

APOLLO

E N C L O S U R E S

ELITE Direct Sun Line of Environmental TV Enclosures

**MODELS: AE4239-DS
 AE5550-DS
 AE6560-DS
 AE7570-DS
 AE8680-DS
 AE9800-DS**

*Mastering the Outdoor TV Viewing Experience from the
Inside...Out!*



www.apolloenc.com

Introduction

Congratulations on the purchase of your Apollo environmental TV enclosure.

Apollo Enclosures (Apollo) developed environmental LED/LCD enclosures as a platform to provide an affordable solution to safely enjoy TV entertainment outdoors in both residential and commercial applications worldwide.

With optimized internal capacity, configurability and flexibility; the Apollo environmental enclosure is the ideal solution for protecting your LED/LCD TV for outdoor entertainment applications of today and tomorrow, providing both quality and endurance for years to come.

To ensure your personal safety and optimum performance of your enclosure, please read this instruction manual thoroughly.

Customer Service Contacts:

It is our goal to provide a safe, practical and fulfilling outdoor TV viewing experience with the installation of the Apollo enclosure. For questions regarding the Apollo enclosure installation or ordering any Apollo accessories, please contact Apollo at any of the following options:

Toll Free: 888-414-5919

E-mail: support@apolloenc.com

Address: 5069-A Maureen Lane
Moorpark, CA 93021

If you need to call Customer Service:
Please complete the following information for future reference:

Model Number*: _____

Mfg. Code*: _____

Date of Purchase: _____

Place of Purchase: _____

*The model number and Mfg. Code are on the back bottom right of the rear panel. Retain this installation manual with your sales receipt as a permanent record of your purchase in the event of warranty service.

Product Description

Overview

The features for all Apollo models are identical in functionality with the only difference being the sizes of LED/LCD televisions that will safely fit inside each model. There is a full complement of weatherproof mounts for a complete environmental solution.

The Apollo line of weatherproof enclosures will protect a wide range of slim LED/LCD televisions in ambient temperatures of -4°F to 122°F (-20°C - 50°C) in a partial or full shaded areas. The modularity of the system design ensures easy access, simplified installation and maintenance.

The enclosure also offers the option to add a thermostatically controlled heater module (HM001i) to either manage condensation in high humidity locations or provide additional protection in extreme cold climates under -4°F (-20°C). Contact your sales representative for more information on this option.

Specifications

- The enclosures are manufactured of durable and weatherproof powder coated aluminum.
- Built-in anti-glare safety glass protects the LED/LCD TV while significantly reducing ambient reflection and increases the contrast ratio for better viewing.
- IR film applied to the back of the safety tempered glass shields the TV from harmful UV & IR Rays.
- Thermostatically controlled filtered air-flow system cools the enclosure and protects the TV from extreme temperatures (up to 122°) and from dust, dirt and insects.
- Additional thermostatically controlled air flow is added in the front cover bezel to stream air across the LED TV.
- ***Apollo's Tight seal*** technology protects your LED/LCD TV against the elements.
- The down firing sound port speaker grilles transfer TV speaker audio effectively to maximize audio performance.
- A water-tight cable cover facilitates the pass through of power and cable connections to TV inputs and outputs.
- A 3-outlet power bank supports AC power for the air-flow system, TV and one auxiliary port; which can be used for the heater module or other miscellaneous devices.
- 9' outdoor rated power cord is safe for outdoor installations.
- 1' Extension power cord is provided for internal connection of power packs or right-angle plugs.
- EZ mount TV swing brackets for simplified TV installation and easy access to TV cables and cable management.
- Available with a choice of weatherproof full motion wall mount, non-articulating wall mount or adjustable height ceiling mount; all with stainless steel hardware.

Safety

Apollo Enclosures are certified to UL/CSA & CE safety standards.



Complies with
UL/CSA 60950-1
UL/CSA 60950-22
Voltage: 110/220V 60 HZ
Amp: 15A Maximum

NOTE: Please read entire instruction guide before you start installation and assembly of the Apollo enclosure.

Safety Statements



WARNING

- Do not begin to install your Apollo Enclosure until you have read and understand the instructions and warnings contained in this guide. If you have any questions regarding any of the instructions or warnings, please contact Apollo at 1-888-414-5919.
- This product should be installed by a qualified person or professional.
- Make sure the supporting surface (wall or ceiling) will safely support the combined weight of the enclosure and the attached LED/LCD TV.
- If mounting to wood wall studs, make sure that the mounting screws are anchored into the center of the studs. Use of an edge-to-edge stud finder is highly recommended.
- Do not lift more weight than you can handle. Use additional manpower or  mechanical lifting equipment to safely handle placement of the TV into the enclosure.
- Tighten screws firmly, but do not over-tighten. Over-tightening can damage the parts and reduce their holding power.
- The enclosure has been evaluated and tested for use in a continuous outdoor ambient temperature not to exceed -4°F to 122°F (-20°C to 50°C) in partial shade or full shade areas.



WARNING: This enclosure is equipped with a 9' outdoor power cord with a 3-prong grounded plug. The plug will only fit into a grounded power outlet. **Do not use an extension cord.** This is a safety feature and this plug **must be plugged into a GFCI receptacle with an outdoor rated "in use" cover plate** (see  picture). Do not alter this plug, as this will defeat the safety feature. Unless the above grounding method is followed, you are not protected against severe or lethal shock in the event of a short circuit in the enclosure equipment or electrical components. Please check electrical codes for proper equipment.

- The AC input 3-outlet power bank located inside the enclosure is to be used for the following sources:
 - Internal fan power – factory set up
 - TV power cord
 - Auxiliary outlet for optional Heater Module or alternate accessory (such as Apple® TV, baluns or accessory not requiring more power than available from the standard 110/240VAC, 20 Amp circuit).

Precautions

When working on or using this enclosure, the following precautions should be noted:

- Do not install enclosure near heat sources such as heaters, stoves or heat generating products.
- Do not submerge the Apollo enclosure under water. This product is weatherproof and not meant to be submerged under water.
- Do not use pressure hoses or high-pressure water jets on the enclosure. It is designed to withstand normal rain, garden hoses and sprinklers. **CAUTION: NEVER SPRAY OR DIRECT WATER FROM A HOSE OR SPRINKLER TO THE BOTTOM OF THE ENCLOSURE WHERE THE SPEAKER GRILLES ARE LOCATED.**

Getting Started

1. Parts List

QUANTITY	Description
1	Apollo Front Cover with Anti-Reflective Glass & IR Film and fan system
1	Apollo Back Panel
2	TV Swing Brackets
1	Cable Cover Assembly
1	Assembly Hardware Kit
1	One (1) ft Extension Cord

2. Selecting the Best Viewing Location

- For best viewing enjoyment, we recommend that you install your enclosure in a shaded area, under a canopy, trees or facing away from the sun during your optimum viewing time of day. Positioning the front of the enclosure out of direct sun on the glass will also provide a clearer image and minimize the tendency for direct sun to fight with the image and wash it out.
- If you should install your TV with direct sun on the TV for more than 1 hour per day, the Apollo Direct Sun enclosures are also designed to protect your TV from the direct sun exposure. They include IR film applied to the anti-glare safety glass to shield the TV from harmful UV and IR rays, as well as additional crossflow fans installed in the front cover to stream air between the TV and the glass. For best viewing enjoyment in this application, we recommend that you source a TV with the best peak brightness level (preferably 1000 nits and higher) to enjoy in high ambient light environments. Standard TVs have brightness levels of 350 – 500 nits of brightness. You can locate details on best TVs with the highest peak brightness level by searching on <https://www.rtings.com/tv/tests/picture-quality/peak-brightness>
- During high temperature days of 90° F (32° C) or higher, direct sun exposure on the face of the enclosure may cause the TV to exhibit blackout spotting in the picture screen, commonly known as “isotropic blackout,” a condition during which some of the LCD panel’s cells temporarily shut down (go black) until the cells’ temperature cools and the sun is no longer on the glass on these extremely hot days.
- We recommend the purchase of our custom design fit dust cover (optional accessory) to further protect in direct sun installations when the TV is not in use, as well as preserving the beauty of your enclosure for years to come.

3. Installing the Apollo Mount to Your Outside Location

NOTE: We recommend that your mount be installed by a qualified professional. We accept no liability for damages caused by incorrect assembly, installation or use.

 WARNING
Always refer to the installation instructions included with your mount.
Make sure that the supporting surface will safely support the combined weight load of the equipment (enclosure and TV) and all attached hardware and components.
Make sure to use the proper mounting hardware and that all mounting hardware is securely fastened

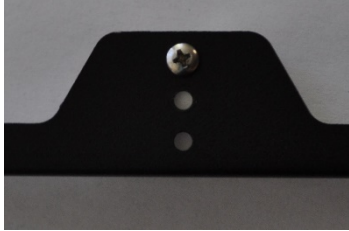
4. Unpacking your Apollo Enclosure

- Remove the back panel from the carton placing it on a clean, smooth surface. (Do not remove the front cover with glass, as this is your final step).
- Use the parts list to verify all materials are included. Save the shipping container and all packing inserts until installation is complete.
- Snip wire ties securing two (2) TV swing brackets, which will be required for next step.

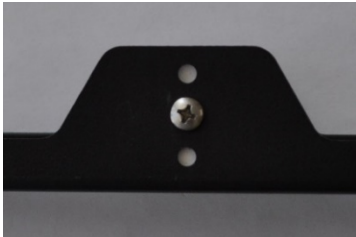
Assembly Instructions

1. Adjusting TV Swing Brackets for Depth of TV

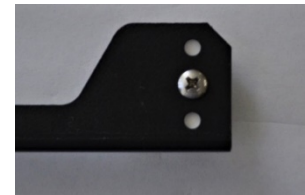
TV swing brackets must be adjusted according to the depth of your TV (as shown below) to provide the proper air gap between the TV and the enclosure front glass. The correct bracket adjustments will insure required air flow and best clarity. SEE SUPPLEMENT FOR ADJUSTING DEPTH IN AE9800-DS



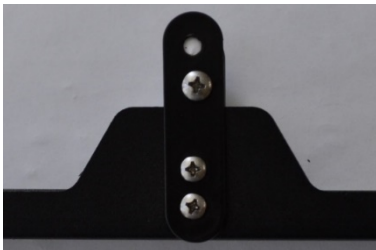
TV DEPTH
3.0" to 3.3"
WHITE ROLLER THRU
CENTER HOLE



2.6" to 2.9"
WHITE ROLLER THRU
CENTER HOLE



2.2" TO 2.59
WHITE ROLLER THRU
TOP HOLE



1.8" TO 2.19"
WHITE ROLLER THRU 2ND
HOLE FROM TOP
SCREW EXTENSION BRACKET
TO TV SWING BRACKET
BOTTOM AND MIDDLE HOLE



1.4" to 1.79"
WHITE ROLLER THRU
TOP HOLE
SCREW EXTENSION BRACKET
TO TV SWING BRACKET
BOTTOM AND MIDDLE HOLE

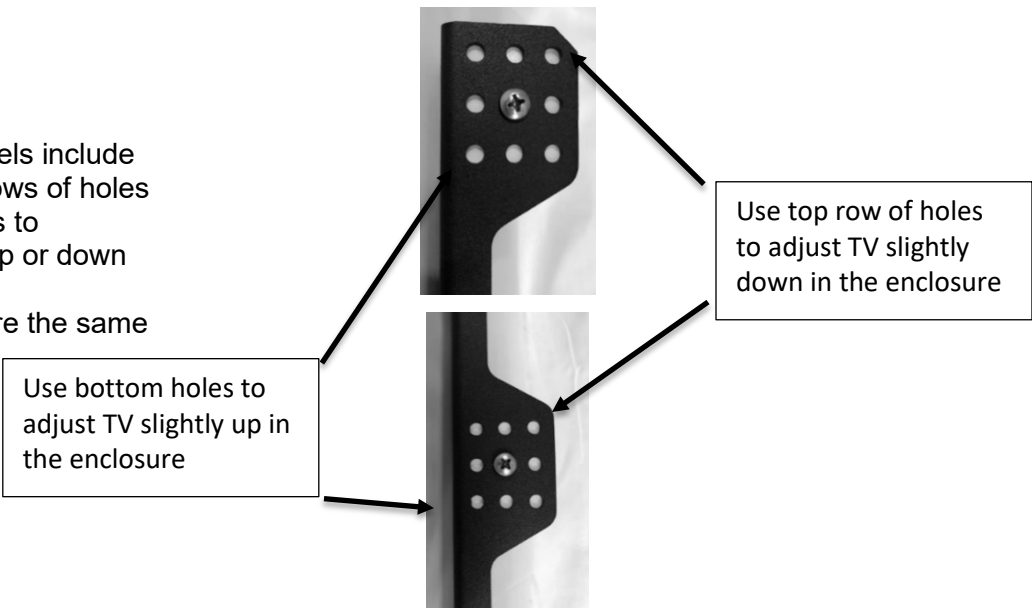


1" to 1.39"
WHITE ROLLER THRU
TOP HOLE
SCREW EXTENSION BRACKET
TO TV SWING BRACKET
TOP AND MIDDLE HOLE



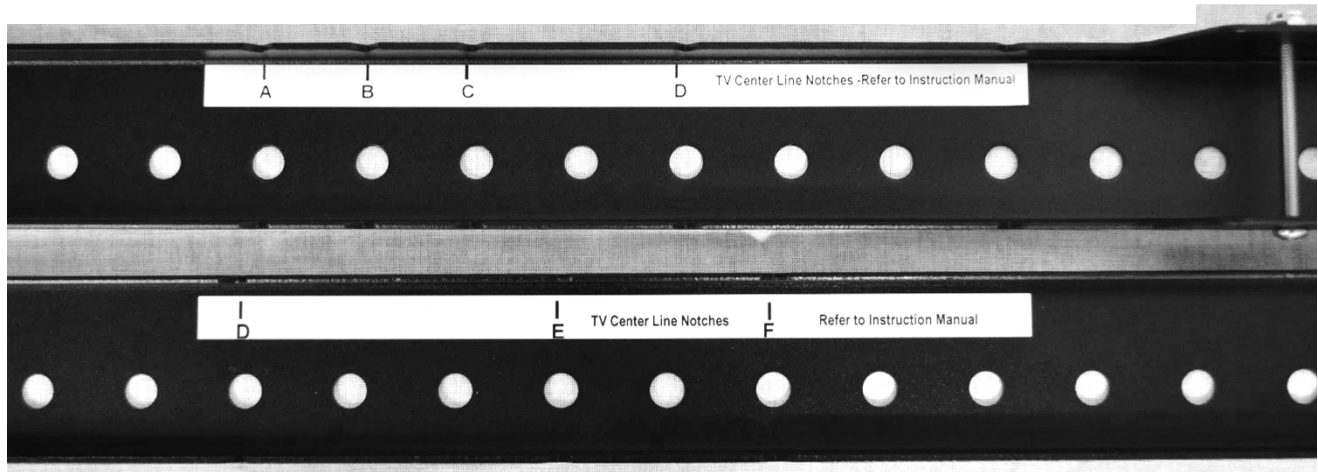
65" – 98" Apollo models include brackets with extra rows of holes for minor adjustments to vertically center TV up or down

Depth adjustments are the same as above



2. Attaching TV Swing Brackets to Back of TV

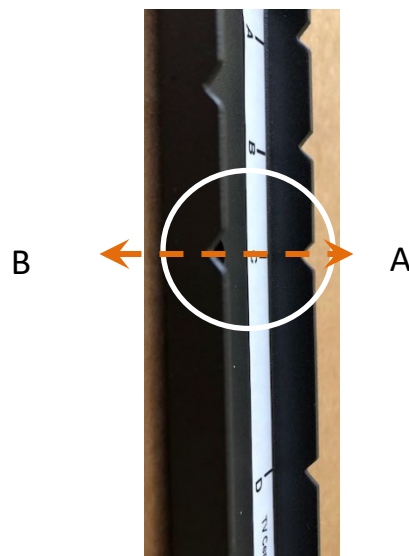
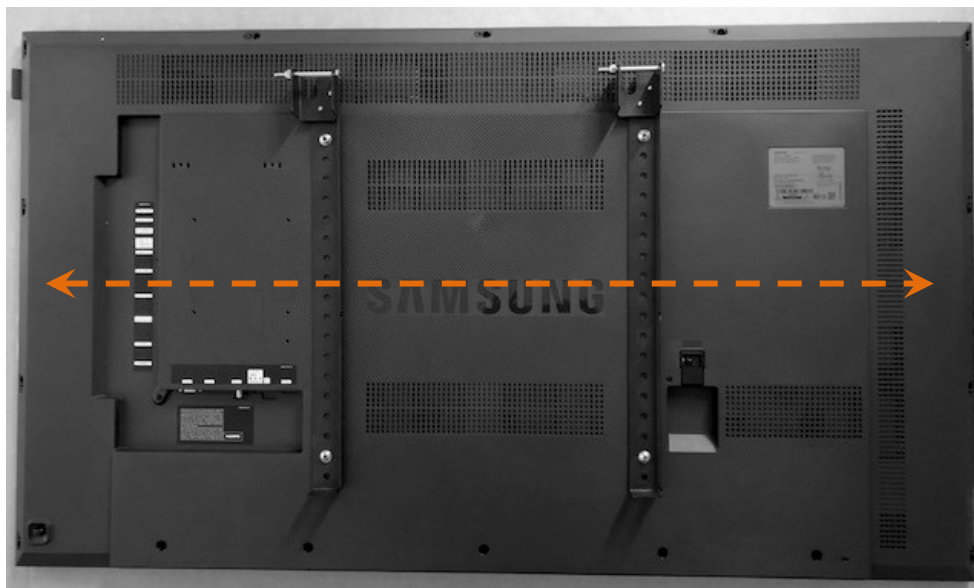
Select the notch on the TV Swing Bracket based on the size of the TV (see chart below)



Enclosure Size	Center Line Notch Indicator
AE4239	A
AE5550	C
AE6560	D
AE7570	E
AE8680	Center Line Label
AE9800	Center Line Label

1. Attaching TV Swing Brackets to Back of TV (continued)

Following these directions will insure that the TV is properly centered top to bottom in your Apollo enclosure.

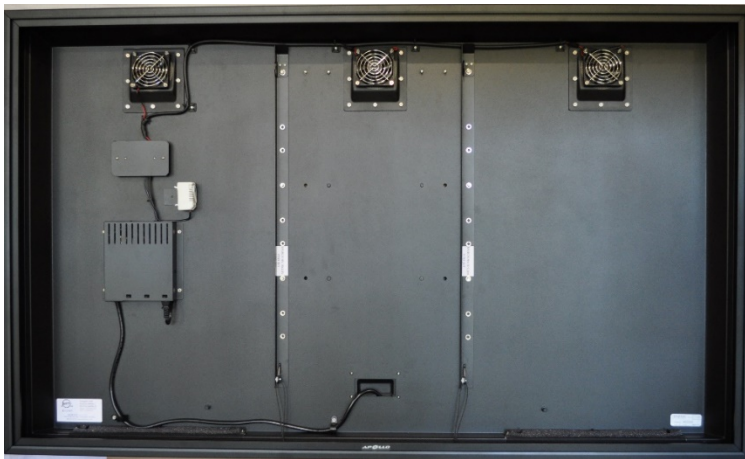


- Select the notch on the TV Swing Bracket (see diagram A) based on the enclosure model size (see Page 7)
- Find the vertical center line of your TV by placing a tape measure vertically top to bottom on the rear of the TV and mark the center of the TV with a pencil. (see diagram B)
- Line up holes on TV swing bracket with TV VESA holes so that the appropriate notch in bracket lines up with center line of TV (as close as possible).
- Select the proper size metric screw with washers that fits the TV VESA holes (included with the TV mount) and screw brackets in place. Be sure to tighten screws down to fit securely. If screws are too long, use additional washers between bracket and screw head.

3. Attaching Internal TV Swing Mounting Brackets to Inside of Back Panel

The stiffener brackets need to be spaced to match the width of the VESA pattern on the back of your TV.

If it is necessary to move the brackets, loosen the 10-24 lock nuts, relocate to the alternate position, and retighten.



Picture illustrates
65" Apollo Enclosure
with brackets in
400mm position.

Apollo enclosure models 43", 50", 55" & 65" are designed for standard TV VESA pattern widths of
200mm (Approx. 8")
300mm (Approx. 12")
400mm (Approx. 16").

Apollo enclosure model 75" is designed for standard TV VESA pattern widths of:
300mm (Approx. 12")
400mm (Approx. 16")
600mm (Approx. 24")

Apollo enclosure model 86" is designed for standard TV VESA pattern widths of:
400mm (Approx. 16")
600mm (Approx. 24")

Apollo enclosure model 98" is designed for standard TV VESA pattern widths of:
600mm (Approx. 16")
800mm (Approx. 24") or 900mm (Approx. 28") **Must be selected at time of order**

4. Attaching Mount Brackets to Rear of Back Panel



Models 43" to 86"



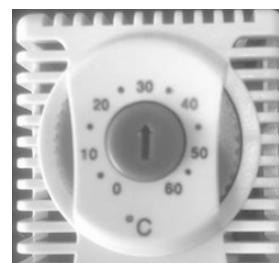
IMPORTANT!
BE SURE THE O-RING RUBBER WASHER IS PLACED BETWEEN THE BACK OF THE ENCLOSURE AND THE STAINLESS-STEEL WASHER TO PREVENT WATER INTRUSION.

- Use the set of VESA holes on the back panel which match the spacing of stiffener brackets on the inside of the back panel, which also match the VESA pattern width of your TV. Use four (4) M6 X 20 metric screws, metal washers and rubber washers provided to fasten to the threaded inserts on the inside stiffener brackets.
- Be sure that any unused VESA holes on the back panel are sealed with provided hole plugs.

5. Attaching the Back Panel to the Mount

NOTE: Be sure your mount is completely installed to your outside location and all cables are run before proceeding.

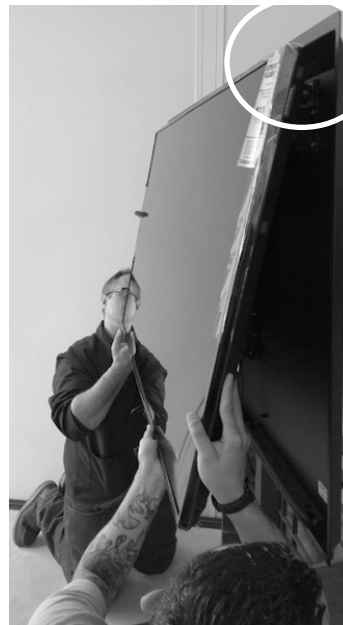
- Attach back panel to wall mount, lock the mount in the desired tilt or non-tilt position and tighten tilt adjustment screws before hanging TV. Refer to directions included with your mount.
- Run 9' enclosure power cord through rectangular hole in back panel and plug into a GFCI receptacle with an outdoor rated "in use" cover plate. (See safety statement)
- Run your signal cable(s) from outside through rectangle opening in rear panel to be hooked up in next step.
- The fan control thermostat located on the back cover is factory preset for the fans to turn the fans on when the internal temperature of the enclosure reaches 30°C (86°F). To test your fan operation be sure the enclosure is plugged into AC power. Turn thermostat down to lowest setting and once the fans turn on, return the setting back to the 30C (86°F).



° C	° F
0	32
10	50
20	68
30	86
40	104
50	122
60	140

Last

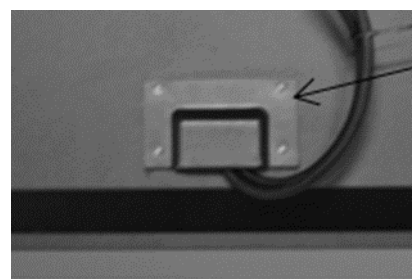
6. Installing the TV to the Back Panel



- a. Lift TV and align swing bolts (located on top of TV hanger brackets) above hanger hooks on top of rear panel and carefully lower into place.
- b. Check side to side alignment to be sure TV is centered left to right.
- c. Swing bottom of TV outward; plug TV into 3 outlet A/C power receptacle on rear panel and make appropriate signal connections.
- d. To lock TV in place, pull latch cord down, push TV toward bracket and release. Be sure all cables are clear from interfering with TV swing brackets.

- e. Attach cable cover, securely tighten into threaded inserts, and neatly dress all cables using wire cable management covers on mounts, and wire ties, as necessary.

NOTE: For best results, position cables flat against rear panel.

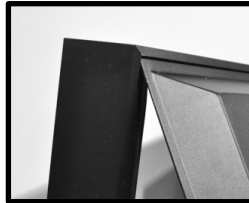


IMPORTANT: Test operation of your TV before attaching front cover.

7. Attach front cover

- a. Hold the cover at a slight tilt and carefully align from left to right so front cover is centered over the flange of the rear cover. (See pictures below). Once aligned, drop down cover so flange fits securely into channel. Cover should now freely pivot down to close position.

IMPORTANT: To power front bezel fans



Flange on top of rear panel fits into top channel on front cover.



Before closing front cover, plug connector in back panel to connector in bezel (as shown)

Tuck wires underneath TV before closing front cover



Remove 10-32 flange nuts from studs on bottom of front cover. Push front cover studs through the tabs in the back cover and secure with flange nuts.

Carefully tighten to secure seal.

Maintenance & Care

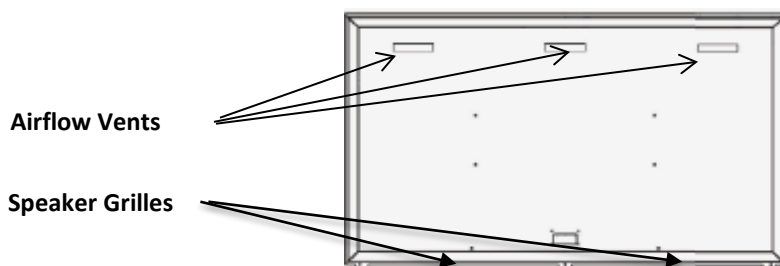
Cleaning the Glass –

- Apollo enclosures are equipped with anti-reflective safety glass to ensure the best possible viewing experience. To properly clean the glass, we recommend the use of a soft cotton or microfiber cloth. Do not use paper towel, tissues or rags as it may damage the coating on the glass and leave lint behind.
- For cleaning glass, we recommend a standard 70/30 isopropyl alcohol mix.
- Spray the cleaner on the soft cloth and gently clean the glass.

Air filters –

There are dark gray reusable audio air filter pads that are installed over the speaker grilles. (See diagram). These filters have a MERV 5 rating. This standard is used for determining the filters' ability to capture and hold dirt and dust in specific size ranges. MERV 5 to 8 rated filters are a better choice and are more commonly found in commercial applications. These filters will collect particles as small as 3 microns and are a good choice for residential use as well.

- To clean the filters over the speaker grilles, lift tabs on both sides of filter, remove filter.
- Wash it with mild detergent and warm water to restore it to its original dark gray color. **Important! After rinsing the filter, let it air dry before re-inserting in enclosure. Do not squeeze the filter as it will cause the breakdown of the cells and damage the structure to properly filter the air.**
- Once the filter is dry, lift filter tabs on both sides and re-insert the clean filter over the speaker grilles using the tabs to hold in place.
- If there is damage to the filter, please contact Apollo customer service to purchase a replacement.



Basic Cleaning of Enclosure housing –

- With a soft soapy cloth and warm water, wipe dirt, dust, bird dropping, etc. from housing; rinsing cloth frequently to avoid scratching powder coated aluminum from dirt grit. **Do not use this same cloth to clean the glass – see instruction above for cleaning the glass. Avoid using harsh chemicals, abrasives or solvents when cleaning the surface of the housing.**
- **For Snow and Ice** - Use a soft brush to remove snow and ice from the enclosure.
- We recommend the purchase of our custom design fit dust cover (optional accessory) to protect the beauty of your enclosure for years to come.

Optional Accessories

See enclosed accessory brochures for information on products available.

- ❖ Dust Cover (DC4239, DC5550, DC6560, DC7570, DC8680)
- ❖ Security Bracket Kit (SK100-WM)
- ❖ Heater Module (HM200i, HM200i-D)
- ❖ Modesty Frame Slats (MOD39, MOD 50, MOD60, MOD70)

Contact Sales at Apollo Enclosures for assistance in purchase of accessories. (888-414-5919)

Troubleshooting

Following is a list of possible concerns and the solutions to them. Please check list before you contact customer service.

- **Safety** - Review all safety instructions and warnings in Section 3 of the guide before troubleshooting.
- **Front Cover doesn't close properly** – Check to be sure the top left and right back panel corners are in line and fit inside the front cover. Once the back and front are aligned, the cover will close safely and securely to the back panel.
- **Rear screw closures holes don't line up** – The front cover may not be aligned exactly right on the rear panel. Check left and right edges to verify that are equally seated on the top rear panel edge.
- **TV does not lay flat against back panel** – Check the connections from the TV to your source to see if the cables are extruding. If so, you may need to obtain a right-angle USB connector to eliminate the total panel and connection depth to be more than the enclosure maximum measurements.

Check to be sure that the TV Swing Brackets have the bolts in the same holes, top and bottom, for the TV to be level.

- **Glass has streaks or slight imperfections**– Anti-reflective glass has an inherent property that will manifest in slight imperfections that may be noticeable when the TV is not playing. Once the TV is turned on, you will never notice any problems. If streaks are from cleaning, please see Maintenance and Care section for cleaning tips.
- **Condensation is frequently present on the inside glass** – This is an indication that you are in a high humidity area. The condensation will disappear in a short period of time after the TV is turned on, as the heat will dry any moisture. Alternatively, if this is a frequent event, we recommend the purchase of the heater module (HM001i) which is designed to turn on at a preset temperature to virtually eliminate condensation or is used in cold climate areas to protect the TV when temperatures dip below -4 degrees.

Frequently Asked Questions (FAQs)

You can find more information about Apollo Enclosures at our website, from product specification sheets to Frequently Asked Questions (FAQs), it is all there. Visit us at:

www.apolloenc.com

Limited Warranty

Apollo enclosures and accessories are warrantied for one (1) year in-factory parts and labor from the date of original purchase.

Please go to our website at www.apolloenc.com for full details on warranty and return policies.

Compilation and Publication Notice:

Under the supervision of Apollo, this Installation Manual has been compiled and published covering the latest product descriptions and specifications.

The contents of this Installation Guide and the specifications of this product are subject to change without notice.

Apollo reserves the right to make changes without notice in the specifications and materials contained herein and shall not be responsible for any damages (including consequential) caused by reliance on the materials presented, including but not limited to typographical and other errors relating to the publication.



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