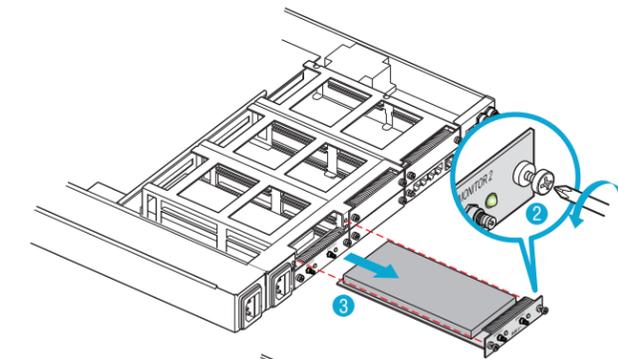


Removing and Replacing an Input/Output (I/O) Module

Note: The device must be turned off when removing and replacing an I/O module. Use NMX or Standalone mode (ProStream only) to make sure the service configuration is cleared before powering down the system.

To remove an I/O module:

1. Turn off the device.
2. Using a Phillips-head screwdriver, remove the two screws attaching the module to the back of the chassis, as shown in step 2.
3. Pull firmly on the module to remove it from the chassis, as shown in step 3.



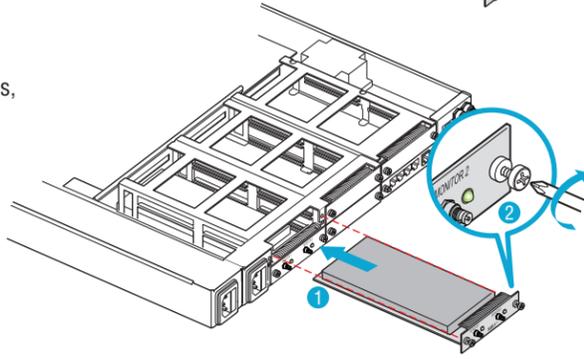
To replace an I/O module:

1. Insert the module into an appropriate empty slot on the back of the chassis, as shown in step 1.



Warning: Make sure the module is level and goes into the device smoothly without binding or scraping other modules. The module must slide easily until you feel it engage the internal connector and you see that it is flush with the back of the device. Do not force the module.

2. Using a Phillips-head screwdriver, secure the module to the chassis, as shown in step 2.



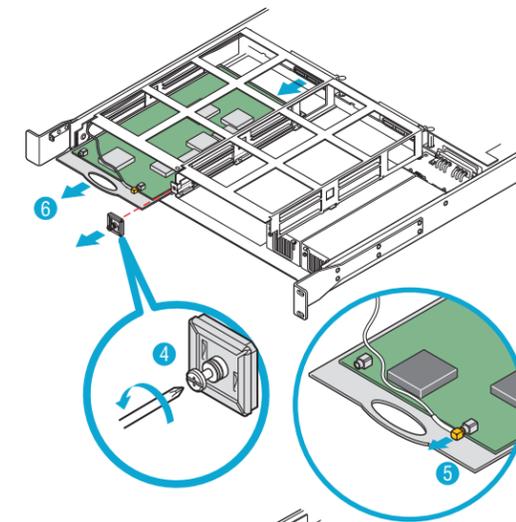
Warning: Wear the appropriate ESD protection when unpacking modules from their antistatic packing material. Unpack and handle the module away from electric motors, transformers, and similar machinery.

Removing and Replacing an AVPM Card

Note: The device needs to be turned off when removing and replacing an AVPM card.

To remove an AVPM card:

1. Turn off the device.
2. Remove the bezel.
3. Remove the fan tray assembly.
4. Using a Phillips-head screwdriver, remove the screw attaching the card retainer to the chassis, as shown in step 4.
5. For the Electra 9200, if a mini-SDI connector is present, disconnect the connector identified in step 5.
6. Grab the card handle and slide the card from the chassis, as shown in step 6.



Note: When facing the front of the device:

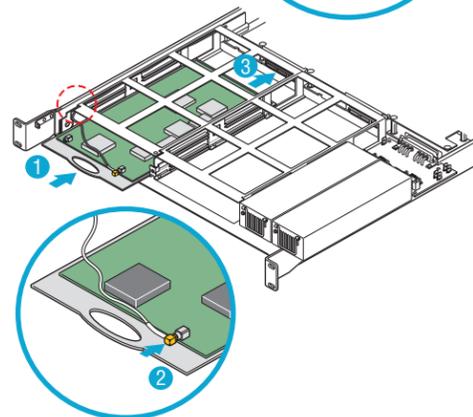
The bottom-left card is card 1. The top-left card is card 3.
The bottom-right card is card 2. The top-right card is card 4.

To replace an AVPM card:

1. From the front of the device, insert the card part way into the chassis, as shown in step 1.
2. For the Electra 9200, if necessary, reinstall the mini-SDI connector to the card, as shown in step 2.

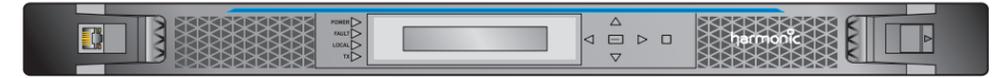
Note: On the Electra 9200, the cables for cards in slots 1 and 3 should be tucked under the card cage so they don't get pinched, as indicated by the red circle.

3. Slide the card the rest of the way into the chassis until the module engages with the chassis connector, as shown in step 3.
4. Reinstall the card retainer.
5. Reinsert the fan tray.
6. Reinstall the bezel.



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Electra™ 9200 and ProStream® 9100 Component Replacement Guide



For complete Electra 9200 installation instructions, refer to the *Electra 9200 Installation Guide*.

For complete ProStream 9100 installation instructions, refer to the *ProStream 9000 Installation Guide*.

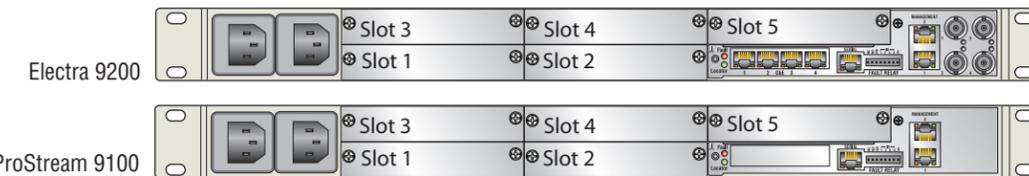


Warning: The illustrations in this guide show the cover of the device removed. The illustrations were created with the cover removed for ease of explanation. The cover should never be removed.

Note: Some procedures in this guide may vary between devices. Please read the instructions carefully before replacing any components on your device.

Module Slots

The illustrations below show the slot numbers of the dual power supply model of the Electra 9200 (ELC-9200D) and the ProStream 9100.



Module Slot Configurations

This table shows module configurations available for the Electra 9200 and 9200D.

Note: The AHC-561 audio card is being deprecated on the Electra 9200/9200D. IOM-RAC2 and AHC-RAC are the recommended audio cards for that encoder.

	Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	
FLEX -1				X	X	1 or 2 per chassis
IOM-RAC2			X			1 per chassis Note: Must use slot 3
AHC-RAC	X	X	X	X	X	1 to 5 per chassis
AHC-561	X	X	X	X		1 to 4 per chassis Note: Cannot be used with FLEX
8VSB	X	X	X			1 per chassis
ASI Out		X			X	1 per chassis
ASI In	X		X	X		1 per chassis

This table shows module configurations available for the ProStream 9100.

	Slot 1	Slot 2	Slot 3	Slot 4	Slot 5	
Quad GbE	X	X				1 per chassis
Dual GbE	X	X				1 or 2 per chassis
8VSB	X	X	X	X	X	Up to 4 per chassis
ASI-SCR	X	X	X	X	X	Up to 5 per chassis

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Removing and Replacing the Bezel

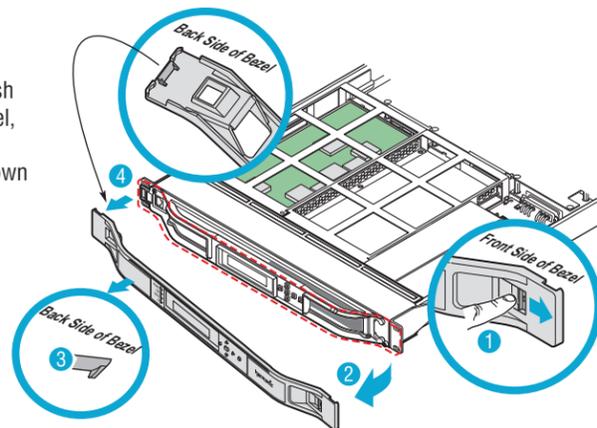


Warning: The front panel display on the device is susceptible to electrostatic discharge (ESD) when the bezel is removed. Wear the appropriate ESD protection when the bezel is removed.

Note: You do not need to turn off the device when removing and replacing the bezel.

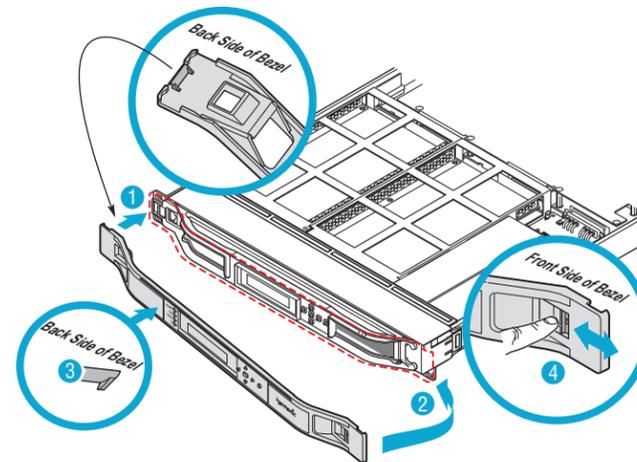
To remove the bezel:

1. Locate the lever on the front of the bezel, and push to the right to disengage the right side of the bezel, as shown in step 1.
2. Pull the right side of the bezel toward you, as shown in step 2.
3. Ease the bezel away from the fan tray. The bezel is secured to the fan tray by a clip, as shown in step 3.
4. Ease the left side of the bezel away from the unit, as shown in step 4.



To replace the bezel:

1. Replace the bezel by inserting the plastic catch at the back of the of the left side of the bezel into the slot in the metal frame, as shown in step 1.
2. Ease the right side of the bezel onto the device, as shown in step 2.
3. Push the front of the bezel flush with the fan tray to secure the clip that holds the bezel to the fan tray, as shown in step 3.
4. Locate the lever on the front of the bezel and push to the right to snap the bezel into place, as shown in step 4.

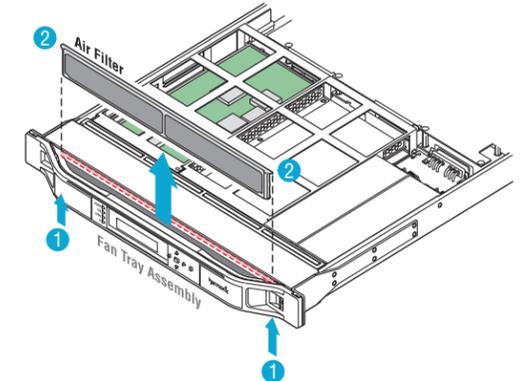


Removing and Replacing the Air Filter

Note: You may need to slide the chassis forward to enable this procedure. You do not need to turn the device off to remove and replace the air filter.

To remove the air filter:

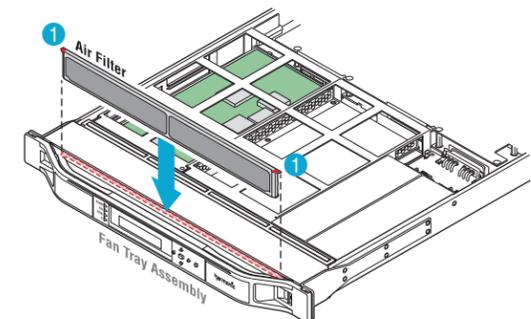
1. Using your fingers, push up on the air filter unit from the bottom of the chassis until the filter is displaced, as shown in step 1.
2. Remove the filter from the chassis.
3. Inspect the air filter for dirt, and clean it if necessary.



Note: When the filter is new, its color is medium charcoal. As dust and dirt collect in the porous filter material, the color of the filter gradually changes to brown, then to an ash color.

To replace the air filter:

1. With your fingers on the corners of the filter (indicated in red), push down on the filter until it is secure in the chassis, as shown in step 1.



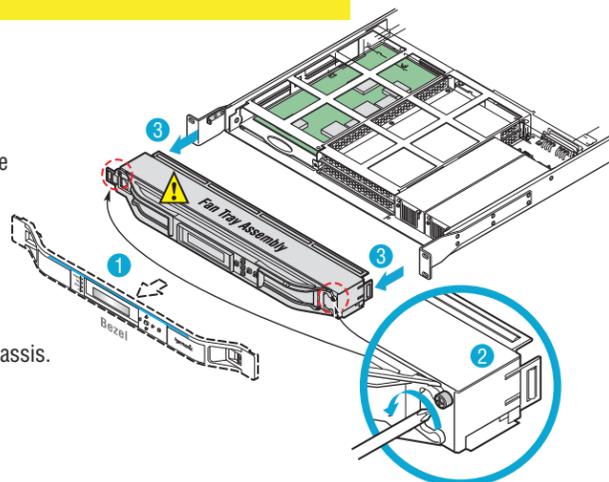
Removing and Replacing the Fan Tray Assembly



Warning: The front panel display unit attaches to the front of the fan tray unit. The front panel display should never be removed.

To remove the fan tray:

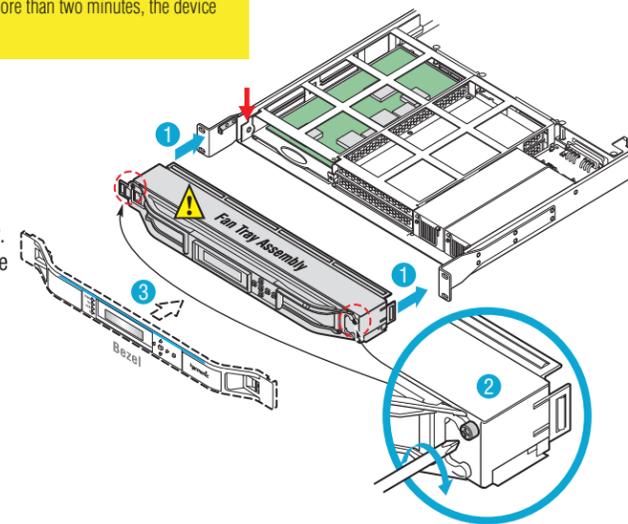
1. Remove the bezel.
2. Using a Phillips-head screwdriver, remove the two screws that attach the fan tray assembly to the chassis, as shown in step 2.
3. Grasp the front of the fan tray assembly, and pull the tray firmly but smoothly toward you to disengage it from the PC connector inside the device, as shown in step 3.
4. Slide the fan tray assembly away from the chassis.



Warning: If the fan tray unit is removed for more than two minutes, the device may shut down.

To replace the fan tray:

1. Replace the fan tray assembly by sliding the tray into the chassis, engaging the PC connector identified by the red arrow.
2. Using a Phillips-head screwdriver, secure the fan tray assembly to the chassis, as shown in step 2.
3. Reinstall the bezel.



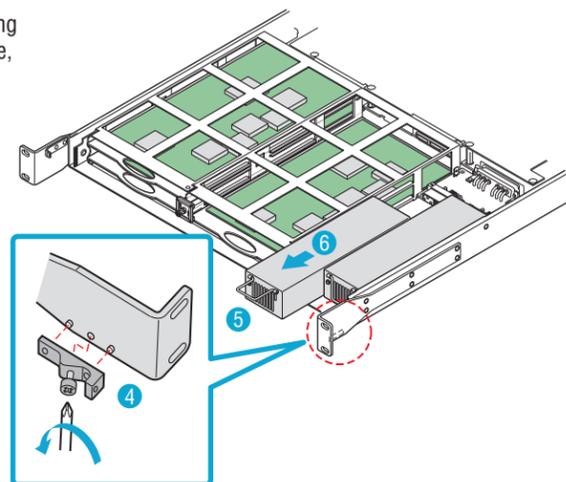
Removing and Replacing a Power Supply

Note: Electra 9200D or ProStream 9100: If you are replacing only one power supply on a dual power supply device, you do not need to turn off the device.

Electra 9200: If you are replacing a power supply on a single power supply device, turn off the device.

To remove a power supply:

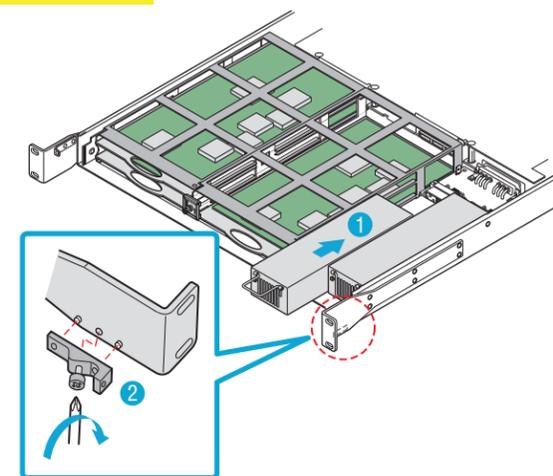
1. Remove the bezel.
2. Remove the fan tray unit.
3. If the power supply on the right is being replaced, use a Phillips-head screwdriver to remove the bracket attached to the inside of the chassis on the right side, as shown in step 4.
4. Grasp the metal handle on the front of the power supply, and pull firmly to disengage the power supply from the connector, as shown in step 5.
5. Slide the power supply away from the device, as shown in step 6.



Warning: If the power supply is removed for more than two minutes, the device may shut down.

To replace a power supply:

1. With the bezel and fan tray assembly removed, insert the power supply into the chassis until it engages with the connector, as shown in step 1.
2. If necessary, use a Phillips-head screwdriver to attach the bracket to the right inside of the chassis, as shown in step 2.
3. Reinstall the fan tray assembly.
4. Reinstall the bezel.
5. Connect power to the power supply.



Replacing the Power Supply Fuse

Note: For single power supply models of the Electra 9200, a spare fuse is located in the fuse cover. No fuse is available on dual power supply models of the Electra 9200D or the ProStream 9100.



Caution: Disconnect the power cord before removing the fuse.

To replace the power supply fuse:

1. Unplug the power cord.
2. Pull down the fuse cover, and remove the old fuse.
3. Install the new fuse.

