FLC Eight-Position Universal Mounting Shelf Unprotected DS3 Adapter Kit Installation Instructions

Telecommunications

INTRODUCTION

This instruction sheet provides the procedures for installing the Unprotected DS3 Adapter Kit in the Fiber Loop Converter Eight-Position Universal Mounting Shelf. The kit is required whenever more than four unprotected DS3 Fiber Loop Converters are to be installed in the Eight-Position Universal Mounting Shelf. The adapter that permits installation of unprotected DS3 modules is a wired assembly that consists of a connector mounting plate, a blank panel, eight coaxial cables, MPU connector/cable assembly, and four printed circuit boards.

Revision History

ISSUE	DATE	REASON FOR CHANGE
1	01/96	Original.
2	02/98	Update corporate address, minor non-technical changes.

Admonishments

Important safety admonishments are used throughout this manual to warn of possible hazards to persons or equipment. An admonishment identifies a possible hazard and then explains what may happen if the hazard is not avoided. The admonishments — in the form of Dangers, Warnings, and Cautions — must be followed at all times. These warnings are flagged by use of the triangular alert icon (seen below), and are listed in descending order of severity of injury or damage and likelihood of occurrence.

⚠ **Danger**: *Danger is used to indicate the presence of a hazard that **will** cause severe personal injury, death, or substantial property damage if the hazard is not avoided.*

⚠ **Warning**: *Warning is used to indicate the presence of a hazard that **can** cause severe personal injury, death, or substantial property damage if the hazard is not avoided.*

⚠ **Caution**: *Caution is used to indicate the presence of a hazard that **will** or **can** cause minor personal injury or property damage if the hazard is not avoided.*

1. DS3 ADAPTER KIT INSTALLATION PROCEDURE

1.01   In this instruction sheet, the shelf is referred to as having either rear access or front access DS3 coax connections. Rear access means that the external DS3 coax connections are made from the rear of the shelf. Front access means that the external DS3 coax connections are made from the front of the shelf.

⚠ **Warning**: *To avoid the possibility of severe and potentially fatal electric shock, never install electrical equipment in a wet location or during a lightning storm.*

⚠ **Caution**: *Be careful when making connections with power applied to the mounting chassis.*

⚠ **Caution**: *Always wear an anti-static discharge wrist strap to prevent damage to electronic equipment from static electrical discharge.*
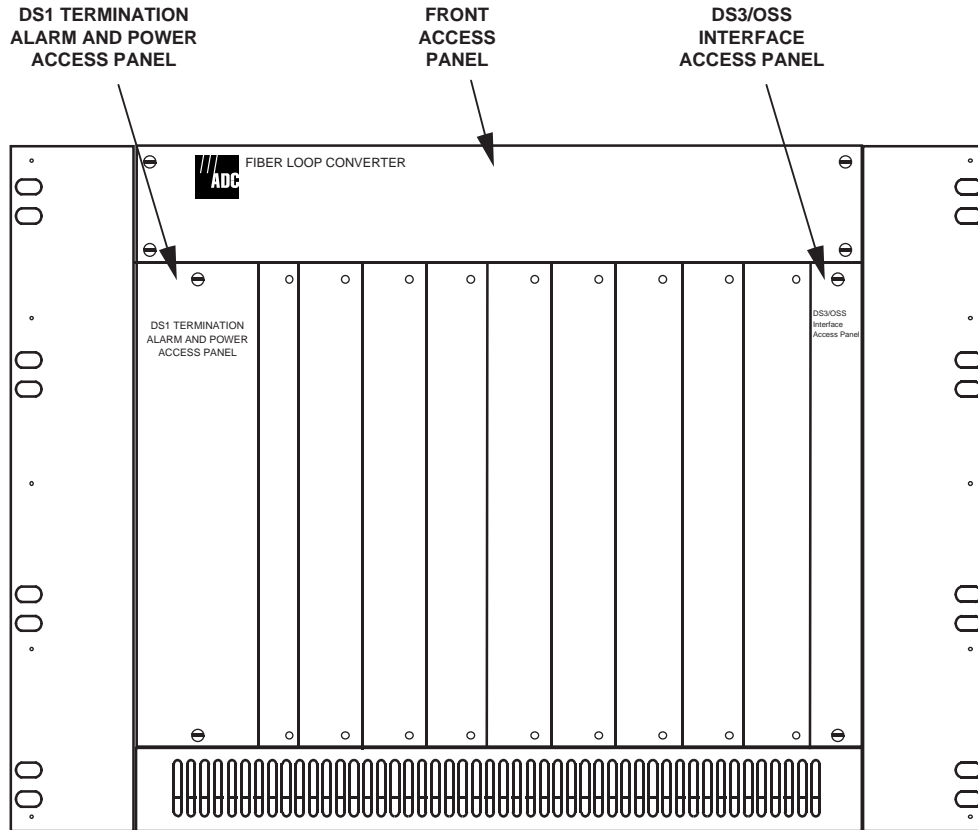
1.02   Use the following steps to install the Unprotected DS3 Adapter Kit:

1. Remove the shelf's rear panel to provide access to the back plane.

2. Remove the DS3/OSS Interface Access Panel and the DS1 Termination Alarm And Power Access Panel from the front of the shelf (see Figure 1).

3. Install the DS3/OSS blank panel (see Figure 2) on the mounting brackets located behind the DS3/OSS Interface Access Panel. Four screws are included in the kit for this purpose.

4. Replace the DS3/OSS Interface Access Panel that was removed from the front of the chassis in Step 2.

5. Using six screws included in the kit, install the DS3 BNC Panel (Figure 2) on the mounting brackets that are behind the DS1 Termination Alarm and Power Access Panel (Figure 1.)

6. On the back plane (Figure 3) align the printed circuit boards (PCB) using the standoffs so that both connectors on each PCB mate with the connectors on the back plane. The positions are identified in Figure 3. Push the PCBs so that the retainer clips latch.

7. Individually route the coax cables from the PCBs through the opening in the top of the chassis. Connect each cable to the appropriate BNC connector on the DS3 BNC Panel. Table 1 lists the cable connections.

8. Route the coax cables to the right of each PCB and to the top of the back plane. Secure (tie) the cables as shown in Figure 4.

9. Replace the rear panel and the DS1 Termination Alarm and Power Access Panel.
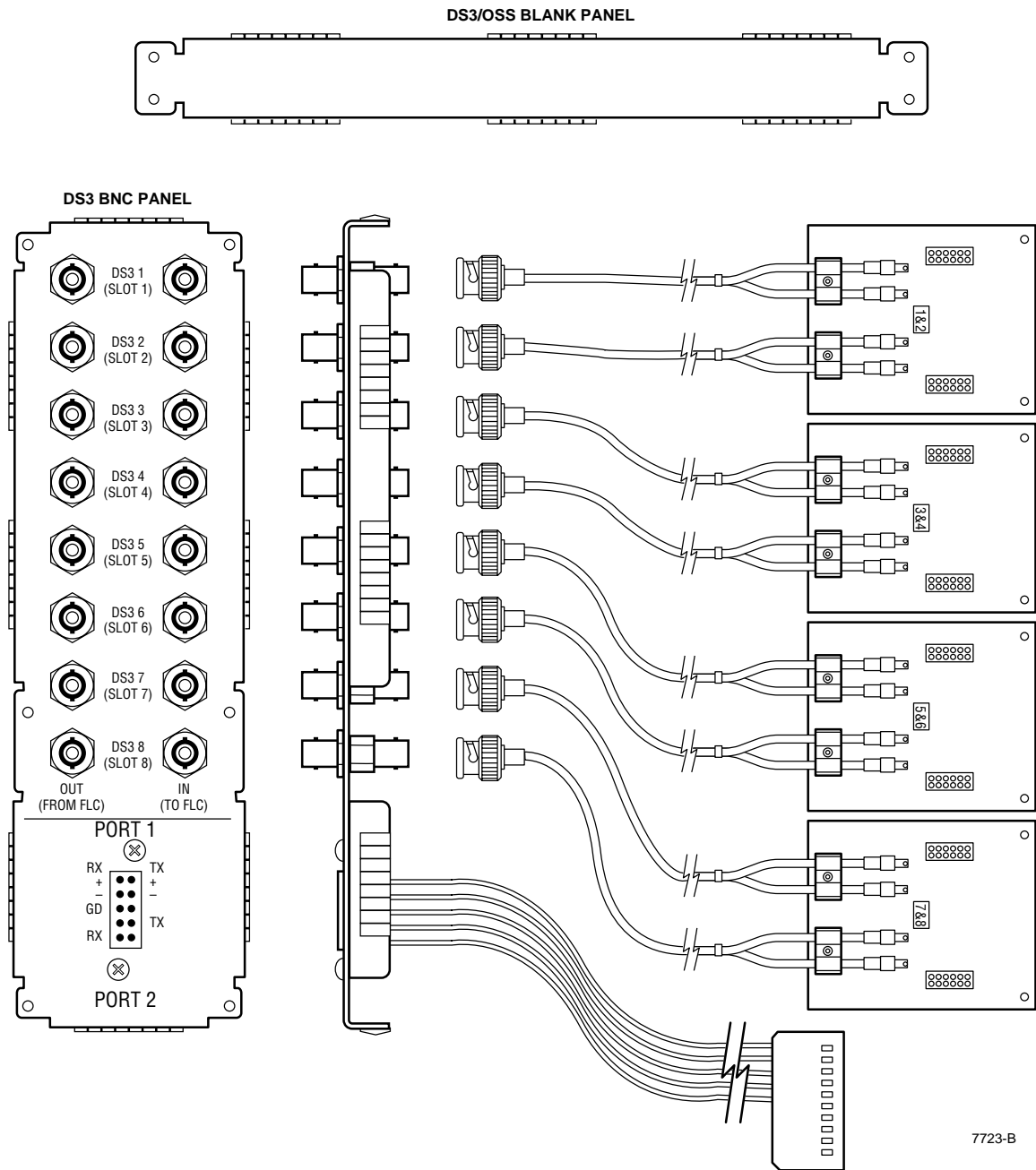
Table 1. PCB Coax Cable Connections

PCB CIRCUIT #	COAX LABEL	BNC LABEL
Circuit #1	P4 Out	DS3 1 Out
Circuit #1	P3 In	DS3 1 In
Circuit #1	P2 In	DS3 2 In
Circuit #1	P1 Out	DS3 2 Out
Circuit #2	P4 Out	DS3 3 Out
Circuit #2	P3 In	DS3 3 In
Circuit #2	P2 In	DS3 4 In
Circuit #2	P1 Out	DS3 4 Out
Circuit #3	P4 Out	DS3 5 Out
Circuit #3	P3 In	DS3 5 In
Circuit #3	P2 In	DS3 6 In
Circuit #3	P1 Out	DS3 6 Out
Circuit #4	P4 Out	DS3 7 Out
Circuit #4	P3 In	DS3 7 In
Circuit #4	P2 In	DS3 8 In
Circuit #4	P1 Out	DS3 8 Out

1.03   The FLC Eight-Position Universal Mounting Shelf Unprotected DS3 Adapter Kit installation is complete.
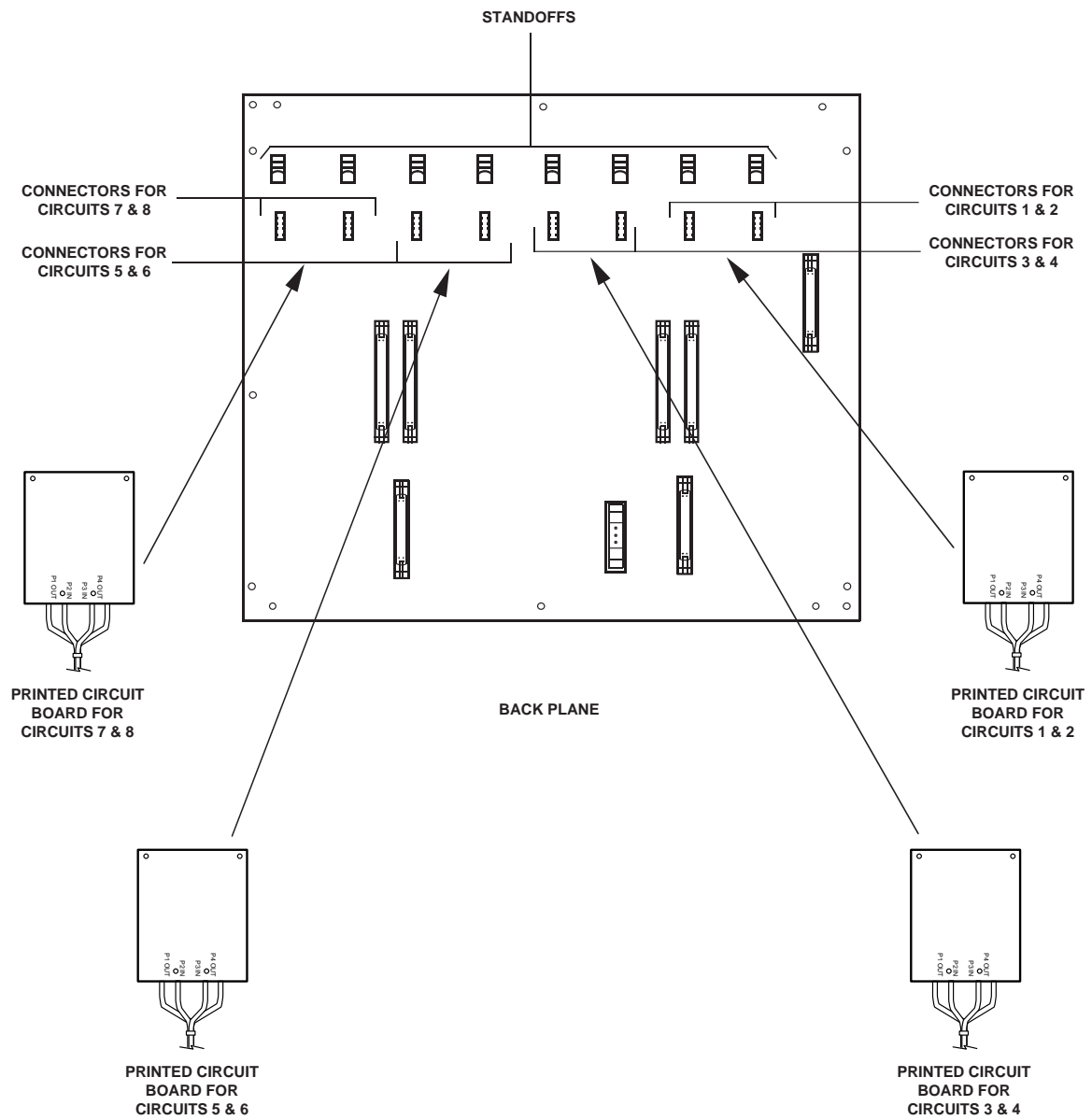
DS1 TERMINATION
ALARM AND POWER
ACCESS PANEL

FRONT
ACCESS
PANEL

DS3/OSS
INTERFACE
ACCESS PANEL

FIBER LOOP CONVERTER

DS1 TERMINATION
ALARM AND POWER
ACCESS PANEL

DS3/OSS
Interface
Access Panel

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Figure 1. Front View of Eight-Position Universal Mounting Shelf

DS3/OSS BLANK PANEL

DS3 BNC PANEL

DS3 1
(SLOT 1)

DS3 2
(SLOT 2)

DS3 3
(SLOT 3)

DS3 4
(SLOT 4)

DS3 5
(SLOT 5)

DS3 6
(SLOT 6)

DS3 7
(SLOT 7)

DS3 8
(SLOT 8)

OUT
(FROM FLC)

IN
(TO FLC)

PORT 1

RX
+
−
GD
RX

TX
+
−

TX

PORT 2

1&2

3&4

5&6

7&8

7723-B

Figure 2. Unprotected DS3 Adapter Kit Layout

STANDOFFS

CONNECTORS FOR
CIRCUITS 7 & 8

CONNECTORS FOR
CIRCUITS 5 & 6

CONNECTORS FOR
CIRCUITS 1 & 2

CONNECTORS FOR
CIRCUITS 3 & 4

PRINTED CIRCUIT
BOARD FOR
CIRCUITS 7 & 8

BACK PLANE

PRINTED CIRCUIT
BOARD FOR
CIRCUITS 1 & 2

PRINTED CIRCUIT
BOARD FOR
CIRCUITS 5 & 6

PRINTED CIRCUIT
BOARD FOR
CIRCUITS 3 & 4

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Figure 3. Mounting PC Boards

**USE CABLE TIES
SHIPPED WITH UNIT**
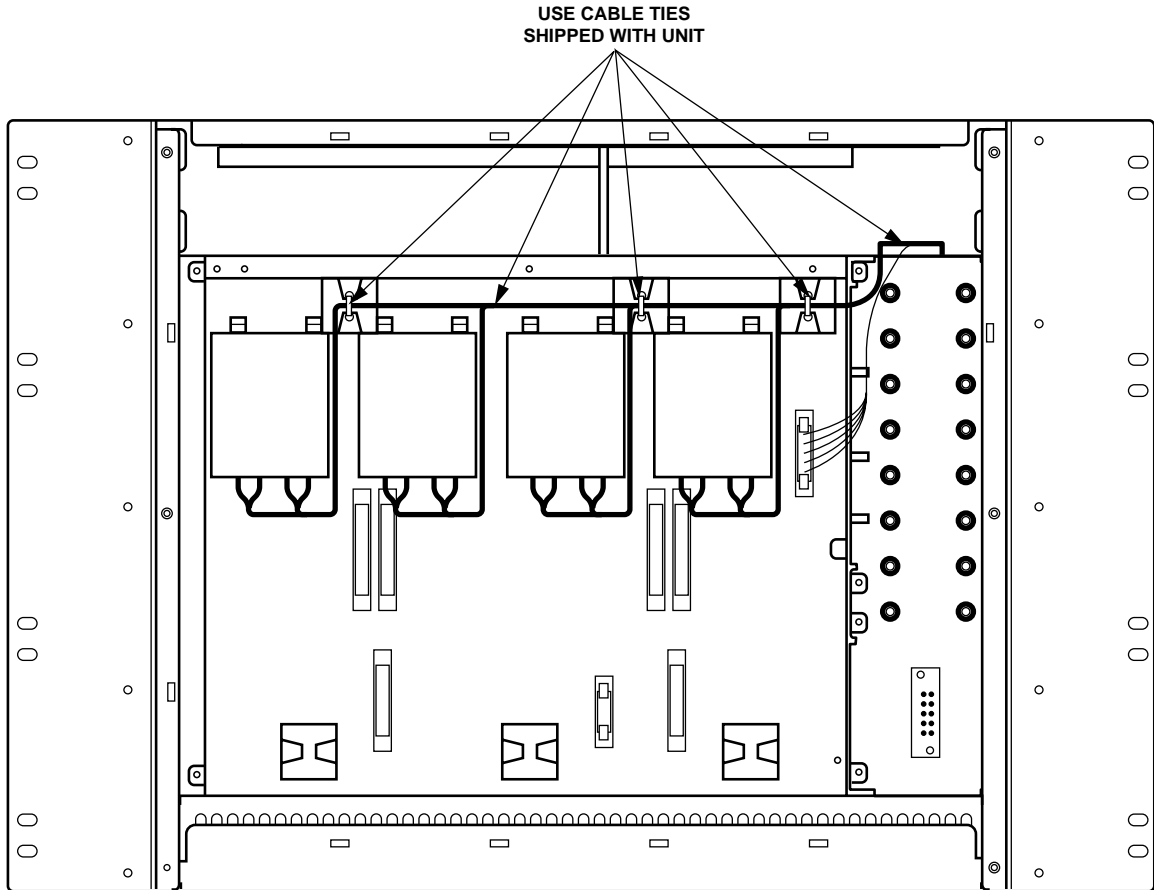
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Figure 4. Cable Tie-Down from Rear of Chassis

2. SYSTEM INTEGRATION SERVICES

2.01   ADC offers the following system integration services. For calls originating in the U.S.A. or Canada, dial **1-800-366-3891**, **extension 3000**. For calls originating outside the U.S.A. or Canada, dial **612-946-3000**.

Technical Assistance Center	• Product Management • Project Engineering • Project Administration • System Turn-Up and Test Support • Service/Maintenance Agreements
Technical Training	• Product Technology • Custom Designed Training
Technical Operations	• Detail Engineering • End-to-End Installation • Drafting Services

3. CUSTOMER SUPPORT SERVICES

3.01   ADC offers the following customer support services. For calls originating in the U.S.A. or Canada, dial **1-800-366-3891**, then request the extension listed. For calls originating outside the U.S.A. or Canada, dial **612-946-3000** or **612-946-3223**.

TSG Technical Assistance Center **Extension 3223**	• Technical Information • System/Network Configuration • Product Specification • Product Application • Proposals • Training • Installation and Operation Assistance • Troubleshooting and Repair • Field Assistance
Sales Administration **Extension 3000**	• Quotation • Ordering • Delivery • General Product Information
Product Return Department **Extension 3000**	• ADC Return Authorization number and instructions must be obtained before returning products.

3.02   Product information and service can also be obtained by writing ADC Telecommunications, Inc., P.O. Box 1101, Minneapolis, Minnesota 55440-1101, U.S.A.

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