

Eclipse™ Coupler Shelf 01U - 02U

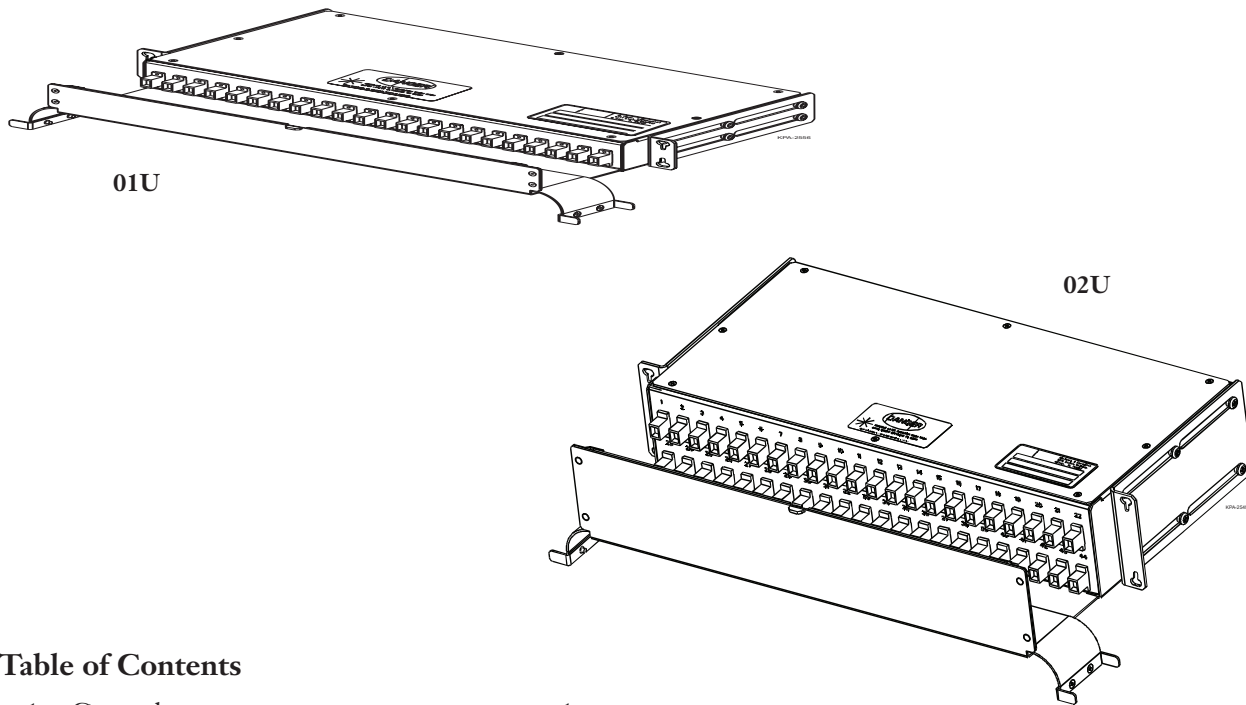


Figure 1

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1. General

1.1 This instruction describes the installation of the 01U and 02U Eclipse Coupler Shelf (ECS) manufactured by Corning Cable Systems.

1.2 This document is being reissued to reflect new hole configuration on the unit's mounting brackets.

2. Description

2.1 The ECS is a fiber optic unit designed to house couplers, splices, connectors, and fiber slack. The 01U unit has 22 input/output ports and will fit in one rack space on a standard utility rack. The 02U unit has 44 input/output ports and will fit in two rack spaces on a standard utility rack (Figure 1).

2.2 Coupler shelf inputs and outputs can be pigtails or adapters. When pigtails are specified, the standard length is 3 meters (118 in.).

2.3 The unit is generally shipped completely assembled to customer specifications. A label is supplied that indicates the loss (in dBs) for each port.

2.4 The unit is designed to mount directly to a 19" equipment rack. Use the 23" rack adapter brackets if mounting to a 23" equipment rack.

3. 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.*

⚠ 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.*

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.

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 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.*

4. Components

Eclipse Coupler Shelf components are shown in Figure 2. The SC adapters shown can be replaced by other fiber optic connector adapters or pigtails. Also included are:

- Extra identification label
- 12-24 rack mounting screws (4)
- 12-24 threaded clips (4)

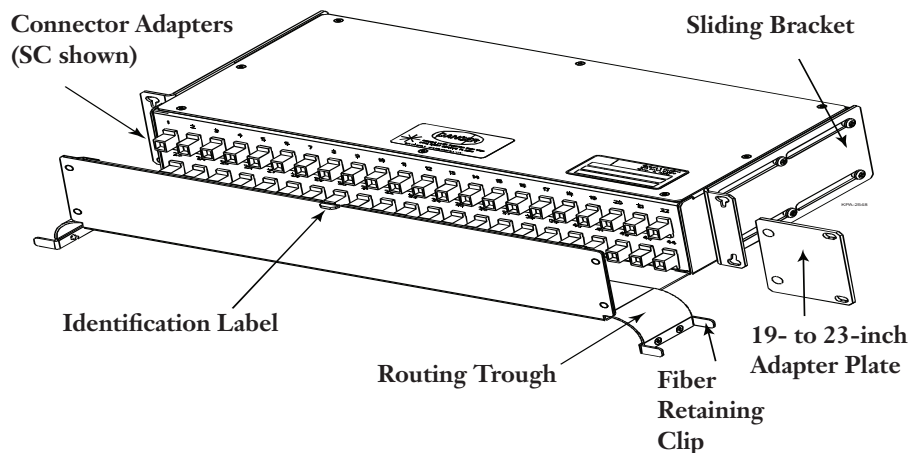


Figure 2

5. Shelf Installation

5.1 Mount the ECS directly onto the equipment rack. Use the 23" rack adapter brackets if mounting to a 23" equipment rack (Figure 3). If using a rack which is threaded for 12-24 screws, the threaded clips are not required and may be discarded. If the rack is threaded for screws other than 12-24 screws, use the screws supplied with the rack.

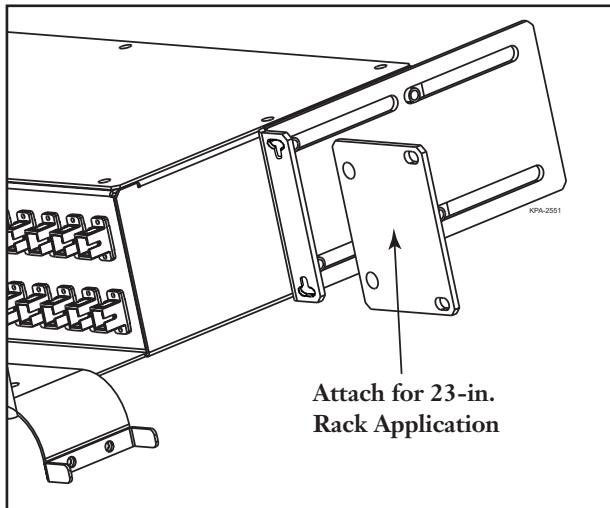


Figure 3

5.2 Determine the appropriate mounting position for the unit and secure to frame using the proper hardware. Ensure the unit is pushed back as far as the sliding brackets will allow.

6. Connector Access

In some applications, the ECS must be extended forward to provide access to the input/output adapters. This is accomplished by gripping the jumper trough on each side and firmly pulling the unit forward.

NOTE: Take care to avoid pulling or bending jumpers when you pull the housing out to access connectors.

7. Jumper Routing

To ensure minimum bend radius, jumpers from the outer four (4) I/O ports must be routed to the opposite side of the unit (Figure 4). All other jumpers can be routed in either direction.

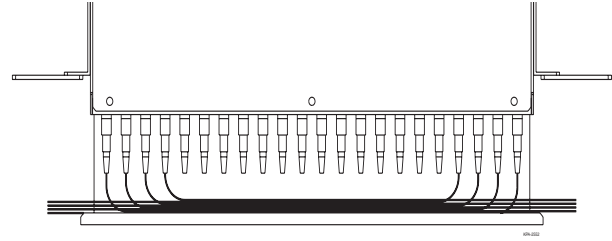


Figure 4

8. Coupler Cassette Installation

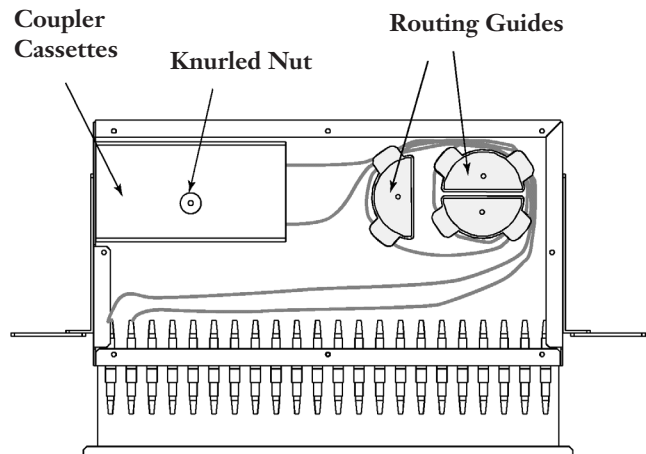


Figure 5

8.1 Corning Cable Systems recommends that the ECS be ordered fully configured before installing into a rack. This keeps jumpers and internal fibers from being disturbed.

8.2 If the coupler circuit must change, coupler cassettes can be removed from and added to the unit by the following (refer to Figure 5):

- Disconnect jumpers and remove them from external routing guides to avoid damage when the unit is removed from the rack.
- Remove the mounting screws and carefully slide the unit out of the rack.
- Remove the top cover by removing the screws on top of the unit.
- Add or remove the proper coupler cassette by removing the knurled nut from the threaded stud. Route and connect or remove and disconnect the required pigtails within the unit.
- Reverse the previous steps to reassemble the unit.

9. Identification Label

Loss (dB)	Node	Tx	Jumper	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22

Figure 6

9.1 A label is provided to identify transmitter inputs (Tx), node outputs, power levels (insertion loss), and miscellaneous descriptions associated with each I/O port (Figure 6).

9.2 To access the label card, pull up at the tab in the center of the shelf. The card may be pulled completely out of the unit to write information on the label (Figure 6).

9.3 The “Loss (dB)” information is always included and represents the measured insertion loss of each port. All other information can be added as required.

10. Connector Care

Connectors are extremely delicate devices. Therefore the following precautions should always be observed.

- At installation, use a clean tissue soaked in isopropyl alcohol to gently clean the connectors at the end of the jumper or pigtail. Clean all the areas of the connector that will contact the connector sleeve.
- Do not press on connectors as you clean. Doing so may scratch or crack the connector surface, making it unusable.
- Carefully press the connector into its receptacle and tighten. Do not overtighten. Doing so can damage the connector surface.
- Do not allow the connector body (ferrule) to turn as you screw it into place. Doing so will allow the surfaces to grind against each other causing scratches on the connector surface.
- The connector should fit into its receptacle easily. If it binds, back it up. Do not force.
- Clean external components of installed connectors at regular intervals as recommended by their manufacturer.

11. Specifications

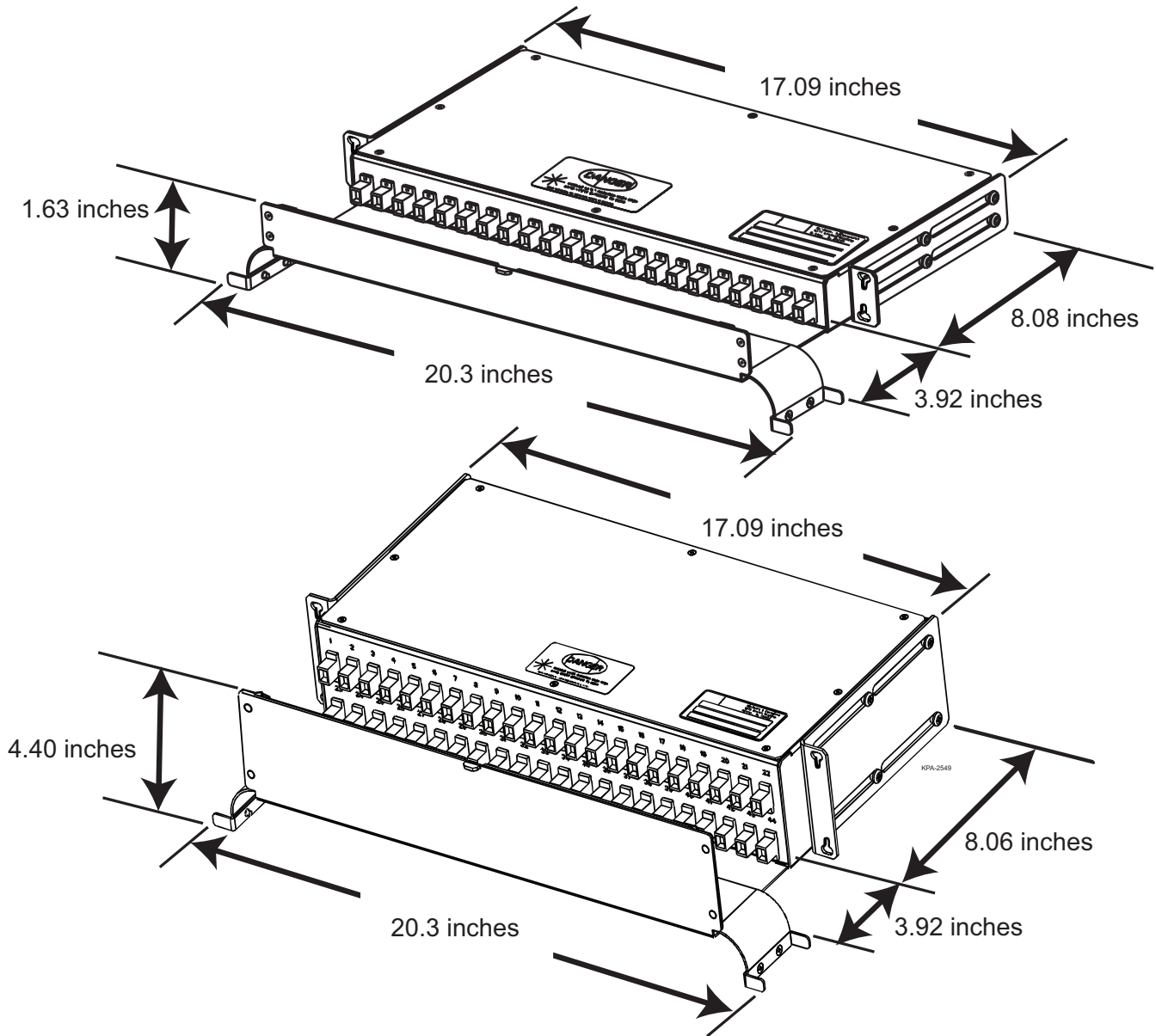


Figure 8

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