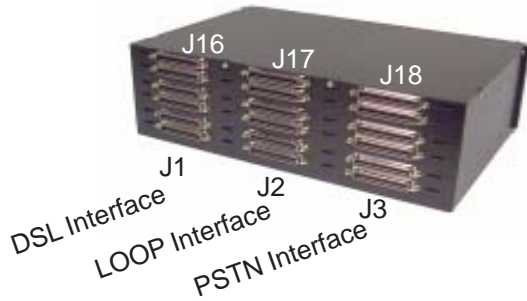
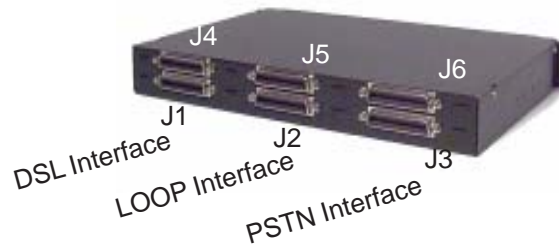


PS-4100 Series CO POTS Splitter Shelf

Installation Quick Step for the PS-4103 and PS-4101 Shelf



PS-4103 Rear View



PS-4101 Rear View



PS-4103 Front View

Card(s) inserted with components facing up



PS-4101 Front View

Card(s) inserted with components facing up

Planning POTS Splitter Shelf Installation

The PS-4103 shelf requires 5.25" of rack space, and is center mounted. The PS-4101 shelf requires 1.75" of rack space, and is center mounted. Both shelves are supplied with mounting brackets, and hardware to allow installation in a 19" or 23" rack. By repositioning the mounting brackets, the shelf can be installed with connectors front or rear facing.

Installing the Ground Wire

To comply with the Network Equipment Building Systems (NEBS) requirements, a suitable ground wire must be installed. The ground point is located on the lower left side of the shelf, and is designed for a # 10/32 screw which is supplied with the shelf.

Installing the POTS Splitter Card(s) in the Shelf

CAUTION Insert the Splitter card(s) into the shelf card guides with *components facing up*. Care should be taken to insert card(s) into the correct left side and right side card guides. Make certain the card(s) are not misaligned which would prevent the card(s) from seating properly into their connectors when using the locking / ejector tab.

- Note 1:** The PS-4101 and PS-4103 shelves will accept the PS-4100 series of ADSL2+ CO Splitter Cards.
- Note 2:** The PS-4101 and PS-4103 shelves will accept the PS-6800 series of ADSL2+ / VDSL2 CO Splitter Cards.
- Note 3:** The PS-4101 and PS-4103 shelves will accept the PS-6900 *fault tolerant* series of ADSL2+ / VDSL2 CO Splitter Cards.

Cabling Overview

Cabling configurations will vary depending on installation locations of the POTS Splitter Shelf, or the number of lines supported by the DSLAM, however, the physical interface are standard 50-position Amphenol-type *female* shielded connectors. Each POTS Splitter card uses only 24 pairs of the 25 pairs on each 50-position connector.

WARNING

Each shielded connector on the rear of the PS-4101 and PS-4103 shelf is **grounded** to the chassis via the jack / hex connector screws. **Do not remove the jack / hex connector screws.**

Cable Routing

On the rear of the shelf, the **DSL** interface connectors, the **LOOP** interface connectors, and the **PSTN** interface connectors are oriented so the mating *male* cable head can be dressed from either side based on the cable head. Cable heads can be left or right-angle for 110° cable heads only. If a 90° cable head is used, it should be secured with the cable head screw, and the tie wrap supplied. Insert the tie wrap through the raised lance anchor points adjacent to each connector. If 110° and 180° cable heads are used, they should be secured using only the screws supplied with the connector.

Note 1: A minimum of 26 AWG wire is required for interface connections.

Note 2: All 50 pin female connectors on the rear of the shelf have the same orientation. See **Figure 1**.

Note 3: The #4-40 screw(s) supplied with the cable heads may be too long for the jack-hex screws as shown in **Figure 1**. To verify this extend the screw fully. If it is flush with or goes past the connector's body as shown in **Figure 2** point (B) the screw is too long. Replace the screw so when fully extended the end of the screw is about 1/16 inch (1.5mm) from the bottom of the connector's body as shown in **Figure 2** point (A).

CAUTION

When mounting this equipment in relay racks, care should be taken such that a hazardous condition is not achieved due to uneven loading. Follow your company's policies and procedures when mounting equipment in relay racks.

CAUTION

When installing the PS-4101 & PS-4103 shelves, it is required they be wired on loops using the Telephone Central Office's **primary protection**.

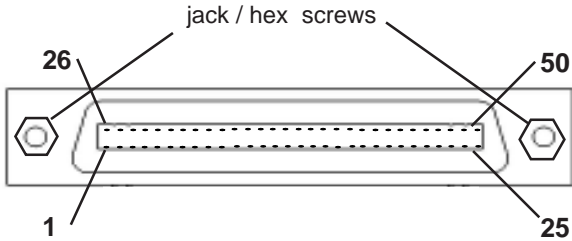


Figure 1: Rear panel female connector

DSL connectors (J1, J4, J7, J10, J13, & J16)

LOOP connectors (J2, J5, J8, J11, J14, & J17)

PSTN connectors (J3, J6, J9, J12, J15, & J18)

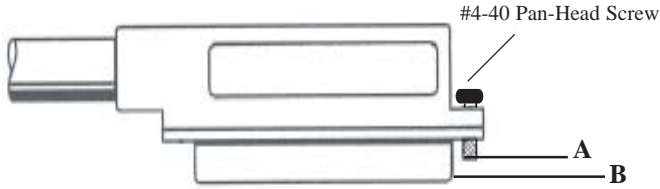


Figure 2: Male cable head

DSL, LOOP & PSTN Connector Wiring

Filter #	Pin # Ring	Pin # Tip
1	1	26
2	2	27
3	3	28
4	4	29
5	5	30
6	6	31
7	7	32
8	8	33
9	9	34
10	10	35
11	11	36
12	12	37
13	13	38
14	14	39
15	15	40
16	16	41
17	17	42
18	18	43
19	19	44
20	20	45
21	21	46
22	22	47
23	23	48
24	24	49
No Contact	25	50

Notes:

- ATTENTION** For non-video applications it is recommend that CAT5 25PR/24 AWG twisted pair cable be used on the DSL port.
- ATTENTION** For video applications, cable such as MOHAWK/CDT CAT5 25PR/24AWG TIA/EIA 568-B.2 with powersum crosstalk (PSNEXT) requirements, and CAT5 connectors such as AVAYA 525 are recommended for the DSL & LOOP ports.

Technical Specification

Item	Specification
Height x Width x Depth (1U Shelf) (3U Shelf)	1.75" x 16" x 10.44" (4.44cm x 40.64cm x 26.52cm) 5.25" x 16" x 10.44" (13.32cm x 40.64cm x 26.52cm)
Weight	
Card (1U Shelf) (3U Shelf)	1.36 lbs (.617 Kg) 6.46 lbs (2.93 Kg) 10.38 lbs (4.70 Kg)
Rack Mounting	The PS-4101 and PS-4103 shelves come equipped with rack adapters for 19" or 23" rack mounting.
Physical Interface	Three (3) 50-pin Amphenol type connectors assigned to each POTS Splitter card for DSL, PSTN, and LOOP connections.
Environmental Operating Storage	-40°C to +70°C -40°C to +70°C
Power	The Wilcom POTS splitter design employs a passive filter design and requires <i>no</i> power to the shelf.

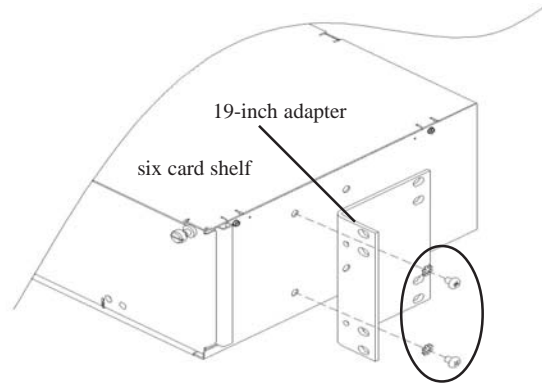


Figure 3: Mounting rack adapters

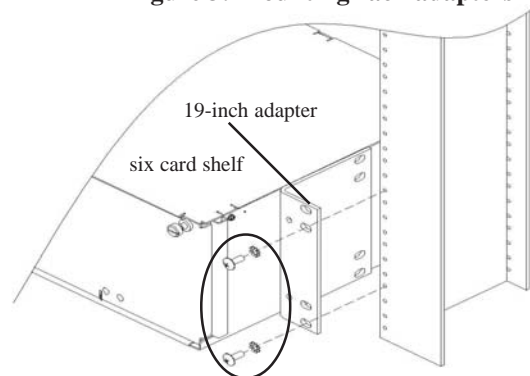


Figure 4: Rack mounting

Notes:

- ATTENTION** Use # 10/32 screws and star washers supplied for mounting rack adapters to the shelf as shown in Figure #3 above and tighten screws to secure adapters to the shelf.
- ATTENTION** Use # 10/32 screws and star washers supplied for mounting the shelf in the rack as shown in Figure #4 above and tighten screws to secure shelf in the rack