# Think you know Lab.gruppen?

# Think again.




**IPD Series:** Intelligent Power Drive™

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# “I realised that many people thought they knew Lab.gruppen and what it is that we do...”

“Certainly we are known for producing ‘best-in-class’ amplifiers for the global pro touring industry. But I began to wonder, were we still serving the kind of customer I used to be – a budding rock guitarist? Did we have a product for the individual, the small rental or dry hire company, the touring band?

I realised that many people thought they knew Lab.gruppen and what it is that we do. But many potential customers felt that there wasn’t a product that was right for them, or accessible in terms of cost and ease of use. So I thought to myself...”

## Maybe it's time to change the game?

**Martin Andersson**, Lab.gruppen Product Manager and son of Lab.gruppen Co-founder Kenneth Andersson

**www.thegamechanges.com**



# Introducing IPD: the **Intelligent Power Drive Series.**

Available in two power configurations (2 × 600 W and 2 × 1200 W), the ultra-compact IPD Series delivers powerful networked integrated DSP, a 4-channel input matrix, extensive front panel controls and graphic display, analog and AES input and definitive Lab.gruppen limiters and build quality... All in a 1U chassis.

## Power amplification: new rules.

Lab.gruppen has rewritten the rule book with the IPD Series, changing everything you'd expect from a compact and moderately priced amplifier. First, we took no shortcuts. The high sustained power output, exemplary performance, and robust build quality are everything you would expect from a Lab.gruppen product.  What you would not expect are all the extras at no additional cost: analog and AES3 digital inputs, on-board DSP with a feature set rivaling high-priced external units, and Ethernet-based networking for monitoring and control by a computer at FOH or – using a WiFi router – a freely roaming iPad.

**Exceptional I/O flexibility**

With AES3 digital inputs standard, IPD Series amplifiers connect directly to digital console stage boxes, eliminating a D-A/A-D conversion cycle. AES3 inputs can be set for automatic failover to analog, and input mixing is available for all four inputs. At the power output end, connections are available on binding posts or Neutrik speakON.

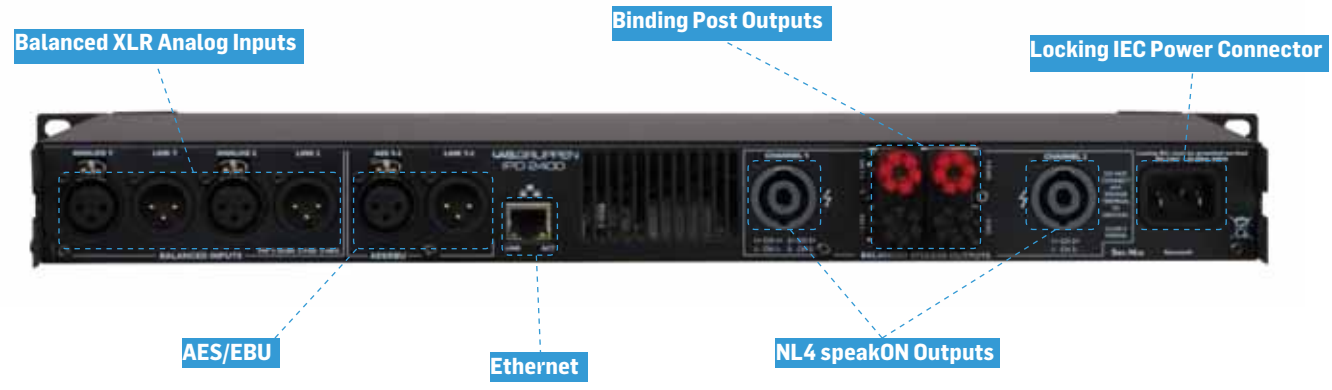
# Brawn with brains.

The IPD Series packs more power into 1U than many competitors offer in 2U. The IPD 1200 delivers 2 x 600 W while the flagship IPD 2400 supplies 2 x 1200 W, both at 4 ohms. This audio muscle is coupled with extraordinary intelligence. At the heart of the IPD platform is a latest-generation DSP engine equipped with up to a total of 40 real-time, multi-slope parametric EQs along with adjustable gain, input and output delay, and both high- and low-pass filters adjustable to any frequency.

**Take control, at the rack or anywhere**

All setup parameters for input mixing, DSP features and limiter setting are accessible on the front panel using two navigation buttons, a rotary encoder, and the backlit display. Individual channel mute buttons are also available. Up to 100 user-defined presets may be stored on-board.

Most users will also want to take advantage of the advanced, Ethernet-based networked monitoring and control features. Network configuration is fast and foolproof, with automatic discovery and identification of all connected amplifiers. The sleek GUI is designed for touch-based devices, and enables quick grouping of amplifiers along with intuitive setup and preset storage of all DSP parameters.



# Do more in less space.

## IPD SERIES AT A GLANCE

MAXIMUM RATED OUTPUT POWER/CHANNEL

| Model | Chan. | 2 ohms | 4 ohms | 8 ohms | 16 ohms | 70 Vrms |
|---|---|---|---|---|---|---|
| IPD 1200 | 2 | 500 W | 600 W | 300 W | 150 W | N/A |
| IPD 2400 | 2 | 800 W | 1200 W | 600 W | 300 W | 1200 W |



- High power density with up to 2400 W in 1 U
- Two models: 2 × 600 W or 2 × 1200 W (at 4 ohms)
- Low mains current draw with proven IDEEA technology
- AES3 and analog inputs with redundant failover
- Link outputs for analog and AES3
- Ethernet network connection
- Fast network setup with auto-discovery and ID of amplifiers
- Networked control via IntelliDrive Controller™ touch-based GUI
- Wireless control via iPad (requires connection of WiFi router)
- Four-channel input mixer
- Integrated DSP includes:
  - 40 real-time, multi-slope parametric equalizers
  - Adjustable high-pass and low-pass filters
  - Input delay (up to 2 s)
  - Output delay (up to 2 s)
  - Crossover with multiple filter types
- 100 user-definable presets
- Backlit display with navigation buttons and encoder for front panel setup
- Horizontal VU meters on display in operating mode
- Mute buttons on front panel
- Software configurable limiters (SCVPL™)
- Binding post and Neutrik speakON connectors
- Outputs may be connected through either one (NL-4) or both speakONs
- Universal power supply: 100 - 240 V at 50 or 60 Hz
- Three year warranty

# Included:

# A world-class, networked digital loudspeaker processor.

Each IPD Series amplifier houses an on-board DSP engine that rivals – in both power and feature set – what you'll find in high-quality external digital loudspeaker processing units. The free IntelliDrive Controller software application gives you total control over every DSP parameter using a GUI optimized for touchscreens yet also easily navigated using a mouse, touchpad or keyboard.

IntelliDrive Controller software is available for free download for Mac or PC at the Lab.gruppen website, and the iPad version is downloadable through Apple's App Store. The IPD Series network uses standard, off-the-shelf Ethernet hardware, and using a router equipped for WiFi allows wireless connection using a laptop computer or an iPad.



## Global View

In Global View, IntelliDrive Controller displays and identifies all amplifiers connected to the network. You can name the amplifiers, form or delete amplifier groups, turn amplifiers on/off or mute/unmute individually or in groups, and monitor all levels at a glance.




# IntelliDrive Cor
# Intuitive contro

At the heart of IPD Series is the simple GUI of the control software, giving powerfu network. Available on PC, Mac and dedicated iPad app, and designed with touch-scr



## Input Mixer View

In this view, you can set the device for stereo or 2-way mode, mix the inputs, and set AES3-to-analog failover either on or off. A graphic header at the top of all views shows the amplifier currently selected, along with ID, power and mute buttons, and preset store/recall functions.



## Levels View

In the Levels View, you can set input and output levels for each channel and set limiter response. Buttons on each fader block provide quick access to mute, EQ and delay for each channel as well as polarity reversal ("Phase Inverted"). Levels view will differ depending on selection of stereo or 2-way mode.




ntroller Software
**l of powerful DSP**

l user control over just about every aspect of DSP performance on each device on the
een in mind, IntelliDrive Controller gives you the edge when it comes to system tuning.




## Output EQ View

Output EQ accesses a comprehensive set of filter functions for each input channel. The parametric equalizer accommodates up to ten bands, with center frequency, slope and boost/cut all adjustable using a touchscreen or keyboard entry. High- and low-pass filters are selectable by type and frequency, and both output level and limiting meters are displayed to immediately monitor the effect of inserting filters. Output delay may be set up to 2 seconds.




## Crossover View

The Crossover View offers a comprehensive tool set for precisely filtering channel outputs to optimize loudspeaker performance. This view includes parameter settings for filter type and cutoff frequency for both the high- and low-pass filters as well as status metering for output level and limiting.




## Input EQ View

The Input EQ View accesses a comprehensive set of filter and delay functions that essentially duplicate the capabilities of the Output EQ section.

# Lab.gruppen IPD Series:
## Beyond conventional thinking.

Extraordinary flexibility, high power density and competitive cost make IPD Series amplifiers equally at home whether in permanent installations, portable corporate AV systems, or touring band rigs. Wherever performance and reliability cannot be compromised, yet the budget is tight (and available rack space even tighter), IPD Series presents the singular solution.

IPD Series offers everything you've wanted in a Lab.gruppen intelligent power amplifier, but may have thought was not compact enough, too powerful or beyond your reach.

If so, think again.



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