AudioPressBox®

APB-112 OW-D

Press Conference Audio Distribution Amplifier
Owner's manual

WARNING

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:

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 the power cord or plug becomes frayed or damaged, or if there is a sudden loss of sound during use of the device, or if any unusual smells or smoke should appear to be caused by it, immediately turn off the power switch, disconnect the electric plug from the outlet, and have the device inspected by qualified AudioPressBox service personnel.

• If this device or the AC power adaptor should be dropped or damaged, immediately turn off the power switch, disconnect the electric plug from the outlet, and have the device inspected by qualified AudioPressBox service personnel.

CAUTION

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:

Power supply/Power cord

• Remove the electric plug from the outlet when the device is not to be used for extended periods of time, or during electrical storms.

• When removing the electric plug from the device or an outlet, always hold the plug itself and not the cord. Pulling by the cord can damage it.

• To avoid generating unwanted noise, make sure there is 50cm or more between the AC power adaptor and the device.

• Do not cover or wrap the AC power adaptor with a cloth or blanket.

- 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.

Connections

- Before connecting the device to other devices, turn off the power for all devices. Before turning the power on or off for all devices, set all volume levels to minimum.

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 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, turn off the power immediately and unplug the power cord from the AC outlet. Then have the device inspected by qualified AudioPressBox service personnel.

- Do not use the device or headphones for a long period of time at a high or uncomfortable volume level, since this can cause permanent hearing loss. If you experience any hearing loss or ringing in the ears, consult a physician.

- 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.

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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.

APB-112 OW-D

Dear customer,

Thank you for purchasing the AudioPressBox APB-112 OW-D.

APB-112 OW-D is an active AudioPressBox unit with one channel DANTE input, 12 transformer isolated outputs with switchable Mic/Line output level.

OW suffix means that the unit is designed for wall mounting. The unit is powered directly from Dante network via PoE. It is a PoE Class 3 device

Features:

Transformer
Individually transformer isolated outputs.

Switchable Mic/Line output Level
for each output

PoE powered (Class 3 device)

1-channel Dante interface

The package contains:

1.   APB-112 OW-D unit
2.   Test report

APB-112 OW-D

1.) **Mic/Line switch**
Output level switch. You can individually
select nominal output level for each output.
Mic = -26dBu, Line = +6dBu

2.) **Mic/Line outputs**
Twelve Individually transformer isolated
balanced outputs with switchable output
level: MIC -26dBu, Line +6dBu. Standard
Neutrik 3-pin XLR connector

3.) **Power LED**
Indicates that the device receives PoE power
and is ready for use

4.) **Output level indicator**
Indicates the analog output level in dB. 0dB
is nominal output level which corresponds
to +6dBu (Line) or -26dBu (Mic) on outputs

5.) **Dante connector**
Standard RJ45 connector for connecting to
PoE and Dante network

Usage

APB-112 OW-D is designed for use as a distribution audio amplifier for press conferences. It features one digital input from Dante network and twelve analog audio outputs with individual output level switch – MIC/LINE. 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 OW-D 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 -20dBFS (FS = Full Scale) of digital signal on Dante network. So, we recommend to drive the APB with digital signals somewhere between -30dBFS and -18dBFS. 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.

Operations

1.

Connect the APB to Dante network with PoE capability

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

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

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: APB112OW-D-serialnumber. You can change it in Dante controller software. In this software you can also route the signal to APB

4.

APB is ready to use!

For more information about Dante controller set up click on the following link:
www.audiopressbox.com/manuals/APB-112-OW-D

Installation

APB-112 OW-D is designed for "On Wall" installation.

1.) Unscrew 4 screws on top panel

2.) Release the back panel

3.) Screw it to the wall, the wall may be from concrete, stud, wood… Please use suitable mounting method for your type of wall material
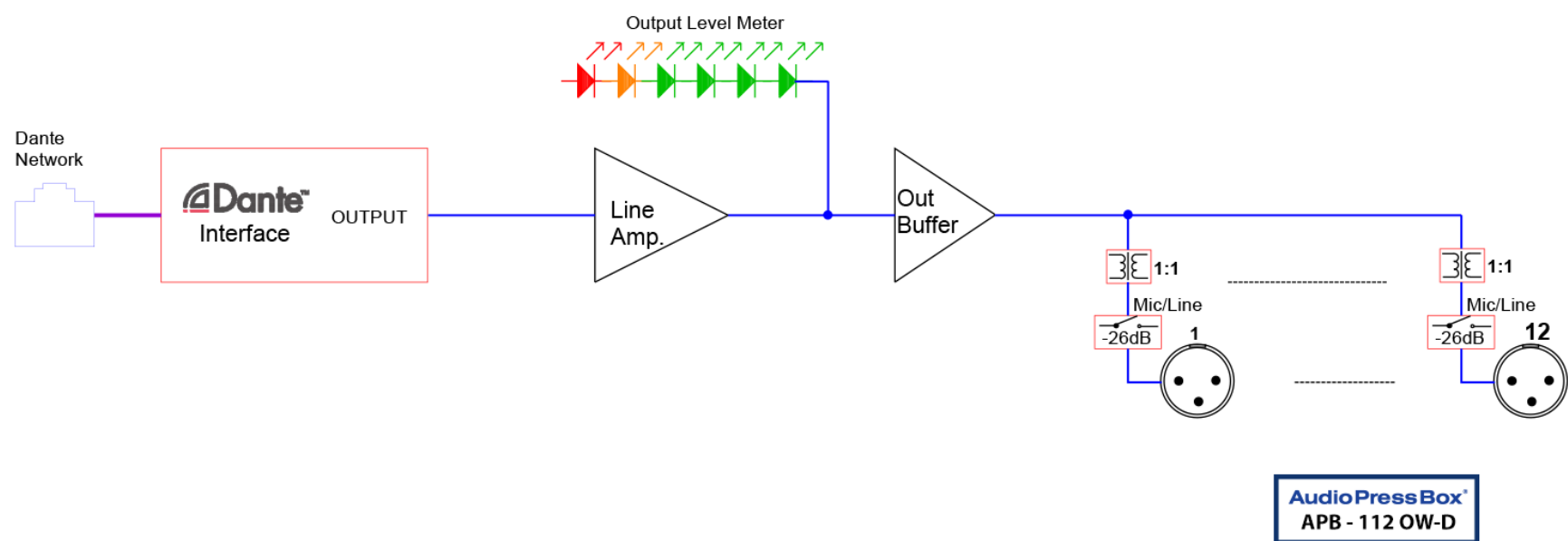

4.) Connect the RJ-45 cable to APB

5.) Screw the APB to the back plate

Specifications

Audio Press Box APB-112 OW-D		
Type	1 in 12 out	
Groups	1	
Input section		
Inputs	1	
Input type	digital, Dante	
Input connector	RJ-45	
Output section		
Outputs	12	
Output type	analog	
Output Level	switchable – Mic: -26dBu, Line: +6dBu	
Maximum Output Level	+20dBu (no load) +14dBu (600Ohm)	
Output impedance	MIC: 220 Ohm	LINE: 600 Ohm
Output connector	Neutrik 3-pin XLR, male	
Output isolation	Transfomer for each output	
SNR	>70dB (nominal output)	
THD+N	< 0,05% 1kHz	< 0,1% 100Hz
Frequency response	20Hz to 20kHz /-3dB	
Indicators	Power, Output level	
Power supply	PoE, Class 3	
Dimensions (WxHxD)	280x138x50 mm	
Weight	2750 g	

Block diagram

Output Level Meter

Dante
Network

Dante™
Interface   OUTPUT

Line
Amp.

Out
Buffer

1:1
Mic/Line
-26dB   1

1:1
Mic/Line
-26dB   12

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