

46001 STATUS MONITOR



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About this Practice:

This practice has been reissued to:

- Document E13 versions of Status Monitor.

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
E13-46001-09	19" housing; 8,192 alarms
E13-46001-03	23" housing; 8,192 alarms
E13-46001-39	19" housing; 32,768 alarms
E13-46001-43	23" housing; 32,768 alarms
B23-46001-00	Keyboard
A11-46068-00	Power Supply and Relay Card
C80-00345-00	CRT Controller Card

GENERAL DESCRIPTION

Dantel's 46001 Status Monitor provides a rack-mounted terminal for local monitoring of the 460 Alarm and Control System (460 ACS). You can use this monitor for displaying alarm system data, operating annunciator points, and configuring the system. The 46001 Status Monitor displays user-defined messages for individual alarm points.

The 46001 Status Monitor can display either a maximum of 8,192 or 32,768 alarm points, depending on the option ordered.

The 46001 mounts in a 19- or 23-inch equipment rack, depending on the option. It requires 8¾ inches of height.

The front panel has a monochrome monitor screen, keypad, status-indicating LEDs, and a keyboard jack. A plug-in keyboard is optional. The monitor contains switches and strapping points to set the operating mode.

CIRCUIT DESCRIPTION

Fig. 1 shows the functional schematic for the 46001 Status Monitor.

The monitor screen, keypad, RJ-11 connector for the keyboard, and the status indicating LEDs are mounted on the front panel. The General Purpose Processor (GPP) printer port and the wire wrap terminal block are accessible from the back.

The Status Monitor housing provides a secure enclosure for the monitor tube, its high voltage power supply (not shown), and the three plug-in circuit boards.

CIRCUIT DESCRIPTION

If you want to use the keyboard, the GPP printer port must be set at 9600 baud.

CRT Controller card

- ◆ Develops the drive signals for the monitor screen,
- ◆ Accepts keystroke information from either the keypad or the keyboard,
- ◆ Generates control codes to be sent to the GPP. The GPP returns text messages which the CRT Controller displays on the screen,
- ◆ Has a speaker to give an audible indication of the keystrokes on keypad and/or keyboard,
- ◆ Has factory-set controls for the volume and the brightness of the monitor screen.

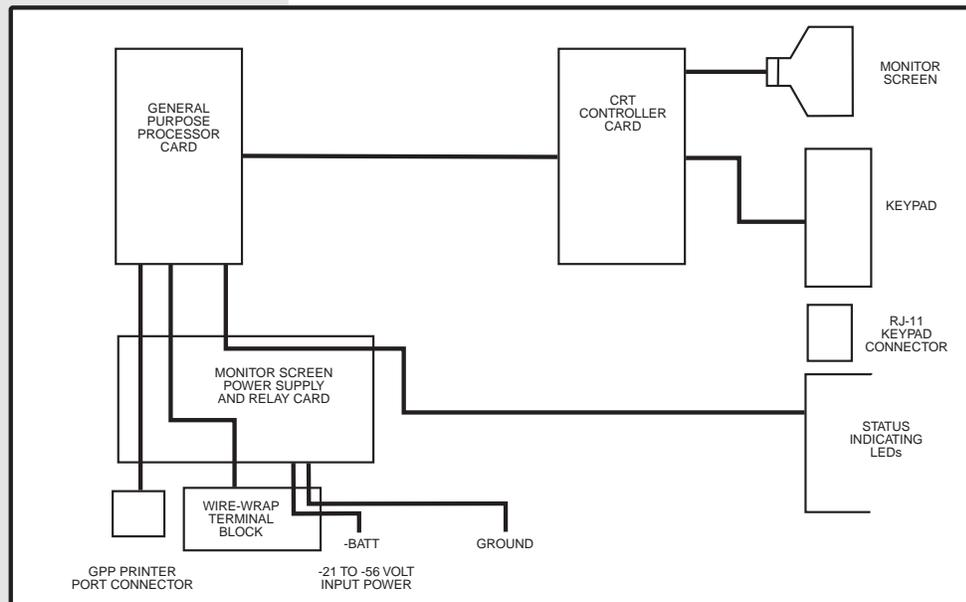
GPP card

- ◆ Converts alarm system data to English text for the CRT Controller card,
- ◆ Operates annunciator points,
- ◆ Controls the 13 status-indicating LEDs on the front panel of the Status Monitor.

Monitor Screen Power Supply and Relay card

- ◆ Provides power for the monitor's high voltage power supply,
- ◆ Contains the drivers for the front panel LEDs,
- ◆ Provides relay contacts for external, user-supplied visual and audible alarms.

Fig. 1 - 46001 STATUS MONITOR FUNCTIONAL SCHEMATIC



APPLICATION INFORMATION

Fig. 2 shows a 46001 Status Monitor to Multiple Alarm Processor interface application. This application lets local service people operate annunciator points and see system status reports.

NOTE: Refer to the *Status Monitor Syntax* section for key functions and printer command syntax.

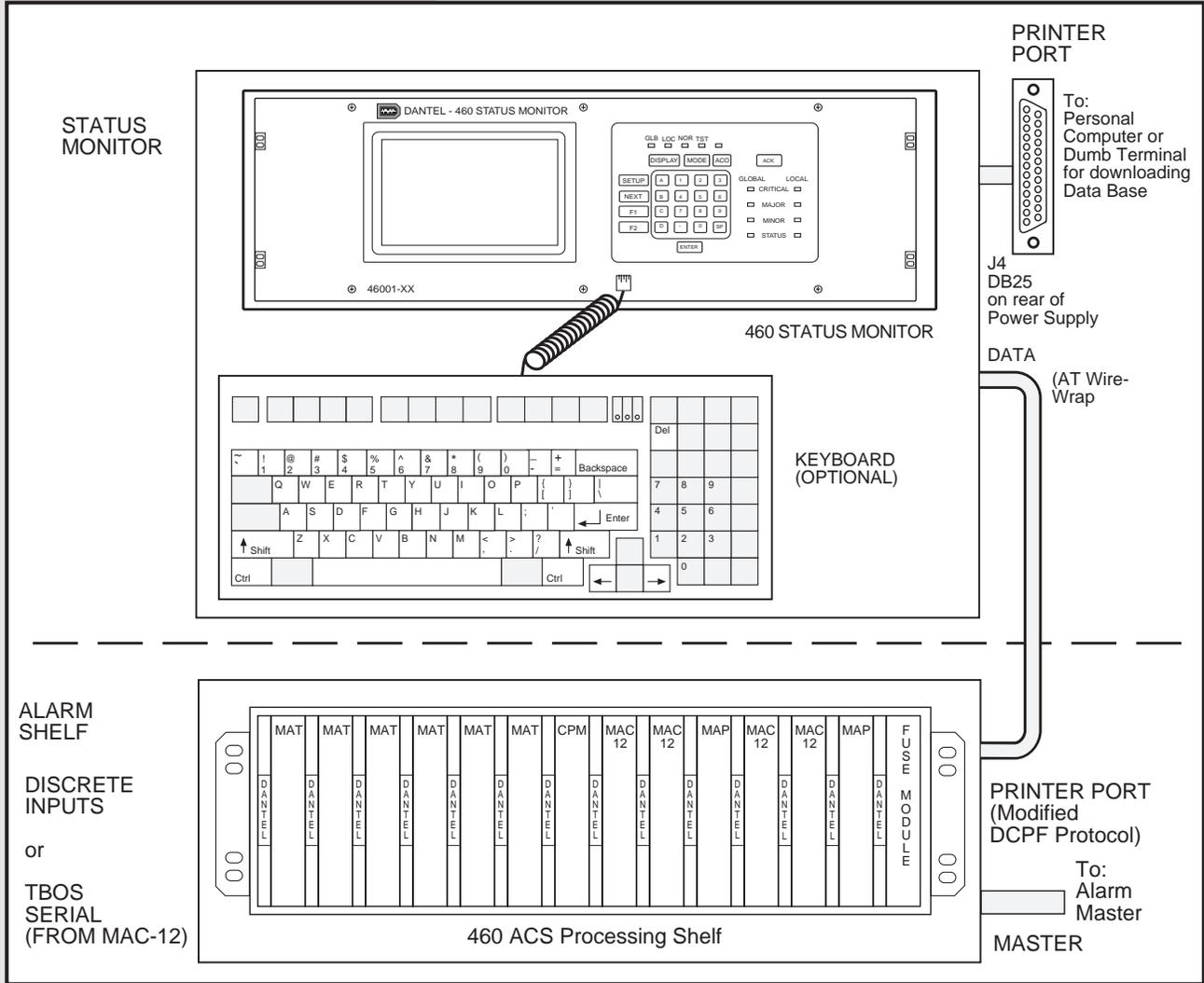
Fig. 3 shows a master/slave system application. Three Status Monitors interface with MAPs in three Dantel 460 ACS shelves. You can place each shelf at a different site. All Status Monitors can connect to the same data bus with a 46034 Hubbing Module. Each monitor displays system alarm data simultaneously.

The monitor with the lowest address is the master; all other monitors are slaves. Only one master can interrogate the responding remotes. You can download the master monitor database to the slave monitors.

If the master monitor fails, the monitor slave with the next lowest address becomes the new master. The new master polling scheme detects and reports the failure of the master. The failed master regains control if it returns to service.

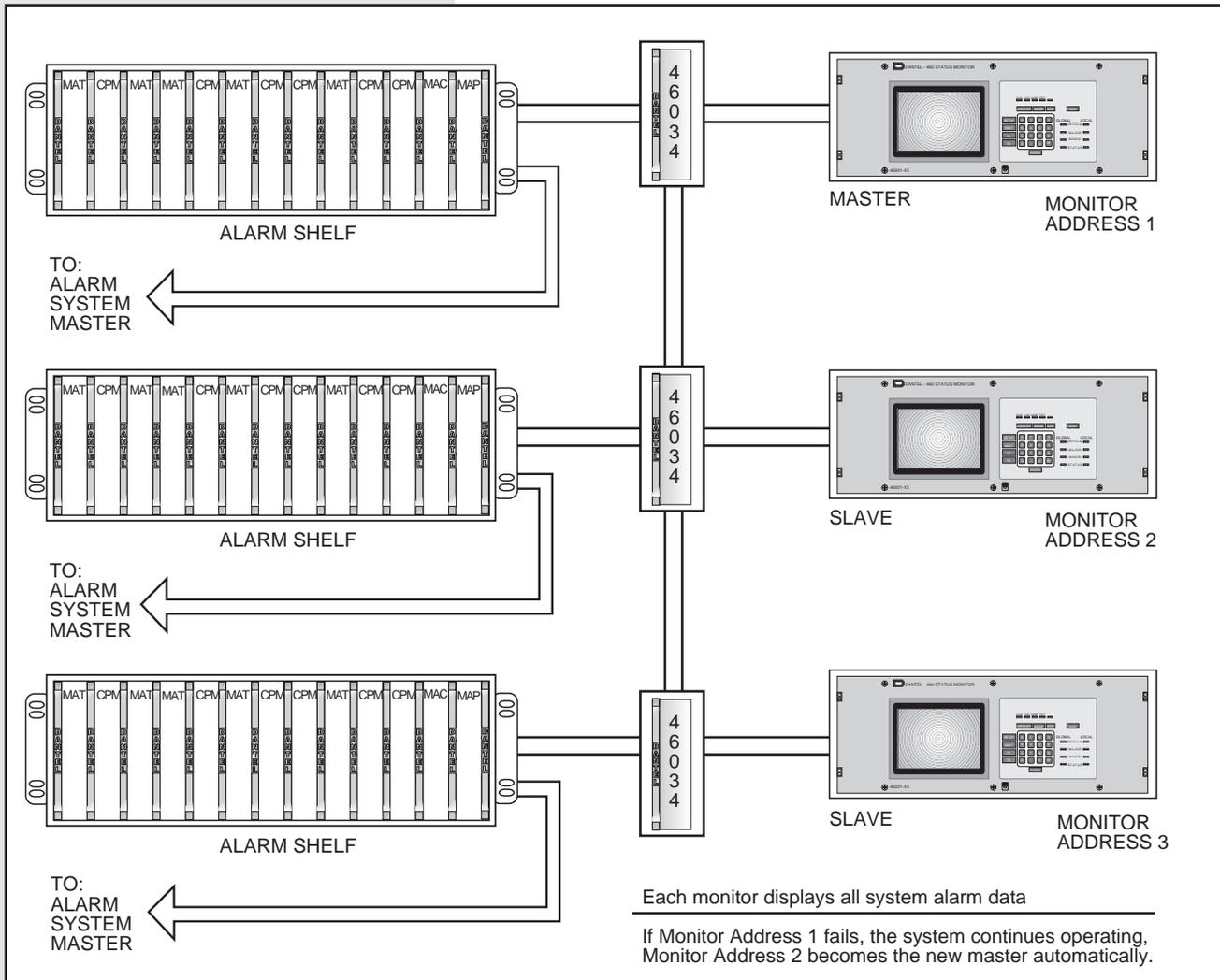
APPLICATION INFORMATION

FIG. 2 - 46001 STATUS MONITOR TO MAP EXAMPLE APPLICATION



APPLICATION INFORMATION

Fig. 3 - 46001 STATUS MONITOR MASTER/SLAVE SYSTEM EXAMPLE APPLICATION



INSTALLATION

This chapter contains four sections:

- ◆ Equipment mounting
- ◆ Switch and strap settings
- ◆ Wiring
- ◆ Turn-up procedure

For proper installation, follow the instructions in these sections in order.

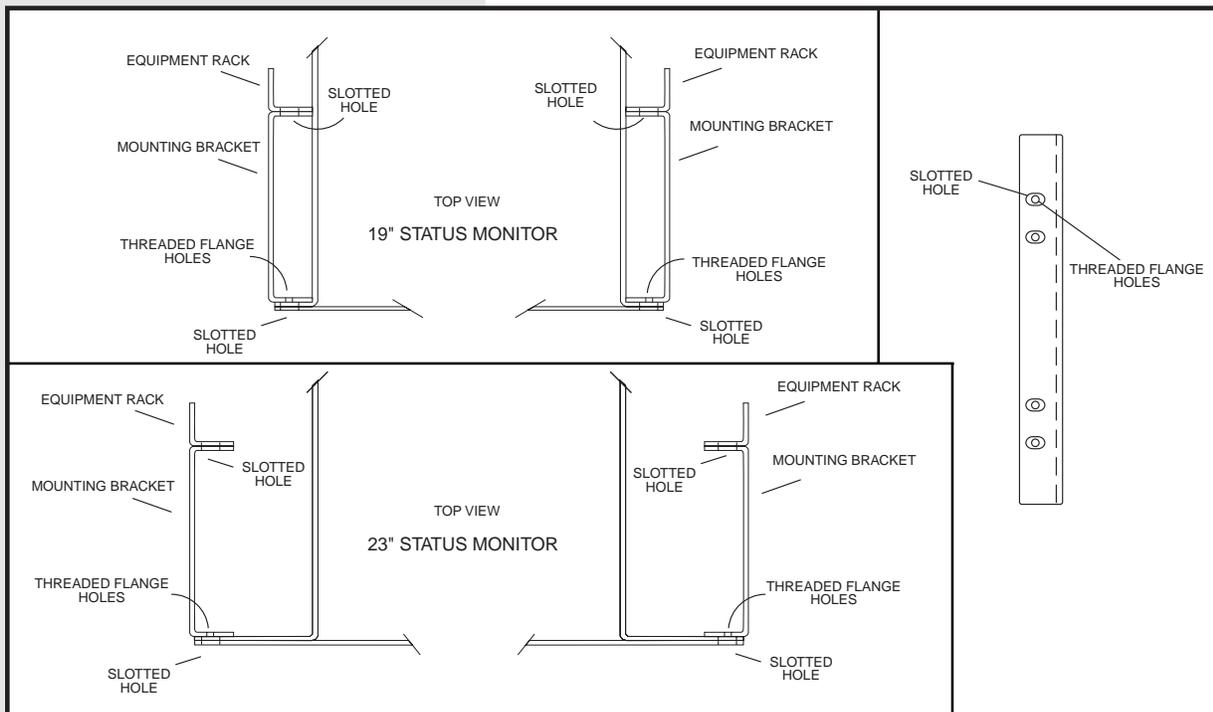
EQUIPMENT MOUNTING

1. Verify that the equipment rack has at least 8 3/4 inches of vertical clearance (five rack units) to mount the 46001.

NOTE: You may want a 1 3/4 inch space on top of the status monitor for keyboard storage.

2. If you ordered brackets to extend the front of the 46001 out five inches from the equipment rack, install the brackets on the equipment rack as shown in Fig. 4. Note that the long edge of each bracket lines up with the outside edge of the rack.
3. Install the ESD studs.

Fig. 4 - MOUNTING BRACKETS, 46001 STATUS MONITOR

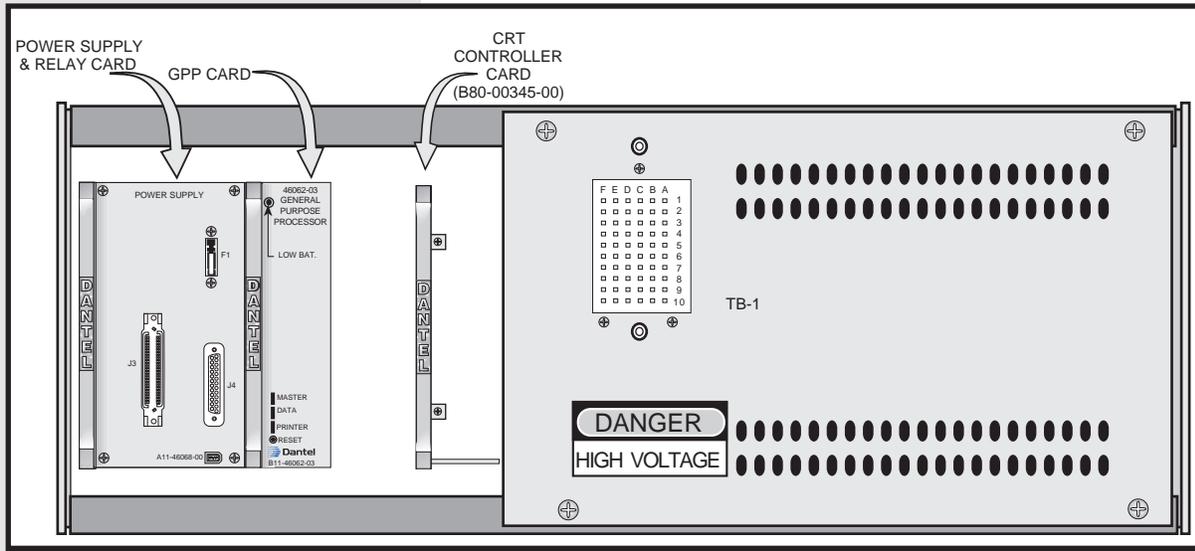


INSTALLATION

SWITCH AND STRAP SETTINGS

Fig. 5 shows the locations of the Power Supply and Relay card, the GPP card, and the CRT Controller card.

FIG. 5 - BOARD LAYOUTS, 46001 STATUS MONITOR



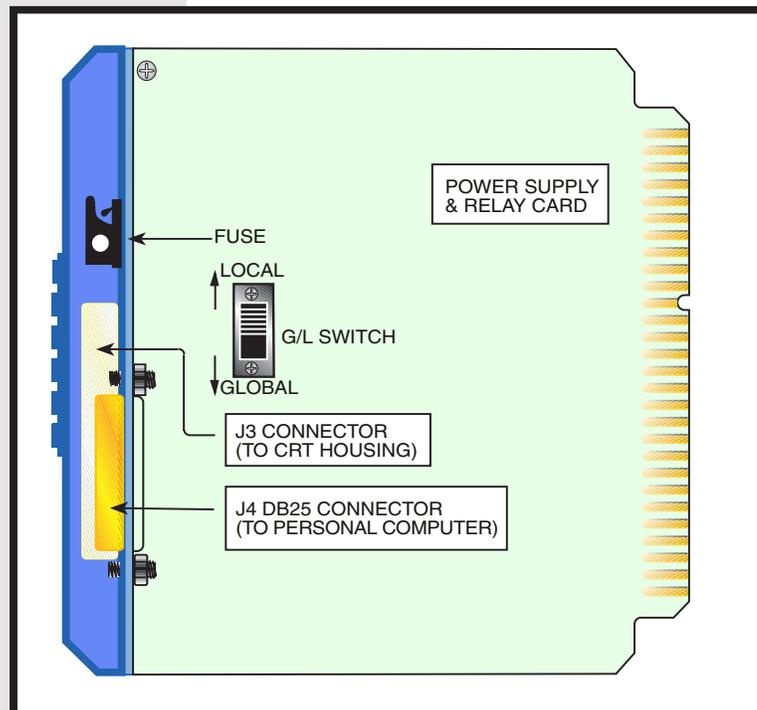
INSTALLATION

POWER SUPPLY AND RELAY CARD

To set the switch:

1. Refer to Fig. 6 for the location of the G/L switch.
2. Pull the card out as far as possible. It is not necessary to remove the connector at J3.
3. To operate the audible relays when the Status Monitor reports LOCAL alarms, set the switch UP.
4. To operate the audible relays when the Status Monitor reports GLOBAL alarms, set the switch DOWN.
5. Push the card back into the Status Monitor.

FIG. 6 - SWITCH SETTING, POWER SUPPLY AND RELAY CARD



SWITCH 1	
UP	Audible relays operate on LOCAL alarms
DOWN	Audible relays operate on GLOBAL alarms

INSTALLATION

CRT CONTROLLER CARD

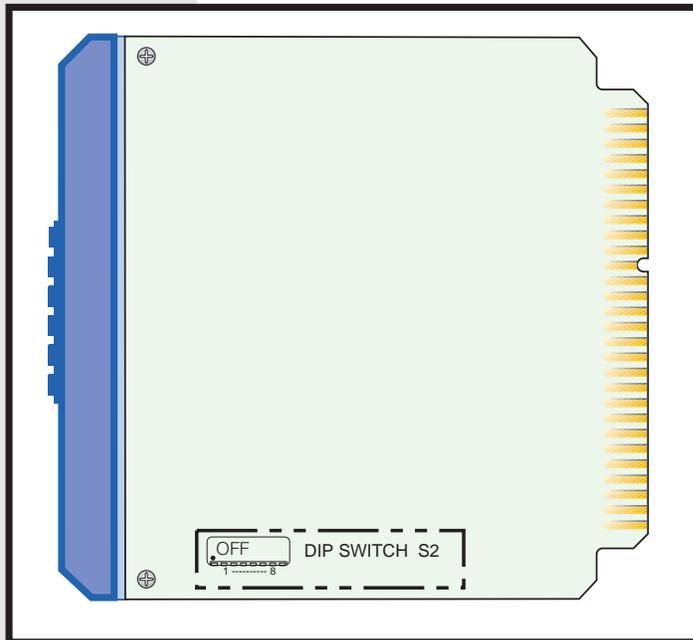
To set the switches:

1. Refer to Fig. 7 for the location and settings of switch S2.
2. Remove the card from the Status Monitor.
3. Set switches S2-1 through S2-3 for the desired data rate. (Switches S2-4 through S2-8 are not used.)

NOTE: The data rate must be the same as the data rate on the printer port of the GPP card (switches S1-1 through S1-3 on the GPP card).

4. Reinstall the card in the Status Monitor.

FIG. 7 - SWITCH SETTINGS, CRT CONTROLLER CARD



BAUD RATE	S2-1	S2-2	S2-3
50	ON	ON	ON
110	OFF	ON	ON
300	ON	OFF	ON
600	OFF	OFF	ON
1200	ON	ON	OFF
2400	OFF	ON	OFF
4800	ON	OFF	OFF
9600 *	OFF	OFF	OFF

* FACTORY SETTING

INSTALLATION

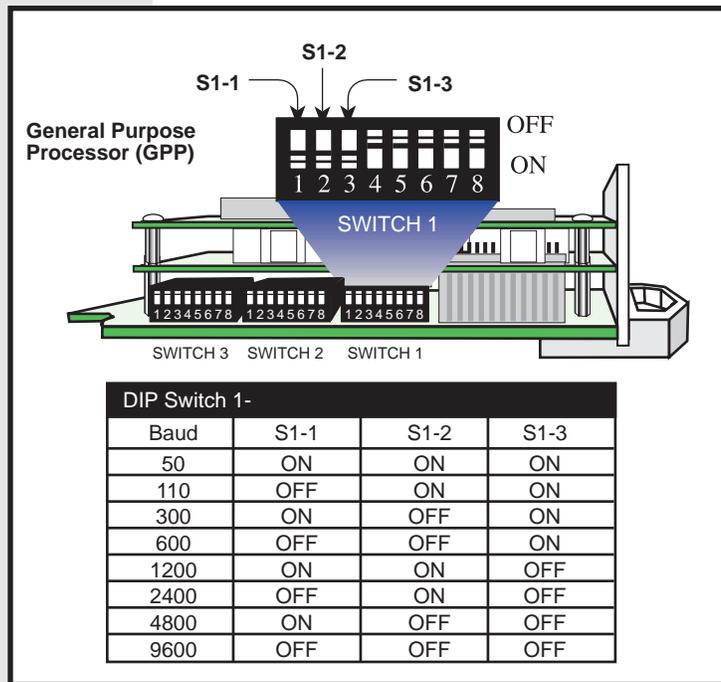
GPP CARD - SWITCHES

To set the switches:

Refer to Figs. 8 through 11 and Table A for the locations and settings of the switches.

NOTE: *The data rate for the printer port must be the same as the data rate on the CRT Controller card (Switches S1-1 through S1-3 on the Controller card).*

FIG. 8 - SWITCH SETTINGS, PRINTER PORT DATA RATE



INSTALLATION

FIG. 9 - SWITCH SETTINGS, MASTER PORT DATA RATE

General Purpose Processor (GPP)

S1-4 S1-5 S1-6

OFF ON

1 2 3 4 5 6 7 8

SWITCH 1

SWITCH 3 SWITCH 2 SWITCH 1

DIP Switch 1-			
Baud	S1-4	S1-5	S1-6
50	ON	ON	ON
110	OFF	ON	ON
300	ON	OFF	ON
600	OFF	OFF	ON
1200	ON	ON	OFF
2400	OFF	ON	OFF
4800	ON	OFF	OFF
9600	OFF	OFF	OFF

FIG. 10 - SWITCH SETTINGS, ALARM MASKING

General Purpose Processor (GPP)

S1-8 S1-7

OFF ON

1 2 3 4 5 6 7 8

SWITCH 3 SWITCH 1

SWITCH 3 SWITCH 2 SWITCH 1

S1-8 OFF - Global alarms can be masked
S1-8 ON - Global alarms can not be masked
S1-7 OFF - Local alarms can be masked
S1-7 ON - Local alarms can not be masked

NOTE: This firmware incorporates an alarm masking feature which, when activated, will filter (block) all LOCAL alarms, or all GLOBAL alarms from the display. Switches S1-7 and S1-8 enable this feature; the DISPLAY command determines if LOCAL or GLOBAL alarms will be masked. Switch 3 is not used and each lever should be left in the OFF position.

INSTALLATION

NOTE: This firmware incorporates an alarm masking feature which, when activated, will filter, or block, all LOCAL alarms or all GLOBAL alarms from the display. Switches S1-7 and S1-8 only enable this feature. Use the DISPLAY command to implement the masking.

FIG. 11 - SWITCH SETTINGS, GPP ADDRESS

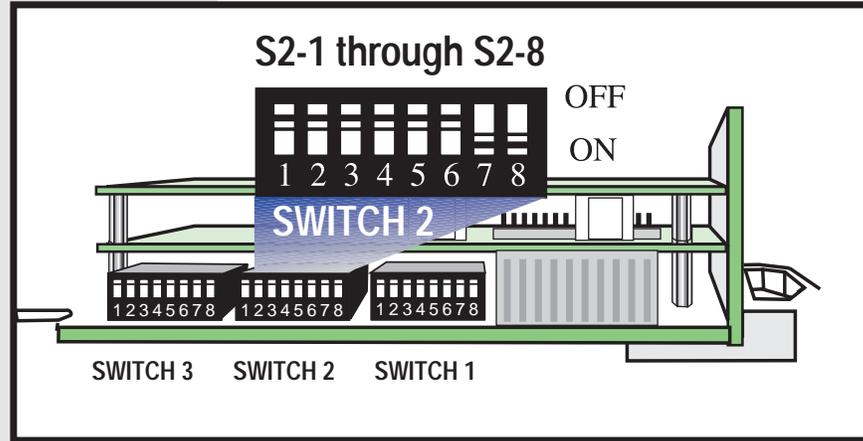


TABLE A - SWITCH SETTINGS, GPP ADDRESS

↑ OFF	1	5	9	13	17	21	25	29
↓ ON								
	2	6	10	14	18	22	26	30
	3	7	11	15	19	23	27	31
	4	8	12	16	20	24	28	32

INSTALLATION

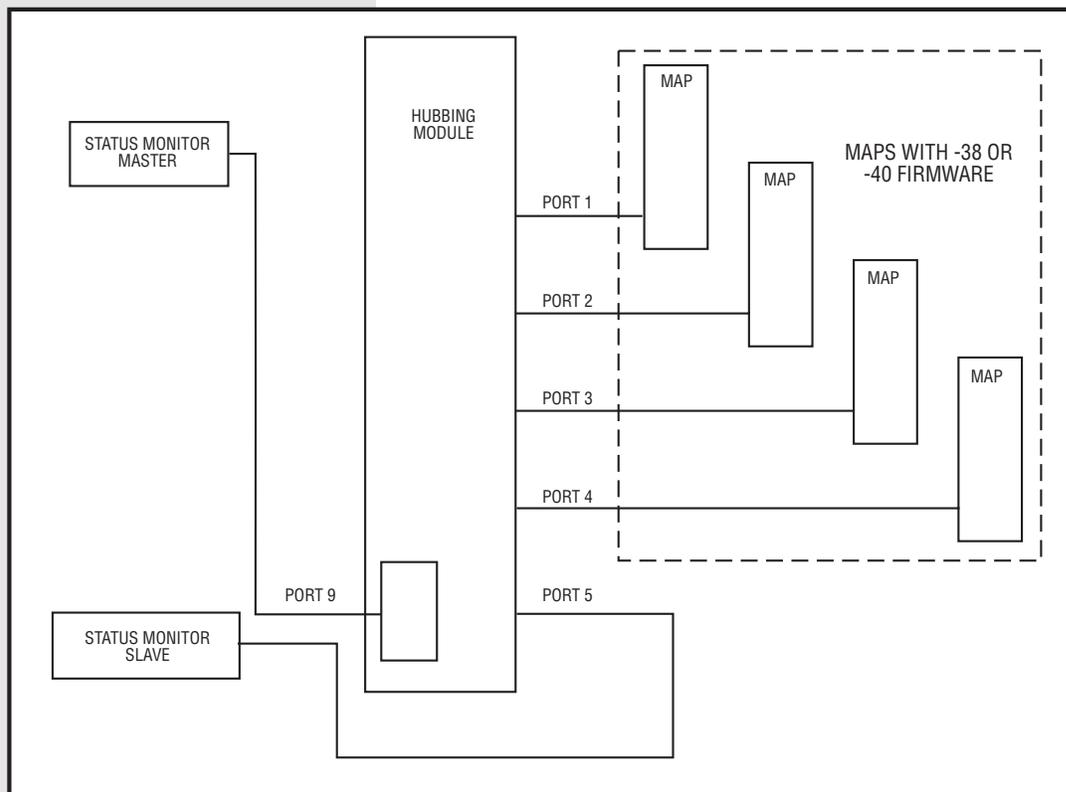
The Status Monitor can be used in master-slave mode, in which more than one unit is used to control and monitor alarm traffic.

Usually a single 46034 Hubbing Module is used to connect all remote alarm gathering devices and 46001 units, as shown in Fig. 12.

A slave can act as a master when the master GPP stops polling.

In Fig. 12 you could have the GPP in the master Status Monitor at address 1, the GPP in the slave Status Monitor at address 2, and the remote MAPs at address 1-4. The GPPs and MAPs can have the same addresses because the GPPs know that there are alarm-gathering remotes and slaves in the system and can tell them apart.

FIG. 12 - TYPICAL STATUS MONITOR MASTER-SLAVE SYSTEM (DCPF PROTOCOL ONLY)



INSTALLATION

GPP CARD - STRAPS

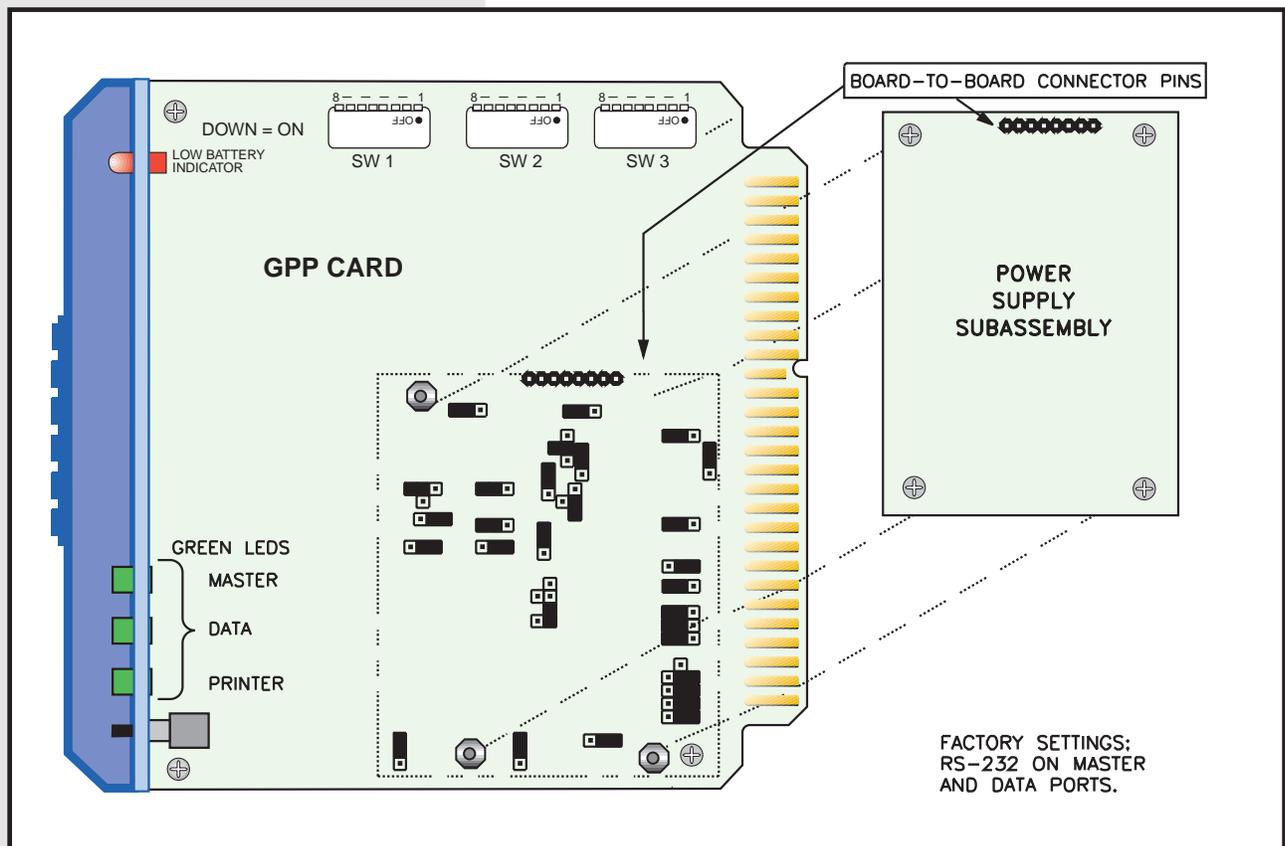
The GPP module has strapping points for selecting available electrical interfaces for data communications. Additional straps are used to select internal operating parameters and battery backup. All straps are located under the power supply subassembly.

To set the straps:

1. Refer to Fig. 13 for the strap locations on the GPP card.
2. Remove the GPP card from the rear of the 46001.
3. Carefully remove the power supply subassembly, exposing the straps located on the main circuit board beneath the subassembly.
4. Verify the strapping and make changes as required. Refer to Figs. 14-17 for illustrations and explanations of specific strap settings.

For descriptions and an illustration of all strap options, refer to Table B and Fig. 18.

FIG. 13 - PC BOARD STRAP LOCATIONS, 46062 GPP



INSTALLATION

Strapping Notes:

- ◆ There is a strap (X1 and X2) that allows the backup battery to be electrically disconnected when the module is stored or shipped. The module is shipped from the factory with the strap in the X2 position. Change it to the X1 position during installation. (Refer to Figs. 14-17.)

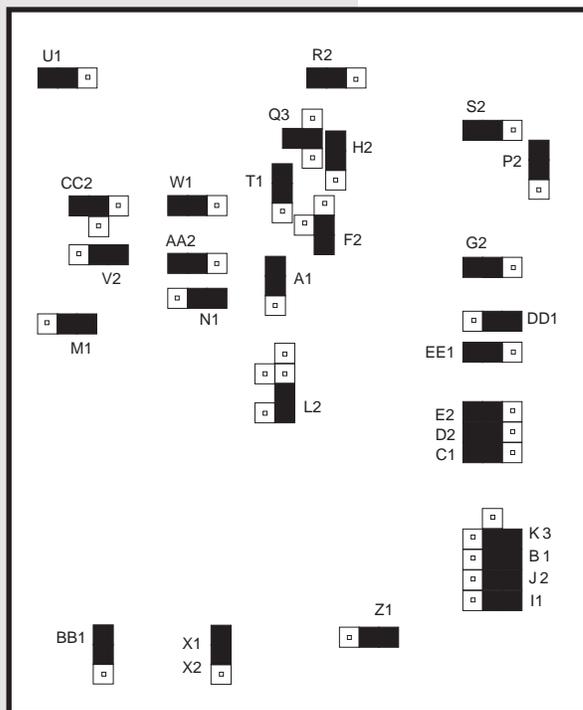
X1 = Normal operation

X2 = Shipment or storage

NOTE: The on-board GPP battery is designed to retain the database configuration during momentary power outages only. It is not intended for long-term storage of databases and is not rechargeable. The battery will begin to discharge when two conditions are met: (1) The X1 strap is in, and (2) power has been removed from the module. When the GPP is not in use, place this strap in the X2 position.

- ◆ The Printer Port is always operated in asynchronous RS-232 mode and requires no straps.

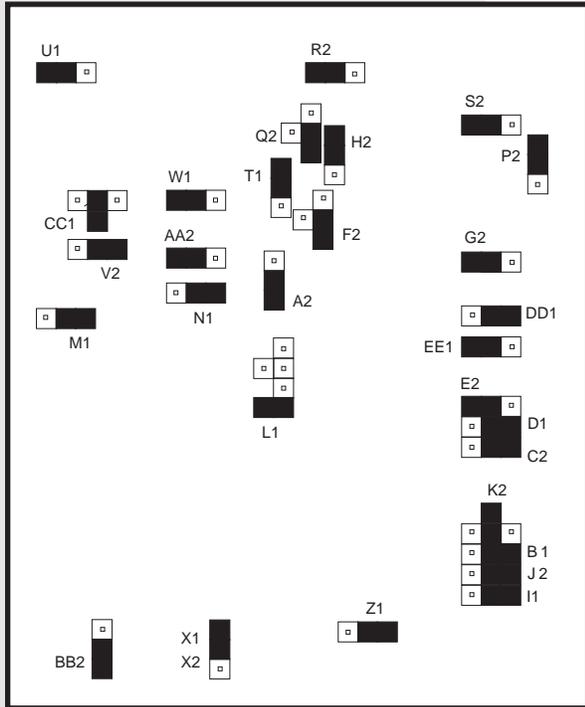
FIG. 14 - STRAP POSITIONS FOR RS-232 ASYNCHRONOUS OPERATION OF DATA AND MASTER PORTS



ACTIVE LINES	
PRINTER PORT	
RS-232 Transmit Data	
RS-232 Receive Data	
MASTER PORT	
RS-232 Transmit Data	
RS-232 Receive Data	
DATA PORT	
RS-232 Transmit Data	
RS-232 Receive Data	

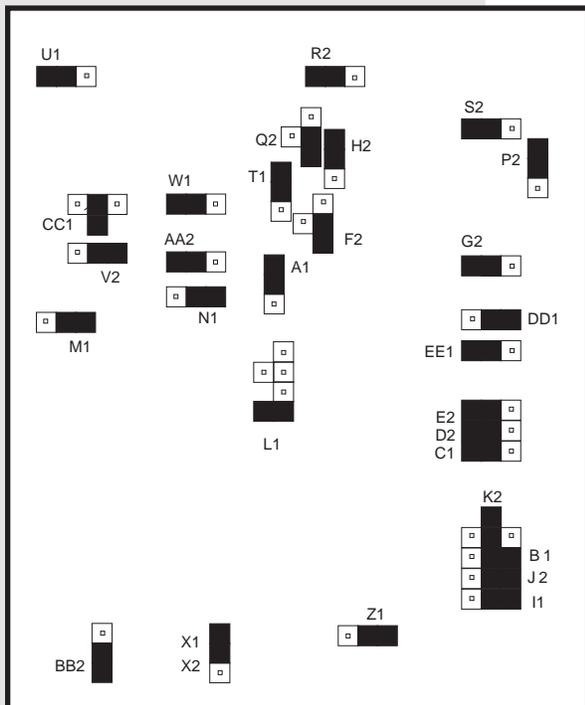
INSTALLATION

FIG. 15 - STRAP POSITIONS FOR RS-422 ASYNCHRONOUS OPERATION OF DATA AND MASTER PORTS



ACTIVE LINES
PRINTER PORT
RS-232 Transmit Data
RS-232 Receive Data
MASTER PORT
RS-422 Transmit Data plus polarity
RS-422 Transmit Data minus polarity
RS-422 Receive Data plus polarity
RS-422 Receive Data minus polarity
DATA PORT
RS-422 Transmit Data plus polarity
RS-422 Transmit Data minus polarity
RS-422 Receive Data plus polarity
RS-422 Receive Data minus polarity

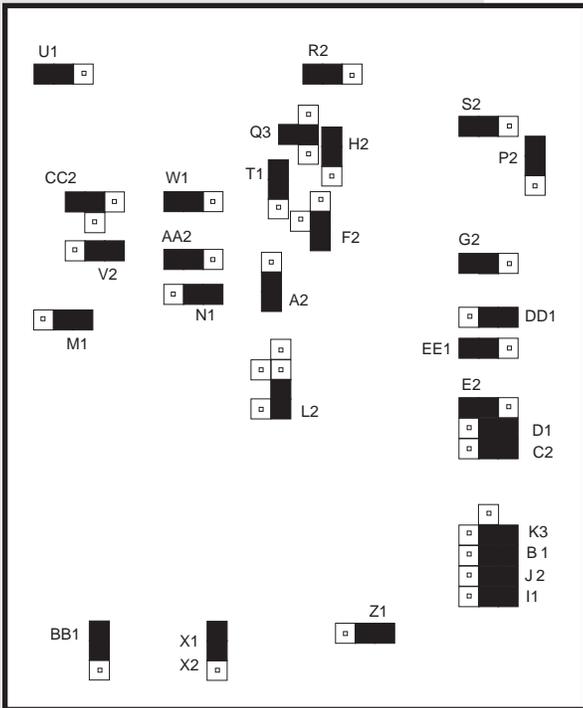
FIG. 16 - STRAP POSITIONS; MASTER PORT = RS-422 ASYNCHRONOUS, DATA PORT = RS-232 ASYNCHRONOUS



ACTIVE LINES
PRINTER PORT
RS-232 Transmit Data
RS-232 Receive Data
MASTER PORT
RS-422 Transmit Data plus polarity
RS-422 Transmit Data minus polarity
RS-422 Receive Data plus polarity
RS-422 Receive Data minus polarity
DATA PORT
RS-232 Transmit Data
RS-232 Receive Data

INSTALLATION

FIG. 17 - STRAP POSITIONS; MASTER PORT = RS-232 ASYNCHRONOUS, DATA PORT = RS-422 ASYNCHRONOUS



ACTIVE LINES
PRINTER PORT
RS-232 Transmit Data
RS-232 Receive Data
MASTER PORT
RS-232 Transmit Data
RS-232 Transmit Data
DATA PORT
RS-422 Transmit Data plus polarity
RS-422 Transmit Data minus polarity
RS-422 Receive Data plus polarity
RS-422 Receive Data minus polarity

INSTALLATION

TABLE B - 46062-02/03 STRAP DEFINITIONS

STRAP	PORT	INTERFACE	DESCRIPTION
A1	Data	RS-232	RD
A2	Data	RS-422	RXD
B1*	Data	RS-422/485	TXD terminated
B2*	Data	RS-422/485	RXD not terminated
C1	Data	RS-232	TD
C2	Data	RS-422/485	TXD
D1	Data	RS-422/485	TXD
D2	Data	RS-232	RTS
I1	Master	RS-422/485	RXD terminated
I2	Master	RS-422/485	RXD not terminated
J1	Master	TTL	RXD
J2	Master	RS-422/485	RXD
K1	Master	TTL	TXD
K2	Master	RS-422/485	TXD
K3	Master	RS-232	TD
L1	Master	RS-422/485	TXD
L2	Master	RS-232	RTS
L3	Master	RS-232	RTS (not used)
L4	Master	TTL	RTS
L5	Master	TTL	DTR
M1	Master	RS-232	CTS
M2	Master/Data	TTL	CTS
N1	Master	RS-232	CTS
N2	Master	TTL	DCD
T1	Master	RS-422	TXD
T2	Master	RS-485	TXD
X1	-	-	Battery in (operating)
X2	-	-	Battery out (storage)
Z1	Data	RS-422 RS-232	TXD RTS
Z2	Data	RS-485	TXD
CC1	Master	RS-422/485	RXD
CC2	Master	RS-232	RD
CC3	Master	TTL	RXD
DD1	Master	RS-232	RD
DD2	Master/Data	TTL	CTS
EE1	Master	RS-232	CTS
EE2	Master	TTL	DCD

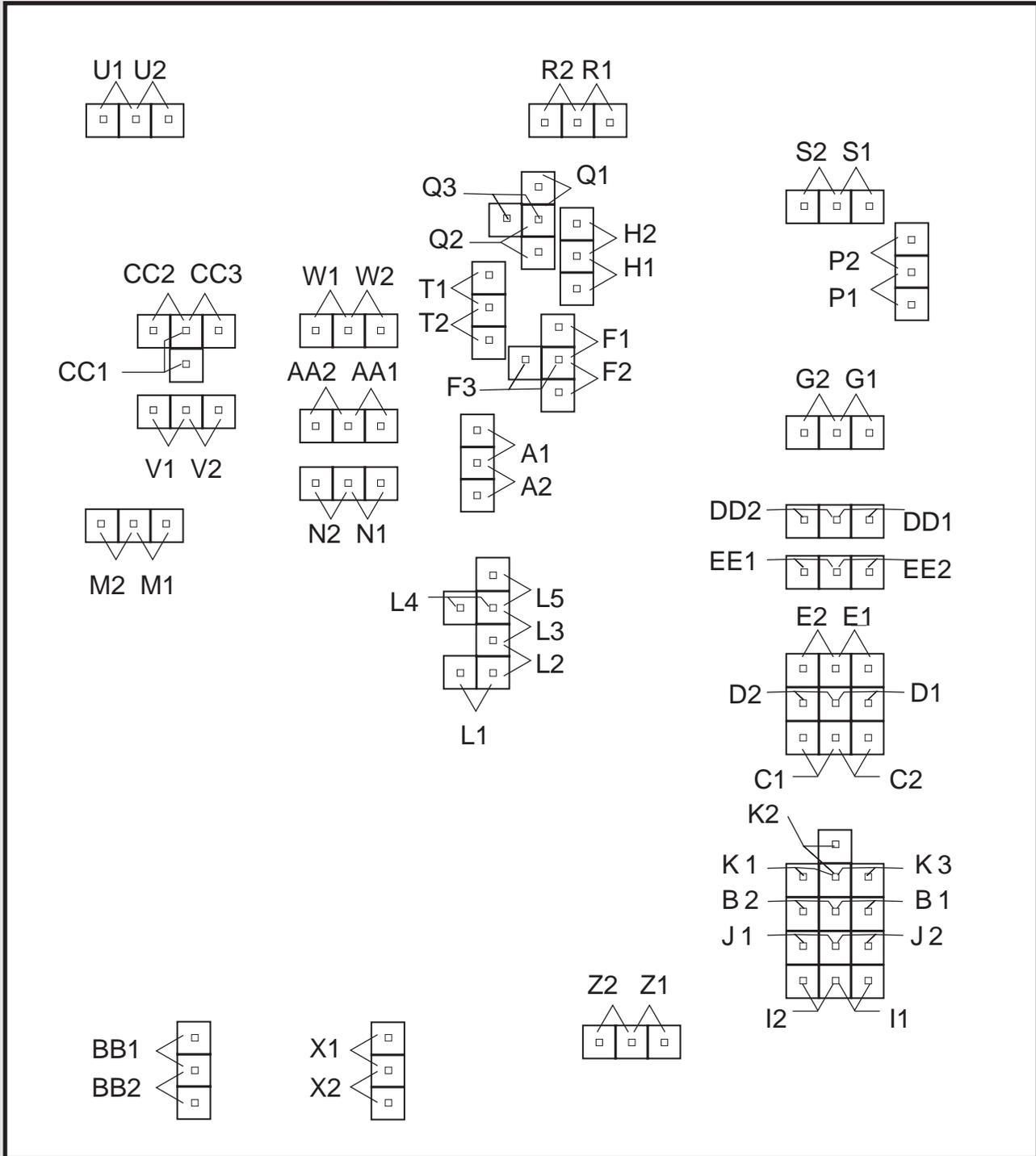
*** WHEN USING RS-485, THE DATA PORT MUST NOT BE TERMINATED**

NOTE:

Straps E, F, G, H, P, Q, R, S, U, V, W, AA and BB are not used.

INSTALLATION

FIG. 18 - 46062 STRAP LOCATIONS

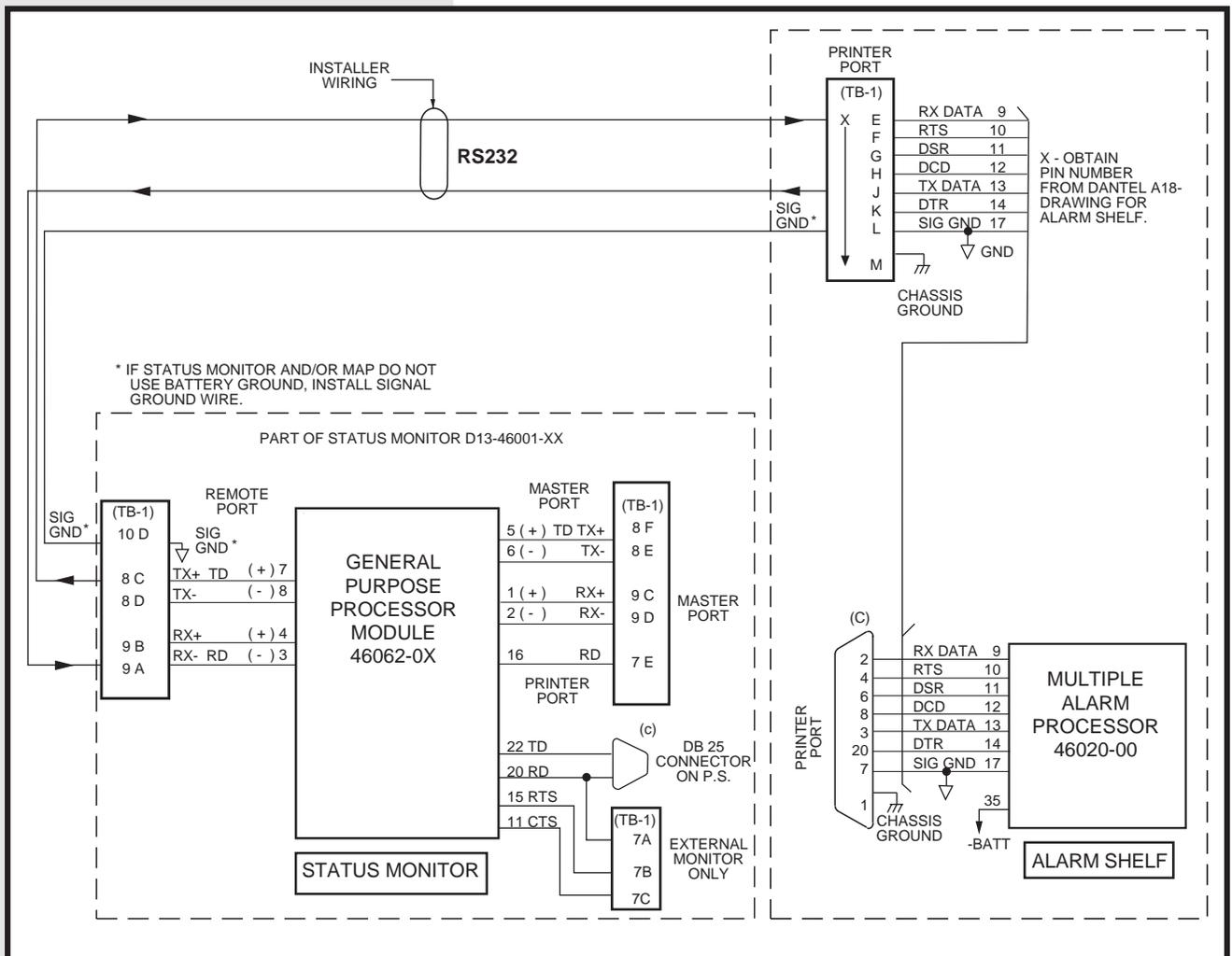


INSTALLATION

WIRING

1. See Figs. 19 and 20 for typical wiring instructions.
2. Refer to Table C for the 46001 wire-wrap block pin assignments.
3. Wire the Status Monitor as required.

FIG. 19 - WIRING INSTRUCTIONS, 46001 STATUS MONITOR



INSTALLATION

FIG. 20 - WIRING INSTRUCTIONS, 46001 STATUS MONITOR

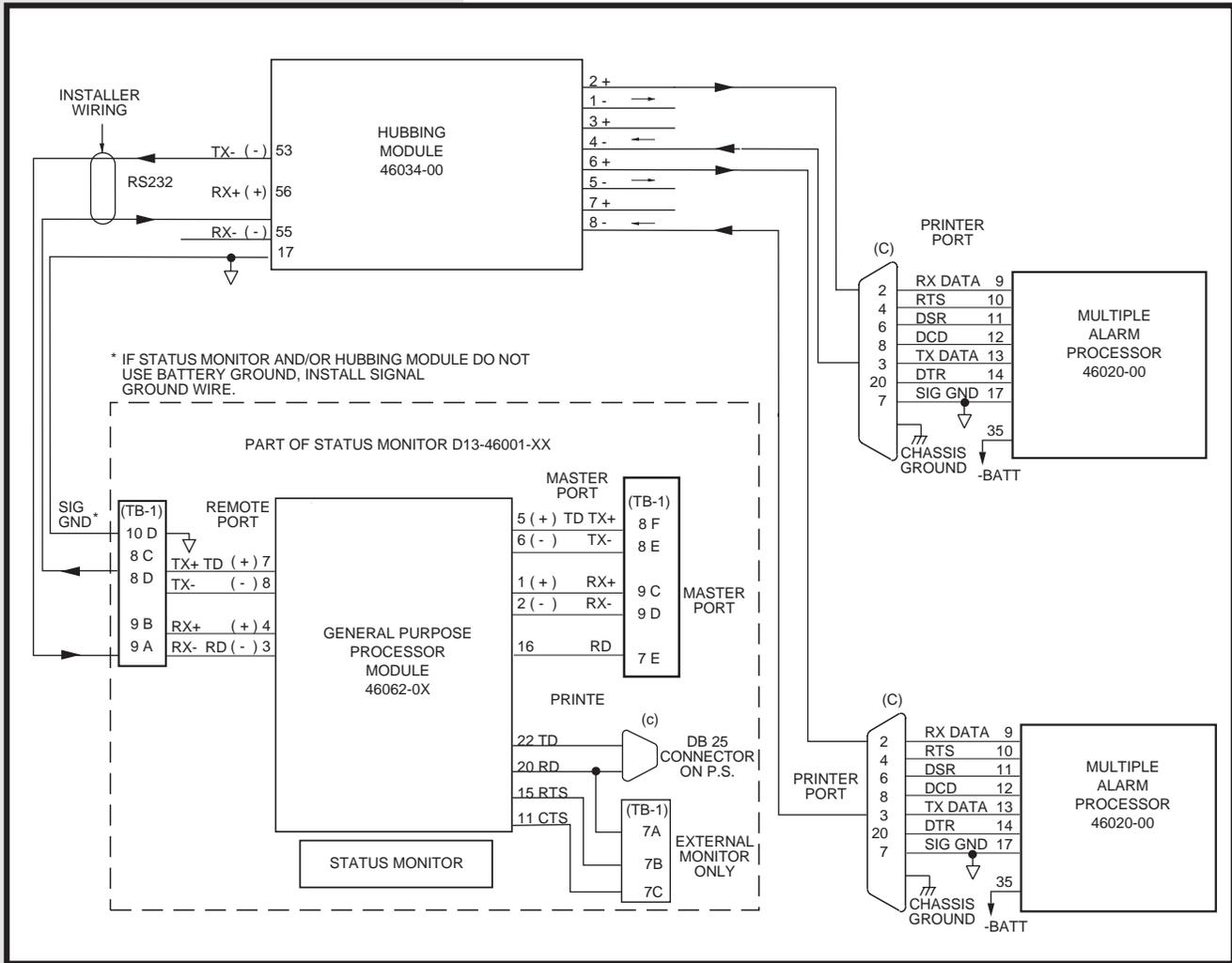
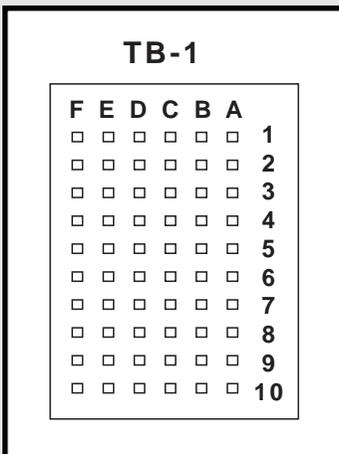


FIG. 21 - STATUS MONITOR TB-1



DB25 Connector (Located on Power Supply Card)

Used for interfacing a laptop computer or dumb terminal for configuring the Status Monitor, the pins are as follows:

PIN NUMBER	FUNCTION	DEFINITION
1	PRT GND	Printer Ground
2	EXT TXD	External Transmit Data
3	EXT RXD	External Receive Data
7	SIG GND	Signal Ground

Wire-Wrap Terminal Block

For wire-wrap pin designations refer to Fig. 21 and Table C.

INSTALLATION

TABLE C - 46001 STATUS MONITOR CONNECTOR PIN DESIGNATIONS, WIRE-WRAP BLOCK TB-1

PIN NUMBER	NAME	DEFINITION
1A	GSTA(visual)	Global Status, Visual Relay contact no. 1
1B	GSTA(visual)	Global Status, Visual Relay contact no. 2
1C	GMIN(visual)	Global Minor, Visual Relay contact no. 1
1D	GMIN(visual)	Global Minor, Visual Relay contact no. 2
1E	GMAJ(visual)	Global Major, Visual Relay contact no. 1
1F	GMAJ(visual)	Global Major, Visual Relay contact no. 2
2A	GCR(visual)	Global Critical, Visual Relay contact no. 1
2B	GCR(visual)	Global Critical, Visual Relay contact no. 2
2C	LSTA(visual)	Local Status, Visual Relay contact no. 1
2D	LSTA(visual)	Local Status, Visual Relay contact no. 2
2E	LMIN(visual)	Local Minor, Visual Relay contact no. 1
2F	LMIN(visual)	Local Minor, Visual Relay contact no. 2
3A	LMAJ(visual)	Local Major, Visual Relay contact no. 1
3B	LMAJ(visual)	Local Major, Visual Relay contact no. 2
3C	LCR(visual)	Local Critical, Visual Relay contact no. 1
3D	LCR(visual)	Local Critical, Visual Relay contact no. 2
5A	Fuse Alarm	Indicating Fuse Output (-Batt)
7A	RD	Printer Port Receive Data
7B	RTS	Printer Port Request To Send
7C	CTS	Printer Port Clear To Send
7D	No connection	
7E	RXD (-)	Master Port RS-232 Receive Data
7F	CTS (-)	Data Port Clear To Send
8A	DCD (+)	Data Port Data Carrier Detect
8B	DCD (+)	Master Port Data Carrier Detect
8C	TX (+)	Data Port RS-422 or RS-232 Transmit Data
8D	TX (-)	Data Port RS-422 Transmit Data
8E	TX (-)	Master Port RS-422 Transmit Data
8F	TX (+)	Master Port RS-422 or RS-232 Transmit Data
9A	RX (-)	Data Port RS-422 or RS-232 Receive Data
9B	RX (+)	Data Port RS-422 Receive Data
9C	RX (+)	Master Port RS-422 Receive Data
9D	RX (-)	Master Port RS-422 Receive Data
9E,F	No connection	
10A,B,C,D	Ground (+)	
10E	No connection	
10F	Battery (-)	-21 to -56 VDC
3E	STA(audible)	Status, Audible Relay contact no. 1
3F	STA(audible)	Status, Audible Relay contact no. 2
4A	MIN(audible)	Minor, Audible Relay contact no. 1
4B	MIN(audible)	Minor, Audible Relay contact no. 2
4C	MAJ(audible)	Major, Audible Relay contact no. 1
4D	MAJ(audible)	Major, Audible Relay contact no. 2
4E	CR(audible)	Critical, Audible Relay contact no. 1
4F	CR(audible)	Critical, Audible Relay contact no. 2

INSTALLATION

TURN-UP PROCEDURE

In order to use the Status Monitor in any application, you must first configure it for the system it will operate in. When there is no configuration database in the Status Monitor, the following message appears on the screen:

ENTER CONFIGURATION INFORMATION USING "CON"
COMMAND

To configure the Status Monitor, you can choose one of the following methods:

- ◆ Enter the configuration through a keyboard or a dumb terminal. Refer to the *Status Monitor Syntax* chapter for instructions.
- ◆ Download the database configuration from a master Status Monitor (when operating as a slave in a master/slave system). Refer to the DOWNLOAD command in the *Status Monitor Syntax* chapter for instructions.
- ◆ Configure the database and download it from an IBM-compatible computer through the Printer Port or Master Port. Refer to the software manual for the *46502 GPP Editor Module for Status Monitor* for instructions.

Once you configure the Status Monitor, it automatically monitors the alarm system and reports any alarm point that sets or returns to normal (these events are called *changes of state*).

OPERATION

Fig. 22 displays the front panel of the 46001 Status Monitor.

FIG. 22 - 46001 STATUS MONITOR



The Status Monitor automatically monitors the alarm system and reports any alarm point that sets or returns to normal (these events are called *changes of state*).

The front panel keypad provides an easy-to-operate interface with the alarm system.

From the keypad you can:

- ◆ Choose the type of alarm to be displayed
- ◆ Acknowledge alarms (at the Status Monitor only)
- ◆ Control the external audible and visual alarms connected to the Status Monitor

LEDs (LIGHT-EMITTING DIODES)

The status-indicating LEDs located at the top of the keypad give a visual display of alarm status and the operating mode of the Status Monitor:

The first two (GLB and LOC) indicate which type of alarm (Global or Local) displays on the monitor screen.

The next two green LEDs (NOR and TST) indicate the mode of the system. When the Normal (NOR) LED is on, the Status Monitor displays alarm status changes as they are received. When the Test LED is on, the Status Monitor does not report alarm status changes.

The Test (TST) LED lights when a REPORT ALL command is issued.

The amber LED located above the ACO key lights if the Alarm Cut-Off feature is on. (When the ACO is on, the Status Monitor does not close the relay contacts that control an external audible or visual alarm.)

OPERATION

In addition, there are eight red LEDs at the right side of the keypad that indicate the presence of an active alarm. These LEDs light and remain on whenever there is an active alarm, even if the alarm has been masked, or has been acknowledged.

LOW BATTERY INDICATION

LED Indications

The General Purpose Processor (GPP) is equipped with a battery back-up. A low battery can ultimately result in the loss of data. When the GPP detects a low battery condition the LOW BAT LED on the front panel of the GPP will begin flashing. This LED will turn on before the voltage of the battery drops below the point at which memory loss will occur. It will not stop until the battery or the GPP is replaced.

A 46062-03 GPP uses display 67, points 33-64 to report low battery conditions on GPP addresses 1-32. The 46062-02 uses points 33-64 of display 73 for the same purpose. Use the SET command (refer to the *STATUS MONITOR SYNTAX* section of this manual) to assign levels to each of the points being used.

Each point can be configured to report as one of the following:

- ◆ GLOBAL CRITICAL
- ◆ GLOBAL MAJOR
- ◆ GLOBAL MINOR
- ◆ GLOBAL STATUS
- ◆ LOCAL CRITICAL
- ◆ LOCAL MAJOR
- ◆ LOCAL MINOR
- ◆ LOCAL STATUS

A low battery reported by that GPP causes the assigned LED on the front panel of the Status Monitor to flash. This flashing has priority over the normal reporting of alarms which cause the LEDs to come on solid.

CONTINUED . . .

OPERATION

Alarm Messages

GPP	TYPICAL MESSAGE
46062-03	1 67 57 G AF CAUTION! BACKUP DATA, BAT LOW
46062-02	1 73 64 G AF CAUTION! BACKUP DATA, BAT LOW

The examples shown above are the default messages. User-defined messages are created using the DESCRIBE command (refer to the *STATUS MONITOR SYNTAX* section of this manual). The message is changeable within the parameters of the DESCRIBE command.

In the examples above,

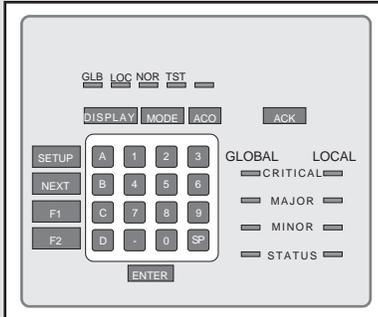
- ◆ 1 67 57 G AF is a low battery condition on the GPP with an address of 25.
- ◆ 1 73 64 G AF is a low battery condition on the GPP with an address of 32.

If a master Status Monitor battery is low, the alarm message will be sent to its master port and printer port, the associated Status Monitor LED will flash, and the front panel LED on its GPP will blink.

If a slave Status Monitor battery is low, its alarm message will be sent to its own master and printer port, the associated Status Monitor LEDs will flash, and the front panel LED on its GPP will blink. The remote will continue to listen to the master Status Monitor but will not respond when it is polled by the master Status Monitor. Because there is no response to the poll, the master Status Monitor will register it as a slave failure (using points 1-32 of display 67 or 73).

OPERATION

CONTROL KEYS



There are nine control keys located around the perimeter of the keypad. These keys allow you to issue commands to the system, acknowledge alarms, disable the external audible alarm, and to select the type of alarms displayed on the monitor screen.

The four keys located across the top of the keypad control the operation of the monitor:

DISPLAY

Toggles the display between Local and Global. When the display is in the Local mode, only local alarms are acknowledged when you press the ACKNOWLEDGE key. When the display is in Global mode, only global alarms are acknowledged. In addition, if the masking switches have been set (see Fig. 10), only local or global alarms display on the monitor screen.

MODE

Issues a REPORT ALL command to the system. The REPORT ALL command displays all alarm point descriptions contained within the database.

ACO

The Alarm Cut-Off (ACO) key toggles the external audible alarm relays between ON and OFF. The amber ACO LED above the ACO button lights when the external audible alarm is off.

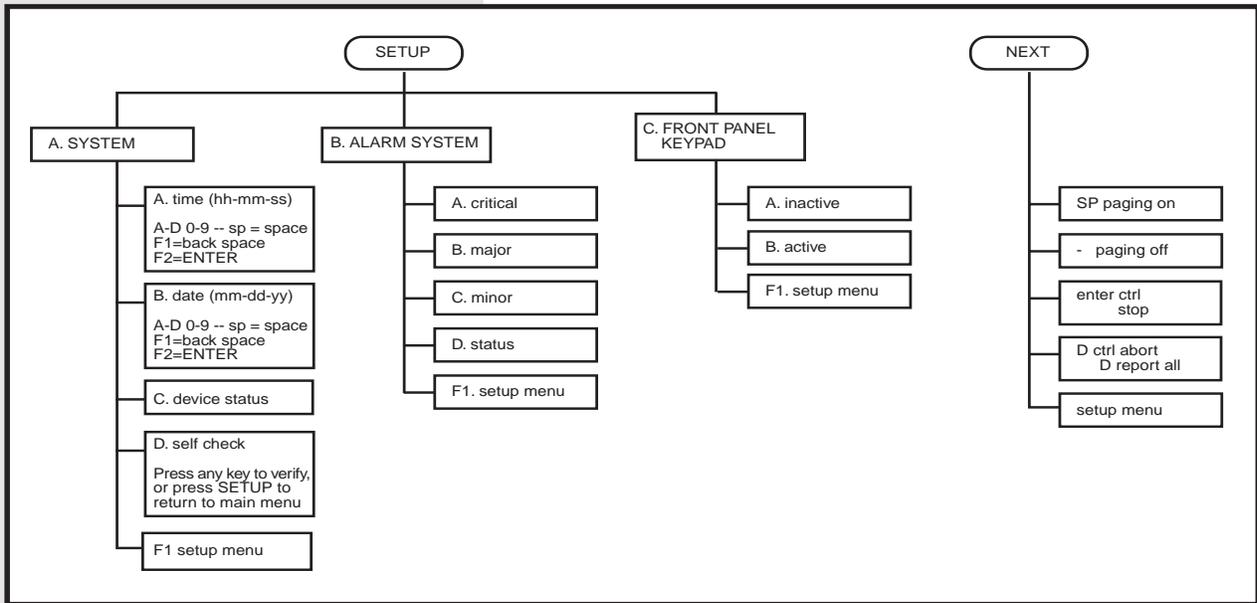
ACK

The Acknowledge (ACK) key acknowledges either all local or all global alarms, depending on the display mode (see DISPLAY). To issue an Acknowledge Level command, press the ACK key twice in rapid succession (within one second). See ACKNOWLEDGE LEVEL command in the Status Monitor Syntax.

To the left of the keypad are four keys that display simple menus that give you a choice of setup commands. Fig. 23 shows a graphic diagram of the menu system, the Command Tree.

OPERATION

FIG. 23 - COMMAND TREE



Here are descriptions of the keys:

SETUP

To display the Setup Menu, press the SETUP key. The Setup Menu allows you to set the system time or date, display system status, or verify the proper operation of the keys. If you are in a submenu, press the SETUP key to return to the Setup Menu.

NEXT

To display the Next Menu, press the NEXT key. The Next Menu allows you to turn paging on or off, to pause the data scrolling up the screen, or to stop any data output.

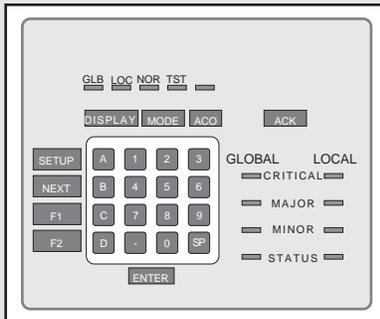
F1

When you are in the System, Alarm Summary, or Front Panel Keypad submenus, press F1 to return to the Setup (previous) Menu.

When you are in the Time or Date submenus, press F1 to back-space.

ENTER

At the bottom of the keypad is the **ENTER** key. Use this key to enter the information when making time or date entries. ENTER is also used with the paging feature.

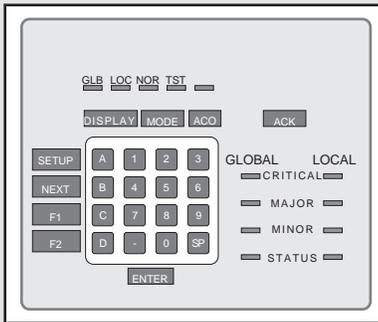


OPERATION

MENUS

The Status Monitor displays menus to assist you in selecting various operating features. Fig. 22, the Command Tree, presents a graphic diagram of the menu system.

SETUP



When you press the SETUP key, the Status Monitor displays the Setup Menu. From the Setup Menu, you have three choices:

- A. System
- B. Alarm Summary
- C. Front Panel Keypad

To select one of the options (A, B, or C), press the appropriate key.

- ◆ Option A, System, allows you to set the system time and/or date, to display the system status, to check the operation of the keys, or to return to the Setup Menu.
- ◆ Option B, Alarm System, allows you to display active alarms by critical, major, minor, or status categories, or to return to the Setup Menu.
- ◆ Option C, Front Panel Keypad, allows you to disable the keypad (preventing further database modifications without first reactivating the keypad) or to return to the Setup Menu.

On the following pages are more detailed explanations of the choices available with each of these options.

A. SYSTEM

The System Option offers five choices:

A (Time)

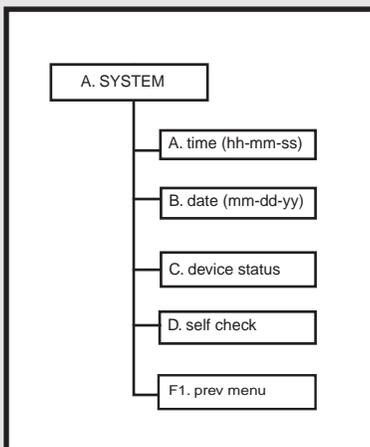
Allows you to set the system time. Enter the time in the 24-hour format, using this form: Two digits represent the hour, followed by a hyphen, two digits represent the minutes, hyphen, and two digits represent the seconds.

Example: Enter 5:15 PM as 17-15-00. Press ENTER after you enter the time.

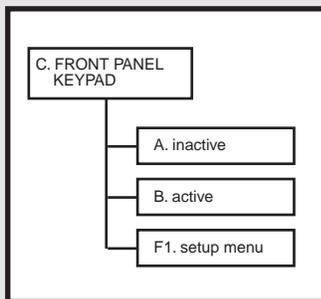
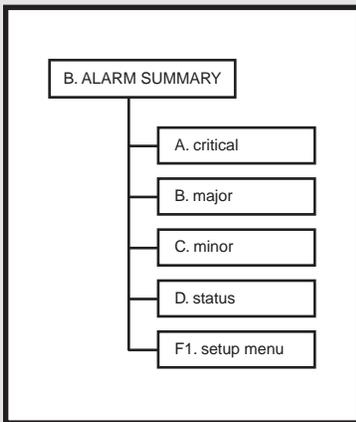
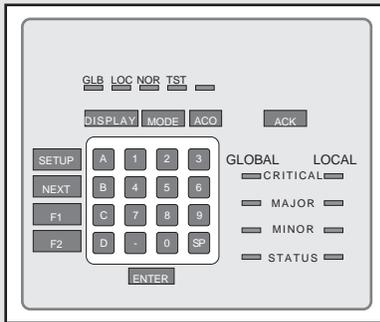
B (Date)

Allows you to set the system date. Two digits represent the month, followed by a hyphen, two digits represent the day of the month, followed by a hyphen, and two digits represent the year.

Example: Enter January 31, 1996, as 01-31-96. Press ENTER after you enter the date.



OPERATION



C (Device Status)

Displays the current status of all devices being polled. See Device Status in the *Status Monitor Syntax* section for more information.

D (Self Check)

Allows you to test all keys on the keypad, momentarily energize the relays that control the external alarm devices, and momentarily light the LED status indicators. As you press each key, it is displayed on the monitor screen. Press the SETUP key to return to the Setup Menu.

F1 returns you to the Setup Menu.

B. ALARM SUMMARY

The Alarm Summary Option offers five choices:

A (Critical)

Selects only active CRITICAL alarms.

B (Major)

Selects only active MAJOR alarms.

C (Minor)

Selects only active MINOR alarms.

D (Status)

Selects only active STATUS alarms.

F1 (Setup Menu)

Returns to the Setup Menu.

C. FRONT PANEL KEYPAD

The Front Panel Keypad Option offers three choices:

A (Inactive)

Prevents further keypad entries that could alter the system setup.

B (Active)

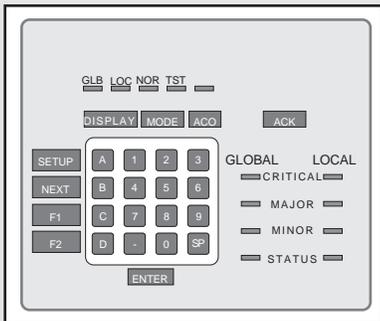
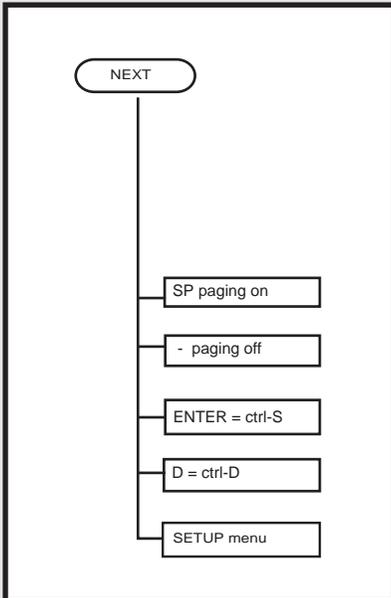
Reactivates the keypad.

F1 (Setup Menu)

Return to the Setup Menu.

OPERATION

NEXT



To display the Next Menu, press the NEXT key from any menu. The Next Menu offers five choices:

SP Key

To turn the paging feature on, press the SP key.

Hyphen (-) Key

To turn the paging feature off, press the hyphen (-) key.

ENTER Key

To issue a control S command (pause the data scrolling across the display screen), press ENTER. To continue displaying data, press ENTER again.

D Key

To stop any data output, press the D key.

SETUP Key

To return to the Setup Menu, press the SETUP key.

When the paging feature is turned on, only the amount of data that fits on one display screen is shown at a time.

- ◆ To display subsequent pages, press the NEXT key and then ENTER.
- ◆ If you do not press NEXT and ENTER, the system does not accept keypad or keyboard entries.
- ◆ The system displays the first page of data for approximately 15 minutes, then the system's screen saver feature blanks the screen. Press any key to return the screen display.
- ◆ To turn the paging feature off, press the NEXT key, then press the HYPHEN key.

STATUS MONITOR SYNTAX

The 46062 General Purpose Processor provides access to the database and remote equipment through Printer Syntax commands. No polling occurs unless one or more remotes and displays have been configured for polling, and polling is turned on.

GETTING STARTED

1. Connect a dumb terminal, or a computer operating as a dumb terminal, to the printer port. You can also connect a computer using the T/Shell Editor.
2. Set the terminal for the proper data rate, eight data bits, one stop bit, and no parity. Make these settings before connecting the terminal to the GPP.
3. If the system is operating properly, a prompt (OK) appears on the screen, indicating that the GPP is ready to accept command inputs.
4. If the terminal and the GPP do not communicate, power down and check the settings on the terminal. Also check the GPP printer port baud switch settings.
5. Type UNLOCK and press ENTER. The UNLOCK command unlocks the system so most of the other commands can be entered.

If there is a password in the system, you must enter it before the system can be unlocked. If a password is not in the system, you may enter one at this time. Refer to the PASSWORD command described later in this section.

6. If the Status Monitor has not been configured for operation, the message below displays on initial power-up. Refer to the *Configuration* part of this section. Configuration is entered using the Configuration command.

ENTERING COMMANDS

The screen displays an OK prompt to show it is ready for a command input. To enter a command for execution, press ENTER after you type the command.

Some dumb terminals or computers operating as dumb terminals have function keys that can be programmed to perform frequently used keyboard operations with a single keystroke. Refer to your terminal's manual for instructions on how to program the function keys.

STATUS MONITOR SYNTAX

Fig. 24 shows the 46001 Status Monitor keyboard with function keys. The following function keys (shaded in Fig. 21) have no function:

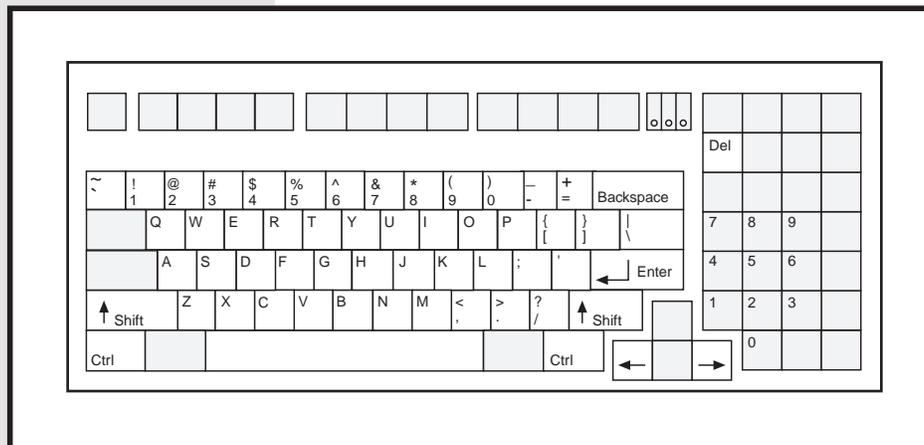
Home, PgUp, Pg Dn, End, Insert
F1, F2, F3, F4, F6, F7, F8, F10, F11, F12
PrtSc
Pause
Esc
Tab
Alt
↑
↓

The following shift-key combinations have no function:

Shift Break
Shift Home
Shift PgUp
Shift ↑
Shift ↓
Shift End
Shift Ins
Shift PgDn

The Caps Lock and Scroll Lock keys have no function. When you press the Caps Lock and Scroll Lock keys LEDs light up on the right side of the keyboard.

FIG. 24 - STATUS MONITOR KEYBOARD



STATUS MONITOR SYNTAX

FREQUENTLY USED COMMANDS

Most commands in the Printer Syntax are seldom used. Concentrate on learning the commands you need. Frequently used commands are listed below.

UNLOCK
ACKNOWLEDGE
SYSTEM
LIST
CALL
PAGE
DEVICE STATUS

EDITING

Several editing features are available. The term CTRL below refers to the control key on the terminal keyboard.

- Backspace:** Hold down the CTRL key and press the H key. Or, press the backspace key.
- Recall previous line:** Hold down the CTRL key and press the K key to retype last line typed. Use when an error message has been returned or to edit that command.
- Recall current line:** Hold down the CTRL key and press the R key to retype contents of current line. Use when interrupted by a system status message.
- Pause output:** Hold down the CTRL key and press the S key to interrupt data flow from the processor.
- Halt output:** Hold down the CTRL key and press the D key.
- Re-execute last command:** Hold down the CTRL key and press the X key.

SPECIAL FUNCTION KEY COMMANDS

- Backspace:** Press F9.
- Repeat line:** Press the ← key.
- Stop screen:** Press F5 or the → key. Hold down the CTRL key and press the S key to resume.

STATUS MONITOR SYNTAX

ERROR MESSAGES

Two error messages may appear on the screen:

COMMAND ERROR

Means the command was not understood. Enter the correct command.

SYNTAX ERROR

Means the rules governing syntax were not followed. Enter the command properly.

CONFIGURATION

Before you can use a GPP in any application, you must first configure it for the system it will operate in. This section explains how to use the Printer Syntax commands to configure the GPP in the Status Monitor.

If the GPP is not configured, a message appears on the screen telling you to enter the configuration information.

Configuration Steps

1. Generate a polling list.

This list informs the GPP which MAPs should be interrogated and which displays contain the necessary alarm data. Devices will be polled in the order that they appear on the polling list.

2. Define each alarm point and write a text message describing the alarm generated.

There are eight ways to define an alarm. Alarms are divided into two groups: Local and Global. Alarms in each group are further divided into four levels: A, B, C, and D.

Every alarm in the database falls into one of the categories shown to the left.

LOCAL	GLOBAL
A	A
B	B
C	C
D	D

By default, any alarm not defined as something else will be a Local level D alarm.

The Printer Syntax recognizes alarm levels A, B, C, and D as Critical, Major, Minor and Status alarms.

The following explanation entitled *Sample GPP Configuration File* shows the steps necessary to configure a system using the Printer Syntax.

STATUS MONITOR SYNTAX

SAMPLE GPP CONFIGURATION FILE

1. **UNLOCK
PG OFF
UNLOCK
PG OFF**

This series of commands unlocks the GPP to allow configuration changes and turns the paging feature off. If PAGE is not turned off, the screen will display only one page of data and then ignore all keyboard commands until the NEXT and ENTER keys on the keypad or the ENTER key on the keyboard is pressed.

2. **RESET ALL**

This command will erase the entire configuration file and should be used only when the entire file is to be replaced.

3. **Repeat step 1 if you entered the command in step 2.**

4. **CON ID 1 DISP 8-10**

This command tells the GPP that MAP 1 Displays 8, 9, and 10 are to be interrogated (polled). There are 192 alarm points in these displays.

5. **SET ID 1 DISP 8 PNT 1 GLOBAL CRIT**

This command defines the alarm at point 1 as being both a global and a critical (level A) alarm.

6. **SET ID 1 DISP 8 PNT 2 CRIT**

This command defines the alarm at point 2 as being local critical. The GPP assumes that any alarm that is not defined as being global is local; hence, there is no advantage in defining point 2 as a local alarm.

7. **SET ID 1 DISP 8 PNT 3 GLOBAL MAJOR**

This command defines the alarm at point 3 as being both global and major (level B) alarm.

8. **SET ID 1 DISP 8 PNT 4 MINOR**

This command defines the alarm at point 4 as being a local minor (level C) alarm.

9. **SET ID 1 DISP 8 PNT 5 GLOBAL**

This command defines the alarm at point 5 as being a global alarm. The GPP assumes that any alarm that is not defined as being level A, B, or C, as being a level D alarm; hence, there is no advantage in defining point 5 as a level D alarm.

10. **DESC ID 1 DISP 8 PNT 1**

15:36:09 11-14-91 ENTER TEXT... (Enter up to a 30-character text message describing the alarm point.)

CONTINUED . . .

STATUS MONITOR SYNTAX

11. DESC ID 1 DISP 8 PNT 2

15:36:49 11-14-91 ENTER TEXT... (Enter 30-character description.)

12. DESC ID 1 DISP 8 PNT 3

15:36:49 11-14-91 ENTER TEXT... (Enter 30-character description.)

13. DESC ID 1 DISP 8 PNT 4

15:36:49 11-14-91 ENTER TEXT... (Enter 30-character description.)

14. DESC ID 1 DISP 8 PNT 5

15:36:49 11-14-91 ENTER TEXT... (Enter 30-character description.) This sample has defined five of the 192 points contained in the three displays that are being interrogated (polled). The other 187 points will default to local status (level D) alarms.

15. SYS

At this point the system has been configured. The GPP will automatically poll MAP 1, displays 8, 9, and 10 and display any of the 192 alarms within those displays that experience a change of state. The SYS command will display any alarms that are active at this time.

STATUS MONITOR SYNTAX

OUTPUT MESSAGES

Whenever there is an alarm or device failure, a report is issued.

1	5	3	L	AF	(up to 30 character alarm point description)
1	5	4	L	C	TOWER FOUR LIGHT OUT
1	66	19	G	AF	COMM FAILURE TOWER 19

This is a typical display of the alarm points that have been set. The first column is the address of the MAP, the second column is the display number, and the third column is the alarm point number. The fourth column indicates if it is local or global, and the last column gives the type of alarm (A for critical, B for major, C for minor, and D for status). If the alarm has not been acknowledged, the letter F follows the type of alarm; if the alarm has been acknowledged, there is no F. If a description of this point has been entered, it is displayed.

The first line reads as MAP 1, display 5, alarm point 3, a local critical (level A) alarm that has not been acknowledged. The second line reads as MAP 1, display 5, point 4, which is a routine (level C) alarm reporting the loss of a light on tower four that has been acknowledged.

The third line reads as MAP 1, display 66, alarm point 19, an unacknowledged global critical failure. It is not necessarily an alarm from MAP 1. The text description explains that this is a communication failure with the devices monitoring Tower 19. A MAP may report up to 64 displays of alarm information per MAP address. Displays 65, 66, and 67 (plus displays 68 through 73 if the expanded memory option has been installed) are generated internal to the GPP and are used to report device communication failures within the alarm system. These displays appear as a MAP address 1.

The alarm point for an individual device corresponds to the position on the configuration polling list that device occupies.

- ◆ **Display 65**, points 1 through 64, is for the first 64 devices polled.
- ◆ **Display 66** is for the devices that occupy positions 65 through 128.
- ◆ **Display 67** reports communication failures with the slave GPPs and low battery indications if the standard size memory is installed. It is for devices that occupy positions 129 through 192 if the expanded memory is installed.
- ◆ **Display 68** is for devices that occupy positions 193 through 256.
- ◆ **Display 69** is for devices that occupy positions 257 through 320.

STATUS MONITOR SYNTAX

- ◆ **Display 70** is for devices that occupy positions 321 through 384.
- ◆ **Display 71** is for devices that occupy positions 385 through 448.
- ◆ **Display 72** is for devices that occupy positions 449 through 512.
- ◆ **Display 73** reports communication failures with the slave GPPs and low battery indications if the expanded memory is installed.

If the message “This is a slave” appears, it means one of the following:

- ◆ This Status Monitor is a slave; that is, it is in a listening mode only.
- ◆ The Status Monitor does not have a database configuration to tell it how to operate. Configure the Status Monitor.
- ◆ The Status Monitor is a master, but it is not communicating with 46020 Multiple Alarm Processors (MAPs). Investigate the communications failure.

STATUS MONITOR SYNTAX

INPUT COMMANDS

ACKNOWLEDGE

Purpose:

Acknowledges local, global, or all alarms.

Format:

ACK ALL

ACK LOCAL

ACK GLOBAL

ACK LOCAL ID#

ACK ID# DISP #

ACK ID# DISP # PNT #

Remarks:

Acknowledges the alarms. All alarms are unipolar and must be acknowledged when they fail, but not when they return to normal.

LOC may be substituted for LOCAL, and is used to acknowledge local alarms only.

The symbol # can be an individual device, it can be a group of devices, or it can be the term ALL, meaning all devices. ID # can be any or all addresses from 1 through 32.

DISP # can be any or all displays from 1 through 64 (and GPP's internal displays 65-73).

PNT # can be any or all points from 1 through 64.

Input Example:

```
ACK ALL
```

Output Response:

```
ACK POINTS 12:57:01 10/14/91  
OK
```

STATUS MONITOR SYNTAX

ACKNOWLEDGE LEVEL

Purpose:

Sets the operation of the acknowledge command to acknowledge audible devices.

Format:

ACK LEVEL 1

ACK LEVEL 2

ACK LEVEL 3

Remarks:

LEVEL 1 - Setting the acknowledge level at one only allows the status monitor to acknowledge its own database and release its own alarm relays. This is the default setting.

LEVEL 2 - Setting the acknowledge level at two allows the status monitor to acknowledge its own database and release its own alarm relays. In addition, if acknowledged again within one second, it will release any relays of any status monitor that has a level set for greater than level one.

LEVEL 3 - Setting the acknowledge level at three allows the status monitor to acknowledge its own database and release its own alarm relays. In addition, if acknowledged again within one second, it will release any alarm relays that are set and acknowledge the database of any other status monitor that has a level set for three.

Entering an ACK LEVEL command after the initial acknowledgment has the same function as pressing the acknowledge button on the front panel of the status monitor.

Input Example:

```
ACK LEVEL 2
```

Output Response:

```
ACK LEVEL 2
```

CONTINUED . . .

STATUS MONITOR SYNTAX

Outputs when acknowledging level 2 or level 3 alarms:

Input Example:

ACK

Output Response:

ACK POINTS 17:32:31 03/09/93

Input Example:

ACK

Output Response:

ACK GPPS 17:32:43 03/09/93

ALARM CUTOFF

Purpose:

Disables or enables the external audible relays.

Format:

ACO

Remarks:

Toggles this function with each use.

Input Example:

ACO

Output Response:

ALARM CUT OFF IS ON 12:34:52 12/19/92

CONTINUED . . .

STATUS MONITOR SYNTAX

Input Example:

ACO

Output Response:

ALARM CUT OFF IS OFF 12:34:52 12/19/92

ACTUATE

Purpose:

Momentarily sets the control points for alarm annunciators.

Format:

ACT ALL

ACT#

Remarks:

ACT ALL sets all control points.

ACT # sets the control point number(s) given in the command.

The symbol # can be an individual point, it can be a group of points, or it can be the term ALL, meaning all points. There are 64 possible control points.

Input Example:

ACT 1-4

Output Response:

OK

NOTE: *There is no other screen response to this command; however, control points one through four will actuate momentarily.*

STATUS MONITOR SYNTAX

BELL

Purpose:

Reports if the terminal bell is on or off. Turns bell on or off; when bell is on, it sounds when a change of alarm status occurs.

Format:

BELL
BELL ON
BELL OFF

Remarks:

The command BELL causes the current status of the BELL feature to be displayed.

The other commands turn the bell on or off.

BEEP or DING can be substituted for BELL

Output Response:

Only the BELL command gives a response and that is to report if the bell is on or off.

CALL

Purpose:

Establishes a communications path to a MAP's printer port. This allows access to the MAP's Printer Syntax. Refer to the MAP's firmware manual for information about the MAP's syntax.

Format:

CALL#

Remarks:

Everything that you type is sent to the MAP.

To display the path, enter Ctrl-V and the command PATH after the question mark.

To exit, enter Ctrl-V and the command DISCONNECT, which will disconnect the path to the MAP.

The symbol # must be an individual MAP address. The possible range of device addresses can be 1 through 32

CONTINUED . . .

STATUS MONITOR SYNTAX

NOTE: *If you do not enter anything for 60 seconds, the path will automatically disconnect and the system will return to polling alarms.*

When the CALL command is active, you can only use the MAP's Printer Syntax commands. You cannot use the Status Monitor Syntax. To determine if the CALL command is still active, type the letter Q. If you get a response to the Q (Query) command, you are still in the MAP's Printer Syntax. If you get a COMMAND ERROR response, the CALL command has timed out and you are in the Status Monitor Syntax.

Input Example:

```
CALL 1
```

Output Response:

Everything that is displayed on the screen is the MAP's return response.

NOTE: *If the message "This is a slave" appears, it means one of the following:*

- ◆ This Status Monitor is a slave; that is, it is in a listening mode only.
- ◆ The Status Monitor does not have a database configuration to tell it how to operate. Configure the Status Monitor.
- ◆ The Status Monitor is a master, but it is not communicating with 46020 Multiple Alarm Processors (MAPs). Investigate the communications failure.

CONFIGURE

Purpose:

Displays, defines, reserves or clears the system configuration.

Format:

```
CONFIGURE  
CONFIGURE POSITION  
CONFIGURE POSITION #  
CONFIGURE ID ## DISPLAY ##  
CONFIGURE POSITION # SKIP #  
CONFIGURE CLEAR ALL  
CONFIGURE CLEAR #
```

CONTINUED . . .

STATUS MONITOR SYNTAX

Remarks:

CONFIGURE will display the interrogation (polling) list.

CONFIGURE POSITION shows the next position to be defined.

CONFIGURE POSITION # sets the position to be defined next.

CONFIGURE ID ## DISPLAY ## tells the system which ID numbers and DISPLAY numbers to poll.

NOTE: *You can duplicate addresses using the CONFIGURE ID ## DISPLAY ## command. Verify addresses by displaying the polling list with the CONFIGURE command. T/Shell uploads will not accept duplicate addresses.*

CONFIGURE POSITION # SKIP # reserves (leaves undefined) a number of displays. For example, POS 5 SKIP 10 means configure 5, skip positions 6 through 9, and configure 10 next.

CONFIGURE CLEAR ALL empties the configuration database.

CONFIGURE CLEAR # clears that position.

C0NFIG, or CONF, or CON may be substituted for CONFIGURE.

POSN or POS may be substituted for POSITION.

DISP may be substituted for DISPLAY.

CLR may be substituted for CLEAR.

The symbol # is an individual device. The possible range of numbers for ID is 1 to 32. The possible range of numbers for POSITION is from 1 to 128 for the 46062-03 and 1 to 512 for the 46062-02. The possible range of numbers for DISPLAY is from 1 to 64.

It is important to understand the different ways in which different DCPF devices report their alarm displays. Most DCPF devices that the Status Monitor will poll report up to 32 displays of alarms for each address entered in step 1. Other DCPF devices can report up to 64 displays at one address. The Status Monitor is capable of polling both.

For example, the MAP -40 can report 64 displays of alarms but to do so must report them using two addresses: displays 1 to 32 as the first address and displays 33 to 64 as the second. In this situation, configure the Status Monitor to poll the first 32 displays at the first address and as displays 1-32. The second group of 32 displays is configured to be polled at the second address but as displays 1-32 also. Note that while the displays are numbered 33-64 on the MAP -40, they are reported as displays 1-32 at the second address.

CONTINUED . . .

STATUS MONITOR SYNTAX

Another DCPF device, the MAP -41, is capable of reporting up to 128 displays of alarm information using two addresses. Displays 1-64 are reported at the first address and displays 65-128 at the second. Configure the Status Monitor to poll displays 1-64 at the first address and displays 1-64 at the second address. Note that while the displays are numbered 65-128 at the MAP -41, they are reported as displays 1-64 at the second address.

Refer to the Operation Manual specific to the device you are polling for details on that devices capabilities.

Input Example:

```
CON
```

Output Response:

```
POS 1 ID 1 DISP 5
POS 3 ID 1 DISP 7
POS 4 ID 1 DISP 32
POS 5 ID 3 DISP 1
POS 66 ID 1 DISP 66
OK
```

NOTE: *The command CON displays the interrogation (polling) list. The sample list above shows that the first device to be polled (position 1) will be MAP address 1, display 5. Position 2 is not being used, so the next device to be polled will be position 3, which is MAP address 1, display 7. Devices are polled in the order that they are listed in the position list.*

There are 64 possible displays of alarm information per address. Displays 65, 66, and 67 (plus displays 68 through 73 if the expanded memory option has been installed) are generated internal to the GPP and are used to report device communication failures within the alarm system. See OUTPUT MESSAGES.

STATUS MONITOR SYNTAX

CONTROL

Purpose:

Authorizes the use of control points for alarm annunciators.

Format:

CONTROL ON
CONTROL OFF

Remarks:

Allows a control point to be set by the ACTUATE command. If CONTROL is off, control points can not be set.

Input Example:

CONTROL OFF

Output Response:

There is no output response to this command; however, the ACTUATE command will not be allowed to set any control points.

CRITICAL

Purpose:

Displays critical alarms.

Format:

CRITICAL

Remarks:

The command CRITICAL displays both local and global critical alarms.

CRIT or A can be substituted for CRITICAL.

Input Example:

CRIT

CONTINUED . . .

STATUS MONITOR SYNTAX

Output Response:

1	5	3	G	AF	(up to 30 character alarm point description)
1	5	4	L	A	TOWER FOUR LIGHT OUT
1	5	6	L	AF	
1	7	15	G	A	
1	7	19	L	A	

NOTE: *This is a typical display of the alarm points that have been set. The first column is the address of the MAP, the second column is the display number, and the third column is the alarm point number. The fourth column indicates if it is local or global, and the last column gives the type of alarm (this is always an A, meaning critical). If the alarm has not been acknowledged, the letter F follows the type of alarm; if the alarm has been acknowledged, there is no F. If a description of this point has been entered, it is displayed.*

The first line reads as MAP 1, display 5, alarm point 3, a global critical alarm that has not been acknowledged. The second line reads as MAP 1, display 5, point 4, which is a local critical alarm reporting the loss of a light on tower four that has been acknowledged.

DATE

Purpose:

Sets or displays the date.

Format:

DATE

DATE MM/DD/YY or MM-DD-YY

Remarks:

The command DATE displays the system date.

The command DATE followed by the month-day-year entry sets the system date.

Output Response:

The date is displayed when the command DATE is entered.

STATUS MONITOR SYNTAX

DESCRIBE

Purpose:

Assigns an easily understandable message to specific alarm points; for example, Tower light 4 is out.

Format:

DESCRIBE ID # DISPLAY # POINT #

At the ENTER TEXT prompt, type a description of 30 characters or less, including punctuation and spaces.

Remarks:

DESC can be substituted for DESCRIBE.

DISP can be substituted for DISP.

PNT can be substituted for POINT.

ID # can be any or all addresses from 1 through 32.

DISP # can be any or all displays from 1 through 64

NOTE: *DISP can also be 65 through 67 for small GPPs or 65 through 73 for large GPPs. These can be used to describe device failure and/or low battery reports.*

PNT # can be any or all points from 1 through 64.

Input Example:

```
DESC ID 3 DISP 5 PNT 11
```

Output Response:

```
15:33:06 11-14-91 ENTER TEXT...
```

Input Message:

```
TOWER LIGHT 4 IS OUT
```

Output Response:

There is no output response; however, when the alarm is set, the failure message will include the text TOWER LIGHT 4 IS OUT.

STATUS MONITOR SYNTAX

DEVICE STATUS

Purpose:

Displays the current status of devices being polled.

Format:

DEVSTAT

Remarks:

Displays the status of the devices as of the last time they were interrogated. It takes three consecutive missed polls before a device is reported as failed.

Input Example:

```
DEVSTAT
```

Output Response:

```
LIST STATUS 12:58:29 10/14/91
1 5 NORM
1 7 NORM
1 32 FAIL
OK
```

NOTE: *The first column is the address of the MAP, the second column is the display number, and the message indicates if the device being interrogated is responding to the polls.*

DISPLAY

Purpose:

Displays either LOCAL only or GLOBAL only alarms (used with the masking switches S1-7 and S1-8 on the GPP module).

Format:

DISPLAY

Remarks:

Determines whether global or local alarms will be displayed.
Toggles this function with each use.

CONTINUED . . .

STATUS MONITOR SYNTAX

Input Example:

DISPLAY

Output Response:

DISPLAY MODE IS GLOBAL
OK

NOTE: *Switch S1-7 and/or] switch S1-8 must be set to the appropriate position before the alarms can be masked.*

DOWNLOAD

Purpose:

Downloads the database from the master GPP to the slave GPP.

Format:

DOWNLOAD ALL
DOWNLOAD DESC ID# DISP # PNT #
DOWNLOAD CON
DOWNLOAD GPPSTAT

Remarks:

DOWNLOAD ALL will download the entire database, with the exception of the local/global display information. The other commands download the information specified.

The symbol # can be an individual device, it can be a group of devices, or it can be the term ALL, meaning all devices. ID # can be any or all addresses from 1 through 32.

DISP # can be any or all displays from number 1 through 64 (and GPP's internal displays 65-73).

PNT # can be any or all points from 1 through 64.

EDIT

Purpose:

Used to edit alarm point description text, display, and level descriptions.

CONTINUED . . .

STATUS MONITOR SYNTAX

Format:

EDIT ID # DISP # POINT #

Remarks:

You can use the following commands when editing:

carriage return = save and exit

backspace = go back one space and erase

ctrl-p (←) = go one character back

ctrl-q (→) = go one character forward

ctrl-r (↑) = go one description back

ctrl-s (↓) = go one description forward

ctrl-x = no change and exit

ctrl-a = no change and edit

ctrl-c = clear text and edit

ctrl-b = go to beginning of text

ctrl-e = go to end of text

ctrl-t = go to end of text description

ctrl-w = save and edit

The symbol # can be an individual device, it can be a group of devices, or it can be the term ALL, meaning all devices. ID # can be any or all addresses from 1 through 32.

DISP # can be any or all displays from number 1 through 64 (and GPP's internal displays 65-73).

PNT # can be any or all points from 1 through 64.

Input Example:

```
EDIT ID 1 DISP 5 PNT 1
```

Output Response:

```
TOWER LIGHT 2 IS OUT L D
```

NOTE: *L stands for local alarm, and D is for a level D alarm.*

STATUS MONITOR SYNTAX

GPP CONTROL

Purpose:

Tells the system which slave GPP address numbers are valid.

Format:

GPP # ON

GPP # OFF

Remarks:

The symbol # can be an individual device, it can be a group of devices, or it can be the term ALL, meaning all devices. The possible range of device addresses can be from 1 through 32.

GPP IDENTIFICATION

Purpose:

Shows the identification number (address) of the GPP that is currently being used to access the system.

Format:

GPP ID

Input Example:

GPP ID

Output Response:

ID 1
OK

If the message "This is a slave" appears, it means one of the following:

- ◆ This Status Monitor is a slave; that is, it is in a listening mode only.
- ◆ The Status Monitor does not have a database configuration to tell it how to operate. Configure the Status Monitor.
- ◆ The Status Monitor is a master, but it is not communicating with 46020 Multiple Alarm Processors (MAPs). Investigate the communications failure.

STATUS MONITOR SYNTAX

GPP MODE SELECT

Purpose:

Informs operating system if GPP is being used as a Status Monitor or if it is in a stand-alone system.

Format:

GPP SM

GPP SA

Remarks:

SM must be selected when GPP is installed in the Status Monitor.

Input Example:

GPP SM

Output Response:

There is no output response to this command.

GPP STATUS

Purpose:

Lists the master and slave GPPs within the system. Shows their communication status (NORM or FAIL).

Format:

GPP STATUS

Remarks:

GPPSTAT can be substituted for GPP STATUS.

Input Example:

GPPSTAT

CONTINUED . . .

STATUS MONITOR SYNTAX

Output Response:

```
1 MYSELF
2 NORM
3 NORM
```

NOTE: *The first GPP listed is the master GPP; hence, the answer MYSELF.*

If the message “This is a slave” appears, it means one of the following:

- ◆ This Status Monitor is a slave; that is, it is in a listening mode only.
 - ◆ The Status Monitor does not have a database configuration to tell it how to operate. Configure the Status Monitor.
 - ◆ The Status Monitor is a master, but it is not communicating with 46020 Multiple Alarm Processors (MAPs). Investigate the communications failure.
-

LED

Purpose:

Tests the front panel LEDs audible alarm relays.

Format:

LED

Remarks:

The LEDs and relays activate for a moment, then the system returns to the live display.

Example:

```
LED
```

Output Response:

```
OK
```

CONTINUED . . .

STATUS MONITOR SYNTAX

NOTE: *There is no other output response to this command; however, the output relays and the front panel LEDs (GLB; NOR; ACO; GLOBAL and LOCAL CRITICAL, MAJOR, MINOR and STATUS) activate momentarily.*

LINEFEED

Purpose:

Reports if the linefeed is on or off. Turns the linefeed on or off.

Format:

LINEFEED
LINEFEED ON
LINEFEED OFF

Remarks:

This command functions only when a terminal is connected to the GPP module. It does not have any affect on the display on the screen on the Status Monitor.

The command LINEFEED shows if the linefeed is on or off.

The other commands turn the linefeed on or off.

LF can be substituted for LINEFEED.

Output Response:

Only the LINEFEED command shows a response and that is to report if the linefeed is on or off.

LIST

Purpose:

Displays all active alarms in the system, including levels and descriptions.

Format:

LIST ALL or LIST SYSTEM or SYSTEM
LIST GLOBAL
LIST LOCAL
LIST ID #
LIST ID # DISPLAY #
LIST ID # DISPLAY # POINT #
LIST A

CONTINUED . . .

STATUS MONITOR SYNTAX

LIST B
LIST C
LIST D

Remarks:

LIST ALL displays all active alarm points in the entire system. LIST SYSTEM or SYSTEM operates the same as LIST ALL. SYS can be substituted for system.

LIST GLOBAL displays all active alarm points described as GLOBAL in the database.

LIST LOCAL displays all active alarm points described as LOCAL in the database.

LIST ID # displays all active alarm points assigned to that address.

LIST ID # DISPLAY # displays all active alarm points assigned to that ID and display.

LIST ID # DISPLAY # POINT # displays the description of the active alarm point located in that display of that ID.

LIST A displays all active alarm points described as A in the database.

LIST B displays all active alarm points described as B in the database.

LIST C displays all active alarm points described as C in the database.

LIST D displays all active alarm points described as D in the database.

The symbol # can be an individual device, it can be a group of devices, or it can be the term ALL, meaning all devices.

ID # can be any or all addresses from 1 through 32.

DISP # can be any or all displays from 1 through 64 (and GPP's internal displays 65-73).

PNT # can be any or all points from 1 through 64.

Input Example:

LIST ALL

CONTINUED . . .

STATUS MONITOR SYNTAX

Output Response:

```
1 5 3 L AF (up to 30-character alarm point description)
1 5 4 L C TOWER FOUR LIGHT OUT
1 5 6 L CF
1 7 15 L C
1 66 19 G AF COMMUNICATION FAILURE TOWER 19
```

This is a typical display of the alarm points that have been set. The first column is the address of the MAP, the second column is the display number, and the third column is the alarm point number. The fourth column indicates if it is local or global, and the last column gives the type of alarm (A for critical, B for major, C for minor, and D for status). If the alarm has not been acknowledged, the letter F follows the type of alarm; if the alarm has been acknowledged, there is no F. If a description of this point has been entered, it is displayed.

The first line reads as MAP 1, display 5, alarm point 3, a local critical alarm that has not been acknowledged. The second line reads as MAP 1, display 5, point 4, which is a local routine alarm reporting the loss of a light on tower four that has been acknowledged.

The last line reads as MAP 1, display 66, alarm point 19, an unacknowledged global critical failure. The text description explains that this is a communication failure with the devices monitoring Tower 19.

A MAP can report up to 64 displays (32 for some MAP firmware) of alarm information. For MAP 1 only, displays 65, 66, and 67 (plus displays 68 through 73 if the expanded memory option has been installed) are generated internal to the GPP and are used to report device communication failures within the alarm system. See OUTPUT MESSAGES.

Lock

Purpose:

Locks the GPP's printer port so it will not accept commands that change system configuration or set control points.

Format:

LOCK

Remarks:

Effectively locks the system and protects it from being altered. If a password has been assigned, it also must be entered after the UNLOCK command is given to access the system again. Commands that display system data are still available.

CONTINUED . . .

STATUS MONITOR SYNTAX

Input Example:

LOCK

Output Response:

SYSTEM LOCKED
OK

Log

Purpose:

Reports if the logging feature is on or off. Turns on or off the logging feature.

Format:

LOG
LOG ON
LOG OFF

Remarks:

The LOG command shows if the logging feature is on or off.

The LOG ON command turns logging on. Alarm and device failures will be reported.

The LOG OFF command turns logging off. Alarm and device failures will not be reported. The most recent failures, however, will be stored in memory and displayed when the logging feature is turned ON.

Output Responses:

Only the command LOG gives a response and that is to report if logging is on or off.

NOTE: *When logging is on, alarms and device failures will be reported automatically. See OUTPUT MESSAGES for examples of reports.*

STATUS MONITOR SYNTAX

MAJOR

Purpose:

Displays all major alarms.

Format:

MAJOR

Remarks:

The command MAJOR displays all major alarms.

MAJ or B can be substituted for MAJOR.

Input Example:

```
B LOCAL
```

Output Response:

```
1 5 3 L BF (up to 30-character alarm point description)
1 5 4 L B TOWER FOUR LIGHT OUT
1 5 6 L BF
1 7 15 L B
1 7 19 L B
```

This is a typical display of the alarm points that have been set. The first column is the address of the MAP, the second column is the display number, and the third column is the alarm point number. The fourth column indicates if it is local or global, and the last column gives the type of alarm (this is always a B, meaning major). If the alarm has not been acknowledged, the letter F follows the type of alarm; if the alarm has been acknowledged, there is no F. If a description of this point has been entered, it is displayed.

The first line reads as MAP 1, display 5, alarm point 3, a global major alarm that has not been acknowledged. The second line reads as MAP 1, display 5, point 4, which is a local major alarm reporting the loss of a light on tower four that has been acknowledged.

STATUS MONITOR SYNTAX

MASTER/SLAVE

Purpose:

Displays if the GPP you are using is a master or slave.

Format:

MS

Input Example:

MS

Output Response:

THIS IS A MASTER.

If the message “This is a slave” appears, it means one of the following:

- ◆ This Status Monitor is a slave; that is, it is in a listening mode only.
- ◆ The Status Monitor does not have a database configuration to tell it how to operate. Configure the Status Monitor.
- ◆ The Status Monitor is a master, but it is not communicating with 46020 Multiple Alarm Processors (MAPs). Investigate the communications failure.

MINOR

Purpose:

Displays all minor alarms.

Format:

MINOR

Remarks:

The command MINOR displays all minor alarms.

MIN or C can be substituted for MINOR.

CONTINUED . . .

STATUS MONITOR SYNTAX

Input Example:

MIN

Output Response:

```
1 5 3 G CF (up to 30-character alarm point description)
1 5 4 L C TOWER FOUR LIGHT OUT
1 5 6 L CF
1 7 15 G C
1 7 19 L C
```

This is a typical display of the alarm points that have been set. The first column is the address of the MAP, the second column is the display number, and the third column is the alarm point number. The fourth column indicates if it is local or global, and the last column gives the type of alarm (this is always a C, meaning minor). If the alarm has not been acknowledged, the letter F follows the type of alarm; if the alarm has been acknowledged, there is no F. If a description of this point has been entered, it is displayed.

The first line reads as MAP 1, display 5, alarm point 3, a global minor (level C) alarm that has not been acknowledged. The second line reads as MAP 1, display 5, point 4, which is a local minor alarm reporting the loss of a light on tower four that has been acknowledged.

PAGE

Purpose:

Reports if the paging feature is on or off. Turns the paging feature on or off.

Format:

```
PG
PG ON
PG OFF
```

Remarks:

With the page turned on, only the amount of data that fits on one display screen is shown at a time, with subsequent pages displayed as the Enter key is pressed.

CONTINUED . . .

STATUS MONITOR SYNTAX

PG reports if the paging feature is on or off.

PG ON turns paging on.

PG OFF turns paging off.

NOTE: *PAGE must be off when using a printer.*

Input Example:

PG

Output Response:

PAGING OFF
OK

PASSWORD1/PASSWORD2

Purpose:

Sets password or passwords for system security.

Format:

PASSWORD1

PASSWORD2

Remarks:

Entry is followed by a query for a new password. If an old password exists, you must enter it before setting a new one. As the password is entered, asterisks appear on the screen to safeguard the identity of the password. Maximum length is seven characters.

If no password is desired, press ENTER when a new password is requested.

This firmware allows the use of two separate passwords. Use of either one gives full access to the system.

The following commands are password protected:

All control point commands

All configuration commands

UNLOCK

CONTINUED . . .

STATUS MONITOR SYNTAX

NOTE: *Do not lose the password! If the password is lost, the system can not be accessed unless the backup power for the memory on the GPP is interrupted. Interrupting the backup power will erase the entire database (the configuration, individual point descriptions, etc.).*

For security reasons PASSWORD1 OR PASSWORD2 should not be included as part of the configuration database file that is to be downloaded. The GPP to be loaded should be unlocked, using the appropriate password, prior to downloading. If a password is included in the database file, anyone with access to the computer storage medium (hard drive or floppy disk, etc.) can discover the password by reviewing the database file.

Input Example:

```
PASSWORD1
```

Response:

```
NEW PASSWORD 1: *****
```

NOTE: *To change the password, you must first enter the existing password before the system will accept a new password.*

RELAY TIME OUT

Purpose:

Sets the amount of time that the relays that control the external audible and visual alarms are energized.

Format:

```
RELAY TIME OUT  
RELAY TIME OUT ON  
RELAY TIME OUT OFF  
RELAY TIME OUT #
```

Remarks:

RELAY TIME OUT # set the time-out. # is a whole number between 2 and 30 that represents the amount of time in minutes that the relays that control the external alarms will be turned on.

RELAY TIME OUT shows the setting of the time-out (in minutes) and whether it is on or off.

CONTINUED . . .

STATUS MONITOR SYNTAX

RELAY TIME OUT ON and RELAY TIME OUT OFF set the time-out to be either on or off.

The system default is RELAY TIME OUT ON 2 minutes.

Input Example:

```
RELAY TIME OUT 5
```

Output Response:

```
RELAY TIME OUT ON 5 MINUTES
```

REMARK

Purpose:

Places a comment or notation in the log.

Format:

```
REMARK
```

Remarks:

REM or ; may be substituted for REMARK.

The message can equal one line in length (approximately 72 characters).

Input Example:

```
REM INTERMITTENT PROBLEM ON TOWER 4, NEED ADDITIONAL EQUIPMENT.
```

Output Response:

There is no response to this command; however, the message will appear on the log.

REMOTE BAUD

Purpose:

Displays the baud of the data port or changes the baud between 1200 and 9600.

CONTINUED . . .

STATUS MONITOR SYNTAX

Format:

REMOTE BAUD
REMOTE BAUD 1200
REMOTE BAUD 9600

Remarks:

REMOTE BAUD displays the baud of the data port.
REMOTE BAUD 1200 sets the baud of the data port to 1200.
REMOTE BAUD 9600 sets the baud of the data port to 9600.

Input Example:

REMOTE BAUD

Output Response:

REMOTE BAUD 9600

Only the command REMOTE BAUD gives a response.

REPORT

Purpose:

Reports all alarm point descriptions.

Format:

REPORT ALL
REPORT ID #
REPORT ID # DISP #
REPORT ID # DISP # POINT #

Remarks:

Reports all alarm point descriptions by ID number, ID and display number, or by ID and display and point number.

The symbol # can be an individual device, it can be a group of devices, or it can be the term ALL, meaning all devices. ID # can be any or all addresses from 1 through 32.

DISP # can be any or all displays from 1 through 64 (and GPP's internal displays 65-73).

CONTINUED . . .

STATUS MONITOR SYNTAX

PNT # can be any or all points from 1 through 64.

Input Example:

```
REPORT ID 1 DISP 5 PNT 32
```

Output Response:

```
1 5 32 LM TOWER 4 LIGHT OUT
```

NOTE: *This reads as address 1, display 5, alarm point 32, which is a local minor alarm indicating that tower 4 light is out.*

To stop a report, press D on the front panel of the Status Monitor or type Ctrl+D if you have a keyboard.

To pause a report, press ENTER on the front panel of the Status Monitor or type Ctrl+S if you have a keyboard. To resume the report, press ENTER (or Ctrl+S) again.

REPORT CONTROL

Purpose:

Displays the control point information for alarm annunciators.

Format:

```
REPORT CONTROL ALL
```

```
REPORT CONTROL#
```

Remarks:

Reports which alarm points are associated with the specified control points.

There can be up to a total of 64 control points, with a maximum of two points assigned to each alarm point.

A control point can be assigned to more than one alarm point.

The symbol # can be a control point or a range of numbers from 1-64.

Input Example:

```
REPORT CONTROL 1-2
```

CONTINUED . . .

STATUS MONITOR SYNTAX

Output Response:

5 2 7 L CN C-1 C-2

NOTE: *This response indicates that control points one and two will be set (turned on) when there is an alarm at ID 5 Disp 2 point 7.*

RESET

Purpose:

Resets the system.

Format:

RESET

RESET ALL

Remarks:

RESET resets the system without erasing the database. Turns relays ON momentarily.

WARNING: *RESET ALL resets the system and erases all memory (configuration, point descriptions, etc.).*

RESPOND IDENTIFICATION

Purpose:

Assigns the control point information to the alarm points.

Format:

RESP ID # DISP # PNT # TO CTRL #,#

Remarks:

Up to two control points can be assigned to any alarm point.

The symbol # can be an individual device, it can be a group of devices, or it can be the term ALL, meaning all devices. ID # can be any or all addresses from 1 through 32.

DISP # can be any or all displays from number 1 through 64 (and GPP's internal displays 65-73).

PNT # can be any or all points from point 1 through 64.

CTRL # can be any or all points from 1 through 64, up to two points can be assigned to each alarm.

CONTINUED . . .

STATUS MONITOR SYNTAX

Input Example:

```
RESP ID 5 DISP 2 PNT 7 TO CTRL 2,6
```

Output Response:

There is no immediate response to this command; however, when the alarm is set, control points 2 and 6 will be set.

REVISION LIST

Purpose:

Displays the firmware's revision number.

Format:

REV

Remarks:

Status Monitors with the expanded memory option will have X82-00283-0X firmware, those without will have X82-00300-0X.

Input Example:

```
REV
```

Output Response:

```
DANTEL COS POLLING STATUS MONITOR 1 meg  
COPYRIGHT 1991  
PART# X82-00283-0X  
OK
```

Input Example:

```
REV
```

CONTINUED . . .

STATUS MONITOR SYNTAX

Output Response:

```
DANTEL COS POLLING STATUS MONITOR
COPYRIGHT 1991
10-10-91
PART# X82-00300-0X
OK
```

SEND

Purpose:

Passes 70-character text messages between the terminal connected to the printer port and those connected to the master port.

Format:

SEND [70-character text message]

Remarks:

Provides communications between the location of the printer port device (any ASCII device: dumb terminal, personal computer, printer, etc.) and the master port device (an alarm system master, ASCII terminal or computer, etc.). Helpful for transmitting system maintenance information between personnel. The message is limited to 70 characters or less.

Input Example:

```
SEND SET RCV LEV MODEM 4 @ -8 DBM
```

Output Response:

There is no response to this command; however, the terminal connected to the master port displays the following:

```
P1 - SET RCV LEV MODEM 4 @ -8 DBM
```

NOTE: *P1 identifies the printer port; if the master port had originated the message the terminal on the printer port would have displayed: M1 - SET RCV LEV MODEM 4 @ -8 DBM.*

STATUS MONITOR SYNTAX

SET ID

Purpose:

Changes the characteristics of an individual alarm point.

Format:

SET ID # DISPLAY # POINT # GLOBAL CRITICAL.
SET ID # DISPLAY # POINT # LOCAL CRITICAL.
SET ID # DISPLAY # POINT # GLOBAL MAJOR.
SET ID # DISPLAY # POINT # LOCAL MAJOR.
SET ID # DISPLAY # POINT # GLOBAL MINOR.
SET ID # DISPLAY # POINT # LOCAL MINOR.
SET ID # DISPLAY # POINT # GLOBAL STATUS.
SET ID # DISPLAY # POINT # LOCAL STATUS.

Remarks:

When an alarm point is defined or redefined, the changes are written to the database in nonvolatile memory along with all other system configuration information.

DISP can be substituted for DISPLAY.

PNT can be substituted for POINT.

GLOB can be substituted for GLOBAL.

LOC can be substituted for LOCAL.

CRIT or A can be substituted for CRITICAL.

MAJ or B can be substituted for MAJOR.

MIN or C can be substituted for MINOR.

STAT can be substituted for STATUS.

The symbol # can be an individual device, it can be a group of devices, or it can be the term ALL, meaning all devices. ID # can be any or all addresses from 1 through 32.

DISP # can be any or all displays from 1 through 64 (and GPP's internal displays 65-73).

PNT # can be any or all points from 1 through 64.

Input Example:

```
SET ID 11 DISP 25 PNT 55 CRIT
```

CONTINUED . . .

STATUS MONITOR SYNTAX

Output Response:

There is no output response to this command; however, alarm point 55 in display 25 for address 11 is now a critical alarm.

STATUS

Purpose:

Displays all status alarms.

Format:

STATUS

Remarks:

STAT or D may be substituted for STATUS.

Input Example:

STAT

Output Response:

1	5	3	G	DF	(up to 30-character alarm point description)
1	5	4	L	D	TOWER FOUR LIGHT OUT
1	5	6	L	DF	
1	7	15	G	D	
1	7	19	L	D	

This is a typical display of the alarm points that have been set. The first column is the address of the MAP, the second column is the display number, and the third column is the alarm point number. The fourth column indicates if it is local or global, and the last column gives the type of alarm (this is always a D, meaning status). If the alarm has not been acknowledged, the letter F follows the type of alarm; if the alarm has been acknowledged, there is no F. If a description of this point has been entered, it is displayed.

The first line reads as MAP 1, display 5, alarm point 3, a global status (level D) alarm that has not been acknowledged. The second line reads as MAP 1, display 5, point 4, which is a local status alarm reporting the loss of a light on tower four that has been acknowledged.

STATUS MONITOR SYNTAX

TIME

Purpose:

Displays or sets the system time.

Format:

TIME

TIME hh-mm-ss

Remarks:

The command TIME will display the current time.

The command TIME followed by the hour-minute-seconds entry will set the time. Time is entered in 24-hour format.

Output Response:

The command TIME displays the current time.

UNLOCK

Purpose:

Unlocks the GPP so it will accept commands that change the system configuration or operate control points.

Format:

UNLOCK

Remarks:

If a password has been set, it will be requested before the system can be unlocked.

Input Example:

```
UNLOCK
```

Output Response:

```
Password : ****  
System Unlocked
```

STATUS MONITOR SYNTAX

XMODEM UPLOAD

Purpose:

Prepares the GPP to transfer the configuration database on command. The computer that issues the XMODEM UPLOAD command would then exit the terminal emulation mode and enter a communications program that will establish the communications link and call for the data.

Format:

XMODEM UPLOAD

Remarks:

Will copy the entire configuration database to a computer, which may then manage the database as it would any file. To exit, wait approximately 30 seconds and it will time-out and return the normal display prompt.

Input Example:

XMODEM UPLOAD

Output Response:

There is no response to this command unless the GPP does not receive a call for the data within 30 seconds, at which time it will revert to the normal operating mode and display the response:
TIME OUT OK

TECHNICAL SPECIFICATION

DESCRIPTION	VALUE
Input Voltage	-21 to -56 VDC
Input Current Range at -24VDC at -48VDC at -56VDC	1.4 Amps 0.8 Amps 0.7 Amps
Maximum Surge Current @ Power-up	3.0 Amps
Maximum Heat Dissipation at -24VDC at -48VDC at -56VDC	115 Btu's Per Hour (BPH) 131 BPH 134 BPH
Fuse Protection	One 2-Amp, GMT-Type
Relay Contacts	0.5 Amp @ 0-56 VDC 0.5 Amp @ 0-125 VAC
CRT Display Screen	9" Diagonal
Character Format	7 x 9 Dot Matrix in 8 x 12 Dot Block
Cursor Type	Full Field Flashing
Data Ports Data Port Printer Port Master Port	RS-232/422 Interfaces Fixed @ 1200 baud (Software controlled to 9600 baud) RS-232 Interface, 50 through 9600 baud RS-232/422 Interfaces, 50 through 9600 baud
Message Storage Capacity Standard memory Expanded Memory	8,192 Messages of 30 Characters Each 32,768 Messages of 30 Characters Each
Operating Temperature Range	0° to 40° C.
Physical Dimensions -09 and -39 Housing -03 and -43 Housing Keyboard	8 3/4" H x 10 1/8" D x 19" W 8 3/4" H x 10 1/8" D x 23" W 7/16" H x 6 3/4" D x 13" W
Weight 46001 Keyboard	18 pounds 2 pounds, 9 ounces

UPDATED

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

