

Passive Ceiling Speaker 8 Ohms/70V/100V, 40W

User Manual 500222



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1. Safety Precautions

To ensure the best performance from the product, please read all instructions carefully before using the device. Save this manual for future reference.

- Follow basic safety precautions to reduce the risk of fire, electrical shock, and injury.
- Do not dismantle the housing or modify the module. It may result in electrical shock or burns.
- Do not open or remove the housing of the device as you may be exposed to dangerous voltage or other hazards.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture and do not install this product near water. Keep the product away from liquids.
- Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on the housing, unplug the module immediately.
- Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
- Using supplies or parts not meeting the product specifications may cause damage, deterioration or malfunction.
- Refer all servicing to qualified service personnel.
- Install the device in a place with adequate ventilation to avoid damage caused by overheat.
- Unplug the power when left unused for a long period of time.
- Information on disposal of devices: do not burn or mix with general household waste, please treat them as normal electrical waste.

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2. Introduction

The MuxLab Passive Ceiling Speaker 8 Ohms/70V/100V, 40W (Model: 500222) is a highperformance full band and easy installation speaker ideal for providing background music and vocal performance in a wide range of applications and installations and is designed with advanced linear sound source technology. This speaker can be used as an 8 ohm speaker at 40 W but can also be cascaded when set as a 70V speaker system with taps at 2.5W, 5W, 10W and 20W, and as a 100V speaker system with taps at 5W, 10W, 20W and 40W.

The MuxLab Passive Ceiling Speaker 8 Ohms/70V/100V, 40W comes with a 6.25" coaxial 40W loudspeaker driver that has excellent dispersion, wide bandwidth, and smooth frequency response which makes this the top choice for today's overhead commercial and residential applications.

3. Features

- 40 Watts RMS
- Frequency Range 96Hz 20KHz (+/- 3dB)
- Impedance 8Ω
- Tweeter 1" (25mm) Titanium Dome
- Woofer 6.25" (165mm) Graphite Cone, Rubber Surround

4. Package Contents

- One (1) Passive Ceiling Speaker 8 Ohms/70V/100V, 40W
- One (1) Speaker hole template
- One (1) Safety Wire Rope for Ceiling Speaker
- One (1) User manual (available via download)

Notes: Confirm that the product and accessories are all included. If not, please contact the supplier from which you purchased the unit.

5. Specifications

Audio Input	Analog Audio Signal
Frequency Range +/- 3dB	96Hz ~ 20KHz
Tweeter	1″ (25mm) Titanium Dome
Woofer	6.25" (165mm) Graphite Cone, Rubber Surround
Power Handling RMS	40W (IEEE 219)
Sensitivity (1W a 1m)	86dB
Crossover Frequency	3.5 kHz
Conformity (Input)	100V (8Ω)
Taps _	8Ω, 0, 40W, 20W, 10W, 5W
Impedance	8Ω
Nominal Coverage	90 degrees conical
Termination	Standard pressed connector
Attachment	Low-profile grille
Included Accessories	Cutout template grille
Dimension $(H \times D)$	236 x 257 mm (9.01″ x 10.11″)
Weight	3.3kg
Cut out diameter	8.90″ (226mm)
Material	ABS + iron
Shipping Weight	8.0 lbs (3.6 kg)
Warranty	2 years
Order Information	500222 Passive Ceiling Speaker 8 Ohms/70V/100V, 40W (UPC: 627699002223)

6. Technical Drawings



238.8



7. Installation

STEP 1

Using a stud finder (available at low cost at most hardware stores) or other accurate method, locate center point between two joists and mark. Using template provided, trace hole pattern on surface of ceiling.



STEP 2

Using a sabre saw, keyhole saw or very sharp utility knife, cut hole in ceiling. Following trace pattern.



STEP 3

Run loudspeaker wire to sound source location. There are several methods you can use to accomplish wiring, depending on the construction characteristics of the room or house. You can add a professional touch to your installation by using a speaker terminal plate at the source location. Leave sufficient amount of wire at speaker location (8-10 inches / 20-25 cm) to complete connection.



STEP 4

Attach loud speaker wire to speaker terminals observing correct polarity and position speaker frame up into cutout. Be careful not pinch wires in the process.



STEP 5

Carefully tighten the four mounting screws. This will cause the mounting wings to rotate our behind the mounting surface and secure the speaker in place.



STEP 6

After the speaker panel is secured tightly, test sound. When you are satisfied the speaker is operational, then affix grill. As grill is designed for a snug fit you'll need to position one edge into slot first and press or squeeze around perimeter of grill, while pushing leading edges into grill slot.



8. Applications

The Passive Ceiling Speaker 8 Ohms/70V/100V, 40W are ideal for hotels, conference rooms, shopping center, education, hospitals, retail stores, performing art centers, restaurants, airports, houses of worship, and board rooms.

Below you will find some diagrams showing the 500222 speakers as a solution in different scenarios working together with other MuxLab devices.

Audio over IP

Using 500222 speakers in an audio over IP setup.



Speakers and Amplifiers

Using 500222 speakers with analog audio amplifiers.



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