Extron

Replacing the Quantum Ultra® Disk Drives and System Board Computer Assembly

The Quantum Ultra has two solid state hard disk drives:

- **C: drive** — Contains the internal operating system and hardware drivers.
- **D: drive** — Contains system configuration data. This drive can also store local source content, such as image files.

One or both of these drives can be removed and replaced if they should fail during operation.

The System Board Computer (SBC) assembly contains the two disk drives and the system computer. This entire assembly can be removed and replaced if necessary.

> **NOTE:** It is **not** necessary to remove the entire SBC in order to replace only the disk drives.

Replacing a Disk Drive

> **ATTENTION:**
> - The disk drives are NOT hot-swappable and cannot be switched while the unit is operating. Always power off the Quantum Ultra before removing a drive.
> - Ces disques NE sont PAS interchangeables à chaud et il est impossible de les changer durant le fonctionnement de l'unité. Mettez toujours hors tension le Quantum Ultra avant de retirer un disque.

> **NOTE:** Before replacing a disk drive, confirm you have copies of the following files related to your Quantum Ultra system:
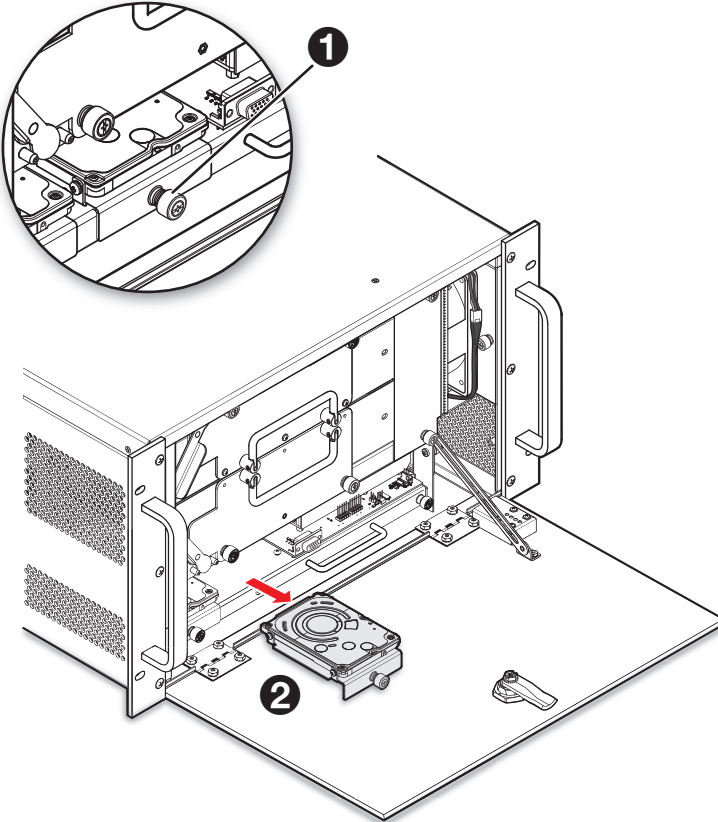> - Project file currently loaded on the device
> - Picture files currently loaded on the device
> - Commissioning Report
>
> Use VCS to connect to the unit and obtain the project file and commissioning report. Picture files can be downloaded from the D: drive of the unit using the System HDMI and USB connections (see the *Quantum Ultra User Guide*, available at **www.extron.com**, for more information.

Replacing the Quantum Ultra Disk Drives and SBC (Continued)

To replace a disk drive:

1. Shut down the unit and disconnect the power.

2. Use a screwdriver or other appropriate tool to loosen the thumbscrew on the drive (see figure 1, ❶) by rotating it counterclockwise.

3. Grasp the thumbscrew firmly and pull the drive (❷) straight toward you until it is free.
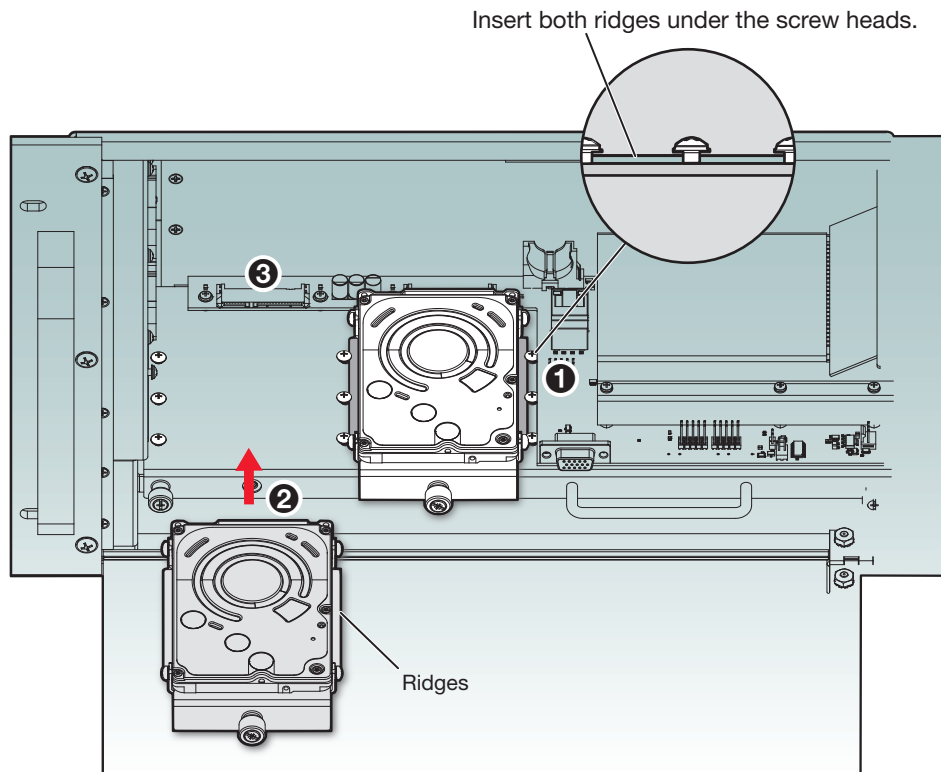

Figure 1. **Removing the Disk Drive**

> **ATTENTION:**
> - Thumbscrews should be tightened with an appropriate tool after both initial installation and subsequent access to the drives.
> - Les vis doivent être serrées avec un outil adapté après la première installation et l'accès postérieur au panneau.

> **NOTE:** The thumbscrews cannot be removed completely.

4. Insert the replacement drive so that the right and left edges pass under the inside edges of the three screws on the right and left sides of the drive (see **figure 2**, ❶, on the next page).

> **NOTE:** You are not able to see the second and third pairs of screws. However, if you press the drive straight back after it passes under the first pair of screws, without letting its front edge rise up, it should pass under the remaining screws as well.

Insert both ridges under the screw heads.

Figure 2. **Inserting the Hard Drives**

5. Continue pressing the drive into its space until it stops. The pins on the back edge of the drive (see figure 2, ❷) should insert into the receptacles on the board at the back of the compartment (❸).

6. Use a tool to tighten the thumbscrew and secure the drive in place.

7. Power the system back on. New firmware is automatically installed before you are able to proceed.

8. After the firmware is successfully loaded, perform a device reset, using the Quantum Ultra Control Panel as follows (see the *Quantum Ultra User Guide* at **www.extron.com** to access the Control Panel):

    a. On the Control Panel, click the `Reset Device` button.

    b. On the `Reset Device` window, select the `Reset All Settings and Delete All Files` radio button (see figure 3) to reset the unit to factory defaults. All user-uploaded image files are deleted, IP settings are reset to default, and the default image files are restored.

Figure 3. **Reset Device Window**

    c. Click the `Reset` button. A reset confirmation prompt appears.

    d. Click `OK` on the prompt. The unit reboots and resets. The password is reset to `extron`.

    > **NOTE:** The factory configured passwords for all accounts on this device have been set to the device serial number. In the event of an absolute system reset, the passwords convert to the default, which is extron.

9. Set the IP address of the device using the Control Panel, SIS commands, or VCS (see the *Quantum Ultra User Guide* or the *Quantum Ultra VCS Help File*).

10. Use the latest project file to connect to the device with VCS and confirm the system is operational.

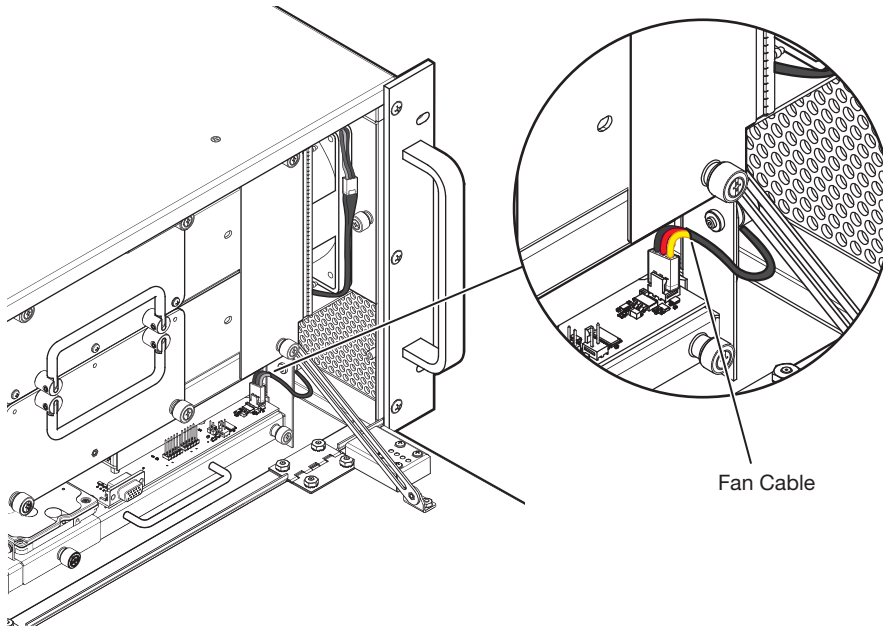## Replacing the System Board Computer Assembly

> **ATTENTION:**
> - The SBC assembly is **NOT** hot-swappable and cannot be switched while the unit is operating. Always power off the unit before removing the SBC assembly.
> - L'ensemble de composants SBC **N'EST PAS** interchangeable à chaud et il est impossible de le changer durant le fonctionnement de l'unité. Mettez toujours hors tension le Quantum Ultra avant de retirer l'ensemble SBC.

Removing the SBC Assembly

1. Shut down the unit and disconnect the power.

2. Remove the two hard drives from the SBC assembly and set them aside. They will be used with the new assembly (see **Replacing a Disk Drive** on page 1).

   > **NOTE:** It is not necessary to replace the disk drives whenever you replace the SBC. If either or both drives are functioning adequately, remove them first, then reinstall them after installing the new SBC.

3. Unplug the lower fan cable from the 3-pin connector at the right front corner of the SBC assembly (see figure 4).
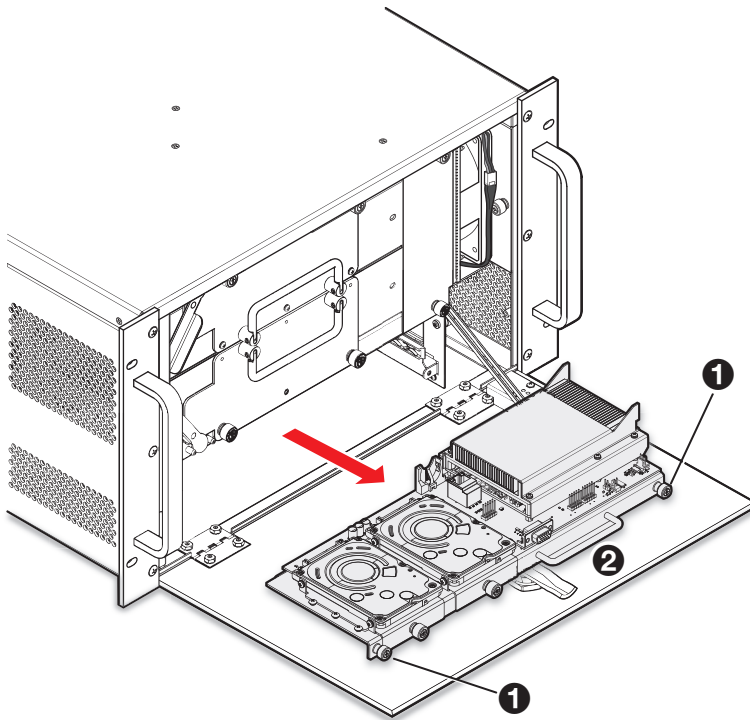

Fan Cable

Figure 4. Unplugging the Fan Cable

4. Use a screwdriver or other appropriate tool to loosen the thumbscrews at the right and left edges of the assembly (see figure 5, ❶).

> **ATTENTION:**
> - Thumbscrews should be tightened with a tool after both initial installation and subsequent access to the assembly.
> - Les vis doivent être serrées avec un outil adapté après la première installation et l'accès postérieur au panneau.

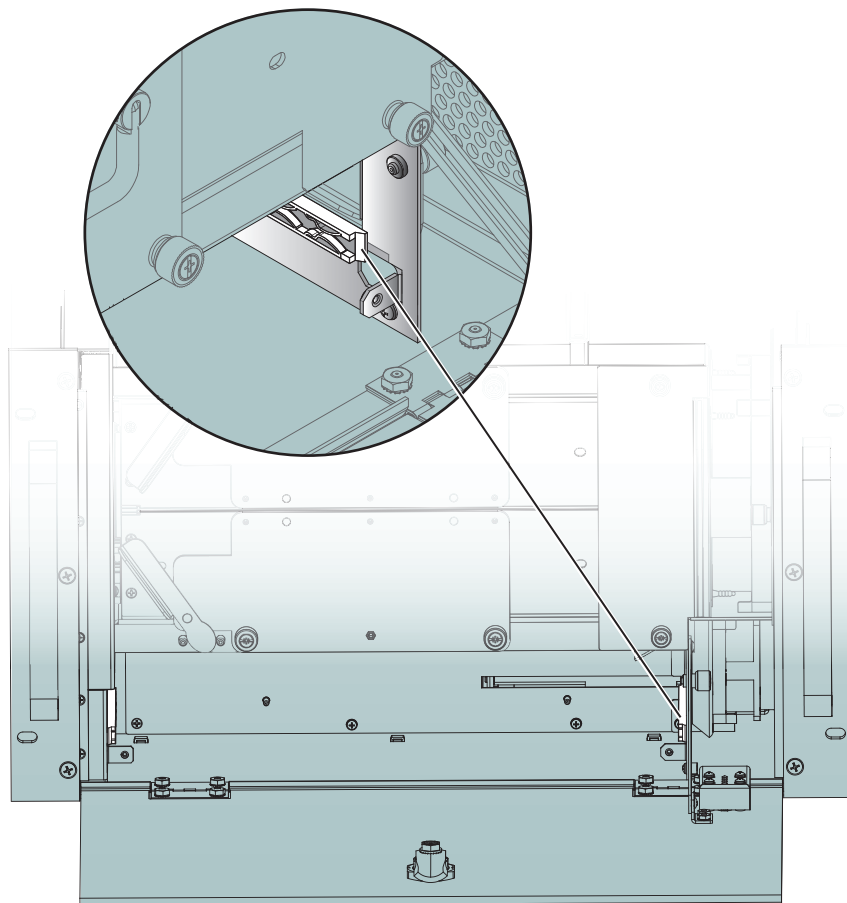> **NOTE:**   The thumbscrews cannot be removed completely.

5. Pull the handle on the SBC assembly (❷) toward you until the assembly is free of the chassis.

Figure 5.   **Removing the SBC Assembly**

Installing a New SBC Assembly

1. Align the edges of the new assembly with the tracks inside the chassis on the right and left sides.

Figure 6.   **Tracks to Insert the SBC Assembly**

2. Slide the assembly into the chassis and press it firmly into place, so that the pins on the back of the SBC board are plugged into their receptacles on the chassis.

> **NOTE:**   The SBC assembly is not completely in place until you hear or feel it snap. If you do not feel it snap into position, press on it more firmly until you do.

3. Use a screwdriver or other appropriate tool to tighten the right and left thumbscrews on the SBC assembly.

4. Attach the lower fan cable to the 3-pin connector in the right front corner of the SBC (see **figure 3** on page 3 for the location).

5. Reinstall the hard drives on the SBC assembly (see **Replacing a Disk Drive** on page 1).

6. Power the system back on.

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the **Extron Safety and Regulatory Compliance Guide** on the Extron website.