

APOLLO ENCLOSURES

ELITE MODEL Environmental TV Enclosures

STANDARD

- AE4239**
- AE5550**
- AE6560**
- AE7570**
- AE8680**

DIRECT SUN

- AE4239-DS**
- AE5550-DS**
- AE6560-DS**
- AE7570-DS**
- AE8680-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 by 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). The Elite line of enclosures are designed for installations in partial or full shaded areas. Apollo's Direct Sun line includes enhancements required to protect TVs in direct sun installations.

The enclosure also offers the option to add a thermostatically controlled heater module (HM2001i for 43" – 65" models and HM200i-D for 75-86" models) 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-reflective safety glass protects the LED/LCD TV while significantly reducing ambient reflection and increases the contrast ratio for better viewing.
- 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.
- **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.

Direct Sun Models include:

- Internal laminated IR film to anti-reflective tempered glass protects the LCD panel from harmful IR and UV solar rays.
- Cross flow fans installed in front cover lower bezel provide streaming airflow between the LCD screen and the front glass.

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 (DS models inc. IR film and Crossflow fans)
1	Apollo Back Panel
2	TV Swing Brackets
1	Cable Cover Assembly
1	Assembly Hardware Kit
1	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 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.
- 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. Although limited direct sun may not permanently damage to your TV, in these situations, we recommend using an Apollo custom fit dust cover when the TV is not in use.
- For Direct Sun installations, contact Apollo at 888-414-5919 for technology options and suggestions.

3. Installing the Apollo Mount to Your Outside Location

NOTE: We recommend that your mount be installed by a qualified professional. Apollo accepts 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







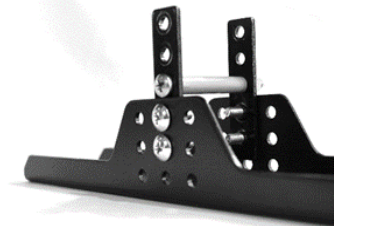
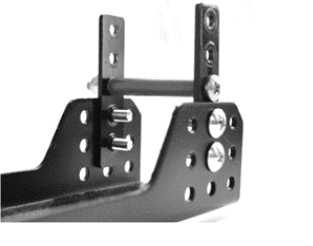
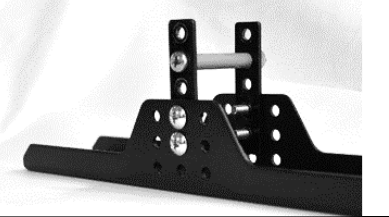
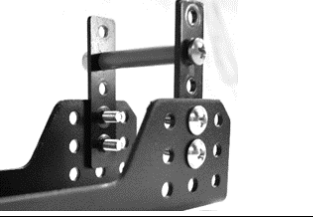
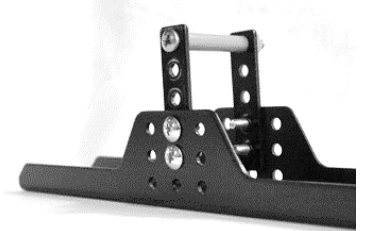

- Remove the back panel from the carton placing it on a clean, smooth surface. (Do not remove the front cover with glass, as this is your final step).
- Use the parts list to verify all materials are included. Save the shipping container and all packing inserts until installation is complete.
- Snip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

Assembly Instruction for Elite STANDARD Models

1. Adjusting TV Swing Brackets for Depth of TV in Standard Elite Models

For the TV to be positioned properly in the enclosure relative to the anti-reflective glass, please adjust the brackets as shown below, based on your Apollo enclosure model size and according to the depth of your TV.

NOTE: Maximum TV Depth for models 43" to 86" is 3.5":


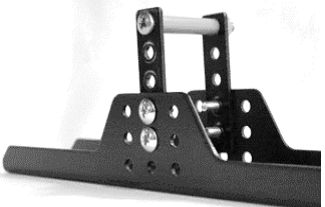
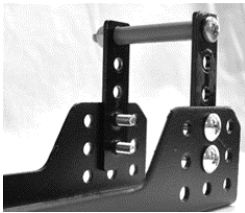
Bottom of Bracket	Top of Bracket	Models 43" to 75"	Model 86"
		USE BOTTOM HOLE FOR TV DEPTH OF 3.0" TO 3.5"	USE BOTTOM HOLE FOR TV DEPTH OF 3.0" TO 3.5"
		USE CENTER HOLE FOR TV DEPTH OF 2.1" TO 3.0"	USE CENTER HOLE FOR TV DEPTH OF 2.6" TO 3.1"
		USE TOP HOLE FOR TV DEPTH OF 1.7" TO 2.1"	USE TOP HOLE FOR TV DEPTH OF 2.2" TO 2.7"
		N/A	USE NYLON ROLLER THRU 3 RD HOLE FROM TOP FOR TV DEPTH OF 1.8" TO 2.3"
		USE GRAY ROLLER THRU 2 ND HOLE FROM TOP FOR TV DEPTH OF 1.0" – 1.7"	USE NYLON ROLLER THRU 2 ND HOLE FROM TOP FOR TV DEPTH OF 1.4" TO 1.9"
		N/A	USE NYLON ROLLER THRU TOP HOLE FOR TV DEPTH OF 1.0" TO 1.5"

Assembly Instruction for Elite DIRECT SUN Models

1. Adjusting TV Swing Brackets for Depth of TV in Direct Sun Models

These bracket placements will position the TV within .75" to 1" of the anti-glare glass to provide proper airflow across the LCD panel and insure the best TV image clarity. Please adjust the brackets as shown below, based on your Apollo enclosure model size and according to the depth of your TV.

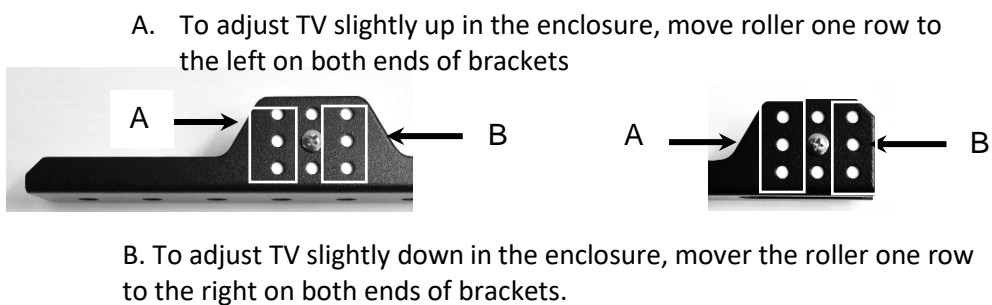
NOTE: Maximum TV Depth for models 43" to 86" is 3.2":

Bottom of Bracket	Top of Bracket	DIRECT SUN Models 43" to 86"
		USE BOTTOM HOLE FOR TV DEPTH OF 3" TO 3.3"
		USE CENTER HOLE FOR TV DEPTH OF 2.6" TO 2.9"
		USE TOP HOLE FOR TV DEPTH OF 2.2" TO 2.5"
		INSTALL EXTENSION BRACKETS AND USE NYLON ROLLER THRU 3 RD HOLE FROM TOP FOR TV DEPTH OF 1.8" TO 2.1"
		INSTALL EXTENSION BRACKETS AND USE NYLON ROLLER THRU 2 ND HOLE FROM TOP FOR TV DEPTH OF 1.4" TO 1.7"
		INSTALL EXTENSION BRACKETS AND USE NYLON ROLLER THRU TOP HOLE FOR TV DEPTH OF 1.0" TO 1.3"

1. Adjusting TV Swing Brackets (Continued)

65", 75", & 86" Apollo models include brackets with extra rows of holes for minor adjustments to vertically center TV up or down.

Proper depth adjustments are still required. Refer to pages 6 or 7.



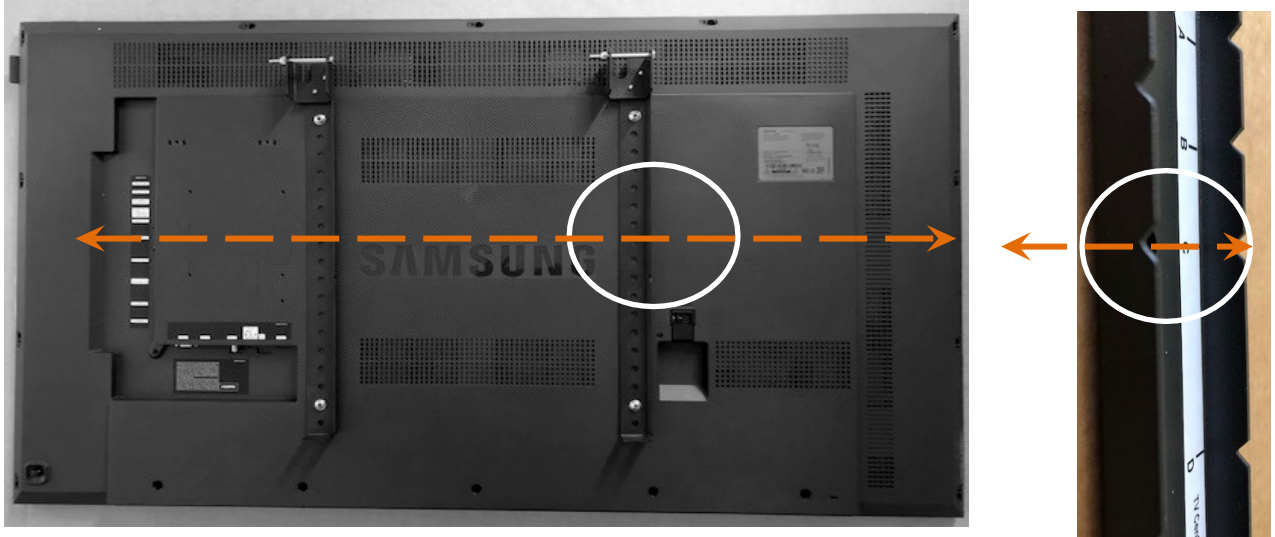
2. Attaching TV Swing Brackets to Back of TV

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



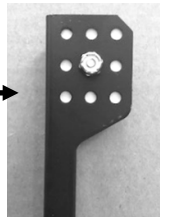
Enclosure/TV Sizes	Center Line Notch Indicator
AE4239 (39"-43")	A
AE5550 (49"-55")	C For Lower VESA patterns, use notch A
AE6560 (60"-65")	D For Lower VESA patterns, use notch A
AE7570 (70"-76")	E For Lower VESA patterns, use notch D
AE8680 (80"-86')	Center Line Label

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



- a. 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.
- b. Place TV swing bracket on back of TV with selected notch in line with TV vertical center. (See picture above)

NOTE: Be sure to orient top of bracket with top of TV. (Top of bracket)

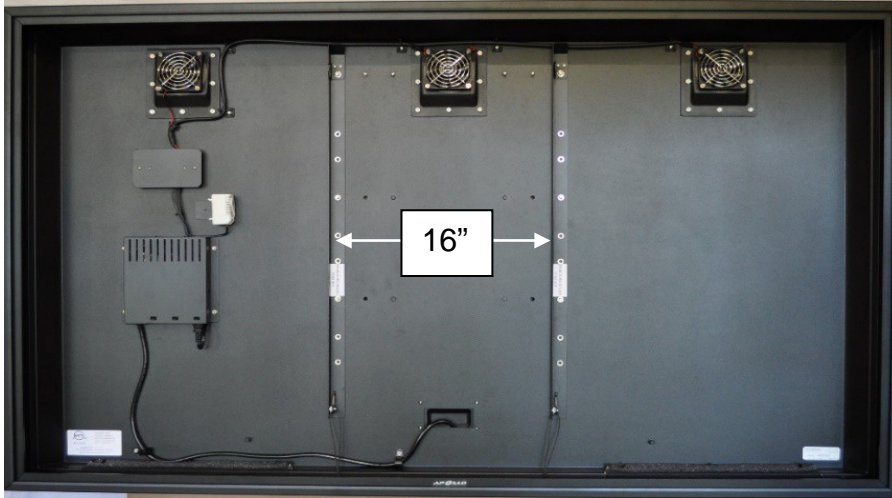


- c. Line up holes on TV swing bracket with TV VESA holes so that the appropriate notch lines up as close to the center line as possible within one (1) hole.

FOR TVs WITH LOWER VESA PATTERNS

- **55", 65", 75" TVs:** If the holes in the TV swing bracket, when properly lined up with the center line, does not reach the bottom TV VESA holes, line up the center line of your TV with notch "A" for 55 & 65" TVs and notch "D" for 75" TVs.
 - **86":** If the TV swing bracket, when properly lined up with the center line, does not cover the bottom TV VESA holes, use extension brackets included with your enclosure.
- d. Select the proper size **metric screw** that fits the TV VESA holes. (These screws are not included with the enclosure and are included with most wall or ceiling TV mounts, purchased separately)
 - e. Securely tighten brackets in place using metric screws and washers. If screws are too long, use additional washers between bracket and screw head.

3. Adjusting Internal TV Stiffener Mounting Brackets to Fit VESA Pattern of your TV



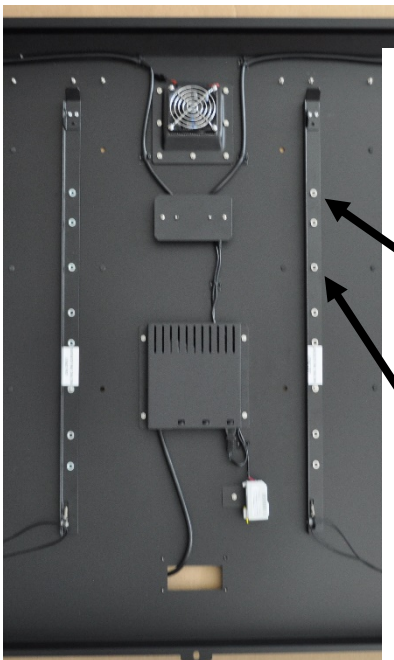
Picture illustrates 65" Apollo Enclosure with brackets in 400mm position. (Approximately 16" apart.)

Measure the spacing between the TV swing brackets assembled to the back of your TV (see Page 8) and, if necessary, adjust the factory preset position of the stiffener brackets based on your TV VESA pattern width. To move the brackets, loosen the 10-24 lock nuts, relocate to the alternate position, and retighten. See below for available VESA settings.

Apollo enclosure models are designed for standard TV VESA pattern widths as follows::

MODEL SIZE	VESA PATTERNS AVAILABLE		
43", 55", 65"	200MM (approx. 8")	300mm (approx. 12")	400mm (approx. 16")
75"	300mm (approx. 12")	400mm (approx. 16")	600mm (approx. 24")
86"	400mm (approx. 16")	600mm (approx. 24")	

3.1 55", 65", 75" TVs with Lower Vesa Patterns (See Page 9c)



- Remove 10 -24 lock nuts (2 places) that secure the internal TV Swing stiffener mounting bracket to the back panel. They are not used with low VESA pattern set up.
- Determine the proper VESA pattern width that matches your TV. (Refer to chart above).
- For 55" and 65" use one of the provided 1/4" x 20 screws through the top hole in the back panel into the top threaded insert of the TV mounting bracket to temporarily secure the bracket in place. Repeat for brackets on both sides. Do not place a screw in the bottom VESA hole at this time.
- For 75" use one of the provided M6 screw through the middle hole in the back panel into the 3rd threaded insert from the top of stiffener bracket to temporarily secure the bracket in place. Repeat for brackets on both sides. Do not place a screw in the bottom VESA hole at this time.

4. Attaching Mount Brackets to Rear of Back Panel



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.

NOTE: Be sure that any unused VESA holes on the back panel are sealed with provided hole plugs. Insert with cone shape facing out



Install the provided hardware through the mount brackets into the threaded holes in the back panel. See below:

Models 43" and 55" use the following provided hardware:

Four (4) SAE 1/4" x 20 screws, stainless steel washers, O-ring rubber washers

Model 65" uses the following provided hardware.

Four (4) Metric M6 x 20 screws, stainless steel washers, O-ring rubber washers

Models 75" & 86" use the following provided hardware.

Six (6) Metric M6 X 20 screws, stainless steel washers, O-ring rubber washers

NOTE: If the vertical mount bracket only covers two (2) of the threaded holes, insert one of the M6 screws with washer and O-ring into the third threaded hole.

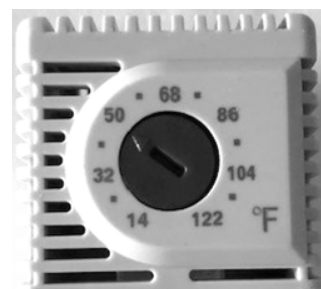
FOR LOW VESA PATTERNS:

For 55", 65", 75" TVs with low VESA pattern (from Page 10, 3.1). Attach mount bracket through bottom hole first, then remove temporary screw on top and reattach through bracket,

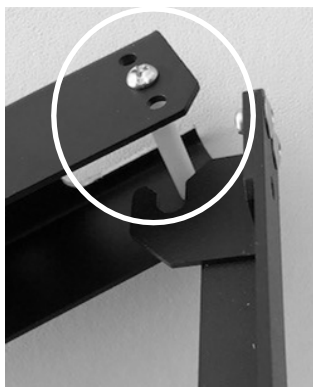
5. Attaching the Back Panel to the Mount

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

- a. 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.
- b. 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)
- c. Run your signal cable(s) from outside through rectangle opening in rear panel to be hooked up in next step.
- d. 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 86°F (30C). 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 86°F (30C).



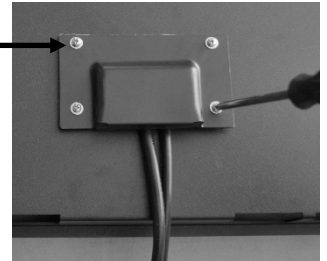
6. Installing the TV to the Back Panel



- a. Lift TV and align swing roller bolts (located on top of TV hanger brackets) above hanger hooks on top of rear panel and carefully lower into place.
- b. Swing bottom of TV outward; plug TV into 3 outlet A/C power receptacle on rear panel and make appropriate signal connections.

6. Installing the TV to the Back Panel (continued)

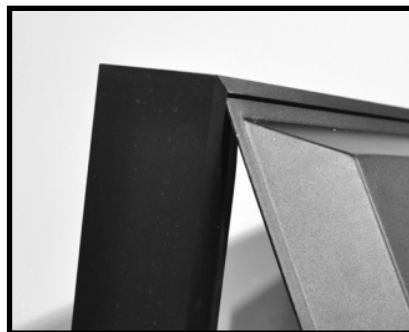
- c. Check side to side alignment to be sure TV is centered left to right. TV will slide left or right to center.
- d. To lock bottom of TV in place, be sure all cables are clear from interfering with TV swing brackets. Pull latch cord down one side at a time, push TV toward bracket, and release cord. Pull out bottom of TV to be sure both latches are engaged.
- e. Attach cable cover by securely tightening four (4) 6-32 screws into threaded inserts. For best results, separate cables and lay flat against rear panel.



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

7. Attach front cover

- a. Remove 10-32 flange nuts from studs on bottom of front cover.
- b. 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.



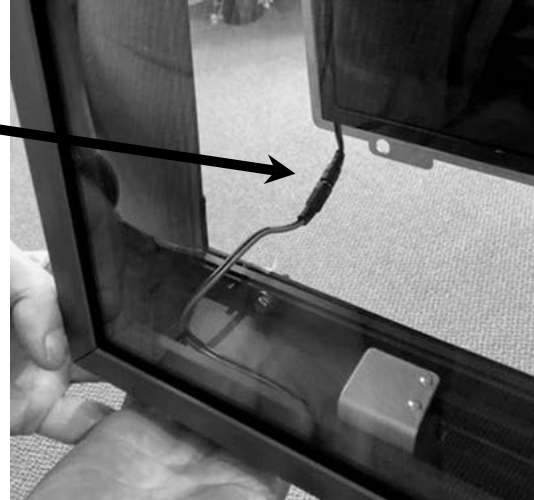
Flange on top of rear panel fits into top channel on front cover.

7. Attach front cover (continued)

IMPORTANT – FOR DIRECT SUN MODELS WITH FANS IN BEZEL

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

Tuck wires underneath TV before securing front cover to back panel.



- c. Push front cover studs through the tabs in the backcover and secure with flange nuts.

IMPORTANT: Tighten with hand tools to secure seal. (Be careful not to overtighten)



- Models 43” – 65” utilize 2 flanged nuts.
- Models 75” & 86” utilize 3 flanged nuts.

Maintenance & Care

An Apollo custom fit Dust cover is recommended to keep your glass and enclosure clean when not in use. (See Optional Accessories at bottom of page)

Cleaning the Glass –

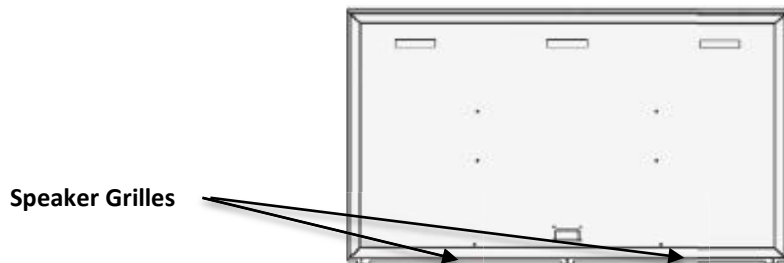
- Apollo enclosures are equipped with anti-reflective safety glass to ensure the best possible viewing experience.
- To properly clean the glass, we recommend the use of a soft cotton or microfiber cloth with a standard 70/30 isopropyl alcohol mix or an ammonia free glass cleaner.
- Spray the cleaner on the soft cloth and gently clean the glass.

DO NOT USE paper towel, coarse fabric material or any ammonia-based glass cleaner as any of these may damage the coating on the glass or leave streaks.

Air filters –

There are dark gray reusable 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.

- To clean the filters located over the speaker grilles, lift tabs on both sides and remove.
- Wash filters 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.
- **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 (HM200i or HM200i-D) 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° F (-20° C).

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 warranted 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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