

[Manuals.plus](#) /

› [Awoco](#) /

› Awoco FM-1510SA1 42-inch Commercial Indoor Air Curtain User Manual

Awoco FM-1510SA1

Awoco FM-1510SA1 42-inch Commercial Indoor Air Curtain User Manual

Model: FM-1510SA1 | Brand: Awoco

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of your Awoco FM-1510SA1 42-inch Commercial Indoor Air Curtain. Please read this manual thoroughly before installation and use to ensure proper function and safety. This air curtain is designed to create an invisible air barrier over an entrance, effectively isolating indoor and outdoor air environments. It is not an air conditioner and does not generate heated or cooled air.



Air Curtain Isolates Indoor & Outdoor Air Environment



Energy Saving

(Reduces energy loss, keeping indoor climate stable)



Heat Shield

(Blocks hot air, keeping interiors cool.)



Dust Guard

(Prevents airborne dust from entering indoors.)



Block Bugs

(Stops insects from coming inside.)

Air Curtain IS NOT an Air Conditioner
(Air Curtain doesn't generate the cool Air)

The Awoco Air Curtain creates an invisible air barrier to maintain indoor climate and block external elements.

2. SAFETY INSTRUCTIONS

Always follow basic safety precautions when using electrical appliances to reduce the risk of fire, electric shock, and injury.

- Ensure the power supply matches the unit's specifications (120V 60Hz).
- Do not operate the unit with a damaged cord or plug.
- Keep hands and objects clear of the air inlet and outlet during operation.
- Installation must be performed by qualified personnel in accordance with local electrical codes.
- Disconnect power before performing any maintenance or cleaning.
- This appliance is for indoor use only.

3. PACKAGE CONTENTS

Verify that all items are present and undamaged upon opening the package:

- Awoco FM-1510SA1 Air Curtain Unit
- Detachable Mounting Plate
- Magnetic Door Switch (optional installation)
- User Manual
- Mounting Hardware (screws, anchors)

4. PRODUCT OVERVIEW

4.1 Key Features

- **Invisible Air Barrier:** Isolates interior from exterior air, blocking hot/cold air, dust, and smoke.
- **US Patented Magnetic Switch:** Automatically turns the air curtain on when the door opens and off when it closes.
- **Two Speed Settings:** Lo (1059 CFM, 56dB) and Hi (1354 CFM, 58dB) for versatile performance.
- **Durable Construction:** Fireproof and anti-erosive powder-coated metal case with German electrical machinery technology for continuous operation.
- **Easy Installation:** Features a detachable mounting plate for simplified setup.

4.2 Dimensions and Components



Product dimensions and key internal components.

- **Dimensions (L x D x H):** 41-3/4" x 8-5/8" x 10-3/8"
- **Weight:** 37.5 LBS
- **Power Cord:** 55" long with plug

POWERFUL MOTOR & FAN WHEEL



POWERFUL MOTOR:

Motor technology of German electrical machinery with smooth operation.



FAN WHEEL:

Reduce noise to 58db on high speed, 56 on low speed.

Airflow diagram showing how the air curtain creates a barrier.

5. SETUP AND INSTALLATION

5.1 Pre-Installation Check

1. Inspect the unit for any shipping damages.
2. Plug the power cord into a 110V outlet and press the Lo/Off/Hi switch to ensure the unit powers on and the fan wheels spin freely.
3. If fan wheels are stuck, refer to the included instructions for adjusting the seating.

5.2 Mounting the Air Curtain

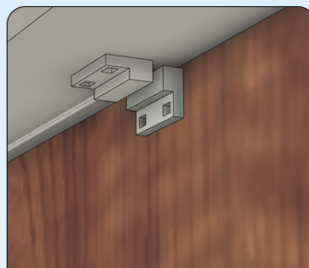
1. **Remove Mounting Plate:** Remove the screws from the bottom of the air curtain and detach the mounting plate.
2. **Locate Studs:** Use a stud finder to locate studs above the door frame where the air curtain will be mounted.
3. **Secure Mounting Plate:** Install the detachable mounting plate securely to the wall, ensuring it is level. Drill new holes on the mounting plate if necessary to align with studs.
4. **Hang Air Curtain:** Carefully hang the air curtain unit onto the secured mounting plate.
5. **Tighten Screws:** Tighten the bottom screws to firmly secure the air curtain to the mounting plate.

US PATENTED MAGNETIC SWITCH CONTROLLED CIRCUIT

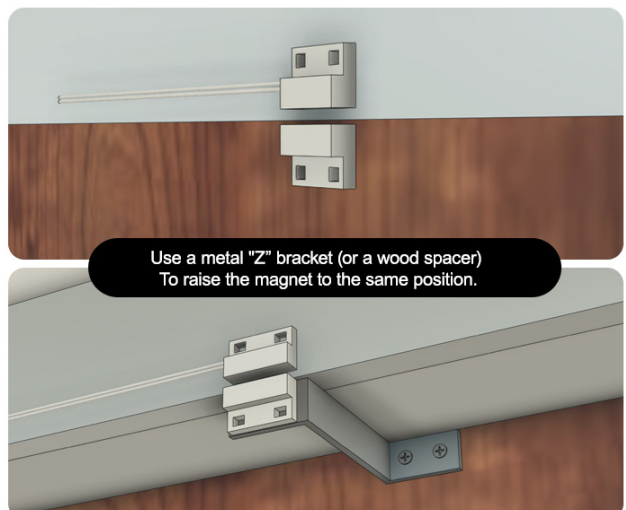
Easily Apply to any Kinds of swing or Sliding Doors and Windows. 12VDC is Safer And no hard wired required. No mechanical contact. US Patented Magnetic Switch Controlled Circuit (Patent No. US10584889B2).



Self-adhesive tape install.
Apply small screws if needed.



No direct contact, won't be damaged by
A door slamming, same as security
Alarm's door or window magnetic sensors.



Use a metal "Z" bracket (or a wood spacer)
To raise the magnet to the same position.

Step-by-step guide for air curtain installation.

Why Choose Awoco?

Quality and Durability



Awoco air curtains are built to last, and all replacement parts are available, ensuring easy maintenance and repair.

Fast Support



Awoco offers professional support in the Los Angeles, California, providing prompt and efficient support for our products.

Awoco's mounting plate design for enhanced stability.

5.3 Magnetic Door Switch Installation (Optional)

The magnetic switch allows the air curtain to operate automatically when the door opens or closes.

1. **Prepare Wires:** Locate the two yellow wires on the air curtain. Cut off the nuts and strip the insulation from their ends.
2. **Connect Switch:** Connect the two yellow wires from the air curtain to the magnetic switch wires.
3. **Test Switch Function:** Before mounting, test the magnetic switch by connecting the wires. The air curtain should run. Separate the wires, and the air curtain should stop. Then, connect the magnetic switch components. The air curtain should stop when the magnets are close together and run when separated.
4. **Choose Position:** Select a proper position on the door frame and door edge. The magnetic switch is applicable for all kinds of door configurations (swing or sliding doors). Ensure the magnetic effective surface (usually the bottom) aligns correctly. If surfaces are not flush, use a metal 'Z' bracket or wooden filler to raise one side of the magnet piece to the same effective surface.
5. **Mount Switch:** Attach the magnetic switch components to the door edge and frame using self-adhesive tape or small screws if needed. Ensure no direct contact between the magnetic pieces to prevent damage from door slamming.



Proper and improper magnetic switch installation examples.



Easy Magnetic Switch Installation

- Easily apply to any kinds of swing or sliding doors and windows.
- 12VDC is safer and no hard wired required. No mechanical contact.
- It works even the door closer is not working well, just install closer to the door hinges.



Detailed view of magnetic switch installation with filler option.

5.4 Adjusting Air Deflector

Adjust the angle of the air deflector to direct the airflow as needed, optimizing performance for your specific environment.

Video: Awoco Easy to Install Magnetic Switch. This video demonstrates the installation process for the magnetic door switch, including wiring, testing, and proper placement for various door types.

6. OPERATING INSTRUCTIONS

6.1 Manual Operation

Use the Lo/Off/Hi switch located on the unit to control the air curtain:

- **Lo:** Activates low-speed airflow (1059 CFM).
- **Hi:** Activates high-speed airflow (1354 CFM).
- **Off:** Turns the unit off.

If the magnetic door switch is not installed, the unit will run continuously for 8 hours when turned on via the Lo/Off/Hi switch.

6.2 Automatic Operation (with Magnetic Switch)

With the magnetic door switch installed and connected:

- The air curtain will automatically turn on when the door is opened.
- The air curtain will automatically turn off when the door is closed.



Control options for the Awoco Air Curtain.

7. MAINTENANCE

Regular maintenance ensures optimal performance and longevity of your air curtain.

- **Cleaning:** The fireproof and anti-erosive powder-coated metal case is easy to clean. Use a soft, damp cloth to wipe down the exterior. Do not use harsh chemicals or abrasive cleaners.
- **Fan Wheel Inspection:** Periodically check the fan wheels for any debris accumulation. Disconnect power

before inspecting or cleaning the fan wheels.

- **Power Cord:** Inspect the power cord for any signs of damage. If damaged, contact customer support for replacement.

8. TROUBLESHOOTING

If you encounter issues with your Awoco air curtain, refer to the following common troubleshooting steps:

Problem	Possible Cause	Solution
Air curtain does not turn on.	No power supply. Switch is in 'Off' position. Magnetic switch not connected or faulty.	Check power outlet and cord. Set switch to 'Lo' or 'Hi'. Verify magnetic switch connection and function.
Weak airflow.	Fan wheels obstructed. Unit set to 'Lo' speed.	Disconnect power and check for obstructions. Set switch to 'Hi' speed.
Excessive noise.	Fan wheels unbalanced or obstructed.	Disconnect power and check for obstructions. Ensure fan wheels are properly seated.
Magnetic switch not working.	Incorrect alignment. Wires not connected properly.	Adjust magnetic switch alignment to ensure effective surfaces face each other. Recheck wire connections.

9. SPECIFICATIONS

Feature	Specification
Brand	Awoco
Model Number	FM-1510SA1
Size	42 inches
Air Flow Capacity	1354 CFM (High), 1059 CFM (Low)
Number of Speeds	2
Noise Level	58 dB (High), 56 dB (Low)
Voltage	120 Volts
Wattage	350 Watts
Product Dimensions (D x W x H)	8.63"D x 41.75"W x 10.38"H
Item Weight	37.5 LBS (Unit), 45 LBS (Shipping)
Material	Metal (Powder Coated)
Blade Material	Plastic
Mounting Type	Door Mount / Wall-mounted
Controller Type	Button Control

Feature	Specification
Certification	UL Certified
UPC	796762684717

10. WARRANTY AND SUPPORT

Awoco provides a 1-year warranty for free parts, repair, or exchange. For any questions, technical assistance, or warranty claims, please contact Awoco customer support. Awoco offers professional support from Los Angeles, California, ensuring prompt and efficient service.

For further information or to contact support, please visit the official Awoco store:[Awoco Store on Amazon](#).

Video: Awoco Super Power FM15 Series Air Curtain. This video highlights the key features and benefits of the Awoco FM15 series air curtain, including its powerful airflow and energy-saving capabilities.