Charles Telecommunications Group

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3633-80 12-Channel & 3633-81 6-Channel Data Service Unit— Data Port Installation Guide

GENERAL DESCRIPTION

Document Purpose

This document provides general, installation and testing information for the 12-Channel & 6-Channel Data Service Unit—Data Port (DSU-DP). This document covers model numbers 3633-80 (12-channel) and 3633-81 (6-channel).

Equipment Function

The DSU-DP is part of the 360-80 Intelligent Channel Bank (ICB). This unit provides a direct Data Communications Equipment (DCE) interface to allow direct connection to data equipment.

Equipment Location/Mounting

Model 3633-80 plugs into any full-size slot of the 360-80 ICB. Model 3633-81 plugs into the half-size slot of the 360-80 ICB.

Control Interface

This unit is managed through the craft port or the Network Management Software (NMS), that controls the provisioning of the unit and obtains status information from the unit. Provisioning is described in this document. Operation information is located in the craft port or NMS documentation.

This unit will maintain its default provisioning until changed through the control interface. When the provisioning is changed, it will maintain the new provisioning even if power is lost. If replaced with a new unit, the new unit will default to the same provisioning set for the prior unit. If this unit is installed in a location that was used by a different type of unit, this unit will use its own default provisioning.

INSPECTION

Inspect for Damages

Inspect the equipment thoroughly upon delivery. If the equipment has been damaged in transit, immediately report the extent of damage to the transportation company.

Equipment Identification

Charles equipment is identified by a model and issue number imprinted on the front panel or located elsewhere on the equipment. Each time a major engineering design change is made on the equipment, the issue number is advanced by 1 and imprinted on subsequent units manufactured. Therefore, be sure to include both the model number and its issue number when making inquiries about the equipment.

STATIC-SENSITIVE

To prevent electrostatic charges from damaging static-sensitive units:

Use approved static-preventive measures (such as static-conductive wrist straps and static-dissipative mats) at all times whenever touching units outside of their original, shipped, protective packaging.

Do not ship or store units near strong electrostatic, electromagnetic, or magnetic fields.

Always use the original static-protective packaging for shipping or storage.

INSTALLATION

Installing a New Unit

Use the following steps to install a new unit.

Step	Action
1.	If not already installed, install the rear panel, screwing it to the appropriate mounting locations on the shelf using the provided hardware.
2.	Insert the unit into the shelf, making sure that the unit is aligned with the card guides inside the shelf.
3.	Slide the unit fully in to the shelf.
4.	Once the unit is fully inserted, tighten the securing screw on the front panel of the unit.
5.	Wire the unit per the wiring information in the wiring section. The unit will perform a self-test to ensure that it is compatible with the network management software on the system.
6.	After the self-test is performed, check the software provisioning of the card using either the front panel craft interface on the front of the controller unit or the network management interface on the rear of the controller.

Installing a Replacement Unit

If you are replacing a unit that is already in service, make sure that the unit is the same as the unit being replaced.

Step	Action
1.	Remove the wiring connectors from the front and rear of the unit.
2.	Unscrew the front panel securing screw to release the unit from the shelf.
3.	Using the card ejector, remove the unit from the shelf.
4.	Follow the procedure for installing a new unit.

Wiring the Unit

The Data Terminal Equipment (DTE) interface cable provides the RS232, RS530, RS449/422, or V.35 connection.

The cable connects to the 4:1 adaptor on the front panel of both units, and the rear panel of the 3633-80. The 3633-81 unit uses a 2:1 adaptor on the rear panel.

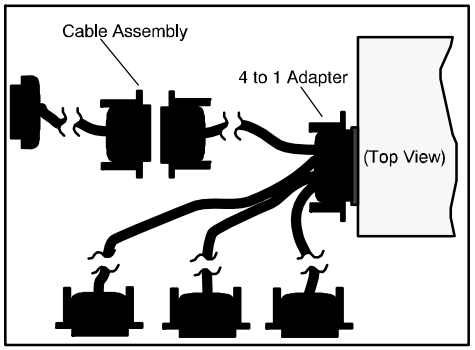

Figure 1. Wiring the Unit

Table 1. Cabling for Each Interface Type

Interface Type	Cable Assembly	4 to 1 Adapter	2 to 1 Adapter
V.35 DTE/ DCE	03-210149-0	03-210148-0	03-210152-0
RS530 DTE/DCE	03-210150-0	03-210148-0	03-210152-0
RS232 DTE/DCE	03-210150-0	03-210148-0	03-210152-0
V.36/ RS449	03-210151-0	03-210148-0	03-210152-0

Table 2. Interface Pin Numbers

Interface Type	V.35 (34 pin)	RS-232D (25 pin)	RS-449 /422(37 pin)	RS-530	SRC
Protective ground	A	1	1, 37	1	XXX
XMT data (A/B)	P(A) S(B)	2	4(A) 22(B)	2(A) 14(B)	DTE
RCV data (A/B)	R(A) T(B)	3	6(A) 24(B)	3(A) 16(B)	DCE
Request to send (A/B)	C	4	7(A) 25(B)	4(A) 19(B)	DTE
Clear to send	D	5	9(A) 27(B)	5(A) 13(B)	DCE
Data set ready (A/B)	E	6	11(A) 29(B)	6(A) 22(B)	DCE

Inter-face Type	V.35 (34 pin)	RS-232D (25 pin)	RS-449 /422(37 pin)	RS-530	SRC
Signal ground	B	7	19	7	XXX
RCV line signal detect (A/B)	F	8	13(A) 31(B)	8(A) 10(B)	DCE
XMT clock (A/B)	Y(A), AA(B)	15	5(A) 23(B)	15(A) 12(B)	DCE
RCV clock (A/B)	V(A), X(B)	17	8(A) 26(B)	17(A) 9(B)	DCE

PROVISIONING

This unit comes from the factory with default provisioning. This provisioning can be altered through the Network Management interface. When this module is inserted in to a previously provisioned slot, if the card type matches, the module will change its provisioning options to match the previously provisioned module. If the module type does not match the module will assume its default provisioning. The provisioning options are as follows with the default optioning noted.

Option (per circuit)	Choices	Default
Timeslot used	T1=1–24, None E1=1–15, 17–31, None	3633-80: channel number 3633-81: T1= None E1=channel number
Data mode	asynchronous, synchronous	Synchronous
Data rate	2.4, 4.8, 9.6, 19.2, 56, 64	64
Async data bit length	7, 8	7
Async parity bit	No, Yes	No
Async data stop bits	1, 2	1
Async shortened stop bit allowance	12.5, 25	12.5
RTS Force On	Enable, Disable	Disable
Zero code suppression	Enable, Disable	Disable
Error correction for 19.2, 56, 64	Enable, Disable	Disable
Latching loopback enable	Enable, Disable	Disable
Physical interface	RS-232, V.35, RS-422, RS-530	V.35
Note: The maximum data rate for the physical interface, RS-232/V.24, is 19.2 Kbps.		
Test loopback to be transmitted *	OCU, DSU, CSU, Local, None	None
Test loopback to be transmitted *	Latching, Non-latching	Non-latching
Test loopback location *	Near end, far end	Near end
Test loopback time *	Hour/minute/ second	1 minute
Test loopback 2047 pattern *	Disable, enable	Disable
** Available with the T1 Control Unit.*		

TECHNICAL ASSISTANCE

If technical assistance is required, contact Charles Industries' Technical Service Center at:

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800–607–8500
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