



FP 4000

Input sensitivity is defined as the input signal required to drive the amplifier into clip (max. output power). The level at which an amplifier will clip depends on gain, available voltage and current as well as the connected load. Most amplifiers have fixed gain, voltage, and current, therefore the input sensitivity will depend on the load. Lab.gruppen amplifiers feature adjustable Gain (8 steps) and voltage (Voltage Peak Limiter (VPL™)) functions, therefore the input sensitivity and clip-level varies according to these settings. The following tables show input sensitivity for the Gain and VPL settings at typical loads. This information is replicated in the GUI of DeviceControl, Lab.gruppen's amplifier control and monitoring software, at the Details / DIP-switch page. The input sensitivity calculator provides an interactive version of the information below.

Input sensitivity tables for Gain and Voltage Peak Limiter settings at typical loads

Gain setting, dB	23		26		29		32		35		38		41		44		VPL setting		Output
Input Sensitivity	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	U out, V peak	V out, Vrms	Watt
16 ohm load	17.3	5.7	14.3	4	11.3	2.8	8.3	2	5.3	1.4	2.3	1	-0.7	0.7	-3.7	0.5	150	106	400
	17.3	5.7	14.3	4	11.3	2.8	8.3	2	5.3	1.4	2.3	1	-0.7	0.7	-3.7	0.5	121	86	400
	16.3	5.1	13.3	3.6	10.3	2.5	7.3	1.8	4.3	1.3	1.3	0.9	-1.7	0.6	-4.7	0.5	101	71	320
	14.6	4.2	11.6	2.9	8.6	2.1	5.6	1.5	2.6	1	-0.4	0.7	-3.4	0.5	-6.4	0.4	83	59	220
	13.1	3.5	10.1	2.5	7.1	1.8	4.1	1.2	1.1	0.9	-1.9	0.6	-4.9	0.4	-7.9	0.3	70	49	150
	11.2	2.8	8.2	2	5.2	1.4	2.2	1	-0.8	0.7	-3.8	0.5	-6.8	0.4	-9.8	0.2	56	40	98
	9.6	2.4	6.6	1.7	3.6	1.2	0.6	0.8	-2.4	0.6	-5.4	0.4	-8.4	0.3	-11.4	0.2	47	33	69
	7.8	1.9	4.8	1.3	1.8	1	-1.2	0.7	-4.2	0.5	-7.2	0.3	-10.2	0.2	-13.2	0.2	38	27	45
Gain setting, dB	23		26		29		32		35		38		41		44		VPL setting		Output
Input Sensitivity	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	U out, V peak	V out, Vrms	Watt
8 ohm load	17.3	5.7	14.3	4	11.3	2.8	8.3	2	5.3	1.4	2.3	1	-0.7	0.7	-3.7	0.5	150	106	800
	17.3	5.7	14.3	4	11.3	2.8	8.3	2	5.3	1.4	2.3	1	-0.7	0.7	-3.7	0.5	121	86	800
	16.3	5.1	13.3	3.6	10.3	2.5	7.3	1.8	4.3	1.3	1.3	0.9	-1.7	0.6	-4.7	0.5	101	71	640
	14.6	4.2	11.6	2.9	8.6	2.1	5.6	1.5	2.6	1	-0.4	0.7	-3.4	0.5	-6.4	0.4	83	59	430
	14.6	4.2	11.6	2.9	8.6	2.1	5.6	1.5	2.6	1	-0.4	0.7	-3.4	0.5	-6.4	0.4	83	59	430
	11.2	2.8	8.2	2	5.2	1.4	2.2	1	-0.8	0.7	-3.8	0.5	-6.8	0.4	-9.8	0.2	56	40	200
	9.6	2.4	6.6	1.7	3.6	1.2	0.6	0.8	-2.4	0.6	-5.4	0.4	-8.4	0.3	-11.4	0.2	47	33	140
	7.8	1.9	4.8	1.3	1.8	1	-1.2	0.7	-4.2	0.5	-7.2	0.3	-10.2	0.2	-13.2	0.2	38	27	90

Input sensitivity tables for Gain and Voltage Peak Limiter settings at typical loads

Gain setting, dB	23		26		29		32		35		38		41		44		VPL setting		Output
Input Sensitivity	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	U out, V peak	V out, Vrms	Watt
4 ohm load	17.3	5.7	14.3	4	11.3	2.8	8.3	2	5.3	1.4	2.3	1	-0.7	0.7	-3.7	0.5	150	106	1600
	17.3	5.7	14.3	4	11.3	2.8	8.3	2	5.3	1.4	2.3	1	-0.7	0.7	-3.7	0.5	121	86	1600
	16.3	5.1	13.3	3.6	10.3	2.5	7.3	1.8	4.3	1.3	1.3	0.9	-1.7	0.6	-4.7	0.5	101	71	1300
	14.6	4.2	11.6	2.9	8.6	2.1	5.6	1.5	2.6	1	-0.4	0.7	-3.4	0.5	-6.4	0.4	83	59	860
	14.6	4.2	11.6	2.9	8.6	2.1	5.6	1.5	2.6	1	-0.4	0.7	-3.4	0.5	-6.4	0.4	83	59	860
	11.2	2.8	8.2	2	5.2	1.4	2.2	1	-0.8	0.7	-3.8	0.5	-6.8	0.4	-9.8	0.2	56	40	390
	9.6	2.4	6.6	1.7	3.6	1.2	0.6	0.8	-2.4	0.6	-5.4	0.4	-8.4	0.3	-11.4	0.2	47	33	280
	7.8	1.9	4.8	1.3	1.8	1	-1.2	0.7	-4.2	0.5	-7.2	0.3	-10.2	0.2	-13.2	0.2	38	27	180
Gain setting, dB	23		26		29		32		35		38		41		44		VPL setting		Output
Input Sensitivity	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	dBu	V	U out, V peak	V out, Vrms	Watt
2 ohm load	15.8	4.8	12.8	3.4	9.8	2.4	6.8	1.7	3.8	1.2	0.8	0.9	-2.2	0.6	-5.2	0.4	150	106	2300
	15.8	4.8	12.8	3.4	9.8	2.4	6.8	1.7	3.8	1.2	0.8	0.9	-2.2	0.6	-5.2	0.4	121	86	2300
	15.8	4.8	12.8	3.4	9.8	2.4	6.8	1.7	3.8	1.2	0.8	0.9	-2.2	0.6	-5.2	0.4	101	71	2300
	14.6	4.2	11.6	2.9	8.6	2.1	5.6	1.5	2.6	1	-0.4	0.7	-3.4	0.5	-6.4	0.4	83	59	1700
	14.6	4.2	11.6	2.9	8.6	2.1	5.6	1.5	2.6	1	-0.4	0.7	-3.4	0.5	-6.4	0.4	83	59	1700
	11.2	2.8	8.2	2	5.2	1.4	2.2	1	-0.8	0.7	-3.8	0.5	-6.8	0.4	-9.8	0.2	56	40	780
	9.6	2.4	6.6	1.7	3.6	1.2	0.6	0.8	-2.4	0.6	-5.4	0.4	-8.4	0.3	-11.4	0.2	47	33	550
	7.8	1.9	4.8	1.3	1.8	1	-1.2	0.7	-4.2	0.5	-7.2	0.3	-10.2	0.2	-13.2	0.2	38	27	360