

# Manager's Alarm Panel Keypad and Display Instructions

## Introduction

The Manager's Alarm Panel (MAP), part of the Novar Controls Spectrum<sup>®</sup> Refrigeration Control System, provides easy access to logged alarm information as it is received from the Refrigeration Controller (RC) or EP/2. It does not require direct access to an RC, EP/2, or the software.

The panel has an 8-line by 40-character liquid crystal display (LCD) and an easy-to-use keypad (Figure 1).

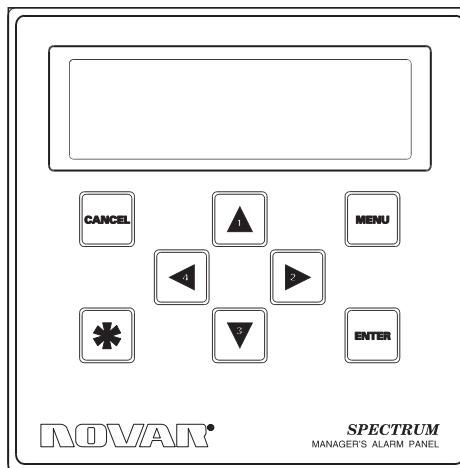


Figure 1. MAP Keypad & Display

- The **Cancel** key can be used to exit a screen and return to the previous screen. This key does *not* cancel any of the changes made in a screen.
- The arrow keys on the keypad can be used to move the cursor from one field to the next to highlight and select options and to scroll through lists.
- The **Menu** key opens the Main Menu.
- The asterisk key (\*) can be used to select or tag items for printing or deletion.
- The **Enter** key is used to activate options selected in the Main Menu.

This document provides detailed instructions for using the keys to operate the panel.

A printer port available on the MAP can be used to print alarms. For information about installing the panel and connecting the printer, refer to the Novar Controls *Manager's Alarm Panel Installation Instructions* (Doc. No. 569029000).

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**NOTE!** The Manager's Alarm Panel is to be used on a Local Area Network (LAN) with NovarNet<sup>®</sup> only. It cannot be used on a master/slave network.

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# Manager's Alarm Panel Keypad and Display Instructions

## Main Alarm Log

When the Manager's Alarm Panel is turned on, a power-up screen (Figure 2) is displayed.

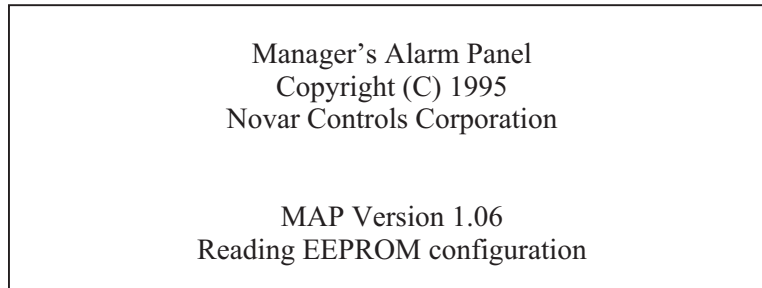


Figure 2. Power-up Display

After the MAP completes a quick self-test, the Main Alarm Log screen (Figure 3) is displayed. When it opens, it displays two lines of information each for the most recent three alarms logged. The most current alarm is listed third and highlighted.

RC	TYPE	ALARM NAME	READING
1	MODU16	COMP 00 COMMUNICATION LOSS	
2		*SYSTEM ALARM* Time: 11.51 Date: 6/24/1994	
3	MA 1	Hot Freezer Chk. Freezer Temp.	55 deg. F. ABOVE 50 deg, F.
ARROW KEYS TO VIEW LIST, * TO TAG			

Figure 3. Main Alarm Log

The appearance of the two lines of information shown for each alarm depends on the type of alarm being reported. There are four types of alarms.

ALARM TYPE	DISPLAYED AS
Load Alarms (critical)	LD
Monitoring Alarms (critical, noncritical)	MA
System Alarms	*SYSTEM ALARM*
Module Alarms	Module number (e.g., MODU16)

The first line of information for each alarm shows:

- The RC or EP/2 system number for the reported alarm.
- The alarm type (as indicated in the table above).
- The name of the load, monitoring alarm, or module as set up in the software.
- The current reading of the input (monitoring alarms only).

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**NOTE!** For system alarms, only the message “\*SYSTEM ALARM\*” will be displayed on the first line along with the RC or EP/2 system number.

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On the second line, the right and left arrow keys can be used to toggle back and forth to display the time and date the alarm was received or the alarm message (the cause of the alarm).

Figure 3 shows examples of a Module Alarm, a System Alarm, and a Monitoring Alarm.

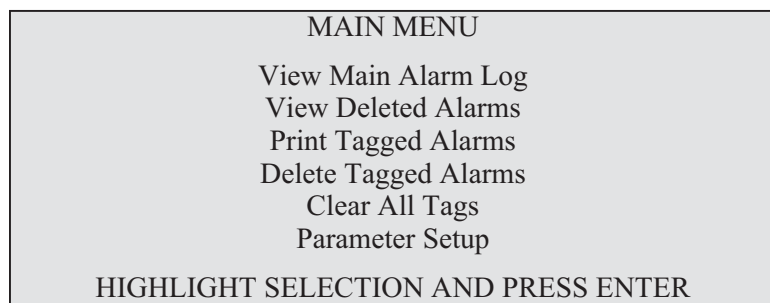
- The most current alarm, Hot Freezer Chk., is a monitoring alarm and shows that the freezer temperature went above 50°F.
- The second line for the “\*SYSTEM ALARM\*” shows the time and date the alarm was received.
- The module alarm at the top of the list shows a Communication Loss as the alarm message on the second line.

The Main Alarm Log screen can be used to select (tag or mark) specific alarms to be deleted or printed. To tag an alarm, the user presses the arrow keys to move the cursor to and highlight each alarm that is to be marked and presses the asterisk key (\*) to mark the alarm. As many alarms as necessary can be selected. An asterisk will appear in front of each alarm that is tagged. If an alarm is tagged in error, highlighting the alarm and pressing the asterisk key again untags it. The selected alarms are not deleted or printed until the user selects the appropriate option in the Main Menu, which opens if the user presses the **Menu** button on the keypad.

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### Main Menu

In the Main Menu (Figure 4), the arrow keys are used to move the cursor to the various options, which are displayed on two screens. Once the appropriate option is highlighted, pressing **Enter** activates the option.



**Figure 4.** Main Menu, Screen #1 of 2 screens

## Manager's Alarm Panel Keypad and Display Instructions

The Main Menu offers the following options.

<b>Table 2. Main Menu Options</b>	
<b>OPTION</b>	<b>EXPLANATION</b>
View Main Alarm Log	Selecting this option returns the user to the Main Alarm Log screen.
View Deleted Alarms	The Manager's Alarm Panel retains in a special alarm log the last 100 alarms deleted from the Main Alarm Log. Selecting this option displays the log listing those 100 alarms. The log displays alarm information in the same format used in the Main Alarm Log, but the alarms cannot be tagged.
Print Tagged Alarms	When this option is selected, all of the alarms tagged in the Main Alarm Log are printed, providing a printer has been connected to the printer port on the MAP. While printing is occurring, the Main Menu disappears from the display and a message about printing alarms briefly appears in the middle of the screen.
Delete Tagged Alarms	When this option is selected, all of the alarms tagged in the Main Alarm Log are deleted. While the tagged alarms are being deleted, the Main Menu disappears from the display and a message about deleting alarms briefly appears in the middle of the screen.
Clear All Tags	Selecting this option automatically clears any tags that were applied in the Main Alarm Log. While the tags are being cleared, the Main Menu disappears from the display and a message about clearing the tags briefly appears in the middle of the screen.
Parameter Setup	Selecting this option opens the first of two screens that can be used to set parameters for the MAP (see "Setting Parameters" in this document).
Clock Display	Selecting this option opens a screen (Figure 5) that is very similar to the power-up display, but it shows the correct time and date. Pressing any key returns the user to the Main Menu. <div style="border: 1px solid black; padding: 10px; margin: 10px auto; width: fit-content;"> <p style="text-align: center;">08:05 06/24/1996  Manager's Alarm Panel  Copyright (C) 1995  Novar Controls Corporation</p> <p style="text-align: center;">MAP Version 1.06</p> <p style="text-align: center;">Press Any Key To Exit</p> </div> <p><b>Figure 5.</b> Clock Display</p> <p style="text-align: right;"><i>continued</i></p>

<b>Table 2. Main Menu Options</b>	
<b>OPTION</b>	<b>EXPLANATION</b>
Default Setup	Selecting this option clears any changes that have been made to the parameter setup and returns all values to the default setup. While this process is occurring, the Main Menu disappears from the display and a default set up message briefly appears in the middle of the screen.
Tag All Alarms	Selecting this option tags every alarm on the Main Alarm Log. While this process is occurring, the Main Menu disappears from the display and a message about tagging all alarms briefly appears in the middle of the screen.
Remote Terminal	Selecting this option allows a user to view (Monitor access level only) an EP/2 or RC front panel from this MAP's display panel.

### Setting Parameters

When a user selects the **Parameter Setup** option and presses the **Enter** key, the first of two Setup/Configuration screens opens. The parameters set in these screens determine how alarm information is received and displayed by the panel.

- The right and left arrow keys should be used to move through the parameters offered on these screens.
- Once a parameter is highlighted, the up and down arrow keys can be used to scroll through the available options and change the parameter's setting.
- Once a parameter has been changed, moving the cursor to another parameter or exiting the screen confirms the selection.

The bottom line of the screen changes to provide appropriate information relating to each selection.

The following parameters are listed on the first of the two Setup/Configuration screens (Figure 6).

SETUP/CONFIGURATION			
Alarm Source:	ALL-UNITS	Unit#	1
Alarms to log:			
Critical Monitors -			YES
Non-critical Monitors -			YES
System -	YES	Load -	YES
Module -			YES
USE UP/DN ARROW KEYS TO SELECT SOURCE			

**Figure 6.** Setup/Configuration Screen #1

PARAMETER	EXPLANATION
Alarm Source	<p>This parameter determines the source of the alarms that are received. The options are:</p> <ul style="list-style-type: none"> <li>■ <b>All Units</b> (alarms are to be received from all RCs and/or EP/2s in the system)</li> <li>■ <b>One Unit</b> (alarms will come from one specific RC or EP/2).</li> </ul> <p>If <b>One Unit</b> is selected, the right arrow key should be used to move to the UNIT # parameter immediately to the right of the Alarm Source field, and the up or down arrow key should be used to select the appropriate unit number.</p>
Alarms to Log	<p>This parameter lists the types of alarms and offers the following options for each:</p> <ul style="list-style-type: none"> <li>■ <b>Yes</b> (this type of alarm is to be logged at the MAP)</li> <li>■ <b>No</b> (this type of alarm is not to be logged at the MAP)</li> </ul>

If the user moves the cursor to the bottom of the first Setup/Configuration screen and presses the right arrow key, the second Setup/Configuration screen (Figure 7) opens.

SETUP/CONFIGURATION			
Print Selected Alarms			NO
Fault Relay Duration (sec:)			2
Fault Relay Contacts:			NORMAL
Beeper Duration (sec):			1
Unit Number:	32	Protocol	NovarNet
Log Size:	100	Language	ENG
USE UP/DN ARROW KEYS TO SELECT STATE			

**Figure 7.** Setup/Configuration Screen #2

The same methods are used to move around and select options in this screen. The following parameters are listed.

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**NOTE!** The Manager's Alarm Panel has an Alarm Output connection that can be used for a variety of purposes (for example, a light can turn on or an auto-dialer can dial out when an alarm is logged; the *Manager's Alarm Panel Installation Instructions* provides details). If this connection is used, the Fault Relay parameters are used to determine how this relay operates.

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<b>Table 4. Setup/Configuration Screen 2 Parameters</b>	
PARAMETER	EXPLANATION
Print Selected Alarms	<p>This parameter determines which alarms are printed.</p> <ul style="list-style-type: none"> <li>■ <b>Yes</b> automatically formats alarm information as it is received by the Manager's Alarm Panel and sends it to the printer. This does not affect tagged alarms.</li> <li>■ <b>No</b> prints tagged alarms when the <b>Print Tagged Alarms</b> option is pressed in the Main Menu.</li> </ul>
Fault Relay Duration	<p>This parameter determines the number of seconds that the fault relay is activated for each incoming alarm. The options are:</p> <ul style="list-style-type: none"> <li>■ <b>0</b> (zero—deactivates the fault relay)</li> <li>■ Any number from <b>1</b> to <b>999</b></li> </ul>
Fault Relay Contacts	<p>This parameter is used to set the fault relay contact to match the wiring of the MAP's Alarm Output terminals.</p> <ul style="list-style-type: none"> <li>■ <b>Normal</b> sets the contacts for normally open.</li> <li>■ <b>Inverted</b> sets the contacts for normally closed.</li> </ul> <p>The contacts remain in the selected contact state until an alarm is logged. Then the relay is triggered to activate the output connection for the number of seconds set as the Fault Relay Duration parameter.</p>
Beeper Duration	<p>This parameter determines if a beeper is to announce incoming alarms and, if so, the number of seconds it is to beep. The beep can be canceled at the Main Alarm Log screen by pressing any key. The options are:</p> <ul style="list-style-type: none"> <li>■ <b>0</b> (zero deactivates the beeper)</li> <li>■ Any number from <b>1</b> to <b>999</b></li> </ul>
Unit Number	<p>This selection is currently not in use. The default is 32. Changing this number will have no effect on the system.</p>
Protocol	<p>The options are:</p> <ul style="list-style-type: none"> <li>■ <b>NovarNet</b></li> <li>■ <b>MOD2</b></li> </ul>
Log Size	<p>This parameter sets the maximum number of entries to be displayed on the Main Alarm Log. The parameter is set in increments of 10 with a maximum of 100.</p>
Language	<p>This parameter determines the language to be used in the menus in this MAP:</p> <ul style="list-style-type: none"> <li>■ <b>Eng</b> displays the menus in English.</li> <li>■ <b>Esp</b> displays the menus in Spanish.</li> </ul>

Once the parameters have been set, the **Cancel** key should be used to return to the Main Menu.

## Alarm Messages

Table 5 lists the possible alarm messages that can be logged at the MAP.

<b>Table 5. Manager's Alarm Panel Alarm Messages</b>	
Load Alarms	<ul style="list-style-type: none"> <li>■ Defrost Time Limit Exceeded This alarm indicates that a user-specified number of scheduled defrost time limits have been completed without achieving the defrost Terminate Setpoint as designated in the software.</li> <li>■ Meter Limit Exceeded This alarm refers to the Multiple Alarm load type. It indicates that an alarm has occurred at one of the multiple alarm parameters defined within this load.</li> <li>■ Input Sensor Fault This alarm is for the Case Controller Module load only. It indicates that there is a problem with an input sensor at either the Evap Out, Disc Air, Ret Air, or Evap In connections at the Case Controller Module.</li> </ul>
System Alarms	<ul style="list-style-type: none"> <li>■ Power Failure A power failure at the RC(s) and/or EP/2(s) report this alarm. The power failure could be for one unit if just one unit reports the alarm or for an entire building, in which case all RCs and/or EP/2's in that building should report the alarm.</li> <li>■ Phase Loss Fault Phase Loss has been detected at the Phase Loss connections on the RC or EP/2.</li> </ul>
Module Alarms	<ul style="list-style-type: none"> <li>■ Communication Loss The module indicated by the alarm has lost communications with the RC or EP/2.</li> </ul>
Monitoring Alarms	<ul style="list-style-type: none"> <li>■ User-defined An alarm is reported based on how the alarm has been set up in the software. This alarm shows the current reading along with the alarm message.</li> </ul>



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NOVAR CONTROLS CORPORATION  
6060 ROCKSIDE WOODS BLVD., CLEVELAND, OH 44131  
TEL.: 800.348.1235 WWW.NOVARCONTROLS.COM