

UNIT DESCRIPTION

OUTPUT TRANSFORMER FOR NSM-PHONOGRAPHS

EE IV-CD TECHNOLOGY

Technical Information, Assy

174 903	SILVER CITY
174 831	SILVER SKY
174 486	FASCINATION
175 274	SOUNDMASTER
175 040	FIRE BIRD/COUNTRY

NSM
Aktien Gesellschaft
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6530 Bingen am Rhein

13

Page 1301-1304

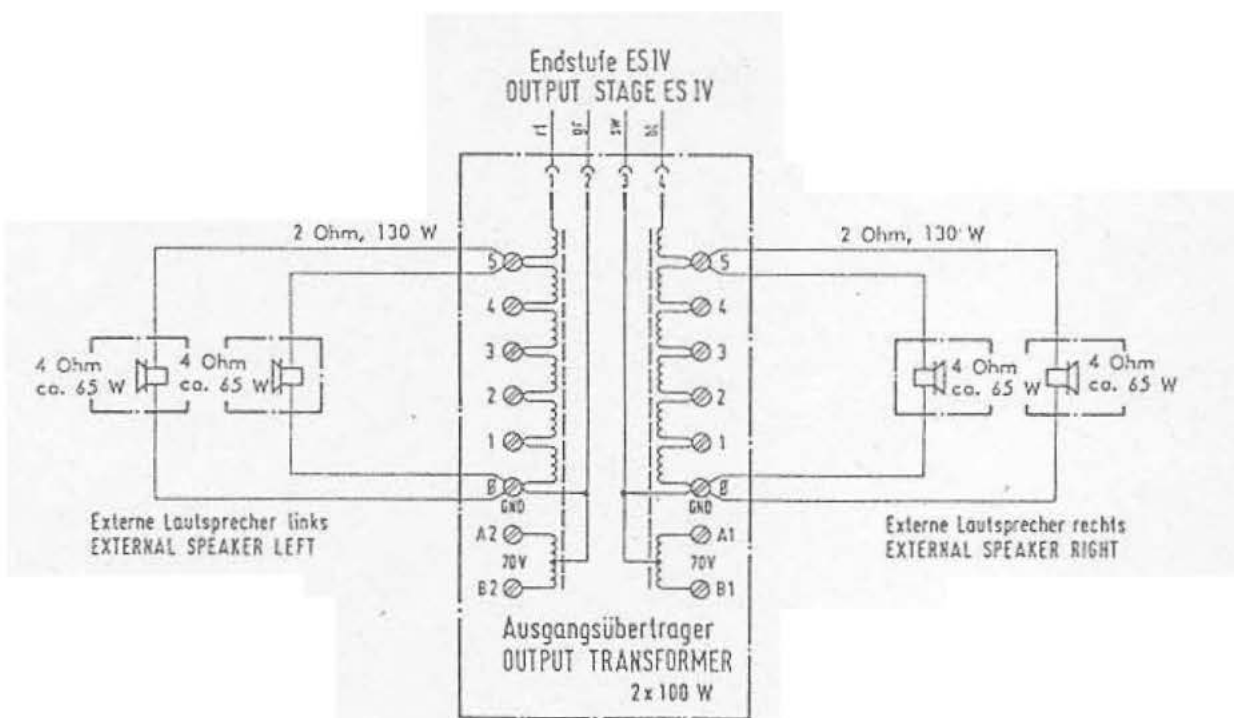
OUTPUT TRANSFORMER with cable harness

Part.-No. 172 431

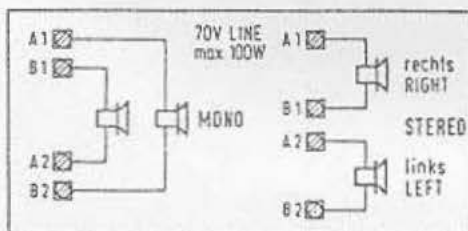
The output transformer is connected directly to the terminals of the output amplifier. It has input impedance of 4 ohms and transforms the input voltage down so that smaller output voltages are available at Connection Terminals 1 through 5 permitting speakers with lower impedances to be connected.

A number of loudspeakers can be connected together (in parallel) up to a total maximum power of 130 W music power per channel; depending on how much power is taken directly from the amplifier.

The table below shows the power required for a loudspeaker with the corresponding impedance at Connection Terminals 0-1 through 0-5. Also observe the output transformer diagram and connection schematics. Further information is given in the "TECHNICAL INSTRUCTIONS" under "Loudspeaker Connection".



Anschlußschema für Ausgangsübertrager
CONNECTION DIAGRAM FOR OUTPUT TRANSFORMER



Klemme TERMINAL POSITION	Lautsprecher SPEAKER				
	2 Ω	2,5 Ω	4 Ω	8 Ω	16 Ω
0 - 5	130 W	100 W	70 W	45 W	22 W
0 - 4	60 W	45 W	30 W	16 W	8 W
0 - 3	30 W	24 W	15 W	8 W	4 W
0 - 2	15 W	12 W	7,5 W	4 W	2 W
0 - 1	3,7 W	3 W	1,8 W	1 W	0,5 W

Maximum Power Output Connections

The maximum power output of the amplifier is 2x200 W music power at 2 ohms.

The following is an example of how to connect external loudspeakers to the "CD GALAXY": The phonograph itself consumes (when directly connected at 5,5 ohm impedance) 2x70 watts.

Therefore, 2x130 W is still available for external loudspeakers.

For example, two 4-ohm loudspeakers each can be connected to Terminals 0-5 (see diagram) or four loudspeakers (with 4 ohms each) can be connected to Terminals 0-4.

Example for connection of wallboxes or Hide-Away's

If loudspeakers with 4 ohm are connected directly to a wallbox or Hide-Away, the consumption is 100 watts; therefore there is only 100 watts left for the loudspeaker connected to the transformer.

Connection for Lower Phonograph Output Power

When full power is not required from the phonograph, it can be connected to the corresponding terminals of the transformer and external loudspeakers can then be connected directly to the output amplifier for higher output.

70 V - High Voltage Output

Additionally, the transformer also has a 70 V high-voltage output (A1-B1/A2-B2) for each channel.

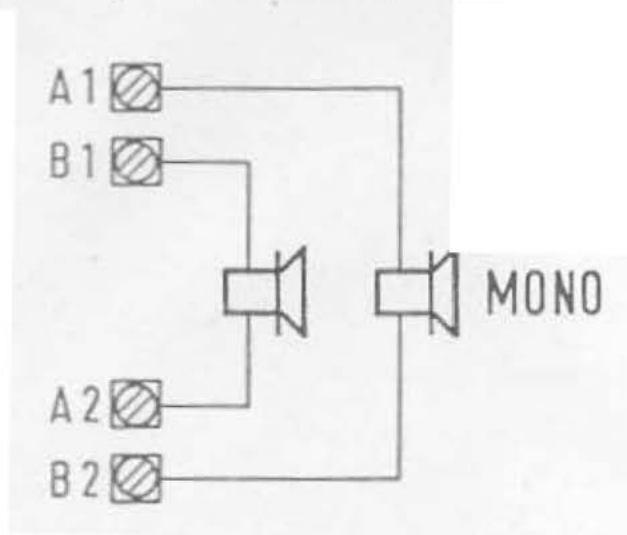
These features are provided for operation of a widespread external loudspeaker system whereby the higher voltage keep the line losses low. Only loudspeakers with input transformers (so-called high-impedance loudspeakers of 50 ohms upwards) can be connected to this terminal. these outputs also provide a maximum of 100 W music power each, e.g. two 50 W loudspeakers (200 ohms) can be connected to each channel.

Lautsprecher-Impedanz Loudspeaker-Impedance	Ausgangsleistung Output power	A1-B1 A2-B2
50 Ohm	100 W	
100 Ohm	50 W	
150 Ohm	35 W	
200 Ohm	28 W	
250 Ohm	20 W	

The total wattage of all remote loudspeakers connected to one channel of the output transformer (whether low impedance, high impedance or combined) may not exceed max. 130 W.

HV - MONO Mode

Since the high-voltage coils are connected with their center, a loudspeaker connected to A1-B2 or B1-A2 radiates sound from both (stereo) channels; for this mono mode no special NF-coupling of the channels is necessary, coupling is provided by the transformer.



HV - STEREO Mode

If the loudspeakers are connected to A1-B1 or A2-B2, stereo mode is possible, but without NF-coupling of the channels.

