

CCS-CU Control Unit

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Invented for life



- ▶ Digital Acoustic Feedback Suppression
- ▶ Discussion control without operator
- ▶ Controls up to 150 contribution devices
- ▶ Built-in monitor loudspeaker

The Control Unit (CU) is the heart of the CCS Ultra Discussion System and supplies the power for all delegate and chairman units in the system. The unit also controls the chairman and delegate unit microphones, as well as providing connections for audio inputs and outputs.

Functions

Digital acoustic feedback suppression (CCS-CUD)

The digital acoustic feedback suppression facility automatically eliminates acoustic feedback (also known as 'howling' or 'Larsen effect'). This gives better speech intelligibility by allowing the speaker volume to be turned up as loud as required without any risk of feedback.

Discussion control without operator

The CU can be setup to operate standalone without the need for an operator. The following 5 modes can be chosen using a rotary control on the unit's top panel:

Open mode – allows selection of one to four microphones (excluded chairman microphones) which can be simultaneously active

- Open mode with auto-switch-off – allows selection of one to four microphones (excluded chairman microphones) which can be simultaneously active. If the delegate does not speak for 30 seconds, microphones are automatically switched off
- Override mode – delegates can override each other simply by activating their microphones. Only one microphone can be active at any one time. (Note: In override mode, delegates cannot override chairmen)
- Chairman only mode – only chairmen can speak. Delegate microphones cannot be activated, even when a chairman is not speaking
- Test mode – checks if system connections are correct. All microphone light rings and contribution unit LEDs light up to indicate that units are properly connected

Supplies power for up to 50 contribution units

The CU has two trunk outputs for the loop-through connection of contribution units. It is possible to connect 25 contribution units to each trunk output, with a maximum system cable length of 100 m (109.3 yards).

Provides control for up to 150 contribution units

Up to 3 CUs can be used together in a discussion system to power and control a maximum of 150 contribution units. In this configuration a single CU acts as a master controller for the entire system.

Built-in monitor loudspeaker

The built-in monitor loudspeaker and headphone socket allow the conference to be monitored.

Interfaces the system with external equipment

The following equipment can be interfaced to the CCS Ultro Discussion System through the CU:

- External wired or wireless microphone – for guest speakers or audience participation. (Note: The external microphone is muted when the priority button on a chairman unit is pressed, and when the system is operating in ‘chairman only’ mode)
- External PA system – for transmitting the proceedings to an audience in the same room or an adjacent room
- Tape recorder – for external recording and playing back meetings and discussions
- Audio equipment – for providing background music
- Telephone coupler – to allow a remote delegate to participate via telephone
- External audio processing – an insertion connector is provided

Controls and indicators

Top

- Mains on/off switch
- Loudspeaker volume control, for setting output level of loudspeakers of contribution units. This control also determines the maximum level for the headphone outputs of the contribution units and the CU.
- Microphone mode rotary switch, for setting the number of simultaneously active microphones, and selecting one of the four operation modes (plus test mode)
- Power on LED

Back

- On/off switch for digital acoustic feedback suppression facility (CCS-CUD)
- Microphone input gain adjustment
- External recorder input gain adjustment
- Insertion connector bypass switch

Interconnections

Top

- 1 x 3.5 mm (0.14 inch) stereo headphone socket

Back

- 1 x AC input
- 2 x 7-pole circular female connectors, trunk in/out loop through interconnection
- 1 x 3-pole female XLR connector, microphone input (can be used as line input by included 50dB attenuator)
- 1 x Cinch connector pair, line input/output
- 1 x Cinch connector pair, telephone input/output
- 1 x Cinch connector pair, insertion input/output
- 2 x Cinch connector pairs (R/L channel), external recorder input/output



1	CCS-CUD
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Parts included

Quant.	Component
1	Control Unit
1	50 dB Attenuator
1	User manual
1	Power cord

Technical specifications

Electrical

Mains voltage	100 to 240 VAC $\pm$ 10 %
Current consumption	maximum 0.9 A (100 VAC) to 0.3 A (240 VAC)
DC supply to contribution units	24 V $\pm$ 1 V (current limited)
Loudspeaker volume control	mute (50 dB att.) + 10 steps of 1.9 dB
Limiter threshold level to unit	10 dB above nominal level loudspeaker / headphone
Gain reduction due to number of open microphones (NOM)	$\div$ NOM $\pm$ 1 dB
Total harmonics	
Nominal input (85 dB SPL)	< 0.5
Max. input (110 dB SPL)	< 0.5

Mechanical

Dimensions including feet (H x W x D)	84 x 361 x 143 mm (3.4 x 14.2 x 5.6 in)
Height of feet	5.5 mm (0.22 in)
Mounting	tabletop (portable or fixed) 19-inch rack flush mounting
Weight	1.5 kg (3.3 lb)
Material (top)	polymer
Material (base)	painted metal

Color (top)	charcoal (PH10736)
Color (base)	black (PH80007)

Ordering information

CCS-CU Control Unit

CCS 900 control unit, supplies power for all delegate and chairman units in the system, as well as the unit microphones, provides connections for the audio inputs and outputs.

Order number **CCS-CU**

CCS-CUD Control Unit with DAFS

CCS 900 control unit with the DAFS (Digital Acoustic Feedback Suppression) facility, supplies the power for all delegate and chairman units in the system, as well as the unit microphones, provides connections for the audio inputs and outputs.

Order number **CCS-CUD**

CCS-CU-JP Control Unit (JP)

CCS 900 control unit, supplies the power for all delegate and chairman units in the system, as well as the unit microphones, provides connections for the audio inputs and outputs. Japanese version.

Order number **CCS-CU-JP**

CCS-CUD-JP Control Unit with DAFS (JP)

CCS 900 control unit with the DAFS (Digital Acoustic Feedback Suppression) facility, supplies power for all units in the system, as well as the unit microphones, provides connections for the audio inputs and outputs. Japanese version.

Order number **CCS-CUD-JP**

CCS-CU-US Control Unit (US)

CCS 900 control unit, supplies power for all delegate and chairman units in the system, as well as the unit microphones, provides connections for the audio inputs and outputs. US version.

Order number **CCS-CU-US**

CCS-CUD-US Control Unit with DAFS (US)

CCS 900 control unit with the DAFS (Digital Acoustic Feedback Suppression) facility, supplies power for all units in the system, as well as the unit microphones, provides connections for the audio inputs and outputs. US version.

Order number **CCS-CUD-US**

Represented by:

Americas:

Bosch Security Systems, Inc.
12000 Portland Avenue South
Burnsville MN 55337, USA
Phone: +1-800-392-3497
Fax: +1-800-955-6831
audiosupport@us.bosch.com
www.boschsecurity.com

Europe, Middle East, Africa:

Bosch Security Systems B.V.
P.O. Box 80002
5617 BA Eindhoven, The Netherlands
Phone: +31 40 2577 284
Fax: +31 40 2577 330
emea.securitysystems@bosch.com
www.boschsecurity.com

Asia-Pacific:

Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia

China:

Bosch (Shanghai) Security Systems Ltd.
201 Building, No. 333 Fuquan Road
North IBP
Changning District, Shanghai
200335 China
Phone +86 21 22181111
Fax: +86 21 22182398
www.boschsecurity.com.cn

America Latina:

Robert Bosch Ltda Security Systems Division
Via Anhanguera, Km 98
CEP 13065-900
Campinas, Sao Paulo, Brazil
Phone: +55 19 2103 2860
Fax: +55 19 2103 2862
latam.boschsecurity@bosch.com
www.boschsecurity.com