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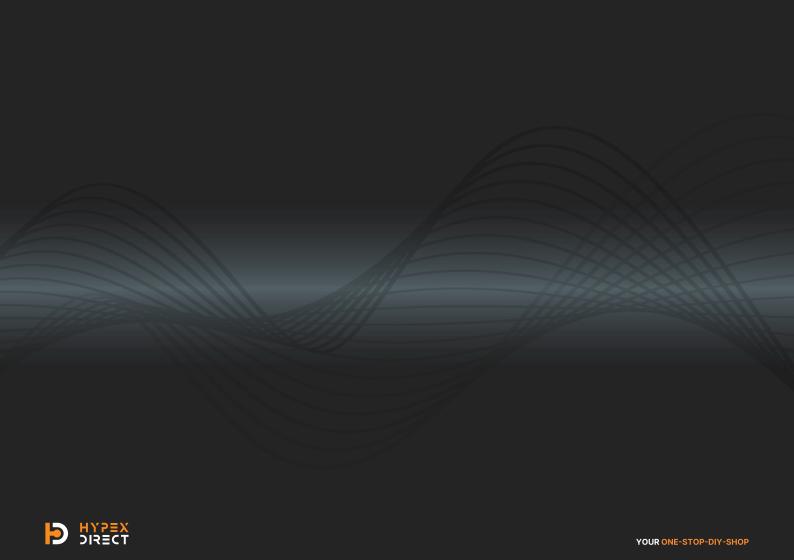






# **CONTENTS**

ABOUT HYPEX DIRECT	5	FUSION AMPLIFIER FAMILY	20
		FusionAmps	22
AMPLIFIER KITS	7	FusionAmp Accessoires	24
PreAmplifier	8		
PreDIGin add-on	10	AMPLIFIER MODULES	26
Nilai500 Mono Kit	12	Nilai500 amplifier module	27
Nilai500 Stereo Kit	14	UcD180HG with HxR amplifier module	28
Faceplates	16	UcD400HG with HxR amplifier module	29
INTERCONNECTS	18	SWITCH MODE POWER SUPPLIES	30
Stereo Interconnect RCA - RCA	19	PS500	31
Stereo Interconnect RCA - XLR	19	SMPS400	32
Stereo Interconnect XLR - XLR	19	SMPS1200	33
		SMPS3k	34



# **ABOUT HYPEX DIRECT**

As part of Hypex Electronics BV, Hypex Direct serves the DIY community and the business to consumer market for Hypex products. Hypex Electronics is a specialised supplier, designer and manufacturer of Class D power amplifiers, power supplies, DSP solutions and plate amplifiers for the HiFi, High End and Pro Audio industries. Hypex Electronics manufactures very superior-quality Class D amplifiers based on leading Nilai®, NCORE® and globally respected UcD™ technologies. Our goal is to provide everyone with the best possible audio experience. As such our commitment goes beyond just OEM solutions, we cater to the consumer market with a wide range of products on www.hypexdirect.com.

#### WHAT WE DO

Hypex Direct takes care of community of do-it-yourselfers and audio enthusiasts with ready access to Hypex Electronics equipment. The separation of our consumer and OEM activities gives us more direct access to the audio community, and allows us to provide the dedicated customer support they require. Hypex Direct products are sold worldwide to private individuals and our Hypex direct product catalogue is 100% supported by and based on Hypex Electronics BV products. The Hypex Direct range is fully developed by Hypex Electronics BV and is sold exclusively by hypexdirect.com and our worldwide network of business partners.

### KITS, FUSION AMPLIFIERS AND INTERCONNECTS

Hypex Direct has three focus points: Amplifier kits, Fusion amplifiers and Interconnects. The easy-to-build nature of our amplifier kits allows anyone - even those without any technical knowledge - to build their own amplifier in the shortest possible time. Our website, www. hypexdirect.com, also offers the components to build a complete amplifier from scratch, in order to give the real DIY diehards with technical experience the opportunity to do so.

Please note that all prices are ex. VAT.



# **AMPLIFIER KITS**

Build yourself a high-end system with our easy-to-assemble amplifier kits. Combine our PreAmplifier kit with one of our mono or stereo amplifiers and enjoy your music like never before.

With easy-to-follow, step-by-step assembly instructions, each kit can be built in approximately 30 to 60 minutes.

The complete line-up consists of the PreAmplifier kit and two power amplifier sets, the Nilai500 Mono kit and the Nilai500 Stereo kit. The PreAmplifier can be extended with the PreDIGin add-on which extends the preamplifier with a DAC and streaming option.

#### **NILAI® POWER**

Both Nilai® power amplifier kits are built around the Nilai500 amplifier module with the PS500 switch mode power supply. The Nilai500 amplifier module is the successor to the acclaimed NCORE® NC400. The engine room houses a brand new control-loop topology, boosting performance to the next level. It outperforms Ncore® by not less than ten times!

The Nilai500 is our best sounding amplifier to date, boasting a truly special technique which sets a new benchmark for high-end audio applications. A marvel for our DIY community.

Complete your system with high-end custom made Hypex Direct interconnects, available with XLR-XLR, XLR-RCA and RCA-RCA connectors and lengths up to 2 meter.



#### GAIN UP. NOISE DOWN

The Hypex Direct PreAmplifier Kit is packed with features designed to provide a high quality audio and user experience. The heart of this kit is a fully analogue build-up PreAmplifier. It is controlled by a 2.7" monochrome display, which offers adjustable brightness and an on-time standby feature. A power indication LED keeps you informed about the power status. The kit includes two full aluminium control knobs, giving you precise control over your settings while adding a touch of tactile to your setup. For added convenience, the kit comes with a remote control, allowing you to adjust settings from a distance.

Each input on the PreAmplifier features adjustable gain offset, enabling you to customise the audio levels to perfectly match your preferences. Furthermore, the kit is extendable with the PreDIGin Add-on, providing a DAC, Fusion Connect board, Bluetooth input board and Streaming option.

One of the most compelling aspects of the PreAmplifier Kit is the combination of high-end quality and the do-it-yourself approach. Assembling your own amplifier not only brings a sense of accomplishment but also provides a deeper understanding of the technology behind the audio equipment. The PreAmplifier Kit is designed to be user- friendly, with easy-to-follow instructions that quide



you through the assembly process. Most users can complete the assembly in under an hour, making it an accessible project even for those new to DIY electronics. For additional support, an online instructional video is available, offering a visual step-by-step guide to ensure a smooth assembly process.

The kit features a sleek, modern design with a matte black finish that will enhance and pay compliment to any audio setup. Made

from durable, high-grade aluminium, the housing is built to withstand regular use while maintaining its pristine appearance. This robust construction ensures that your preamplifier will not only perform well but retain its aesthetic appeal for years to come.

Furthermore, you can personalise your PreAmplifier with our black or silver faceplate replacement options.

#### INPUTS

- Two sets RCA unbalanced analog inputs
- One set female XLR stereo balanced analog input

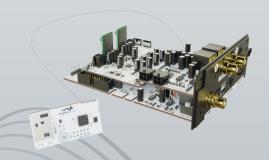
#### **OUTPUTS**

- One XLR 4 pole headphone output (front)
- One 6.35mm headphone output (front)
- Two dual 3.5mm TS 12V output trigger ports
- Two sets male XLR stereo balanced outputs



## PreDIGin add-on







The PreDIGin add-on is designed to complete the Hypex Direct PreAmplifier. PreDIGin is the digital companion for audio enthusiasts seeking the ultimate listening experience. At the heart of the PreDIGin lies cutting-edge technology, including high-quality components such as the AK5574 ADC IC, dual CS43198 DAC ICs operating in mono mode, SRC4392 for superior sample rate conversion, and the ADSP21489 DSP for advanced signal processing capabilities.

10

#### AN EXCEPTIONAL DAC

One of the standout features of the PreDIGin is its exceptional DAC. With an output level of 14dBu, distortion rated at an impressive -117.5dB, a signal-to-noise ratio of 128.5dB, and a dynamic range of 127dB, the PreDIGin ensures pristine audio reproduction, capturing every nuance of your favourite music.

Versatility is another key strength of the PreDIGin, offering support for a wide range of audio formats and connectivity options. Whether you prefer traditional sources like S/PDIF, Optical, and AES/EBU up to 192kHz/24bits, or digital interfaces like USB type B and Network1 up to 384kHz/32bits, the PreDIGin has you covered. Additionally, Bluetooth connectivity at 48kHz/16bits provides convenient wireless streaming options.

The included FusionConnect board makes it possible to transform your PreAmplifier into the master device in a FusionAmp setup, offering seamless integration and enhanced control over your entire FusionAmp based audio system.

Elevate your listening experience and unleash the full potential of the PreAmplifier with the PreDIGin add-on.



# PreDIGin add-on Data

### **FEATURES**

Inputs	Selectable DAC-filters	Notes
S/PDIF	Fast, low lat. (default)	Master in master/slave setup
Optical	Fast, linear	Digital put-through analog output of preamplifier (via ADC)
USB	Slow, low latency	
AES/EBU	Slow, linear	
Bluetooth	Non oversampling	
Network		

### **AUDIO PERFORMANCE DATA DAC**

All audio measurements are done with AES17 20kHz filter and no weighting.

Item	Symbol	Max	Unit	Notes
Output level	Vout	14	dBu	(4.1 Vrms)
Distortion	THD+N	-117.5	dB	(@ 0 dBFS)
Signal-to-Noise ratio	SNR	128.5	dB	
Dynamic range	DR	127	dB	
Channel crosstalk		-147	dB	

## **AUDIO PERFORMANCE DATA ADC**

All audio measurements are done with AES17 20kHz filter and no weighting.

Item	Symbol	Max	Unit	Notes
Input level	Vout	14	dBu	(4.1 Vrms)
Distortion	THD+N	-112	dB	(@ 0 dBFS)
Signal-to-Noise ratio	SNR	119	dB	
Dynamic range	DR	119	dB	
Channel crosstalk		-139	dB	
Bandwidth	FC	40	kHz	

## Nilai500 Mono Kit





Unleash the power of high-fidelity audio with the Nilai500 Mono Kit — the ultimate amplifier solution for audio enthusiasts. Built around the state-of-the-art Nilai500 amplifier module designed by Hypex, this kit offers unmatched performance, ease of assembly, and flexibility when creating your own premium mono-channel amplifier.

12

The **Nilai500** module delivers high-end performance with low distortion, high efficiency, and superb linearity, ensuring pristine, audiophile-grade sound. It is engineered to provide a clean and accurate audio signal, allowing every nuance of your music to be faithfully reproduced. The module's advanced **Nilai®** technology contributes to its high efficiency, reducing heat dissipation and enhancing overall system reliability.

#### **PS500**

The kit also includes the **PS500** power supply, which is engineered with high quality, efficiency, and reliability in mind. This regulated power supply minimises noise and distortion while providing robust power output. A regulated power supply ensures consistent voltage

and current delivery, preventing fluctuations that can introduce noise and distort the audio signal. As a result, you get a cleaner, more accurate sound with improved dynamics, detail, and clarity.

#### POWER TO DELIVER

This kit provides an impressive output of **500 watts at 2 ohms**, **525 watts at 4 ohms and 260 watts at 8 ohms**, making it capable of driving demanding speakers with ease and delivering dynamic, powerful audio. Too much power for your speakers? For mediumsized speakers, please consider the **Nilai500 Stereo Kit** on P14, which provides a suitable balance of power and performance for a variety of listening environments.



**No soldering required!** The kit includes all necessary components and straightforward instructions, making it accessible for beginners and experienced DIYers alike. Also, a building instruction video is available online at the product page's video tab.

Easily integrate this amplifier with other components in your audio system using the available **12V trigger input** for synchronised power control. You'll also find a user-friendly **on/off switch button** on the front panel for easy access and operation.

#### **PERSONALISE**

Perfect for creating a high-power, dual-mono setup or expanding your existing multi-channel audio system, this kit is equipped with a **rear LED switch** that allows you to easily adjust the brightness of the front LED, ensuring it fits perfectly with your room's ambiance or matches the brightness of your setup. The kit also offers flexibility

to tailor the final build to your **personal style** or existing setup with the available **faceplates**.

Whether you're an audiophile or a DIY enthusiast, the Nilai500 Mono Kit brings the joy of building your own high-performance amplifier with professional-level results. Experience the benefits of Hypex's cutting-edge **Nilai®** amplification technology, with reduced heat dissipation, higher efficiency, and exceptional sound quality.

The Nilai500 mono kit is a perfect match with the **Hypex Direct PreAmplifier**, allowing you to create a complete, high-performance audio system with seamless integration and exceptional sound quality.

Build your own audio masterpiece with the Nilai500 Mono Kit and enjoy uncompromised sound quality, tailored to your taste.

#### **FEATURES**

- THD+N: 0,00015% (-116dB) @ 100W / 4Ω / 20.000Hz
- Output noise: 9,5µV @11,8dB gain
- Gain adjust in 3 steps (11,8 21,8 27,8)
- · High fidelity components
- Discrete buffer stage and regulators
- Dedicated high-end power supply PS500 included

#### **SPECIFICATIONS**

- Automatic input voltage selection
- 100-120Vac / 200-240 Vac ±10%

#### Inputs

- 1 x Trigger 12V
- 1 x Balanced XLR

#### Outputs

1 x Goldplated Bindingpost Set
 (Banana plug, Spade plug or Bare wire)

#### POWER

- 2Ω: 500W
- 4Ω: 525W
- 8Ω: 260W



Unleash the power of high-fidelity audio with the Nilai500 Stereo Kit — the ultimate amplifier solution for audio enthusiasts. Built around two state-of-the-art Nilai500 amplifier module designed by Hypex, this kit offers unmatched performance, ease of assembly, and flexibility for creating your own premium mono-channel amplifier.

The two **Nilai500** modules deliver high-end performance with low distortion, high efficiency, and superb linearity, ensuring pristine, audiophile-grade sound. It is engineered to provide a clean and accurate audio signal, allowing every nuance of your music to be faithfully reproduced. The module's advanced **Nilai®** technology contributes to its high efficiency, reducing heat dissipation and enhancing overall system reliability.

#### **PS500**

The kit also includes one **PS500** power supply, which is engineered with high quality, efficiency, and reliability in mind. Both Nilai500 modules share this single power supply. This regulated power supply minimises noise and distortion while providing robust power

output. A regulated power supply ensures consistent voltage and current delivery, preventing fluctuations that can introduce noise and distort the audio signal. As a result, you get a cleaner, more accurate sound with improved dynamics, detail, and clarity.

#### SMOOTH DELIVERY

This kit provides an impressive output of **250 watts at 2 ohms**, **300 watts at 4 ohms and 260 watts at 8 ohms**, making it an excellent choice for all medium-sized speakers. It delivers dynamic and engaging audio performance, ideally suited to a variety of listening environments. However, for the most demanding, large-scale speaker setups, please refer to the **Nilai500 Mono Kit** on P12.



**No soldering required!** The kit includes all necessary components and straightforward instructions, making it accessible for beginners and experienced DIYers alike. Also, a building instruction video is available online at the product page's video tab.

Seamlessly integrate this amplifier with other components in your audio system using the available **12V trigger input** for synchronised power control. You'll also find a user-friendly **on/off switch button** on the front panel for easy access and operation.

#### **MAKE IT YOURS**

Perfect for creating a high-power, stereo setup or expanding your existing multi-channel audio system, this kit is equipped with a **rear LED switch** that allows you to easily adjust the brightness of the front LED, ensuring it fits perfectly with your room's ambiance or matches the brightness of your setup. The kit also offers flexibility

to tailor the final build to your **personal style** or existing setup with the available **faceplates**.

Whether you're an audiophile or a DIY enthusiast, the Nilai500 Stereo Kit brings the joy of building your own high-performance amplifier with professional-level results. Experience the benefits of Hypex's cutting-edge **Nilai®** amplification technology, with reduced heat dissipation, higher efficiency, and exceptional sound quality.

The Nilai500 stereo kit is a perfect match with the **Hypex Direct PreAmplifier**, allowing you to create a complete, high-performance audio system with seamless integration and exceptional sound quality.

Build your own audio masterpiece with the Nilai500 Stereo Kit and enjoy uncompromised sound quality, tailored to your taste.

#### **FEATURES**

- THD+N: 0,00015% (-116dB) @ 100W / 4Ω / 20.000Hz
- Output noise: 9,5µV @11,8dB gain
- Gain adjust in 3 steps (11,8 21,8 27,8)
- · High fidelity components
- Discrete buffer stage and regulators
- Dedicated high-end power supply PS500 included

### **SPECIFICATIONS**

### Inputs

- 1 x Trigger 12V
- 2 x Balanced XLR

#### **Outputs**

2 x Goldplated Bindingpost Set
 (Banana plug, Spade plug or Bare wire)

#### POWER

- 2Ω: 2 × 250W
- 4Ω: 2 × 300W
- 8Ω: 2 × 260W

# **Faceplates**

Change the aesthetics of your Hypex Direct amplifier kit with our premium Matte Black or Silver Faceplates without the HD engraving, designed to provide a sleek and sophisticated upgrade. Crafted with precision and elegance, these faceplates are the perfect solution for those looking to personalise the visual appeal of their Hypex Direct amplifier kit.

With a modern matte black or silver finish that adds a touch of luxury to your amplifier and made from durable, high-grade aluminium, these faceplates are built to last. The robust construction ensures that it can withstand regular use while maintaining its pristine appearance for years.

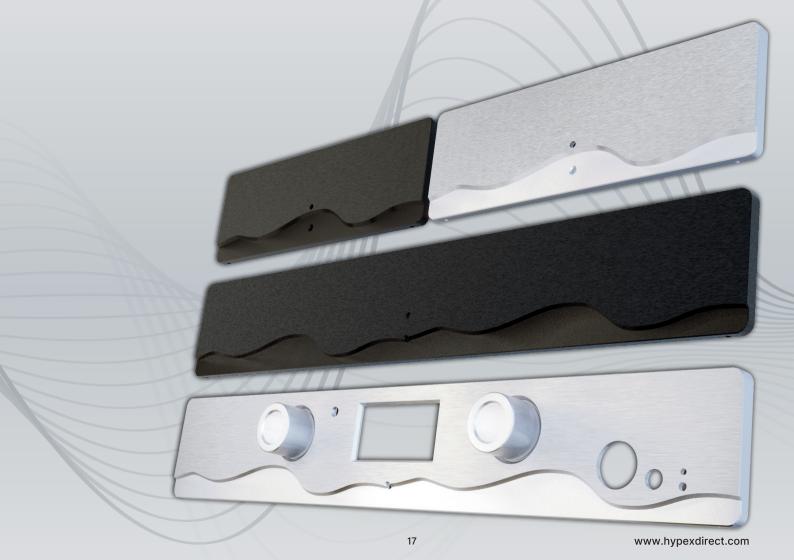
#### **EASY INSTALL**

Designed for hassle-free installation, a faceplate can be easily exchanged with the original supplied faceplate. Simply detach the original faceplate and front PCB, mount the front PCB on the new faceplate, and attach the new faceplate to your Hypex Direct amplifier kit.

Don't just settle for standard. Upgrade your amplifier with a purpose-built matte black or silver faceplate and enjoy a perfect blend of style, functionality and sound quality. Make a statement with your audio setup and let its external appearance reflect the quality of the internals.

Model	MSRP	Notes
Faceplate - Mono Black (2 pieces)	€ 79,50	
Faceplate - Stereo Black	€ 79,50	
Faceplate - PreAmplifier Black	€ 85,50	The original black knobs are used with this faceplate.
Faceplate - Mono Silver	€ 79,50	
Faceplate - Stereo Silver	€ 79,50	
Faceplate - PreAmplifier Silver (including knobs)	€ 95,50	The original black knobs are replaced with the silver knobs.





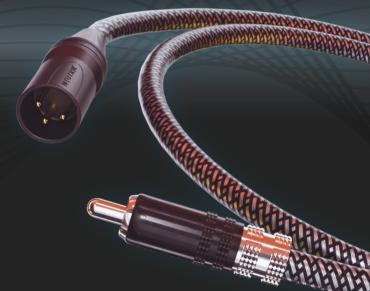
# **INTERCONNECTS**

Hypex Direct Interconnects are the perfect link between the Hypex Direct PreAmplifier kit and power amplifier kits or active Fusion Amp powered loudspeakers. The silver plated connectors guarantee an optimal, uncoloured signal transmission.

These Interconnects are the best protected audio signal cables in the industry because of their **silver-plated conductors** with **PTFE tape-wrapped insulation**, **glass-fibre stabilisers** and **two layers of braided shield** over a **bonded carbon triboelectric charge drain layer**.

The Hypex Direct Interconnects are custom-made double-shielded twisted pair cables - specifically designed for the highest RFI immunity and lowest microphonic noise.

Adding high-end cables to your setup and enjoying an immediate upgrade in sound is now possible at a very affordable price!





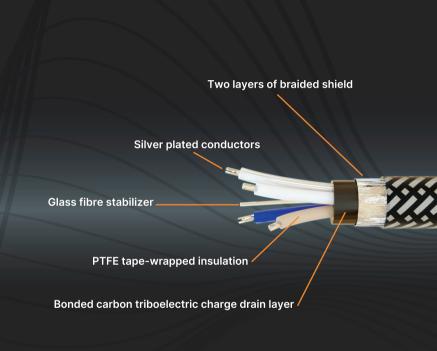
18

## **AVAILABLE INTERCONNECTS**

Туре	Length	MSRP / pair
RCA-RCA	1 meter	€ 190,00
RCA-RCA	2 meter	€ 265,00
RCA-XLR	1 meter	€ 190,00
RCA-XLR	2 meter	€ 265,00
XLR-XLR	1 meter	€ 190,00
XLR-XLR	2 meter	€ 265,00

### **HIGHLIGHTS**

- Double-shielded twister pair per cable
- Silver plated conductors
- PTFE tape-wrapped insulation
- Highest RFI immunity
- Lowest microphonic noise
- Silver plated XLR and RCA connectors



# **FUSION AMPLIFIER FAMILY**

Discover the epitome of amplifier excellence with the Fusion Amplifier Family - a turnkey solution that flawlessly integrates SMPS, DSP, and the power of NCORE®-based amplification. Tailored for active speaker designs, the Fusion Amp Family stands out as one of the finest amplifier solutions available.

At the heart of the Fusion Amplifier lies an exceptional fusion of a Switch Mode Power Supply (SMPS), Digital Signal Processing (DSP), and NCORE®-based amplification. This synergy creates a powerhouse of audio engineering, setting a new standard for active speaker designs. The integrated DSP delivers remarkable audio processing capabilities, while the NCORE® technology ensures negligible distortion across the entire audio and power spectrum.

#### **BUILDING POWERHOUSES**

All equal dual-channel Fusion Amplifiers (2ch and 3ch versions) can be used in Bridged-Tied Load (BTL), transforming them into robust powerhouses and making them a force to be reckoned with. Distortion - whether in Total Harmonic Distortion (THD) or Intermodulation Distortion (IMD) - is virtually nonexistent. Even at low listening levels (1W) distortion is immeasurable.

#### **HYPEX FILTER DESIGN**

The Fusion Amplifier Family offers a range of input options for compatibility with various source equipment. Hypex provides the HFD software (Hypex Filter Design) for designing and configuring filters for the Fusion Amplifiers. Enhance the capabilities of the Fusion Amplifiers with the Fusion Remote Kit or Fusion OLED Display for convenient remote control. The thermal regulation ensures optimal performance without compromising on ventilation.

Download the HFD software from www.hypexdirect.com for a seamless configuration process.



#### **CONFIGURATION OPTIONS**

Multiple Fusion Amplifiers can be used in a master-slave configuration to create a stereo or a 2.1 system. Three presets are available to store different filter settings, inputs and volume offsets. In each preset either one 4500 tap FIR filter right after the input, or three 1500 tap FIR filters on the output (one for each channel) can be implemented.

#### **KEY FEATURES**

- 15 biquads per output channel
- Signal detection
- Bridge-Tied Load (BTL) capable

- Three selectable presets for filters
- Automatic shutdown
- Thermal protection

- Source selection
- Clip protection
- IIR and FIR filter options

### **AVAILABLE MODULES**

Module name	Configuration	Power @ 4Ω	Power @ 8Ω	Inputs	MSRP
FA251	1 channel / 1-way	1 × 250W	1 × 130W	XLR, RCA, High level	€ 296,50
FA501	1 channel / 1-way	1 × 500W	1 × 270W	XLR, RCA, High level	€ 418,00
FA122	1 channel / 2-way	2 × 125W	2 × 75W	XLR, RCA, AES/EBU, SPDIF, Optical	€ 352,00
FA252	1 channel / 2-way	2 × 250W	2 × 150W	XLR, RCA, AES/EBU, SPDIF, Optical	€ 472,50
FA502	1 channel / 2-way	2 × 500W	2 × 350W	XLR, RCA, AES/EBU, SPDIF, Optical	€ 595,00
FA123	1 channel / 3-way	2 × 125W + 1 × 100W	3 × 75W	XLR, RCA, AES/EBU, SPDIF, Optical	€ 418,00
FA253	1 channel / 3-way	2 × 250W + 1 × 100W	2 × 150W + 1 × 100W	XLR, RCA, AES/EBU, SPDIF, Optical	€ 539,00
FA503	1 channel / 3-way	2 × 500W + 1 × 100W	2 × 350W + 1 × 100W	XLR, RCA, AES/EBU, SPDIF, Optical	€ 660,00



















# **FusionAmp Accessories**

Enhance the control over your FusionAmps with the Fusion OLED Display, Fusion remote kit, Hypex Remote control accessories and the free-of-charge Hypex Filter Design software.

Elevate your audio experience with the sleek **Fusion OLED Display**, designed to provide you with all essential information at a glance. Whether it's monitoring the volume level or identifying the active input or error messages, the Fusion OLED Display ensures that every detail is easily visible from your preferred listening position.

All models of the FusionAmp range can be extended with the **Fusion Remote Kit**. This kit contains a PCBA with IR receiver and bi-colour LED, a plexiglass front with double adhesive tape, 2 lightpipes, the necessary cable (125cm) and screws. You can mount this kit from the inside or outside of the speaker cabinet. This set must be used in master devices if the **Hypex remote control** is to be used. When used in slave devices the IR functionality will be disabled. The green LED acts as on-off indicator; the red LED mirrors the protect indicator.

The **Hypex remote control** is a simple straightforward remote control for your FusionAmps, enabling you to adjust the volume and place your system in or out of standby. This remote control can be used with either the Fusion OLED Display or the Fusion Remote Kit.

Our **Hypex Filter Design (HFD)** software (Windows only) is free of charge and available as a download only. Seamlessly manage your FusionAmps with HFD and take full command of your audio system as never before. With HFD, you have the ability to configure all essential filters and exercise complete control over the available options. This software is your gateway to a world of audio customisation, allowing you to fine-tune your system according to your preferences.

Unlock the full potential of your FusionAmps with ease!



# **FusionAmp Accessories**









# **AMPLIFIER MODULES**

For the DIY enthusiasts who aim for the best, we offer a fine selection of amplifier and SMPS modules. In addition we can provide you with the right connection materials and accessories. At hypexdirect.com we offer three amplifier modules for use in custom built DIY amplifiers. Visit our online application pages at <a href="https://www.hypexdirect.com/application">www.hypexdirect.com/application</a>/ to see a range of options for DIY projects. From active loudspeaker and subwoofer configurations based on our FusionAmps to different kinds of amplifiers configured with Nilai® or UcD™ modules and matching Switch Mode Power Supplies.

#### **NILAI® AMPLIFIER MODULE**

Nilai is a Malay word meaning value. We couldn't have chosen a more appropriate name for this technology. In comparison to its predecessor NCORE® we've been able to boost performance by a factor of ten. This results in distortion rates that are ten times lower, a power supply noise reduction that is ten times higher and a reduced output impedance that has dropped ten times. Impressive numbers indeed but let Nilai® prove its true worth when you hear these numbers come to life through your loudspeakers.

#### **UCD™ AMPLIFIER MODULES**

Over the past two decades UcD™ (Universal class D) has played a significant role in Class D amplifier technology. What began at the time as a modest amplifier for the DIY market soon became a worldwide success.

2003 saw the start of a migration of all Hypex products to class D. For this, a licence deal was closed with Philips for the 'Universal class D' circuit. Realising the market potential of the circuit, Hypex decided not only to use the technology in completed subassemblies, but also to sell amplifier modules to the DIY market. The UcD180 and UcD400 modules have quickly established themselves as the new standard, in terms of both measured and subjective performance.



Nilai500

MSRP: € 350,00

The Nilai500 amplifier module is the long-awaited successor to the acclaimed NCORE® NC400. Incorporating a brand new control-loop topology that really boosts performance to the next level. It outperforms NCORE® by no less than 10 times!

The module comes with a fully discrete buffer stage and on-board voltage regulators, similar to the NC400 it's replacing. Together with carefully selected high-grade components, the Nilai500 is our best-sounding amplifier module to date. With a special technique that sets a new benchmark for high-end audio applications, it is a truly unique amplifier module for the entire audio community.



#### **APPLICATIONS**

· High-end power amplifiers

#### **POWER**

- 2Ω: 500W
- 4Ω: 525W
- 8Ω: 260W

#### **FEATURES**

- THD+N: 0,00015% (-116dB) @ 100W / 4 $\Omega$ hm / 20.000Hz
- Output noise: 9,5µV @11,8dB gain
- Gain adjust in 3 steps (11,8 21,8 and 27,8)
- · Built with high fidelity components
- Discrete buffer stage and regulators
- Dedicated high-end power supply PS500
- Also available in mono & stereo kits

# UcD180HG with HxR

MSRP: € 89,00

The UcD180HG amplifier module is a self-contained, high-performance class D amplifier intended for a wide range of audio applications, ranging from Public Address systems to ultra high-fidelity replay systems for studio and home use.

Chief distinguishing features are flat frequency response, irrespective of load impedance, nearly frequency-independent distortion behaviour and very low radiated and conducted EMI. Control is based on a phase-shift-controlled self-oscillating loop taking feedback only at the speaker output.



#### **APPLICATIONS**

Audiophile power amplifiers for home and professional use

#### POWER

- 4Ω: 180W
- 8Ω: 120W

#### **FFATURES**

- Pop-free start and stop control
- · Differential audio input
- Clip indicator
- Overcurrent and over voltage protection
- · No compromise components
- LM4562 buffer OpAmp
- HxR12 mounted
- Ultra-low noise
- Improved on-board buffer supply



# UcD400HG with HxR

The UcD400HG amplifier module is a self-contained high-performance class D amplifier intended for a wide range of audio applications, ranging from Public Address systems to ultra high-fidelity replay systems for studio and home use.

Chief distinguishing features are flat frequency response, irrespective of load impedance, nearly frequency-independent distortion behaviour and very low radiated and conducted EMI. Control is based on a phase-shift controlled self-oscillating loop taking feedback only at the speaker output.



#### **APPLICATIONS**

Audiophile power amplifiers for home and professional use

#### POWER

- 4Ω: 400W
- 8Ω: 240W

#### **FEATURES**

- · Pop-free start and stop control
- Differential audio input
- Clip indicator
- Overcurrent and over voltage protection
- No compromise components
- LM4562 buffer OpAmp
- HxR12 mounted
- Ultra-low noise
- Improved on-board buffer supply

# **SWITCH MODE POWER SUPPLIES (SMPS)**

Our Switch Mode Power Supplies (SMPS) are highly efficient and specifically designed to be used in combination with our UcD™ and Nilai® amplifier modules. Key features include high efficiency over the entire load range, extremely small form factor, low weight and very low radiated and conducted EMI.

The SMPS also features an upgraded overcurrent protection which in case of temporary overload simply reduces the output voltage. Only when the overload condition is in place for a longer time will the supply enter hiccup mode and remain that way until the overload condition disappears. This feature combined with large electrolytic buffer capacitors is key to the capability of delivering high dynamic headroom power to the connected amplifier.

The supply is triggered for normal operation or latched off in case of a critical fault via in built-in actuators. The SMPS is optimised from the first phase of design to final implementation in order to realise the low EMI signature required of the most demanding audio applications.

#### **HIGHLIGHTS**

- High efficiency
- · Extremely small form factor
- Low weight
- Low radiated and conducted EMI

#### **APPLICATIONS**

• Power Supply for single or multiple UcD™ and Nilai® amplifier modules.



PS500 MSRP: € 250,00



The PS500 is a high efficiency Safety Class 2 switch mode power supply specifically designed to be used in combination with single or dual Nilai500 modules. Its key features are high efficiency over the entire load range, use of audiophile components and interleaved PFC for increased power density and lower conducted EMI.

The PS500 features a comprehensive over current protection. When an overload condition remains for a longer period of time, the supply voltage gradually decreases until entering hiccup mode.

Universal mains capability ensures reliable operation across the globe. Sturdy Molex® connectors provide a solid connection to the

amplifier modules while the user has control over on/off operation through the I/O and HBUS connectors.

The user accessible 5V standby and symmetrical auxiliary supply enables the user to connect third party electronics, making the PS500 ideal for DIY purposes.

### HIGHLIGHTS

- High End Audio Amplification
- Interleaved PFC Stages

- Supplies Single Or Dual Nilai500 Amplifiers
- 2013 ErP Lot 6 0.5W Standby Supply

Universal Mains Input

SMPS400 MSRP: € 99,00

The SMPS400 stands out as a highly-efficient Safety Class 2 switch mode power supply explicitly crafted for seamless integration with our UcD™ amplifier modules. Noteworthy attributes include exceptional efficiency across the entire load spectrum, an exceptionally compact form factor, minimal weight and remarkably low levels of both radiated and conducted electromagnetic interference (EMI).

Distinguishing itself further, the SMPS400 incorporates advanced overcurrent protection mechanisms. In the event of a temporary overload, it intelligently diminishes the output voltage. Only when the overload persists for an extended duration does the supply transition into hiccup mode, maintaining this state until the overload resolves. This unique feature, coupled with large electrolytic buffer capacitors, empowers the supply to deliver substantial dynamic headroom power to the connected amplifier.

Moreover, the SMPS400 encompasses an auxiliary isolated supply and a control circuit seamlessly interfacing with our  $UcD^{TM}$  amplifier modules. Activation for routine operation or disconnection during a



critical fault is executed through built-in actuators, providing a reliable safeguard. From the initial design phase to the final implementation, the SMPS400 undergoes optimisation to achieve the low EMI signature essential for the most demanding audio applications.

#### **FEATURES**

- High efficiency
- · Small form factor
- Low EMI

- Selectable input voltage range
- Remote controlled operation
- 2 variants available: A180 / A400

#### **PROTECTIONS**

- Advanced Overcurrent protection
- Over temperature protection
- DC detection input



The SMPS1200 represents a high-efficiency Safety Class 2 switch mode power supply, meticulously engineered for compatibility with our UcD™ amplifier modules. Highlighted features encompass superior efficiency across the entire load spectrum, an exceptionally compact form factor, lightweight construction and minimal radiated and conducted electromagnetic interference (EMI).

Additionally, the SMPS1200 boasts an advanced overcurrent protection mechanism that, during a temporary overload, restricts the output current. Only when the overload persists for an extended duration does the supply transition into hiccup mode, maintaining this state until the overload condition resolves. This attribute, in conjunction with substantial primary electrolytic buffer capacitors, enables the supply to deliver robust dynamic headroom power to the connected amplifier.

Furthermore, the SMPS1200 includes a symmetrical auxiliary output and a control circuit seamlessly interfacing with our UcD™ amplifier modules. Activation for routine operation or deactivation during a critical fault is managed through built-in actuators, ensuring a reli-



able safeguard. From the initial design phase to the final implementation, the SMPS1200 is optimised to achieve the lowest possible EMI signature, meeting the stringent demands of the most sophisticated audio applications.

#### **FEATURES**

- · High efficiency
- · Small form factor
- Low EMI

- Selectable input voltage range
- Remote controlled operation
- 3 variants available:
   A180 / A400 / A700

#### **PROTECTIONS**

- Advanced Overcurrent protection
- Over temperature protection
- DC detection input

SMPS3k MSRP: € 265,00

The SMPS3K stands out as a high power, high-efficiency Safety Class 1 switch mode power supply meticulously crafted for seamless integration with our UcD™ amplifier modules. Its key attributes include superior efficiency across the entire load spectrum, an exceptionally compact form factor, lightweight design, and minimal radiated and conducted electromagnetic interference (EMI).

Adding to its capabilities, the SMPS3K incorporates advanced overcurrent protection. In the event of a temporary overload, it restricts the output current. Only if the overload condition persists for an extended period does the supply transition into hiccup mode, maintaining this state until the overload condition dissipates. This feature, coupled with large primary electrolytic buffer capacitors, enables the supply to deliver high dynamic headroom power to the connected amplifier.

Moreover, the SMPS3K includes a symmetrical auxiliary output and a control circuit seamlessly interfacing with our UcD™ amplifier modules. Activation for routine operation or deactivation during a critical fault is managed through built-in actuators, providing a reli-



able safeguard. From the initial design phase to the final implementation, the SMPS3K undergoes optimisation to achieve the lowest possible EMI signature, meeting the stringent requirements of the most demanding audio applications.

#### **FEATURES**

- · High efficiency
- · Small form factor
- Low EMI

- Selectable input voltage range
- Remote controlled operation
- 2 variants available: A400 / A700

#### **PROTECTIONS**

- Advanced Overcurrent protection
- Over temperature protection
- DC detection input





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