



Gloria 3.2 Speaker Installation

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Summary

Starting with Gloria 3.2, Gloria Music is transitioning from an oval speaker to a round speaker. The main reason is to improve the sound quality. A secondary reason is to increase supply flexibility, to move away from special orders and long lead times, and so we're no longer tied to a single vendor.

The oval speaker simply dropped into a slot in the case. The round speaker requires a transition plate. Installation will require additional steps, described in this document.

Materials

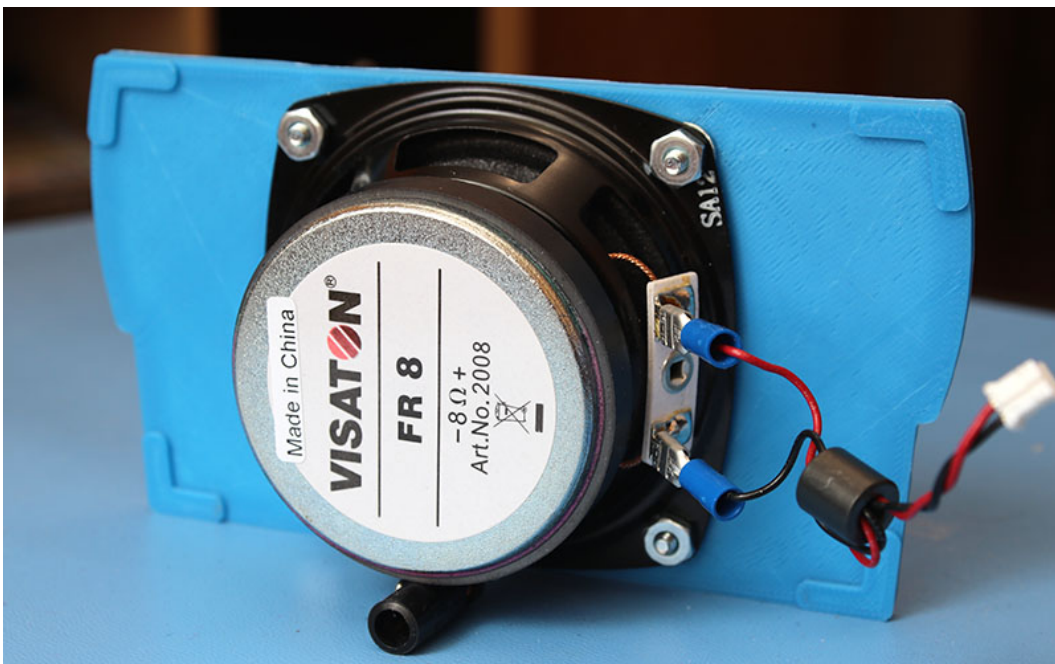
- Speaker. FR8-8 by Visaton.
- Transition plate. Custom by Uniphase (supplied with Gloria case).
- Installation hardware. Set of 4 machine screws, washers and nuts. 6-32x3/8 recommended, e.g. Fastenal SKUs 1128795, 1133070, 1136020.
- Connector. 2-pin female header. PHR-2 by JST Sales America.
- Ferrite bead. LFB090050-000 by Laird.
- Hookup wire. Red & black.

Tools

- Screwdriver and / or nutdriver.
- Assembly jig or fixture (optional).

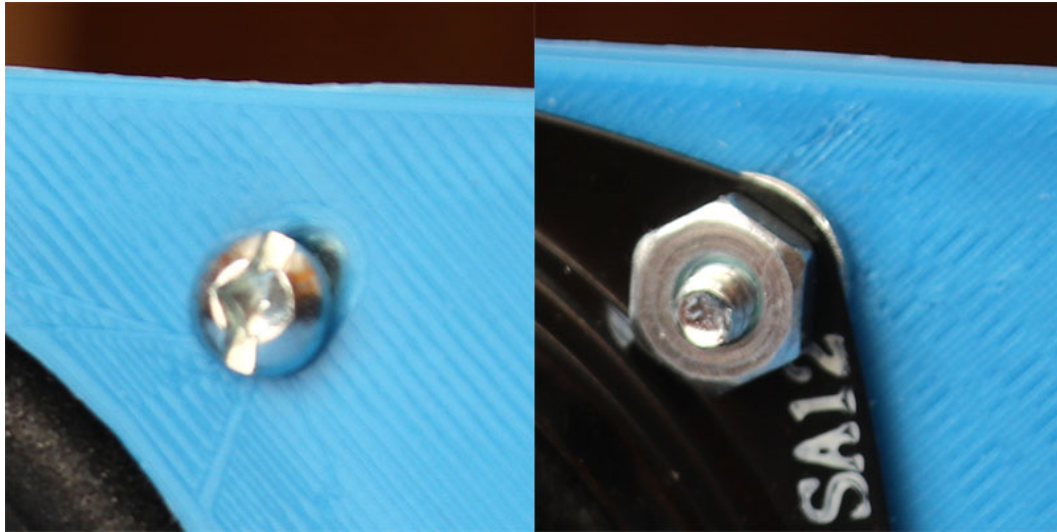
Installation

The speaker attaches to the transition plate with four machine screws or rivets. There is a recessed step on the back of the plate that the speaker fits into. The flat face of the plate faces outward.



The back of the plate has four corner bosses that hold the assembly firmly in the case slot. The speaker & plate assembly must fit snugly in the slot once the two case halves are assembled.

The speaker must be installed with the terminals and cable on the right, when viewed from the back of the speaker. The widest part of the plate is at the top. See the picture above. Cables are twisted together, passed twice through the ferrite bead (one loop), and soldered to the terminals. The wide terminal is the positive connection, and has a red cable. The narrow terminal has a black cable.



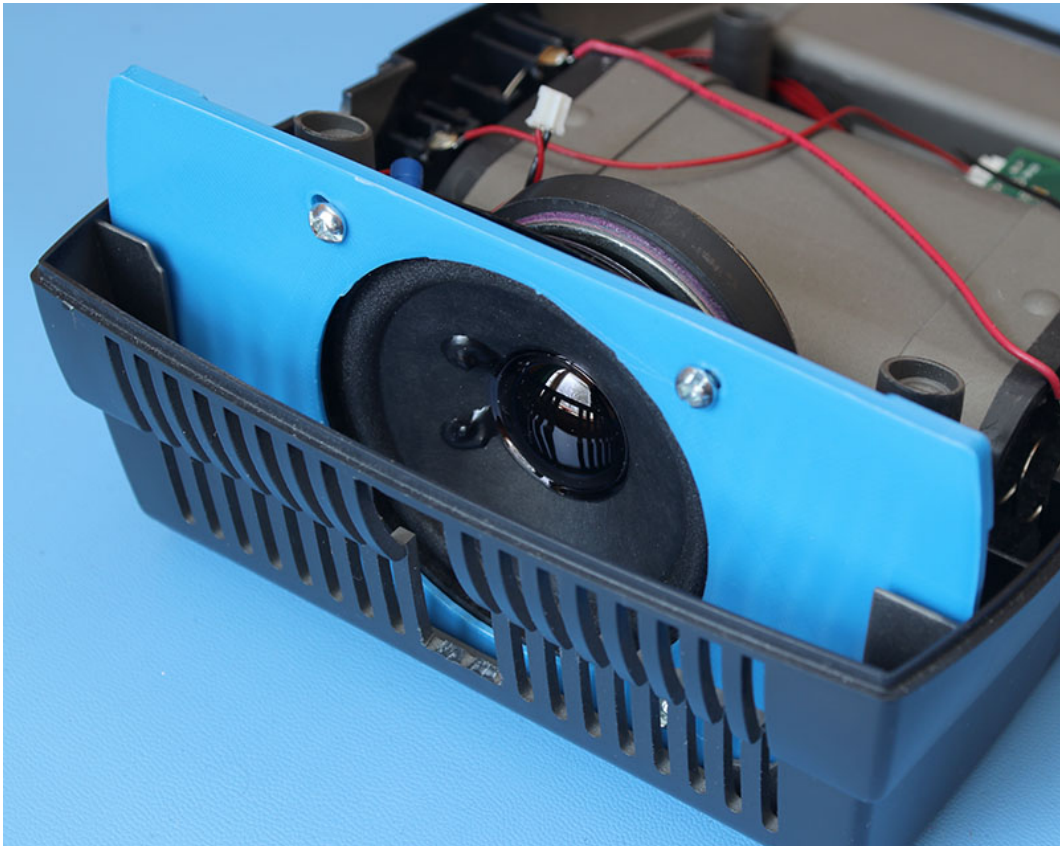
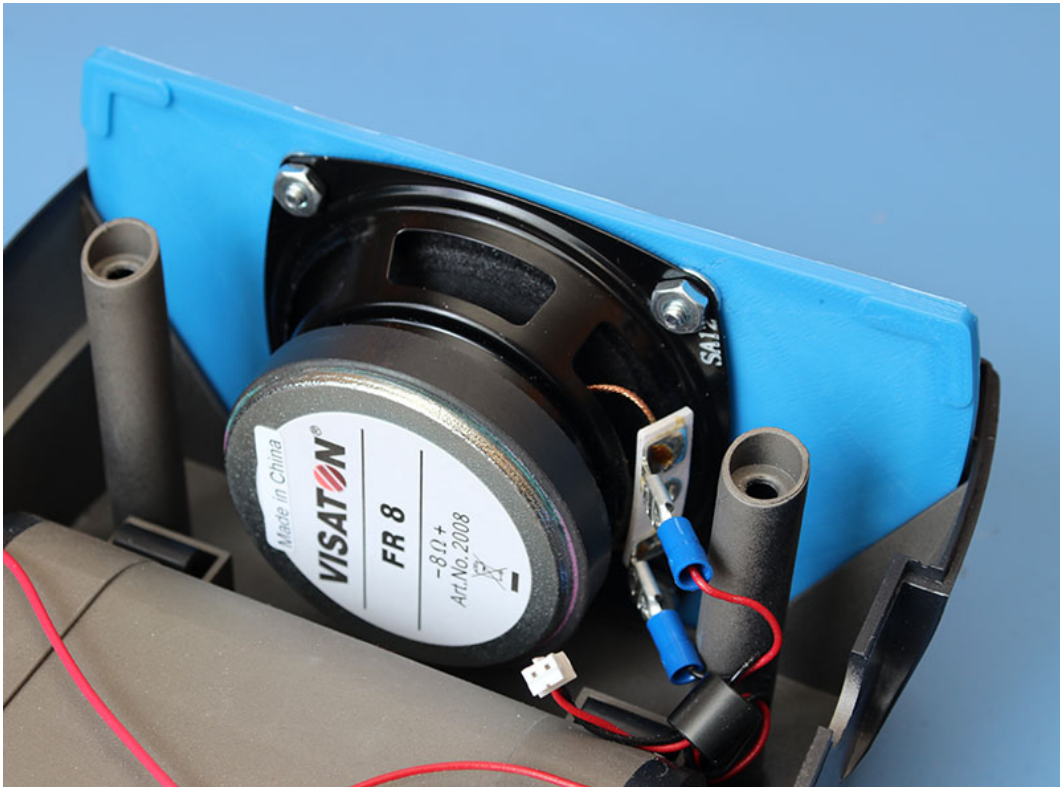
The screw heads are on the outer plate face. The nuts and screw ends are on the back side. There is a washer between the plate and the speaker acting as a spacer. The nut and screw end may extend up to 7mm (0.275") past the speaker.

The screws must not be over torqued, or the plastic plate may crack.

The speaker and plate mounting holes are slotted to allow for variation between parts, so care must be taken to ensure the speaker is centered on the plate. Most importantly, the speaker must not extend beyond the top or bottom of the plate.

The completed assembly drops into the slot at the back of the case bottom half, narrow side down. The speaker terminals and cable pass in front of the right hand mounting post. See the pictures below. The assembly will be loose in the slot until the two halves of the case are assembled and all four corner bosses are engaged.

Ensure the plate engages the slot correctly when assembling the other half of the case.

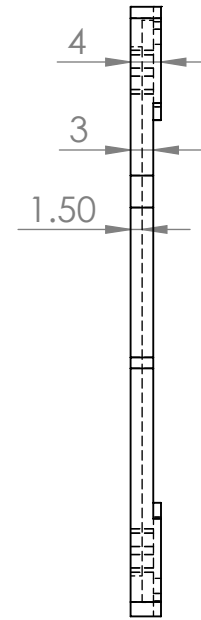
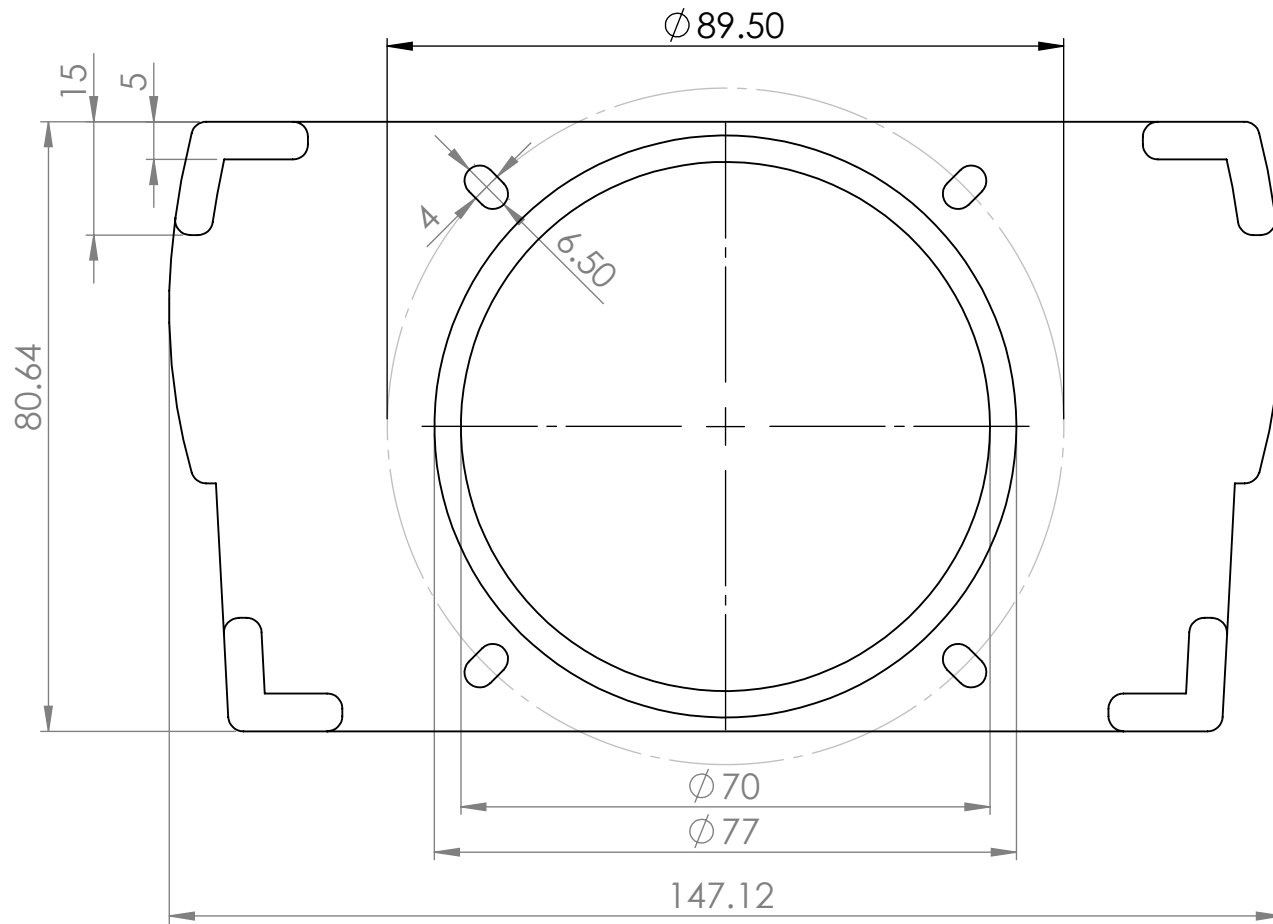


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		UNLESS OTHERWISE SPECIFIED:		NAME	DATE
		DIMENSIONS ARE IN MM	DRAWN	SROTHUSBERGER	27/03/18
		TOLERANCES:	CHECKED		
		FRACTIONAL \pm	ENG APPR.		
		ANGULAR: MACH \pm BEND \pm	MFG APPR.		
		TWO PLACE DECIMAL \pm	Q.A.		
		THREE PLACE DECIMAL \pm	COMMENTS:		
		INTERPRET GEOMETRIC TOLERANCING PER:			
		MATERIAL			
		ABS			
		FINISH			
NEXT ASSY	USED ON				
APPLICATION		DO NOT SCALE DRAWING			

TITLE:		
Speaker Transition Plate		
SIZE	DWG. NO.	REV
A	SpkPlate	1
SCALE: 1:1	WEIGHT:	SHEET 1 OF 1

2

1

FR 8 - 8 Ohm

Art. No. 2008



8 cm (3,3") Breitbandlautsprecher mit guten Tieftoneigenschaften, ausgeglichenem Frequenzgang und hohem Wirkungsgrad. Besonders geeignet als Einbaulautsprecher für die Musikwiedergabe sowie zur Bestückung von wirkungsstarken ELA-Zeilen.

8 cm (3.3") fullrange speaker with good bass reproduction, balanced frequency response and high efficiency. Especially suitable as built-in speaker for music reproduction and as driver for 100 V network column speakers.

Anwendungsmöglichkeiten / Typical applications

- Schmale ELA-Zeilen
 - Kontroll-Lautsprecher für elektronische Geräte
 - Deckenlautsprecher in Schienenfahrzeugen und Bussen
 - Elektronische Musikinstrumente
-
- Narrow network column speakers
 - Control speaker for electronic devices
 - Ceiling-mounted speakers in railway carriages and busses
 - Electronic musical instruments

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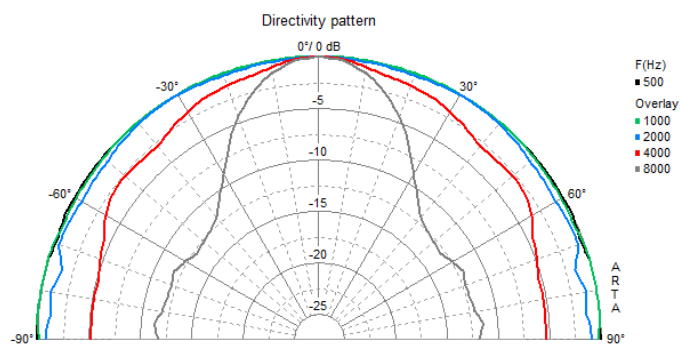
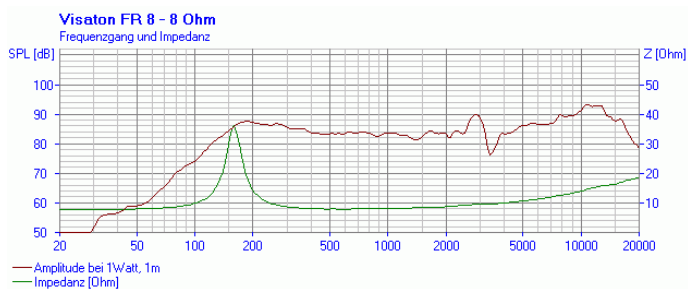
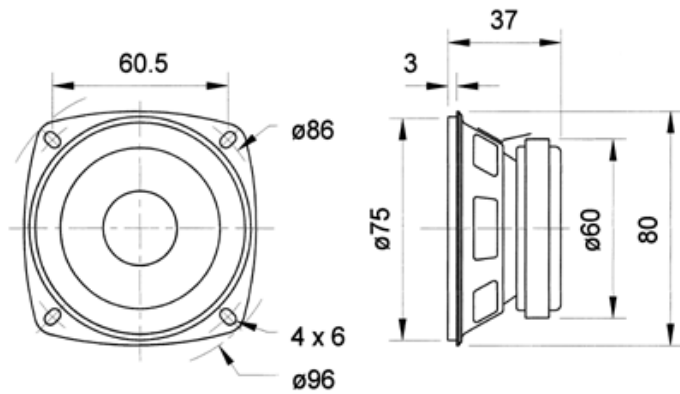
Eigenschaften / Attributes

- Feuchtigkeitsimprägnierte Membran
- Metallausführung

- Moisturised cone
- Metal basket

FR 8 - 8 Ohm

Art. No. 2008



Technische Daten / Technical data

Nennbelastbarkeit Rated power	10 W
Musikbelastbarkeit Maximum power	15 W
Nennimpedanz Z Nominal impedance Z	8 Ohm
Übertragungsbereich Frequency response	130–20000 Hz
Mittlerer Schalldruckpegel Mean sound pressure level	86 dB (1 W/1 m)
Abstrahlwinkel (-6 dB) Opening angle (-6 dB)	180°/4000 Hz
Grenzauslenkung Excursion limit	+/-2 mm
Resonanzfrequenz fs Resonance frequency fs	150 Hz
Magnetische Induktion Magnetic induction	1,4 T
Magnetischer Fluss Magnetic flux	200 µ Wb
Obere Polplattenhöhe Height of front pole-plate	3 mm
Schwingspulendurchmesser Voice coil diameter	15 mm
Wickelhöhe Height of winding	5 mm
Schallwandöffnung Cutout diameter	75 mm
Gewicht netto Net weight	0,24 kg
Gleichstromwiderstand Rdc D.C. resistance Rdc	7,4 Ohm
Mechanischer Q-Faktor Qms Mechanical Q factor Qms	5,3
Elektrischer Q-Faktor Qes Electrical Q factor Qes	1,38
Gesamt-Q-Faktor Qts Total Q factor Qts	1,09
Äquivalentes Luftnachgiebigkeitsvolumen Vas Equivalent volume Vas	0,7 l
Effektive Membranfläche Sd	

01.10.2015

Effective piston area Sd	30 cm ²
Dynamische bewegte Masse Mms Dynamically moved mass Mms	1,7 g
Antriebsfaktor Bxl Force factor Bxl	2,5 Tm
Schwingspuleninduktivität L Inductance of the voice coil L	0,6 mH
Anschlüsse Connections	4,8 x 0,8 mm (+) 2,8 x 0,8 mm (-)
Temperaturbereich Temperature range	-25 ... 70 °C