

## User Manual Hypex UcD Supply HG

### Preface

We thank you for selecting a **Hypex UcD Supply HG** and recommend that you read these instructions carefully before installation and start-up of the supply. Please keep this manual in a safe place for future reference.

### Tested

Committed to quality, Hypex individually tests each product to ensure reliable performance for the user. All units have passed the quality control standards of Hypex Electronics B.V. and conform within tolerance to the enclosed specifications.

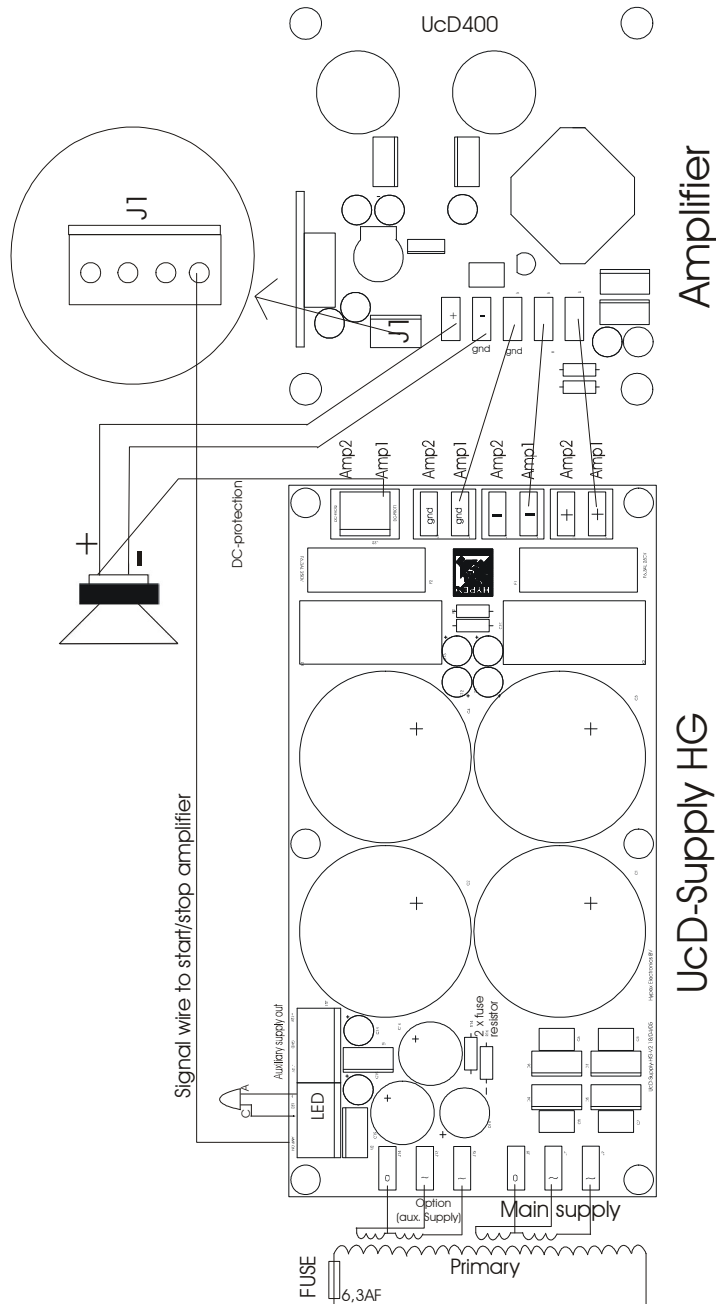
### About Hypex Electronics B.V.

Hypex Electronics B.V. is located in Groningen, the Netherlands. Hypex Electronics B.V. has been designing, manufacturing and supporting audio amplifier equipment since 1995. Hypex Electronics B.V. main markets are the EC Countries, United States and Australia.



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## 1 Safety Rules

### 1.1 General

- This equipment can be operated by anyone with basic knowledge of Electronics and understands the danger of AC and especially DC voltages.

### WARNING: RISK OF ELECTRICAL SHOCK.

- Dangerous voltages are present during operation. The DC-output voltage may be more than 2 x 60 Volt (120Volt DC total).

### 1.2 Installation

- The amplifier power supply is intended to be used in normal domestic situations.
- Do not use the power supply in an excessively humid environment or near water.
- The unit must be placed in a sufficiently ventilated area; the ambient temperature should not exceed 30 °C.
- Do not connect any equipment other than the intended amplifiers to the power supply.
- **All hazardous voltages may never be accidentally touched after installation and during use.**

## 2 Functional explanation

### 2.1 The Principles of Operation

The UcD-supply HG converts the AC voltage into suitable DC-voltage for powering the UcD amplifiers.

The typical AC input voltage depends on the DC voltage requirements of the connected amplifier and must come from a double wound class-2 approved isolation transformer for safety reasons. This transformer must be primary fused. In case of high inrush current a current limiter PCB is recommended.

### 2.2 Normal Conditions

The DC output voltage will vary depending on output power and transformer and should not exceed the limits of the connected amplifier for normal use.

Typical AC-input voltage for UcD180 Amplifier: 2 x 31 Vac

Typical AC-input voltage for UcD400 Amplifier: 2 x 42 Vac

## 3 Functional description

See diagram last page.

The main input voltages from the transformer are wired to Faston connectors J7/J8/J9. If needed, auxiliary supply can be connected to J12/J13/J14. This low voltage, low power connection can be used for pre-amplifier use. Maximum current: 100 milli ampère.

A LED may be connected as POWER-ON indicator.

The UcD-supply has two separate DC-protection devices thus allowing two amplifiers to be connected.

The amplifier can be controlled switched on/off by the UcD-supply; completely 'pop-free'.

Two fuses are mounted to protect in case of over current in the main power circuit. These fuses must be  $\leq 6.3$  Amp/250Volt fast type. In case of long term over current in the lower section there are two fuse-resistors fitted to prevent further damage. If defective, these devices have to be replaced by similar ones.

Last, but not least, 4x Slit Foil Capacitors are present for optimal audio performance.

## 4 SPECIFICATIONS

Type	: UcD-Supply-HG
Output power	: 600Watt
AC input voltage	: Typical 2 x 46 Vac
Input frequency	: 50/60 Hz
DC output voltage	: 2 x 57 Vdc (at typical input voltage)
Main PCB fuses F1, F2	: maximum 6,3 Amp fast / 250V - 5x20mm
Auxiliary circuit fuse resistors (R14/R16)	: 22 Ohm / 330 mW fusible
Auxiliary AC-supply	: Typical 14-0-14 Vac (between 11 and 16 vac)
Auxiliary DC-output	: +12V/0V/-12V maximum current 100 mA

### GENERAL DESIGN CRITERIA

Humidity	: 95% non-condensing
Safety	: EN 60065
EMC	: EN 55103

