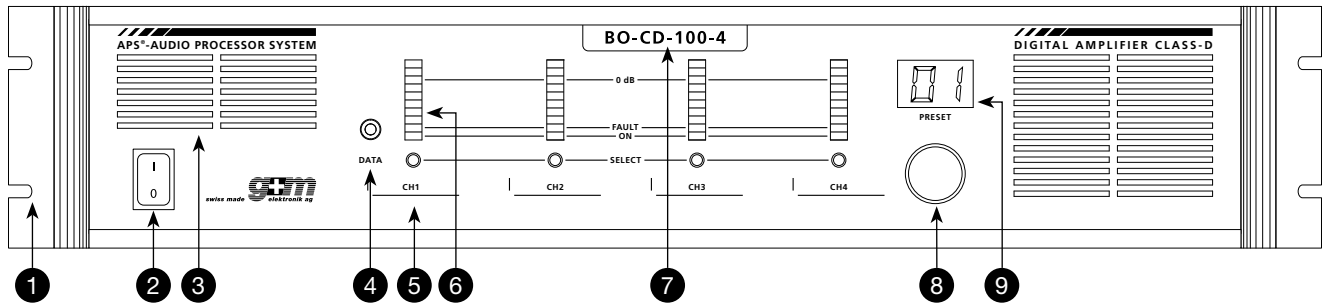


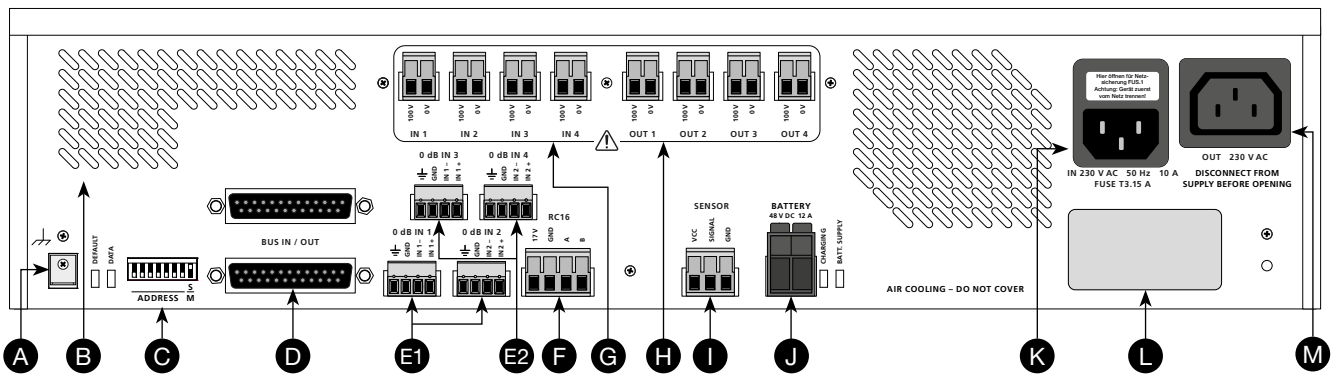
# BO-CD-100-4 | -EV | -AX | -LD | -EVLD

## Digital amplifier 4 x 100W



### Front view

- |                                  |                        |
|----------------------------------|------------------------|
| 1 19" adapter 2HE (option MC-42) | 6 Level display        |
| 2 DC switch standby/on (0/I)     | 7 Type designation     |
| 3 Ventilation slots              | 8 Volume control       |
| 4 Programming socket             | 9 Preset/error display |
| 5 Channel selection buttons      |                        |



### Rear view

- |  |  |
|--|--|
| A Functional earth                           | H Output terminals for amplifiers 1–4      |
| B Ventilation slots                          | I Terminal for temperature sensor          |
| C Mini switches for address and master/slave | J Terminal for battery (48 VDC)            |
| D D-SUB-25 sockets for APS bus cable         | K Input socket for mains voltage with fuse |
| E1, E2 Input terminal for LF signal          | L Type plate                               |
| F Terminal for remote control (RC16)         | M Output socket for mains voltage 230V     |
| G Input terminals for reserve amplifiers 1–4 |  |

Terminals G, I and J only with EV version  
Terminal E2 only with AX version

## Description

### Designation and function

Housing with four amplifiers for 100V loudspeakers

### Use

As part of an APS system (normal case)

### Adjustments at the casing (Rear side)

- APS address
- Master/slave (function of the DC switch)

### Functions as APS amplifier

According to the programming of the APS-990

#### WARNING

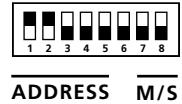
The unit is supplied with life-threatening mains voltage (230V AC). You should therefore never undertake work on the device yourself. Tampering with it puts you at risk of electric shock.

- Only use the appliance indoors and protect it from moisture and heat
- Do not cover the ventilation slots (front and rear)
- Ensure that air can circulate unimpeded
- Do not allow anything to enter the ventilation slots!
- Do not operate the device in the following circumstances (i. e. disconnect it from the mains immediately):
  - Visible damage to the unit or the mains cable
  - You suspect a defect
  - The device malfunctions
- Never use the cable to pull the mains plug out of the socket!
- Use a dry, soft cloth for cleaning – no liquids!
- The device may only be opened by authorised personnel
- This device is not suitable for use in locations where children may be present

## Technical specifications

### Mini-switch for the addressing (ADDRESS) (C)

- 1 Address 1
- 2 Address 2
- 3 Address 4
- 4 Address 8
- 5 Address 16
- 6 Address 32
- 7 Address 64
- 8 Master (ON) or slave (OFF)



#### IMPORTANT

The APS address must match the programming! The switches of systems delivered complete are set correctly and must not be changed! Even one incorrectly set switch can render the system inoperable! This can also occur if a housing is removed from the system without replacement.

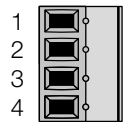
M/S: function of the DC switch (2)  
(Master: ON/OFF switch, slave: no function)

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

For bus connection with other APS system housings

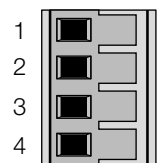
#### Connection diagram for the connector blocks (E1 and E2)

- 1 Housing/earth
- 2 Ground
- 3 LF- (low frequency)  
Input 0 dBu bal. +
- 4 LF- (low frequency)  
Input 0 dBu bal. –



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

- 1 Remote control supply 17V
- 2 Remote control supply ground
- 3 Data line RC16 A
- 4 Data line RC16 B



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

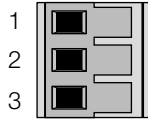
- 1 100V
- 2 0V



## Technical specifications

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

- 1 Supply
- 2 Sensor
- 3 Ground



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

- 1 48V DC
- 2 Ground DC



Internal fuse:  
20A, 58V

## General information

Power	4 × 100W
Frequency response	50Hz to 20kHz (−3 dB)
Linearity	±0.5 dB
Distortion factor	<0.3% (at 1 kHz) at 50% nominal output power
Signal-to-noise ratio	> 85 dB
Fuse (J)	5 × 20mm, 3.15 AT
Min. connection impedance	100 Ω / Z −10%
Supply of the APS system	1000 mA / 17V
Ambient temperature	−5°C bis 40°C
Humidity	15% to 90%, non condensing
Weight	8.5 kg
Dimensions (W × H × D)	422 × 89 × 318 mm

### Product variants

- BO-CD-100-4
- BO-CD-100-4-EV
- BO-CD-100-4-EV-AX
- BO-CD-100-4-LD
- BO-CD-100-4-EVLD

EV: certified in accordance with EN 54-16  
 AX: two additional analogue 0dB inputs  
 LD: Long Delay option up to 14.56 seconds  
 (4.8km) distributable across 4 channels

## Operating instructions

Commissioning, operation and maintenance may only be carried out by qualified personnel.

1. The green ON indicators are illuminated when the device is on.
2. If the indicators are not illuminated, the mains fuse must be checked. This may be found in the mains socket (K). Be sure to unplug the mains cable from the amplifier prior to inspection or replacement. After that, the drawer incorporated within in the mains socket can be opened using e.g. a small screwdriver. This reveals two fine-wire fuses. The first visible one is the spare fuse. The second is the device fuse. Fuses may only be replaced with those of the same type.
3. After selecting the channel using the selection keys (5), “Vo” (Volume) appears in the display (9). The required volume (for music and call) can be set with the control (8). Pressing the same select button a second time causes “Sh” (Shadow Volume) to appear in the display. This volume can also be adjusted to the desired level with the control. Switching between the two volume levels can be done by means of a digital contact in the APS programming. In operation, the level indicators (6) show the current output levels, while when setting a volume, only the selected channel shows the set volume.
4. The battery connection (J) also serves as a charger and as an emergency power supply. Switching from mains to emergency power operation is automatic.

### WARNING

The usual safety regulations for handling electrical equipment apply. In particular, the device may only be opened when the 230 V mains plug and battery supply are disconnected.

### NOTICE

AX version: if the external LF input 0 dB IN 3 is connected to one or more amplifier outputs, the internal bus BF3 is switched off.

AX version: if the external LF input 0 dB IN 4 is connected to one or more amplifier outputs, the internal bus BF4 is switched off.