

## 829MA-6 and 829MB-6 Data Mountings

CONTENTS	PAGE
Part 1. GENERAL .....	2
Part 2. INSPECTION .....	2
Part 3. APPLICATION GUIDELINES .....	3
Part 4. MOUNTING .....	3
Part 5. INSTALLER CONNECTIONS .....	4
Part 6. TESTING .....	5
Part 7. TECHNICAL ASSISTANCE .....	5
Part 8. WARRANTY & CUSTOMER SERVICE .....	6
Part 9. SPECIFICATIONS .....	7

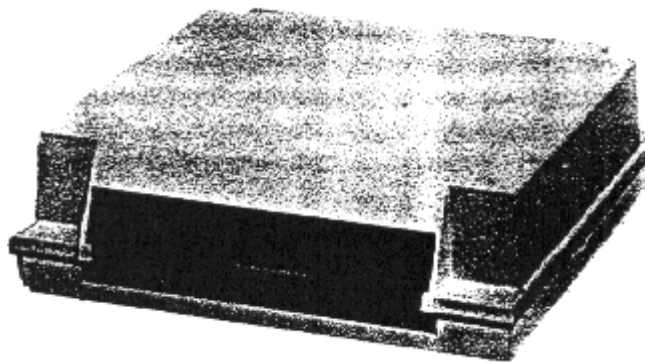


Figure 1. 829M\*-6 Data Mounting

## 1. GENERAL

### 1.1 Document Purpose

This document provides general, installation and testing information for the Charles Industries 829MA–6 or 829MB–6 Data Mounting, shown in Figure 1.

### 1.2 Document Status

This document is reprinted to include a general editorial update.

### 1.3 Equipment Function

The 829MA–6 or 829MB–6 Data Mounting, when used with the Charles Industries Data Channel Interface module, terminates a 4W private line voice band data channel, and is installed between the 4W private line and a 4W or 2W customer station (modem) depending on the module selection. Differences between the two Data Mountings are shown in Table 1. Both will be referred to as “829M\*–6” hereafter.

**Table 1. 829M\*–6 Data Mounting Features**

Data Mounting	Screw Terminals	25-Pair Connector (connection to customer)	24Vac To 48Vdc Voltage Doubler
829MA–6	X	X	
829MB–6	X	X	X (Note)

*Note: This unit requires 24Vac input.*

### 1.4 Equipment Features

The 829M\*–6 provides the following features:

- Pre-wired mounting for selected Charles Industries Data Channel Interface modules
- Wall or desktop mount
- Easily-removable cover
- Transparent crystal allowing visibility to module LEDs
- A voltage doubler circuit to power 48Vdc modules with a 24Vac power supply (829MB–6 only)
- Two means of connecting to the customer: screw terminals or a 25-pair connector
- Screw terminals for connecting to the facility (line) and battery
- Manual Loopback (MLB) terminal
- Fire retardant case

## 2. INSPECTION

### 2.1 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.

### 2.2 Equipment Identification

Charles Industries' 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.

### 3. APPLICATION GUIDELINES

The 829M\*–6 is pre-wired for selected Charles Industries Data Channel Interface modules. Table 2 lists model numbers, description, and Section numbers, which contain detailed description and installation instructions for modules, mountings, and power supplies.

**Table 2. Data Channel Mountings, Interface Modules and Power Supplies**

Model #	Description	Section #
4112–11	4W–4W Data Channel Interface With Loopback	411–211–203
7305–45	4W–4W/2W Data Channel Interface With Loopback And Sealing Current, Western Electric 309B-type Post Equalizer (see note)	730–545–202
7305–46	4W–4W/2W Data Channel Interface With Loopback And Sealing Current, Pre- and Post-Equalization (see note)	730–546–203
8411–24	24Vac (7.5VA) Power Supply (see note)	841–124–201
8412–24	24Vac (10VA) Power Supply W/Output Power Cord (see note)	841–224–201
8411–48	48Vdc (100MA) Power Supply (see note)	841–148–202
829M*–6	829MA–6 and 829MB–6 Data Mountings	829–MA6–001

*Note: When using the internal sealing current generator, it is necessary to supply 48Vdc to the data station. This can be accomplished by using a 48Vdc power supply and the 829MA–6 Data Mounting, or by using a 24Vac power supply and the 829MB–6 Data Mounting.*

The 829M\*–6 is provided as part of Data Channel interface packages. Refer to Table 3 for ordering codes and items included in the Data Channel Interface packages. This document, the module document, and power supply document (where applicable) are included with each package.

**Table 3. Ordering Code Key**

Type of 829 Mounting	DCTE Module Included	Power Supply Included
Z=MA-6	A=4112-11	0=None
X=MB-6	B=7305-45	1=8411-24
	C=7305-46	2=8412-24
		3=8411-48

### 4. MOUNTING

No special tools are required to install the 829M\*–6 Data Mounting. To remove the cover apply a light inward pressure on both sides of the cover and lift.

The 829M\*–6 can be used as a free standing unit on a desk or shelf or it can be wall mounted. A package of four screws is included to further secure the cover as a free-standing unit if desired. However the cover tabs are adequate in most installations.

The 829M\*-6 can be mounted on a wall with two mounting screws. It should be mounted so that the module LEDs can be observed through the transparent crystal on the front of the assembly, and to allow unobstructed access to installer connections.

Once the 829M\*-6 Data Mounting base is secured in its mounting location, the installer connections are completed, and the Data Channel Interface module is conditioned and tested, the cover is installed by snapping it in place.

### 5. INSTALLER CONNECTIONS

Installer connections can be made several ways depending upon the interfacing equipment, installer preference, and the 829 Data Mounting provided. Refer to Table 1.

Make all installer connections as shown in Figure 2. Refer to Figure 3 for location of installer connection points.

Power for the 829M\*-6 is typically provided by the wall mounted power supply listed in Table 2. The customer must provide a standard 3-wire, grounded 105 to 129Vac at 57 to 63Hz, power receptacle that is easily accessible to the data mounting. The receptacle should not be under the control of a switch.

Power connections to the 829M\*-6 are made to the three screw terminals designated, AC1, AC2, and GRD. The 829MB-6 requires 24Vac power.

Facility connections are made to four screw terminals designated T, R, T1, and R1.

Customer station connections can be made to six screw terminals designated DT, DR, DT1, DR1, TEK5, and TEK6. Customer station connections can also be made to the 25-pair connector P1. Refer to Figure 2 for the pin assignment on the 25-pair connector P1.

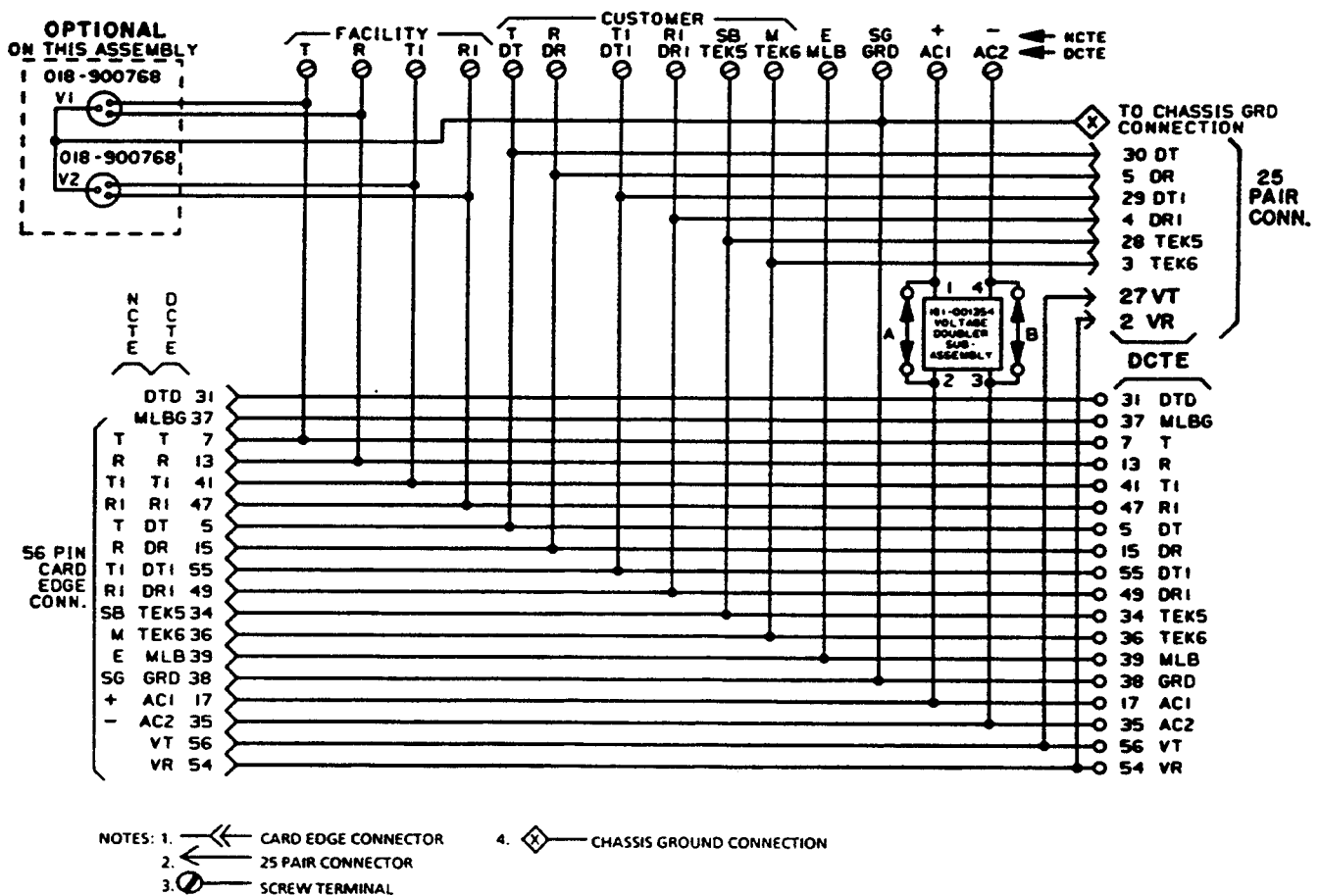


Figure 2. 829M\*-6 Block Wiring Diagram

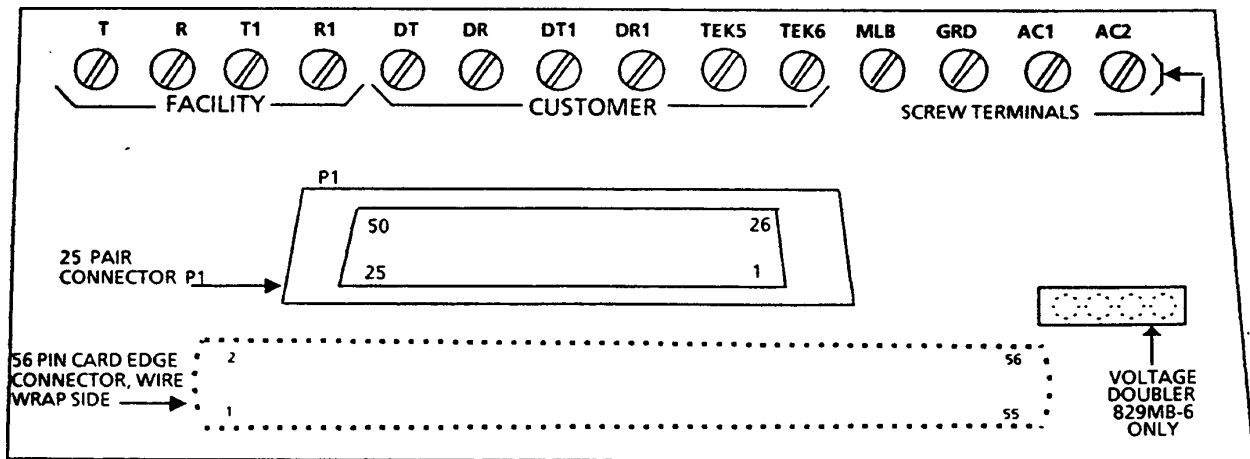


Figure 3. 829M\*-6 Printed Circuit Board Installer Connection Points

Plug P1, the 25-pair male connector for connection to the customer station, mates with an Amphenol 57-10500-4, Cinch 222-32-50-096, or WECO KS-16690L3 female connector-ended adaptor cord or B25A running cable.

*Note:* Refer to cable length limitations as recommended by the station (modem) manufacturer.

Manual Loopback (MLB) can be activated by connecting a jumper between the MLB and GRD screw terminals. To release the manual loopback remove the jumper. Refer to the individual document for detail description of the loopback function.

Charles Industries Data Channel Interface modules provide a Data Tone Disable (DTD) lead. This feature disables tone operated loopback when the DTD lead (wire-wrap pin 31) is jumpered to screw terminal GRD.

Charles Industries Data Channel Interface modules provide external simplex leads (SX1 and SX2). Connections to these leads on the 829M\*-6 are made through the 56-pin card-edge connector. Refer to the pin designations shown in the installer connections table in the appropriate module document.

When installation, conditioning and testing are complete, install cover as described in Part 4.

## 6. TESTING

All testing to Charles Industries 829 data channel interface packages should be done in accordance with the applicable module document.

If trouble is experienced with data operation, verify that all module options and installer connections have been performed in accordance with the related sections. If the module is suspected, replace it with a module known to be in operating condition and retest.

## 7. TECHNICAL ASSISTANCE

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

847-806-8500

847-806-8556 (FAX)

800-607-8500

techserv@charlesindustries.com (e-mail)

## 8. WARRANTY & CUSTOMER SERVICE

### 8.1 Warranty

Charles Industries, Ltd. offers an industry-leading, 5-year warranty on products manufactured by Charles Industries. Contact your local Sales Representative at the address or telephone numbers below for warranty details. The warranty provisions are subject to change without notice. The terms and conditions applicable to any specific sale of product shall be defined in the resulting sales contract.

Charles Industries, Ltd.  
5600 Apollo Drive  
Rolling Meadows, Illinois 60008–4049  
847–806–6300 (Main Office)  
847–806–6231 (FAX)

### 8.2 Field Repairs (In-Warranty Units)

Field repairs involving the replacement of components within a unit are not recommended and may void the warranty and compatibility with any applicable regulatory or agency requirements. If a unit needs repair, contact Charles Industries, Ltd. for replacement or repair instructions, or follow the *Repair Service Procedure* below.

### 8.3 Advanced Replacement Service (In-Warranty Units)

Charles Industries, Ltd. offers an “advanced replacement” service if a replacement unit is required as soon as possible. With this service, the unit will be shipped in the fastest manner consistent with the urgency of the situation. In most cases, there are no charges for in-warranty repairs, except for the transportation charges of the unit and for a testing and handling charge for units returned with no trouble found. Upon receipt of the advanced replacement unit, return the out-of-service unit in the carton in which the replacement was shipped, using the pre-addressed shipping label provided. Call your customer service representative at the telephone number above for more details.

### 8.4 Standard Repair and Replacement Service (Both In-Warranty and Out-Of-Warranty Units)

Charles Industries, Ltd. offers a standard repair or exchange service for units either in- or out-of-warranty. With this service, units may be shipped to Charles Industries for either repair and quality testing or exchanged for a replacement unit, as determined by Charles Industries. Follow the *Repair Service Procedure* below to return units and to secure a repair or replacement. A handling charge applies for equipment returned with no trouble found. To obtain more details of this service and a schedule of prices, contact the CI Service Center at 217–932–5288 (FAX 217–932–2943).

#### *Repair Service Procedure*

1. Prepare, complete, and enclose a purchase order in the box with the equipment to be returned.
2. Include the following information:
  - Company name and address
  - Contact name and phone number
  - Inventory of equipment being shipped
  - Particulars as to the nature of the failure
  - Return shipping address
3. Ship the equipment, purchase order, and above-listed information, transportation prepaid, to the service center address shown below.

CI Service Center  
503 N.E. 15th St., P.O. Box 339  
Casey, IL 62420–2054
4. Most repaired or replaced units will be returned within 30 or 45 days, depending on the product type and availability of repair parts. Repaired units are warranted for either 90 days from the date of repair or for the remaining unexpired portion of the original warranty, whichever is longer.

**9. SPECIFICATIONS**

The characteristics of the 829M\*-6 are as follows:

- (a) POWER SUPPLY WIRING: 22AWG (or larger) solid wire is recommended.

**Table 4. Physical Specifications**

<b>Feature</b>	<b>U.S.</b>	<b>Metric</b>
Height	2.5 inches	6.4 centimeters
Width	8.1 inches	20.6 centimeters
Depth	7.4 inches	8 centimeters
Weight	19 ounces	539 grams

