

DIGITAL TRANSMISSION SYSTEM  
828AFXT DIGITAL MULTIPLEXER  
PARTS LIST AND ORDERING INFORMATION

1. GENERAL

- 1.01 This section is a cover sheet for Telco Systems Fiber Optics Corporation Digital Transmission System 828AFXT Digital Multiplexer Parts List and Ordering Information. This section is reproduced with permission of Telco Systems Fiber Optics Corporation and is the equivalent of Telco practice 833-102-003, Issue 1.
- 1.02 Whenever this section is reissued the reason(s) for reissue will be listed in this paragraph.
- 1.03 This section presents a parts list for the 828AFXT Digital Multiplexer, including accessories and cables.
- 1.04 If corrections are required in the attached document, use Form-3973 as described in Section 000-010-015.
- 1.05 If equipment design and/or manufacturing problems should occur, refer to Section SW 010-522-906 for procedures on filing an Engineering complaint.

2. ORDERING PROCEDURE

- 2.01 For information concerning equipment and parts availability contact Telco Systems, Order Administration Department, in Norwood, Massachusetts, at:

1-800-44-SALES  
1-617-551-0300

- 2.02 To order additional copies of this practice, use TELC 365-407-855SW as the section number.

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TELC 365-407-855SW

3. REPAIR/RETURN

- 3.01 For defective modules and assemblies contact the Repair Department at the following number:

8:00 a.m. - 5:00 p.m. (617) 551-0300 - Ext./ 2778

Attachment: Telco Systems Fiber Optics Corporation  
Digital Transmission System  
828AFXT Digital Multiplexer  
Parts List and Ordering Information

PROPRIETARY

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TELCO SYSTEMS FIBER OPTICS CORPORATION      SECTION 833-102-003  
Norwood, Massachusetts 02062      Issue 1, April 1988

DIGITAL TRANSMISSION SYSTEM  
828AFXT DIGITAL MULTIPLEXER  
PARTS LIST AND ORDERING INFORMATION

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| 1. SCOPE   |      |
| 1.01 This section presents a parts list for the 828AFXT Multiplexer, including accessories and cables. In addition, this section also provides general parts ordering information.                                       |      |
| 1.02 Whenever this section is reissued, the reason for reissue will be listed in this paragraph.   |      |
| 2. PARTS LIST  |      |
| 2.01 TABLE A provides ordering information for the 828AFXT multiplexer. Required ordering information for 828AFXT accessories is contained in TABLE B. Required information for ordering cables is contained in TABLE C. |      |
| 3. ORDERING INFORMATION  |      |
| 3.01 For information concerning 828AFXT equipment and parts availability, contact Telco Systems, Order Administration Department, in Norwood, Massachusetts at:  |      |
| 1-800-44-SALES<br>1-617-551-0300   |      |
| 3.02 A valid Purchase Order Number must be provided at the time the order is placed.   |      |
| 3.03 Alternatively, a Telco Systems Telephone Equipment Order form (see Figure 3-1) accompanied by a valid Purchase Order Number can be sent to the Order Administration Department                                      |      |

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TABLE A. 828AFXT Multiplexer Assembly and Part Number List

| PART NUMBER | PART DESCRIPTION                              | QUANTITY REQUIRED |
|-------------|---|-------------------|
| ACX026G5    | Cage Assembly                                 | 1                 |
| PSX016-4    | Power Supply Module (-48 Vdc)<br>-48 Vdc      | 2                 |
| CCA120G1E   | High-Speed Common Card<br>(1 for unprotected) | 2                 |

|                               |                                    |                      |
|-------------------------------|------------------------------------|----------------------|
| Control MPU Card              | 1                                  |                      |
| CCA162G21E                    | Interfaces with the TELTRAC system |                      |
| XCVR (Transceiver) Cards      | 2                                  |                      |
| CCA121G1E                     | XCVR Card, SM, -9.0 dBm, Laser     | (1 for unprotected)  |
| CCA121G4E                     | XCVR Card, MM 0 dBm, Laser         |                      |
| CCA121G11E                    | XCVR Card, SM, -24.0 dBm, LED      |                      |
| CCA121G3E                     | XCVR Card, SM -3.0 dBm, Laser      |                      |
| LS INTER T1 Cards             | Up to 7                            |                      |
| CCA099G1E                     | Configures T1 AIS to be All 1s     |                      |
| CCA161G2E                     | B8ZS/AMI Switch Selectable         |                      |
| Fuse and Alarm Panel (-48 Vdc | 1 per 6 828AFs,                    |                      |
| ACX043G1                      | -48 Vdc                            | or 1 per 7-foot rack |
| Preemphasis/Buildout Networks | 1 per                              |                      |
| (Cable length to DSX-1)       | LS INTER T1 card                   |                      |
| None Required                 | T1 0 - 100 feet                    |                      |
| CCA062G1                      | T1 101 - 350 feet                  |                      |
| CCA062G2                      | T1 351 - 655 feet                  |                      |

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TABLE B. 828AFXT Equipment Accessories

| PART NUMBER | PART DESCRIPTION  | QUANTITY REQUIRED |
|-------------|---|-------------------|
| AXX072G1    | Maintenance Kit (-48 Vdc)<br>(with Maintenance Interface card)                    | As Required       |
| AXX072G6    | Maintenance Kit (-48 Vdc)<br>(without Maintenance Interface card)                 |                   |
| CCA058G1E   | Maintenance Interface Card (Note 1)<br>(included in the Maintenance Kit)          |                   |
| CCA158G1E   | Remote Alarm Card (RAC-II) (Note 2)   |                   |
| CCA008G1    | Manual Control Interface Card (Note 3)  |                   |
| CCA176G1    | T1 Monitor Card (Note 4)  |                   |
| AXX004G1    | (-48 Vdc) Fuse and Relay Kit (spare)  |                   |
| AXX067G1    | CEV Conversion Kit<br>(contains the BNC bracket and<br>Cable Support)             |                   |
| AXX068G1    | CEV Shelf Kit<br>(contains the CEV Shelf)   |                   |
| FA0488-1    | Air Baffle<br>(to be installed in rack every three<br>units stacked, as required) |                   |
| Relay Racks |   |                   |
| FAR004-3    | 7-feet x 23-inches  |                   |
| FAR004-7    | 9-feet x 23-inches  |                   |
| FAR004-12   | 11.5-feet x 23-inches   |                   |

### Functionality:

Note 1: Module capable of testing or replacing T1 or T1C low-speed cards.

Note 2: Module performs TELTRAC communication, DS-3 X-bit bridging, eight alarm points, eight contact closures.

Note 3: This module is not designed for extended temperature conditions. Module performs LED test, low-speed loopback, high-speed BER (Bit Error Rate) reporting.

Note 4: This module is not designed for extended conditions. Module is capable of monitoring and bridging T1 or T1C low-speed signals.

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#### SECTION 833-102-003

TABLE B. 828AFX Equipment Accessories (Cont.)

| PART NUMBER | PART DESCRIPTION | QUANTITY REQUIRED |
|-------------|------------------|-------------------|
|-------------|------------------|-------------------|

|  |                              |             |
|--|------------------------------|-------------|
|  | FO (Fiber-Optic) Attenuators | As Required |
|--|------------------------------|-------------|

|        |                           |  |
|--------|---------------------------|--|
| OSF011 | BIC Attenuator, SM, 5 dB  |  |
| OSF012 | BIC Attenuator, SM, 10 dB |  |
| OSF013 | BIC SM, 15 dB             |  |
| OSF014 | BIC Attenuator, SM, 20 dB |  |

FO Entrance Panels

|          |                                 |  |
|----------|---------------------------------|--|
| ACX003G1 | FO Interface Panel, BIC*        |  |
| AXX003G1 | FO Connector Interface, SM/BIC* |  |

DSX-1 Panels

|        |                                  |  |
|--------|----------------------------------|--|
| OSX002 | DSX-1 Panel, 56 CKT, 23", BANTAM |  |
| OSX003 | DSX-1 Panel, 25 CKT, 23", 310    |  |
| OSX021 | DSX-1 Panel, 28 CKT, 23", 310    |  |

|          |   |  |
|----------|---|--|
| HTB013-1 | Wire-Wrap Blocks  |  |
|          | Wire-wrap block (segmented into four 10 x 5 pins) with a 50-pin Amphenol connector interface (male) |  |

\* BIC (Biconical Optical Connector)

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#### SECTION 833-102-003

TABLE C. 828AFX Equipment Cables

| PART NUMBER | PART DESCRIPTION | QUANTITY |
|-------------|------------------|----------|
|-------------|------------------|----------|

|  |               |             |
|--|---------------|-------------|
|  | Ribbon Cables | As required |
|--|---------------|-------------|

|          |                             |  |
|----------|-----------------------------|--|
| AWX104G1 | Mux-to-Mux                  |  |
| AWX104G5 | Mux-to-Fuse and Alarm Panel |  |

DC Power Cables (Wire Harness)

|          |                               |  |
|----------|-------------------------------|--|
| AWX182G1 | Fuse and Alarm Panel to MUX 1 |  |
| AWX182G2 | Fuse and Alarm Panel to MUX 2 |  |
| AWX182G3 | Fuse and Alarm Panel to MUX 3 |  |
| AWX182G4 | Fuse and Alarm Panel to MUX 4 |  |
| AWX182G5 | Fuse and Alarm Panel to MUX 5 |  |
| AWX182G6 | Fuse and Alarm Panel to MUX 6 |  |

ACX043 Fuse and Alarm Panel Cables

|          |  |  |
|----------|--|--|
| AWX182G* | Power Cable Harness from Fuse and Alarm Panel to Mux |  |
|----------|--|--|

|          |  |  |
|----------|--|--|
| AWX181G* | RAC-II: 82SA/828AF (J7) to Fuse and Alarm Panel (J4) |  |
|----------|--|--|

AWX184G\* RAC-II: 828A/828AF (J7) to 50-pin  
Amphenol connector (female) to  
interconnect to connectorized wire-wrap  
block HTB013-1

AWX185G\* RAC-II: Extension cable from AWX184G\* to  
customer supplied wire-wrap pin block  
(bare wires)

AWX104G5 Ribbon cable from 828A/828AF (J1) to Fuse  
and Alarm Panel (J3)

\* G number indicates length of cable, which can be ordered in lengths of 6,  
12, 18, 24, 30, 36, 48, and 60 feet.

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#### SECTION 833-102-003

TABLE C. 828AFXT Equipment Cables (Cont.)

| PART NUMBER | PART DESCRIPTION | QUANTITY |
|-------------|------------------|----------|
|-------------|------------------|----------|

|                |             |  |
|----------------|-------------|--|
| TELTRAC Cables | As required |  |
|----------------|-------------|--|

|          |   |  |
|----------|---|--|
| AWX105G* | Connect Fuse and Alarm Panels (ACX043)<br>(modular-to-modular connectors) |  |
|----------|---|--|

|          |  |  |
|----------|--|--|
| AWX126G1 | Three-foot patch cable to connect Fuse and<br>Alarm Panel (ACX043) to TELTRAC cable<br>(modular-to-female Sub D) |  |
|----------|--|--|

|          |  |  |
|----------|--|--|
| AWX126G2 | Three-foot patch cable to connect Fuse and<br>Alarm Panel (ACX043) to TELTRAC cable<br>(modular-to-male Sub D) |  |
|----------|--|--|

|           |   |  |
|-----------|---|--|
| AWX071G** | Connect TELTRAC patch cable to TELTRAC<br>system (male Sub D-to-male Sub D) |  |
|-----------|---|--|

|          |  |  |
|----------|--|--|
| AWX181G* | Connect RAC-II card communication via<br>828AFXT backplane (J7) to ACX043G1 Fuse<br>and Alarm panel. |  |
|----------|--|--|

\* G number indicates length of cable, which can be ordered in lengths of 6,  
12, 18, 24, 30, 36, 48, and 60 feet.

\*\* G number indicates length of cable, which can be ordered in lengths of  
5-foot increments up to 75 feet.(Example: AWX071G5 is five feet.)

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#### SECTION 833-102-003

TABLE C. 828AFXT Equipment Cables (Cont.)

| PART NUMBER | PART DESCRIPTION | QUANTITY |
|-------------|------------------|----------|
|-------------|------------------|----------|

|  |   |  |
|--|---|--|
|  | Optical Patch Cords, BC-BC<br>Single-Mode, Extended Temperature |  |
|--|---|--|

|          |                        |  |
|----------|------------------------|--|
| AWX107-1 | 3.0 Meters ( 9.84 Ft.) |  |
|----------|------------------------|--|

|          |                       |  |
|----------|-----------------------|--|
| AWX107-2 | 5.0 Meters (16.4 Ft.) |  |
|----------|-----------------------|--|

