AssuredSAN 4U56 Enclosure Bezel Kit Installation

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The person using these instructions must be qualified to service and install storage products.

Before you begin

Verify that the target controller or drive enclosure has been properly installed in an environment that meets requirements for space, airflow, temperature, and power. Verify that the enclosure is available and ready for the ensuing bezel installation or air filter maintenance procedures.

IMPORTANT: Nominal vertical spacing between enclosures is necessary to allow for bezel installation and removal, and servicing of the air filter.

Required tools

Antistatic protection devices

CAUTION: Parts can be damaged by electrostatic discharge (ESD). Be sure you are properly grounded before touching a static-sensitive component to minimize potential for electrostatic discharge.

Bezel assembly components

The enclosure bezel — comprised of a vented cover with an EMI (Electromagnetic Interference) shield — is pre-assembled and packed in foam within a box included in the master shipping container. The basic bezel configuration does not include an air filter; however, a removable air filter is available as an optional feature for applications requiring it. For sake of completeness, these instructions address servicing the air filter for customers using that bezel option.

The air filter — comprised of a frame, mesh screen, foam insert, and laminated foam pads — is also pre-assembled, and it is pre-installed within the enclosure bezel of kits configured with the option.

The air filter is reusable if removed, properly cleaned, and reinstalled. Over time, however, the air filter will ultimately require replacement.

NOTE: See the topics about cleaning and replacing the air filter in the following sections.

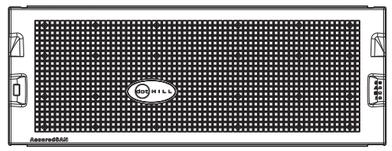
1. Overview

These instructions address *a*) the attachment of the bezel assembly to the front (drawer-facing side) of a previously-installed enclosure, and *b*) removal and cleaning or replacement of the optional bezel air filter.

The following illustration shows front views of the bezel assembly and its removable air filter sub-assembly. The second illustration in this series of illustrated procedures provides an *orientation key* that labels enclosure sides for reference when performing tasks.

4U56 enclosure bezel kit components

4U56 enclosure bezel assembly - front view



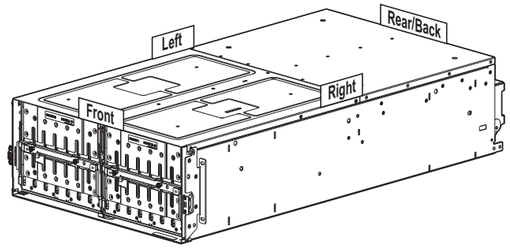
Optional air filter sub-assembly - front view

(Sectioned-cutaways show metal mesh behind foam)

2. Installing the bezel

Within the master enclosure container, locate the long shallow/narrow box containing the bezel kit. The box lid should be labeled. Keep the bezel in the box until needed.

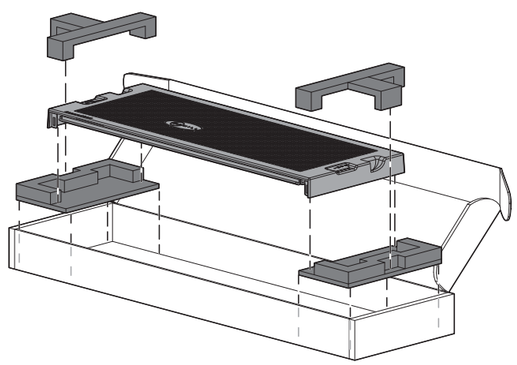
The figure below shows a pictorial view of an enclosure. The bezel attaches to the enclosure face labeled “Front.”



1. Identify the enclosure to which the bezel will be attached.

   The figure above shows an installed enclosure — with ears exposed — that is ready for bezel installation.

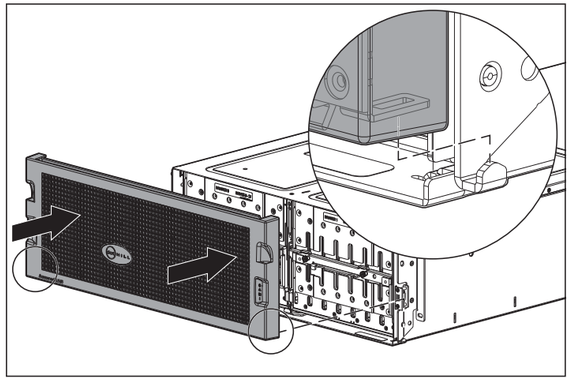
2. Open the box containing the bezel, and swing the lid back to reveal the bezel assembly packaged in foam. Remove the contents.



Bezel assembly

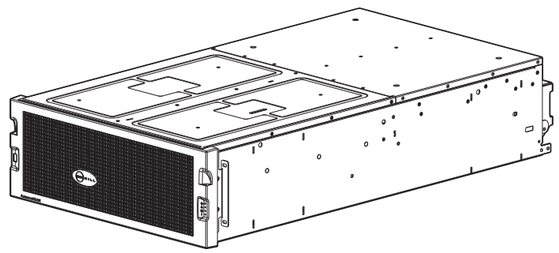
Once you have removed the bezel assembly from its foam-packed box, examine it carefully to verify that it is properly configured (with or without an air filter) to address your site requirements.

3. Orient the bezel assembly to align its back side with the front face of the enclosure as shown in the figure below.



4. Face the front of the enclosure. Tilt the bezel forward, and guide the two angle-bracket slots on the backside of the bezel onto the two upturned flanges located on sidemount brackets near the front of the enclosure on the exterior left and right chassis walls.

   Gently slip the integrated ear covers onto the push-fit ball studs, taking care to guide the LED indicators through bezel openings.



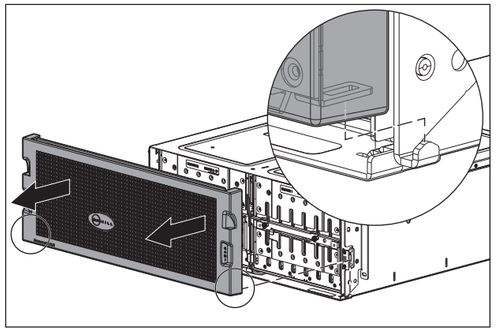
5. Gently push-fit the two ear cover areas of the bezel (interior sleeves) onto the ball studs to secure the bezel in place.

CAUTION: Whether configured with or without an air filter, to ensure adequate EMI protection from the product, the bezel should be properly installed while the enclosure is in operation.

3. Removing the bezel and air filter

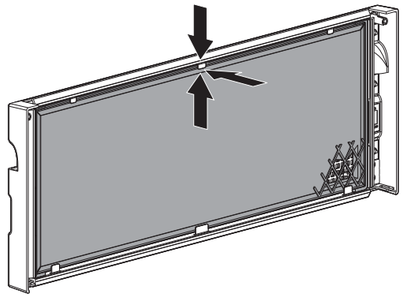
To replace or clean the dust-filtration air filter, you must first remove the bezel assembly from the enclosure. Once the bezel is detached from the enclosure, you can remove its air filter.

1. Openings are provided between the vented grille and ear LEDs on the bezel. While facing the front of the enclosure, insert the index finger of each hand into the top of the respective (left or right) opening, and insert the middle finger of each hand into the bottom of the respective opening, with thumbs on the bezel's bottom. Gently pull the top of the bezel while applying slight inward pressure below, to release the bezel from the ball studs. Lift the bezel to release it from the mounting flanges.



2. While holding the bezel in one hand, gently slip your thumb or index finger between the top of the filter frame and its foam insert on the back side of the bezel. Ensure the EMI gaskets remain attached to the bezel.

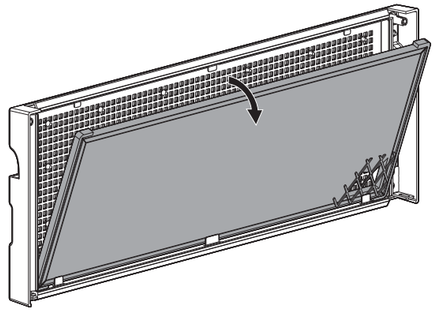
   At the location indicated by the large arrow in the figure below, gently pull the top of the filter frame downward and outward to clear the bezel retaining flange, and to dislodge the two laminated external foam pads from the interior walls of the bezel.



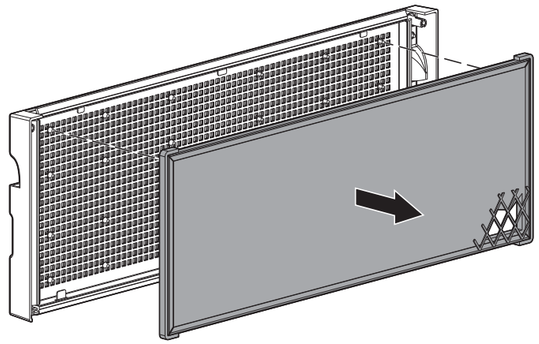
NOTE: The air filter mesh — which would be fully visible in the above orientation — is simplified for clarity.

3. Gently tug the top of the filter frame to revolve it away from its vertical position, and then pull upwards to release the filter from the two mounting channels at the base of the bezel.

   The mounting channels are shown at the base of the bezel in the figure below, with corresponding guide flanges shown beneath the top face of the bezel.



4. Carefully extract the air filter from the bezel.



5. If you plan to service and reuse the air filter, proceed to "step 4 — Cleaning the optional air filter." Otherwise, proceed to "step 5 — Replacing the optional air filter."

4. Cleaning the optional air filter

The air filter sub-assembly contains a reusable open cell polyurethane foam insert. This filter media should be cleaned or replaced every three to six months.

If you elect to reuse the media, you can clean the air filter sub-assembly using any of the following methods:

- Spray the filter — using slightly compressed air — from an air compressor equipped with an air hose and nozzle.
- Vacuum the filter using moderate suction.
- Rinse the filter with clean water at low pressure.

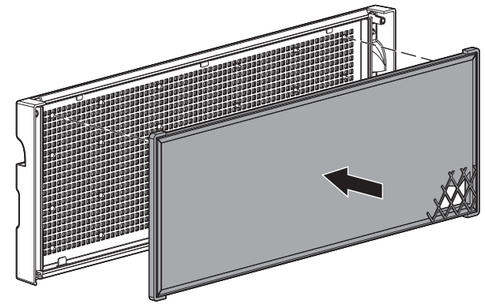
If a degreaser is required, use a mild detergent such as dishwashing liquid. Avoid using harsh solvents or cleaning agents.

Although the filter is reusable, replacement is recommended every two to three years to ensure the durability of the media, and to mitigate dust build-up and air flow resistance.

5. Replacing the optional air filter

Whether replacing an air filter or reusing one that has been reconditioned, install the air filter into the bezel *before* reattaching the bezel to the front of the enclosure.

1. Locate the bezel removed from the enclosure during "step 3 — Removing the bezel and air filter."
2. Orient the bezel to view its back side.
3. Orient the air filter in a forward-facing position, with the foam facing forward — toward the bezel vents — and the retaining mesh facing away from the bezel.



Mesh atop foam is only partially shown

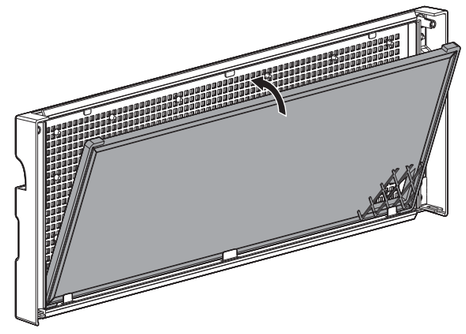
NOTE: The air filter mesh — which would be fully visible in the above orientation — is simplified for clarity.

4. Align the bottom corners of the air filter per the thrust lines shown in the illustration above.

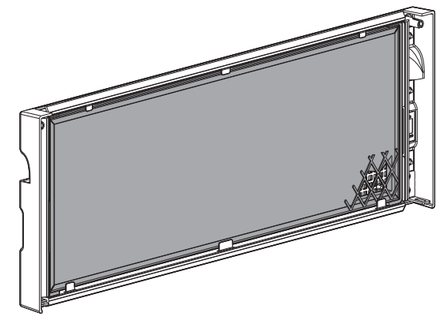
   You will insert the bottom edge of the air filter frame into the two mounting channels.

5. While tilting the top of the air filter frame slightly away from the bezel — about the horizontal axis — slip its bottom edge into the mounting channels as far as the filter will go.
6. Gently revolve the air filter into its vertical position, taking care to ensure that the foam pads of the filter frame seat snugly against the interior walls of the bezel.

   The two filter mounting channels are shown at the base of the bezel in the figure below. One of the channels is located on the lower left side of the EMI shield, and the other is located on the lower right side of the EMI shield.



Once properly seated — and revolved into position — the installed air filter should appear as shown in the figure below; albeit with visible foam-retaining mesh in front of the shaded foam insert (the mesh is only partially shown in the illustrations provided in this document).



General guidelines concerning air filters in inventory

- Replacement air filter storage:

  Air filters in inventory should be stored in an environment that is cool, dry, and dark. Heat, humidity, and ultraviolet light can damage air filters.

- Replacement air filter inventory on-hand:

  Purchase cost-effective quantities of replacement air filters to maintain sufficient inventories for no more than a few months. Following this approach will enable you to avoid stock-outs and mitigate inventory loss due to shrinkage.

6. Reattaching the bezel

Once the air filter is successfully installed within the bezel, you can reattach the bezel to the front face of the enclosure. See sub-steps 3–5 in "step 2 — Installing the bezel."

7. Next steps

Finish the enclosure bezel installation by verifying enclosure and component operation. Use either of the following methods to verify enclosure and component operation.

Using management interfaces

Use the web-based management interfaces (the SMC (v3), RAIDar (v2), or the CLI) to monitor the storage system, including monitoring of event notification.

Make note of any irregularities, and troubleshoot as necessary using the fault isolation methodology described in your product Setup Guide.

If the system has not yet been configured or provisioned, use the SMC (v3) or RAIDar (v2) to perform the tasks. See the Storage Management Guide pertaining to your product for information on configuring and provisioning the system.

Using LEDs

Observe the enclosure LEDs (see "LED descriptions" within your product Setup Guide for more information).

Make note of any irregularities, and troubleshoot as necessary using the fault isolation methodology described in your product Setup Guide.