

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	22	9.8	19	6.9	16	4.9	13	3.5	10	2.5	7	1.7	4	1.2	1	0.9	195	138	1200
	20.8	8.5	17.8	6	14.8	4.3	11.8	3	8.8	2.1	5.8	1.5	2.8	1.1	-0.2	0.8	170	120	900
	19.1	7	16.1	5	13.1	3.5	10.1	2.5	7.1	1.8	4.1	1.2	1.1	0.9	-1.9	0.6	140	99	610
	17.5	5.8	14.5	4.1	11.5	2.9	8.5	2.1	5.5	1.5	2.5	1	-0.5	0.7	-3.5	0.5	116	82	420
	16.2	5	13.2	3.5	10.2	2.5	7.2	1.8	4.2	1.3	1.2	0.9	-1.8	0.6	-4.8	0.4	100	71	310
	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	-6.7	0.4	80	57	200
	12.6	3.3	9.6	2.3	6.6	1.7	3.6	1.2	0.6	0.8	-2.4	0.6	-5.4	0.4	-8.4	0.3	66	47	140
	10.9	2.7	7.9	1.9	4.9	1.4	1.9	1	-1.1	0.7	-4.1	0.5	-7.1	0.3	-10.1	0.2	54	38	91
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	22	9.7	19	6.9	16	4.9	13	3.4	10	2.4	7	1.7	4	1.2	1	0.9	195	138	2350
	20.8	8.5	17.8	6	14.8	4.3	11.8	3	8.8	2.1	5.8	1.5	2.8	1.1	-0.2	0.8	170	120	1800
	19.1	7	16.1	5	13.1	3.5	10.1	2.5	7.1	1.8	4.1	1.2	1.1	0.9	-1.9	0.6	140	99	1200
	17.5	5.8	14.5	4.1	11.5	2.9	8.5	2.1	5.5	1.5	2.5	1	-0.5	0.7	-3.5	0.5	116	82	840
	16.2	5	13.2	3.5	10.2	2.5	7.2	1.8	4.2	1.3	1.2	0.9	-1.8	0.6	-4.8	0.4	100	71	630
	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	-6.7	0.4	80	57	400
	12.6	3.3	9.6	2.3	6.6	1.7	3.6	1.2	0.6	0.8	-2.4	0.6	-5.4	0.4	-8.4	0.3	66	47	270
	10.9	2.7	7.9	1.9	4.9	1.4	1.9	1	-1.1	0.7	-4.1	0.5	-7.1	0.3	-10.1	0.2	54	38	180

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	21.7	9.4	18.7	6.6	15.7	4.7	12.7	3.3	9.7	2.4	6.7	1.7	3.7	1.2	0.7	0.8	195	138	4400
	20.8	8.5	17.8	6	14.8	4.3	11.8	3	8.8	2.1	5.8	1.5	2.8	1.1	-0.2	0.8	170	120	3600
	19.1	7	16.1	5	13.1	3.5	10.1	2.5	7.1	1.8	4.1	1.2	1.1	0.9	-1.9	0.6	140	99	2500
	17.5	5.8	14.5	4.1	11.5	2.9	8.5	2.1	5.5	1.5	2.5	1	-0.5	0.7	-3.5	0.5	116	82	1700
	16.2	5	13.2	3.5	10.2	2.5	7.2	1.8	4.2	1.3	1.2	0.9	-1.8	0.6	-4.8	0.4	100	71	1300
	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	-6.7	0.4	80	57	800
	12.6	3.3	9.6	2.3	6.6	1.7	3.6	1.2	0.6	0.8	-2.4	0.6	-5.4	0.4	-8.4	0.3	66	47	540
	10.9	2.7	7.9	1.9	4.9	1.4	1.9	1	-1.1	0.7	-4.1	0.5	-7.1	0.3	-10.1	0.2	54	38	360
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	20.7	8.4	17.7	5.9	14.7	4.2	11.7	3	8.7	2.1	5.7	1.5	2.7	1.1	-0.3	0.7	195	138	7000
	20.7	8.4	17.7	5.9	14.7	4.2	11.7	3	8.7	2.1	5.7	1.5	2.7	1.1	-0.3	0.7	170	120	7000
	19.1	7	16.1	5	13.1	3.5	10.1	2.5	7.1	1.8	4.1	1.2	1.1	0.9	-1.9	0.6	140	99	4900
	17.5	5.8	14.5	4.1	11.5	2.9	8.5	2.1	5.5	1.5	2.5	1	-0.5	0.7	-3.5	0.5	116	82	3400
	16.2	5	13.2	3.5	10.2	2.5	7.2	1.8	4.2	1.3	1.2	0.9	-1.8	0.6	-4.8	0.4	100	71	2500
	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	-6.7	0.4	80	57	1600
	12.6	3.3	9.6	2.3	6.6	1.7	3.6	1.2	0.6	0.8	-2.4	0.6	-5.4	0.4	-8.4	0.3	66	47	1100
	10.9	2.7	7.9	1.9	4.9	1.4	1.9	1	-1.1	0.7	-4.1	0.5	-7.1	0.3	-10.1	0.2	54	38	730