

# AMPLIFIER

## HP 1D 2300 W



### Power Supply

Power supply voltage:	11 ÷ 16.5 VDC
Idling current:	2.6 A
Idling current when off:	0.05 mA
Consumption @1, 14.4 VDC (Max Musical Power):	120 A

### Amplifier stage

Distorsion - THD (100 Hz @ 4Ω):	0.05 %
Bandwidth (-3 dB):	4 ÷ 350 Hz
S/N Ratio (A weighted @ 1 V):	87 dBA
Damping factor (100 Hz @ 4Ω):	100
Pre-In sensitivity:	0.3 ÷ 5 V
Pre-In impedance:	15 kΩ
Speaker-In sensitivity:	1.4 ÷ 24 V
Speaker-In impedance:	5 kΩ
Load impedance:	4 ÷ 1 Ω 4 ÷ 2 Ω (HP LINK)

### CEA 2006-A RATINGS

RMS Power (4Ω, ≤ 1 % THD+N,  
14.4 Volts): 700 W x 1ch  
S/N Ratio (ref. 1W output): 58dBA



### OUTPUT POWER (RMS) @ 14.4 VDC, THD 1%:

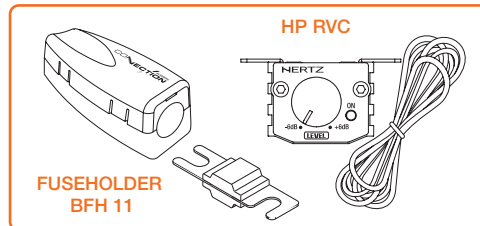
700 W x 1 (4Ω)  
1400 W x 1 (2Ω)  
2300 W x 1 (1Ω)  
2300 W x 1 (4Ω - HP LINK)  
4000 W x 1 (2Ω - HP LINK)

### Other functions

Remote In:	7 ÷ 16.5 VDC - 1 mA
Remote Out :	12 VDC - 50 mA
ART™:	Automatic Turn On/Off with Speaker-In
Fuse:	300 A (AFS - External)
HP RVC (Digital Remote Volume Control): Level:	-36 ÷ +6dB



### Accessories



FUSEHOLDER  
BFH 11

### Filters & Controls

Lo-Pass	50 ÷ 350 Hz @ 24dB/Oct. (L+R)
Subsonic	By-pass / 10 ÷ 50 Hz @ 24dB/Oct.
Output Phase Selector	0° / 180°
HP LINK mode	Master / Slave
Bass Boost	0 ÷ 18dB @ 50 Hz

### Inputs/Outputs

Input	Pre / Speaker
Output	Pre
Out Filter	Bypass / 50 ÷ 350 Hz @ 12dB/Oct.

### Filter configuration

Config.	AMP	PRE OUT
1	Lo-pass 24dB	Bypass
2	Lo-pass 24dB	Hi-pass 12dB

### Input/Output configuration

Input	Speaker	Pre Out
L&R	Mix L+R	L+R
L	Mix L+R	L
R	Mix L+R	R

### Measure

Max size (mm/inches):	240 x 548 x 55 9" 15/32 x 21" 19/32 x 2" 3/16
Weight (Kg/lb):	7.76 / 17.1

## HP THE POWER EXPERIENCE

### HP MANAGER™ - DIGITAL MANAGEMENT

**HP MANAGER™** is a microprocessor based monitoring and diagnosis system with blue **LCD** display and **LEDs**. The microprocessor controls the internal operating conditions of the amplifier, avoiding potential damage to the amplifier and to the car audio system itself. Located on the control panel, the LCD and LEDs indicate the operating status data, as well as informing the user to the cause of a potential problem, allowing the user to quickly and accurately solve the malfunction in the system. Battery Voltage (V) and Temperature (°C/°F) operating status data is selectable with the **MODE** button on the HP MANAGER™ control panel. The protection system monitors: output overload, output short-circuit, thermal condition, battery over-voltage, continuous output current.



### D-class - UNLIMITED, CONTROLLED BASS

The **D-class** technology, employed in the HP 1 D and HP 1 KD, uses a 120 kHz sampling frequency, providing the best transient power response. Each output stage is comprised of two sub-stages in parallel with several **TO247 MOSFETs**, each rated for 380W power dissipation. The output stages are fed current by an oversized dual transformer power supply with large reserve capacitors in parallel, for up to 34.000 µF, in both HP 1 D and HP 1 KD. This design topology ensures bursting dynamics and control of multi-driver subwoofer sections.



### HP RTS - REAL TIME SETTING

HP amplifiers feature **HP RTS**, Real Time Setting, a top mount control panel providing quick and easy access to crossover, gain and other amplifier adjustments. Perfect for the enthusiast that never stops in the search for the best system adjustment! The panel is illuminated by a blue **LED**, allowing adjustment even when ambient light is not available, such as in most trunk installations. To provide protection for these critical controls, the panel is covered by a dark transparent cover.

### HP IN - GLOBAL INTERFACING

**HP IN** dual input option offers wide interfacing possibilities; traditional pre-amplified RCA inputs and Speaker-In (OEM sources). With the use of removable connectors the Speaker-In can be wired in comfort, and then plugged in to the amplifier upon final installation. A pre-amplified output is provided to resend the source signal to other components in the system from both Pre-In and Speaker-In inputs. HP IN also offers the proprietary **ART™** circuitry, eliminating the need for Remote Turn-On/Off signal from source unit when using the Speaker-In.

A Remote Out is provided to turn on/off other components installed in the system. HP IN features special circuitry to reject electromagnetic noises detected on the RCA and Speaker-In.



### HP LINK & HP LINK 2™ - THE ULTIMATE CONFIGURATION



**HP LINK** provides the ability to configure two HP 1 D into a strapped mode to achieve 4000W (RMS) into a 2Ω load. No external accessories are required.

**HP LINK 2™** system provides an easy "one-cable" setup for the strapped operation of two HP 1 KD amplifiers, perfectly synchronizing the amplifiers to extract their maximum power output: 6600W (RMS) into a 2Ω load for the ultimate performance in **SPL competition!**

### HP RVC & HP RBC - REMOTE LEVEL AND BASS CONTROL

**HP RVC** digital Remote Volume Control provides remote adjustment of subwoofer level from -36 dB to +6 dB.

**HP RBC** Remote Bass Control provides a single band equalizer with adjustable frequency from 40 Hz to 120 Hz and gain from 0 dB to +9 dB.