

DIGITAL TRANSMISSION SYSTEM
828AFXT DIGITAL MULTIPLEXER
GENERAL DESCRIPTION

1. GENERAL

- 1.01 This section is a cover sheet for Telco Systems Fiber Optics Corporation Digital Transmission System 828AFXT Digital Multiplexer General Description. This section is reproduced with permission of Telco Systems Fiber Optics Corporation and is the equivalent of Telco practice 833-102-001, Issue 1.
- 1.02 Whenever this section is reissued the reason(s) for reissue will be listed in this paragraph.
- 1.03 This section is an addendum to the 828AF Digital Multiplexer General Description section (TELC 365-407-849) and contains general information concerning the differences between the 828AF and 828AFXT multiplexers.
- 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 365-407-853SW as the section number.

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Page 1

TELC 365-407-853SW

3. REPAIR/RETURN

- 3.01 For defective modules and assemblies contact the Repair and Return 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
General Description

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Page 2
2 Pages

TELCO SYSTEMS FIBER OPTICS CORPORATION SECTION 833-102-001
Norwood, Massachusetts 02062 Issue 1, April 1988

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CONTENTS PAGE

1. GENERAL..... 1-1
2. APPLICATIONS..... 1-2

1. GENERAL

1.01 This section is an addendum to the 828AF General Description section (830-102-001) and contains general information concerning the differences between the 828AF and 828AFXT multiplexers.

1.02 Whenever this section is reissued, the reasons for reissue will be listed in this paragraph.

1.03 The 82SAFXT multiplexer performs all of the operational functions of the 828AF multiplexer except that the 828AFXT can be utilized in hostile environments, where the ambient temperature is unregulated. The operational range of the 828AFXT multiplexer is as follows:

828AFXT TEMPERATURE RANGE:

-40°F to +151°F

-40°C to +66°C

1.04 An 828AF can be converted into an 828AFXT capable of extended temperature operation by installing extended temperature cards into the unit. All extended temperature operation cards are readily identified by an 'E' suffix appended to the CCA part number. Any cards which do not contain an 'E' suffix, cannot be utilized in 828AFXT applications.

1.05 Since LTU circuit cards are not designed for extended temperature operation, DS-2 optical extensions from an 828AFXT multiplexer is not possible at this time. Consequently, when multiple 828AFXT multiplexers are mounted within the same bay, the cost-effective FA0488-1 air baffle shelf which does not include fiber management for LTU cards can be utilized for required heat deflection.

1.06 The exclusion of LTU cards in 828AFXT applications also eliminates all system requirements for the use of the Optional MPU II card

(CCA135G1). This card is typically employed to couple TELTRAC and RAC-II information to/from remote FOX-2/FOX-2R units via DS-2 optical extensions from installed LTU cards. All external alarm input functions of the Optional MPU II card can be accommodated with the RAC-II card (Remote Alarm Card II) which is designed for extended temperature operation.

- 1.07 Special optical patch cords are required for extended temperature operation. All metallic interconnection cables used in 828AF applications are suitable for extended temperature operation.

1-1

SECTION 830-102-001

- 1.08 An ACX043 Fuse and Alarm Panel must be employed in all extended temperature applications. The ACX025 Fuse and Alarm Panel can only be used in temperature-controlled environments and its use with the 828AFXT multiplexer is therefore excluded. Since certain functional differences exist between the ACX043 and ACX025 Fuse and Alarm Panels, please consult the Installation Section (830-102-005) of the 828AF Operations and Maintenance Manual to determine all ramifications to system design.

- 1.09 A complete listing of all circuit cards, accessories, optical patch cords and interconnection cables are listed in the 828AFXT Parts List and Ordering Information addendum (833-102-003). Please consult this addendum section to order all system components.

2.APPLICATIONS

- 2.01 Since the 828AFXT can be operated over a broad temperature range -40°F to +151°F (-40°C to +66°C), this unit can be utilized in system applications where equipment enclosures contain little or no environmental control. Such enclosures can consist of mini-huts, maxi-huts, and Type 80 equipment cabinets. Where rear access to the equipment is limited, a CEV shelf (AXX068G1) and related cable support hardware (AXX067G1) can be installed temporarily to support the unit to facilitate cable interconnection and installation.

- 2.02 All of the system applications described in the 828AF General Description Section (830-102-001) can utilize the 828AFXT except DS-2 optical extension and DS-2 fiber optic hubbing.

1-2