This document outlines how to replace a failed Crosspoint Fan Module in the ULTRIX-FR12 chassis.

⚠️ **Caution** — *When servicing or moving equipment, always observe safe handling practices. Follow all safety rules of your workplace.*

⚠️ **ESD Susceptibility** — *Static discharge can cause serious damage to sensitive semiconductor devices. Avoid handling circuit boards in high static environments such as carpeted areas and when synthetic fiber clothing is worn. Always exercise proper grounding precautions when working on circuit boards and related equipment.*
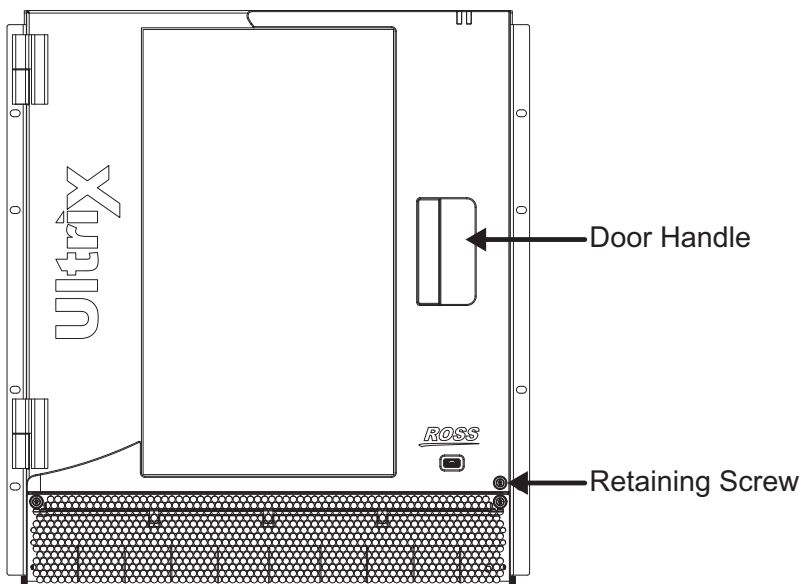
Required Equipment

You will need:

- an Ultrix-FR12-FCBFAN Replacement Kit
- a #1 Phillips screwdriver
- a #2 Phillips screwdriver

Opening the Front Panel Door on the ULTRIX-FR12 Chassis

You must first open the front panel door before you can access the failed Crosspoint Fan Module.

To open the front panel door

✸ The front panel door is secured to the chassis with strong magnets and a retaining screw.

1. Locate the retaining screw on the bottom of the panel door.
2. Use a #2 Phillips screwdriver to loosen the retaining screw.
3. Locate the handle on the front panel.
4. Pull the handle towards you to fully open the door.

Door Handle

Retaining Screw
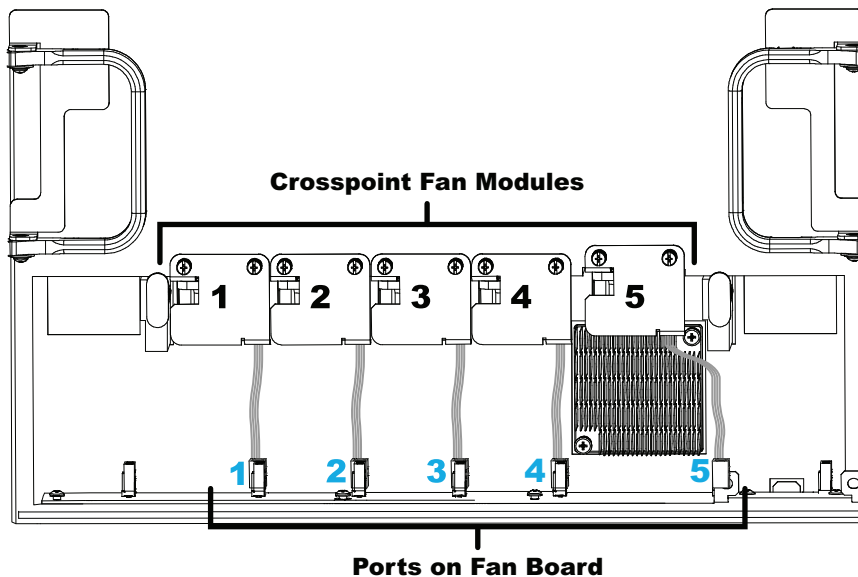
Removing the Failed Crosspoint Fan Module

Each Crosspoint Fan Module is secured with two screws and connected with a plug that is inserted in the fan board below the module. Removing a failed module requires you to first disconnect the module from the fan board, and unfastened the screws holding the module to the chassis.

✦ The failed Crosspoint Fan Module is reported in DashBoard on the Frame Configuration > Fans & Power tab as the Front Fans 1 and 2[1]. Refer to the **ULTRIX-FR12 User Guide** for details.

To remove the failed Crosspoint Fan Module

1. Locate the row of fans located below the Crosspoint Fan Module and the red handles.

2. Locate the failed module (1-5 in the figure below) and note its orientation in the chassis.

3. Locate the wires and plug (blue 1-5 in the figure below) that connect the failed module to the fan board.

✦ The LED next to failed module plug on the fan board is lit red.

Crosspoint Fan Modules

Ports on Fan Board

✦ The wires and plug are located on the bottom right corner of the module and connect to a specific port, on the fan board, directly below the module.

4. Make a note of the orientation of the wires and plug of the module to its port on the fan board. This information will be helpful for the installation of the new module.

   • Each module has one plug that is inserted into a specific port on the fan board.
   • There are four wires on the plug for each module.
   • Refer to the silk-screen labels on the fan board to identify each port.

⚠️ **Caution** — *Active cooling fans. Coming into contact with the spinning cooling fans on the module(s) next to the failed Crosspoint Fan Module may result in injury to personnel and/or damage equipment.*

5. Disconnect the module from its 4-pin port on the fan board.

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1. Where Fan 1 refers to Modules 1 and 2 in the fan bank. Fan 2 refers to Modules 3-5 in the fan bank.

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live product specialist located right here in our facility.
Tel: (+1) 844 • 652 • 0645
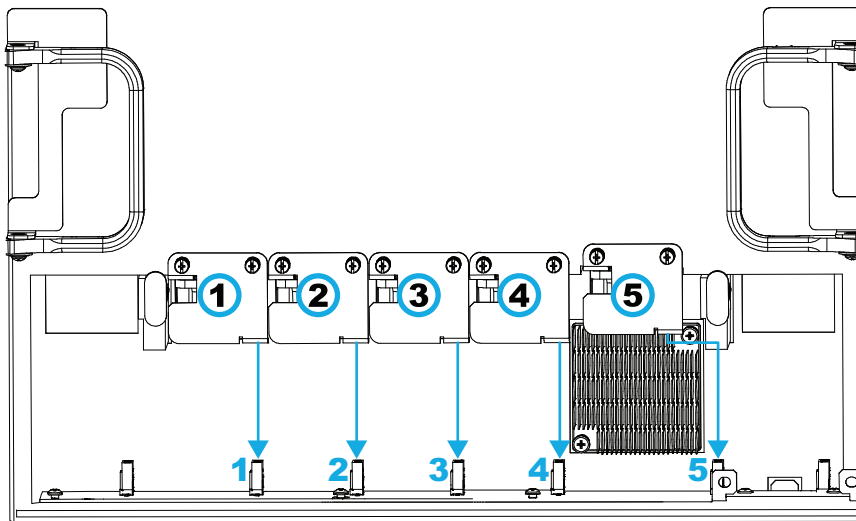**Email: techsupport@rossvideo.com**

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6. Use a #1 Phillips screwdriver to fully loosen the retaining screws on the module.

7. Carefully grip the module and slide it towards you until it is fully disengaged from its slot.

Installing the New Crosspoint Fan Module

Installing a new module requires you to connect the module to its port on the fan board, position the new Crosspoint Fan Module in the available fan slot, and affix the module via its two retaining screws.

To position the new Crosspoint Fan Module

1. Locate the available slot (1-5) for the module you are replacing.

2. Position the new module so that:

   • the metal square faceplate faces you
   • the retaining screws are topside
   • it aligns with the other modules

To affix the new Crosspoint Fan Module

1. Hold the module in one hand to keep it in position within its slot.

2. Use a #1 Philips screwdriver to tighten the retaining screws and affix the Crosspoint Fan Module.

✷ Use approximately 4 to 5 in-lbs of torque to tighten each screw.

⚠️ **Caution** — *The module retention screws are required to ensure proper contact.*

To connect the new Crosspoint Fan Module to the Fan Board

1. Locate the available port on the fan board for the module you are replacing.

2. Position the module connector so that its two vertical ridges are on the left side and its plastic retainer slots in between the ridges on the fan board port.

3. Wrap the wires as required to keep the wires organized and together.

4. Verify that the wires are not pinched or interfere with other components.

✷ The LED next to failed module plug on the fan board is now unlit.

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Replacing a Crosspoint Fan Module in the ULTRIX-FR12

Closing the Front Panel Door

Once the new Crosspoint Fan Module is installed, you must close the front panel door of the ULTRIX-FR12 chassis.

To re-install the front panel door

1. Close the door.

2. Ensure the door handle, on the front right corner is engaged.

3. Secure the door into position:

    a. Locate the locking screw near the bottom right corner of the door.

    b. Use a #2 Phillips screwdriver to tighten the screw.

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