cone
Constructed of	3/8" Particle Board	Aluminum (contoured)	Aluminum (contoured)	Steel	Aluminum	Steel
Finish	Walnut Vinyl**	Satin Aluminum	Semi-gloss White Enamel	Semi-Gloss White Enamel	Satin Aluminum	Semi-Gloss White Enamel
Diameter/Dimensions	See Below†	12-5/8"	12-5/8"	13-1/4"	12-7/8"	13-1/4"
Shipping Weight	4 @ 12 lbs.	15 @ 8 lbs.	15 @ 9 lbs.	20 @ 27 lbs.	20 @ 10 lbs.	10 @ 13 lbs.

* Features hidden speaker mounting studs • **With black grille cloth • †Width: 9-1/2", Height: 9-1/2", Depth: Top – 5-1/4", Base – 3-1/4"

Assemblies For Easy Installation

- Speaker plus transformer
- Speaker, transformer, baffle or grille
- Optional volume control
- Optional terminal strip

Labor-saving, factory-assembled versions of the **S86** and **S810** loudspeakers are available. Both can be ordered with the model **T725** transformer mounted and wired. The **S86** can also be ordered with a transformer and terminal strip for easy connection to the audio line.

For even greater convenience and time-savings, the speakers are available fully assembled on a white ceiling grille (model **PG8W**) for recessed installation, or in a wall-mounting baffle (model **WB8**). The assembled versions can also include a volume control (recessed or knob) and/or terminal strip, as listed below.

S86T725(BR) & S810T725

The basic factory-assembled loudspeaker. Includes the **S86** or **S810** speaker with model **T725** transformer mounted and wired. The **S86** can also be ordered with a terminal strip (**S86T725BR**).

S86T725PG8W

The **S86** loudspeaker with model **T725** transformer is available mounted to a **PG8W** ceiling grille. The list below shows all the mountable configurations:

S86T725PG8W	S86T725 mounted to PG8W grille
S86T725PG8WVR	S86T725PG8W with recessed volume control
S86T725PG8WVK	S86T725PG8W with knob volume control
S86T725PG8WBR	S86T725PG8W with terminal strip
S86T725PG8WBRVR	S86T725PG8WBR with recessed volume control
S86T725PG8WBRVK	S86T725PG8WBR with knob volume control

S810T725PG8W

The **S810** loudspeaker with model **T725** transformer is available mounted to a **PG8W** ceiling grille. The list below shows all the available configurations:

S810T725PG8W	S810T725 mounted to PG8W grille
S810T725PG8WVR	S810T725PG8W with recessed volume control
S810T725PG8WVK	S810T725PG8W with knob volume control

WBS8T725 & WBS810T725

The **S86** and **S810** loudspeakers with model **T725** transformer are available mounted to the **WB8** baffle. The list below shows all the available configurations:

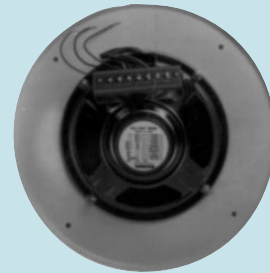
WBS8T725	S86T725 mounted in WB8 baffle
WBS8T725V	WBS8T725 with volume control
WBS8T725BR	WBS8T725 with terminal strip
WBS8T725BRV	WBS8T725BR with volume control
WBS810T725	S810T725 mounted in WB8 baffle



S86T725



S86T725BR



S86T725PG8WBR



WBS8T725BR

Architects and Engineers Specifications

S86 Cone Loudspeaker

The loudspeaker shall be a Bogen model **S86** (or **S86T725**, or **S86T725BR**), or equivalent, eight-inch cone-type loudspeaker, having a frequency response of at least 50Hz to 12kHz. Axial sensitivity shall be 95dB, at four feet with one watt input. The loudspeaker shall have a six-ounce ceramic magnet, a three-quarter inch voice coil, and a power handling capacity of seven watts, minimum. Mounting holes shall be provided for attaching an optional transformer. Speaker depth shall be 3-1/8".

– (For **S86T725** add) A transformer, capable of matching an 8-ohm loudspeaker to a 25-volt or 70-volt line, and providing power taps of 4, 2, 1, 1/2, 1/4, and 1/8 watts shall be included. The transformer primary and secondary leads shall be stripped, tinned, and shall be at least six inches in length.

– (For **S86T725BR** add) A terminal strip shall be provided for connection of the audio line. Terminals shall be labeled for 4, 2, 1, 1/2, 1/4, and 1/8 watt connection.

S810 Cone Loudspeaker

The loudspeaker shall be a Bogen model **S810** (or **S810T725**), or equivalent, eight-inch cone-type loudspeaker, having a frequency response of at least 70Hz to 15kHz. Axial sensitivity shall be 96dB, at four feet with one watt input. The loudspeaker shall have a ten-ounce ceramic magnet, a one-inch voice coil, and power handling capacity of 15 watts, minimum. Mounting holes shall be provided for attaching an optional transformer. Speaker depth shall be 3-1/4".

– (For **S810T725** add) A transformer, capable of matching an 8-ohm loudspeaker to a 25-volt or 70-volt line, and providing power taps of 4, 2, 1, 1/2, 1/4, and 1/8 watts shall be included. The transformer primary and secondary leads shall be stripped, tinned, and shall be at least six inches in length.

WB8 Wall Baffle

The loudspeaker baffle shall be a Bogen model **WB8**, or equivalent, capable of housing an eight-inch cone-type loudspeaker and angled for additional downward sound dispersion. The baffle shall be constructed of 3/8" particle board, glued and covered in simulated walnut vinyl. Glue blocks shall be used to reinforce all side corner joints. The speaker opening shall be covered with a black grille cloth. Hardware for mounting speaker to baffle shall be supplied with the unit. Overall dimensions shall be 9-1/2"W x 9-1/2"H x 5-1/4"D [top] x 3-1/4"D [base].

Ceiling Grilles

– (Use for **CG8A**) The ceiling speaker grille shall be a Bogen model **CG8A** aluminum grille, or equivalent, capable of protecting and concealing a recessed eight-inch cone-type loudspeaker. The diameter of the grille shall be 12-5/8" inches (32cm) and it shall be finished in satin aluminum.

– (Use for **CG8AW**) The ceiling speaker grille shall be a Bogen model **CG8AW** aluminum grille, or equivalent, capable of protecting and concealing a recessed eight-inch cone-type loudspeaker. The diameter of the grille shall be 12-5/8" inches (32cm) and it shall be finished in white semi-gloss enamel.

– (Use for **PG8W**) The ceiling speaker grille shall be a Bogen model **PG8W** steel grille, or equivalent, capable of protecting and concealing a recessed eight-inch cone-type loudspeaker. The diameter of the grille shall be 13-1/4 inches (33.6cm) and it shall be finished in white semi-gloss enamel.

– (Use for **PG8A**) The ceiling speaker grille shall be a Bogen model **PG8A** aluminum grille, or equivalent, capable of protecting and concealing a recessed eight-inch cone-type loudspeaker. The diameter of the grille shall be 12-7/8 inches (32.7cm) and it shall be finished in satin aluminum.

– (Use for **SG8W**) The ceiling speaker grille shall be a Bogen model **SG8W** steel grille, or equivalent, capable of protecting and concealing a recessed eight-inch cone-type loudspeaker. The diameter of the grille shall be 13-1/4 inches (33.6cm), the speaker mounting studs shall be hidden, and the grille shall be finished in white semi-gloss enamel.

Wall Baffle/Speaker Assemblies

WBS8T725

The surface-mounting loudspeaker assembly shall be a Bogen model **WBS8T725** (or **WBS8T725V**, **WBS8T725BR**, or **WBS8T725BRV**), or equivalent, eight-inch cone-type loudspeaker having a frequency response of at least 50Hz to 12kHz. Axial sensitivity shall be 95dB, at four feet with one watt input. The loudspeaker shall have a six-ounce ceramic magnet, a three-quarter inch voice coil, and a power handling capacity of seven watts, minimum. A transformer, capable of matching an 8-ohm loudspeaker to a 25-volt or 70-volt line, and providing power taps of 4, 2, 1, 1/2, 1/4, and 1/8 watts shall be included. The transformer primary and secondary leads shall be stripped, tinned, and shall be at least six inches in length.

The loudspeaker shall be assembled in a wall baffle for surface mounting, angled for additional downward sound dispersion. The baffle shall be constructed of 3/8" particle board, glued and covered in simulated walnut vinyl. Glue blocks shall be used to reinforce all side corner joints. The speaker opening shall be covered with a black grille cloth. Overall dimensions shall be 9-1/2"W x 9-1/2"H x 5-1/4"D [top] x 3-1/4"D [base].

– (For **WBS8T725V** add) The assembly shall include a control for adjusting the volume of the loudspeaker.

– (For **WBS8T725BR** add) A terminal strip shall be included for connection of the audio line. Terminals shall be labeled for 4, 2, 1, 1/2, 1/4, and 1/8 watt power connection.

– (For **WBS8T725BRV** add) A terminal strip shall be included for connection of the audio line. Terminals shall be labeled for 4, 2, 1, 1/2, 1/4, and 1/8 watt power connection. A control shall also be included for adjusting the volume of the loudspeaker.

WBS810T725

The surface mounting loudspeaker shall be a Bogen model **WBS810T725**, or equivalent, eight-inch cone-type loudspeaker having a frequency response of at least 70Hz to 15kHz. Axial sensitivity shall be 96dB, at four feet with one watt input. The loudspeaker shall have a ten-ounce ceramic magnet, a one-inch voice coil, and a power handling capacity of 15 watts, minimum. A transformer, capable of matching an 8-ohm loudspeaker to a 25-volt or 70-volt line, and providing power taps of 4, 2, 1, 1/2, 1/4, and 1/8 watts shall be included. The transformer primary and secondary leads shall be stripped, tinned, and shall be at least six inches in length.

The loudspeaker shall be assembled in a wall baffle for surface mounting, angled for additional downward sound dispersion. The baffle shall be constructed of 3/8" particle board, glued and covered in simulated walnut vinyl. Glue blocks shall be used to reinforce all side corner joints. The speaker opening shall be covered with a black grille cloth. Overall dimensions shall be 9-1/2"W x 9-1/2"H x 5-1/4"D [top] x 3-1/4"D [base].

Ceiling Grille/Speaker Assemblies

S86T725PG8W

The loudspeaker assembly shall be a Bogen model **S86T725PG8W** (or **S86T725PG8WVR**, **S86T725PG8WVK**, **S86T725PG8WBR**, **S86T725PG8WBRVR**, or **S86T725PG8WBRVK**), or equivalent, eight-inch cone-type loudspeaker, having a frequency response of at least 50Hz to 12kHz. Axial sensitivity shall be 95dB, at four feet with one watt input. The loudspeaker shall have a six-ounce ceramic magnet, a three-quarter inch voice coil, and a power handling capacity of

seven watts, minimum. A transformer, capable of matching an 8-ohm loudspeaker to a 25-volt or 70-volt line, and providing power taps of 4, 2, 1, 1/2, 1/4, and 1/8 watts shall be included. The transformer primary and secondary leads shall be stripped, tinned, and shall be at least six inches in length.

The loudspeaker shall be assembled on a 13-1/4 inch (33.6cm) steel ceiling grille, finished in white semi-gloss enamel.

– (For **S86T725PG8WVR** add) A recessed control shall be included to adjust the volume of the loudspeaker.

– (For **S86T725PG8WVK** add) A control, accessible from the front of the grille shall be included to adjust the volume of the loudspeaker.

– (For **S86T725PG8WBR** add) A terminal strip shall be included for connection of the audio line. Terminals shall be labeled for 4, 2, 1, 1/2, 1/4, and 1/8 watt power connection.

– (For **S86T725PG8WBRVR** add) A terminal strip shall be included for connection of the audio line. Terminals shall be labeled for 4, 2, 1, 1/2, 1/4, and 1/8 watt power connection. A recessed control shall be included to adjust the volume of the loudspeaker.

– (For **S86T725PG8WBRVK** add) A terminal strip shall be included for connection of the audio line. Terminals shall be labeled for 4, 2, 1, 1/2, 1/4, and 1/8 watt power connection. A control, accessible from the front of the grille, shall be included to adjust the volume of the loudspeaker.

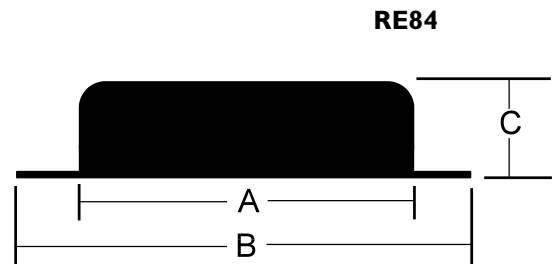
S810T725PG8W

The loudspeaker shall be a Bogen model **S810T725PG8W** (or **S810T725PG8WVR**, or **S810T725PG8WVK**), or equivalent, eight-inch cone-type loudspeaker, having a frequency response of at least 70Hz to 15kHz. Axial sensitivity shall be 96dB, at four feet with one watt input. The loudspeaker shall have a ten-ounce ceramic magnet, a one-inch voice coil, and a power handling capacity of 15 watts, minimum. A transformer, capable of matching an 8-ohm loudspeaker to a 25-volt or 70-volt line, and providing power taps of 4, 2, 1, 1/2, 1/4, and 1/8 watts shall be included. The transformer primary and secondary leads shall be stripped, tinned, and shall be at least six inches in length. The loudspeaker shall be assembled on a 13-1/4 inch (33.6cm) steel ceiling grille, finished in white semi-gloss enamel.

Accessories

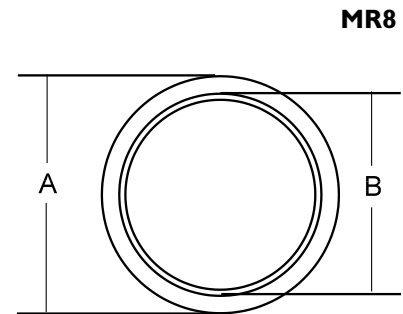
RE84

The protective enclosure for the eight-inch cone-type loudspeaker shall be a Bogen model **RE84**, or equivalent, designed for recessed installations. It shall be constructed of one-piece heavy gauge steel, and shall include a speaker mounting ring. A foam insert shall be permanently attached to the inner surface, to prevent metallic resonance. Four combination 1/2" – 3/4" conduit knockouts shall be provided at 90 degree intervals, and the unit shall be finished in a rust retardant black primer coating. The dimensions shall be: A, 12-1/4" (31.1 cm); B, 10" (25.4 cm); C, 4" (10.2 cm).



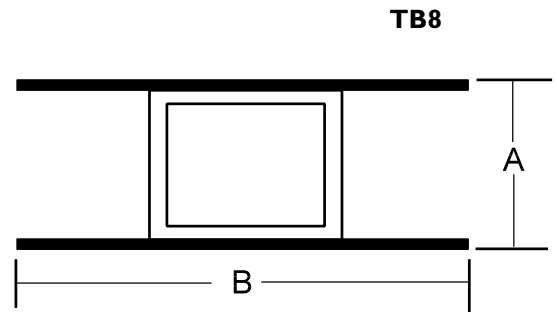
MR8

The plaster ring shall be a Bogen model **MR8**, or equivalent, circular cold rolled steel unit. It shall be finished in a rust retardant gray primer coating, and the dimensions shall be: A, 11-3/4" (29.85 cm); B, 8-7/16" (21.4 cm).



TB8

The load bearing T-bar support shall be a Bogen model **TB8**, or equivalent, capable of sustaining the weight of an eight-inch speaker, grille and protective enclosure in suspended ceiling construction. It shall be manufactured of steel and shall be finished with a rust retardant galvanized coating. The unit shall measure: A, 14-1/2" (36.8 cm); B, 23-3/4" (60.3 cm).



Attenuators

The speaker line attenuator shall be a Bogen model (specify **AT10A** or **AT35A**), and shall permit setting the output level at loudspeakers on a 25V or 70V line without altering the amplifier volume setting. The attenuator shall provide a choice of ten stops and an "off" position.