

WHALE XD2120

Dante Digital Amplifier



Product Introduction

This Dante Digital Amplifier is a 2-channel digital amplifier designed with Dante Receiver Slot card, which accepts the digital signal from Dante Network and converts to analogue audio signal, as the input source of amplifier. Simply using the “Dante Controller” to route the signal from other source devices which on the same Dante Network. Its space-saving 1/2-rack design allow for quick installation and gives flexibility of mixing and matching with other 1/2-rack products to save valuable equipment rack space.

The powerful class D amplifier in this Dante Digital Amplifier is combined with features such as 12V trigger control, audio sensing, volume gain adjustment, and a buffered line output that enables even more amplification of the same audio signal when needed.

Product Features

- **Class D amplifier:** The cool running, low-profile, high efficiency design makes the perfect choice for even the most space-conscious system designs;
- **Dante interface:** Receiving digital signal from Dante network, and convert to analog audio signal to the amplifier;
- **120W per channel:** A powerful output are available to provide ample power to even the largest of spaces;
- **Trigger in/out:** Amplifier can be activated by a 12V DC trigger signal, and can activate additional devices at the same time;
- **Multiple Turn-on modes:**
 - ✧ Always On: Amplifier is always active and ready for use;

- ✧ Signal-sensing: Amplifier is in a standby mode when no audio signal is present and will turn on when an audio signal is detected;
- ✧ 12V Trigger: Using the 12V trigger allows precise turn on/off when the amplifier is needed, keeping the unit in a power saving standby mode when not in use.
- **Multiple Output modes:**
 - ✧ 8Ω-optimized mode for 8Ω stereo output;
 - ✧ 4Ω-optimized mode for 4Ω stereo output;
 - ✧ Bridged mode-240W output for 70V or 100V (Direct Drive).
- **Switch for High Pass Filter;**
- **Natural cooling without Fan;**
- **Removable speaker connectors:** Allow for quick, secure installation and accommodate cables of up to 12 ga AWG;
- **Thermal Protection:**
 - ✧ All amplifiers are designed with special circuitry to safeguard the Amplifier under a thermal overload condition. Thermal protection mode can only engage when the unit has been run at high volume for extended periods of time without adequate ventilation and/or when speaker impedance are below the minimum levels for the amplifier. If this fault occurs, turn off the amplifier, and check that the speaker impedance rating is above the minimum rating. Also check for adequate ventilation around the amplifier and make adjustments if necessary. Once the unit has cooled to safe operating temperatures, the amplifier may be powered back on.
- **Protection Circuitry:**
 - ✧ All amplifiers are designed with special circuitry to safeguard the amplifier under a short-circuit condition. A faulty speaker can also cause a short circuit condition. The front panel LED illuminates orange when the amplifier is in short circuit protection. If this fault condition occurs, turn off the amplifier and check speakers for short circuit conditions when appropriate.

Specification

Amplifier Output Channels	2
Stereo Mode (all channels driven)	<ul style="list-style-type: none"> - 120W×2, 8Ω (31V) RMS output (steady - state), per channel @ < 1% THD+N - 120W×2, 4Ω (22V) RMS output (steady - state), per channel @ < 1% THD+N

Bridged output for 70V/100V (switch at “HIZ” position)	<ul style="list-style-type: none"> - 240W, 70V @ < 1% THD+N - 240W, 100V @ < 1% THD+N
Frequency response	20Hz - 20kHz, ± 2 dB @ 4 Ω load
Signal to Noise	>90dB @ 1W (20Hz - 20KHz)
Input Sensitivity	1.0V (+2.2dBu) @ Max Output 4 Ω
Gain value	25dB @ 4 Ω
Input Impedance	>10k, Balanced
Maximum input level	12.3V (+24dBu)
Trigger In/Out	DC 12V
High Pass Filter	80Hz (± 2 dB)
Trigger Connector	3.5mm jack
Output Connectors	<ul style="list-style-type: none"> - 4 - pin European terminal (4Ω/8Ω) - 2 - pin European terminal (70V/100V)
Dante channel Receivers	2
Transmission Rate	100Mbps
Bit Depth	16/24/32bit
Sampling Rate	44.1KHz, 48KHz, 88.2KHz, 96KHz
Dante interface	RJ45 jack
Dante interface power supply	PoE IEEE 802.3af
Network interface	Standard 100Mbps Ethernet
Receive flows	2 (unicast or multicast)
Latency	from 2ms

Power Requirements	AC 100V~240V, 50Hz/60Hz, 350W
Operating Temperature Range	0~50℃
Operating Humidity Range	Below 90%RH (but no condensation)
Chassis	1/2U
Product Dimensions (W×D×H)	214mm×249.8mm×44mm
Net weight	2kg
Package Dimensions (L×W×H)	330mm×230mm×70mm
Gross Weight	2.5kg