

Engenuity/Pulsecom Model O3-12D1DN Shelf Installation Training

NOTE: This training material does not presume organizational responsibilities. It is intended solely for on-site provisioning and maintenance.

STEP 1 – Physical Inspection.

Remove shelf from the box and inspect for damage. This is what you should see if the shelf is a 2O3D3-19A REV.B:



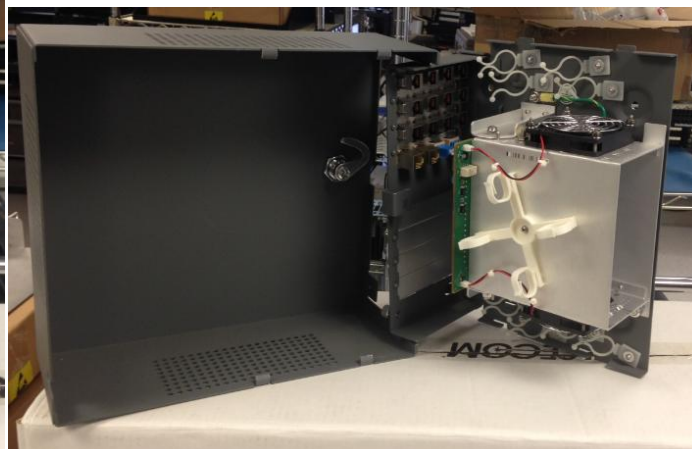
This is what you should see if the shelf is a 3O3D3-23L2A:



This is what you should see if the shelf is a 3O3D3-CPL2C REV.B:



Closed



Opened

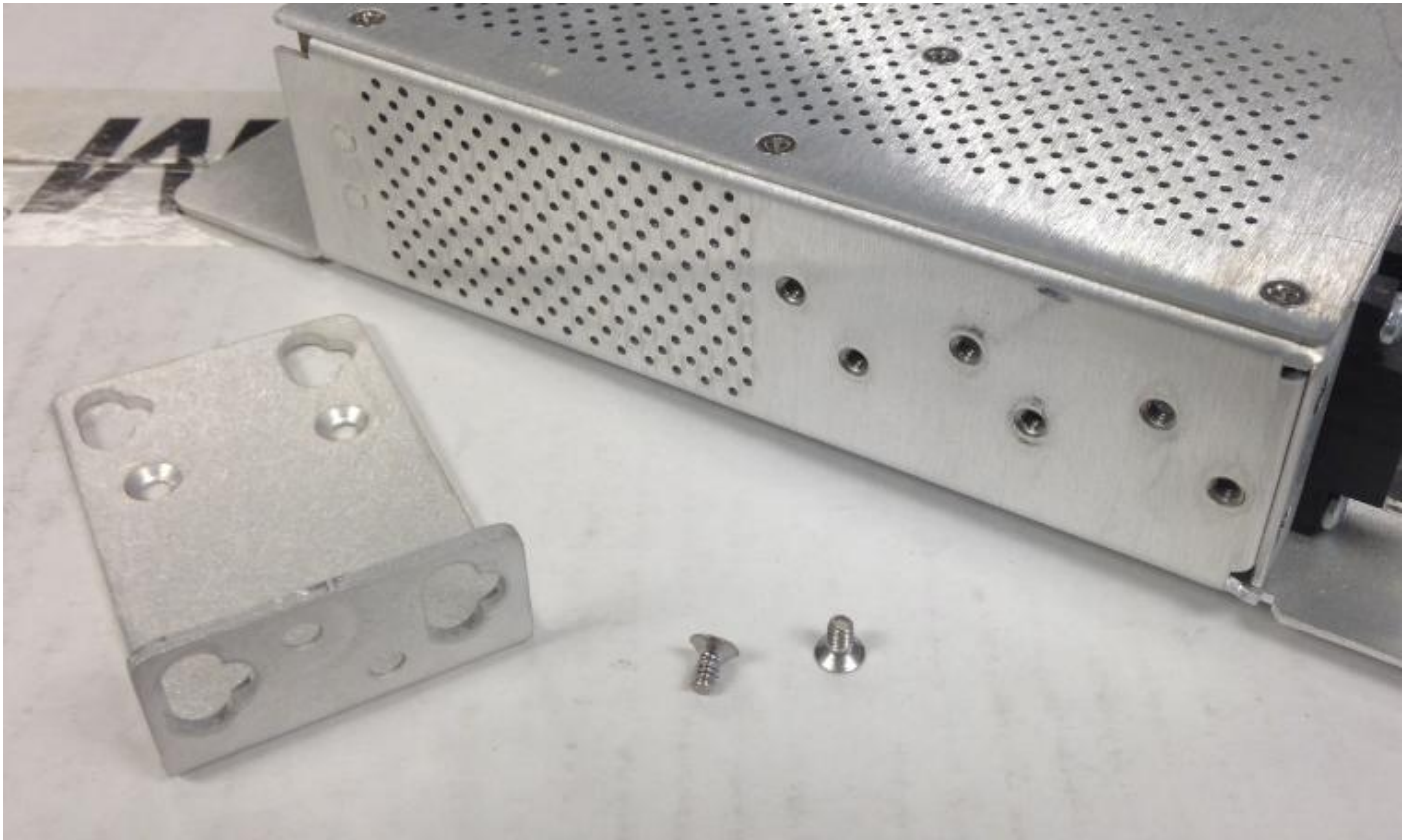
This is what you should see if the shelf is an O3D3-RT REV.B:



NOTE: Shelves are typically used for different applications; check that the shelf is the correct one for CPE or CO installation.

STEP 2 – Rack mounted (CO) application.

2O3D3-19A REVB (often referred to as the 19A REVB) and 3O3D3-23L2A (often referred to as the 23L2A) shelves are used primarily in central offices (CO) in racks. The 19A REVB can be used in 19" or 23" racks because of their reversible ears that can be mounted in three locations along the sides of the shelf (shown below). The 19A REVB ears can also be turned to mount the shelf flat on a wall. The 23L2A shelf can only be used in a 23" rack and has 2 mounting locations.



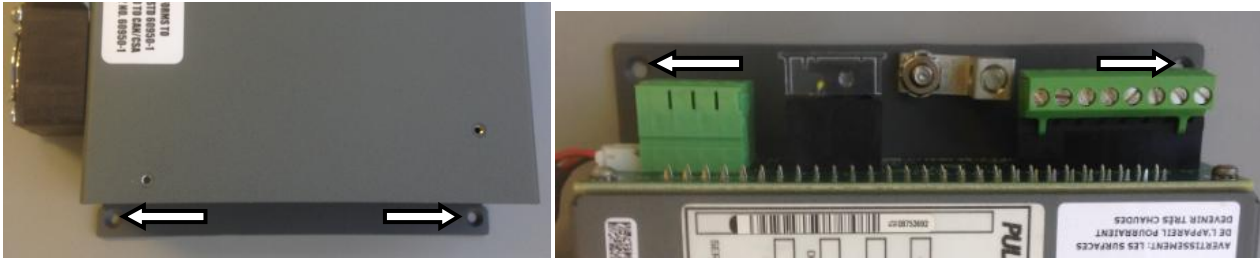
Use the included rack screws to bolt the CO shelf into a rack.



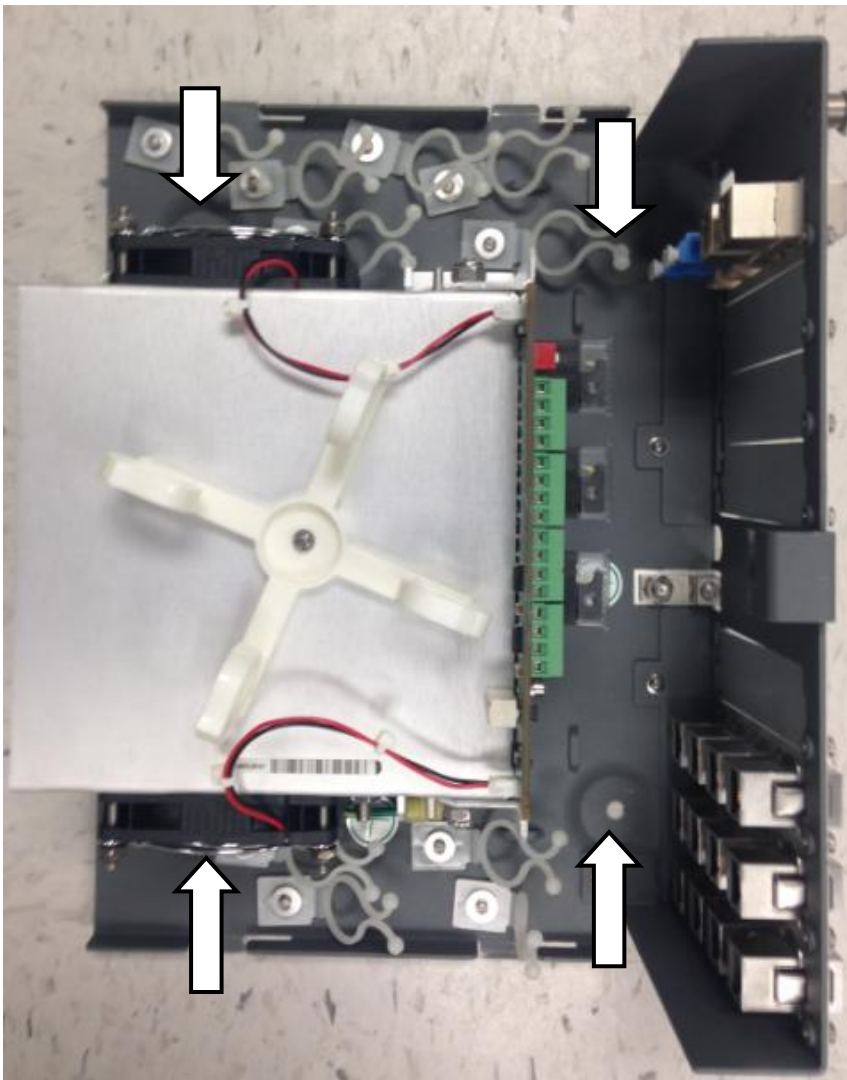
STEP 3 – Wall mounted (CPE) application.

3O3D3-CPL2C REVB and O3D3-RT REVB are typically customer premise (CPE) housings wall mounted to a plywood backboard. The white arrows indicate the mounting holes for this type of application (see below).

NOTE: The O3D3-RT REVB can be used in racks especially in small areas between a rack and the wall of an outside plant cabinet.



O3D3-RT Chassis



3O3D3-CPL2C REVB

STEP 4 – Power and Ground connections.

Each housing has connections for electrical power (-48VDC or +24VDC) and frame ground. Except for the 3O3D3-23L2A all housings have both an A and a B power feeds. Study the images below for the applicable housing. Use the included flat blade screwdriver to connect the power wires (22 AWG minimum to 14 AWG maximum) to the appropriate terminal blocks. Use 6 AWG wire to attach the frame ground wire.

NOTE: With -48VDC, the + lead connection is considered the return (RTN). When using +24VDC, replace .75A fuses with 1.5A fuses (included).



2O3D3-19A REVB ↑

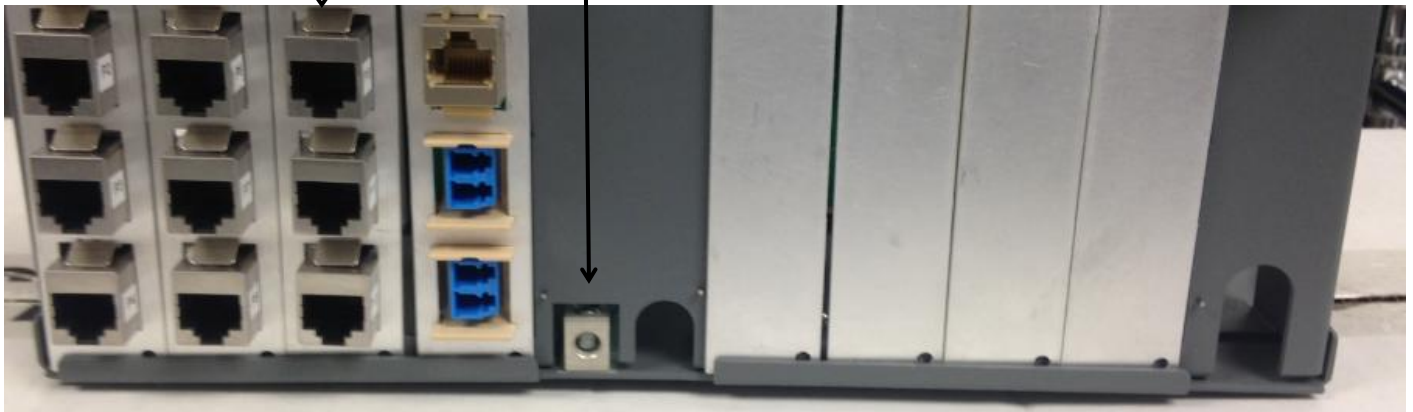
Ground A & B Power

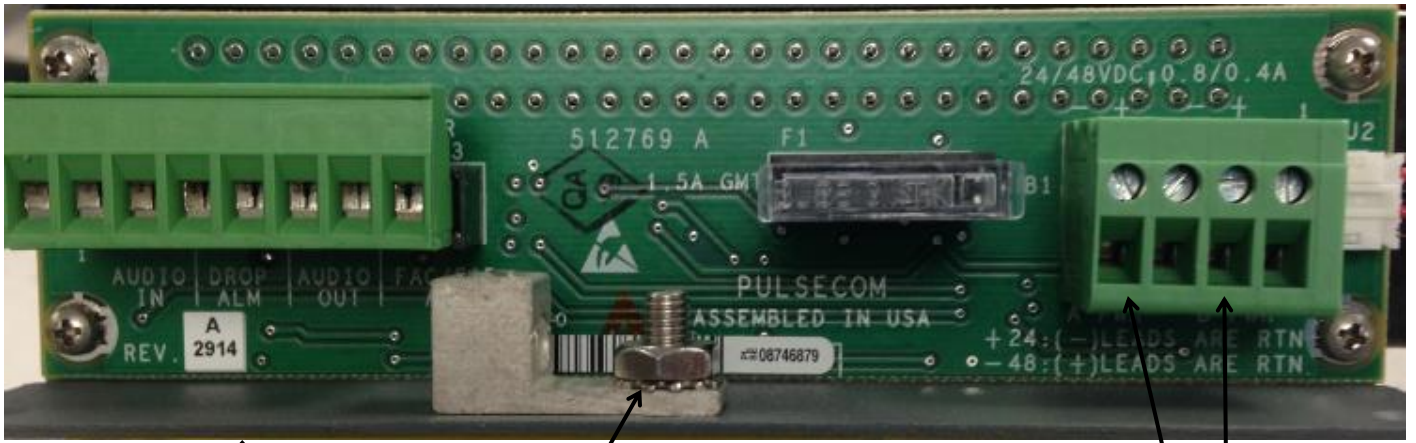


3O3D3-CPL2C REVB ↑↓

Ground

A & B Power

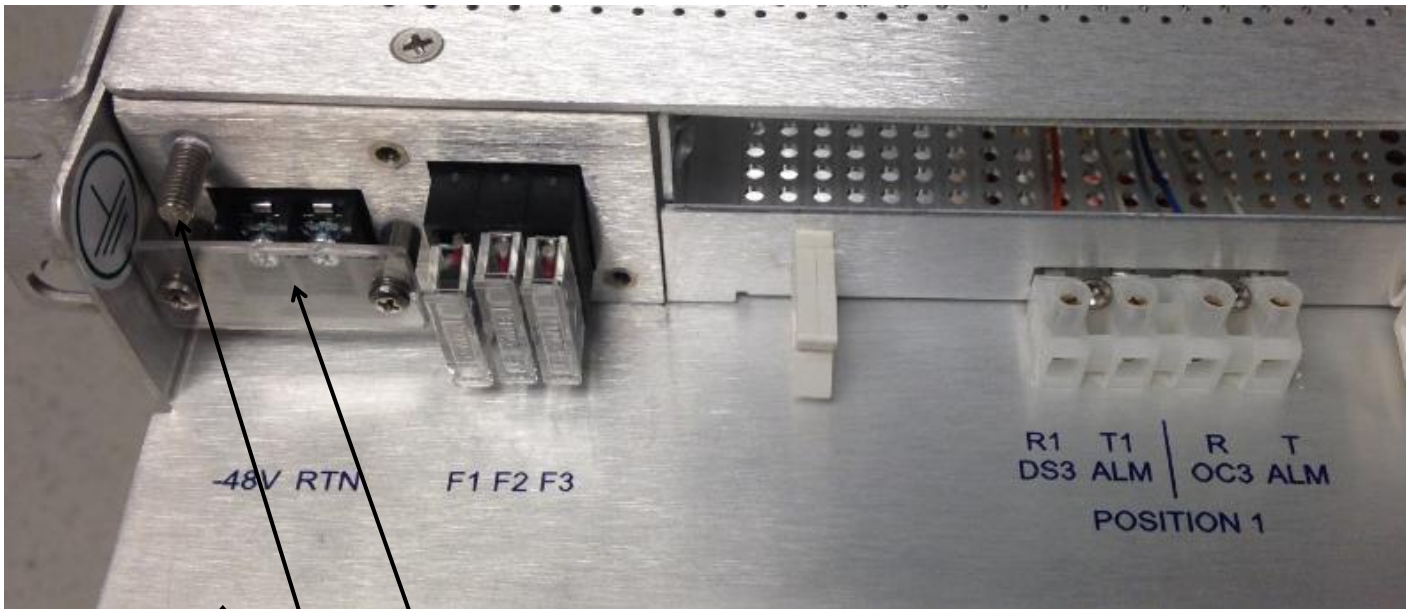




03D3-RT REVB ↑

Ground ↑

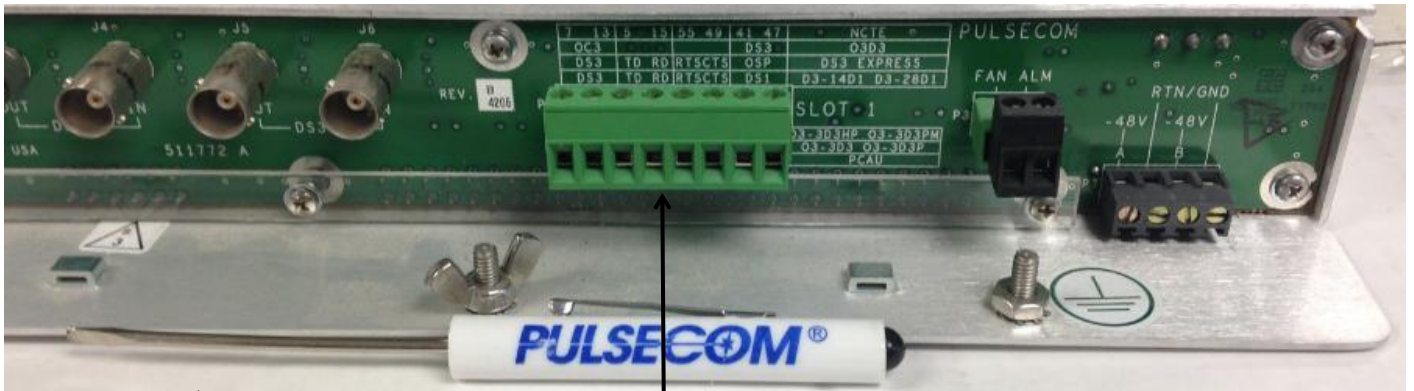
A & B Power ↑



303D3-23L2A ↑ Ground Power

STEP 5 – Alarm connections.

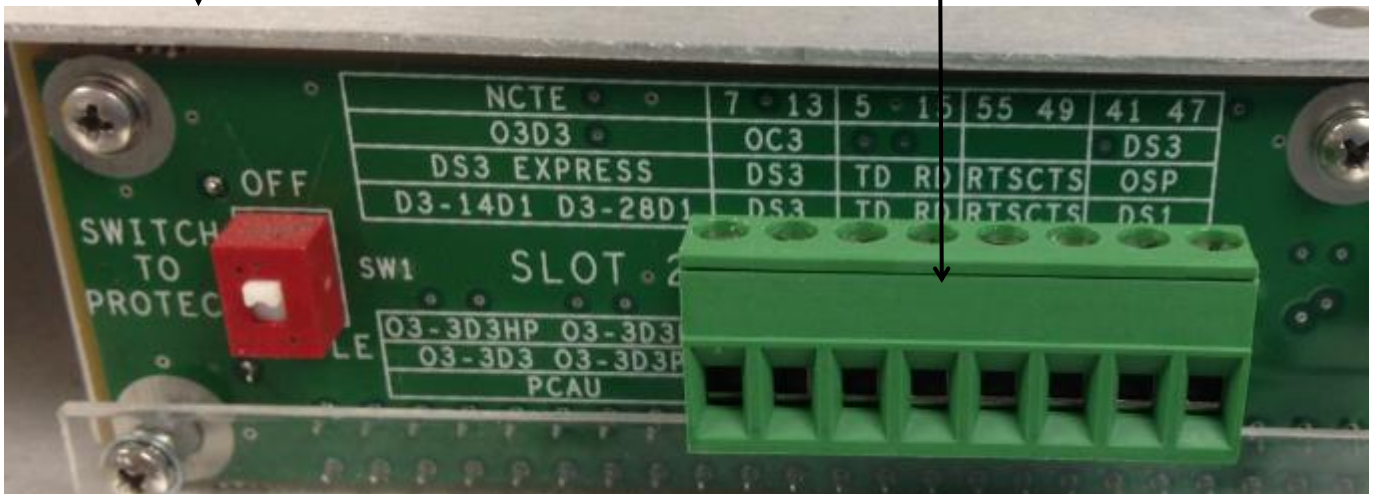
Each housing has connections for alarms. The 3O3D3-23L2A and 3O3D3-CPL2C REV B housings have a set of alarm connections for each of the three slots. The 2O3D3-19A REV B has a set of alarm connections for its two slots and a connection for fan alarms. The O3D3-RT REV B has one set of alarm connections. Study the images below for the applicable housing. Use the included flat blade screwdriver to connect the alarm wires (22 AWG minimum to 18 AWG maximum) to the appropriate terminal blocks. NOTE: DS1 alarms appear at the DS3 pins 41 and 47 for the O3-12D1DN unit.



2O3D3-19A



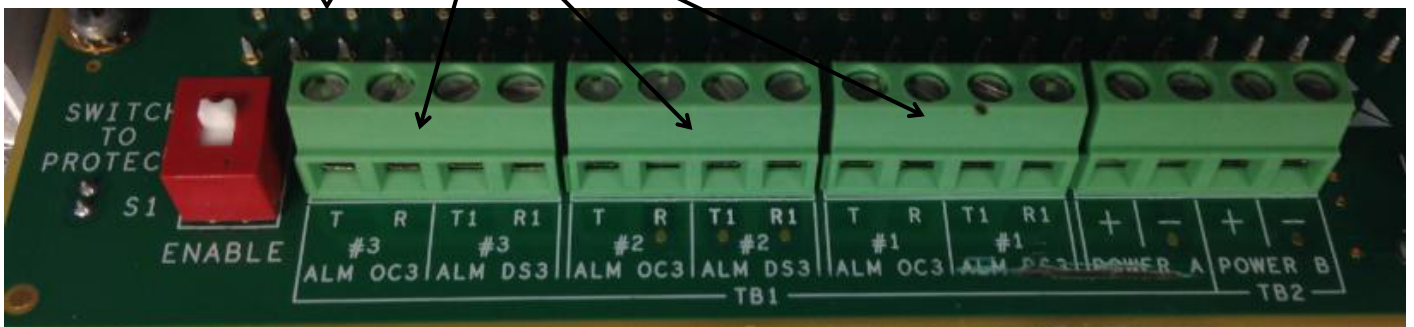
Alarm Connections Slot 1 and Slot 2



3O3D3-CPL2C REV B

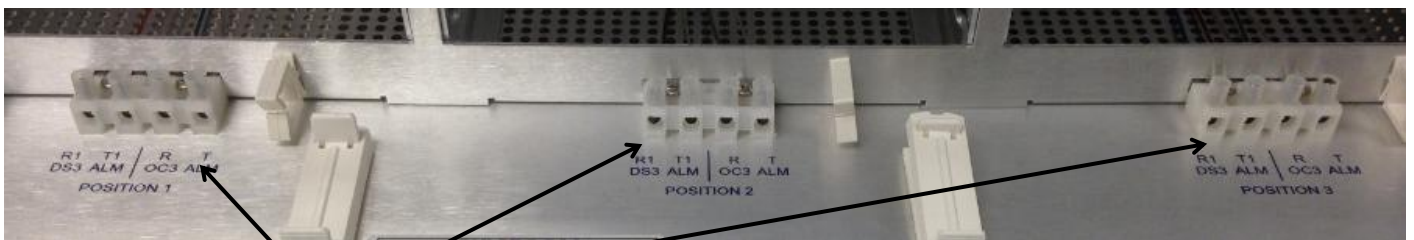


Alarm connections





O3D3-RT REVB ↑ Alarm connections



3O3D3-23L2A ↑ Alarm connections

STEP 6 – Fiber cabling.

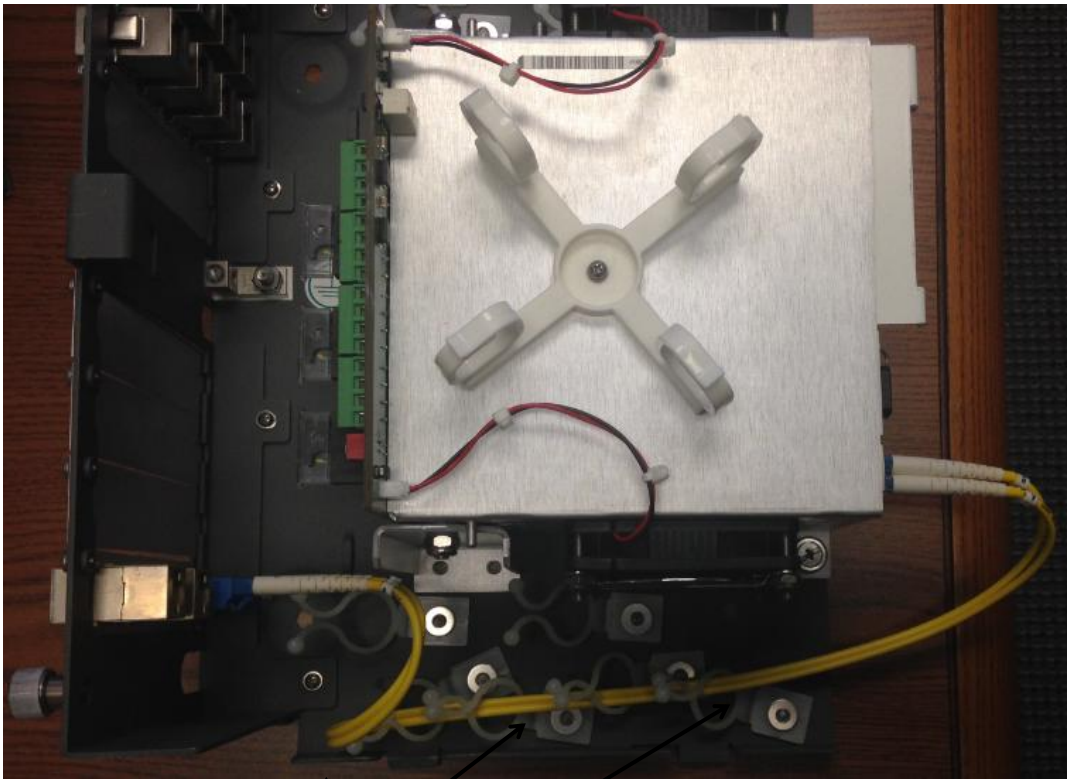
Many units that use the Engenuity/Pulsecom housing are fed by optical fiber cables. Dress the fiber as shown in the following examples:



2O3D3-19A REVB ↑ Fiber dressing



3O3D3-23L2A ↑ Fiber dressing



303D3-CPL2C REVB ↑↑

Fiber dressing

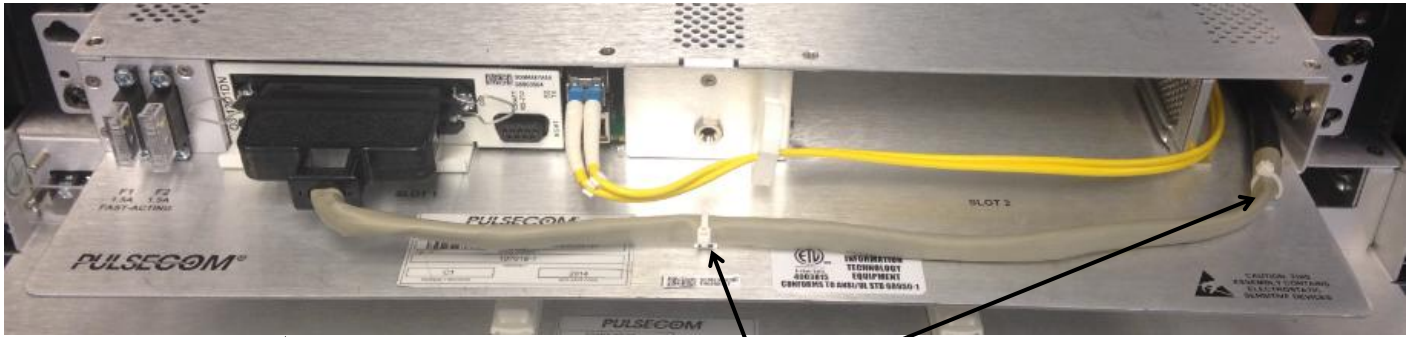


O3D3-RT REVB ↑↑

Fiber dressing

STEP 7 – Electrical (DS1, DS3, Ethernet, etc.) cabling.

Many units that use the Enginuity/Pulsecom housings deliver electrical signals over copper cables. Dress the cables as shown in the following examples:



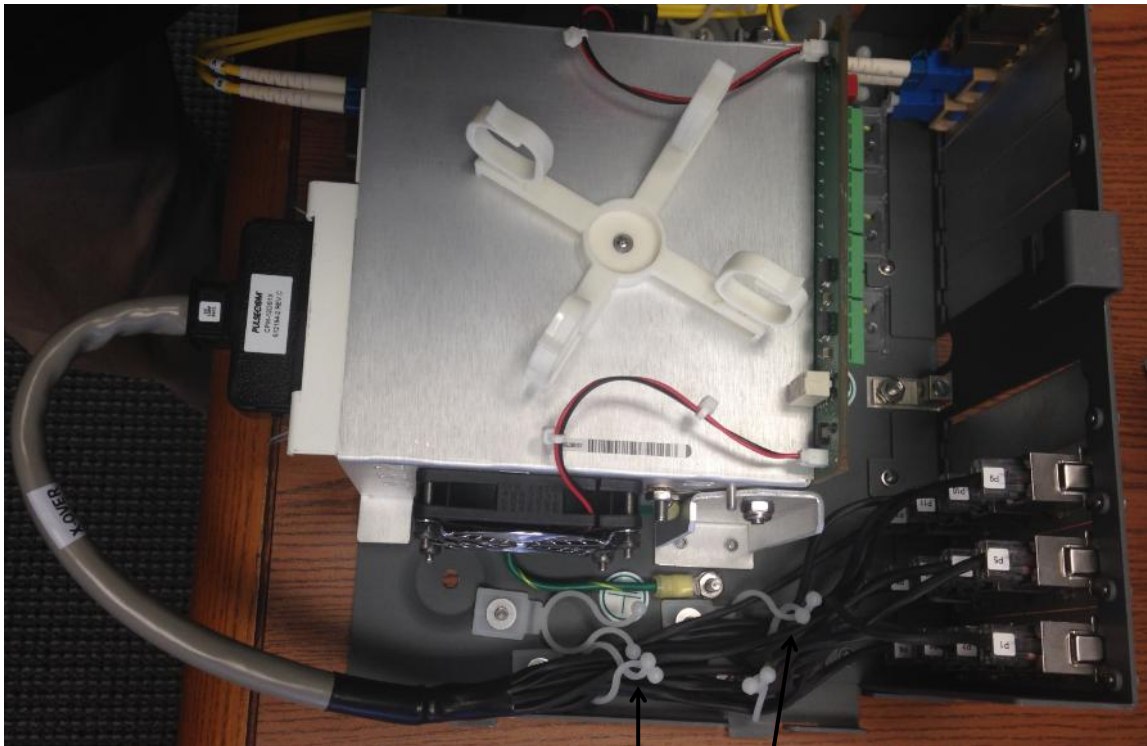
203D3-19A REV B ↑

Cable dressing



303D3-23L2A ↑

Cable dressing



303D3-CPL2C REV B ↑

Cable dressing



O3D3-RT REVB ↑

Cable dressing

NOTE: The rack mounting ear and fiber guard are reversible on the O3D3-RT REVB. The O3D3-RT REVB can also be used in a cabinet between the inner wall and the outside of the rack.



STEP 8 – 2O3D3-19A-HORIZ and 2O3D3-19A-VERT installation.

In addition to the four typical housings, there are two supplements to the 2O3D3-19A REV.B. Study the images below on the use of these supplements.



2O3D3-19A-HORIZ

Mount 1 U below the 2O3D3-19A REV.B with 4 rack screws to divert heat from lower equipment.



2O3D3-19A-VERT

Uses two to mount up to 10 of the 2O3D3-19A REV.B shelves vertically.

STEP 9 - Technical documentation.

Use the following list to reference manuals available for these products:

IN1672	2O3D3-19A REVB
IN1594	3O3D3-23L2A
IN1678	3O3D3-CPL2C REVB
IN1690	O3D3-RT REVB

Use the following link to watch a video on the installation of the 3O3D3-CPL2C REVB:

http://www.pulse.com/emodule/3O3D3_CPL2CREVB/player.html

Technical Support

Please don't hesitate to contact us. We are available to help anytime.

Technical Support

Jim Belcher

800-841-1005

jbelcher@enginuitycom.com

©2017 Enginuity Communications Corp.