



AudioPressBox®

APB-112 IW-D-USB

Press Conference Audio Distribution Amplifier
Owner's manual

English



Always follow the basic precautions listed below to avoid the possibility of serious injury or even death from electrical shock, short-circuiting, damages, fire or other hazards. These precautions include, but are not limited to, the following:

WARNING

Do not open

- Do not open the device or attempt to disassemble the internal parts or modify them in any way. The device contains no user-serviceable parts. If it should appear to be malfunctioning, discontinue use immediately and have it inspected by qualified AudioPressBox service personnel.

Water warning

- Do not expose the device to rain, use it near water or in damp or wet conditions, or place containers on it containing liquids which might spill into any openings.
- Never insert or remove an electric plug with wet hands.

If you notice any abnormality

- If this device should be dropped or damaged, immediately disconnect the Dante network and have the device inspected by qualified AudioPressBox service personnel.



Always follow the basic precautions listed below to avoid the possibility of physical injury to you or others, or damage to the device or other property.

These precautions include, but are not limited to, the following:

CAUTION

- Do not expose the device to excessive dust or vibrations, or extreme cold or heat (such as in direct sunlight, near a heater, or in a car during the day) to prevent the possibility of panel disfiguration or damage to the internal components.
- Do not place the device in an unstable position where it might accidentally fall over.
- Do not insert your fingers or hands in any gaps or openings on the device.
- Avoid inserting or dropping foreign objects (paper, plastic, metal, etc.) into any gaps or openings on the device. If this happens, unplug the Dante network. Then have the device inspected by qualified AudioPressBox service personnel.

Handling caution

- When turning on the AC power in your audio system, always turn on the power amplifier LAST, to avoid speaker damage. When turning the power off, the power amplifier should be turned off FIRST for the same reason.

- Do not rest your weight on the device or place heavy objects on it, and avoid use excessive force on the buttons, switches or connectors.

XLR-type connectors are wired as follows (IEC60268 standard): pin 1: ground, pin 2: hot (+), and pin 3: cold (-).

AudioPressBox cannot be held responsible for damage caused by improper use or modifications to the device, or data that is lost or destroyed.

The performance of components with moving contacts, such as switches, volume controls, and connectors, deteriorates over time. Consult qualified AudioPressBox service personnel about replacing defective components.

Illustrations herein are for explanatory purposes only, and may not match actual appearance during operation.

Company names and product names herein are trademarks or registered trademarks of their respective companies.

Specifications and descriptions in this owner's manual are for information purposes only. AudioPressBox reserves the right to change or modify products or specifications at any time without prior notice. Since specifications, equipment or options may not be the same in every locale, please check with your AudioPressBox dealer.



Dear customer,

Thank you for purchasing the AudioPressBox APB-112 IW-D-USB.

APB-112 IW-D-USB is an active AudioPressBox unit with one channel DANTE interface, 8 XLR transformer ballanced and isolated output with switchable Mic/Line output level and 4 USB-C outputs. IW suffix means that the unit is designed for in-wall mounting (EU version).

The unit is powered directly from Dante network via PoE. It is a PoE Class 3 device.

APB-112 IW-D-USB

Features:



Transformer
Individually transformer ballanced and isolated outputs.



Switchable **Mic/Line output Level**
for each output



1-channel **Dante interface**



PoE powered (Class 3 device)



4 **USB-C outputs**

The package contains:

1. APB-112 IW-D-USB unit
2. Test report
3. Flush Mounting Box

APB-112 IW-D-USB



1.) USB-C

USB-C outputs for smartphones or laptops

2.) XLR Outputs

Eight Individually transformer balanced and isolated outputs with switchable output level: Mic = -20dBu, Line = + 6dbu. Standard Neutrik 3-pin XLR connector

3.) Power LED

Indicates that the device receives PoE power and is ready for use



4.) Mic/Line switch

Output level switch. You can individually select nominal output level for each output. Mic = -20dBu, Line = + 6dbu

5.) Output level indicator

Indicates the analog output level in dB. 0dB is nominal output level which corresponds to +6dBu (Line) or -20dBu (Mic) on outputs

6.) Dante connector

Standard RJ45 connector for connecting to PoE and Dante network

Usage



APB-112 IW-D-USB is designed for use as a distribution audio amplifier for press conferences. It features one digital input from Dante network, eight analog audio outputs with individual output level switch – MIC/LINE and four USB-C outputs*. There is no signal processing inside. All desired processing should be done in other devices (e.g. mixing console or DSP). So, the **APB-112 IW-D-USB** is suitable for fixed installations with integrated Dante network.

For proper operation and to maintain declared parameters, it is necessary to drive the APB with the correct signal level from Dante network. The nominal analog output level of APB is +6dBu which corresponds to -18dBFS (FS = Full Scale) of digital signal on Dante network. So, we recommend to drive the APB with digital signals somewhere between -26dBFS and -16dBFS. Also, it is very useful to drive the APB with a processed signal e.g. with applied compressor and limiter to reduce the dynamics of the signal especially for speech.

* For iPhone and iPad with lightning connector Apple Lightning to USB 3 Camera Adapter is needed together with a USB-A to USB-C cable.

Operations

1.

Connect the APB to Dante network with PoE capability

APB-112 IW-D-USB is a PoE Class 3 device, so it can be powered from a basic PoE

2.

Make the Dante signal routing APB is set by default to obtain IP address from DHCP server.

In Dante network you will see the APB as: APB112IW-D-USB-serialnumber. You can change it in Dante controller software. In this software you can also route the signal to APB

3.

Set up the levels

Set up the output level on your source device to reach the nominal output on APB – 0dB LED on Output Level indicator. You can also set the output level switch for each output as desired – Mic or Line

4.

APB is ready to use!

Specifications

Audio Press Box APB-112 IW-D-USB	
Type	1 in 12 Out
Groups	1
Input section	
Inputs	1
Input connectors	RJ45 - Dante
PoE Requirement	YES
Reference level	-18dBFS
Output section	
Analog Outputs	
Outputs	8 Line/MIC level
Output connectors	Balanced, XLR
Nominal Output Level	+6dBu
Maximum Output Level	+20dBu (no load) +14dBu (600Ohm)
Output impedance	MIC: 220 Ohm LINE: 600 Ohm
Transformer isolated outputs	Yes (each output)
SNR	>70 dB
Frequency Response	25Hz to 20kHz/-3dB
Digital Outputs	
Output connector	USB Type C
Compliant USB Specification	USB 2.0
Supported Sampling Rates	8kHz, 11.025kHz, 16kHz, 22.05kHz, 32kHz, 44.1kHz, 48kHz
Bit Depth	16-Bit
Interface Powering	Bus powered (from connected USB host device)
Charging capability	No

Specifications

Audio Press Box APB-112 IW-D-USB

Indicators

Output section: Output level. Power

Power

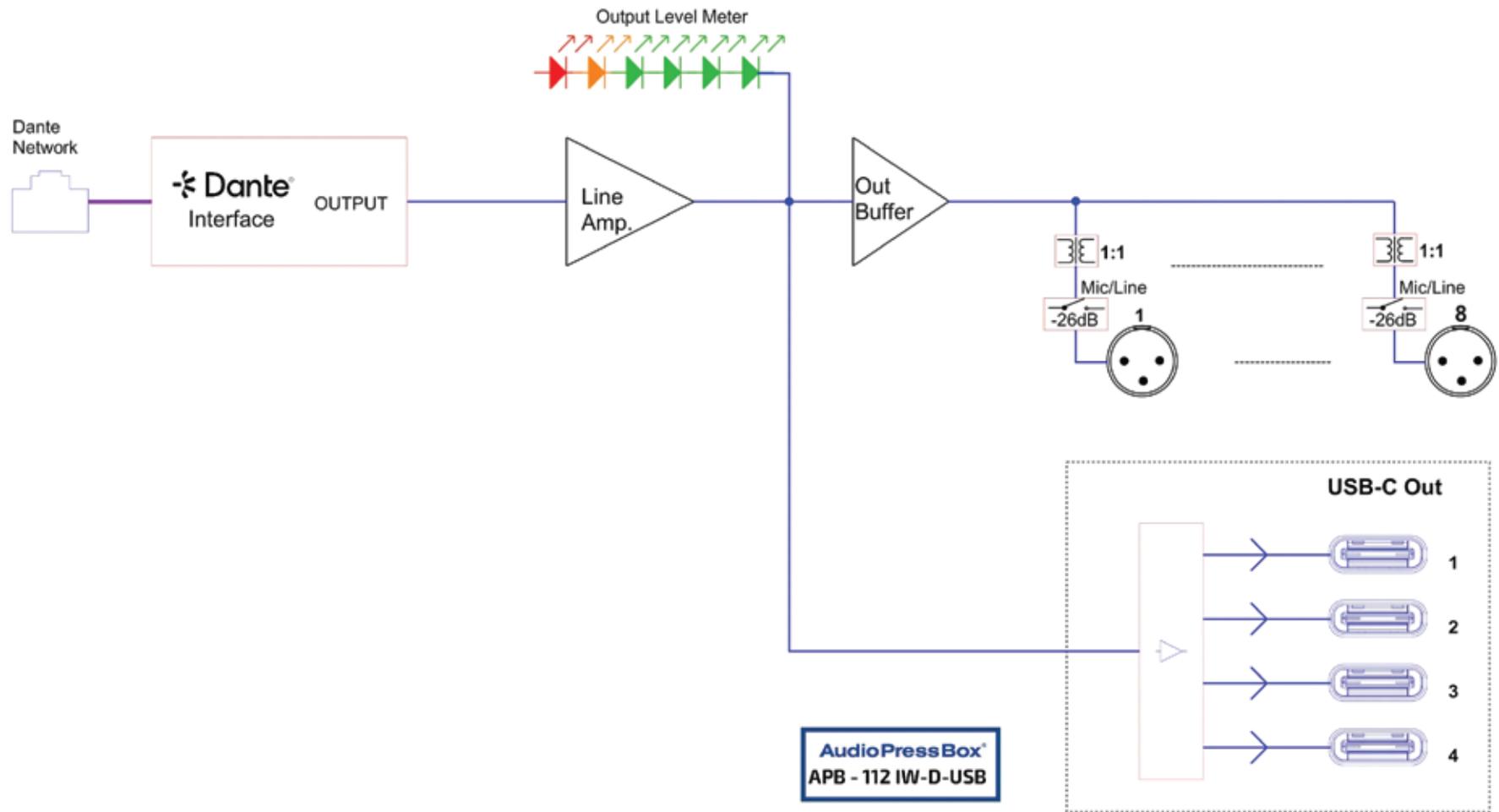
Power Supply PoE (Type 1, Class 3 (12,95W))

Mechanical

Dimensions (WxHxD) 280x138x50mm

Weight 2700 g

Block diagram



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