



ProTHX Equipment Testing Program
Power Amplifier Test Data

Manuf./ Model **Lab Gruppen 1600**
Serial Number **990-427**
Test Date: **16-Sep-99**

Figure					Manuf. Spec.	Status
1	Input Impedance (balanced)	22.10/21.59 kohms @1 kHz			20k Ω	P
2	Input Impedance (unbalanced)	41.08/41.25 kohms @1 kHz			10k Ω	P
3	Output Impedance	.05/.05 ohms @ 1 kHz				P
4	Input/ Output Phase (8ohm/1W)	+14.85	-6.13			ok
-	Preheat (8ohms/st, 3 hrs, 10% power)	85 F, maximum temp.				ok
5,6	THD+N vs. Level	16 ohm, st.	230 W @	1.0 % THD+N	not rated	ok
7-10	(1kHz, 120 VAC)	8 ohm, st.	448 W @	1.0 % THD+N	430W, 1%THD	P
11-14		4 ohm, st.	852 W @	1.0 % THD+N	840W, 1% THD	P
15,16		2 ohm, st.	1286 W @	1.0 % THD+N	870W, 1% THD	P
17,18		16 ohm, br.	904 W @	1.0 % THD+N	not rated	ok
19,20		8 ohm, br.	1742 W @	1.0 % THD+N	1680W, 1% THD	P
21,22		4 ohm, br.	2579 W @	1.0 % THD+N	1740W, 1% THD	P
-		2 ohm, br.	W @	% THD+N	not rated	-
-	THD+N vs. Frequency	16 ohm, st.	W <	% THD+N	not rated	-
23	(20Hz-20 kHz)	8 ohm, st.	412 W <	0.10 % THD+N	410W, .1% THD	P
24		4 ohm, st.	780 W <	0.10 % THD+N	780W, .1% THD	P
25		2 ohm, st.	791 W <	0.10 % THD+N	780W, .1% THD	P
-		16 ohm, br.	W <	% THD+N	not rated	-
26		8 ohm, br.	1560 W <	0.10 % THD+N	1560W, .1% THD	P
27		4 ohm, br.	1588 W <	0.10 % THD+N	1560W, .1% THD	P
-		2 ohm, br.	W <	% THD+N	not rated	-
28	Power Bandwidth	0.1% THD+N				P
-	(8ohms/st)	0.05% THD+N				-
-		0.01% THD+N				-
29	Frequency Response	1 W output	Spec.: +/- 0.5 dB			P
30	(ref. 1kHz, 8ohms/st Rated output)		Spec.: +/- 0.5 dB			P
31	Crosstalk (at rated output power, 8ohms/st)					ok
32	Capacitive Load Test	ch. A	Spec.: +/- 0.5 dB			ok
33	(100pF-1uF,no loads)	ch. B	Spec.: +/- 0.5 dB			ok
34	1 kHz FFT Analysis	10% output	43W			ok
35	(8ohms/st)	50% output	215W			ok
36		100% output	430W			ok
-	CMRR	ch. A: -59.96	ch. B: -58.0			ok
37	CCIF FFT Analysis	19kHz:20kHz, 1:1				ok
38	CCIF IMD	19kHz:20kHz, 1:1	<	0.20%		ok
39	SMPTE IMD	60Hz:7kHz, 4:1	<	1.60%		ok
40	Bandpass Noise	10 Hz- 200 kHz				P
41	Hum FFT	20 Hz- 20 kHz				P
42	Hum FFT (zoom)	20 Hz- 300 Hz				P
43	Turn-on FFT					P
44	Turn-off FFT					P
n/a	Input Sensitivity (8ohm/st)	1.076/1.07 Vrms for		430 Wout		P
n/a	Voltage Gain	34.7 dB				ok
n/a	Input Attenuation	83.0 dB attenuation @ min. gain				ok
n/a	A-Weighted Noise	80.5/81.1 dBr (r=2.83 Vrms)				ok
n/a	Low Voltage Output	425 W with		200 VAC		ok
n/a	VI Limiting Circuits	no problems found				ok
n/a	Common Mode Conduction					ok
n/a	Input Level Control: Security Covers	security covers are acceptable				P