

Studiomaster

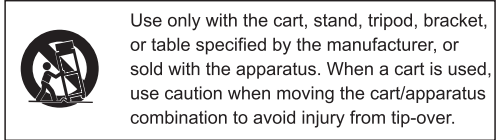
Quickguide

CABS I Coaxial Active Beamsteering System



**USER
GUIDE**

IMPORTANT SAFETY SYMBOLS



The symbol is used to indicate that some hazardous live terminals are involved within this apparatus, even under the normal operating conditions, which may be sufficient to constitute the risk of electric shock or death.



The symbol is used in the service documentation to indicate that specific component shall be replaced only by the component specified in that documentation for safety reasons.



Protective grounding terminal



Alternating current/voltage



Hazardous live terminal

ON: Denotes the apparatus is turned on

OFF: Denotes the apparatus is turned off.

WARNING: Describes precautions that should be observed to prevent the danger of injury or death to the operator.

CAUTION: Describes precautions that should be observed to prevent danger of the apparatus.

1. IMPORTANT SAFETY INSTRUCTIONS

- **Read these instructions.**

- **Keep these instructions.**

- **Heed all warning.**

- **Follow all instructions.**

- **Water & Moisture**

The apparatus should be protected from moisture and rain, can not used near water, for example: near bathtub, kitchen sink or a swimming pool, etc.

- **Heat**

The apparatus should be located away from the heat source such as radiators, stoves or other appliances that produce heat.

- **Ventilation**

Do not block areas of ventilation opening. Failure to do could result in fire. Always install accordance with the manufacturer's instructions.

- **Object and Liquid Entry**

Objects do not fall into and liquids are not spilled into the inside of the apparatus for safety.

- **Power Cord and Plug**

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety.

If the provided plug does not fit into your outlet, refer

to electrician for replacement.

- **Power Supply**

The apparatus should be connected to the power supply only of the type as marked on the apparatus or described in the manual. Failure to do could result in damage to the product and possibly the user.

Unplug this apparatus during lightning storms or when unused for long periods of time.

Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

- **Fuse**

To prevent the risk of fire and damaging the unit, please use only of the recommended fuse type as described in the manual. Before replacing the fuse, make sure the unit turned off and disconnected from the AC outlet.

- **Electrical Connection**

Improper electrical wiring may invalidate the product warranty.

- **Cleaning**

Clean only with a dry cloth. Do not use any solvents such as benzol or alcohol.

- **Servicing**

Do not implement any servicing other than those means described in the manual. Refer all servicing to qualified service personnel only.

- Only use accessories/attachments or parts recommended by the manufacturer.

1.Introduction

CABS I – Active Beam Steering Column Speaker

CABS I is a compact beam steering loudspeaker designed for applications where speech clarity and controlled sound coverage are critical.

Typical applications include:

- Houses of Worship
- Conference rooms
- Lecture halls
- Auditoriums
- Museums

The system combines multiple drivers, a built-in DSP processor, and browser-based control software to allow precise adjustment of sound direction and coverage.

2.Why Beam Steering

Churches and auditoriums often present acoustic challenges:

- High ceilings
- Reflective surfaces
- Long reverberation time

Traditional loudspeakers distribute sound broadly, which can cause reflections and reduce speech intelligibility.

Beam steering technology focuses sound (beam) energy toward the audience area, reducing unwanted reflections and improving clarity.

Benefits include:

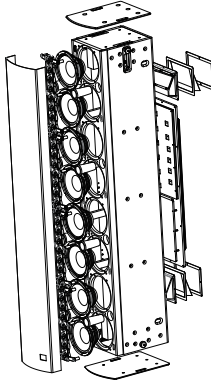
- Improved speech intelligibility
- More even sound coverage
- Reduced acoustic reflections
- Simplified system tuning

3.System Overview

Main features:

- 32 × 1" HF drivers
- 8 × 6.5" mid-bass drivers
- Built-in DSP processor
- Integrated 2000W Class-D amplifier
- Browser-based control interface
- Analog and network audio input

The system supports beam steering adjustment via built-in DSP processing respectively for total forty drivers in a coaxial arrangement.



4.Control Software

The CABS control interface runs in any standard web browser.

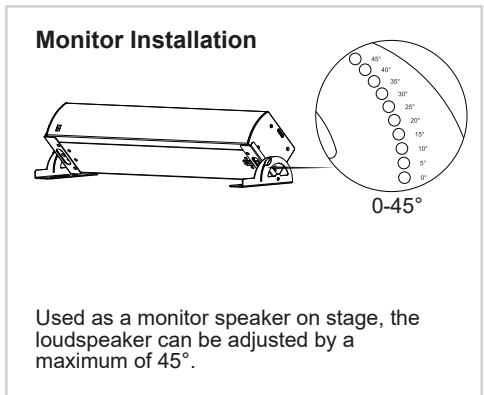
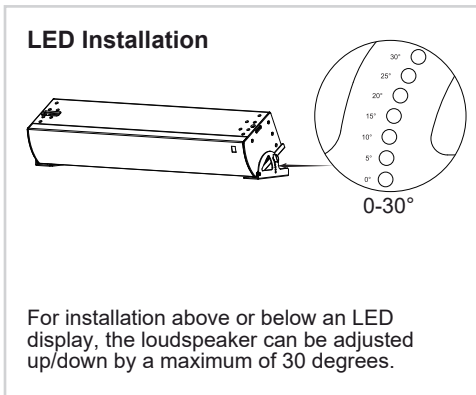
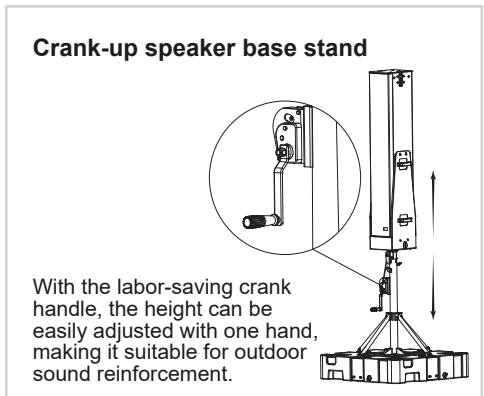
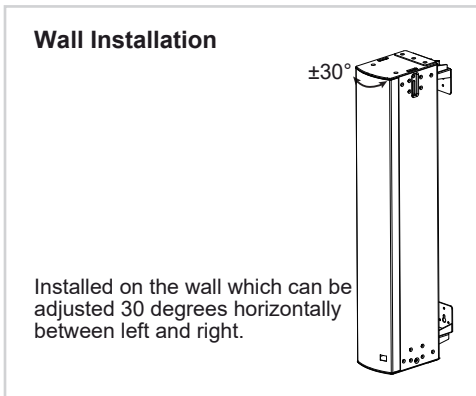
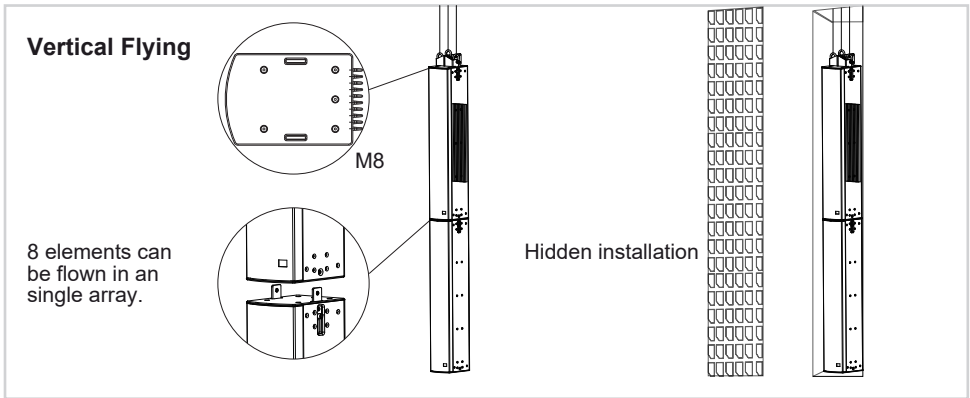
Functions include:

- Beam steering adjustment
- EQ
- Input routing
- Scene management
- Network configuration

The system supports up to 40 DSP channels for detailed audio processing.

5.Quick Start

Step 1 – Mount the Speaker



Optional Accessories:

① CABS I Flying Bar



② CABS I Wall Mount



④ CABS I Display Adjustable Arm



⑤ CABS I Monitor Adjustable Arm



③ CABS I Crank-up speaker base stand

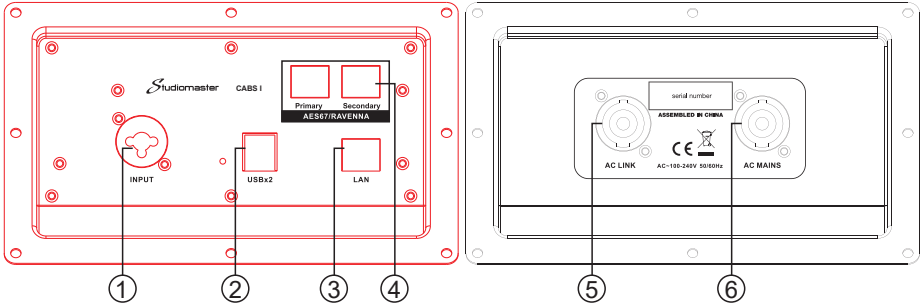


Step 2 – Connect Power and Network

Connect:

- AC power cable
- LAN cable

Turn on the system.



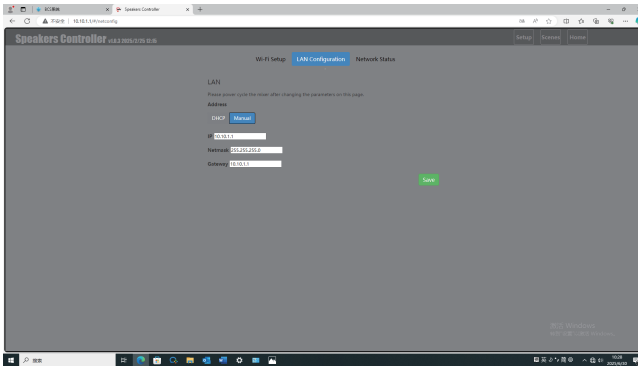
- ① INPUT: Local analog input
- ② USBx2: 2 USB 2.0 interfaces (for reset/upgrade)
- ③ LAN: Network Interface
- ④ AES67: Digital Audio Signal Input/Output Interface
- ⑤ AC LINK: AC power LINK output
- ⑥ AC MAINS: Main power input

Step 3 – Open Control Interface

Connect your PC within the same domain of LAN network.

Open a web browser and enter:10.10.1.1

No software installation required.



Step 4 – Select Input

Choose the audio input among four channels:

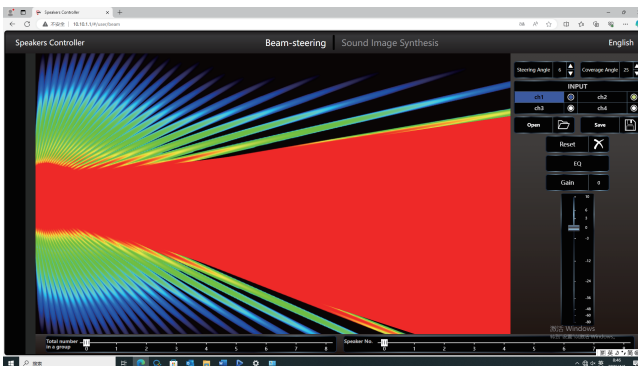
- CH 1 default as: Analog input
- CH 2 default as: AES67 networked audio input

Step 5 – Adjust Beam Direction

Adjust:

- Beam angle
- Coverage width

Typical church setting:Beam angle: 6°, Coverage: 25°.



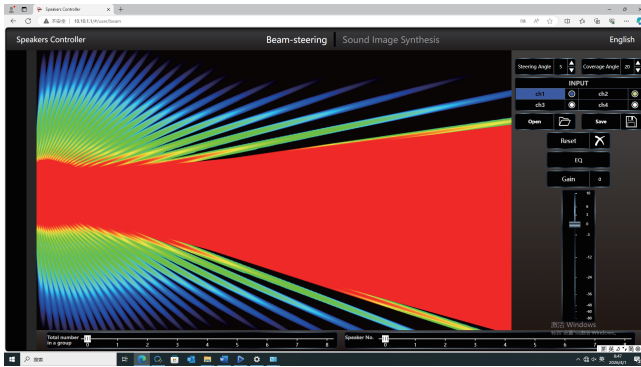
Step 6 – Save Scene

Click Save Scene to store configuration.

6.Recommended Beam Settings

Factory recommended presets include configurations optimized for typical installations:

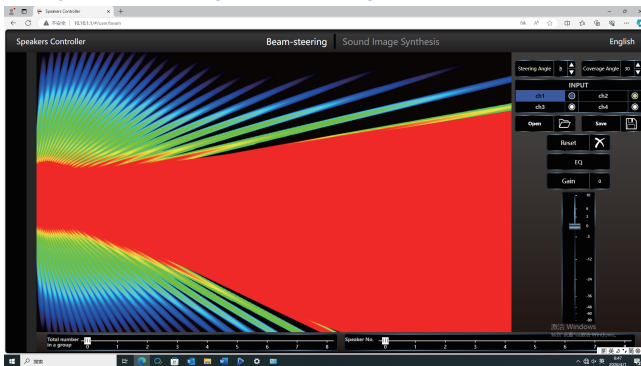
- Small Church:Beam angle: 5°, Coverage: 20°.



- Medium Church:Beam angle: 7°, Coverage: 25°.



- Long Hall:Beam angle: 8°, Coverage: 30°.



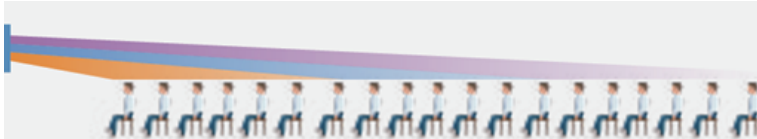
These presets provide a quick starting point and can be further adjusted as needed.

7. Installation Recommendations

Best results are achieved when:

- Speaker is mounted above audience head level
- Speaker is installed vertically
- Beam is directed toward seating area

Avoid aiming the beam directly at reflective ceilings.



8. Technical Specifications

Frequency response:	60Hz–20kHz
Max SPL:	136 dB
Amplifier power:	2000W
Dimensions:	1378×346×225 mm
Weight:	49 kg

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