



# Y2K FIRMWARE UPGRADE KITS FOR DANTEL MULTIPLE ALARM PROCESSORS

**46020-38, 46020-40, 46020-41,  
46800-24, 46639-01, 46800-48,  
46800-50, 46800-58**

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### About this Practice:

This practice has been reissued to:

- Update the -38 firmware eeprom number from D82 to E82.

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

**Issue date: March 1999**

UPDATED

### 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
A17-46000-24	Basic upgrade kit to upgrade any MAP equipped with 46800-24 firmware to be Y2K compliant.
A17-46038-00	Basic upgrade kit to upgrade any 46020-38 MAP to be Y2K compliant.
A17-46000-39	Basic upgrade kit to upgrade any MAP equipped with 46639-01 firmware to be Y2K compliant.
A17-46040-00	Basic upgrade kit to upgrade any 46020-40 MAP to be Y2K compliant.
A17-46041-00	Basic upgrade kit to upgrade any 46020-41 MAP to be Y2K compliant.
A17-46000-48	Basic upgrade kit to upgrade any MAP equipped with 46800-48 firmware to be Y2K compliant.
A17-46000-50	Basic upgrade kit to upgrade any MAP equipped with 46800-50 firmware to be Y2K compliant.
A17-46000-58	Basic upgrade kit to upgrade any MAP equipped with 46800-58 firmware to be Y2K compliant.

# GENERAL DESCRIPTION

The following instructions are for upgrading the firmware on the 46020 Multiple Alarm Processor (MAP) to be Y2K compliant.

The upgrade kits will contain one or more of the following items:

- ◆ A new programmed eeprom
- ◆ A new part number label for the front panel
- ◆ A new barcode label for the handle

Refer to Table A for the Dantel part numbers for each of these kits.

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# GENERAL DESCRIPTION

TABLE A - UPGRADE KITS AND PART NUMBERS

UPGRADE KIT PART NUMBER	DESCRIPTION	FOOTPRINT TYPE *	EPROM(S)	FRONT PANEL LABEL	BARCODE LABEL
A17-46000-24	Upgrades MAP's equipped with 46800-24 firmware.	2	D80-00207-00 D80-00207-02	n/a	n/a
A17-46038-00	Upgrades MAP's equipped with 46600-38 firmware.	1	E82-00289-00	C11-46020-38	RMPQADF7AA
A17-46000-39	Upgrades MAP's equipped with 46639-01 firmware.	1	E82-00290-00	n/a	n/a
A17-46040-00	Upgrades MAP's equipped with 46640-01 firmware.	1	F82-00308-00	D11-46020-40	RMPQADB7AA
A17-46041-00	Upgrades MAP's equipped with 46641-01 firmware.	1	F82-00351-00	D11-46020-41	RMPQADC7AA
A17-46000-48	Upgrades MAP's equipped with 46800-48 firmware.	2	F82-00262-00 F82-00262-01 F82-00262-02	n/a	n/a
A17-46000-50	Upgrades MAP's equipped with 46800-50 firmware.	2	B82-00269-00 B82-00269-01 B82-00269-02	n/a	n/a
A17-46000-58	Upgrades MAP's equipped with 46800-58 firmware.	1	C82-00464-00	n/a	n/a

*\* NOTE: Different firmware packages are laid out differently. Refer to Figs. 1 or 2 to locate the EPROM for your firmware package.*

UPDATED

## INSTALLATION

This documents a generic procedure for replacing the programmable eprom in the following Dantel Multiple Alarm Processors (MAPS):

- ◆ 46020-38 (MAP equipped with 46600-38 firmware)
- ◆ 46020-40 (MAP equipped with 46640-01 firmware)
- ◆ 46020-41 (MAP equipped with 46641-00 firmware)

In addition, some MAPs are equipped with other firmware packages. This procedure also applies to those MAPs equipped with:

- ◆ 46800-24 firmware
- ◆ 46639-01 firmware
- ◆ 46800-48 firmware
- ◆ 46800-50 firmware
- ◆ 46800-58 firmware

**NOTE:**

Observe all electrostatic precautions when handling both the MAP and the EPROM.

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# INSTALLATION

## Step 1 - Identify MAP Firmware

1. Determine whether your firmware is configured by switches alone, or by a combination of switches and downloading. To determine what type of firmware is used on your MAP, remove the MAP from the equipment shelf and locate the eeprom(s). Refer to Figs. 1 and 2.
2. The eeprom will have a white label on it. That label will have a number printed on it. Use the following table to identify what type of firmware uses the eeprom with that number.

EPROM NUMBER	FIRMWARE
xxx-00207-xx	46800-24
xxx-00289-xx	46600-38
xxx-00290-xx	46639-00
xxx-00308-xx	46640-01
xxx-00351-xx	46641-01
xxx-00262-xx	46800-48
xxx-00269-xx	46800-50
xxx-00464-xx	46800-58

3. MAPS equipped with 46639, 46640, or 46641 firmware require a database download as part of their configuration. The other firmware packages listed above are configured with switches alone.
4. If the MAP being upgraded is **not** equipped with 46639, 46640, or 46641 firmware, skip to step 2 now.
5. MAPS equipped with 46639, 46640, or 46641 firmware must be downloaded as a part of their configuration. The database in the MAP **will be lost** during this upgrade. Before taking the MAP out of service, verify that the database is intact in the T/Shell program that created it.

The simplest method to ensure the integrity of your database is to upload it from the MAP into the T/Shell program. Refer to the T/Shell documentation for the procedure to accomplish this.

6. Continue to step 2, but remain aware that after completing the upgrade, the database must be downloaded from the T/Shell program into the MAP.

## Step 2 - Remove Old EPROM(S)

1. Remove the module to be upgraded and place the module on an ESD approved work area. The component side should be up and the blue handle to the left.
2. The EPROM(S) to be removed is located in the top left corner of the module (Refer to Fig. 1). Before removing this chip, note its orientation. (The notch is toward the top of the module.)
3. Remove the old EPROM(S) by pulling straight up on the IC. It may be necessary to use a small screwdriver to gently pry the old EPROM(S) up.
4. Set the old IC(s) to the side.

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# INSTALLATION

## Step 3 - Install New EPROM

1. Install the replacement EPROM in the socket. Verify that the orientation is the same as the old EPROM (refer to Figs. 1 and 2.)
2. Applying even pressure, push the IC into position. Exercise caution not to bend any pins on the IC.

## Step 4 - Replace Labels

1. If there is an identification label at the bottom of the front panel, replace it with the label referenced in Table A.
2. Remove the bar code label from the front of the blue handle and replace it with the new label referenced in Table A.

**NOTE:** Don't forget that MAPs equipped with 46639, 46640, or 46641 firmware will need to be redownloaded from the T/Shell program.

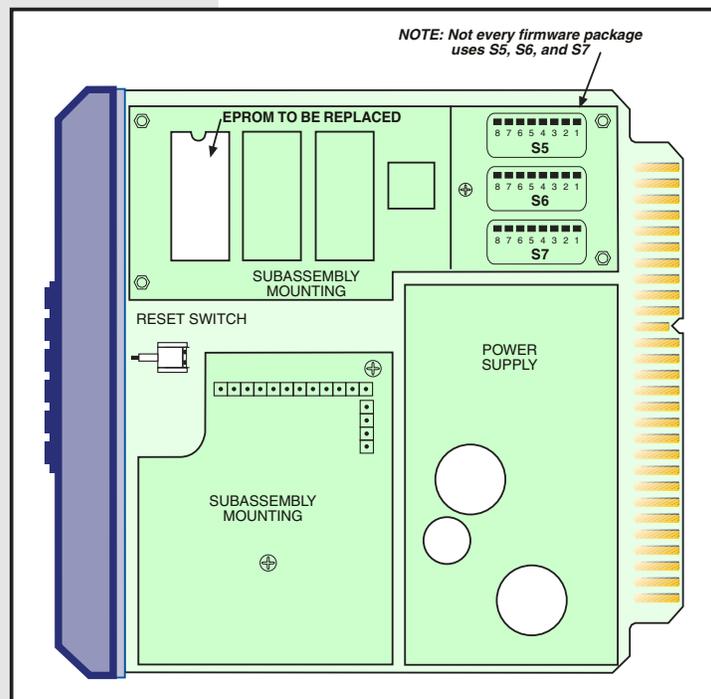
3. This completes the MAP upgrade procedure.

## Step 5 - Verify Proper Operation

Those MAPs that **do not** require a software download will start operation as soon as power is applied. The MAPs requiring a software download (46639, 46640, or 46641) will begin operation upon completion of the database download.

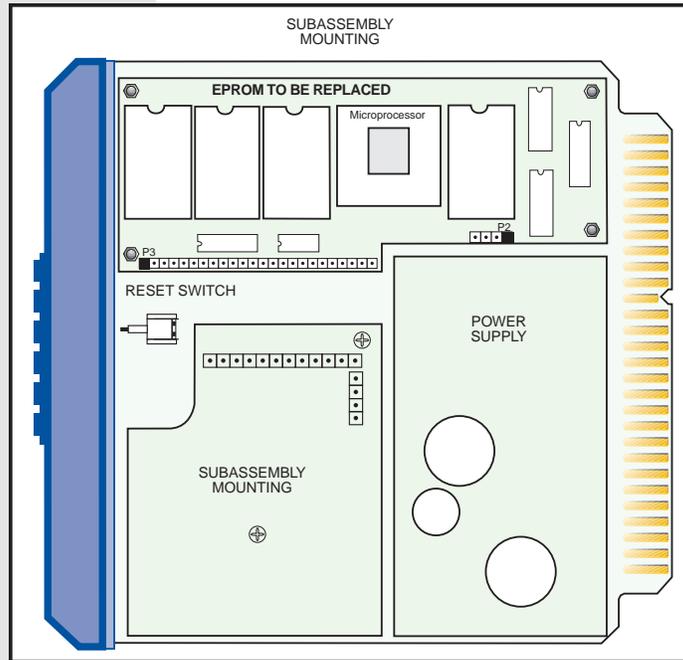
The front panel of the MAP has a green LED labeled "DATA XMT". This LED flashes when data is being transmitted from the MAP's data port. This is an indication that the MAP is operating.

FIG. 1 - 46020 MAP EPROM LOCATION (FOOTPRINT 1)



# INSTALLATION

FIG. 2 - 46020 MAP EPROM LOCATION (FOOTPRINT 2)



# NOTES

# WARRANTY

## LIMITED WARRANTY

The Seller warrants that the standard hardware products sold will be free from defects in material and workmanship and perform to the Seller's applicable published specifications for a period of 18 months for hardware, and 3 months for software, from the date of the original invoice. The liability of the Seller hereunder shall be limited to replacing or repairing, at its option, any defective products which are returned F.O.B. to the Seller's plant, (or, at the Seller's option, refunding the purchase price of such products). In no case are products to be returned without first obtaining permission and a customer return authorization number from the Seller. In no event shall the Seller be liable for any consequential or incidental damages.

Equipment or parts which have been subject to abuse, misuse, accident, alteration, neglect, unauthorized repair or installation are not covered by warranty. The Seller shall make the final determination as to the existence and cause of any alleged defect. No warranty is made with respect to custom equipment or products produced to the Buyer's specifications except as specifically stated in writing by the Seller in the contract for such custom equipment.

This warranty is the only warranty made by the Seller with respect to the goods delivered hereunder, and may be modified or amended only by a written instrument signed by a duly authorized officer of the Seller and accepted by the Buyer.

Warranty and remedies on products not manufactured by the Seller are in accordance with warranty of the respective manufacturer. **THE SELLER MAKES NO OTHER WARRANTY OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED; AND ALL IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE WHICH EXCEEDS THE AFORESAID OBLIGATIONS IS HEREBY DISCLAIMED BY THE SELLER.**

## 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**

