# 150W Dante Class D Amplifier with DSP

The KanexPro AUD-DTE-2CHAMP is a 150W Class D amplifier with built-in DSP and Dante audio networking. It powers low-impedance (4Ω/8Ω) stereo speakers at 2×75W or bridges to a single-channel 150W output for 70V/100V constant-voltage speaker lines. Dante 2-channel digital audio input and output, plus balanced/unbalanced line-level analog I/O, provide flexible integration into networked AV systems. Control via RS-232, LAN, and Web GUI. Half-rack mountable.

**Surge Protection Recommended —** This product contains sensitive electrical components that may be damaged by electrical spikes, surges, electric shock, or lightning strikes. Use of surge protection systems is highly recommended.

**Caution —** This product requires UTP connectors. Connect using the direct interconnection method (T568B) only — do not cross connect.

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## FEATURES

- ✓ Dante 2-channel digital audio input and output with balanced/unbalanced line-level analog I/O
- ✓ Built-in audio DSP processor with 31-band GEQ, delay, and mixer
- ✓ Lo-Z mode: 2×75W at 4Ω/8Ω stereo or 1×150W bridged at 8Ω
- ✓ Hi-Z mode: 1×150W at 70V or 100V constant voltage for distributed speaker systems
- ✓ Independent input gain, output EQ, delay, and volume control per output channel
- ✓ 48kHz sampling rate with 24-bit independent A/D and D/A converters
- ✓ 5–12V trigger input for external power-on/mute control
- ✓ Auto standby with configurable timer (0–120 minutes)
- ✓ 5 preset scenes for quick recall of audio configurations
- ✓ Control via RS-232, LAN (TCP/IP), and Web GUI
- ✓ Half-rack mountable design (240mm W × 210mm D × 44mm H)

## PACKAGE CONTENTS

1× 150W Class D Amplifier • 3× 5-pin 3.81mm Phoenix Connector (male) • 2× 4-pin 5.08mm Phoenix Connector (male) • 6× Mounting Ears • 24× Machine Screws • 1× AC Power Cord (100–240V, 1.5m) • 1× Product Manual

# Specifications

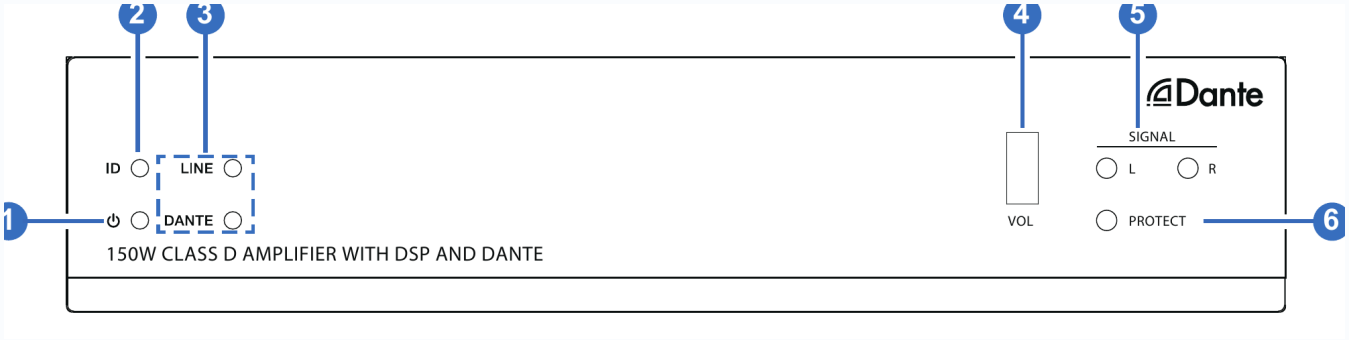
| TECHNICAL | |
|---|---|
| **Input** | 1× Dante network audio input<br>1× LINE balanced stereo 0dBu/10kΩ input |
| **Output** | 1× Dante network audio output<br>1× Stereo or constant voltage 70V/100V speaker output<br>1× LINE balanced stereo output |
| **Input Sensitivity** | Full power @ 0.775V (0dBu) |
| **Output Power** | DC power supply: 2×75W @ 4Ω/8Ω; 1×150W @ 8Ω; 1×150W @ 70V/100V |
| **Max Voltage Gain** | 27–30dB SE / 39–42dB BTL |
| **Amplifier Type** | Class D |
| **Frequency Response** | 20Hz–20kHz @ ±3dB |
| **Signal to Noise Ratio** | 87dB, 20Hz–10kHz |
| **THD+N** | 0.04% (1kHz @ 1W) |
| **Control** | RS-232, Web GUI |
| **Audio Format** | LINE IN: Analog, Balanced 2CH, Max 2Vrms<br>LINE OUT: Analog, Balanced 2CH, Max 2Vrms<br>DANTE: Digital 2×2 in/out, PCM 2CH 44.1K–96kHz 16/24-bit<br>AMP OUT: Analog, Balanced 2CH, Max 24.5Vrms<br>70V/100V AMP OUT: Analog, Unbalanced 1CH |
| **ESD Protection** | ±8kV (air-gap) & ±4kV (contact) — Human-body Model |

| CONNECTION | |
|---|---|
| **Input** | 1× LINE IN [5-pin 3.81mm Phoenix]<br>1× DANTE [RJ45] |
| **Output** | 1× LINE OUT [5-pin 3.81mm Phoenix]<br>1× 4/8Ω AMP OUT [4-pin 5.08mm locking Phoenix]<br>1× 70V/100V AMP OUT [4-pin 5.08mm locking Phoenix] |
| **Control** | 1× RS-232/TRG [5-pin 3.81mm Phoenix]<br>1× LAN [RJ45] |

| MECHANICAL | |
|---|---|
| **Housing** | Front: Aluminum; Rear: Metal Enclosure |
| **Color** | Black |
| **Dimensions** | 240mm (W) × 210mm (D) × 44mm (H) |
| **Weight** | 1.88 kg |
| **Power Supply** | AC 100–240V 50/60Hz |
| **Power Consumption** | 240W (Max) |
| **Operating Temp** | 32–104°F / 0–40°C |
| **Storage Temp** | −4–140°F / −20–60°C |
| **Humidity** | 20–90% RH (non-condensing) |

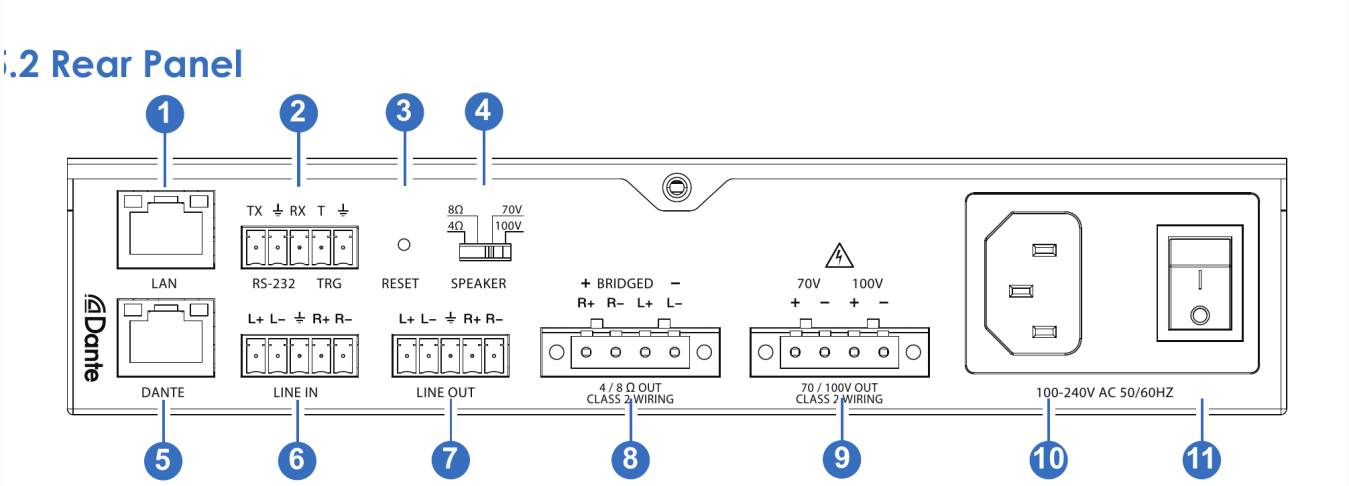
# Operation Controls & Functions

## 5.1 FRONT PANEL




| No. | Name | Function Description |
|---|---|---|
| 1 | **Power LED** | Red LED is on when the product is powered on. |
| 2 | **ID (Show Me) LED** | Indicates device presence in a multi-device system. Enable via Web GUI System page or API command — the LED flashes to help identify the unit. |
| 3 | **LINE / DANTE LED** | Input signal source indicators. The corresponding green LED illuminates when DANTE or LINE IN is selected as the active input channel. DANTE is the default input. |
| 4 | **VOL LED** | Displays the main audio volume in five green segments, each representing 20% of the volume range. Default is 50% after initialization. Volume is controlled through Web GUI or API command. |
| 5 | **SIGNAL L/R LEDs** | Left and right channel signal indicators. LEDs illuminate when stereo audio signal is present. |
| 6 | **PROTECT LED** | Illuminates when the amplifier enters protection mode due to overtemperature, overcurrent, or overvoltage. |

## 5.2 REAR PANEL




| No. | Name | Function Description |
|---|---|---|
| 1 | **LAN port** | RJ45 port. Connect to a PC or router for Web GUI access. Default IP address: 192.168.0.200. |
| 2 | **RS-232/TRG port** | RS-232: Serial control port for RS-232 signal pass-through or controlling the product via RS-232 commands. TRG: 5–12V trigger signal input — when connected to a trigger voltage, the amplifier is muted. Disconnecting the trigger restores normal audio output. |
| 3 | **RESET button** | Press and hold for 5 seconds to restore factory default settings. |
| 4 | **SPEAKER switch** | Speaker high-low resistance switch. Selects among Lo-Z (4Ω/8Ω), Hi-70V, and Hi-100V output modes. |
| 5 | **DANTE port** | RJ45 Dante audio input and output port. Uses dynamic IP by default. |
| 6 | **LINE IN port** | Balanced stereo audio input (5-pin 3.81mm Phoenix). Max input level: 2Vrms. |
| 7 | **LINE OUT port** | Balanced stereo audio output (5-pin 3.81mm Phoenix). Max output level: 2Vrms. |
| 8 | **4/8Ω OUT port** | 4/8Ω speaker output. Connect to a 4/8Ω speaker and set the SPEAKER switch to 4/8Ω. |
| 9 | **70/100V OUT port** | 70/100V speaker output. Connect to a 70/100V speaker and set the SPEAKER switch to 70V or 100V. |
| 10 | **Power port** | 100–240V AC 50/60Hz power input. |
| 11 | **Power switch** | Turns power supply on or off. |

# Default Settings

| SETTING | DEFAULT VALUE |
|---|---|
| IP Address (LAN) | 192.168.0.200 |
| Subnet Mask | 255.255.0.0 |
| Gateway | 169.254.100.1 |
| IP Mode | DHCP |
| TCP/IP Port | 8000 |
| Telnet Port | 23 |
| RS-232 Baud Rate | 115200 |
| Admin Username / Password | Admin / 1234 |
| User Username / Password | User / 1234 |
| Input Source | Dante |
| Input Volume (Line / Dante) | 50 |
| Master Volume | 50 |
| Output Volume (Speaker/Line/Dante) | 50 |
| Master Mute | Off (unmuted) |
| Output Mix | Stereo |
| Output Delay | 0ms |
| GEQ Preset | Flat |
| Auto Standby Time | 10 minutes |
| Trigger | Off |
| Front Panel Lights (VOL LED) | Always On |
| ID LED | Off |
| Fan | On |
| Master Output Member | 1 1 1 (Speaker + Line + Dante) |
| Domain Name | HDP-PA150D.local |

# Web GUI User Guide

**Access:** Connect the amplifier and PC to the same Ethernet switch. Set PC to “Obtain an IP address automatically.” Open Dante Controller > Device Info to find the device IP. Enter that IP in a browser. Login: **Admin** / **1234**.

## INFORMATION PAGE

Displays model name (HDP-PA150D), MCU/Web version, IP hostname, MAC address, IP address, subnet mask, and gateway.

## PRESET PAGE

Save, recall, or clear up to 5 named preset scenes. Each preset stores all audio settings except network configuration.

## AUDIO PAGE

**Source Select:** Switch between LINE IN and DANTE IN.
**Input Setting:** Adjust volume (0–100) and mute per input.
**Output Setting:** Master volume/mute for Speaker, Line, and Dante outputs. Per-output mix mode (Stereo/Left/Right/L+R), delay (0–50ms), volume, and mute.
**GEQ:** 31-band graphic EQ (−10 to +10dB) per output with Flat, Custom 1, and Custom 2 presets.

## NETWORK PAGE

Configure IP Mode (DHCP/Static), IP Address, Subnet Mask, Gateway, Telnet Port, and Domain Name. **HDP-PA150D.local** can also be used to access the Web GUI.

## SYSTEM PAGE

Account Passwords (User/Admin), Power On/Off, Dante Identification (ID LED), Input Trigger, Front Panel Lights, RS-232 Baud Rate, Auto Standby Time (0–120 min), Reboot, Restore Factory Settings, Export/Import Settings.

# RS-232 Control Commands

Connect RS-232 port to PC via 3-pin Phoenix connector and RS-232-to-USB adapter. Protocol: **115200** baud, 8 data bits, 1 stop bit, no parity. TCP/IP port: **8000**.

| COMMAND | FUNCTION | DEFAULT |
|---|---|---|
| **System Setting** | | |
| `help` | Get the list of all commands | – |
| `r type` | Get device model | HDP-PA150D |
| `r fw version` | Get firmware version | – |
| `r status` | Get all current device status | – |
| `s power on/off` | Power on or off the device | – |
| `r power` | Get current power state | – |
| `s reboot` | Reboot the device | – |
| `s reset` | Reset system settings to default (confirm with “Yes”) | – |
| `s reset all` | Reset system + network settings to default | – |
| `s auto stb x` | Set auto standby time (x=0: off, 1–120: minutes) | 10 |
| `r auto stb` | Get auto standby time | – |
| `s lcd on/off/15/30/60` | Set VOL LED always on, off, or timed (15/30/60s) | on |
| `r lcd` | Get VOL LED status | – |
| `s idled on/off/15/30/60` | Set ID LED on, off, or timed (15/30/60s) | off |
| `r idled` | Get ID LED status | – |
| `s trigger on/off x` | Set trigger on/off (x=0: Low mute, x=1: High mute) | off |
| `r trigger` | Get trigger status | – |
| `s rsb x` | Set baud rate (115200/57600/38400/19200/9600/4800) | 115200 |
| `r rsb` | Get baud rate | – |
| `s fan x on/off` | Set fan on/off (x=0:All, 1:Fan1, 2:Fan2) | on |
| `r fan` | Get fan status | – |
| **Input Setting** | | |
| `s input x` | Set input source (x=1:Line, 2:Dante) | Dante |
| `r input` | Get current input source | – |
| `s input x vol y` | Set input:x volume (x=0:All, 1:Line, 2:Dante; y=0–100) | 50 |
| `r input x vol` | Get input:x volume | – |
| `s input x vol+/vol-` | Increase/decrease input:x volume | – |
| `s input x mute on/off` | Set input:x mute on/off | – |
| `r input x mute` | Get input:x mute status | – |

## RS-232 Control Commands (continued)

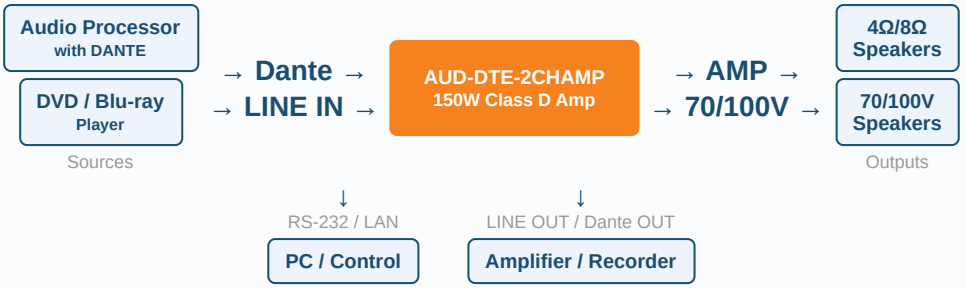
| COMMAND | FUNCTION | DEFAULT |
|---|---|---|
| **Output Setting** | | |
| s master member x y z | Set master output member (x=Spkr, y=Line, z=Dante; 0/1) | 1 1 1 |
| r master member | Get master output member | – |
| s master vol x / s vol x | Set master volume (x=0–100) | 50 |
| r master vol / r vol | Get master volume | – |
| s master vol+/vol- | Increase/decrease master volume | – |
| s master mute on/off | Set master mute on/off | 0 (off) |
| r master mute / r mute | Get master mute status | – |
| s output x vol y | Set output:x volume (x=0:All, 1:Spkr, 2:Line, 3:Dante; y=0–100) | 50 |
| r output x vol | Get output:x volume | – |
| s output x vol+/vol- | Increase/decrease output:x volume | – |
| s output x mute on/off | Set output:x mute on/off | – |
| r output x mute | Get output:x mute status | – |
| s output x mix y | Set output:x mix (y=1:Stereo, 2:Left, 3:Right, 4:L+R) | Stereo |
| r output x mix | Get output:x mix mode | – |
| s output x delay y | Set output:x delay (y=0–50ms) | 0 |
| r output x delay | Get output:x delay value | – |
| s output x eq y val z | Set output:x GEQ band:y value:z (y=1–31, z=0–20dB) | 10 |
| r output x eq y val | Get output:x GEQ band:y value | – |
| s output x eq preset y | Set output:x GEQ preset (y=1:Flat, 2:Custom1, 3:Custom2) | 1 (Flat) |
| r output x eq preset | Get output:x GEQ preset | – |
| s output x eq clear | Clear output:x GEQ settings | – |
| **Preset Setting** | | |
| s preset save x | Save current settings to preset:x (x=1–5) | – |
| s preset recall x | Recall preset:x (x=1–5) | – |
| s preset clear x | Clear preset:x (x=1–5) | – |
| s preset x name y | Set preset:x name (max 16 characters) | – |
| r preset x name | Get preset:x name | – |

## RS-232 Control Commands (continued)

| COMMAND | FUNCTION | DEFAULT |
|---|---|---|
| **Network Setting** | | |
| r ipconfig | Get current IP configuration (mode, IP, subnet, gateway, TCP/IP port, MAC) | – |
| s ip mode x | Set IP mode (x=0: Static, x=1: DHCP) | 1 (DHCP) |
| r ip mode | Get IP mode | – |
| s ip addr x.x.x.x | Set IP address (requires Static mode) | 192.168.0.100 |
| r ip addr | Get IP address | – |
| s subnet x.x.x.x | Set subnet mask (requires Static mode) | 255.255.255.0 |
| r subnet | Get subnet mask | – |
| s gateway x.x.x.x | Set gateway (requires Static mode) | 192.168.1.1 |
| r gateway | Get gateway | – |
| s tcp/ip port x | Set TCP/IP port (x=1–65535) | 8000 |
| r tcp/ip port | Get TCP/IP port | – |
| s telnet port x | Set Telnet port (x=1–65535) | 23 |
| r telnet port | Get Telnet port | – |
| r mac addr | Get MAC address | – |
| s net reboot | Reboot network modules (apply new config) | – |
| **Password Setting** | | |
| s admin password x | Set admin login password (max 16 characters) | 1234 |
| r admin password | Get admin login password | – |
| s user password x | Set user login password (max 16 characters) | 1234 |
| r user password | Get user login password | – |

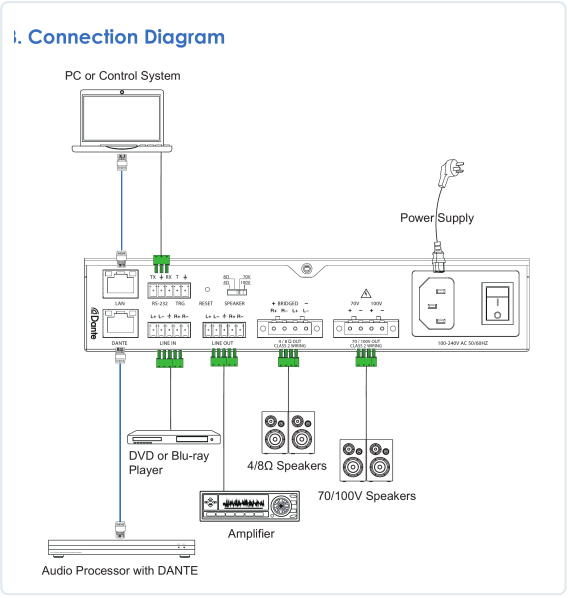
# Connection Diagram

### Dante Amplifier — Networked Audio with Lo-Z & Hi-Z Speaker Outputs




**How it works:** Connect a Dante-enabled audio processor or other sources via the DANTE port or LINE IN. Select the active input via Web GUI, RS-232, or Dante Controller. The amplifier drives 4Ω/8Ω speakers in Lo-Z mode (2×75W stereo or 1×150W bridged) or 70V/100V lines in Hi-Z mode. Set the rear SPEAKER switch to match the speaker type. Built-in DSP provides per-output EQ, delay, and mix control.
**Trigger:** Connect a 5–12V trigger signal to TRG to externally mute/unmute the amplifier.

DETAILED WIRING REFERENCE




## TROUBLESHOOTING

**Q: No audio output from the speakers?**
**A:** Verify the SPEAKER switch matches the connected speaker type. Confirm the correct input is selected (LINE or DANTE). Check master and output volumes are not muted or at zero. Ensure the PROTECT LED is not illuminated.

**Q: Cannot access the Web GUI?**
**A:** Connect the LAN port to the same network as your PC. Default IP: **192.168.0.200**. If using DHCP, find the IP via Dante Controller > Device Info. Try **HDP-PA150D.local**. Login: Admin / 1234.

**Q: PROTECT LED is on?**
**A:** The amplifier entered protection mode (overtemp/overcurrent/overvoltage). Power off, allow cooling, check speaker wiring for shorts or impedance mismatches. Verify SPEAKER switch. Contact KanexPro support if the issue persists.