

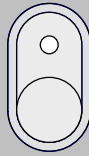
LINNENBERG

Georg Friedrich HÄNDEL

MONO POWER
AMPLIFIER

Owner's Manual

GEORG FRIEDRICH HÄNDEL



LINNENBERG

G.F. HÄNDEL is a linear class A amplifier delivering superiority and authority not to be found in lesser creations due to the high current capability and operating speed. Clever construction techniques enabled us to build an amplifier with high packing density, consequently making the signal and power paths extremely short.

Room temperatures over 30 degrees Celsius and / or extreme humidity should be avoided. Keep away from heat sources like radiators, heating, ovens or similar appliances dissipating heat. It is important to maintain an adequate supply of airflow to prevent overheating.


Place the unit(s) on a solid, flat level surface such as a shelf or directly on the floor. Virtually, there are no limitations on where to position your G.F. HÄNDEL. We suggest positioning the unit(s) so that the speaker connecting cables remain short.

First, establish the AC – power connection. The IEC mains input is located on the rear panel. Connect the power cord to the IEC mains input and plug it into your wall outlet or high-quality power strip.

HÄNDEL offers a balanced input, because a properly implemented balanced connection will offer higher sound quality than a single-ended connection. The amplifier can be driven by a preamplifier or directly from a line – level source that has a volume control.

Connect your loudspeakers to the amplifier. The speaker cable can be connected via spade plugs or via banana plugs. *Avoid speaker cables with excessive capacitance. As with any other high-speed amplifier, such cables can lead to instability. If in doubt, please consult your speaker cable manufacturer. Now, before turning the*

amplifier on, make sure that all cables have been connected firmly and in correct polarity.

Never attempt to ground the negative binding post, as this is an active output. Doing so will short one half of the amplifier and damage may occur. 

Operation

With the speakers and the source connected, press the front panel push button to activate the amplifier. The blue LED will come on. After switching to operating mode, the protective circuits take 10s to check all circuits of the power amplifier before enabling the speaker outputs.

As it is common practice, disconnect G.F. HÄNDEL from the mains during a thunderstorm or when going on vacation.

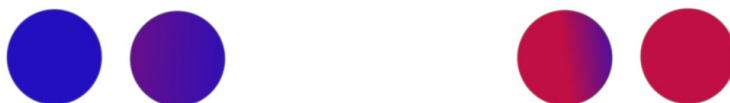
Protection circuits

HÄNDEL provides comprehensive protection for both the amplifier and your loudspeakers, including faults that may occur in your source components.

If the unit is operated at high playback levels with insufficient ventilation, the internal temperature may become too high for safe operation. In this case the front-panel status LED will change colour from static blue to red. If the LED is appearing totally red, the amplifier will shut down, the LED will blink until the unit has cooled down sufficiently.

Temperature monitor

Normal + 40°C → → → + 60°C Shut down



Likewise, if the surveillance circuit detects the presence of DC (LED = blinks green) at the output terminal, the amplifier will shut down too. Unallowable DC voltages can origin from the source component or the HÄNDEL amplifier itself. To isolate the source of the problem, disconnect the audio input cable from the HÄNDEL amplifier before proceeding any further.

If the error message persists, the amplifier hasn't cooled down sufficiently, or the unit itself is faulty. If the DC error only shows up, when the source is connected, the source component is faulty. In both cases consult your dealer.

An overcurrent condition is monitored permanently. If the output current to the loudspeakers exceeds 20A (continuous) the amplifier will shut down immediately.

Replacing the fuse

The following work should only be carried out by a qualified technician in accordance to highest electrical safety standards. Risk of electric shock. 

The fuse must be replaced by a 10AT type (5x20mm). Never attempt to short the fuse holder. Normally the fuse should never blow – if it has, it is a sign of a serious fault condition. Further investigation is needed.

Specifications

Input sensitivity	1,2V rms		
Input impedance	94k Ω (balanced XLR)		
Gain	+ 28,9 dB		
Power output	100W/8 Ω	200W/4 Ω	400W/2 Ω
Peak output voltage	85 V _{pp} / 30V rms		
Peak output current	+/- 50A (1: 10 cycle)		
Frequency response	20 Hz ... 20kHz: +/- 0,02dB		
	0 ... 400 kHz -3dB @ 8 Ω		
Output impedance	<0,02 Ω @ 1kHz		
Signal – to – noise ratio	103dB(A), ref. 1W / 8 Ω (= 0dBW)		
Equivalent Input Noise	0,7 μ V = -123dBV		
Distortion and noise (THD+N)	0,002% @ 20W, 1kHz, 8 Ω < 0,01% @ 200W, 20kHz, 2 Ω		
Dimensions (H x W x D):	210 x 256 x 442 mm		
Weight:	24kg		

CE declaration of conformity

Product Type: Power amplifier

Model: HÄNDEL

Linnenberg-Elektronik declares that this product complies with the Low Voltage Directive 2014/35/EU and the Electromagnetic Compatibility Directive 2014/30/EU as well as the Ecodesign Directive 2009/125/EC.

The unit meets all currently valid regulations only in its original condition. The original, unaltered factory serial number must be present on the outside of the unit and must be clearly legible! The serial number is an essential part of our conformity declaration and therefore of the approval for operation of the HÄNDEL. The serial numbers on the unit and in manual, must not be removed or modified, and must correspond.

Furthermore, the unit has been found to comply with the limits for a Class B digital device, pursuant to Part 15, subpart B (unintentional radiators) of the FCC rules.

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