INSTALLATION

Wayne Hyper Peripheral Interface Board (HyperPIB™)

DRESSER
Wayne

Wayne HyperPIB
Peripheral Interface Board
Installation Manual

Dresser Wayne, Dresser Inc.
3814 Jarrett Way, Austin, TX 78728
Telephone: (512) 388-8311
Fax: (512) 388-8302

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GETTING STARTED

1.1 Introduction

This manual describes the installation and testing of the Wayne Hyper Peripheral Interface Board (HyperPIB). The information is this manual is intended to be used by service representatives installing the system and by maintenance personnel.

For additional information about the Wayne 2400/Plus™ Management Control System (2400/Plus), refer to the following publication:

- *Operation and Programming, Wayne 2400/Plus Management Control System*, part number 917434

1.2 HyperPIB Overview

Installing the HyperPIB board, part number 881415-xxx, in the site controller, allows the 2400/Plus system to communicate with auxiliary controllers (AC). Auxiliary controllers are then able to operate in place of the Wayne 2400 Control console when controlling Wayne dispensers. Auxiliary controllers, such as Verifone, Suntronic, Allied or the Datarol 7100™, interface with the 2400/Plus system with an RS-232 cable installation, part number 887902-001.

1.3 Required Equipment

The following equipment is required to install the HyperPIB board and the interface cable.

Table 1-1. Required Equipment

Part Number	Description
#1	Phillips Head Screwdriver
916962	Anti-Static Wrist Strap

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INSTALLATION

2.1 Introduction

The following information describes how to install the HyperPIB board and the RS-232 cable interface in the site controller.

2.2 Unpacking And Inspection

1. Before opening any cartons, count the number of cartons and verify the carton count against the supplied packing list.
2. Inspect the cartons for damage made during transit.
3. File claim information with the carrier on the bill of lading.
4. Retain cartons suspected of damage for future claim purposes.

CAUTION: To remove electronic components from static packages, you must wear an anti-static wrist strap, part number 916962. The wrist strap must be securely attached to an earth grounding point to prevent possible damage from static electricity.

5. Remove all equipment from the shipping cartons and carefully inspect for damage.

NOTE: Any damage should be brought to the attention of the carrier and claims made immediately. Return all equipment to the respective cartons for protection until actual installation is made. Save all cartons until it is certain that return shipments are not required.

2.3 Returning Damaged Components

Parts or components returned to the factory under warranty or for repair are subject to damage if not packaged properly. Complete the following steps to return parts or components to the factory.

1. Place electronic components in an anti-static bag and in the original shipping cartons for return shipment to the factory.

NOTE: If original shipping cartons are not available use a sturdy cardboard container and suitable packing materials such as anti-static polyethylene foam or bubble pack, to ensure the component is firmly packed.

2. Include a Return Parts Tag with the defective component describing the particular problem with the part.

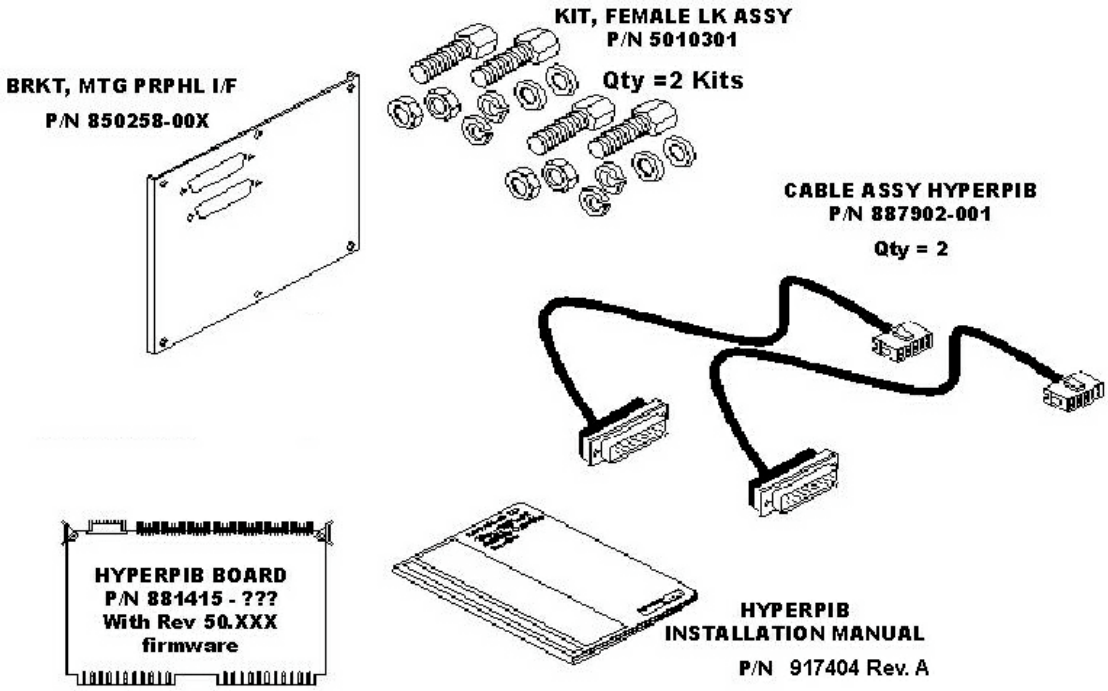
3. Make sure that adequate insurance is provided when returning parts to the factory.

WARNING: If the parts or components arrive at our factory in a damaged condition and it is determined that the damage is a direct result of inadequate or improper packaging, the damage will not be covered under the original warranty and the customer or distributor will be held responsible for the cost of repairs necessary to correct or replace the damaged parts.

2.4 HyperPIB Installation

2.4.1 Required Equipment

Verify the following items are available before attempting to install the HyperPIB.



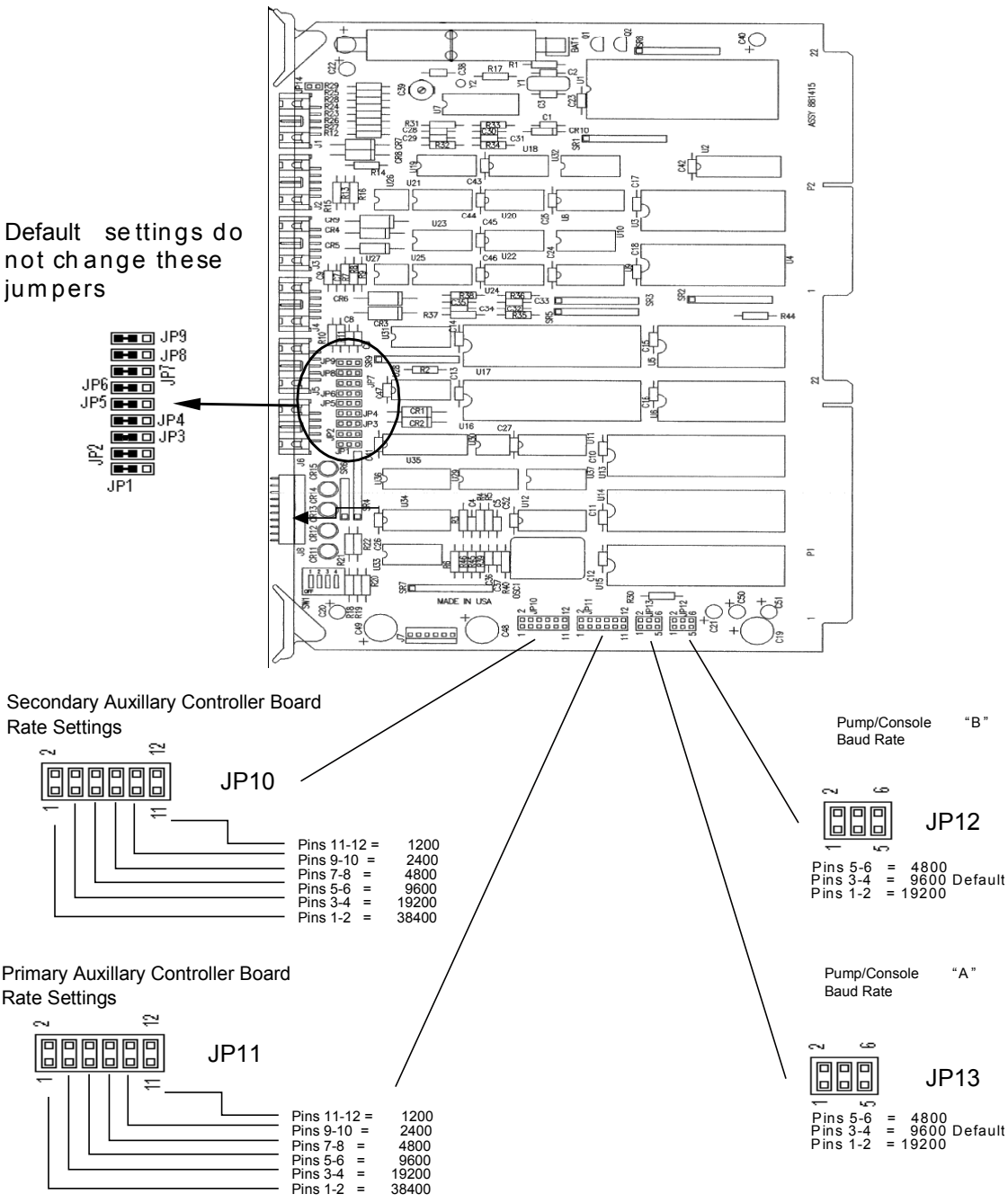
- 850258-00x Mounting Bracket (1)
- 5010301 Female Screwlock Kit (2)
- 887902-001 RS-232 Interface Cable (2)
- 881415-xxx HyperPIB PCB Board (1)

2.4.2 HyperPIB Board Configuration

2.4.2.1 Jumpers and Switches

Set the AC baud rate(s) to match the AC(s) on site. Also verify DIP switch and other jumper settings on the board to match the ones stated below.

Figure 2-1 HyperPIB Board Jumper Settings



JP14 should always be open
DIP switches 1-4 of SW1 should all be set to OFF position.

2.4.2.2 Connectors

Table 2-1 HyperPIB Connectors

Connector	Destination
J1	Primary AC
J2	Secondary AC
J6	Debug Monitor

2.4.2.3 LEDs

Table 2-2 HyperPIB LEDs

LED	Function
CR11	Receiving data from Secondary AC
CR12	Receiving data from Primary AC
CR13	Pump link B active
CR14	Pump link A active
CR15	Console active

2.4.2.4 Pin Definitions

Table 2-3 RS-232 (DB-25) Pin Definitions

PIN Number	Signal Direction	Definition
1	<——>	FG - Frame Ground
2	——>	TX - Transmit
3	<——	RX - Receive
4	——>	RTS - Request To Send
5	<——	CTS - Clear To Send
7	<——>	SG - Signal Ground
8	<——	CD - Carrier Detect
20	——>	DTR - Data Terminal Ready

2.4.3 HyperPIB Board And RS-232 Cable Installation

To install the HyperPIB board perform the following steps.

1. Turn power **Off** to the site controller.
2. Place a wrist strap, (Wayne part number 916962, 3M Charge Guard 2213, or equivalent), on your wrist and clip the grounding end to the chassis of the power supply in the site controller.
3. If there is a PIB/Plus board in slot 6, remove it.
4. Install the HyperPIB board in slot 2 (remove the 2400/Plus CPU board on this slot if there is one) of the site controller. Refer to Figure 2-1. Place the HyperPIB board with the component side facing toward the power supply.
5. Check the site controller cabinet for loose tools or parts.
6. Remove the grounding end of the wrist strap from the power supply and close the cabinet door.
7. Turn power **On** to the site controller.
8. To check the HyperPIB software version, enter mode 90 and submode 08 on the 2400 console, then press the PRNT/ENTR key. The console screen displays the HyperPIB version in the following format: VVWWYY00, where VV is the HyperPIB version number, WW and YY the week and year when the software is released.

Note: If the HyperPIB version does not appear on the console screen, the HyperPIB board is not communicating with the 2400 console. If the checksum does not equal zero, the HyperPIB firmware or hardware is not operating correctly and must be replaced.

9. To check the HyperPIB software checksum, enter mode 90 and submode 07 on the 2400 console, then press the PRNT/ENTR key. The console screen displays the software checksum. The checksum should equal zeroes if a production release version of code is present.
10. Turn power to the site controller **Off.**
11. Remove the six screws securing the metal plate to the hinge side of the site controller. Discard the metal plate. Install the new side panel (part number 850258-04).
12. Connect the 10-pin AMP connector end of cable, part number 887902-001, to J1 on the HyperPIB board, then connect the 25-pin DB connector end to slot J1 on the side panel of the site controller using the screw assembly #5010303.
13. Connect the 10-pin AMP connector end of cable, part number 887902-001, to J2 on the HyperPIB board, then connect the 25-pin DB connector end to slot J2 on the side panel of the site controller using the screw assembly #5010303.

NOTE: Older site controller cabinets may have knockout mounting holes instead of a removable plate. In this case, connect cables in the uppermost knockout mounting holes.

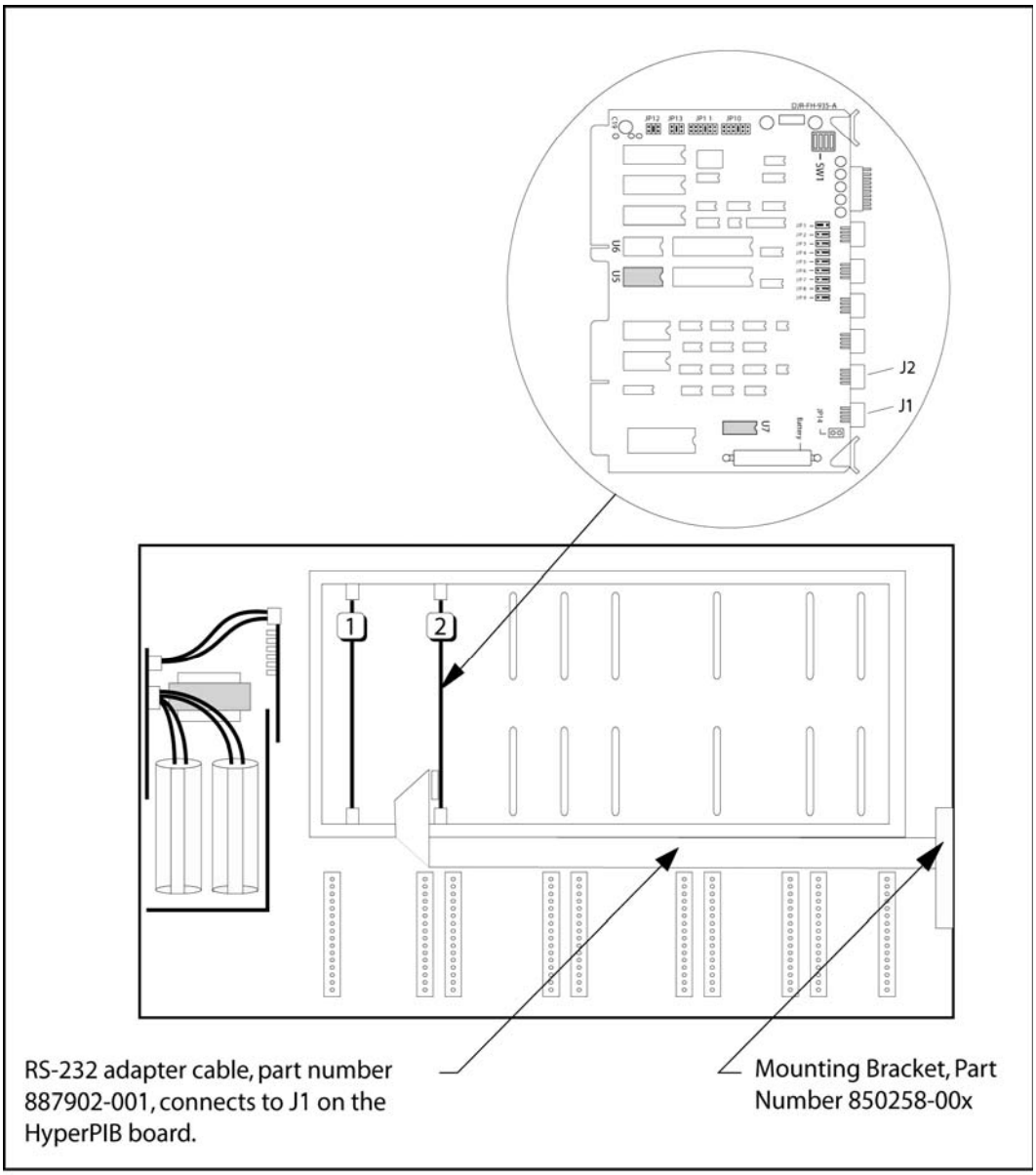


Figure 2-2 HyperPIB Board And RS-232 Installation

14. Restore power to the site controller.

WAYNE HYPERPIB
PERIPHERAL INTERFACE BOARD
INSTALLATION MANUAL

Produced by Tom Sigmon

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"NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense."

Dresser Wayne, Dresser Inc., 3814 Jarrett Way, Austin, TX 78728-1212, (512) 388-8311
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