

4RU High Density Shelf Installation Instructions

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1.0 General Product Information

Description

All Systems Broadband’s 4RU High Density Shelf is designed to accommodate fiber cassettes such as the HiD4 Cassette or LGX-compatible cassettes in indoor applications. This product requires some assembly and it is recommended that these instructions are read before starting the installation.

2.0 Safety Precautions



Danger: Direct eye exposure to laser light will cause serious eye damage. Avoid looking directly into an optical fiber, optical connector or optical adapter that is connected to an active source.



Warning: Wear safety glasses to prevent accidental eye injury. Wear protective gloves and clothing to prevent accidental injury.



Warning: Observe company policies and procedures regarding personal safety.



Warning: Follow local and national safety and construction codes.



Caution: Handle fiber optic cable per manufacturer's recommendation for minimum bend radius, maximum tensile loading, and maximum crush resistance.

3.0 Tools Required

- #2 Phillips head screwdriver
- Fiber Optic Cleaning Supplies

4.0 Package Contents

- 4RU High Density Shelf
- Standard Sub-Assembly Kit
 - ◇ Mounting brackets
 - ◇ Mounting screws
 - [4] 10-32 x 3/4" Phillips head, dog point
 - [4] 12-24 x 3/4" Phillips head, dog point
 - [8] M4 x 8mm Phillips head, flat head (mounting bracket hardware)
 - ◇ Installation Instructions

The 4RU High Density Shelf is a pre-configured product. Accessory kits are available for this product that incorporate components for varied applications.

Installing the Product

5.0 Unpacking

Ensure all mounting brackets and hardware are available.

6.0 Mounting

1. Locate the provided 2 mounting brackets and 8 M4 x 8mm long Phillips head screws in the Standard Sub-Assembly Kit

These mounting brackets provide 2 possible front extension mounting positions; mid-shelf, or front-shelf, which allows the shelf to be mounted flush with the frame.

2. For 19" Rack mounting, be sure that the long side of the bracket rests against the shelf.
3. For 23" Rack mounting, be sure that the short side of the bracket rests against the shelf.
4. Attach the brackets to the shelf for the desired frame width and front extension
5. To mount the shelf to the Rack, use the provided 10-32 x 3/4" or 12-24 x 3/4" Phillips head screws located in the Standard Sub-Assembly Kit

7.0 Loading HiD4 or Mini-LGX Cassettes

Both HiD4 and Mini-LGX Cassettes may be mounted on the front and rear of the shelf. Due to their width, Mini-LGX Cassettes will limit the total capacity of the shelf

1. Insert the cassette into the shelf panel bulkhead
2. Align the cassette push-pin grommet to the proper mounting hole position
3. Apply pressure to the push-pin retainer until it clicks, locking the cassette into position
4. It is strongly recommended to inspect and clean the jumper connectors before making an optical connection (see section 10).
5. Remove the dust covers and clean the jumpers as required
6. Route the jumper slack through the routing ring either to the left or right and top or bottom

8.0 Loading LGX Cassettes - Front mount only

Use of Standard LGX Cassettes will limit total capacity of the shelf due to the fact that they will protrude into the rear portion of the shelf, rendering those rear-facing slots as unusable. LGX Cassettes may only be mounted on the front of the shelf.

For single wide LGX cassettes

1. Insert the cassette into the shelf panel bulkhead
2. Align the cassette push-pin grommet to the proper mounting hole position
3. Apply pressure to the push-pin retainer until it clicks, locking the cassette into position

4. It is strongly recommended to inspect and clean the jumper connectors before making an optical connection (see section 10).
5. Remove the dust covers and connect appropriate fiber jumpers as required.
6. Route the jumper slack through the routing ring either to the left or right and top or bottom

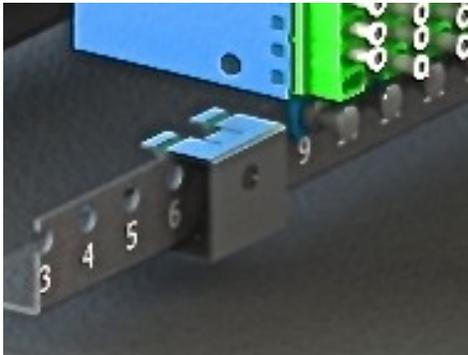


Fig. 1

For double and triple wide LGX cassettes

This procedure requires the use of 4 LGX adapter clips [accessory P/N ASBACC1022778] to allow for proper push-pin alignment.

1. Insert 2 LGX adapter clips onto the top bulkhead panel rail and 2 onto bottom bulkhead panel rail (Fig. 1)
2. Push the clip towards the bulkhead panels front face until it snaps into position
3. Insert the cassette into the shelf panel bulkhead
4. Adjust the clips so the holes align with the push-pins
5. Align the cassette push-pin grommet to the proper mounting hole position
6. Apply pressure to the push-pin retainer until it clicks, locking the cassette into position
7. It is strongly recommended to inspect and clean the jumper connectors before making an optical connection (see section 10).
8. Remove the dust covers and connect appropriate fiber jumpers as required
9. Route the jumper slack through the routing ring either to the left or right and top or bottom

9.0 HiD4 / LGX Cassette Mixing

For mixing HiD4 and LGX style cassettes as shown (Fig. 2). This procedure requires the use of LGX adapter clips [accessories P/N ASBACC1022778] to allow for optimum cassette spacing and proper push-pin alignment.

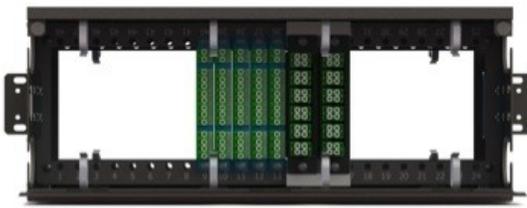


Fig. 2

1. Insert LGX adapter clips onto the top bulkhead panel rail and onto the bottom bulkhead panel rail (Fig. 1)
2. Push the clip towards the bulkhead panels front face until it snaps into position
3. Insert the LGX cassette into the shelf panel bulkhead
4. Adjust the clips so the cassette is next to the adjacent cassette and the holes align with the push-pins
5. Align the cassette push-pin grommet to the proper mounting hole position
6. Apply pressure to the push-pin retainer until it clicks, locking the cassette into position
7. It is strongly recommended to inspect and clean the jumper connectors before making an optical connection (see section 10).

8. Remove the dust covers and connect appropriate fiber jumpers as required
9. Route the jumper slack through the routing ring either to the left or right and top or bottom

10.0 Connector Cleaning

* Recommended prior to product usage

Note: Utilize connector and adapter protective caps whenever possible; however, this practice does not guarantee cleanliness of the optical interface.

Before connecting, or after each disconnect, it is recommended to perform the following cleaning procedure. A connector inspection scope, lint-free wipes and optical cleaning solvent are necessary equipment.

This procedure conforms to the IPC 8491-1, "Cleaning Methods and Contamination Assessment for Optical Assembly".

- Make sure the fiber is not active
- Remove the protective caps
- Gently wipe the connector ferrule end with a lint-free wipe
- Verify the cleanliness of the connector with an inspection scope
- If necessary, gently wipe the fiber end with a lint-free wipe moistened with a small amount of cleaning solvent. Then dry with a clean lint-free wipe
- Verify the cleanliness of the connector with an inspection scope

11.0 Jumper Routing

It is strongly recommended to inspect and clean the jumper connectors before making an optical connection (see section 10).

1. Install the jumper connector into the appropriate adapter.
2. Route the jumper slack out of the shelf to either side.
3. Route the jumper slack to minimize tight bending stress or tension at the connector boot.
4. Jumpers should be managed on the rack to provide sufficient slack

12.0 Customer Service

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