



MODEL 165-8/16G

BASS HORN DRIVER LOUDSPEAKER

Manufacturing Company

Iconic Manufacturing Company proudly offers one of the most efficient low frequency loudspeakers built anywhere by any company at any time, the **Iconic™ Model 165-G Series Bass Horn Driver Loudspeaker**. Designed to provide unsurpassed performance in low frequency horn and vented horn enclosures, the **Iconic Model 165-G Series Bass Horn Driver Loudspeaker** is the loudspeaker of choice where superb clarity, natural sound quality, high efficiency, and excellent frequency response are a necessity.

❑ **Bass Horns: The RIGHT Type Of Enclosure For Most Low-Frequency Applications**

It has long been established that horns provide the most efficient transfer of acoustic energy to the air. In addition, a properly designed horn-type loudspeaker exhibits lower distortion, greater linearity, and more natural sounding reproduction than do other types of loudspeaker systems.

Across the audible range of human hearing, the advantages of using high and low frequency horns in sound reproduction are both well recognized and desired by discerning listeners everywhere. Low frequency (bass) horns are especially effective in venues where the acoustic energy must be directed away from hard reflective surfaces, such as walls and ceilings. They also enable the sound system into which they are incorporated to reproduce the dynamics of any given program material with stunning realism.

In order for systems that do not incorporate bass horns in their design to reach the farthest seats in a large facility with sufficient low frequency energy, it is necessary to increase their acoustic output. The result is that, while they may sound fine in the *back rows*, this type of compromised low frequency system nearly deafens those who are unfortunate enough to have to sit near them.

Not so with a properly designed and installed system that uses bass horns! Bass horns reproduce the program material so accurately and effortlessly that everyone in the room can hear even the slightest nuances of the audio without the long term listening fatigue associated with other types of systems. In fact, the frequency response and dynamic levels available from a properly designed and installed bass horn system are so uniform that they literally *draw the listeners into the program material*, rather than merely throw it at them. When directivity, accuracy, clarity, and naturalness of reproduction are required, bass horns are the low frequency systems of choice for discriminating listeners, designers, installers, and performers

❑ **A TRUE LOW-FREQUENCY BASS HORN DRIVER LOUDSPEAKER**

The design and resultant performance of the **Iconic Model 165-G Series** came as the result of years of in-depth research into the behavioral characteristics of bass horns by a team comprised of the finest loudspeaker engineers in the industry. Although many loudspeakers of various types had been used in bass horns since they were first invented over seventy years ago, it was found that there was not a single loudspeaker available that was *specifically designed* to be used in them. Instead, customers had to make do with low frequency loudspeakers that were more of the “general purpose” type, rather than having ones that were optimized for use in a low frequency horn.

The **Iconic Model 165-8G, Model 165-16G, and Model 165-8GHP Bass Horn Drivers** changed all that. Building upon proven manufacturing



techniques and materials, the design team created an essentially all-new low frequency loudspeaker that is *optimized specifically for the bass horn*.

❑ **Digital Ready? OF COURSE!**

One of the most impressive aspects of modern digital sound recordings is the low frequency content found in them. In order to attempt to reproduce these sounds, most “digital ready” loudspeakers incorporate large heavy voice coils, inarticulate suspension systems, and cones that weigh far too much to be able to reproduce the middle of the audio spectrum accurately. They also require huge amounts of amplifier power to operate. In addition, most of these designs incorporate voice coils that “overhang” outside of the magnetic field. This method of construction results in a significant loss of control of cone movement, which reduces the ability of the loudspeaker to articulate sounds accurately

The **Iconic Model 165-8G Bass Horn Driver** doesn’t resort to such techniques in order to be able to respond to the demands of digital music and sound effects. The **Model 165-G Series** speakers have a lightweight cone, high-compliance suspension, and the low-frequency voice coil remains in the magnetic gap at all times. When used in a properly designed bass horn, these features allow them to have tighter bass, cleaner sound, and more accurate low-frequency sound reproduction than virtually any other system on the market today.

Constructed using a massive 132-ounce FerriteV magnet that provides 15,500 gauss of flux density, an edgewound aluminum flatwire voice coil, a light cone assembly, and a low distortion cloth suspension, the **Model 165-G Series** are low frequency loudspeakers that exhibit extended bass response, extremely high linearity, and amazing efficiency. Quite literally, there is nothing like them available anywhere, at any price.

***You Can HEAR
The Difference!™***

165-G SERIES BASS HORN LOW-FREQUENCY LOUDSPEAKERS

PERFORMANCE SPECIFICATIONS -

Frequency Response*:	165-8G	165-16G	165-8GHP
Enclosure: 516A	60-4kHz	65-4kHz	70-4kHz
517A	55-4kHz	60-4kHz	65-4kHz
528A	50-4kHz	55-4kHz	60-4kHz
210A	40-4kHz	50-4kHz	50-4kHz

Power Handling**:	75 watts	75 watts	200 watts
--------------------------	----------	----------	-----------

Pressure Sensitivity***:	165-8G	165-16G	165-8GHP
Enclosure: 516A	102 dB	103 dB	103.5 dB
517A	104.5 dB	105.5 dB	106 dB
528A	103 dB	104 dB	104.5 dB
210A	107 dB	108 dB	108.5 dB

Minimum Impedance:	8 ohms	16 ohms	8 ohms
---------------------------	--------	---------	--------

Input Connections: .25-inch spade type terminals.

Thiele-Small Parameters:	165-8G	165-16G	165-8GHP
---------------------------------	---------------	----------------	-----------------

<i>X_{max} (inch)</i>	0.17	0.15	0.12
<i>R_e (ohms)</i>	6.20	11.30	5.60
<i>V_d (cu. in.)</i>	22.40	19.70	15.80
<i>F_s (Hz)</i>	37.00	37.00	37.00
<i>V_{as} (cu. ft.)</i>	12.40	12.20	12.10
<i>Ref. Eff (%)</i>	6.00	7.50	8.60
<i>Q_{ts}</i>	0.269	0.215	0.187
<i>Q_{ms}</i>	5.00	5.00	4.50
<i>Q_{es}</i>	0.284	0.225	0.195

Magnet Type: Ferrite V

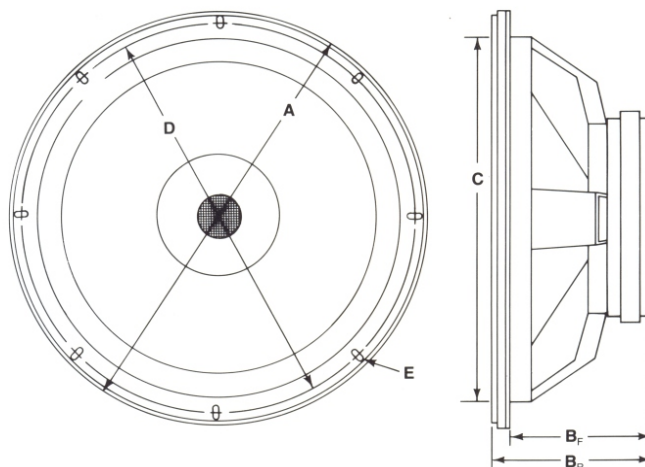
Magnet Weight: 132 ounces

Flux Density: 15,500 Gauss

Net Weight: 30 pounds.

Finish: Gray powder coat paint.

Loudspeaker Mounting Dimensions:



- A = Loudspeaker Diameter: 16"
- B_F = Depth When Front Mounted: 5 7/8"
- B_R = Depth When Rear Mounted: 6 11/16"
- C = Baffle Opening Diameter: 14 1/8"
- D = Bolt Circle Diameter: 15"
- E = Bolt Hole Slots: 1/4" x 3/4" (8 slots spaced 45° apart)

NOTES:

- * Low frequency limit is the 3 dB down point using the particular enclosure and the Thiele/Small parameters of the loudspeaker.
- ** AES power rating (measured Power = E^2/R , using Pink Noise with a crest factor of 6 dB and a band limit of 60-600 Hz).
- *** Measured in the free-field at 4' on-axis with one watt (Power = E^2/R), of band-limited pink noise from 100 to 1000 Hz.

Iconic *Manufacturing Company*
www.iconicspkrs.com

© Iconic Manufacturing Company, LLC.

Specifications subject to change without notice. Overall performance will be maintained or improved.
Iconic, Tangerine, Mantaray, SuperCrossover, and "You can HEAR The Difference"
are trademarks of the Iconic Manufacturing Company.

IMC-165G, Rev. 5, 01/26/05