

# INDOOR OR OUTDOOR FULL RANGE SPEAKER CABINET USER'S MANUAL



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# 6. ACCESSORIES DESCRIPTION

#### The following is optional accessories, not including in the product. They need booking additionally.

(1) YS-62 : U shape bracket+YS-62 (optional), please see figure 9. This accessory can provide the direction well when adjust the audio sources of CSB series cabinets (left and right 270°, up and down 120°)



### **1. THE MATTER NEEDING ATTENTION**

- Please save the manual after setting for referring to in future.
- product.
- Don't use an organic solvent or alcohol detergent when clean the appearance of the product.
- as soon as possible.

(2)YS-22+F-68: YS-22 bracket cap (optional)+F-68 feet bracket (optional), please see figure 10. This accessory can provide wider application of CSB series cabinets.



(figure10)

• Please read the manual before using the product. Make the best proper setting according to the manual.

• If you want to change the setting, please consult the manual again to confirm the specifications are right. The specifications of incorrect setting maybe cause permanent damage to the product. Please be careful. • Don't set the product exceeding the specifications, otherwise it will endanger the life and property of the

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• If your product is damaged or work abnormally, don't repair it yourself. Please contact the service personnel

# 2. INTRODUCTION

CSB series have good performance, many specifications and full range control. They're used indoors or outdoors. They can be arrayed abreast. You can choose the optional accessories such as mounting bracket and distribution transformer. These accessories can show the design value of versatile control for this series. The appearance structure is component of HIPS cabinet, and 4", 6.5", 8" woofers and 1" tweeter. Two channels crossover. The standard impedance of the cabinet is 8 Ohms. It can show the special tone quality of this product.

### **3. CONNECTION DESCRIPTION**

#### SIMPLE CONNECTION DESCRIPTION:

Connect "+", "-" output of amplifier directly to red "+" and black "-" sockets on the back of speaker cabinet.



#### **FURTHER CONNECTION DESCRIPTION:**

Since every speaker has a nominal impedance of 8 Ohms, an amplifier channel can connect many speakers.



**Acoustic outdoor**—The acoustic from speaker to the range we can hear, the sound pressure of background is usually 70dB-80dB. In an open area without a wall, without a floor and without a roof, acoustic strength will decrease as distance's square. For example, the distance from speaker to your ears increase to twice, the sound pressure will decrease 6dB (i.e. When the speaker is 10 meters far, the sound pressure is 100dB. If the distance changes to 20 meters, the sound pressure will decrease to 94dB.) Not all the spreading frequencies are affected uniformly. Vapour is lighter than air, and the density of dry air is lower. So the absorbed acoustic energy is less than dry air, special to the frequency above 2kHz.

# **5. SPECIFICATIONS**

MODEL	CSB-50	CSB-50CV	CSB-150	CSB-150CV	CSB-175	CSB-175CV
Frequency						
Range	80Hz~20kHz	80Hz~20kHz	50Hz~20kHz	50Hz~20kHz	55Hz~20kHz	55Hz~20kHz
Impedance	8Ω	100V/70V	8Ω	100V/70V	8Ω	100V/70V
Dimensions						
(H×W×D)mm	220×165×150	220×165×150	300×220×200	300×220×200	380×280×220	380×280×220
Woofer	4" wofer	4" wofer	6 1/2" wofer	6 1/2" wofer	8" wofer	8" wofer
Tweeter	1" tweeter	1" tweeter	1" tweeter	1" tweeter	1" tweeter	1" tweeter
Power		3.7W-7.5W-15W-		7.5W-15W-30W-		15W-30W-60W-
Capacity	30W	30W-PASS	60W	60W-PASS	90W	90W-PASS
Sensitivity						
(1W/1M)	86dB	86dB	88dB	88dB	90dB	90dB
Termination		Spring terminals, accepts banana plug		Spring terminals, accepts banana plug		Spring terminals, accepts banana plug
Net Weight						
(ea)	2.2kg	2.7kg	3.5kg	4.1kg	5kg	6.2kg
Crossover						
Frequency	2.5kHz-3.5kHz	2.5kHz-3.5kHz	2.5kHz-3.5kHz	2.5kHz-3.5kHz	2.5kHz-3.5kHz	2.5kHz-3.5kHz

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# **TYPICAL WIRING MODE:**

Chrysanthemum chain wiring mode—This is the simplest wiring mode from amplifier to cabinet. From the amplifier to the first cabinet, then to another cabinet (Please see figure 7A).

Stereo wiring mode — This is the best wiring mode of stereo L & R. From the amplifier to each cabinets directly (Please see figure 7B).



(figure7A)





# LEVEL DISTRIBUTION SYSTEM (CONTROL "CV" MODEL) CONNECTION DESCRIPTION:

Level distribution system (control "T" model) control 50CV, control 150CV and control 175CV models have built-in transformer of 70/100V. These speakers need a level distribution amplifier. When connect a normal 8 Ohms speaker, you can connect the "+" and "-" output of amplifier to red "+" and black "-" sockets on the back of speaker cabinet. Set transformer to desired voltage, not like normal 8 Ohms speaker, which perhaps connects many CV series speakers to one amplifier channel. Finally set your desired output power to the band switch on the front panel. After finished setting (CSB-50CV, CAB-150CV or CSB-175CV), fix the iron net. Such the setting of the product is completed. (Please see figure 3A). In this case, the total power of all the speakers can't exceed the nominal power of amplifier. (Please see figure 3B. One 100W amplifier channel can drive 13 speakers of 7.5W, i.e. 13x7.5=97.5<100). For safety, the total power of all the speakers should be less than 3/4 nominal power of amplifier (One 100W amplifier channel can drive 10 speakers of 7.5W, i.e. 10×7.5=75W).



### **OUTDOOR INSTALLATION DESCRIPTION:**

The difference of temperature will influence the acoustic spreading lightly. Cold air is more highly concentrated than hot air. Acoustic spreading is faster in the low-density medium. Air is warmer, acoustic spreading is faster. Air is colder, acoustic spreading is slower. Such will form refraction.



(figure8)



(figure3B)

# 4. INSTALLATION DESCRIPTION

**Note:** Commercial audio installation system must conform to local building laws. When install speaker on wall or ceiling, please consult a building contractor with a license or a professional engineer. The corporation doesn't responsible for the improper installation or damage because of not conforming to installation description.

Installation procedure of U shape bracket is very simple and convenient, the appearance is pleasing to the eye.

**Step 1:** Fasten the U-shape bracket on the wall with screws. The wall material must support the weight of the cabinet. **Step 2:** Place the body of cabinet in U-shape bracket and lock the plastic handles and accessories.

**Step 3:** Adjust the direction of cabinet. When you satisfy the direction (can adjust 270° to left or right), fasten the plastic handles. The installation is completed. (Please see figure 4)



(figure4)

## **INDOOR INSTALLATION DESCRIPTION:**

CSB series speakers are designed specially for fixing and using in different circumstances. The property of speakers maybe different due to different circumstances. There is an acoustic surface (wall, floor and ceiling) in a closed room, the acoustic indoor will turn complex. When acoustic wave hits the surface, a part of acoustic energy is reflected, and others are absorbed. Reflection and absorption are depending on the frequencies of acoustic wave and angle of hitting surface. When operate the cabinet, both man and furniture can absorb the acoustic energy. Please note the position of man and furniture when installing. Reverberation is the results of the reflected acoustic wave continue bouncing between the surfaces. Every reflection will loss the energy. When the acoustic hit the reflection surface, the room will be filled with random reflected acoustic wave. The music and address will be complex. It is recommended that install more speakers and make the volume of speakers lower to reduce the reverberation in high reverberating room. (Please see figure 5B)





(figure5A)

High frequency coverage range — Direct the center axle of the speaker to the flat surface of receiving area. The speakers of  $90^{\circ} \times 90^{\circ}$  series can spread the high frequency tone to all the directions at the axle of  $45^{\circ}$ . If you use the speakers in large room, you can divide the room to some zones. Then decide the installing location of the speakers according to the horn mode. (Please see figure 6)





MULTIPLE QUIET SPEAKERS

# (figure5B)



(figure6)