



I N D E X

Numerics

4-channel mux/demux modules

- optical link loss for data channels (table) **4-3**
- optical link loss for OSC (table) **4-4, 4-14**

8-channel mux/demux modules

- optical link loss for data channels (table) **4-3**
- optical link loss for OSC (table) **4-4, 4-14**

16-channel terminal mux/demux modules

- installing **2-6**

32-channel mux/demux modules

- optical link loss for data channels (table) **4-4**
- optical link loss for OSC (table) **4-4, 4-14**

A

alarms

- verifying generation **4-14**

B

BER test **4-13, 5-6**

bit error rate

- network test **5-6**
- node test **4-13**

C

cabling

- console ports **2-4**
- mux/demux module and OSC ports **2-10**
- mux/demux modules **2-10**

requirements **1-5**

transponder modules **2-9**

cards

handling precautions **1-2**

CDP **5-5**

chassis

powering up **2-12**

safety precautions **1-3**

checklists

node data **A-1**

test results **B-1**

cleaning **2-11**

optical connectors **2-11**

shelf **2-11**

client interfaces

laser specifications **4-5**

verifying status **4-7**

verifying transmit power **4-4**

clock rate command **3-6**

configuring

enable passwords **3-1**

enable secret passwords **3-2**

management access **3-1**

patch connections **3-8**

connecting

console ports **2-4**

mux/demux module and OSC ports **2-10**

mux/demux modules **2-10**

transponder modules **2-9**

D

data channels
optical link loss through 32-channel mux/demux modules **4-4**
duplex command **3-2**

E

electrostatic discharge **1-4**
enable passwords
 configuring **3-1**
encapsulation command **3-6**
ESCON
 configuring protocol encapsulation (table) **3-6**
ESD
 precautions **1-1**
 preventing ESD damage **1-4**
Ethernet management ports. See NME

F

Fast Ethernet
 configuring protocol encapsulation (table) **3-6**
fastethernet 0 interfaces
 configuring **3-2**
 configuring IP addresses **3-2**
 IP on OSC **3-4**
FDDI
 configuring protocol encapsulation (table) **3-6**
fiber
 characterization **1-7**
Fibre Channel
 configuring protocol encapsulation (table) **3-6**
FICON
 configuring protocol encapsulation (table) **3-6**

G

Gigabit Ethernet
 configuring protocol encapsulation (table) **3-6**
grounding **2-10**

H

hardware
 verifying installation **2-13**
hostname command **3-3, 3-11**

I

insertion loss
 checking **4-2**
installing
 chassis **2-1**
 line card motherboards **2-7**
 mux/demux modules **2-6**
 mux/demux motherboards **2-5**
 processor cards **2-3**
 strain relief brackets **2-2**
 transponder modules **2-8**
interface loopback command **3-4**
interface transparent command **3-6, 3-7, 3-11**
interface wave command **3-4**
ip address command **3-2, 3-4**
IP addresses
 configuring on NME **3-2**
 configuring OSC wave interfaces **3-3**
ip default-gateway command **3-3**
ip route command **3-5**
ip unnumbered command **3-4**

L

lasers

- safety warning [1-2](#)
 - verifying frequency [4-11](#)
 - line card motherboards
 - optical link loss (table) [4-3](#)
-

M

meshed rings [5-1](#)

O

OFC

configuring with encapsulation command [3-6](#)

optical spectrum analyzer

measuring optical power [5-1, 5-5](#)

OSA [5-5](#)

OSC

connectivity [5-4](#)

optical link loss through mux/demux modules [4-4, 4-14](#)

OSC interfaces

patch connections [3-8](#)

P

patch command [3-9](#)

patch connections

configuring [3-8](#)

types (table) [3-8](#)

power [2-12](#)

DC protection [1-2](#)

verifying optical power [4-2](#)

verifying power [4-4](#)

R

redundancy

verifying [4-15](#)

required equipment [1-4, 4-1](#)

router bgp command [3-5](#)

router eigrp command [3-5](#)

router ospf command [3-5](#)

S

safety information [1-1](#)

SDH

configuring protocol encapsulation (table) [3-6](#)

shelf

cleaning [2-11](#)

grounding [2-10](#)

show hardware command [2-13](#)

show interfaces command [4-7](#)

SNMP

configuring [3-11](#)

software

configuring [3-1](#)

SONET

configuring protocol encapsulation (table) [3-6](#)

speed command [3-2](#)

strain relief brackets

installing [2-2](#)

Synchronous Digital Hierarchy. See SDH

T

testing

bit error rate [4-13, 5-6](#)

topology neighbor command [3-7](#)

transceivers

types supported [1-5](#)

V

verifying

- alarm generation [4-14](#)
- bit error rate [4-13](#)
- CDP connectivity [5-5](#)
- fiber characteristics [1-7](#)
- hardware installation [2-13](#)
- insertion losses [4-2](#)
- interfaces [4-7](#)
- laser frequency [4-11](#)
- meshed rings [5-1](#)
- optical power and frequency [4-2](#)
- OSC connectivity [5-4](#)
- power [4-4](#)
- power up [2-13](#)
- redundancy [4-15](#)
- traffic [5-1](#)

W

wavelengths

- mapped to channels (table) [4-11](#)
- testing BER [5-6](#)