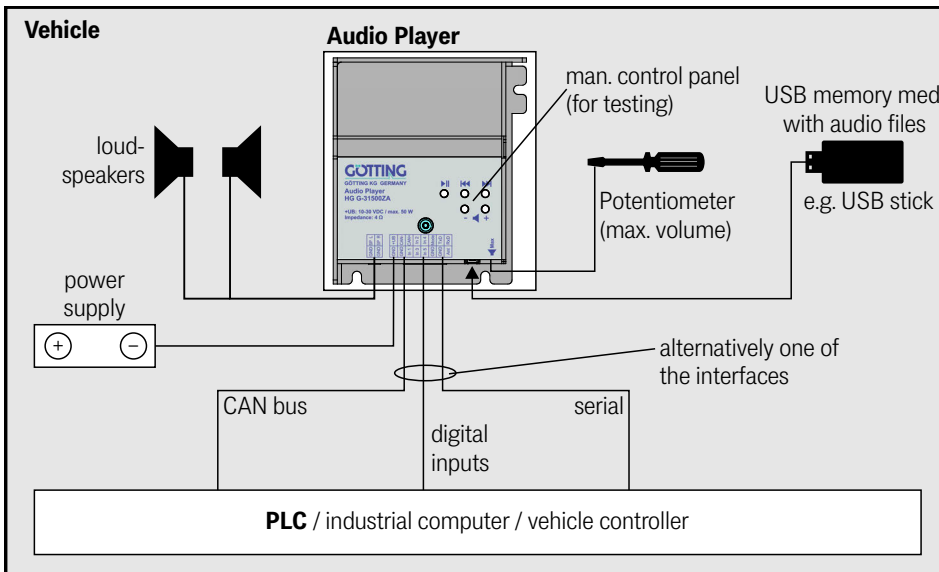


Overview



Main Features

- Audio player for automated guided vehicles (AGV)
- Control via CAN / digital inputs (PLC) / serial (RS 232) / buttons (function test)
- Voltage supply range: 10 – 30 VDC
- Supported formats: MP3/WAV
- Slot for an USB stick with audio files, up to 255 files usable in the memory medium's root directory
- Operating mode of the digital inputs (PLC) configurable: alternatively single evaluation (one of the first 5 tracks selectable) or binary evaluation (one of the first 31 tracks selectable)
- Nominal output: 2 x 10 watt @ 4 Ohm (peak output max. 2 x 25 watt, to be taken into consideration when selecting loudspeakers)
- Potentiometer for limiting the maximum volume
- Configuration of interface parameters
- Installation via mounting lugs / optionally top-hat rail mounting (s. table *Variants* below)

Versions/Variants (see image casing/ mounting on the backside)

HG G-31500ZA	Mounting lugs
HG G-31500YA	Mounting lugs and adapter for top-hat rail mounting

During the operation of automated guided vehicles (AGV) there often is a demand to let the vehicle play notification sounds at specified positions throughout the track. For these applications Götting has developed the audio player HG G-31500-A.

Interfaces

The audio player stands out due the variety of its interfaces. They allow the selection and playback of audio files. The voltage supply range of 10 – 30 V ensures that the player can easily be integrated into a vehicle.

- CAN interface for the connection with the vehicle's CAN bus: Selection of one of up to 255 audio files, control of playback and volume.
- Serial interface (RS 232): Selection of one of up to 255 audio files, control of playback and volume.
- Five digital inputs via which e.g. a PLC can select audio files on the USB memory medium.

Pin Assignments	
ST 1 Loudspeaker	
1	SP L ⊕ Loudspeaker left
2	GND ⊖ Loudspeaker left
3	SP R ⊕ Loudspeaker right
4	GND ⊖ Loudspeaker right
ST 2 Interfaces	
1	+UB Supply
2	GND Ground
3	CAN-
4	GND CAN bus
5	CAN+
6	In 1
7	In 2
8	In 3
9	In 4
10	In 5
11	Mode Mono / Stereo (see below)
12	GND
13	TxD
14	GND serial interface RS 232
15	RxD
16	Ant –

Notes

- The audio player does not contain internal loudspeakers. External loudspeakers and the USB storage medium are not part of the scope of supply.
- USB storage medium and speakers must be selected to match the temperature range in which the audio player will be used.

Factory Settings

- Mode: Stereo
- Potentiometer: Maximum position
- Interfaces: See technical data

Mono/Stereo Operation

In case only one loudspeaker is to be connected it is advisable to use the mode *Mono*. For this alternatively:

- Use mono audio files.
- Connect GND with the input *Mono* to force mono operation (ST 2: connect Pin 11 with Pin 12).

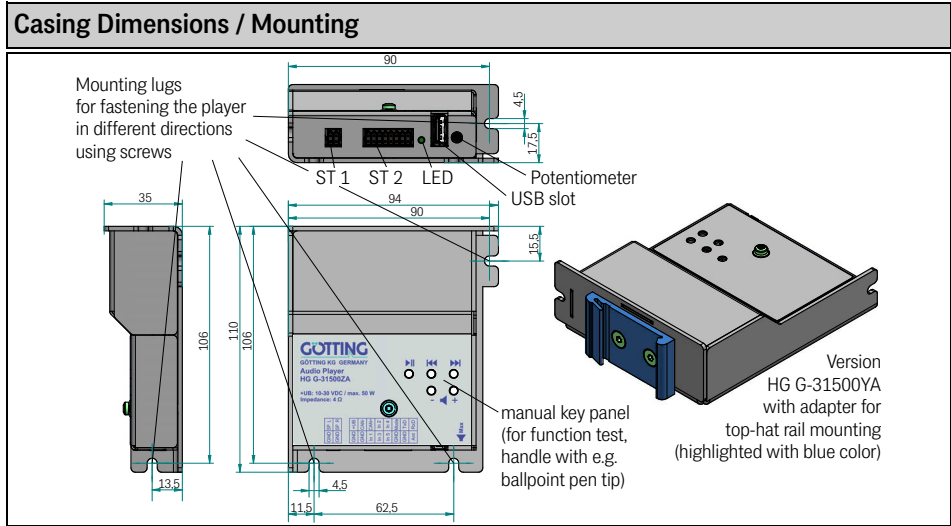
Standby Mode

Using the telegrams (serial/CAN) the standby bit can be set. In standby mode the current consumption drops to 0.02 A @ 24 Volt. The wake-up time is approx. 1 second

Götting Product IDs (order codes)

HG G-31500ZA

- Production series (no functional relevance)
- Functional Model / Version
- Identification Number / Type
- G: Device | K: Component | S: System | W: Software
- HG: Götting | HW: Resale



Selection of Audio Files on the USB Memory Medium

The files are either selected via the 5 digital inputs or telegrams (serial resp. CAN). Depending on the operating mode (see below) the 5 digital inputs can be used to select one of the first 5 (single evaluation) or one of the first 31 audio files (binary coding) on the USB memory medium. The playback takes place with maximum volume (100%), whereby the limitation is carried out by the potentiometer.

Using the telegrams of either the CAN or serial interface it is possible to (also randomly) choose from up to 255 audio files. Volume (0 to 100%) and duration (1 to 255 seconds/full file) can be specified. The potentiometer limits the maximum volume that is possible for 100%.

Additionally the buttons on the device's top side can be used for testing. Handle them with a pointed object (e.g. ballpoint pen tip).

Technical Data	
Dimensions	94 mm x 110 mm x 35 mm (W x H x D without top-hat rail adapter)
Casing	Aluminum plate
Weight	approx. 185 g (without top-hat rail adapter)
Protection class	IP 20
Relative humidity	95 % @ 25° C (without condensation)
Temperature ranges	– Operation: 0° C to +70° C / on request: -25° C to +70° C – Storage: -40° to +85° C
Voltage supply	10 - 30 VDC, nominal voltage 24 VDC
Output power	Nominal output 2 x 10 W @ 4 Ohm Peak output 2 x 25 W @ 4 Ohm (potentiometer set to max, nominal voltage or higher, volume set to 100%, audio file modulation >= 95 db)
Current consumption	Operation 0.07 A to 2 A / standby 0.02 A (see box to the left)
Connectors	1x 4 pin loudspeakers, 1x 16 pin interfaces, nominal wire cross section connection cable 0.5 mm ²
Interfaces	– CAN-Bus: CAN Basic/Extended, without terminator, Node ID 100 _{dez} (all valid IDs except 0), Bit rate 1000, 500, 250, 125, 50, 20 kbit/s
Factory settings	– serial RS232: Baud rate 115200, 57600, 38400, 19200, 9600 Baud, Data bits: 7/8, Parity: None/Even/Odd, Stop Bits: 1/2, no handshake
Factory settings	– USB 2.0 for memory medium
Digital inputs	5x, low level: 0 to +1 VDC, high level: +5 to +30 VDC – as long as a digital input is active no telegrams are processed Operating modes: <u>Single evaluation</u> / binary coded (optional, activation via configuration file)
File formats	WAV, MP3 up to 320 kbit/s
Operating elements	5 buttons, 1 LED, potentiometer for limiting the maximum volume
Operating modes	<u>Stereo</u> / Mono (optional, s. box on the left)

