## Introduction

Congratulations on your purchase of the CORNERED Ci speaker systems. The Ci series is a feature packed range of loudspeakers designed for commercial installations. Emphasis is placed on discreet modern design, ease of installation, wide and uniform coverage and excellent sound quality without the use of electronic signal processing.



### Included in the box

Two speakers: Ci4 and Ci5: 8 ohm Ci4-V and Ci5-V: 8 ohm or 70/100V mode Two sliders Mounting screws Mounting template Manual

The triangular cabinet profile allows for discreet installation in corners or on walls and ceilings. Cabinets can be coupled together to expand coverage and installation is fast and simple with the integrated mounting points.

Please read the manual to ensure best possible performance from your CORNERED loudspeaker.

### Getting started

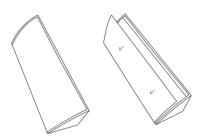
### Connections

The Ci models are fitted with spring loaded terminals on the front baffle. Contacts will accept up to 2,5 sq. mm wire with an outside diameter of up to 10mm.

Important: Always connect the red amplifier output (+) to the red speaker terminal input and the black amplifier output (-) to the black speaker input. If reversed, the stereo imaging will be blurred and the bass output will be dramatically reduced.

### How to connect the cables

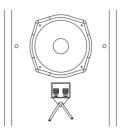
It is important that you run the speaker cables through the port BEFORE mounting your new CORNERED speakers! The speakers are equipped with discreet cable terminals placed on the front baffle behind the front cover – and it is not possible to run the cables to the terminals once the speakers have been installed.



- Remove the front cover to access the cable terminal.
  (push the cover from the side of the cabinet to squeeze it out of the grove).
- (2) Make sure the amplifier is turned off.



③ Run the speaker cable through the tube positioned at the rear of the cabinet to the terminal at the front baffle.



(4) If you use the sliders, you can mount the speaker cables to the terminal at this point. If you use the mounting points, it is easier to install the speaker first and mount the cable to the terminal after the speaker is mounted to the wall.

## Installation

The Ci series can be mounted either in corners, on wall and ceilings with the integrated mounting points or the slider bars. They can also be coupled together to extend coverage.

CORNERED top-boxes are very light, but please make sure that the wall or ceiling is solid and can support the weight of the speaker before installing. Also, make sure that you comply with all local health and safety regulations. The low weight and the sliders allow the products to be installed easily by one person.

### Vertical or horizontal installation in corners

If you prefer to mount the speaker in a corner, you should:



 Remove the front cover and you'll see the mounting holes in the left and right hand side of the cabinet.

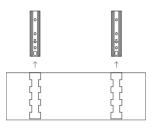
- (2) Place the mounting template in desired position and mark drilling positions by shading through the six mounting holes.
  - Drill holes in the wall using 4mm raw plugs and the enclosed 3,5 mm flat head screws.
  - Reposition the speakers in desired position and mount the screws.

Notes: Mounting in corners that are not exactly 90 degrees:

- If the corner is less than 90 degrees, simply place the speaker cabinet as deep in the corner as possible and use all mounting points. This will leave a little space behind the cabinet and the walls, but the speakers will still appear with a nice finish in the corner.
- If the corner is more than 90 degrees, we recommend mounting only one of the sides of the speaker cabinet onto the wall – and leave some air behind the other side of the cabinet. This will not be visible from the front, and the speakers will still present themselves with a nice finish.

### If the wall or ceiling is soft, or if you wish to mount the speakers away from the corner.

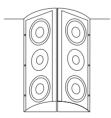
Slide the speaker onto the sliders.



- Mount the sliders to wall or ceiling by shading through the template. \*Note that the arrow on the slider shall point towards the front of the speaker.
- \*Note, if the wall is solid, one slider is sufficient to hold the speaker.
- Slide the speaker onto the sliders
- Finally fix the speaker to the wall or ceiling by screwing through the cabinet and slider into the wall or ceiling, using the upper and lower mounting points.

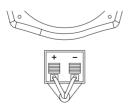
### CORNERED speakers are designed with emphasis on uniform and wide controlled dispersion. The acoustic design allows the speakers to be coupled together to expand coverage.

- One Ci cabinet offers 100x100 degree dispersion.
- Two Ci cabinets can be coupled together back to back and then mounted flush onto walls and ceilings while offering 200 degrees of coverage with minimum phase cancellation.
- Mount the speakers back to back on wall or ceiling using either the sliders or integrated mounting points. Use 9 mm long and 3 mm thick bolts to screw the speakers together.



Likewise, three cabinets can be mounted together to cover 270 degree around a corner. Simply couple three cabinets together using the 9x3mm bolts and mount the speakers to the wall with the integrated mounting points.

When you have installed the speaker to the wall or ceiling, then connect the speaker cable to the terminal and reinstall the front cover.



Connect the red (+) speaker cable to the red cable terminal and the black (-) speaker cable to the black speaker terminal.

# Cables

Speaker cables present the amplifier with different loads. Cables with high capacitance, high inductance and high impedance have a strong negative influence on sound quality as well as amplifier reliability. In order to get the most out of the speaker system, avoid using thin speaker cables.

We recommend the CORNERED CSP2 speaker cable designed to fit in corners or flush on walls.

The thickness of the cable relates to the length of the cable. For very long cable runs, 4 sq mm. cables should be used. When running the cable through the tube, simply remove the outer isolation material from the cable and run the separate wires to the speaker terminals.

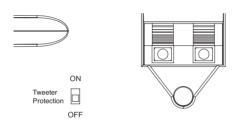
To minimize power loss and response variations, please refer to the following table for guidance, showing the maximum recommended cable length relative to impedance and cable thickness:

Cable size/load	8 ohm	4 ohm	2 ohm
2 sq mm.	20m/65ft.	10m/32ft.	5m/16ft.
2,5 sq mm.	30m/100ft.	15m/50ft.	7,5m/25ft.
4 sq mm.	60m/200ft.	30m/100ft.	15m/50ft.

### Operation

### **Tweeter protection**

Ci4 and Ci5 feature a tweeter protection circuit. If a microphone is used, or if the speaker is used in environments with very high level of background sound, we recommend turning on the protection circuit. For home installations, we recommend turning off the protection.



To enable, move the PTC switch to ON and to disengage, move the switch to OFF.

### Outdoor mounting

The Ci series is IP54 rated, so they can be placed outside. If installed outdoors, the insulation of the cabling should be resistant to water as well as the effects of temperature and ultraviolet radiation from the sun. Recommended insulations are: UV stabilized polyethylene, neoprene, Teflon™, Silicon™, and Hypalon™. The following materials are not recommended, because of potentially shorter life expectancy in outdoor environments: rubber, PVC (polyvinylchloride), polypropylene, polyurethane, and nylon. UV-stabilized polypropylene may be acceptable.

### Mode selection

Ci4-V & Ci5-V can be driven in 8 ohm or 70V or 100V mode. The input tap selection switch is placed behind the grille. On Ci4-V the taps are 3,75, 7,5, and 15 watt output in 70V mode and 7,5 and 15 watt output in 100V mode. On Ci5-V the taps are 3,75, 7,5, 15 and 30 watt output in 70V mode and 7,5, 15 and 30 watt output in 100V mode. The rotary switch is operated with a flat-head #7 screw driver.



### Safety wire

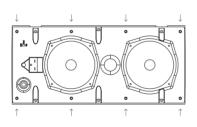
In installation terms, the CORNERED top-boxes are as much brackets as they are speakers, because they mount flush to the walls and ceilings, so no safety wire is needed (just like on traditional speaker installations, you don't use a safety wire from a bracket to the wall).

#### **Recommended amplifier**

CORNERED speakers have high minimum impedance, making them an easy load for amplifiers. Typical pro amplifiers will run three speakers per channel without problems. We recommend amplifiers with a minimum output on level with the highest recommended amplifier output in the specifications.

As with all loudspeaker systems, power handling depends on the quality and size of the amplifier. If overdriving the amplifier and running it into clipping, the drive units can be damaged even if the amplifier output is lower than the power handling of the speaker.

When choosing an amplifier, note that generally a higher power amplifier running free of distortion will sound better and do less damage to the loudspeaker than a lower power amplifier continually clipping. See technical specifications section for recommended amplifier power.



### Service

Woofers can be easily replaced by unscrewing them from the baffle using a Hexagon H3 bit. The tweeter is clicked into the horn section of the baffle from the rear of the baffle. To access the tweeter, remove the baffle by unscrewing the eight Philips screws.

Turn the tweeter counter-clockwise to remove it from the baffle. Reinstall the new tweeter by pressing it towards the horn section of the baffle and turn it clock wise until you hear a "click".

The crossover is removed by unscrewing the Philips head screws and removing the cables from the drivers.

# Specifications

### Ci2

Power handling, IEC268: Power handling, peak: Sensitivity, 2,83V/1m: Maximum SPL, long term: Maximum SPL, peak: Frequency response: Nominal impedance: Dispersion: Measurements: Weight: Colour:

### Ci4

Power handling, IEC268: Power handling, peak: Sensitivity, 2,83V/1m: Maximum SPL, long term: Maximum SPL, peak: Frequency response: Nominal impedance: Dispersion: Measurements: Weight: Colour: 30 watt 120 watt 84 dB 99 dB 105 dB 140-20.000 Hz 8 ohm 100x100 degrees (HxWxD) 181x135x102mm 0,75 kg Black - White

60 watt 240 watt 86 dB 104 dB 10 dB 70-20.000 Hz 8 ohm 100x100 degree (HxWxD) 400x190x145mm 2,4 kg (Ci4 - 2,35 kg) Black - White

Ci4-V high impedance data:

Ci5

Power handling: Power handling: Sensitivity: Maximum SPL: Maximum SPL: Frequency response: Nominal impedance: Dispersion: Measurements: Weight: IEC268: 80 watt Peak: 320 watt 2,83V/1m: 88 dB Long term: 107 dB Peak: 113 dB 65-20.000 Hz 8 ohm 100x100 degree (HxWxD) 450x209x150mm 3,6 kg (Ci5 - 3,55 kg)

Ci5-V high impedance data:

Selectable taps at 7,5W, 15W or 30W @ 100V or 3.75W @ 70V

Selectable taps at 7,5W or 15W @ 100V or 3.75W @ 70V