

Dayton Audio PA130-8

Dayton Audio PA130-8 5" Full Range PA Driver Instruction Manual

Model: PA130-8

1. INTRODUCTION

This manual provides essential information for the proper installation, operation, and maintenance of your Dayton Audio PA130-8 5-inch Full Range PA Driver. The PA130-8 is designed for use in small stage monitors and other PA applications, offering broad frequency coverage and accurate sound reproduction for vocals and instruments. Its robust construction ensures durability in various environments.



Figure 1: Front view of the PA130-8 driver, highlighting the cone and surround.

2. PRODUCT FEATURES

- Designed for small stage monitors and new construction.
- Broad frequency coverage for clear vocal and instrument reproduction.
- Flat midrange response for balanced audio.
- Rugged construction including a steel frame, paper cone, treated cloth surround, vented pole piece, and a 20 oz. magnet.

3. SETUP AND INSTALLATION

3.1 Unpacking

Carefully remove the PA130-8 driver from its packaging. Inspect the driver for any signs of damage during transit. Retain the packaging for future transport or storage.

3.2 Mounting

The PA130-8 driver is designed for flush mounting. Ensure the enclosure has a baffle cutout diameter of 112 mm (4.41 inches). The driver features 4 mounting holes. Use appropriate screws and ensure a secure, airtight seal between the driver frame and the enclosure baffle to prevent air leaks that can degrade performance.

3.3 Wiring

Connect the speaker wires to the terminals on the rear of the driver. The positive (+) terminal is typically marked with a red dot or a larger tab, and the negative (-) terminal with a black dot or smaller tab. Ensure correct polarity when connecting to your amplifier or crossover network to maintain proper phase alignment within your audio system.



Figure 2: Rear view of the PA130-8 driver, showing the wiring terminals.

4. OPERATION

Once installed and wired correctly, the PA130-8 driver operates as a component within your audio system. Ensure that the amplifier connected to the driver is capable of providing adequate power without exceeding the driver's maximum power handling capacity (100 watts peak, 50 watts RMS). Overdriving the speaker can lead to damage. Adjust volume levels gradually and monitor for any signs of distortion.

5. MAINTENANCE

The Dayton Audio PA130-8 driver requires minimal maintenance. Keep the speaker cone and surround free from dust and debris. Use a soft, dry cloth to gently clean the surfaces. Avoid applying excessive pressure or using liquid cleaners, which could damage the cone material or surround. Periodically inspect the mounting screws and wiring connections to ensure they remain secure.

6. TROUBLESHOOTING

6.1 No Sound

- **Check Connections:** Verify that all speaker wires are securely connected to both the driver terminals and the amplifier/crossover outputs. Ensure correct polarity.
- **Amplifier Status:** Confirm that the amplifier is powered on and functioning correctly. Check its input source and volume settings.
- **Crossover Issues:** If using a passive or active crossover, ensure it is correctly configured and receiving an audio signal.

6.2 Distorted Sound

- **Overdriving:** Reduce the volume level from the amplifier. The driver may be receiving too much power, causing distortion.
- **Loose Connections:** Check all wiring connections for looseness or corrosion.
- **Enclosure Leaks:** Inspect the speaker mounting for any air leaks around the frame, which can cause buzzing or rattling sounds.
- **Damaged Driver:** If distortion persists at low volumes and with proper connections, the driver may be damaged.

7. SPECIFICATIONS

Parameter	Value
Nominal Diameter	5 inches
Power Handling (RMS)	50 watts
Power Handling (Max)	100 watts
Impedance	8 ohms
Sensitivity	88.2 dB @ 2.83V/1m
Frequency Response	90 - 15,000 Hz
Voice Coil Diameter	25 mm
Magnet Weight	20 oz.
DC Resistance (Re)	7.1 ohms
Voice Coil Inductance (Le)	0.71 mH @ 1 kHz
Resonant Frequency (Fs)	83.4 Hz
Mechanical Q (Qms)	3.21
Electromagnetic Q (Qes)	0.6
Total Q (Qts)	0.51
Diaphragm Mass Inc. Airload (Mms)	6.8g
Mechanical Compliance of Suspension (Cms)	0.54 mm/N
Surface Area Of Cone (Sd)	73.9 cm ²
Volume of Displacement (Vd)	14.8 cm ³
BL Product (BL)	6.44 Tm

Parameter	Value
Compliance Equivalent Volume (Vas)	3.95 liters
Maximum Linear Excursion (Xmax)	2.0 mm
Cone / Diaphragm Material	Paper Cone
Surround Material	Treated Cloth
Voice Coil Wire Material	Copper
Voice Coil Former	Aluminum
Basket/Frame Material	Steel
Magnet Material	Ferrite
Overall Outside Diameter	132 mm (5.2 inches)
Overall Depth	67.5 mm (2.66 inches)
Baffle Cutout Diameter	112 mm (4.41 inches)
Mounting Holes	4
Product Weight	2.63 pounds

8. WARRANTY INFORMATION

The Dayton Audio PA130-8 5" Full Range PA Driver comes with a limited warranty:

- **Parts:** 5 Years
- **Labor:** 5 Years

Please retain your proof of purchase for warranty claims. For detailed warranty terms and conditions, refer to the official Dayton Audio website or contact customer support.

9. SUPPORT

For further assistance, technical support, or inquiries regarding your Dayton Audio PA130-8 driver, please visit the official Dayton Audio website or contact their customer service department. You can find more information and resources by visiting the [Dayton Audio Store](#).