



Cobalt Digital Inc.

2406 E. University Ave.
Urbana, IL 61802
Voice 217.344.1243 • Fax 217.344.1245
www.cobaltdigital.com • info@cobaltdigital.com

9490CWDM-8M-LC 8-Channel CWDM Multiplexer

9490CWDM-8D-LC 8-Channel CWDM Demultiplexer

Installation Instructions

This manual provides safety and installation instructions for the 9490CWDM-8M-LC 8-Channel CWDM Multiplexers and 9490CWDM-8D-LC 8-Channel CWDM Demultiplexers. All units use type LC connectors and use the following wavelength divisions:

9490CWDM-8M-LC 8-Ch mux; 1270nm - 1290nm - 1310nm - 1330nm - 1350nm - 1370nm - 1430nm - 1450nm

9490CWDM-8MX-LC 8-Ch mux with expansion port; 1470nm - 1490nm - 1510nm - 1530nm - 1550nm - 1570nm - 1590nm

9490CWDM-8D-LC 8-Ch demux; 1270nm - 1290nm - 1310nm - 1330nm - 1350nm - 1370nm - 1430nm - 1450nm

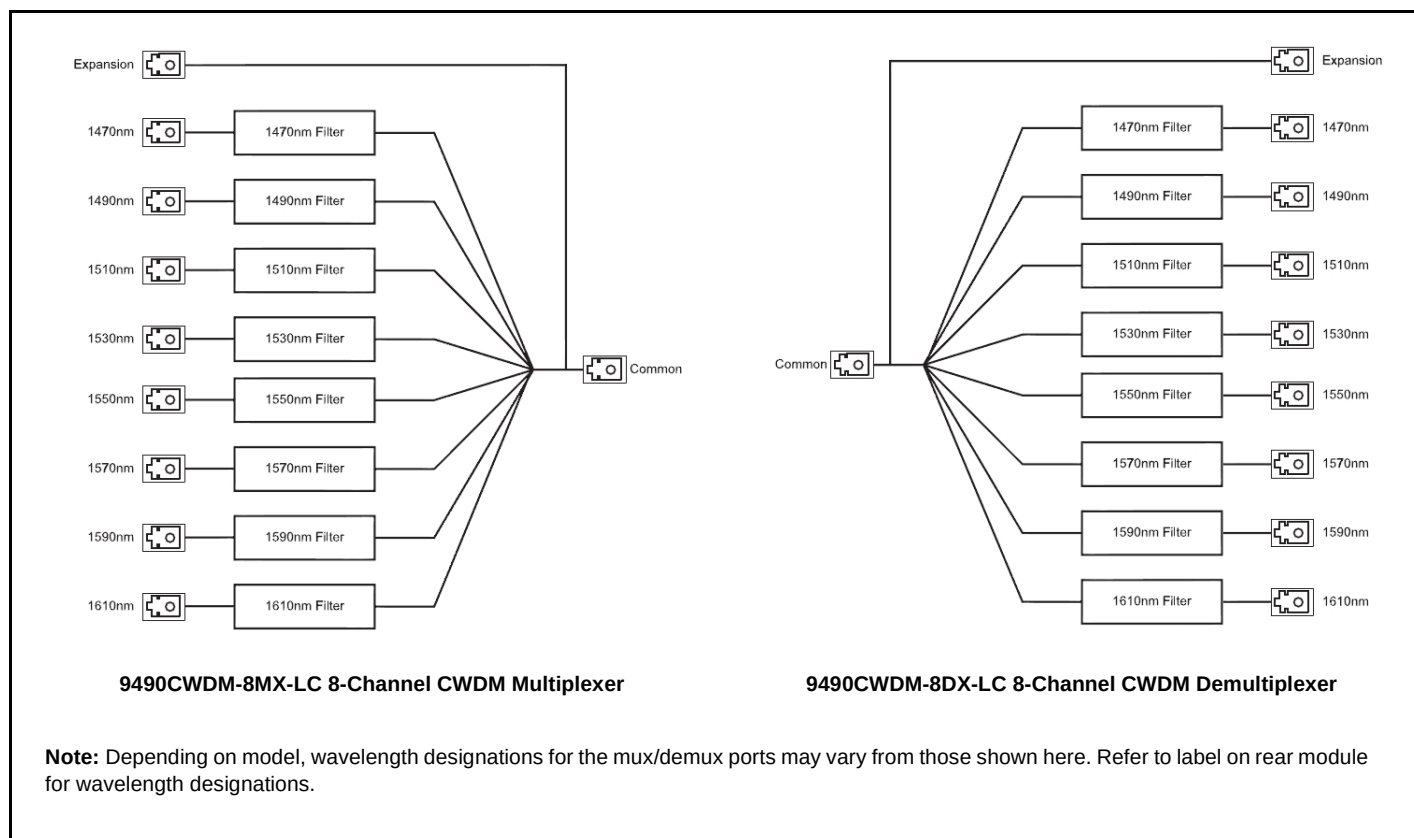
9490CWDM-8DX-LC 8-Ch demux with expansion port; 1470nm - 1490nm - 1510nm - 1330nm - 1530nm - 1550nm - 1570nm - 1590nm

Laser Safety Instructions and Notices



- Do not look into fiber cable ends or connectors.
- Only trained and authorized personnel shall be permitted to perform laser/fiber optic installation and/or maintenance.

9490CWDM-8MX-LC and 9490CWDM-8DX-LC Block Diagrams

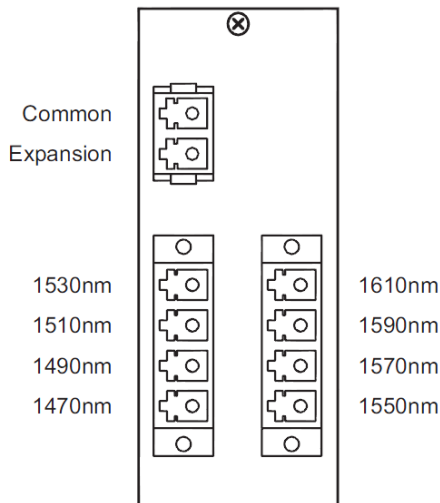


Unit Installation and Rear I/O Module Connections

Install the mux/de-mux units and connect fiber cabling as shown in the illustration below and as described below.

1. Install the rear module in the desired 20-slot frame slot pair (mux or de-mux unit and its rear module occupies 2 card slots).
2. Install the mux or demux unit in the frame to mate with the rear module.
3. Remove protective caps on couplers and install cable onto connectors.

Please see other side



Note: Depending on model, wavelength designations for the mux/demux ports may vary from those shown here. Refer to label on rear module for wavelength designations.

Typical 9490CWDM-8MX-LC / 9490CWDM-8DX-LC Rear Module Connections

Item	Characteristic
Part number, nomenclature, and filter wavelength divisions	9490CWDM-8M-LC 8-Channel Optical Mux 1270nm - 1290nm - 1310nm - 1330nm - 1350nm - 1370nm - 1430nm - 1450nm. Includes type LC connector Rear I/O Module 9490CWDM-8MX-LC 8-Channel Optical Mux with expansion port 1470nm - 1490nm - 1510nm - 1530nm - 1550nm - 1570nm - 1590nm - 1610nm. Includes type LC connector Rear I/O Module 9490CWDM-8D-LC 8-Channel Optical De-Mux 1270nm - 1290nm - 1310nm - 1330nm - 1350nm - 1370nm - 1430nm - 1450nm. Includes type LC connector Rear I/O Module 9490CWDM-8DX-LC 8-Channel Optical De-Mux with expansion port 1470nm - 1490nm - 1510nm - 1530nm - 1550nm - 1570nm - 1590nm - 1610nm. Includes type LC connector Rear I/O Module
Insertion Loss Note: When used as a pair, max. 4.1 dB insertion loss (exluding expansion port)	3.1 dB (max) per channel (mux or demux) 3.0 dB (max) (expansion port; mux or demux)
Adjacent Channel Isolation	30 dB (min)
Non-Adjacent Channel Isolation	40 dB (min)
Passband Ripple	0.3 dB
Channel Passband	+/- 6.5 nm
Channel Spacing	20 nm
Return Loss	50 dB (min)
Frame Slot Usage	2 per unit
Connector Type	Single Mode, Type LC/UPC

9490CWDM-8MX-LC / 9490CWDM-8DX-LC Specifications