

High Density Housing (HDH-01U)

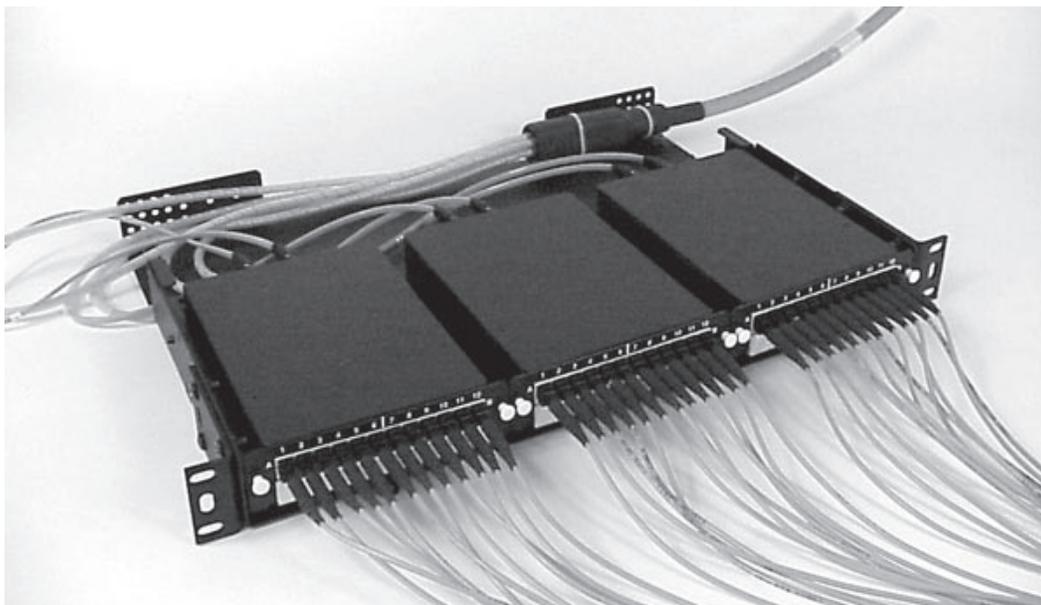


Figure 1

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1. General

1.1 This document describes installation of the single-rack space High Density Housing (HDH-01U). The High Density Housings are designed for use with Corning Cable Systems' Plug & Play™ system.

- The HDH-01U unit is designed for high fiber count rack applications.
- The HDH-01U unit fits into either 19- or 23-inch racks and occupies one (1.75 in.) rack space. The unit is 12.4 in. deep.

1.2 Contact your customer service representative to purchase accessories that are sold separately.

1.3 If this document is reissued, the reason will appear in this paragraph.

NOTE: *Read and understand this procedure (as well as the instructions provided with related assemblies) before beginning an installation. Familiarize yourself to understand the unit's placement in your network. Make sure you know where the cable will enter the unit and be strain-relieved, how jumpers will be routed, where the unit will be placed in the utility rack, and other details of the installation plan.*

2. Precautions

2.1 Laser Light Precautions

⚠ WARNING: *Never look directly into the end of a fiber that may be carrying laser light. Laser light may be invisible. Laser light can damage your eyes. Viewing it directly does not cause pain. The iris of the eye will not close involuntarily as when viewing a bright light. Consequently, serious damage to the retina of the eye is possible. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.*

⚠ WARNING: *DO NOT use magnifiers in the presence of laser radiation. Diffused laser light can cause eye damage if focused with optical instruments. Should accidental eye exposure to laser light be suspected, arrange for an eye examination immediately.*

2.2 Safety Precautions

⚠ CAUTION: *The wearing of safety glasses to protect the eyes from accidental injury is strongly recommended when handling chemicals and cutting fiber. Pieces of glass fiber are very sharp and can damage the cornea easily.*

⚠ CAUTION: *The wearing of safety gloves to protect hands from accidental injury is strongly recommended when using sharp instruments.*

⚠ CAUTION: *Isopropyl alcohol is flammable with a flashpoint at 50°F. It can cause irritation to eyes on contact. In case of eye contact, flush eyes with water for at least 15 minutes. Inhaling fumes may induce mild narcosis. In case of ingestion, consult a physician.*

2.3 Glass Fiber Precautions

⚠ WARNING: *Cleaved glass fibers are very sharp and can pierce the skin easily. Do not let cut pieces of fiber stick to your clothing or drop in the work area where they can cause injury later. Use tweezers to pick up cut or broken pieces of the glass fibers and place them on a loop of tape kept for that purpose alone. **Good housekeeping is very important.***

2.4 Cable Handling Precautions

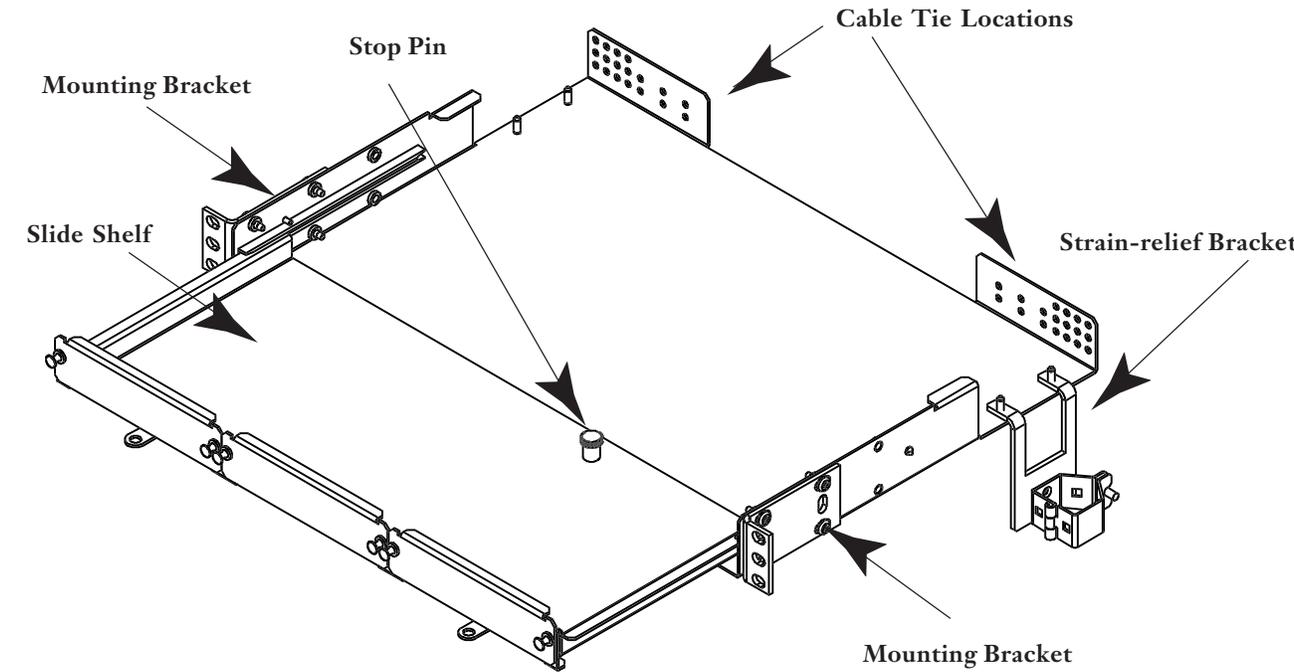
NOTE: *Fiber optic cable is sensitive to excessive pulling, bending and crushing forces. Consult the cable specification sheet for the cable you are installing. **Do not bend the cable more sharply than the minimum recommended bend radius. Do not apply more pulling force to the cable than specified. Do not crush the cable or allow it to kink.** Doing so may cause damage that can alter the transmission characteristics of the cable — the cable may have to be replaced.*

3. Components

3.1 The normal complement of installation tools are required for this installation.

3.2 The main components of the HDH-01U unit are illustrated in Figure 2.

- Cables and jumpers can enter the unit from either side of the housing.
- A label is provided for unit identification.
- When the tray is pulled out of the unit, a tray stop will keep the tray from sliding out completely. The tray may be removed by lifting up the stop pin.
- The unit accommodates up to three connector modules/panels on a sliding shelf. Modules and panels are sold separately.



Components Shown with Shelf Extended

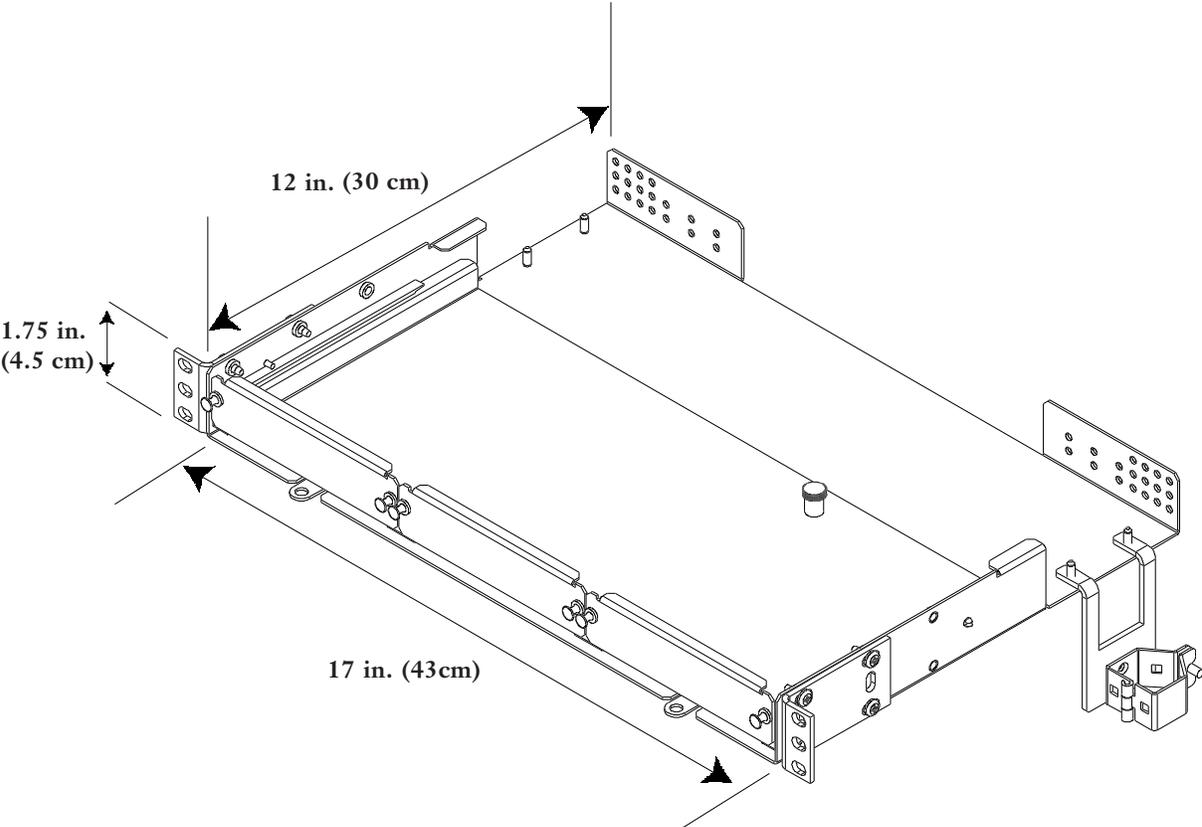


Figure 2

4. Mounting

4.1 The HDH-01U unit can be installed in a 19-inch utility rack if the mounting brackets are attached with the long side flush against the housing (Figure 3).

4.2 The unit can be installed in a 23-inch utility rack if the mounting brackets are attached with the short side of the bracket flush against the housing (Figure 3).

4.3 Attach the brackets to the cabinet using the provided screws.

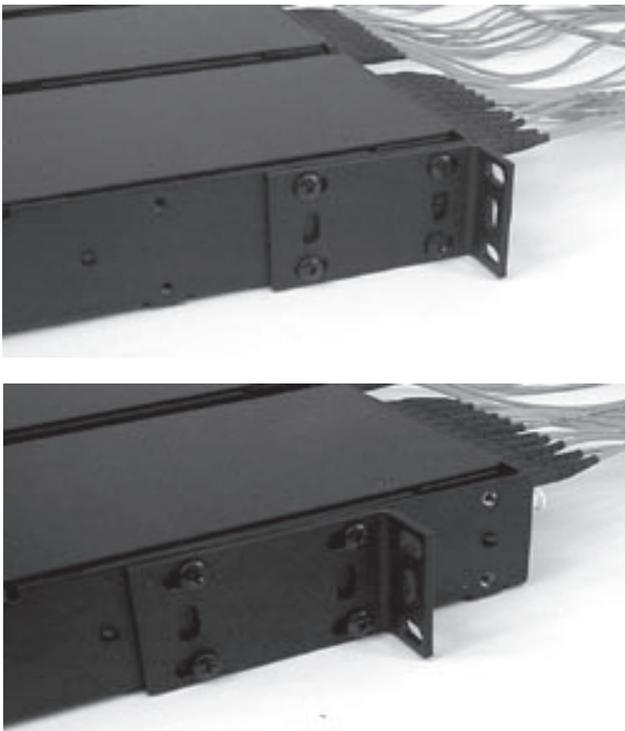


Figure 3

4.4 The HDH-01U unit comes ready to be installed flush with the front of a 19-inch rack. The unit's projection from the rack can be changed by attaching the rack-mounting brackets to another of the two pairs of threaded holes on the sides of the unit. This allows for a 2-inch projection from the rack (Figure 4).

4.5 Attach the unit to the utility rack using the four #10-32 or #12-24 screws provided.



With 2 in. Frontal Projection

Figure 4

5. Cable Installation

5.1 Route the cable into the back of the cabinet through either side. Be careful not to bend the cable too sharply to transition into the housing.

NOTE: Cable ties or the Universal Cable Clamp should be used for cable strain-relief.

5.2 To use the Universal Cable Clamp (UCC) for cable strain-relief, attach the UCC clamshell to the strain-relief bracket as shown in Figure 5. Follow installation instructions included with the UCC kit for specific cable installation instructions. Attach the bracket to the housing (Figure 5).

NOTE: Figure 5 illustrates the orientation of the strain-relief bracket for top entry of the cable into the housing. When your application requires bottom entry of the cable, install the strain-relief bracket as shown in Figure 2.

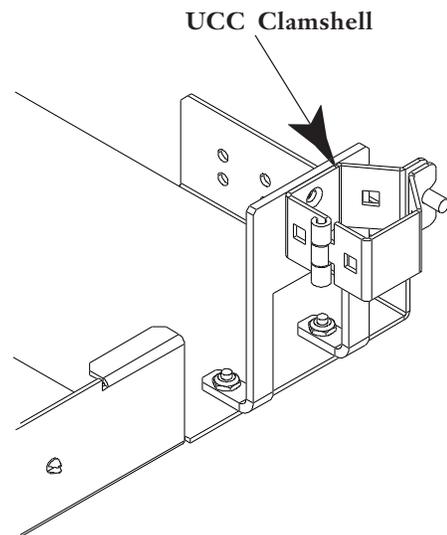


Figure 5

5.3 If using cable ties, attach the cable to the rear of the housing in two places as shown in Figure 6.

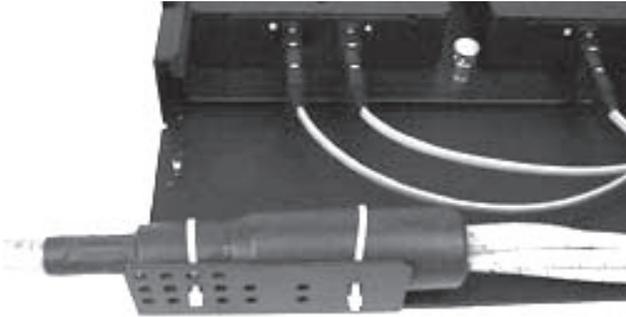


Figure 6

6. Connector Modules

6.1 HDH connector modules typically support 24 fibers each and are mounted on the removable tray (Figure 7).

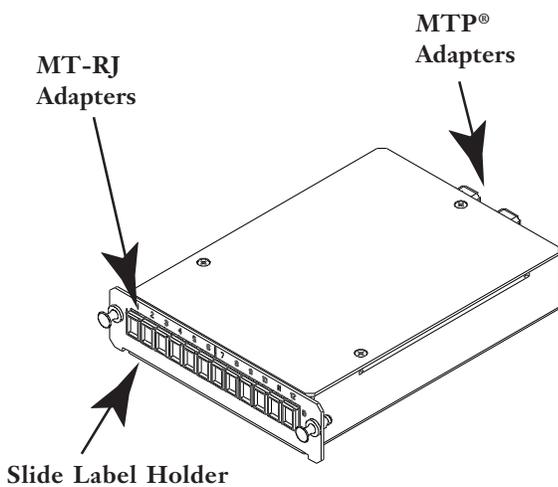


Figure 7

IMPORTANT: Since the connector tray can slide forward to access the inside of the modules, it is important that there be enough slack between the modules and the strain-relief point to allow for operation of the tray without damaging the fibers (Figure 8).

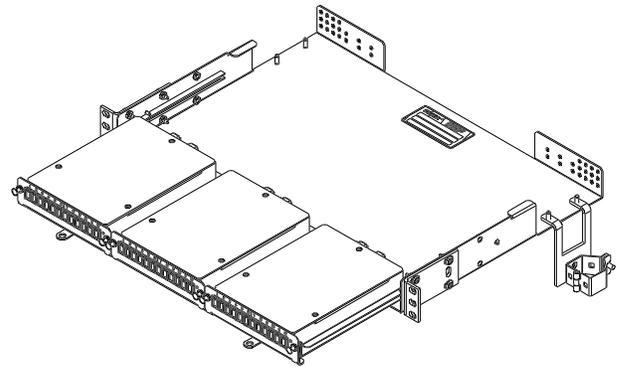


Figure 8

NOTE: Obey the following precautions in order not to damage the surface of the connector and make it unusable:

- Use a clean tissue soaked in alcohol to gently clean the connector. Do not press heavily on it as you clean.
- Dry the connector prior to installation by using a dry tissue or blowing it dry with compressed air.
- Clean all areas that will contact the connector adapter.
- Do not force the connector into the receptacle. If the connector does not fit easily into the receptacle, back it out and reinstall.

6.2 Record information appropriately on the label strips on the module, if desired.

6.3 To remove a module, pull out on both nylon fasteners and pull the connector module away from the two retaining brackets.

7. Cable Routing

7.1 Route the cable inside the HDH unit (Figure 9), making sure that there is enough slack for the slide-out connector panel tray to operate properly without violating the minimum fiber bend radius.

7.2 Verify that the connector panel tray slides in the grooves of the tray guides.

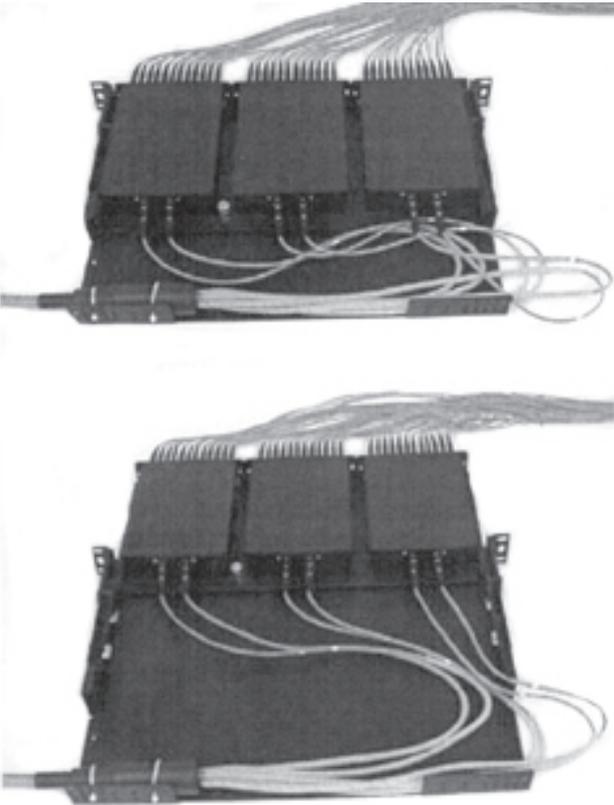


Figure 9

8. Jumper Routing

NOTE: *Jumpers are fiber optic cables with connectors at both ends. Jumpers should be installed as specified on planning diagrams.*

8.1 Route jumpers to either side on the front of the HDH-01U unit. Provide enough jumper slack to allow the connector module tray to slide out without violating the minimum bend radius of the jumpers.

8.2 Record jumper routing information on individual modules.

9. Maintenance

9.1 The unit requires very little maintenance to make sure fibers and parts remain in good condition.

9.2 External components may be cleaned occasionally with a damp, non-abrasive cloth.

9.3 Internal components should be checked periodically for the following:

- **Loose Parts:** Check nuts, bolts and screws for looseness and tighten.
- **Fiber Bends:** Check fiber optic cable to make sure bends do not exceed the minimum bend radius. Check cable for unnecessary strain. Check cable entries and exits for crimping or crushing.
- **Documentation:** Check record labels to make sure all are clear and accurate.

Special Note:
Fiber Optic
Training
Program



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