CDS200 II

Central Control Unit DPS202

Operating instructions

Version 3.0

Printed in Germany

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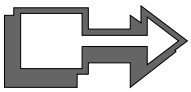
Operating instructions CDS200 II, DPS202,

Sep 2009

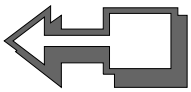


CAUTION

DANGER OF ELECTRIC SHOCK
DO NOT OPEN DEVICES

Do not open housing with mains cable connected.

Maintenance operations may only be executed by qualified personnel.



Our equipment and installations have been built and tested according to the latest state of the art. Under normal conditions, they do not require any special maintenance.

However, please be aware of the following:

- ☑ **Positioning** - secure and stable position of the equipment
- ☑ **Ventilation** - operate equipment with proper ventilation. Avoid heat sources such as heating radiators etc.
- ☑ **Mains connection** – pass all power cables so that they will not be damaged
- ☑ **Cable connections** - avoid trip-traps
- ☑ **Liquids** - avoid penetration of liquids into the housing
- ☑ **Power sockets** - operate equipment only with power sockets that are connected to ground according to the relevant specifications and regulations

Warning: Never expose equipment to rain or humidity

Rough handling of the equipment, such as strong shocks or vibrations, may result in damages. Inappropriate handling and storage, which does not conform to the operating instructions, may also lead to equipment damages

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1. About this manual

Symbols

The following symbols and fonts are used in this manual:

This sign indicates an important note, which has to be followed to guarantee that the functions of the unit, the security of any data or your health are not put at risk.

Indicates additional information, remarks and tips

Describes activities that must be performed in the shown order

Words in bold letters require your special attention.

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2. Important remarks

2.1 For customers in the EU and in the USA

Our equipment has been tested and complies with the requirement of the CE test. This guarantees the protection against harmful interferences, when the equipment is operating in a commercial environment. If the unit is not proper installed to this user manual it may causes radio interferences. Any changes or modifications not explicit approved in this manual could void your authority to operate this equipment.

The equipment must be connected to earth!

2.2 Safety

Check that the operating voltage of the unit is identical with the voltage of your local power supply. If a voltage conversion is required, consult your BRÄHLER ICS dealer or qualified personnel.

Should any liquid or solid object fall into the housing, unplug the unit and let it check by qualified personnel before further operation. Unplug the unit from the power outlet or set the main power switch to OFF if it's not used for several days. To disconnect the cord, pull it out holding the plug. Never pull the cord itself.

2.3 Installation

Allow proper air circulation to prevent internal heat built-up. Do not place the unit on a surface that may block the ventilation holes.

Do not install the unit in a location near heat sources or in a place exposed to direct sunlight, excessive dust, humidity, mechanical vibration or shock.

To avoid condensation do not install the unit where the temperature may increase rapidly.

2.4 Cleaning

To keep the housing in its original condition, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use organic solvents such as thinners or abrasive cleaners since these will damage the cabinet.

2.5 Repacking

Save the original shipping carton and packing material; they will become useful if you ever have to ship the unit. In this case please keep the manual together with the unit. For maximum protection, re-pack the unit as originally packed from the factory.

If not supplied with the equipment, a complete transportation and storage box system is available from BRÄHLER ICS. We recommend using this system for long-term protection and care.

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General

Please keep this manual together with the CDS200 II Power Supply DPS202. If you hand on the units to third parties, please include this manual.

Please read the manual carefully, taking special care when you see this symbol as it indicates important information!

CE This product is conforming to the rules of the following European directive:

89/336/EWG

Council directive to the alignment of the rules of rights of all member states about the electromagnetic compatibility, modified through RL 91/263/EWG, 92/31/EWG and 93/68/EWG of the council. Further information is available on request.

The warranty will expire, if you cause defectives through inappropriate use or handling of the unit.

Former CDS200 system components (e.g. DV200, DVA200, EDV200, etc) are not compatible to the improved CDS200 II system.

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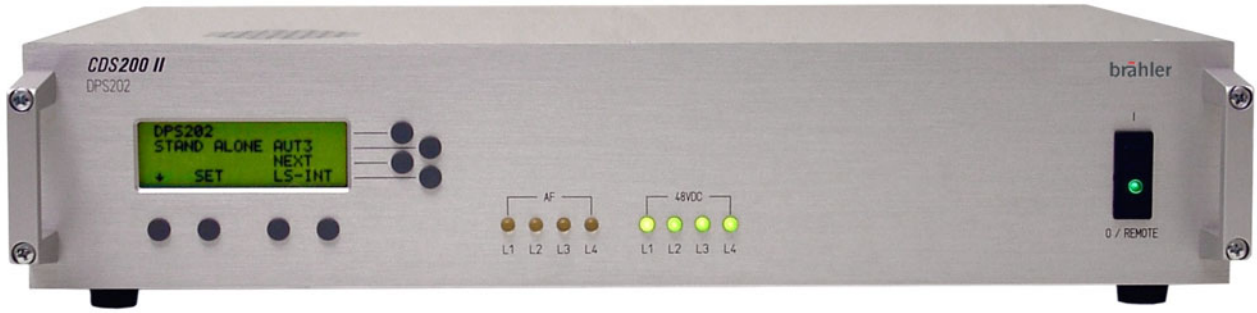
3. Short description Central Control Unit DPS202

Congratulations on buying the DPS202 from BRÄHLER ICS! Thank you for the confidence you have given us.

The Central Control Unit DPS202 belongs to the family of the Congress Data Systems (CDS). CDS200 II is the evolution of the successful Congress Data Systems CDS200. From the stand-alone application of simple discussion equipment to a complete system solution for modern conference management - with CDS200 II everything is possible!



Front View

As part of the Congress Data System CDS200 II the Central Control Unit DPS202 is used for controlling of up to 160 system units. These units are delegates' units with voting facility, system control consoles for controlling the microphone and voting operation modes as well as interfaces for the connection of large screen displays.

The DPS202 is either able to work in stand alone mode or in connection with a PC. In the case of stand alone mode there are 8 buttons to control the unit via a clearly arranged LC Display. In connection with MicControl software and a PC there are manifold options for system parameters and operation modes. The microphone signals at the "UNITS"-inputs 1 to 4 may be either routed individually to the corresponding outputs 1 to 4 or all together mixed to output OUT1/all.

In addition to the manual numbering, first time implemented in CDS200 II is the fully automated numbering of delegates' units. This feature enables a fast starting up of the equipment. For system enhancement up to 5 (8 as option) Central Control Units can be linked together.

The unit consists of a 19" housing (2HU).

On the front panel of the Central Control Console DPS202 there is a POWER switch with a green ON LED which shows the ON status. The four green LEDs (48VDC) L1 to L4 indicate the correct line output supply. If one or more LEDs do not light up you will be informed that there is a voltage breakdown on the corresponding line. Please check the cabling and the connected units first.

The failure can **not** be removed by switching on and off the DPS! This could damage the output line. Also do not plug and unplug the connector of the faulty line.

The four yellow LEDs “AF” indicate audio signal (AF) activity on the corresponding line L1 to L4.

With the help of a large LC Display and eight push buttons the system configuration can be made.

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Rear view

The Central Control Unit contains the following sockets on the rear side:

- Mains power connector
- AF-LINK (2 x S8G-socket) for coupling the AF-signals of more than one Central Control Unit linked together
- EXT LS-IN (XLR socket) for internal decentralized sound reinforcement
- MIXER/PA (4 x XLR socket) for up to 4 separate AF-lines to the mixer
- UNITS (S8G Sockets 1 … 4) for connection of maximum 40 Delegate Units (CDS200 2nd generation) at each line (maximum 80m cable length to the first unit)
- PC IN (CR15-socket) for connection of a control PC
- PC LINK (CR15-socket) temporarily not in use
- Additional earth connection

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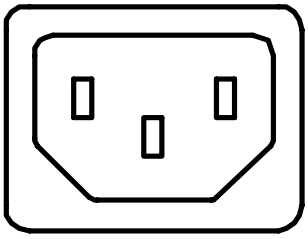
4. Connectors

The Central Control Unit has an automatically mains voltage setting of 90 - 250 Volts by 50 – 60 Hz. If there is another voltage range you must not connect this equipment. It has to be ensured that all cables are installed in cable ducts or that they are fixed by cable clamps or adhesive tape in such a way that there is no danger of somebody falling over them.

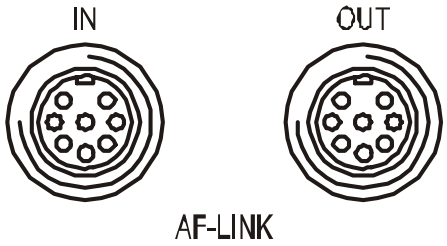
4.1 Mains power connecter

90V-250V/50Hz-60Hz



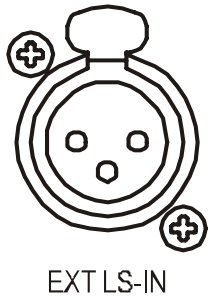
Connect the delivered mains cable with this socket to ensure the proper working of the Central Control Console DPS202.

4.2 Audio (AF)-LINK connector (S8G)



Two DIN S8G sockets for linking the audio (AF) signal, if more than one Central Control Units are connected together. Cables are available on request.

4.3 EXT LS-IN connector (XLR)



EXT LS-IN (XLR socket) for feeding an external signal for decentralized public address. Each delegate unit (DC10, EDC10 and EDC9) has an incorporated loudspeaker for this purpose.

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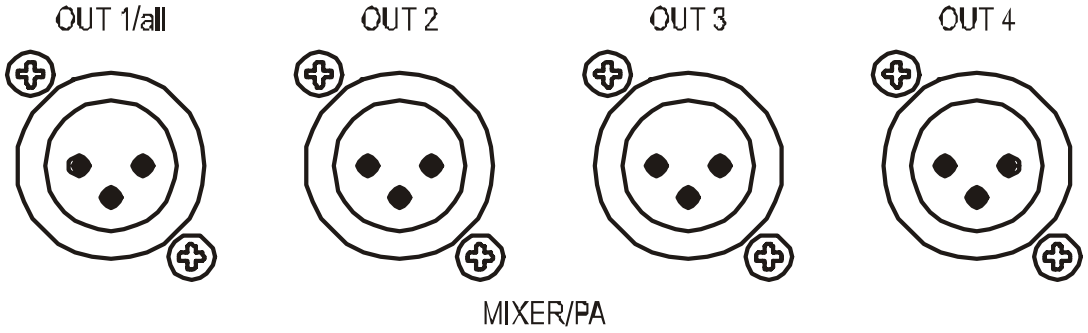
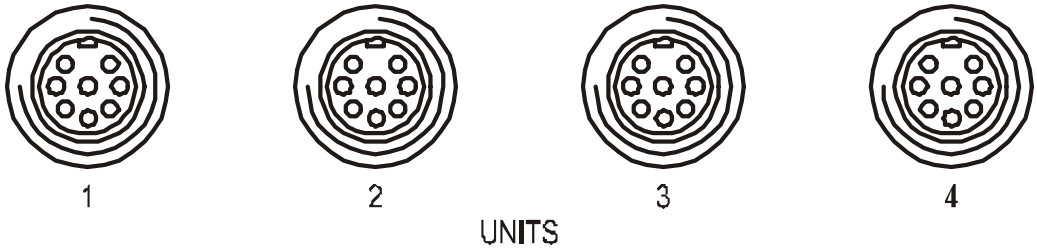
4.4 MIXER/PA line out connector (XLR)



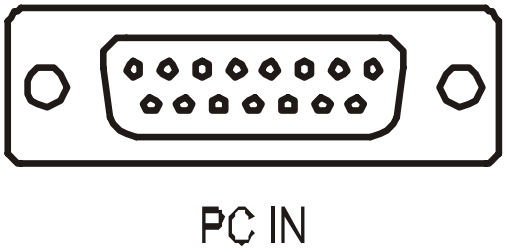
Four LINE outputs (XLR plug) for connection to an external mixer for recording purposes or to provide a PA system.

4.5 UNITS 1 … 4 line connector S8G



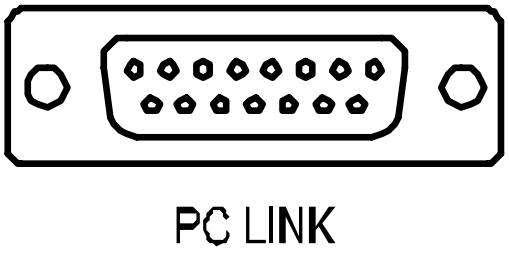
Four output connectors (S8G sockets) for the delegate units or other devices of the CDS200 II (2nd generation) system. At each line you can connect up to 40 devices. For more units you have to couple another Central Control Unit DPS202 for an extended system. The cable is part of each delegate unit.

4.6 PC IN (C15 Input)



C15 socket for connection of a control PC via RS232 COM port.

4.7 PC LINK (C15 Output)



C15 socket – not in use.

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4.8 Connecting to earth

For an additional earth connection (only for signal ground) there is a ground screw besides the mains power connector.

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5. Starting Up

The power supply is turned on via the power switch on the front side of the Central Control Unit DPS202.

When the Control Unit is used the first time it is recommended to control the setup. The procedure is described in the following.

If the DPS202 was already in use connected to a control panel BC202 and VIPs were assigned in this session, but forgot to clear those before disconnect the BC202, the VIPs will be still active. In this case a reset (Fig. 3) is mandatory to reset DPS to default settings.

Please note: If it is **not** ensured that all delegate units have different ID's over all four lines, it is absolutely necessary to start number programming!

For applications of more than one DPS in PC remote mode see → Chapter 8

5.1 Starting Setup

Note: All settings and adjustments will be stored and saved if the Central Control Unit is switched to OFF and ON again.

After switching on the system you will see the welcome menu for about 6 seconds.

Figure 1

5.1.1 Status displays

After 6 seconds or by pressing any button the display can be switch to the main menu shown below.

Note: The menu will also be displayed after 60 seconds if no setup procedure (SET) is done.

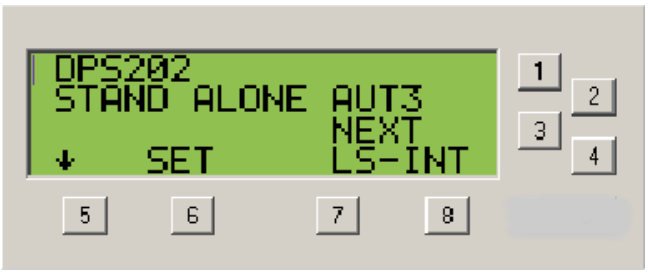

Figure 2

The main menu shows the active operation modes.

When starting the DPS the very first time the default values are displayed. Up to now all changes are saved and loaded with the next starting of the DPS.

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By pressing button 1 and 8 simultaneously the default values are loaded:

Figure 3

A request will follow whether the default values are overriding the current values. With button 5 (OK) the default values are loaded. With button 8 (NO) you may cancel the default settings.

The default values are:

- AUT3, NEXT in STAND ALONE mode
- No chairman assigned, no VIP assigned
- LS INTERN routing
- LS level -60dB
- All microphones routed to OUT1 (one total signal)
- DPS-ID is 01

a) **MIC** (microphone)**-Routing**:

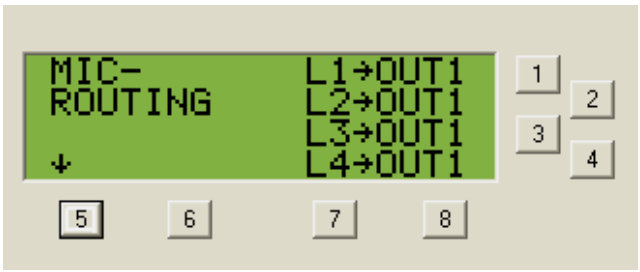

Figure 4

In default-setting all signals are routed to output XLR OUT 1. Pressing button 5 will show the next menu (Figure 5)

b) **UNITS ONLINE**: This display shows the total number of units. 37 of 38 units have been found in the sample.

This menu will always stay once selected. It can be changed to another menu with button 5.

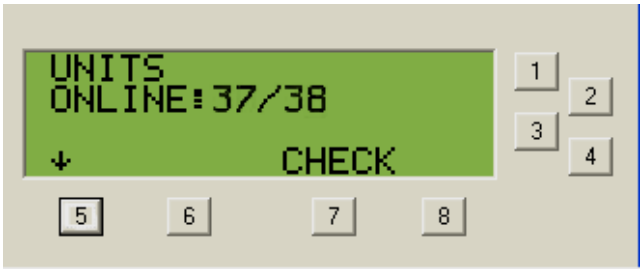

Figure 5

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c) **FOUND/LOST**: You can check the units of each line by pressing CHECK (button 7).

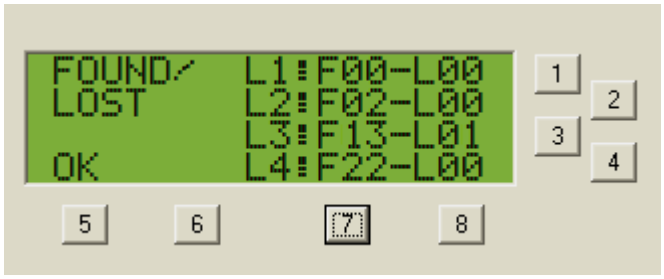

Figure 6

Sample:

L1: no units found / no units lost

L2: 2 units found / no units lost

L3: 13 units found / 1 lost (for instance in the case of removal), by pressing button 3 the number of the lost unit will be displayed.

L4: 22 units found / no units lost

Note: if more than one unit is lost then repeatedly pressing of the corresponding button will display all numbers one after the other.

Pressing key 5 (OK) of Figure 6 will cause the return to main menu:

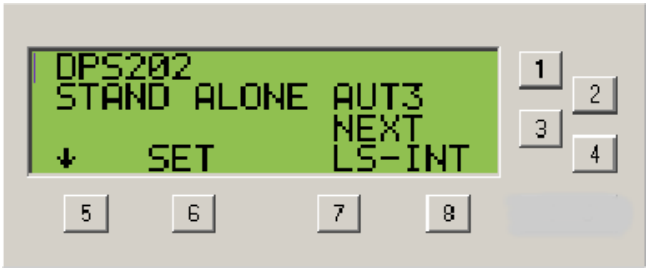

Figure 7

5.2 STAND ALONE mode

With pressing SET (button 6, Figure 7) configuration setup is shown:

Figure 8

First the operation mode STAND ALONE or PC-REMOTE has to be selected. The current adjustment is shown by the black cursor besides the buttons 1 and 2. In the sample above STAND ALONE is the active mode. In the case of controlling by the DPS202 software via PC or Laptop the mode PC-REMOTE is required.

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By pressing SET (button 6) in STAND ALONE mode the next menu is shown:

Figure 9

By selecting one of the buttons 1 to 3 the corresponding sub menus are called. Pressing button 6 will scroll to the next page (Figure 16).

5.2.1 MIC-Modes

Adjustment of microphone mode (button 1 – Figure 9)

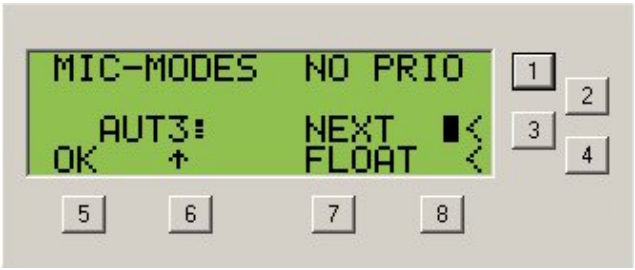

Figure 10

In application STAND ALONE the following microphone modes can be selected:

AUT + NEXT means that the next delegate will be switched online as soon as a speaker slot is available. When all slots are occupied the next speakers' requests are saved. The corresponding LED at the delegates' units is blinking.

AUT + FLOAT mean that the first speaker will be replaced by the last speaker if maximum number of speakers (slot) has been reached (FIFO).

With button 6 the maximum number of active delegates can be changed. Press to toggle from 1 to 6.

"NO PRIO" means that there is no president aligned jet (see also default values).

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5.2.2 MIC-ROUTING (Microphone-Routing)

(Button 2 – Figure 9)

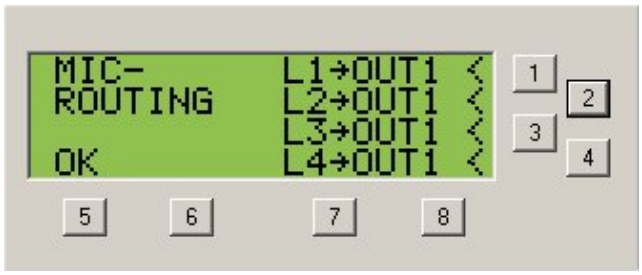

Figure 11

In this menu the microphone input signals are allocated to the different outputs. The outputs L1 to L4 either can be all routed to XLR OUT1 as one sum signal (Figure 11). When OUT1 is switched to LINK, all other lines are also routed to LINK (AF-LINK OUT connector) (Figure 12).

Nevertheless the lines L2 to L4 may be routed individually to the corresponding outputs like shown in Figure 13. This is done by pressing the buttons 2, 3 or 4

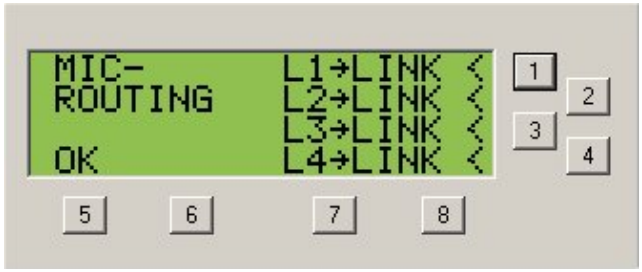

Figure 12

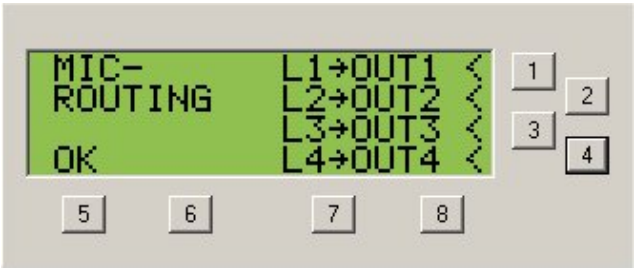

Figure 13

Output 2 (L2) may be routed either to Output 1 (sum) or to Output 2 separately (button 2)

Output 3 (L3) may be routed either to Output 1 (sum) or to Output 3 separately (button 3)

Output 4 (L4) may be routed either to Output 1 (sum) or to Output 4 separately (button 4)

5.2.3 LS (loudspeaker) – Routing

(Button 3 – Figure 9)

Figure 14

In this menu LS-ROUTING can be set to INTERN (button 2), EXTERN (button 3) or LINK (button 4) by pressing the corresponding button.

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Selection INTERN means that LS signals are controlled by the DPS202. In this case of internal processing the level of the LS-signal can be adjusted after pressing button 6 (LEVEL). In the following menu (Figure 15) you can adjust the level with button 6 (decrease) and button 7 (increase) in a range from -62dB to 0dB. To avoid feedback the starting level is set to -60dB.

Figure 15

Selection EXTERN means LS signals are fed in via LS-XLR connector at the rear of DPS. In this case the level of the input signal is controlled externally (e.g. via mixer).

LINK: For the operation with several DPS units there is provided the routing of the LS signals to one Central Control Unit DPS202. Thus the complete decentralized sound can be guaranteed by the loudspeakers in all delegate units.

5.2.4 System-Setup

(First press button 6 to scroll - Figure 9)

Figure 16

Pressing the button 1 leads to SYSTEM SETUP like shown below.

Figure 17

Within the menu SYSTEM SETUP additional settings are possible:

5.2.4.1 UNIT-NO: AUTOMATIC mode

UNIT-NO (button 2) will call the two possibilities for programming the delegates units: AUTOMATIC (button 2) and SEMI-AUTOMATIC (button 3) mode:

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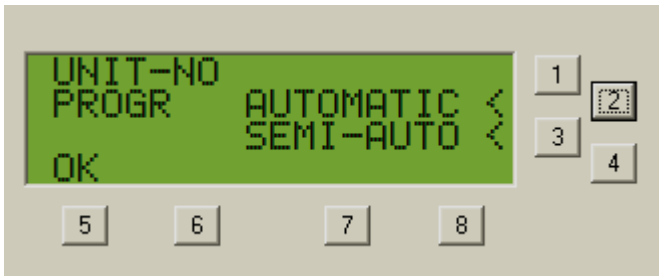

Figure 18

Pressing button 2 will lead to full automatic mode for programming the connected delegates' units (Figure 19). Start the programming procedure with button 6 (START).

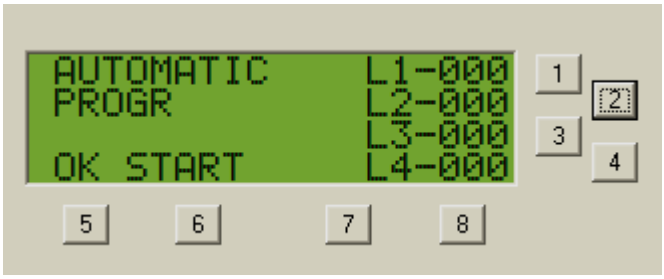

Figure 19

Line L1 to L4 will be checked successive for connected microphone units. The total numbers of units per line are displayed. Just wait until all lines are checked. Meanwhile an arrow besides the line number L1 to L4 showing the momentary line to be check. Procedure stops self acting. If you want to terminate programming immediately press again button 6 (STOP).

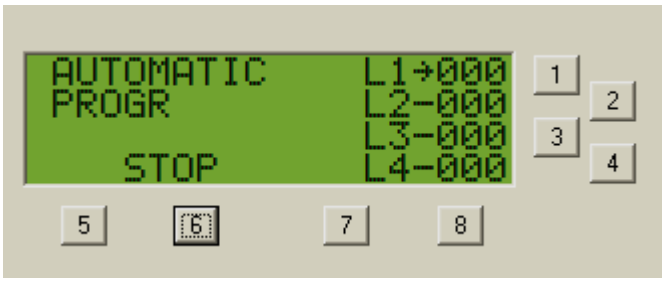

Figure 20

In this case a "power reset" is necessary. Otherwise pressing OK (button 5) will lead to "System Setup" (Figure 17)

5.2.4.2 UNIT-NO: Semi-AUTOMATIC Mode

Button 3 (Figure 18) will select the semi-automatic programming of the delegate units like shown in Figure 21. In this mode the first unit to program is selected with button 6 (down) or 7 (up). Please notice that maximum Number is 245.

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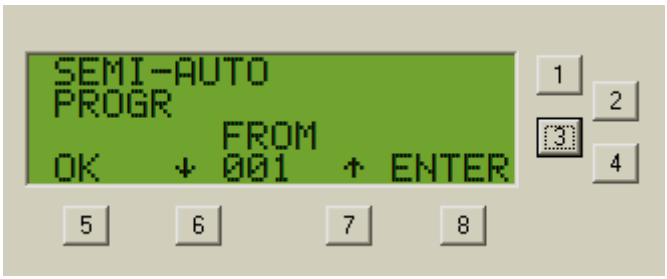

Figure 21

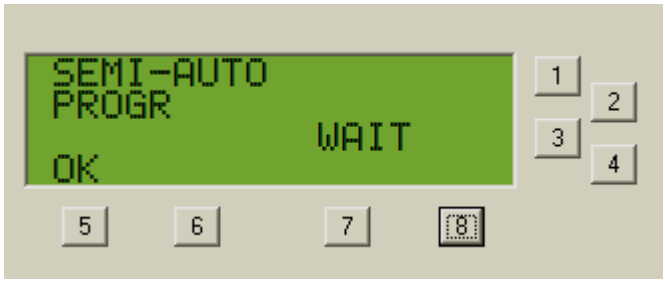

Figure 22

ENTER (button 8) will lead to the operation mode semi-automatic numbering (Figure 23). Please wait until all units are prepared (Figure 22).

Figure 23

“NEXT: 001” means the next ID number of unit to program (for instance: 001). The programming is done by pressing the microphone key of all connected units successively. The illuminated microphone of the unit will be deactivated and again activated after a second. When done with the last unit press OK (button 5).

5.2.5 System Setup: Chairman

Allocation of chairman’ unit

Button 3 (Figure 17): The number of the chairman (sometimes called president) can be allocated. Any user-defined unit can be assigned as a chairman’s unit.

Figure 24

Set the number of the chairman’s unit with button 6 and 7. Button 5 (OK) confirms your input and leaves this menu. Only one chairman per system is possible. Another allocation will override the former one.

Alternatively somebody may press the microphone button of the designated unit. The number of this unit will be displayed accordingly.

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5.3 Test-Routines

(after pressing button 6 to scroll - Figure 9)

To enter the Test-Routines press button 2 of Figure 25

Figure 25

Figure 26

Button 1: Here you can see the found and lost units (see also Figure 5 and 6) like shown below.

Figure 27

5.3.1 MICROPHONE TEST

Pressing the button 2 (MICROPHONE TEST – Figure 26) will cause the menu shown below

Figure 28

Pressing the buttons 6 or 7 will set the starting number of the first unit to check. Press ENTER (8) to accept this number and change to the input of the last unit to check (Figure 29). Finish the input with ENTER (8)

Figure 29

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Figure 30

Start the test with button 2 (START) and also stop it with STOP (2) - see below

Figure 31

5.3.2 MIC-LEDs ALL ON oder OFF

Pressing button 3 (MIC-LEDs ALL ON) will switch on and off all red light-ring LED indicators of the units for a quick check.

Figure 32

Figure 33

5.3.3 Information about Firmware Version

Figure 34

Pressing button 3 will display information about the version of firmware for Master (MA) and Slave (SL) controller. See sample below:

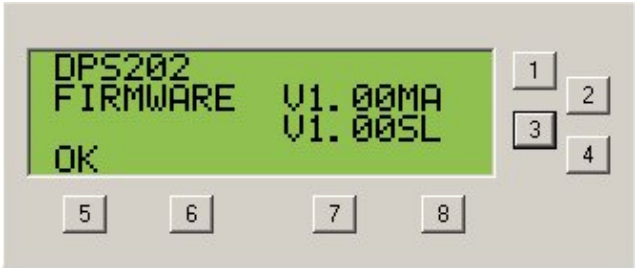

Figure 35

After input of all necessary parameters the system is ready for use. Because all values are saved, setup is only required if changes have to be made.

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5.4 PC Remote Mode

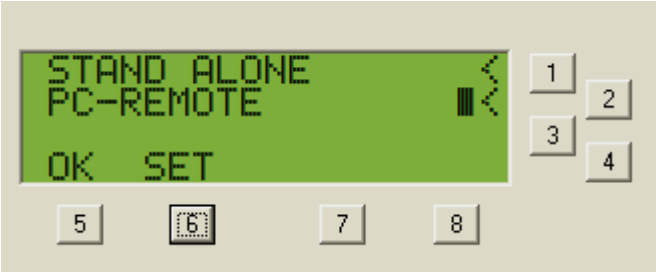

Figure 36

The DPS202 is either able to work in stand alone mode or in connection with a PC. In connection with MicControl software and a PC there are manifold options for system parameters and operation modes.

5.4.1 Single Central Control Unit

The remote mode requires only the following settings:

- Microphone signal routing
- LS (loudspeaker) signal routing

Please see the description in the corresponding chapters for Stand Alone mode (5.2.2 and 5.2.3).

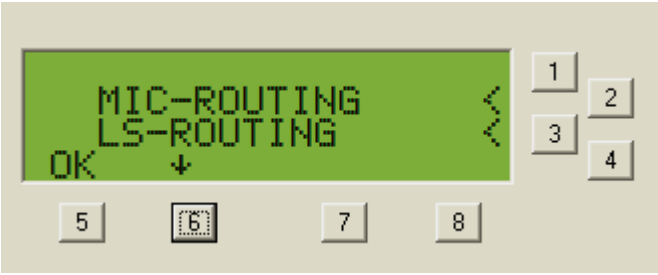

Figure 37

- ID numbering about “System Setup”
- Setting of Baud-Rate

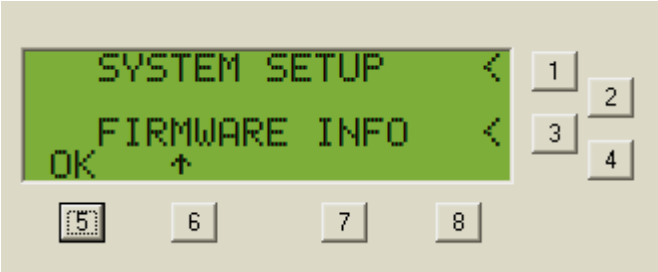

Figure 38

All other adjustments are PC controlled.

The Remote Mode additional offers further microphone mode. Furthermore a speaking time limit for the delegates is provided (see Manual for MicControl).

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Selecting the System Setup leads to the following menu:

DPS-ID is only relevant if using more than one DPS in the system. See next chapter.

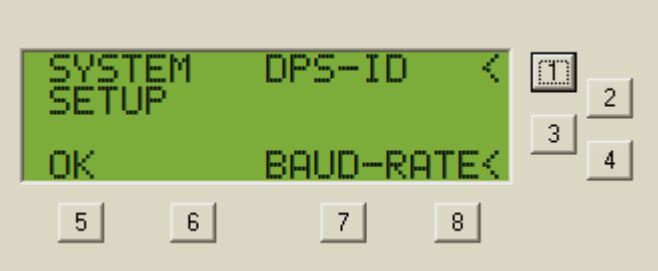

Figure 39

Set BAUD-RATE with pressing button 4.

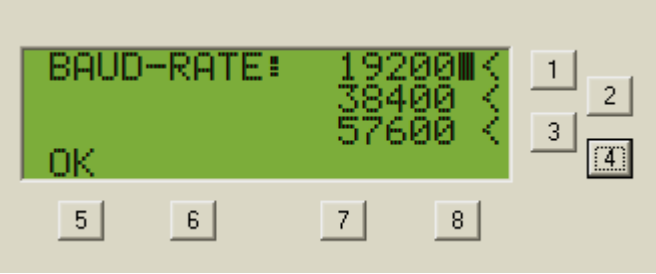

Figure 40

The baud-rate is set in accordance with your equipment. Possible baud-rates are 19.200, 38.400 or 57.600. Just press the corresponding button 1, 2 or 3 and confirm your setting.

5.4.2 Multiple Central Control Units

Each DPS unit within a system with multiple DPS units must have a unique ID number. Double allocation will cause an error.

Using more than one Central Control Unit DPS202 is only possible in PC-REMOTE mode.

Next step is to check the IDs of each unit. They must be different. Select the system setup and herein the DPS-ID setting with button 1

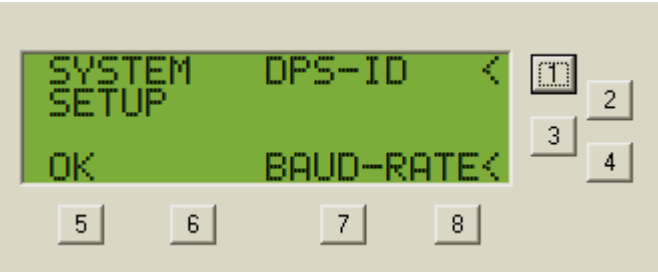

Figure 41

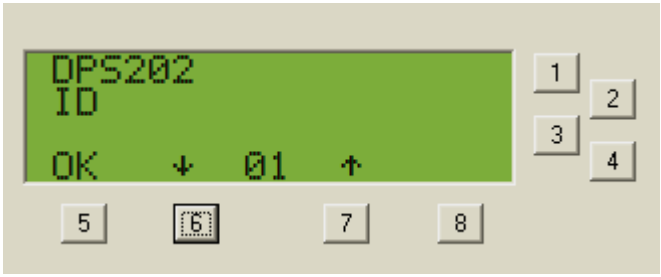

Figure 42

Select ID numbers for **all** DPS in your system. They must be different. All other settings are described in the chapters for Single unit and/or Stand Alone mode.

Note: The numbers of the delegate units must be different only within a range of one DPS ID.

A sample for cabling more than one DPS is shown in chapter 8 Applications.

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6. Routing diagram

The following diagram shows the complete routings of the LS and AF to LINE OUT L1 to L4 (XLR).

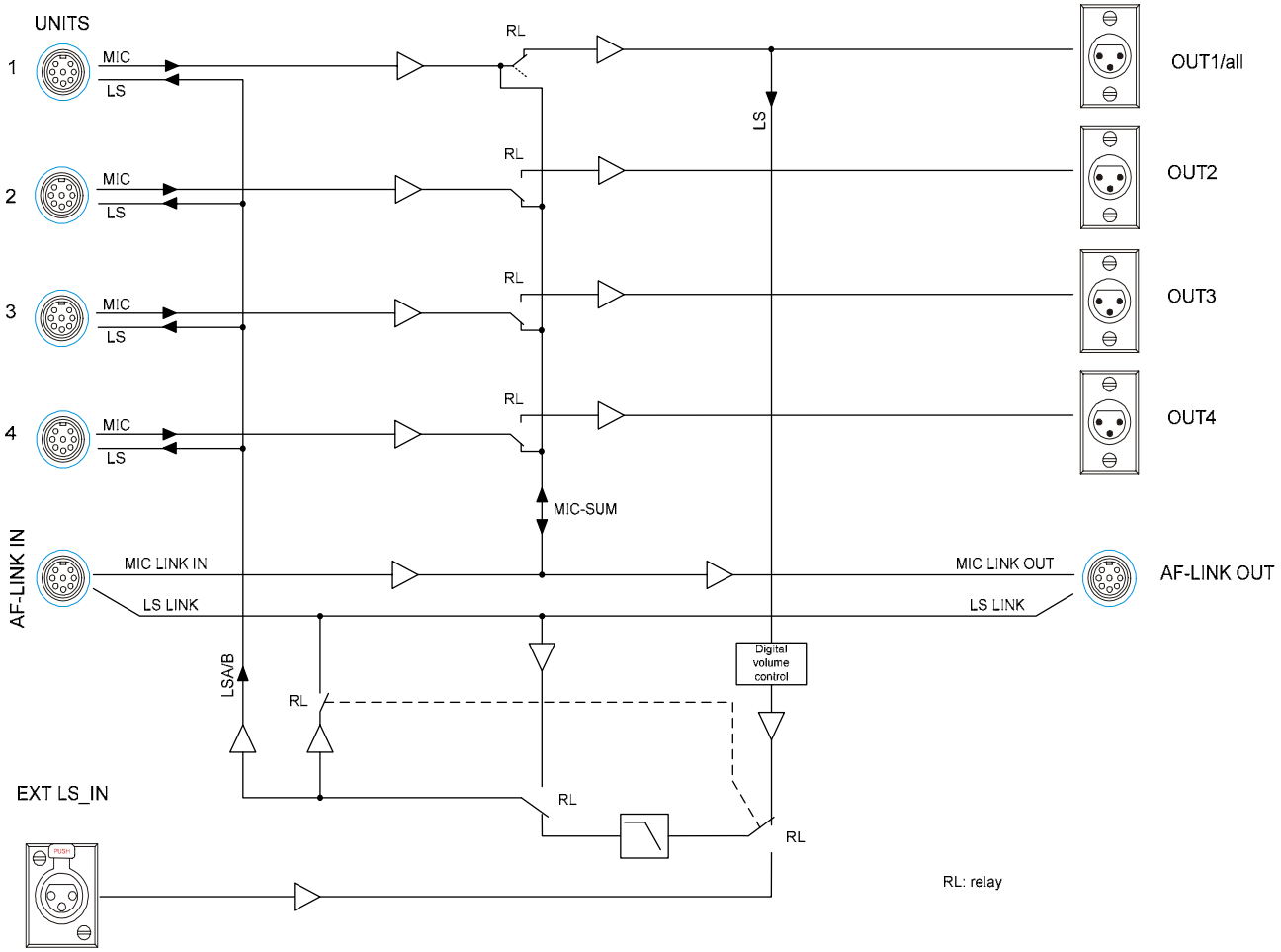

Figure 43

Copyright by Brähler ICS

7. Short Overview

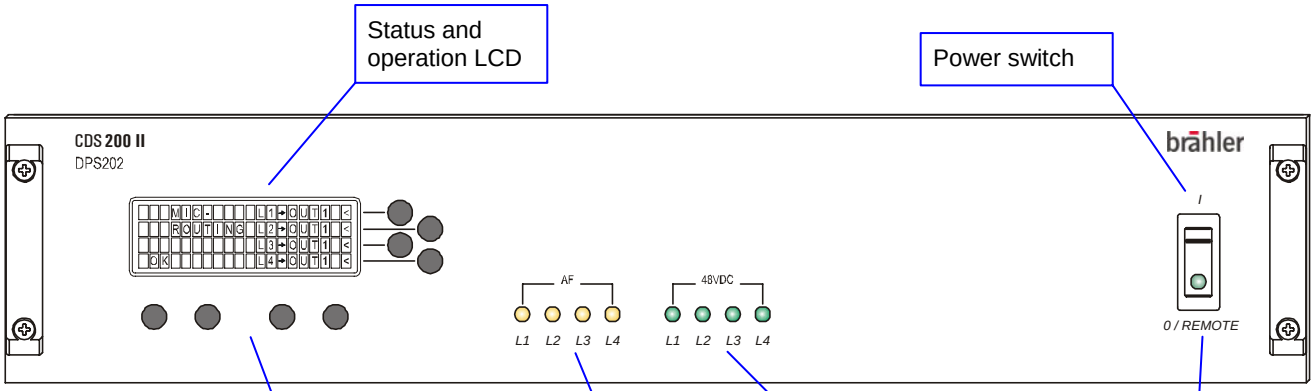

Figure 44

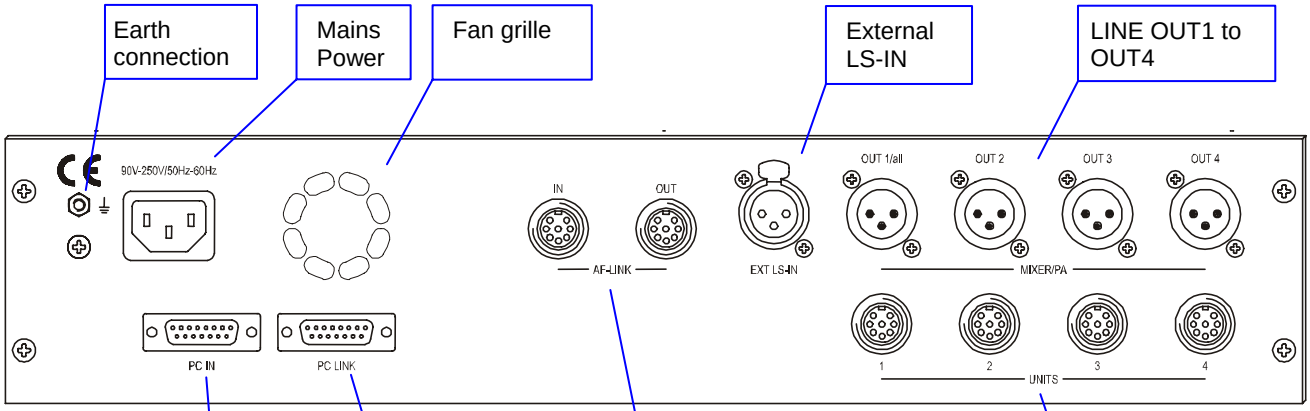

Figure 45

7.1 Technical Data DPS202

The DPS202 is complying with international standard IEC 60914

Connectors

- EXT LS-IN (XLR-socket) for decentralized public address
- MIXER/PA: OUT1/all, OUT2, OUT3 and OUT4 (four XLR-plug) for up to 4 AF-Lines
- UNITS: 1 ... 4 (two S8G-socket) for connection of maximum 40 Delegates' units (CDS200 2nd generation) at each line (maximum 80m cable length to the first delegate unit)
- AF-LINK: IN and OUT (two S8G-socket) for coupling the AF-signals of more than one Central Control Unit connected together
- PC IN (CR15-socket) for connection of a control PC
- PC OUT (CR15-socket) temporary not in use

Features

- Green lighted mains switch for power on indication
- LC Display in 4 rows each 20 characters
- 4 green LEDs for power on indication at the outputs
- 4 yellow LEDs for Peak MIC level

Short-circuit protected outputs

- Short-circuit < 2s: Current limit at 1.5A max. per output
- Short-circuit > 2s: output will switch OFF
- 60s for switching the output ON again if the short-circuit has been removed

Power Supply

- Mains power: (90 ... 250)VAC, (50 ... 60)Hz
- Power consumption: 320VA max.

Housing

- 19", 2 HU, Aluminium, "silver" anodized
- Fan cooling
- W x H x D: (433 x 88 x 305)mm

Weight

- 4,5kg

Optional (not included in delivery)

- System software MicControl
- Connection cable to PC (08.2140) Version RS232

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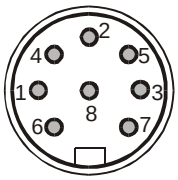
7.2 Connector pinnings for service information

UNITS (S8G-GJ)

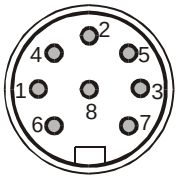


female connector-view
(front view)

1 ●	grn	LS-B
2 ●	blu	GND
3 ●	gry	LS-A
4 ●	vio	DIG-A
5 ●	brn	AF-B (Mic)
6 ●	wht	AF-A (Mic)
7 ●	yel	DIG-B
8 ●	red	+UB (48V)

Cable 13.6190

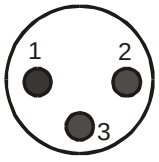
AF-LINK (S8G-GK; IN/OUT connector)



female connector-view
(front part)

1 ●	grn	LSLINK-B
2 ●	blu	GND/Shield
3 ●	gry	LSLINK-A
4 ●	---	
5 ●	brn	MICLIN-B / MICLOUT-B
6 ●	wht	MICLIN-A / MICLOUT-A
7 ●	---	
8 ●	---	

MIXER/PA and EXT LS-IN (X3-CS; OUT1/all, OUT2, OUT3, OUT4, XLR connector)

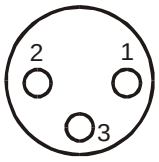


Output

male
(connector-view)

PA
LINE
balanced

1 ●			(Shield)
2 ●			AF-A (NF-A)
3 ●			AF-B (NF-B)



Input

female
(connector-view)

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PC IN (C15-CR data connector)

DATA-A			1 ●	● 9			DATA-B
RxD			2 ●	●10			TxD
GND-Digital			3 ●	●11			Relais
NC			4 ●	●12			NC
AF-A (Mic)			5 ●	●13			AF-B (Mic)
NC			6 ●	●14			Shield
NC			7 ●	●15			LS-A
LS-B			8 ●				

INPUT / OUTPUT

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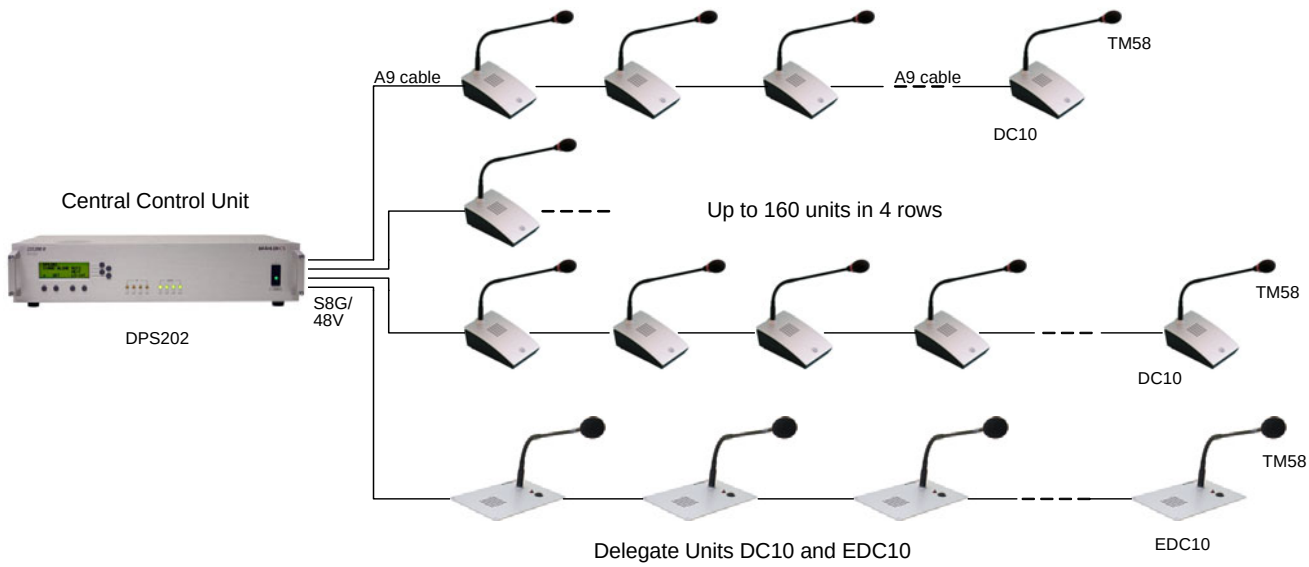
8. Applications

In the following you see some examples in form of block diagrams:



Application 1

This diagram shows an application for a simple discussion system. The DPS works in STAND ALONE mode. When done the system setup there is no further control necessary.

CDS200 II System Components

- DPS202: Central Control Unit with 4 line outputs
- DC10: Delegate unit with MIC function
- EDC10: Built in version of delegate unit with MIC function
- BC202/50: Microphone control panel for 50 microphones *)
- BC202/100: Microphone control panel for 100 microphones *)

*) Can be integrated at any point within the chains: All BC202's have their own ID number

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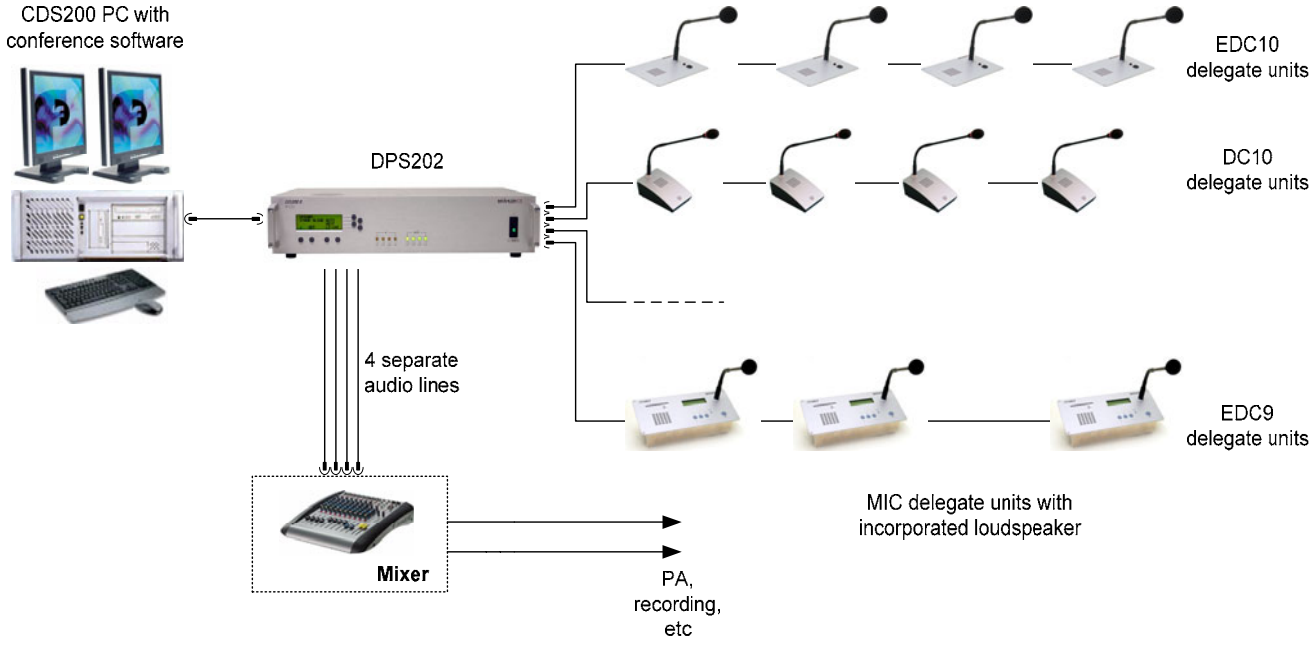

Application 2

This diagram shows an extended application for a discussion system in conjunction with a voting system. The DPS is controlled by a PC with Brähler ICS software MicControl under MS Windows®.

CDS200 II System Components

- CDS200 II PC: Including MicControl Software
- DPS202: Central Control Unit with 4 line outputs
- DC10: Delegate unit with MIC function
- EDC9: Delegate unit with MIC and VOTING function
- BC202/50: Microphone control panel for 50 microphones *)
- BC202/100: Microphone control panel for 100 microphones *)

Optional

- Mixing console: Possibility to connect each output line of the DPS to a mixer console

*) Can be integrated at any point within the chains: All BC202's have their own ID number

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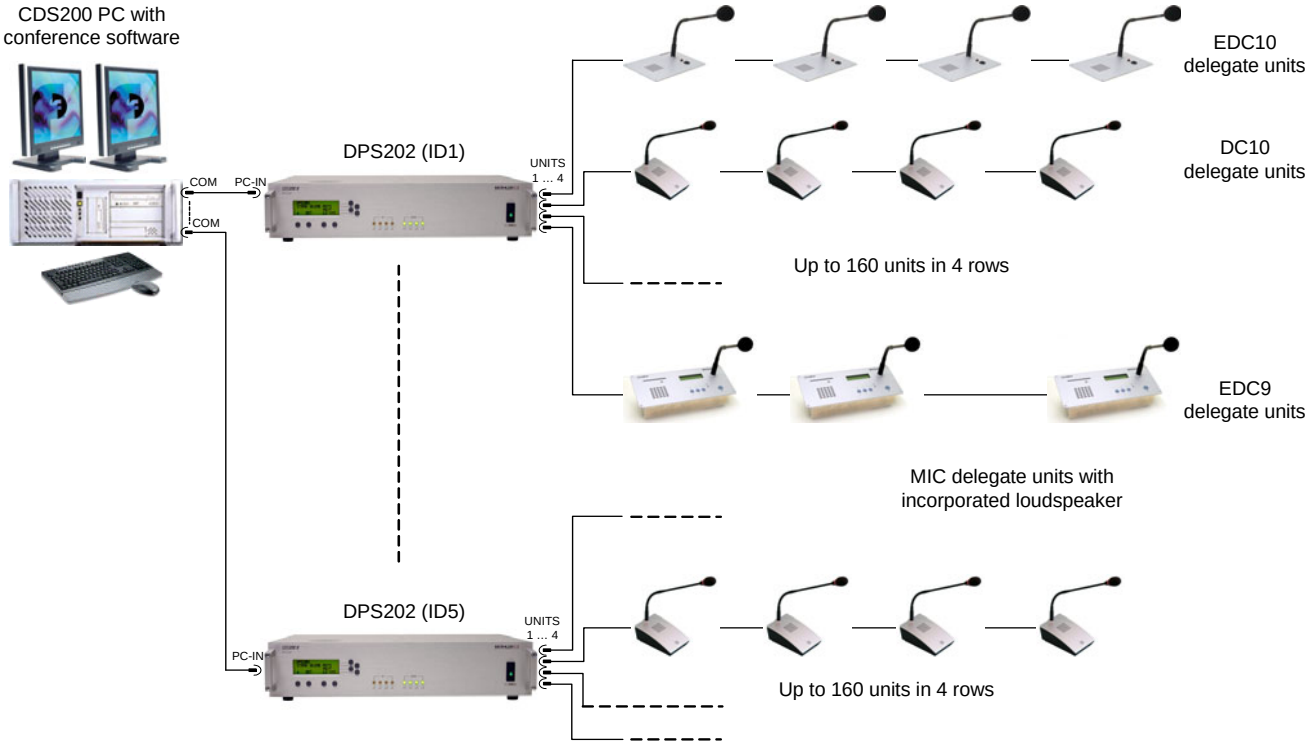

Application 3

This diagram shows an application linking more than one central unit DPS202 in PC Remote mode. It is a discussion system in conjunction with a voting system. The DPS is controlled by a PC with Brähler ICS software MicControl under MS Windows®. With this configuration you can use up to 5 x 160 delegates units (see also 5.1.4.2 page 21).

Note: As option it is possible to connect 8 DPS devices to a PC with 8 COM port.

CDS200 II System Components

- CDS200 II PC: Including MicControl Software
- DPS202: Central Control Unit with 4 line outputs
- DC10: Delegate unit with MIC function
- EDC10: flush-mounted version with MIC function
- EDC9: flush-mounted version with MIC and VOTING function
- BC202/50: Microphone control panel for 50 microphones *)
- BC202/100: Microphone control panel for 100 microphones *)

*) Can be integrated at any point within the chains: All BC202's have their own ID number

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Troubleshooting

Error description	Error cause	Error solution
Switching on the system produces no POWER ON condition (green light does not light up).	The main cable connector is not properly connected to the corresponding socket of the unit. Connection cable possibly defective. The power switch is not in the correct position.	Check if there is no connection to the mains power. Replace a new mains cable. Turn on the POWER ON switch.
One or some of the yellow LEDs do not light up.	Probably there is no audio-signal (no speaker active).	Check whether the speaker's microphone is active (ring-shaped indicator) Check the cabling of the units and the microphones.
One or some of the green LEDs do not light up (L1 … L4).	One or more delegate units cause a short circuit. One or more lines are out of order.	Check the corresponding line for any failure in the cabling. Check the units. Remove or replace the defective unit out of the line. Do **not** switch on and off the DPS trying to remove the short circuit. Also do **not** plug and unplug the connector of the faulty line
DPS unit does not work correctly after connecting to the system.	Communication failure.	Check correct operation modes (Stand-alone or Remote Mode). Controlling and correction of the setup menu. Pay attention to the UNIT-ID. The same unit No. will cause an error.
Activation of one microphone unit switches on an additional unit	Double ID numbers in the system	Renumbering of the corresponding unit (see semi automatic numbering; figure 18)
System performance low	Double ID numbers in the system	Renumbering of the connection unit (see semi automatic numbering; figure 18)
Units lost (see figure 5 and 6)	One or more microphone units are not recognized by the central control unit	Check the power supply for the lost units. Check data communication (figure 25) and power by means of "MIC-LED all ON" Check whether a unit has been removed.

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Warranty

BRÄHLER ICS allows for the CDS200 II products a warranty period of 24 months, from date of delivery, for faulty materials and/or manufacturing faults. The warranty does not include rechargeable or disposable batteries, misuse, negligence, breakage, wrong installation, use outside the existing rules and any unauthorised modifications.

BRÄHLER ICS rejects any guarantee, if the safety label with the serial number is removed.

BRÄHLER ICS declares itself to agree to exchange or repair defective components due to faulty materials or manufacturing, dependent on following procedure:

1) The client declares that the fault is not due to empty, discharged, wrongly inserted, or faulty batteries.

2) Before sending the faulty product back to the company, please obtain an RMA (Return Material Authorisation) number. An RMA can be obtained by contacting us at the details below

Phone +49 (0) 2244 930-0
or email: sales@braehler.com

3) You may send the defective product free of charge to (refer to the service form):

BRÄHLER ICS Konferenztechnik
International Congress Service AG
Auf der Alten Burg 6
53639 Königswinter
Germany

4) Should it turn out that the fault was caused through inattentiveness or inappropriate use, the service and shipping charges will be added to the clients account.

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Service form

Material return shipments for repair-, service-, or guaranty purposes please send to:
BRÄHLER ICS Konferenztechnik AG, Auf der Alten Burg 6, D-53639 Königswinter, Germany
Phone +49 (0)2244 930-100, Fax +49 (0)2244 930-450

Dear customer,
Please ask our sales staff for the **RMA number** *(**R**eturn of **M**aterial **A**uthorization)*.
Without RMA number a treatment is not possible!
Please always include this service form, fully completed, with any complaint or repair wish you may have. Please note that only returns with the proper and complete paperwork can be dealt within time.

A detailed fault description will reduce costs and period of repair.
Please contact us before you return equipment in order to find the most efficient way of sending.

RMA number: _____

Article description: _____ Serial no.: _____Code: _____

Delivery note no.: _____ Invoice no.: _____

Reason for return/Fault description:

_____

_____

_____

Company: _____

Contact person: _____

Phone: _____ Fax: _____

Notes/Comments:

_____

_____

_____

Transport damages have to be reported immediately to the responsible forwarding agent.

Remarks for Non-EU customers:
Please add to each return a delivery note or a proforma invoice, addressed to Brähler ICS AG, Königswinter,
with following statements:
- Reason for return (repair or credit note)
- Exact declaration of the goods, exact no. of pieces, article no. / model, serial no.
- Price which was invoiced by us, better our invoice no. with date

Return shipments from Non-EU countries have to be sent **either by air freight** to Cologne airport, to the attention of:

Calenberg Oversea Logistics, Mrs. Taxacher, Welser Str. 8, 51449 Köln, Tel: +49 2203 3592-838

or by the following courier services:

DHL Express, Federal Express, TNT Worldwide Express, UPS Express

Please do not use any other courier service, because only the four companies mentioned above perform return shipments.
To enable quick and cost efficient customs clearance, kindly take care that the airway bill mentions
a) 'return for repair' as well as
b) the customs tariff code number of the goods (which will be advised by us together with the return of material authorization number)

Any expenses (duties and taxes) incurred by deviant handling will be charged to the sender.

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