

CSR220C

10" Two-way Full Range Speaker System
Theater Surrounding Speaker System

User Manual





SAFETY INSTRUCTIONS

PLEASE READ THIS MANUAL FIRST

Thank you for buying β_a product. Read this manual first as it will help you operate the system properly. Please keep this manual for future reference.

A WARNING: This product must be installed by professionals. When using hanging brackets or rigging other than those supplied with the product, please ensure they comply with the local safety codes.



CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.



ATTENTION: POUR RÉDUIRE LE RISQUE DE DÉCHARGE ÉLECTRIQUE, NE RETIREZ PAS LE COUVERCLE (OU L'ARRIÈRE). IL NE SE TROUVE À L'INTÉRIEUR AUCUNE PIÈCE POUVANT ÊTRE RÉPARÉE PAR L'USAGER. S'ADRESSER À UN RÉPARATEUR COMPÉTENT.



The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and servicing instructions.

ATTENTION: Don't refit the system or spare parts without being authorized as this will void the warranty.

 $m{\mathbb{A}}$ WARNING: Don't place naked flames (such as candles) close to the equipment.

- 1. Read the instruction manual first before using this product.
- 2. Please keep this manual for future reference
- 3. Pay attention to all warnings.
- 4. Obey all operating instructions.
- 5. Do not expose this product to rain or moisture.
- 6. Clean this equipment with a dry cloth.
- 7. Do not block any ventilation openings. Install according to manufacturer's instructions.
- 8. Do not install this product near any heat source, such as a, heater, burner, or any other equipment with heat radiation .
- 9. Only use spare parts supplied by the manufacturer.
- 10. Pay attention to the safety symbol on the outside of the cover.



CONTENT

INTRODUCTION ————————————————————————————————————	 3
Features —	3
Description —	3
Applications —	3
CONNECTION	4
Connection Method	4
System Connection Reference	4
INSTALLATION —	5
Mounting Accessories	5
Installation Reference ———————————————————————————————————	5
TECHNICAL SPECIFICATION —	6
Technical Sheet	6
Frequency Response Curve & Impedance Curve ————	6
2D Dimension	7



Product information is subject to change without prior notification. Please visit www.3g-sys.com for latest updates.

CSR220C

10" Two-way Full Range Active Coaxial Speaker

Features:

- Two transducers two way full range speaker system
- One 10" high power woofer
- One compression driver with 44mm diaphragm
- Frequency response (-3dB):60Hz-20kHz
- Sensitivity 97dB, Maximum SPL 128dB
- 4xM6 mounting points at rear for bracket, and 2xM8 for the left and right.



Product description:

Beta Three professional cinema series speaker system is mainly suitable for all sizes of luxurious theater digita stereo system, also applicable for theaters, conference rooms, multi-function hall stage speaker system. And this series of cinema products have been developed and manufactured basing on the latest speaker computer simulation technology, combining the latest speaker application materials and processing technology. Through optimization of material and aided design by computer, this series of products have been developed into superior performance with lower costs, good reliability with outstanding amplification.

On the performance of sound, this series has developed basing on many actual applications, its unique superior sound radiation characteristics has provided the clearest audio-visual positioning and a more beautiful sound quality to the audiences. Adoption of new generation efficient protection circuit, it ensures this series of products to be applied under poor application circumstances, also extends the service life of products.

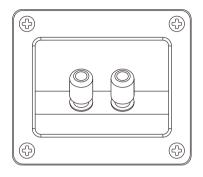
Correctly combining this series of cinema products, the speaker system could be applied to all sorts of different scales of cinemas; also they could be installed quickly and correctly through professional installation structure, it guarantees the sound performance of the system.

Application ■

- Theater
- Multifunctional hall
- Auditorium
- Cinema

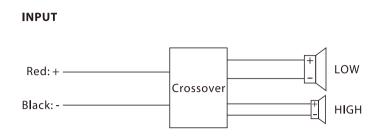
There is one wiring box connecting with amplifier in CSR220C.

Wiring Terminal:

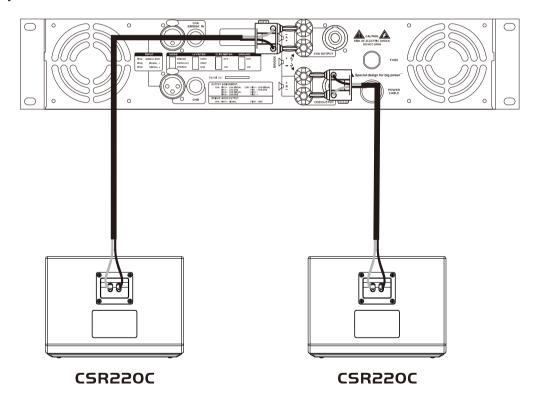


Red: + Black: -

Wiring Diagram:



System Connection Reference:



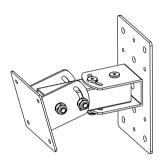
Attention: Make Sure the polarity of speaker and amplifier correctly.

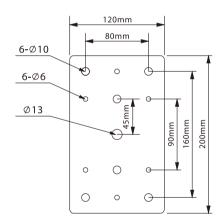
Mounting Accessories (Optional)

There are 6 mounting points on CSR220C cabinet, these are available and easy for mounting brackets installation.

1.Wall Brackets

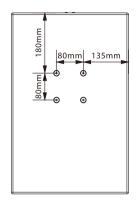
(The bracket can be 360 degree rotated, horizontally or vertically.)

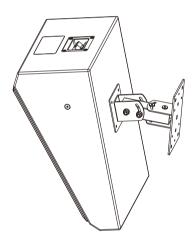


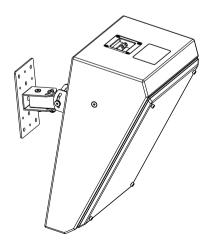


Installation Reference:

1. Wall Mounting:







Warning: Make sure the mounting accessories safety factor not less than 5:1 or meet the local standard during installation.



Specification

Speaker:	Passive Wooden Speaker				
Component:	1X10" LF driver				
	1X44mm voice coil HF driver				
Frequency Response (-3dB)!	60Hz-20kHz				
Frequency Response (-10dB):	54Hz-20kHz				
Sensitivity(1W@1m) ²	97dB				
Maximum SPL(1m) ³ :	128dB				
Power (RMS) ⁴ :	400W				
Dispersion(H, V):	100°, 80°				
Rated Impedance:	4 Ohms				
Crossover point:	2.2KHz				
Cabinet:	Plywood, wedge shaped				
Installation:	4PCS M6 mounting points @rear				
	2PCS M8 mounting points @left & right				
Cosmetic Finish:	Black polyurethane paint,				
	grille with black cloth.				
Connector:	Spring Clip				
Painting:	Cabinet coated by Polyurethane paint;				
	grille is cloth covered				
Dimensions (W, D, H):	350 ×540 ×255mm(13.8 ×21.3 ×10.0in)				
Packing Dimensions (W D H):	610 × 325 × 450mm(24.0 × 12.8 × 17.7in)				
Net weight:	12.5kg(27.5 lbs)				
Gross weight:	14.2kg(31.2 lbs)				
Mounting Accessory (Optional):	Wall bracket				

Speaker Testing Method

1. Frequency Response

Use pink noise to test the speaker in the anechoic chamber, adjust the level to make the speaker work at its rated impedance and set the output power at 1W, then test the frequency response 1m away from the speaker.

2. Sensitivity

Use full range pink noise which has been modified using an EQ curve to test the speaker in the anechoic chamber, Increasing the signal to make the speaker work at its rated impedance and set the power output at 1W, then test the sensitivity 1m away from the speaker.

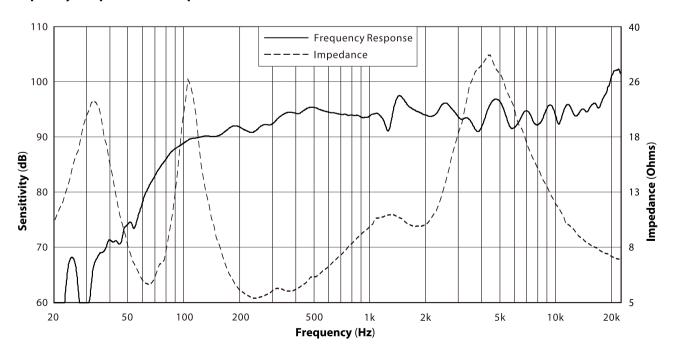
3. MAX.SPL

Use full range pink noise which has been modified using an EQ curve to test the speaker in the anechoic chamber, increase the signal to make the speaker work at its maximum power output level, then test the SPL 1m away from the speaker.

4. Rated Power

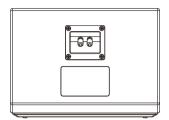
Use pink noise to the IEC#268-5 standard to test the speaker, increase the signal for a continuous period of 100 hours, the rated power is the power when the speaker will show no visible or measurable damage.

Frequency Response and Impedance Curve

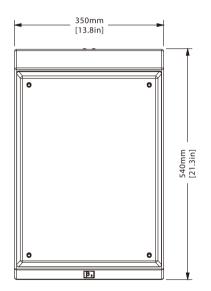


2D Dimension

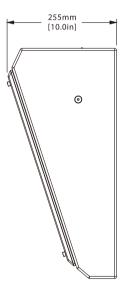
Top View



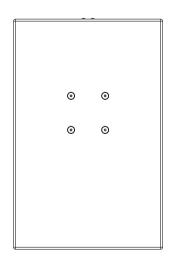
Front view



Side view



Back View



N	n	t	6	c	•
14	v	•	c	3	•

