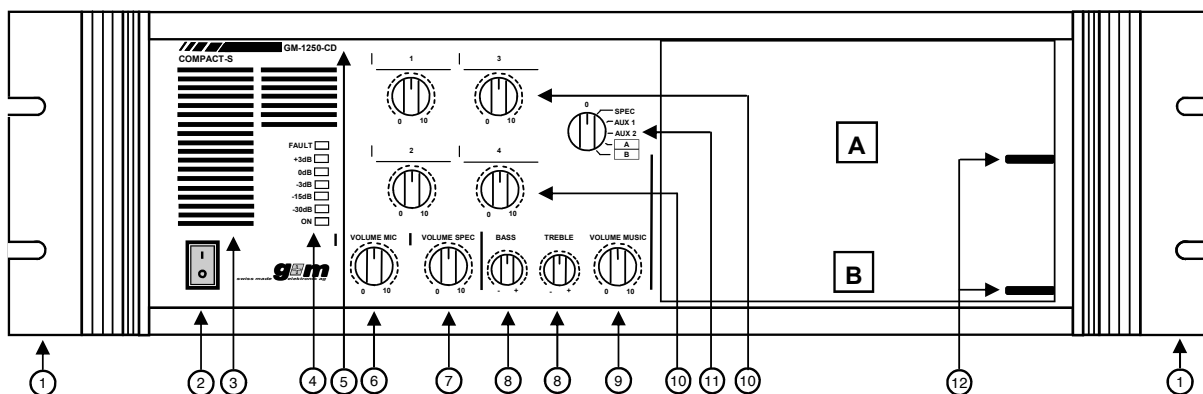


# Compact-S

## GM-1150-CD | -1250-CD



### Front view

- |                                      |  |
|--------------------------------------|--|
| 1 19" adaptor 3U (option MC-43)      | 7 Volume control for the special input         |
| 2 DC switch on/standby (I/O)         | 8 Tone control for the music (Bass and Treble) |
| 3 Ventilation grille                 | 9 Volume control for the music                 |
| 4 LED indication                     | 10 Volume controls for the loudspeaker lines   |
| 5 Model code                         | 11 Music source selector switch                |
| 6 Volume control for the microphones | 12 Detents for the modules A and B             |

### Description

#### Designation and function

Casing with amplifier for loudspeakers 100 V

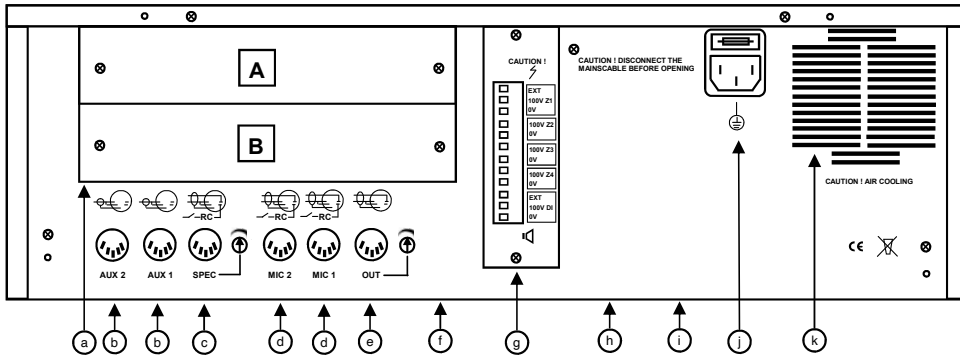
#### Functions

According to the programming and the available options

#### 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



**Rear view**

- a Opening for the rear panels A and B
- b Input sockets for external music devices 1 and 2
- c Special input with sensitivity adjustment
- d Input sockets for the microphones 1 and 2
- e Output socket with level adjustment
- f Volume control for gong signal Compact-S (Bottom)
- g Output terminal for the loudspeaker lines
- h Tone control for the special input (Bottom)
- i Tone control for the microphone inputs (Bottom)
- j Input socket for the mains voltage with fuse
- k Ventilation grille

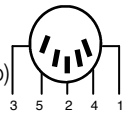
**Technical specifications**

**Removal of a module from a system**

- CAUTION: the amplifier system must be disconnected from the mains supply!
- On the height of the detent (12), plug in a small tool between the front panel and the module
- Move the tool to the right side until the module jumps out of the detent
- Pull out the module forwards carefully. (Have attention to the internal cabling!)

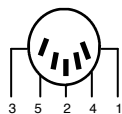
**Connection diagram for the music sources (b)**

- 1 Not connected
- 2 Ground/shield
- 3 LF input unbalanced (reproduction left/mono)
- 4 not connected
- 5 LF input unbalanced (reproduction right/mono)



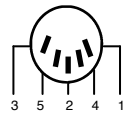
**Connection diagram for the special input (c)**

- 1 LF input balanced +
- 2 Ground/shield
- 3 LF input balanced -
- 4 Remote control
- 5 Not connected



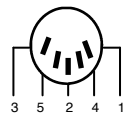
**Connection diagram for the microphones (d)**

- 1 LF input balanced +
- 2 Ground/shield
- 3 LF input balanced -
- 4 Remote control (or serial data at MIC 1)
- 5 +15 VDC (at MIC 1: for APS-305.1-DIN only!)



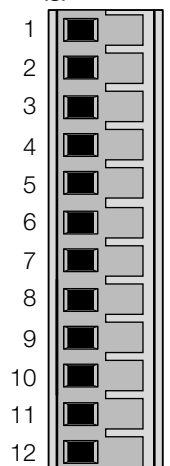
**Connection diagram for the output (e)**

- 1 LF output balanced +
- 2 Ground/shield
- 3 LF output balanced -
- 4 Not connected
- 5 Not connected



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

- 1 Line 1 (Deactivation of ext. controls), 0/100 V (ext.)
- 2 Line 1 (Z1), 100 V
- 3 Line 1, 0 V
- 4 Line 2 (Z2), 100 V
- 5 Line 2, 0 V
- 6 Line 3 (Z3), 100 V
- 7 Line 3, 0 V
- 8 Line 4 (Z4), 100 V
- 9 Line 4, 0 V
- 10 Direct output (Deact. of ext. controls), 0/100 V (ext.)
- 11 Direct output (DIR), 100 V
- 12 Direct output, 0 V



**Input sensitivity**

AUX (music devices)	-10 dBm
SPEC (special)	Adjustable from 0.3–100 V
MIC (microphones)	-53 dBm

**Input impedance**

AUX (music devices)	47 k $\Omega$
SPEC (special)	600 $\Omega$
MIC (microphones)	200 $\Omega$

**Phantom powering for condenser microphones**

+12 VDC

**Remote control**

Functions according to the programming and the available options:

- Switch-on/switch-off of the system
- Activation of a priority
- Muting of the system

**Remote control activation**

External contact between pin 4 and pin 2 of the DIN 5-pole socket.

**Inputs AUX 1 and AUX 2 (b)**

For external music devices as CD player, FM tuner, SAT receiver.

**SPEC input (c)**

Function according to the programming and the available options for an external sound source as a master system.

ATTENTION: Do adjust the sensitivity! No distortion should be audible!

**Inputs MIC 1 and MIC 2 (d)**

Functions according to the programming and the available options for conventional microphones with or without push-to-talk button.

**Input MIC 1**

for serial microphones APS-305.1 (max. 2 pcs.)

**Output OUT (e)**

Output signal	All or the music program only
Output level	0–0.8 V (adjustable but depending on the volume controls of the inputs)
Output impedance	600 $\Omega$

**General information**

Type	Power	Mains fuse (j)	Weight
GM-1150-CD	150 Watt	5 × 20 mm 1.60 AT	7.0 kg
GM-1250-CD	250 Watt	5 × 20 mm 1.60 AT	9.5 kg

**Minimum impedance**

(Total of all five loudspeaker lines in parallel)

GM-1150-CD	67 Ohms
GM-1250-CD	40 Ohms

**Operating****1. Commissioning**

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

**2. Volume adjustment**

First all external volume controls (GM-71XX if present) must be set to position **10**. Additionally, all the volume controls for the loudspeaker lines must be turned to position **10**.

A sound source (music) can now be fed to one of the inputs. The maximum volume required for this sound source is then adjusted using the corresponding volume control **9**. The maximum volume for each of the other sound sources is then adjusted in the same manner. Once this has been completed, the volume should be reduced on those loudspeaker lines for which all sound sources are too loud. For that line which requires the loudest volume, the multi-position switch should remain at position **10**. The other controls can subsequently be turned down to the volume levels required at that particular time.

As a general guideline, the output controls should be turned up as far as possible whilst the input controls should be turned down as far as possible. The reason for this is that the loudspeaker output amplifier should only have to deliver as much power as is in fact needed. This not only saves energy but also reduces the stress to which the electrical components are subjected, thereby lengthening their operating life. If all volume controls are in a «middle position with reserve», never enough volume can be achieved.

**3. Operating principle**

The functions of the system are visible in the tabel on the next page and in the operating instruction of additionally available components.

#### 4. Subsequent corrections, alterations and extensions

Subsequent corrections (e.g. volume alterations) must be performed in small steps and with the necessary degree of caution in order to avoid undesirable effects.

Should it prove necessary to alter the system's functions, this can often be performed at the software level by carrying out the alteration onsite using a PC and appropriate program. Hardware extensions (inclusion of additional or other components) usually also require the software to be adapted.

#### 5. Safety

To prevent operating errors, all the control knobs on the front panel can be pulled off using a suitable tool (pliers). Adjustments can then only be made with the aid of a screwdriver. Additional covers make the operation impossible.

Units, sub-units or functions designed for use in personal or property protection (emergency alarm, evacuation) and which are, therefore, seldom used, must be subjected regularly (e.g. once a month) to functional testing to guarantee proper functioning under uncommon conditions or circumstances.

The usual safety precautions for working with electrical equipment apply. In particular, the unit may only be opened when disconnected from the mains (230 V). Leave servicing to skilled personnel only.

#### 6. Errors and malfunctions

If the system is on, the green LED indication ON illuminates. If the indication does not illuminate, then the mains fuse must be checked. This fuse is integrated into the mains socket (j). 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.

If the red indication FAULT illuminate, then the protection circuit is active and the loudspeaker lines are turned off. In this case it is necessary to cool the amplifier. If this happens repeatedly, the loudspeaker installation operated by this amplifier must be checked (short circuit, overcharge).

If the music source is in operation and all controls (9, 10, 11) are on the right position but no music is audible, then remove the plugs (c, d, e). Note the plugs and sockets!

If it is not possible to turn off the system by the DC-switch (2), then do it the same way.

If, in one of the cases described above, the disconnection of the connectors is helpful, then the system is blocked by the corresponding external component.

If the sound from the speaker group is distorted, all loudspeaker line controls should be closed (turned to position '0') and then re-opened individually. If, whilst control A is being adjusted, a change is registered on the other lines, this most likely indicates a short circuit on line A.

It is also possible that any external controls which may be present are not connected correctly. In this case, the distortion would possibly be dependent on their settings.

If one (or more) speakers in the installation sound relatively loud (the others sounding correspondingly quiet) and if the sound is possibly also distorted, a check should be made whether in fact all speakers are equipped with the prescribed 100 V transformer.

The number of speakers connected or the sum of their power requirements must not exceed the amplifier's maximum power output!

## Options and functions

### Standard settings

Input	Component	Priority	Gong	Speaker lines	GA int.	GA ext.
MIC 1	Is prepared for a conventional microphone	2	none	all on	not enabled	not enabled
MIC 2	Is prepared for a conventional microphone	0	–	–	–	–
SPEC	To activate via event or music source selector	4	none	all on	not enabled	not enabled
Modul A	Blank panel GM-1220 built-in	–	–	–	–	–
Modul B	Blank panel GM-1220 built-in	–	–	–	–	–
Music	Music source selector switch (11) is enabled	–	–	all on	–	–

### Options

Option	Description	Effect
GM-1216	4 sel. calls, 4 music buttons (on APS-305.1)	MIC 1 = digital microphone console (APS-305.1)
GM-1218.1	Telephone interface (module)	Built-in slot B; priority 4
GM-1219	MP3 player (module for gong, siren, message)	Built-in slot B; priority 3
GM-1220	Blank panel (no option)	Built-in slot A (and/or B)
GM-1225.3	Internet radio, DAB tuner, USB player, Bluetooth	Built-in slot A (or B); priority M; music source
GM-1231	Module with 2 additional AUX inputs	Built-in slot A (or B); priority M; music source
GM-1252	Output to telephone exchange (music on hold)	Transformer T2 built-in, internal switch S1/1 at position ON
GM-1257	Custom-made programming	At conventional microphone with priority 2 and at GM-1218.1: zone 4 = OFF; otherwise according to the individual description
GM-1260	Remote access by an other system	SPEC = priority 1; internal controls (10) and external controls deactivated (GA int. and GA ext.)
GM-1261	Monitoring loudspeaker	Built-in slot A (or B)
GM-1262	Remote control by an external contact	SPEC = Priority M
GM-1263	3-tone gong before mic. and message player	Gong «GM-1219» (if built-in) otherwise «Compact-S» before MIC
GM-1264	Deactivation of external volume controls	Ext. controls deactivated in case of priority 1 to 4 (GA ext.)
GM-1265	Operation at switched 230 V mains power	Operation of the Compact-S at a switched mains socket
GM-1269	Entrée spécial pour centrale prioritaire	incorporé dans la fente A (ou B); · SPEC = priorité 1; rétablissement des atténuateurs internes (10) et externes (GA int. et GA ext.) · Entrée SPEC = 100 V (sensibilité minimale) · Tension de coupure = 48 VDC (existant au repos)
GM-1270	Programm from an other system	SPEC = Priority M
GM-1271	Muting in case of an emergency	SPEC = Priority 1; all loudspeaker lines OFF
GM-1280	Priority control for microphone 1 and 2	MIC 2 = Priority 2

**Priorities:**

There are the priorities of **1–5**. The highest priority is the No 1 and the deepest priority is the No 5. In action is always the input or the module with the highest active priority. In case of equal priorities, the first active input is in action. A priority must be activated by an event as the pressing of a button or the closing of a contact. When no priority is active, then the music source selector switch (11) is in function. The positions **A** and **B** allow the playback of music sources (if present) according to the table above. Additionally, the microphone inputs can have the priorities **0** and **M**.

**0** means that the corresponding microphone input is active, if the music source selector switch (11) is at position **0**.

**M** means that the corresponding microphone input is active together with the selected music source (miscible).

**SPEC Input:**

If the SPEC input is in use as a source (options GM-1260, GM-1269, GM-1270), then the input sensitivity (C) must be adjusted. The volume must be high enough (check also the position of the control 7) but audible distortions are not allowed.

**Deactivation of volume controls:**

For important functions as emergency calls and alarms, deactivations for the volume controls can be programmed. The deactivation for the internal volume controls (GA int.) sets the volume controls for the loudspeaker lines (10) to the maximum. When the deactivation for the external volume controls (GA ext.) is active, then the volume controls, present in some rooms, have no longer influence to the volume.