

DESCRIPTION

The MX2820 19-Inch Chassis (P/N 1186001L1) houses multiple M13 multiplexers that consolidate T1/E1 signals into T3 circuits. The chassis houses seven redundant M13 multiplexers. The chassis also houses a single System Controller Unit (SCU) that provides management capabilities to the MX2820 system.

Features of the MX2820 system include the following:

- 1-to-1 redundancy
- Hot-swappable MUX cards
- Embedded SNMP and Telnet management
- Simplified configuration through the VT100 terminal menu structure
- Meets the requirements for NEBS Level 3 compliance

TURN-UP STEPS

After unpacking the unit, inspect it for damage. If damage is noted, file a claim with the carrier and then contact ADTRAN. Refer to Warranty.

1. Attach mounting ears.
2. Attach cable tie bar, if necessary.
3. Mount chassis in rack.

WARNING

Care should be taken not to upset the stability of the equipment rack.

4. Remove appropriate fuses from fuse panel.
5. Remove metal cover from the right side of the back panel.

NOTE

Silk-screen on the metal cover references the following connections.

6. Wire wrap **CHN** posts and **MIN** alarm relay posts and then route the wire downward.
7. If STS-1, wire wrap **CLKB** and **CLKA** posts and then route the wire downward.
8. Wire wrap **ACO** posts and then route the wire downward.
9. Wire wrap **AUX1**, **AUX2**, and **AUX3** alarm input posts and then route the wire downward.
10. Wire wrap **MAJ** and **CRIT** alarm posts and then route the wire downward.

11. Connect the frame ground on the barrier strip.

NOTE

Refer to the Safety and Regulatory Compliance Notice (P/N 61186001L1-17) for this product when connecting the frame ground.

12. Connect **RET B**, **PWR B**, **RET A**, and **PWR A** on the barrier strip.

NOTE

PWR = Respective -48 VDC or ±24 VDC source, RET = respective return

13. Insert the appropriate fuses into the fuse panel.
14. Using a voltmeter, verify that the operating voltage is within specifications for A and B power.
15. Remove appropriate fuses from panel and replace the metal cover that was removed in step 2.
16. Insert appropriate fuses into panel, and if not done in step 2, attach cable tie bar.
17. Connect 10/100Base-T Ethernet and NTKW MGMT X.25 interfaces.
18. Route DSX-3 coax and tie to upper tie bar.
19. Route DSX-1 IN cables below upper tie bar and tie to upper tie bar.
20. Route DSX-1 OUT cables beneath lower tie bar and tie to lower tie bar.

OPERATIONAL SPECIFICATIONS

- Electrical
 - ◆ Operating Voltage
 - -48 VDC Systems: -42 VDC to -56 VDC
 - -24 VDC Systems: -22 VDC to -27 VDC
 - +24 VDC Systems: +22 VDC to +27 VDC
- Environmental
 - ◆ Operational Temperature Range: -40°C to +65°C
 - Without Fans: -40°C to +50°C
 - With Fans: -40°C to +65°C
 - ◆ Storage Temperature Range: -40°C to +85°C
 - ◆ Relative Humidity: up to 95%, noncondensing

CABLE ASSEMBLY PINOUTS

Refer to the tables below for the pinout connections.

Amp Champ Pinout for All Future Bus to Amp Cable Assemblies

Pin	Function	Pin	Pin	Function	Pin		
1	Ring 1	Tip 1	33	17	Ring 17	Tip 17	49
2	Ring 2	Tip 2	34	18	Ring 18	Tip 18	50
3	Ring 3	Tip 3	35	19	Ring 19	Tip 19	51
4	Ring 4	Tip 4	36	20	Ring 20	Tip 20	52
5	Ring 5	Tip 5	37	21	Ring 21	Tip 21	53
6	Ring 6	Tip 6	38	22	Ring 22	Tip 22	54
7	Ring 7	Tip 7	39	23	Ring 23	Tip 23	55
8	Ring 8	Tip 8	40	24	Ring 24	Tip 24	56
9	Ring 9	Tip 9	41	25	Ring 25	Tip 25	57
10	Ring 10	Tip 10	42	26	Ring 26	Tip 26	58
11	Ring 11	Tip 11	43	27	Ring 27	Tip 27	59
12	Ring 12	Tip 12	44	28	Ring 28	Tip 28	60
13	Ring 13	Tip 13	45	29	N/A	N/A	61
14	Ring 14	Tip 14	46	30	N/A	N/A	62
15	Ring 15	Tip 15	47	31	N/A	N/A	63
16	Ring 16	Tip 16	48	32	N/A	FGND	64

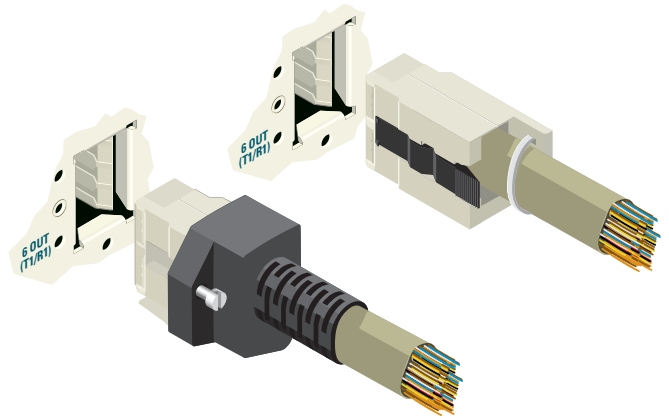
Conductor Color Code for All Future Bus to Stub Cable Assemblies

Pair	Wire Color Tip	Wire Color Ring	Pair	Wire Color Tip	Wire Color Ring
1	WHT/BLU	BLU/WHT	15	BLK/SLT	SLT/BLK
2	WHT/ORG	ORG/WHT	16	YEL/BLU	BLU/YEL
3	WHT/GRN	GRN/WHT	17	YEL/ORG	ORG/YEL
4	WHT/BRN	BRN/WHT	18	YEL/GRN	GRN/YEL
5	WHT/SLT	SLT/WHT	19	YEL/BRN	BRN/YEL
6	RED/BLU	BLU/RED	20	YEL/SLT	SLT/YEL
7	RED/ORG	ORG/RED	21	VOL/BLU	BLU/VOL
8	RED/GRN	GRN/RED	22	VOL/ORG	ORG/VOL
9	RED/BRN	BRN/RED	23	VOL/GRN	GRN/VOL
10	RED/SLT	SLT/RED	24	VOL/BRN	BRN/VOL
11	BLK/BLU	BLU/BLK	25	VOL/SLT	SLT/VOL
12	BLK/ORG	ORG/BLK	26	WHT/BLU	BLU/WHT
13	BLK/GRN	GRN/BLK	27	WHT/ORG	ORG/WHT
14	BLK/BRN	BRN/BLK	28	WHT/GRN	GRN/WHT

Note: **Bold** indicates blue binder group. Pairs 1-25 do not use a binder.

MX2820 CABLE ASSEMBLY INSERTION ORIENTATION

When facing the backplane, the black locking tab or locking screw should be facing to the left as the connector is inserted into the backplane.



DSX-1 Patch Cable Description	Cable Part Numbers	
	Future Bus with Locking Tab	Future Bus with Locking Screw
3 feet Future Bus to Female 64-Pin Amp	1186020L1	1186020L2
6 feet Future Bus to Male 64-Pin Amp	1186021L1	1186021L2
15 feet Future Bus to Female 64-Pin Amp	1186022L1	1186022L2
25 feet Future Bus to Stub	1186025L1	1186025L2
50 feet Future Bus to Stub	1186050L1	1186050L2
100 feet Future Bus to Stub	1186100L1	1186100L2
150 feet Future Bus to Stub	1186150L1	1186150L2

SAFETY AND REGULATORY COMPLIANCE

Refer to the Safety and Regulatory Compliance Notice for this product (P/N 61186001L1-17) for detailed safety and regulatory information.

Consultez l'avis sur la sécurité et la conformité à la réglementation pour ce produit (61186001L1-17) pour obtenir des renseignements détaillés sur la sécurité et la réglementation

Ausführliche Sicherheits- und regulatorische Informationen sind in der Konformitätserklärung zur Sicherheit und Einhaltung von Normen zu diesem Produkt (61186001L1-17) aufgeführt.

Warranty: ADTRAN will replace or repair this product within the warranty period if it does not meet its published specifications or fails while in service. Warranty information can be found online at www.adtran.com/warranty.

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CAUTION!
SUBJECT TO ELECTROSTATIC DAMAGE
OR DECREASE IN RELIABILITY
HANDLING PRECAUTIONS REQUIRED

ADTRAN CUSTOMER CARE:

From within the U.S. 1.800.726.8663
From outside the U.S. +1 256.963.8716

PRICING AND AVAILABILITY 1.800.827.0807

