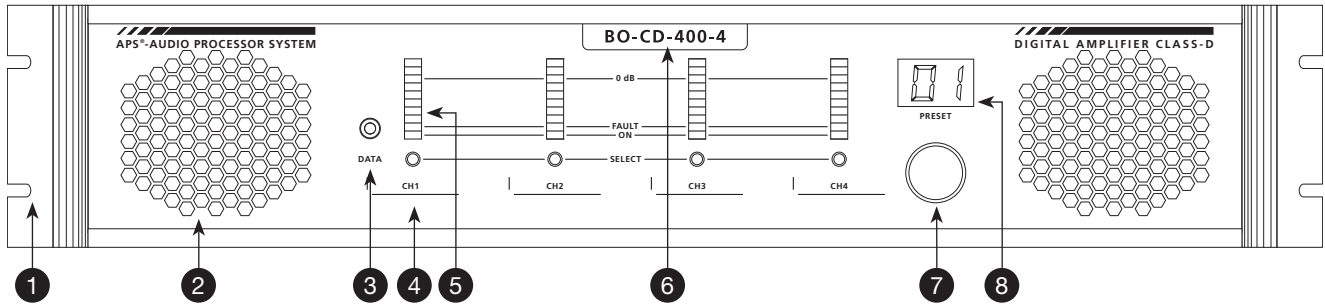


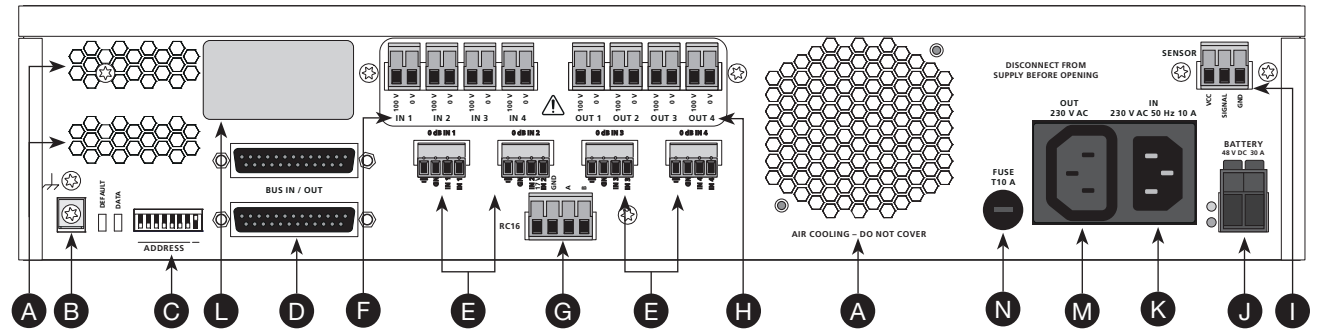
# BO-CD-400-4 | BO-CD-250-4 | -EV | -AX

Digital Amplifier 4 x 400 W | 4 x 250 W



## Front view

- |                                 |                        |
|---------------------------------|------------------------|
| 1 19" Adaptor 2U (Option MC-42) | 5 LED indication       |
| 2 Ventilation grille            | 6 Model code           |
| 3 Socket for programming        | 7 Volume control       |
| 4 Channel selection button      | 8 Preset/Fault display |



## Rear view

- |   |   |
|---|---|
| A Ventilation grille                                | H Output connector blocks for amplifier 1–4 |
| B Functional earth                                  | I Connector block for temperature sensor    |
| C Mini-switches for the addressing and Master/Slave | J Connector block for the battery (48 VDC)  |
| D Socket D-SUB-25 for APS bus ribbon cable          | K Mains power input                         |
| E Input connector blocks for LF signal              | L Type label                                |
| F Input connector blocks for reserve amps 1–4       | M Mains power output 230 V for extension    |
| G Connector block for remote control (RC16)         | N Fuse                                      |

Connector blocks F at EV Version only  
 Connector blocks E at AX Version only

**Description**

**Designation and function**

Casing with four amplifiers for 100 V loudspeakers

**Intended use**

- Fire safety
- Professional audio

**Use**

As part of an APS system (normal case)

**Adjustments at the casing (Rear side)**

- APS Address

**Functions as APS amplifier**

- According to the programming of the APS-990

**WARNING**

The unit is supplied with hazardous mains voltage (230 V AC). Leave servicing to skilled personnel only. Inexpert handling may cause an electric shock hazard.

- The unit is suitable for indoor use only. Protect it against humidity and heat
- Do not cover the ventilation grilles of the casing (Front and rear) with any objects
- Do not insert anything through the ventilation grilles!
- Do not operate the unit or immediately disconnect the plug from the mains socket
  - If there is visible damage at the unit or to the mains cable
  - If a defect might have occurred
  - If malfunctions occur
- Never pull at the cable to disconnect the mains plug!
- For cleaning only use a dry, soft cloth, by no means liquids!
- Device may only be opened by authorized specialists
- This device is not suitable for use in places where children may be present

**Technical specifications**

**Mini-switch for the addressing (C)**

- 1 Address 1
- 2 Address 2
- 3 Address 4
- 4 Address 8
- 5 Address 16
- 6 Address 32
- 7 Address 64
- 8 Not used



**WARNING**

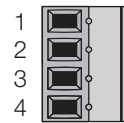
The APS address must be in accordance with the programming! At completely delivered systems, all mini-switches are in the right position. Do not alter! With only one switch in the wrong position, may be the system doesn't work correctly! The same is possible, if a casing without replacement is taken out of the system.

**Socket D-SUB-25 (BUS IN/OUT) (D)**

For the bus connection with other APS casings

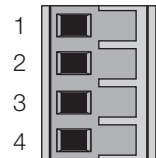
**Connection diagram for the connector blocks (E)**

- 1 Casing/Ground
- 2 Ground
- 3 LF input 0 dBu balanced +
- 4 LF input 0 dBu balanced -



**Connection diagram for the connector block (G)**

- 1 Supply remote control 17 V
- 2 Supply remote control ground
- 3 Data line RC16 A
- 4 Data line RC16 B



**Connection diagram for the connector blocks (F) and (H)**

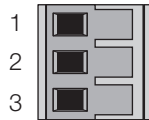
- 1 100 V
- 2 0 V



## Technical specifications

### Connection diagramm for the connector block (I)

- 1 Supply
- 2 Sensor
- 3 Ground



### Connection diagramm for the connector block (J)

- 1 48 V DC
- 2 Ground DC



Fuse protection internal:  
30 A, 58 V

## General Information

Output power in mains and battery operation

BO-CD-400-4	4 x 400 W* (4 x 250 W RMS)
BO-CD-250-4	4 x 250 W* (4 x 200 W RMS)

Minimum impedance per channel

BO-CD-400-4	25 $\Omega$
BO-CD-250-4	40 $\Omega$

Maximum capacity per channel

BO-CD-400-4	300 nF
BO-CD-250-4	300 nF

Frequency response 50 Hz to 20 kHz (-3 dB)

Linearity  $\pm 0.5$  dB

Distortion factor < 0.3% (at 1 kHz) at 50% nominal output power

Signal-to-noise ratio > 85 dB

Main fuse (J) 5 x 20 mm, 10 AT

Powering of the APS syst. 1000 mA / 17 V

Ambient temperature  $-5^{\circ}\text{C}$  to  $40^{\circ}\text{C}$

Humidity 15% to 90%, non condensing

Weight 14 kg

Dimensions (W x H x D)

BO-CD-400-4	422 x 89 x 318 mm
BO-CD-250-4	422 x 89 x 318 mm

\* Output Power: Music and Speech, Siren DIN 33404-3 and Slow Whoop NEN 7525-3 -9 dB Crest Factor.

### Product versions

- BO-CD-400-4
- BO-CD-400-4-EV
- BO-CD-400-4-EV-AX
- BO-CD-250-4
- BO-CD-250-4-EV
- BO-CD-250-4-EV-AX

## Operating instructions

Commissioning, operation and maintenance may only be performed by trained personnel.

1. If the device is on, the green ON indications illuminate.
2. If the indications do not illuminate, then the mains fuse must be checked. This fuse is integrated into the mains socket (K). For a check or for an exchange of the fuse, the mains cable must be disconnected from the amplifier. Then it is possible, with the help of a screwdriver, to open the small drawer which is integrated into the mains socket. Now two fuses become visible. The first visible is the replacement. The second one is the fuse for the device. Replace fuses only by the same type.
3. After selecting the channel using the channel selecting buttons (5) the display (9) shows «Vo» (Volume). The required volume (for music and call) can be adjusted by the volume control (8). After a second press of the same selecting button the display shows «Sh» (shadow volume). Also this volume can be adjusted to the desired level by using the volume control. Switching between the two volumes is possible by using a digital contact in the APS programming. During operation the level meters (6) show the current output level. While setting a volume only the selected channel shows the adjusted volume.
4. The battery connection (J) works as charger and is also the input for emergency power. The changeover between mains and battery power will be made automatically.

### WARNING

The usual safety regulations for handling electrical equipment apply. In particular, the device may only be opened if 230 V mains plug is pulled out and the battery supply is interrupted.