

# DS4100 Fibre Channel Cabling Instructions

## Installing an IBM Small Form-Factor Pluggable (SFP) Module and IBM® fibre channel cable

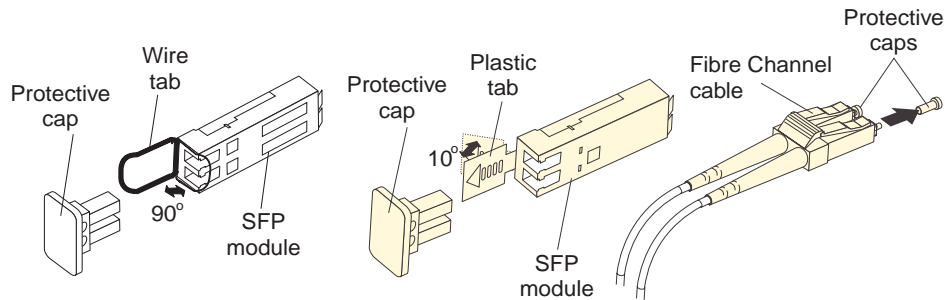
The SFP module housing and fibre channel (FC) cable have integrated guide keys that prevent you from inserting these devices incorrectly. You must insert SFP modules into ports with minimal pressure so that you do not damage either the SFP module or the port. You can insert an SFP module into an active port without affecting the operational loop performance. You must connect the fibre channel cable to the SFP module *after* you insert the SFP module into the port.

**Attention:** To avoid damage to your fibre-optic cables:

- Do not route the cable along a folding cable-management arm.
- For devices on slide rails, leave enough slack in the cable so that it does not bend to a radius less than 38 mm (1.5 in.) when extended or become pinched when retracted.
- Route the cable away from places where it can be damaged by other devices in the rack cabinet.
- Do not use plastic cable ties in place of the provided cable straps.
- Do not overtighten the cable straps or bend the cables to a radius of less than 38 mm (1.5 in.).
- Do not put excess weight on the cable at the connection point. Be sure that the cable is well supported.

### To install an SFP module and fibre channel cable:

1. Remove the protective caps from the SFP module and from the fibre channel cable. Do not touch the exposed fibre-optic cable.



2. Insert the SFP module in an SFP module port on a storage server FC host or expansion port.
3. Connect the fibre channel cable to the SFP module.

### To remove a fibre channel cable and SFP module:

1. Remove the fibre-optic cable from the SFP module. Replace the protective caps on the cable connector.

**Attention:** Do not grasp the plastic tab that is part of the SFP module while disconnecting the fibre-optic cable. Pulling the SFP module plastic tab while disconnecting the fibre-optic cable might damage the SFP module.

2. For SFPs with **plastic tabs**, pull the SFP module plastic tab outward at a 10° angle while you remove the SFP module. The plastic tab releases the SFP module latch.
3. For SFPs with **wire tabs**, pull the SFP module wire tab outward at a 90° angle and remove the SFP module. The wire tab releases the SFP module latch.
4. Replace the protective cap on the SFP module.

### Statement 3



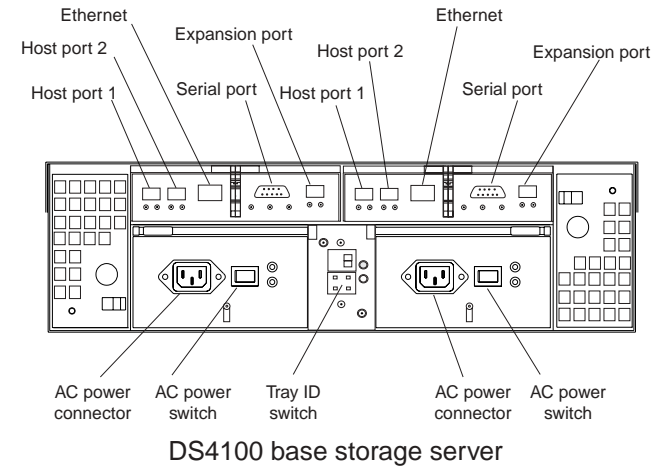
### CAUTION:

**When laser products (such as CD-ROMs, DVD drives, fibre-optic devices, or transmitters) are installed, note the following:**

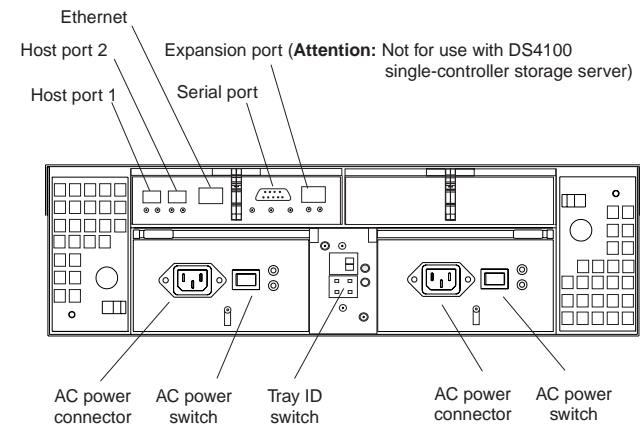
- Do not remove the covers. Removing the covers of the laser product could result in exposure to hazardous laser radiation. There are no serviceable parts inside the device.
- Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.

### DANGER

**Some laser products contain an embedded Class 3A or Class 3B laser diode. Note the following:**  
**Laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.**



DS4100 base storage server



DS4100 single-controller storage server

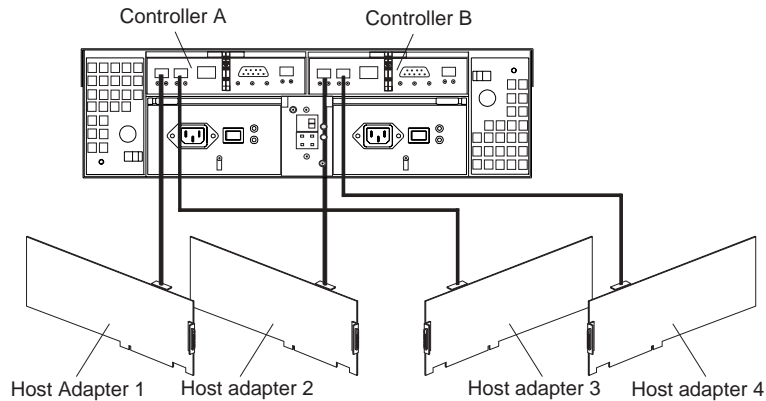


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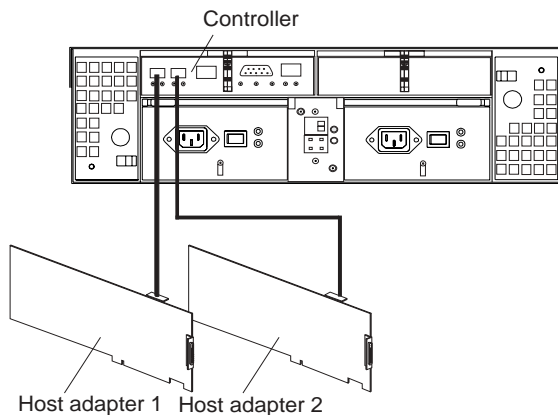
### Host-side fibre channel cabling (DS4100 base storage server)

1. Using a fibre channel cable, connect the first host adapter to the SFP Host port 1 on Controller A.
2. If you are cabling a second host adapter, connect the second host adapter to the SFP Host port 1 on Controller B.
3. Use the same procedure to connect up to two more host bus adapters using host port 2 on Controller A and host port 2 on Controller B.



### Host-side fibre channel cabling (DS4100 single-controller storage server)

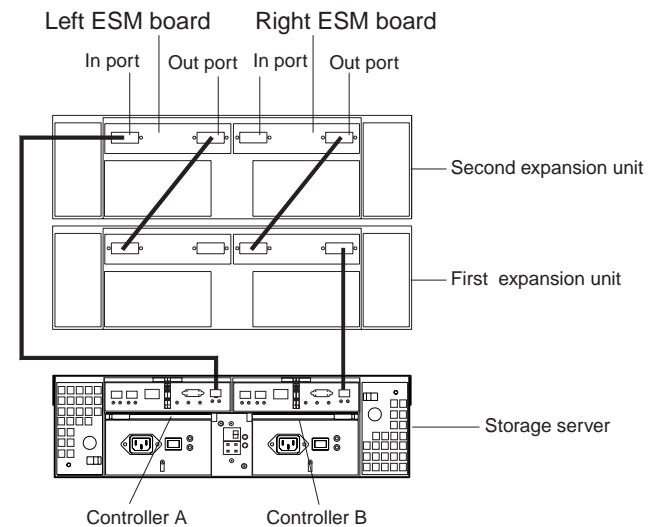
1. Using a fibre channel cable, connect the first host adapter to the SFP Host port 1 on the controller module.
2. If you are cabling a second host adapter, connect the second host adapter to the SFP Host port 2 on the controller module.



### Dual EXP-drive expansion unit fibre channel cabling (DS4100 base storage server only)

1. If you are cabling two storage expansion units to the storage server, use a fibre channel cable to connect the In port on the left ESM board of the first expansion unit to the Out port on the left ESM board of the second storage expansion unit. Connect the In port on the right ESM board of the first expansion unit to the Out port on the right ESM board of the second expansion unit.
2. Connect the SFP Expansion port on Controller A to the In port on the left ESM board of the second storage expansion unit. Connect the SFP storage expansion unit port on Controller B to the Out port on the right ESM board of the first storage expansion unit.
3. Ensure that each storage expansion unit has a unique enclosure ID (switch setting).

For more cabling information, refer to the *IBM TotalStorage DS4100 Storage Server Installation, User's and Maintenance Guide*.



**Important:** The DS4100 single-controller storage server does not support storage expansion units. Do not make any fibre channel connections from any storage expansion unit port to the DS4100 single-controller storage server drive port.

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