

LAB.GRUPPEN



POWER AMPLIFIERS

iP 1150Q

KEY FEATURES:

4 x 130 watts @ 8 Ω

4 x 200 watts @ 4 Ω

4 x 270 watts @ 2 Ω

(Measured just below clip level,
with all channels driven)

- ◆ Compact design:
2U high
- ◆ Intercooler® cooling
system with front-to-rear
airflow
- ◆ Easily accessible dust filter
- ◆ Improved low-end power
bandwidth
- ◆ Neutrik Combo jack
- ◆ Bridged mono outputs in
one SpeakOn connector

The iP 1150Q is a space-saving four channel power amplifier, ideal for use in installations as well as in cost-effective live sound systems.

The iP 1150Q offers a choice of applications, such as in multi-channel monitor systems, four-channel reproduction and compact amplification in active 2-, 3-, and 4-way systems.

The iP 1150Q gives the possibility to bridge connect one or two of the two pairs of channels (channel A and B and/or channel C and D).

The Iron Power (iP) family of power amplifiers is the new compact and versatile line of professional power amplifiers with classic toroidal iron transformers. To achieve a compact design, the latest semiconductor technology is utilized. This, together with Lab.gruppen's proprietary copper cooling system, Intercooler®, enhances the 2 ohms capacity. A easily accessible dust filter on the front ensure a clean front-to-rear airflow.

A new Bi-phase wiring scheme also increases the capacity of the power supply. This extends the power bandwidth in the low end.

Besides the traditionally superb Lab.gruppen sonic performance, there is a full line of features to make the iP family functional in all situations from installation to cost-effective live sound systems:

Versatile input connection

With the Neutrik Combo-jack we offer both the professional XLR-type standard and the semi-pro 1/4 " TRS phono-jacks.

Soft Start

Toroidal transformers require a huge amount of start current to build up a magnetic flux when the amplifier is switched on. Therefore Lab.gruppen have included a soft start circuit to minimize the risk of blowing the wall fuse and to reduce flickering in the lighting.

Sophisticated protection circuitry, combining:

- **ALS™ short circuit protection;** the Adaptive Limiting System permits very high peak currents, but keeps the amplifier within the Safe Operation Area.
- **DC protection;** protects against infrasonic signals
- **VHF protection;** protects the loudspeakers against strong very high frequency non-musical signals above the audible range.
- **Thermal protection;** prevents the amplifier from being overheated. The protection indicators on the front panel are switched on, as a warning, before the protection process is initiated.
- **AC protection;** shuts down the power supply if the line voltage is outside the operating voltage.
- **Clip limiter;** prevents severely clipped waveforms from reaching the loudspeakers, whilst maintaining full peak power.

SPECIFICATIONS iP 1150Q

MAX OUTPUT POWER ¹⁾

	EIA at 1 kHz and 1% THD	FTC 20-20kHz @0.1%THD
8 Ω four channels	130 W	120 W
4 Ω four channels	200 W	180 W
2 Ω four channels	270 W ²⁾	245 ²⁾ W
8 Ω bridged stereo	400 W	360 W
4 Ω bridged stereo	540 W ²⁾	490 ²⁾ W

Max output voltage	
8 ohms load	32 Vrms
Peak voltage, no load	51 V

Distortion etc.	
THD 20Hz-20kHz and 1W to full power	0,05 %
THD @ 1kHz and -1dB under clip	0,01 %
DIM 30 at -3dB under clip	0,008 %

Hum and Noise	<-105 dB
Channel separation @10kHz	70 dB
Output impedance	30 mΩ
Slew Rate	30 V/μs

Inputs	
Gain	32 dB
Impedance	20 kohm
Common mode rejection	50 dB

Front Panel		
Gain controls	(4) channel A, B, C and D	31 positions detent
Protect indicator	(4) yellow LEDs	80°C at heatsink or >12kHz at full power or shorted output
Clip Indicator	(4) red LEDs	Fast peak – slow release
Signal present indicator	(4) green LEDs	-40 dB below full output
On Indicator	(4) green LEDs	DC rail voltage for channel A, B, C and D

Rear Panel	
Input connectors	(4) Neutrik Combo XLR type, 3 pin & 1/4" jack
Output connectors	(2) Neutrik 4-pole Speakon connectors
Switches	
Clip limiter A and B	On-Off (switchable)
Link-switches	A+B / B+C / C+D

Power	230 V version	115 V version
Operation voltage	130 V-265 V AC	65 V – 135 V AC
Minimum start voltage	180 V	90 V AC
Full output power at 4ohms	230 V AC	115 V AC
Peak inrush current (Soft start limited)	10 A	5 A

Current Draw @ 4ohms&230V		
Quiescent power (no load)	0.6 Arms	1.2 Arms
1/8 of full power (-9dB)	2.9 Arms	6 Arms
1/3 of full power (-5dB)	4.5 Arms	9 Arms
At full power (0 dB) @1 kHz 1% THD	7.9 Arms	16 Arms

Net Dimensions mm (inch)	483 (19") W x 88 (3,5") H x 325 (12,8") D
Shipping Dimensions mm (inch)	560 (22") W x 180 (7,1") H x 500 (19,7") D
Net Weight	13.2 kg (29 lbs)
Shipping Weight	14.8 kg (32.5 lbs)

Approvals	CE	Emission EN 55 103-1, E3 Immunity EN 55 103-2, E3, with S/N below 1% at normal operation level ⁴⁾ Safety EN 60 065, class I
	THX	iP1150T

1) Specifications measured with 230 VAC

4) Normal operation level 1/8 of full power or -9dB below clip level.

2) Component tolerance dependent

3) Continuous power, one channel driven or peak power both channels driven
(Thermal protection may occur at high continuous power)