Dantel

X17-46310
POINTMASTER
UPGRADE KITS

Table of Contents

About this Practice:

This document has been reissued to:

• Add two labels to kits -01 and -03.

Reissued Practices: Updated and new content can be identified by a banner in the right margin.

UPDATED

Issue date: September 2000

CAUTION

• Install or remove modules from the shelf only when the power is off. If you install a module in the shelf with the power on, the internal circuitry may suffer damage and the product warranty will be void.

• Remove and install circuit boards only in a static-safe environment (use antistatic wrist straps, smocks, footwear, etc.).

• Keep circuit boards in their antistatic bags when they are not in use.

• Do not ship or store circuit boards near strong electrostatic, electromagnetic, magnetic, or radioactive fields.

• For more complete information on electrostatic discharge safety precautions, refer to Bellcore™ Technical Reference # TR-NWT-000870.

ORDERING INFORMATION

NOTE: This section lists the different options available for this product. To order any of the available options, contact Dantel Inside Sales through our toll-free number, **1-800-432-6835.**

OPTION NUMBER	FEATURES
A17-46310-00	**Standard PointMaster to TL1 PointMaster Conversion Kit (46310-1X to 46310-0X)**
A17-46310-01	**PointMaster (Any B15-46310, or any C15-46310 Rev D or earlier) to IP PointMaster Conversion Kit (46310-1X or 46310-0X to 46310-2X or 46310-3X)**
A17-46310-03	**PointMaster (Any B15-46310, or any C15-46310 Rev E or later) to IP PointMaster Conversion Kit (46310-1X or 46310-0X to 46310-2x or 46310-3X)**
A17-46310-20	**PointMaster Front Panel Upgrade Kit**

GENERAL DESCRIPTION

This manual documents the upgrade kits available to expand the functionality of Dantel's PointMaster product line. There are four upgrade kits. The installation procedure for each group appears in following sections of this manual.

Upgrade kit x17-46310-00

This kit is available for those customers wishing to upgrade existing 46310-1X standard PointMasters to include TL1 functionality.

Upgrade kit x17-46310-01

This kit is available for those customers wishing to upgrade existing PointMasters (standard or TL1) to allow direct connectivity to TCP/IP networks. This kit is for PointMasters with a revision of D or older.

Upgrade kit x17-46310-03

This kit is available for those customers wishing to upgrade existing PointMasters (standard or TL1) to allow direct connectivity to TCP/IP networks. This kit is for PointMasters with a revision of E or newer.

Front Panel Upgrade

This kit is available for upgrading the Front Panel Module of the 46310 PointMaster to correct an intermittent Craft Port DB-9/wirewrap switching function. This condition is only seen in those applications where the Craft Port wirewrap pins 25N thru 25S are permanently connected to an external device.

This kit is also part of the x17-46310-01 kit described above.

NOTE:

Those users wishing to upgrade standard (non-TL1) PointMasters to include TL1 functionality as well as TCP/IP connectivity can do so by purchasing two kits: the x17-46310-00 (for TL1) and the x17-46310-01 (for TCP/IP).

X17-46310-00 TL1 UPGRADE

The following instructions are for adding TL1 functionality to the Non-TL1 PointMasters. Refer to Table A for a breakdown of what pieces make up this kit.

	UPGRADE KIT
	A17-46310-00
Converts from...	46310-1X
to...	46310-0X
CPU Module	C80-00611-00
Label	A17-46310-00

REPLACE CPU (PROCESSOR) SUBASSEMBLY

1. Remove power from the PointMaster.

2. Open the unit by loosening the thumbscrew in the top, right corner of the front panel and swinging the front half out and up. Secure it open by engaging the sliding locking bar.

3. Identify the Processor Module (CPU). Refer to Fig. 1.

FIG. 1 - SUBASSEMBLY LOCATIONS

Expansion Alarm & Control Module

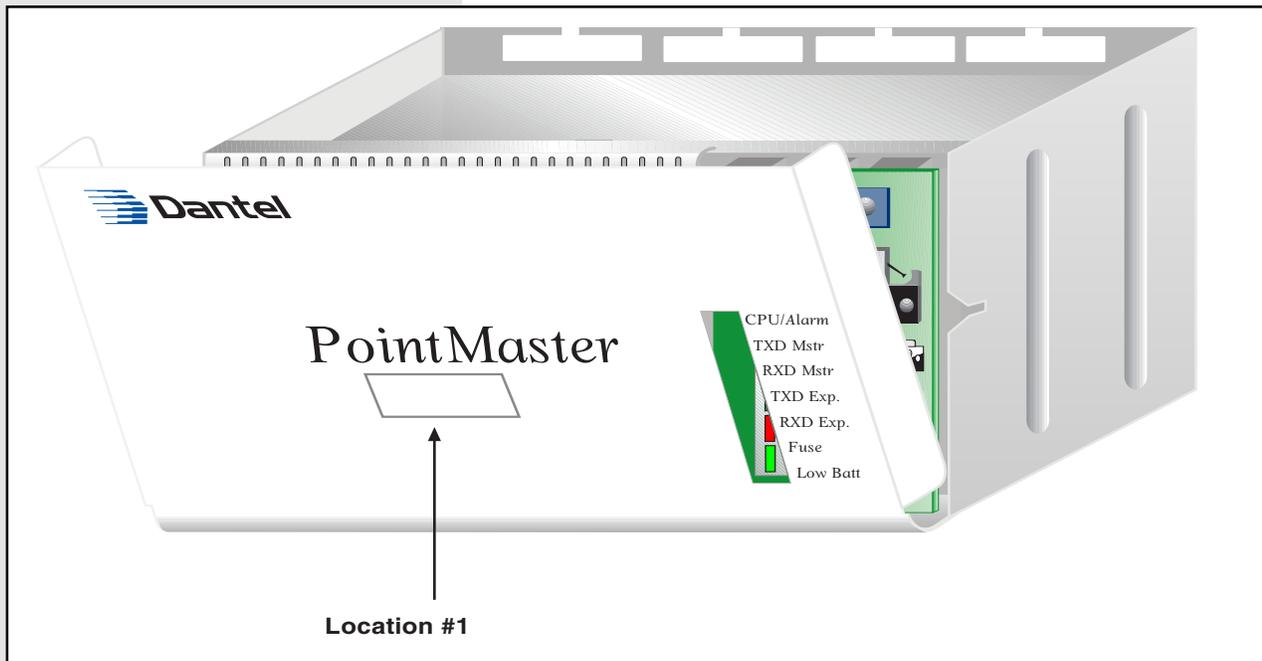Alarm & Control Module

Processor Module
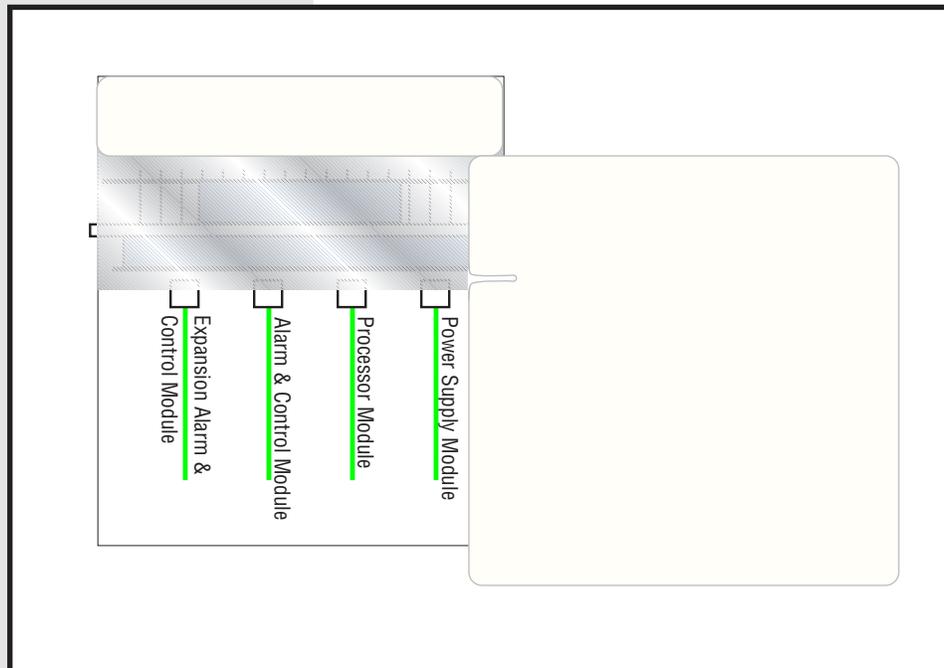
Power Supply Module

NOTE:

The TL1 Editor program is available separately to facilitate the configuration of the TL1 database.

Order part number x22-46310-11

4. Remove the card securing screws and remove the CPU module by pulling it gently down and out of its socket.

5. Set the CPU straps on the new module in the same positions as on the old module.

6. Insert the replacement module into the connector the old module came out of.

7. Reinsert the locking screws, disengage the locking bar, and close the unit.

8. Apply supplied label as indicated in Fig. 2.

9. Reapply power.

10. Refer to the TL1 PointMaster practice for configuration instructions.

FIG. 2 - LABEL LOCATIONS, POINTMASTER

Location #1

The following instructions are for adding TCP/IP connectivity to PointMasters that have a revision of D or older. Refer to Table B for a breakdown of what pieces make up that kit.

TABLE B - POINTMASTER UPGRADE KITS

	UPGRADE KIT
	X17-46310-01
Converts from...	46310-0X or 46310-1X
to...	46310-3X
Ethernet Subassembly *	x12-49413-00
Power Supply Module *	x80-00610-00
Front Panel Module	x80-00615-00
Labels	
Kit Number	x17-46310-01
Ethernet Detail	unique to each unit
IP Pinouts	26L - 26P

*** NOTE:** *The ethernet subassembly comes from the factory mounted on the Power Supply module.*

INSTALL NEW POWER SUPPLY MODULE

1. Remove power from the PointMaster.

2. Open the unit by loosening the thumbscrew in the top, right corner of the front panel and swinging the front half out and up. Secure it open by engaging the sliding locking bar.

3. Identify the Power Supply Module. Refer to Fig. 3.

FIG. 3 - SUBASSEMBLY LOCATIONS
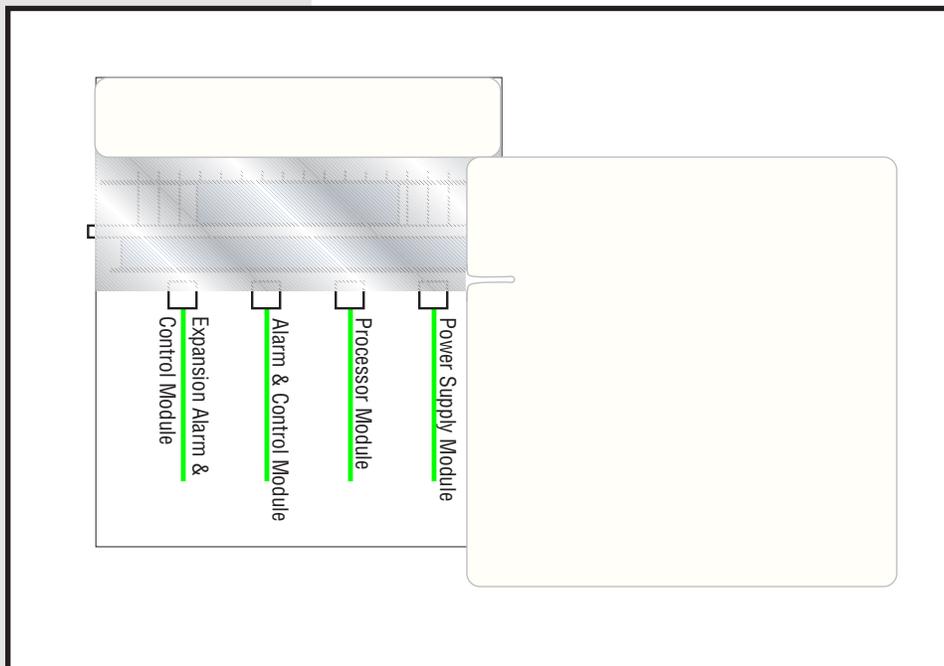
Expansion Alarm & Control Module

Alarm & Control Module

Processor Module

Power Supply Module

4. Remove the card securing screws and remove the Power Supply module by pulling it gently down and out of its socket.


NOTE: *If the old Power Supply module (B80-00610 or older) is equipped with the A12-49229-00 RS-232 Subassembly, this subassembly is not compatible with the new (C80-00610 or newer) Power Supply Module. The new Power Supply must use the newer A12-49229-01. Refer to the table below.*

POWER SUPPLY MODULE	RS-232 SUBASSEMBLY COMPATIBILITY	
	A12-49229-00	A12-49229-01
B80-00610-00	Yes	Yes
C80-00610-00	No	Yes

5. Set the straps on the new module in the same positions as on the old module.

6. Insert the replacement module into the connector the old module came out of.

7. Reinsert the locking screws, disengage the locking bar, and close the unit.

8. Install new Front Panel Module by following the procedure in the ***Front Panel Upgrade Kit*** section of this manual then return to step 9 below.

9. Reapply power.

10. Apply supplied x17-46310-01 label as indicated in Fig. 4. Apply ethernet detail label and pin-out label to the inside of the cover.

11. Refer to the TCP/IP PointMaster practice for configuration instructions.

UPDATED

FIG. 4 - LABEL LOCATIONS, POINTMASTER
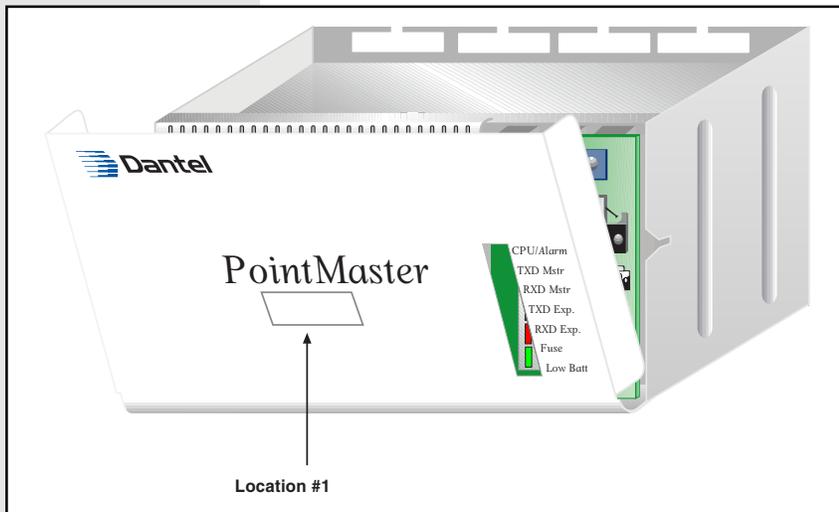
Location #1

T he following instructions are for adding TCP/IP connectivity to PointMasters that have a revision of E or newer. Refer to Table C for a breakdown of what pieces make up that kit.

TABLE C - UPGRADE KIT

	UPGRADE KIT
	A17-46310-03
Converts from...	46310-0X or 46310-1X
to...	46310-3X
Ethernet Subassembly	x12-49413-00
Labels	
Kit Number	x17-46310-03
Ethernet Detail	unique to each unit
IP Pinouts	26L - 26P

UPDATED

INSTALL NEW POWER SUPPLY MODULE

1. Remove power from the PointMaster.

2. Open the unit by loosening the thumbscrew in the top, right corner of the front panel and swinging the front half out and up. Secure it open by engaging the sliding locking bar.

3. Identify the Power Supply Module. Refer to Fig. 5.

FIG. 5 - SUBASSEMBLY LOCATIONS
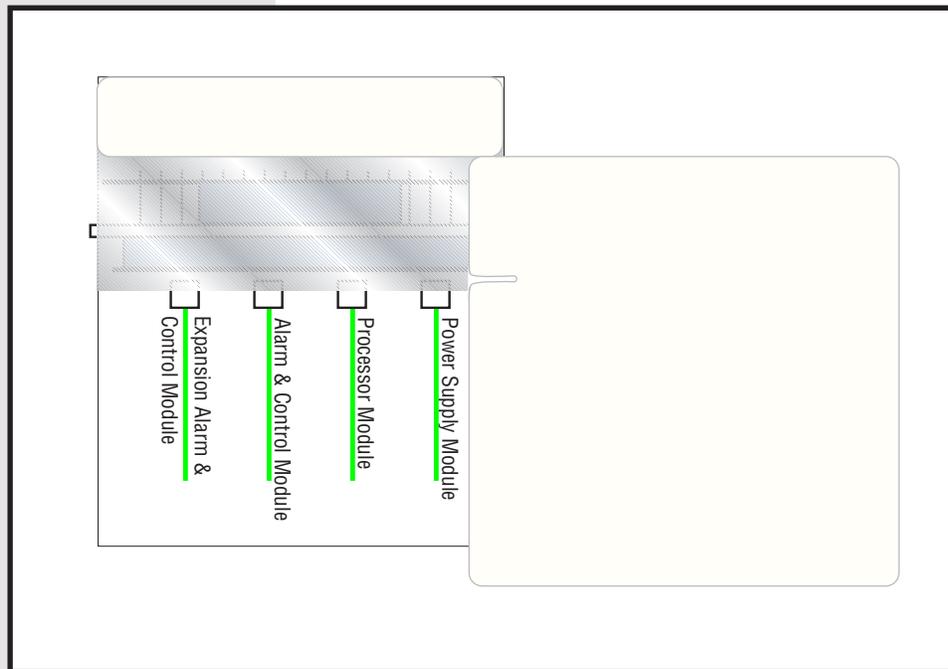
4. Remove the card securing screws and remove the Power Supply module by pulling it gently down and out of its socket.

5. Remove any communications subassembly currently mounted on the Power Supply Module. Refer to Fig. 6.

Fig. 6 - Power Supply Module

PointMaster Communications Subassembly

J4

J2

J3
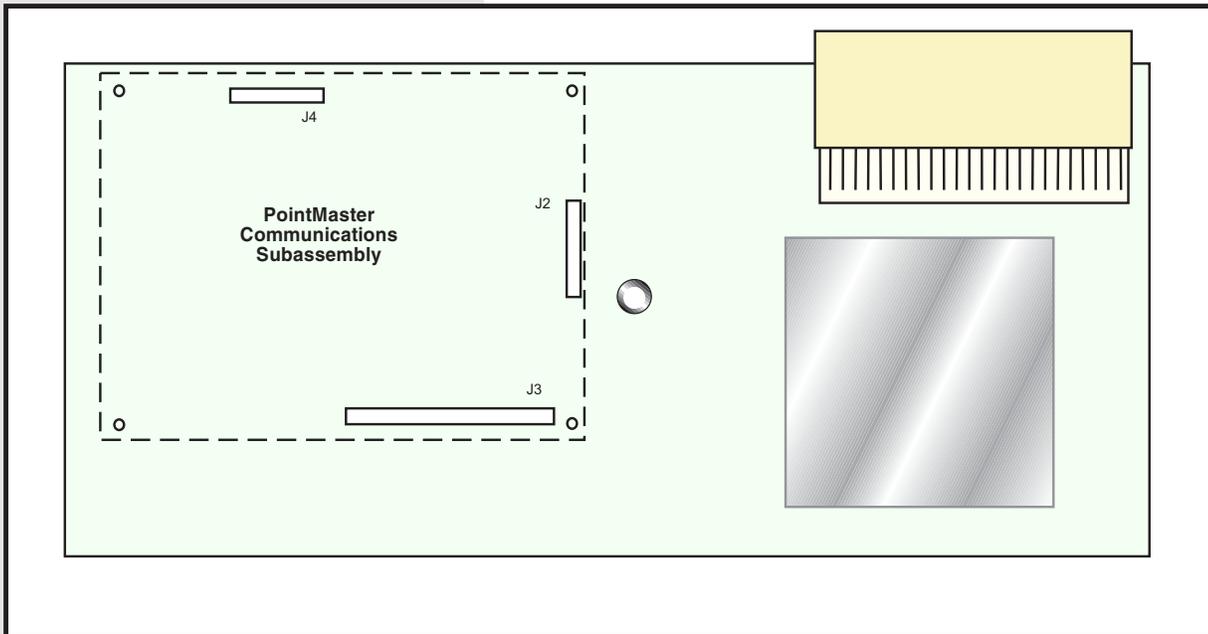
6. Install the standoff extenders provided with this kit.

7. Install the IP subassembly taking care to ensure that all the pins are lined up correctly in J2, J3, and J4.

8. Reinstall the Power Supply module into the PointMaster.

9. Reinsert the locking screws, disengage the locking bar, and close the unit.

10. Reapply power.

11. Apply supplied x17-46310-03 label as indicated in Fig. 7. Apply ethernet detail label and pin-out label to the inside of the cover.

12. Refer to the TCP/IP PointMaster practice for configuration instructions.

FIG. 7 - LABEL LOCATION

Location #1
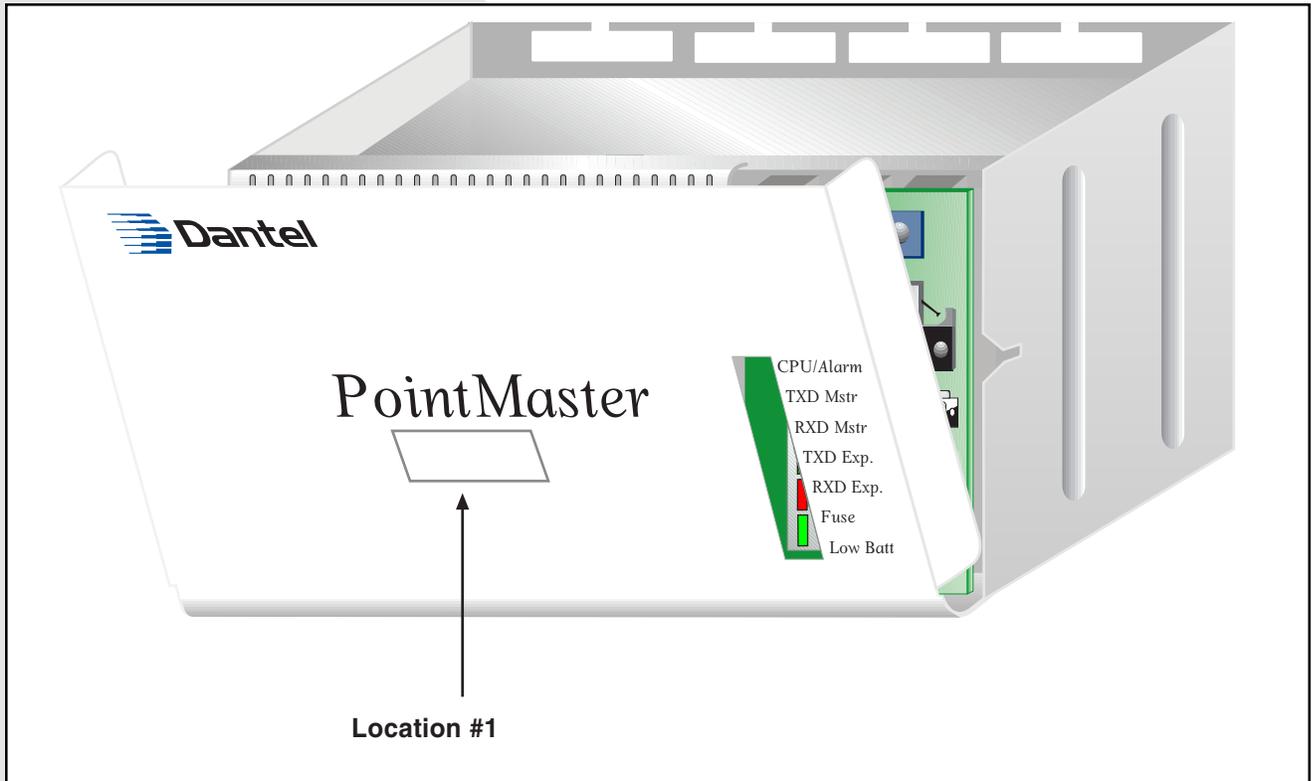
FRONT PANEL UPGRADE KIT

The following instructions are for upgrading the Front Panel Module of the 46310 PointMaster to correct an intermittent Craft Port DB-9/wire-wrap switching function. This condition is only seen in those applications where the Craft Port wirewrap pins 25N thru 25S are permanently connected to an external device.

This kit is also part of the x17-46310-01 TCP/IP Upgrade Kit.

Refer to Table D for a breakdown of the parts included in the upgrade kits.

ITEM	DESCRIPTION	PART NUMBER
1	PointMaster Front Panel	B80-00615-00
2	Revision Label *	951-00161-00
3	Kit Label *	x17-46310-20
4	Screws	901-00205-18
NOTE: Only one of these two labels is used. **Item 2** is used if the PointMaster being upgraded is a C15-46310 Rev C. Item 3 is used if the PointMaster is a B15 or a C15 Rev A or B. When the Front Panel Kit is part of the x17-46310-01 TCP/IP kit, neither of these labels is used.		

This procedure will guide you through the process of upgrading the 46310 PointMaster. There are twenty versions of PointMaster and the A17-46310-20 upgrade kit is optional on all twenty. Refer to Table A.

The board being replaced is the Front Panel Module. Refer to Fig. 8.

FIG. 8 - POINTMASTER FRONT VIEW
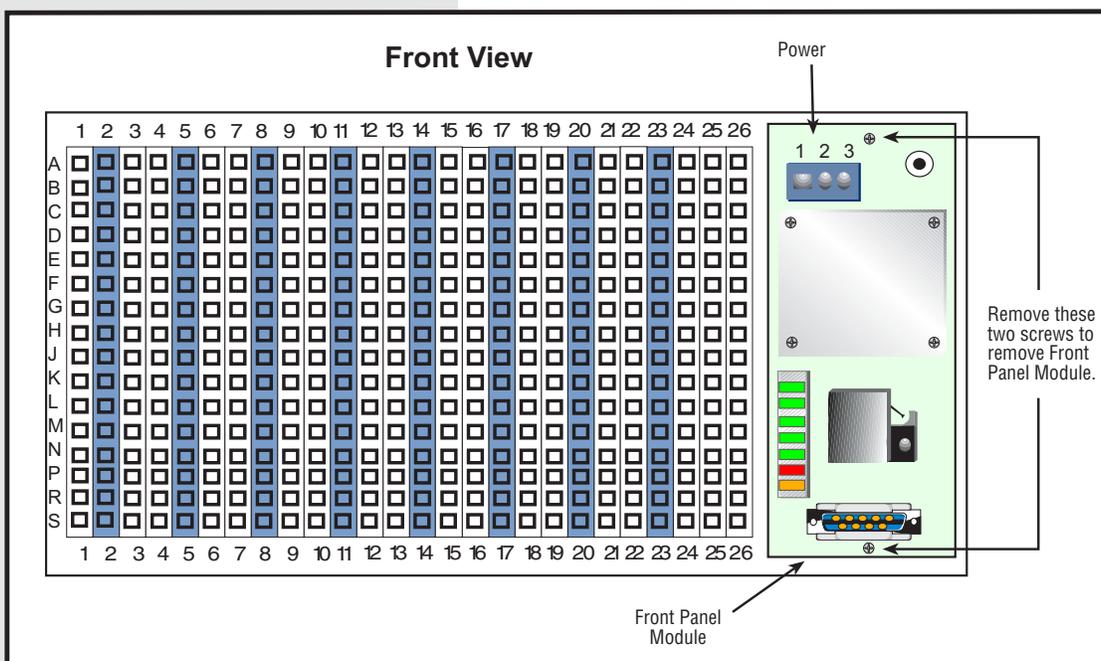
Front Panel Module

REPLACE FRONT PANEL MODULE

1. Remove the fuse supplying power to the PointMaster unit.

2. Open the front cover of the PointMaster and remove the power wires from J1 of the PointMaster.

3. Using a small phillips head screwdriver, remove the two screws indicated in Fig. 8. The Front Panel Module can now be removed by carefully pulling it straight out.

4. Install the new Front Panel Module, being careful to align the pins correctly. Reinstall the two screws removed in step 3. (Two extra screws are provided with the upgrade kit.)

5. Reinstall the power connections removed in step 2 and reinstall the fuse removed in step 1.
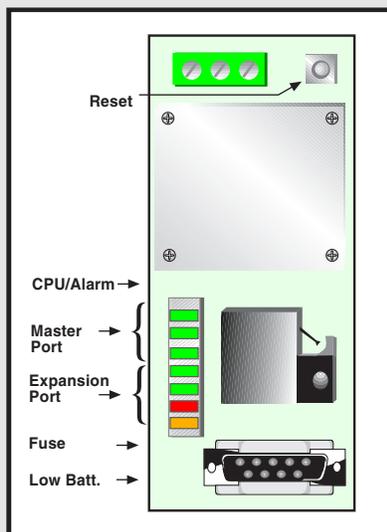
Labels

The x17-46310-20 Upgrade Kit comes with two labels:

- ♦ Rev. D
- ♦ x17-46310-20

If the PointMaster being upgraded is a **46310 Rev. C**, place the Rev. D label over the Rev. C portion of the existing part number label.

If the PointMaster being upgraded is a **46310 Rev A** or **B**, place the x17-46310-20 label in the center of the front cover, under the existing part number label.

If the Front Panel is being installed as part of the x17-46310-01 TCP/IP Upgrade Kit, neither of the two labels noted above are used.
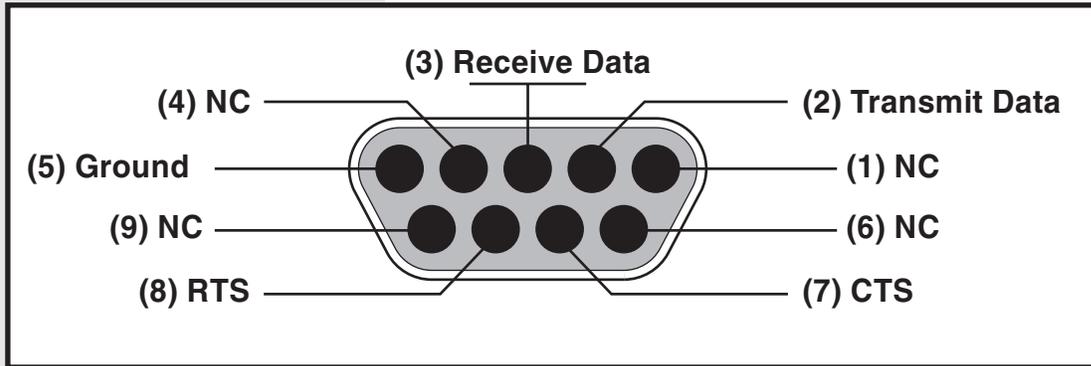
Checkout

1. Apply power to the PointMaster.

    The CPU/Alarm LED lights. The MSTR and EXP LEDs indicate if the master or expansion ports are transmitting or receiving data. Refer to Fig. 9.

2. Connect an ASCII terminal or computer operating as a terminal emulator to the wire-wrap pins 25-N (RD), 25-P (TD) and 25-S (GND) or connect it to C1 on the Front Panel Module. Refer to Fig. 10.

FIG. 9 - FRONT PANEL LED's

CONTINUED . . .

FRONT PANEL UPGRADE KIT

FIG. 10 - CRAFT PORT CONNECTOR WIRING

(3) Receive Data

(4) NC

(2) Transmit Data

(5) Ground

(1) NC

(9) NC

(6) NC

(8) RTS

(7) CTS

The Craft port of the PointMaster defaults on power-up to:

♦ Printer Syntax
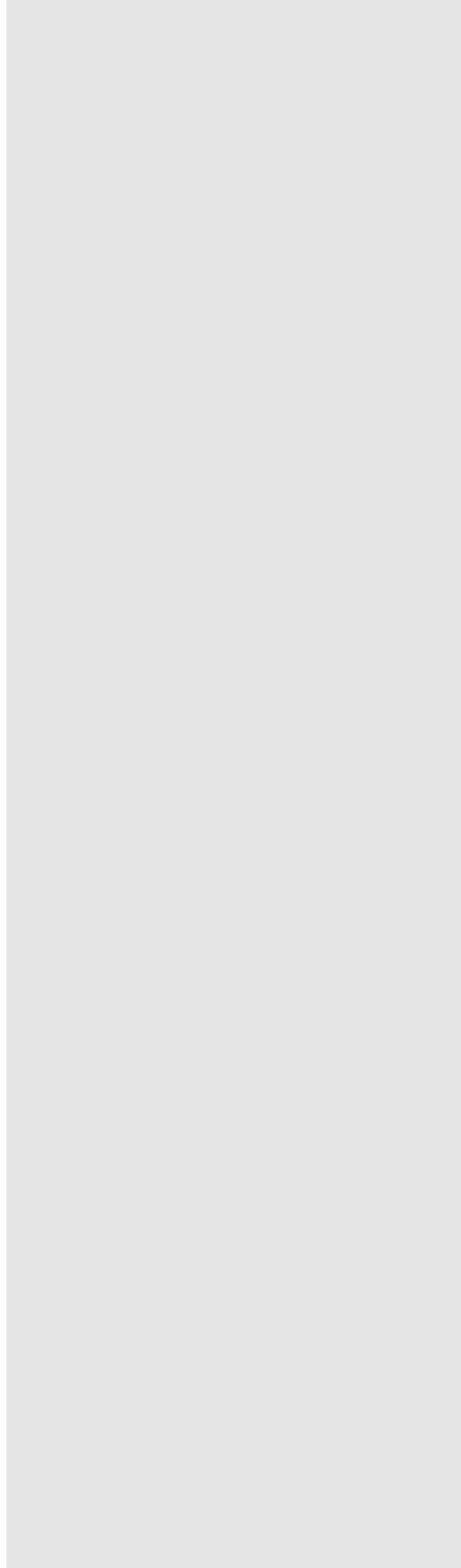
♦ 9600 baud

♦ 8-bit word length

♦ No parity

♦ 1 stop bit

The terminal must be set for the same data rate, word length, parity, and stop bits as shown above. Make these settings before connecting the terminal to the PointMaster.

3. Reset the unit or apply power.

4. With the terminal connected to C1, a prompt ">" will appear on the screen after a soft reset. This indicates that the TL1 PointMaster is ready to accept command inputs. Within 30 seconds, press "!!!" on the terminal. Be aware that the "!!!" must be entered within 30 seconds of power-up or reset and must be entered fast - less than 1/2 second for all three. Optionally, the Terminal Mode of the TL1 Editor has a button labeled "!!!". You can click on this button instead of manually entered the keystrokes.

    This procedure will connect the terminal to C1 and ensure the Craft Port protocol is Printer Syntax. The default timeout for this connection is 10 minutes, after which the unit will switch to the wire-wrap pins.

5. Allow the PointMaster unit to timeout and return communication to the wirewrap pins. Verify communication with the device connected to those wirewrap pins.

6. Checkout complete.

NOTES

WARRANTY

IN CASE OF DIFFICULTY

If you experience difficulty with this equipment, check the following, as appropriate:

1. **Switch settings**
2. **Signal levels**
3. **Software configuration**
4. **Connections between Dantel's equipment and your equipment.**

If there is still a problem, substitute equipment that is known to be good. For additional assistance, call Dantel's Technical Field Service Department weekdays, 6 A.M. to 5 P.M. pacific time:

1-800-4DANTEL (1-800-432-6835).

If a thorough checkout shows a piece of equipment has malfunctioned, you may return it to the factory. For repairs and emergency replacements, obtain a Return Material Authorization (RMA) number from the Customer Service Representative at **1-800-4DANTEL** (1-800-432-6835).

To ensure expedient processing of your order, provide a purchase order number and shipping and billing information when requesting an RMA number. Also, when the units are returned to Dantel, include a description of the failure symptoms for each unit returned. Send defective equipment to:

Dantel, Inc. • 2991 North Argyle Avenue • Fresno, California 93727-1388

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