

UcD400

Hypex Electronics

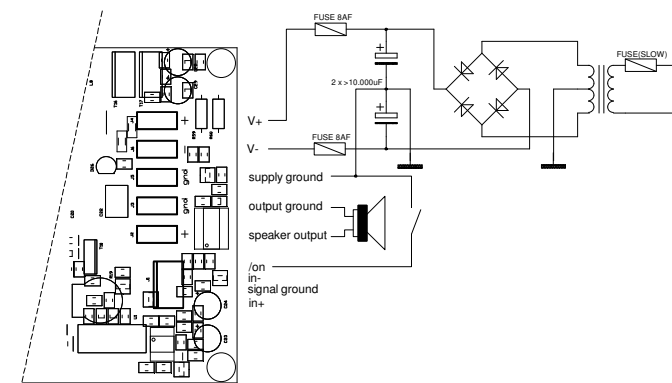
General Description.

The UcD400 is a state-of-the-art full-range amplifier-module based on high-end UCD-technology. The module can be remotely switched On/Off and is small, lightweight and will fit into any of your applications:

- Active monitoring systems.
- Professional high-end audio.
- DIY-projects.
- Active Public Address systems.
- Active subwoofers.

In the UcD400 you will find a small, powerful and reliable amplifier for all your pure amplification needs.

Connection Diagram.



The 'ON' pin is used to put the amplifier in a low power consumption mode. When this pin is held low the amplifier will become active after approx. 1.5s. This pin can be controlled by either a switch or transistor.

Cooling.

Although Hypex UcD modules are based on very efficient Class-D technology, additional cooling is a must. Mounting the modules on a sheet of aluminium will provide enough cooling for use under normal conditions. When the module is used in a closed case, provide enough airflow by means of ventilation slots etc. When using high supply voltages it is better to turn the module 90° for better airflow at both sides of the circuitboard.

Features.

- 400W/4Ω, 210W/8Ω.
- 0.01%<THD+N<0.02% 50W/8Ω 10Hz<f<20kHz.
- Power Bandwidth 10Hz<f<20kHz ±0.5dB.
- Input impedance 100kΩ.
- Output impedance 0.01Ω.
- Stand-by mode (stand-by power <6W).
- Differential input.
- Active current-limiter.
- Pop-free stop/start mode.
- Voltage gain: 26dB.
- Load-independent bandwidth.
- Efficiency >90%.
- Dimensions 82mm x 75mm x 31mm.
- Weighs only 150g.

Absolute Maximum Ratings.

Connection	Description	Max
V+	Positive supply voltage	+ 75V
V-	Negative supply voltage	- 75V

(Overvoltage protection is set at 68V)

Absolute maximum ratings indicate limits beyond which damage may occur.

Operating Conditions For Optimum Sonic Performance.

Connection	Description	Min	Max
V+	1) Positive supply voltage	+ 45V	+ 65V
V-	1) Negative supply voltage	- 45V	- 65V
GND	Supply ground		
LS-	Output ground		
LS+	Speaker output		
/ON	On (internal pull-up)		
IN-	2) Negative signal input		
GND	Signal ground		
IN+	Positive signal input		

- 1) Reversing supply voltage polarity will damage the amplifier beyond repair.
- 2) In case of an un-balanced source: connect **IN-** to signal-ground at the signal-source.