

A23-41072 AISLE PILOT ALARM UNIT



Table of Contents

Ordering Information	2
General Description	2
Circuit Description	2
Application Information	4
Installation	5
Operation	6
Technical Specifications	7
Warranty	8

About this Practice:

This practice has been reissued to:

- Add lamp replacement procedure to **Operation** section.

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

UPDATED

Issue date: February 1999

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
A23-41072-00	Aisle Pilot Alarm Unit
A23-41076-00	Mounting Bracket
A25-00020-00	Replacement Lamp #48PSB
A25-00021-00	Lens Cap Color Red
A25-00022-00	Lens Cap Color Clear
A25-00023-00	Lens Cap Color Amber
A25-00024-00	Lens Cap Color Green

GENERAL DESCRIPTION

The 41072 Aisle Pilot Alarm Unit provides visual alarm indicators for Dantel's 460 Alarm and Control System.

You can wire the unit for critical, major, and minor alarms. The unit accepts up to 100 ground inputs from the 460 ACS equipment. The inputs are arranged into four groups of 25 to activate the different alarms.

Critical and major alarms are reported to a MAJ lamp on the front of the unit. Minor alarms are reported to a MIN lamp on the front of the unit. Critical, major, and minor alarms also can be reported to external audible or visual indicating equipment.

Buttons on the front panel test the critical, major, and minor alarm relays and external alarm indicating devices.

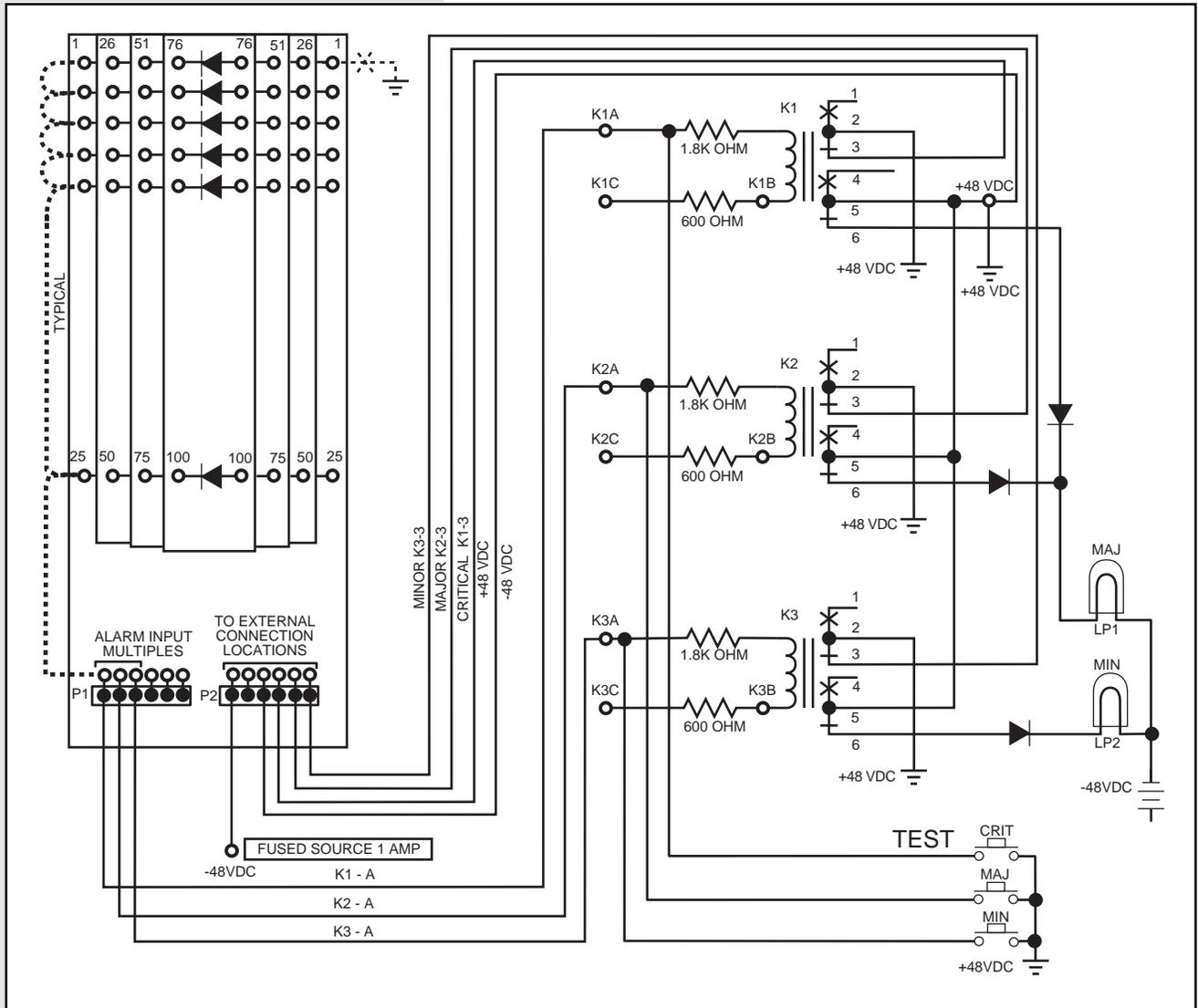
CIRCUIT DESCRIPTION

The schematic diagram for the 41072 Aisle Pilot Alarm Unit is shown in Fig. 1.

- ◆ Ground alarm inputs are connected to the three relay coils -- K1, K2, and K3 -- through the four banks of isolation diodes.
- ◆ When a relay is energized, the corresponding lamp lights and activates any external alarm indicating devices connected to the unit.
- ◆ Each of the relays has a set of contacts for sending remote alarms.
- ◆ The front panel test buttons provide grounds to operate the relays and test the front panel lamps and any external alarm indicating devices.

CIRCUIT DESCRIPTION

FIG. 1 - SCHEMATIC, 41072 AISLE PILOT ALARM UNIT



APPLICATION INFORMATION

The Alarm Display Unit can be installed wherever audible alarm indicators are needed (for example, at the end of an equipment aisle).

The 41072 Alarm Display Unit can be used with the following devices:

MULTIPLE ALARM TRANSMITTERS (MATs):

Inputs to the Alarm Display Unit can come from the A through D alarm level relay outputs from Dantel's 46009 and 46010 Multiple Alarm Transmitters (MATs). Refer to the MAT Practice for pin-outs.

SUMMARY AUDIBLE ALARM MODULE:

You can tie alarm outputs from the relays of Dantel's 46017 Summary Audible Alarm Module (SAAM) to the Alarm Display Unit's inputs. The SAAM has two groups of alarms. Each group has eight inputs but only one output. As a result, the SAAM can accept only two levels of alarms, which can come from MATs or Dantel's 46020 Multiple Alarm Processor (MAP). To report all four alarm levels (A, B, C, D) you need two SAAMs. Refer to the SAAM Practice for pin-outs.

SUMMARY ALARM MODULE:

Dantel's 46019 Summary Alarm Module (SAM) has four inputs to accept the A-D alarm outputs of a MAP. The SAM relay outputs are wired to the Alarm Display Unit's inputs. Refer to the SAM Practice for pin-outs.

CONTROL POINT MODULES:

Dantel's 46028 and 46029 Control Point Modules (CPMs) can "echo" alarms from MATs. If you use this application, you can connect the outputs of the CPMs to the Alarm Display Unit's inputs for alarm indication. Refer to the CPM Practice for pin-outs.

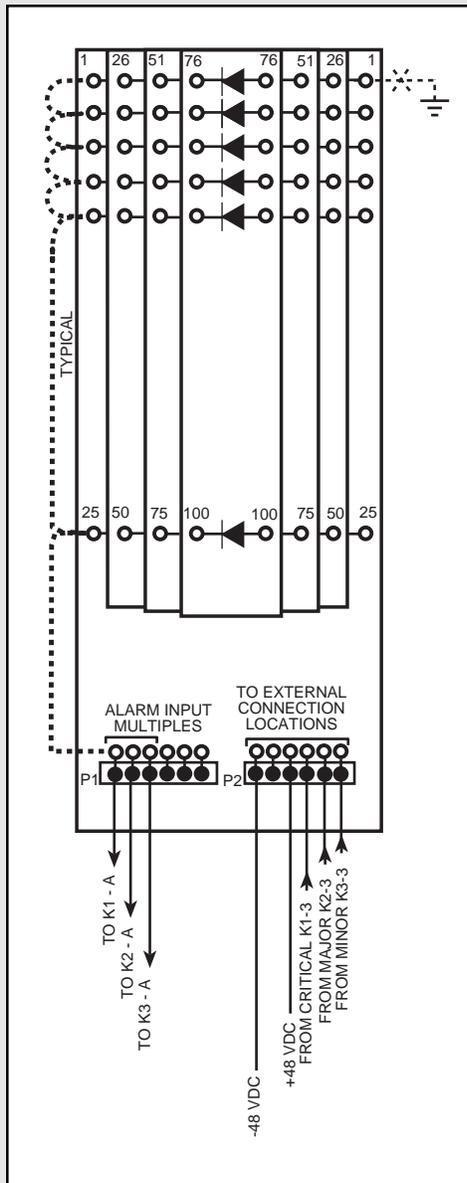
STATUS MONITOR:

The audible and visual alarm outputs from Dantel's 46001 Status Monitor can be wired to the Alarm Display Unit's inputs. Refer to the Status Monitor Practice for pin-outs.

INSTALLATION

This section describes the steps necessary to install the 41072 Alarm Display Unit.

FIG. 2 - WIRE WRAP PIN LOCATIONS



1. Open the cover.

Open the unit. The hinged access cover requires 3/8" of forward movement, then a downward rotation of approximately 180 degrees.

2. Mount the unit.

Mount the unit using the four mounting holes in the rear of the unit. Use #6 hardware (not supplied). If the A16-41076-00 mounting bracket is used, refer to the mounting bracket documentation.

3. Wire the ground inputs.

Refer to Fig. 2.

- ◆ To facilitate the installation of the wire-wrap connections, temporarily disconnect the connectors P1 and P2.
- ◆ Route the wiring through the large hole in the top of the unit.
- ◆ Wire the ground outputs from the relays of the MATs, SAAMs, SAMs, or CPMs to the wire-wrap pin terminals on the diode boards as required. Connect the alarm inputs to the anode (+) sides of the diodes.
- ◆ Jumper the cathode (-) sides of the diodes that are minor alarms together.
- ◆ Jumper the cathode (-) sides of the diodes that are major alarms together.
- ◆ Jumper the cathode (-) sides of the diodes that are critical alarms together.
- ◆ Wire-wrap the cathode side of the critical alarms to the first terminal of P1. Wire-wrap the cathode side of the major alarms to the second terminal of P1. Wire-wrap the cathode side of the minor alarms to the third terminal of P1.
- ◆ Reconnect P1 and P2.

4. Wire the relay pins to the battery.

- ◆ Wire relay pins K1B, K2B, and K3B to the battery (-48VDC) pin.

Terminals K1C, K2C, and K3C are used when additional resistance is required in the operating path of the relays.

5. Wire the relay outputs, if needed.

- ◆ Connect the external audible or visual alarm indicating devices to P2.
- ◆ The external devices must accept a ground input.

CONTINUED . . .

INSTALLATION

6. Wire power.

Connect the power source, with the power turned off, to the unit.

- ◆ Connect -Battery to the -48VDC pin through a 1 amp fuse.
- ◆ Connect Ground to the +48VDC pin.

OPERATION

To verify the operation of the 41072 Aisle Pilot Alarm Unit:

1. Apply power to the unit.
2. Press the Critical Test button on the front panel. Verify that the Major light comes on and any external devices connected to K1 operate.
3. Press the Major Test button on the front panel. Verify that the Major light comes on and any external devices connected to K2 operate.
4. Press the Minor Test button on the front panel. Verify that the Minor light comes on and any external devices connected to K3 operate.
5. Activate each alarm input that is connected to the unit. In proper operation, the appropriate light will light.
6. Verify any external equipment connected to the unit functions properly.

LAMP REPLACEMENT PROCEDURE

To replace the lamps on the 41072 Aisle Pilot Alarm Unit, follow the procedure below:

1. Slide a knife blade, thin screwdriver, or similiar tool carefully under the lens between the case and the lens. Approximately 1/8" is sufficient.
2. Using a twisting motion, gently pry up on the lens until it pops off.
3. Pull out the defective lamp.
4. Insert new lamp.
5. Press lens back on.

The lamps are type 48PSB and can be ordered from your local electronics store or from Dantel using part number A25-00020-00.

NEW TEXT

TECHNICAL SPECIFICATIONS

DESCRIPTION	VALUE
Input Voltage	-48VDC
Relay Coil	
Nominal Power	518-580 mW
Resistance	1070 ohms \pm 10%
Contact Current Rating	2 Amps max.
Physical Dimensions	8.0"H x 4.7"D x 3.5"W
Wire Wrap Pin Dimensions	
Diameter	0.045", square
Length	0.75"
Weight	2.0 lbs

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



P.O. Box 55013 • Fresno, CA 93747-5013 Phone (559) 292-1111 Fax (559) 292-9355 <http://www.dantel.com>