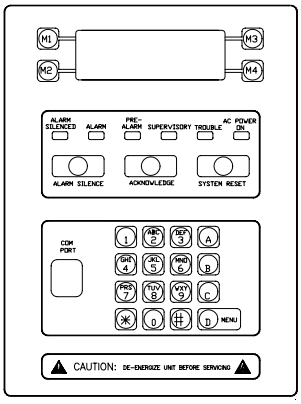

MPC-6000 / MPC-7000 / RND-2

Fire Alarm System Control Unit
Programming Manual

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Introduction

The MPC-6000/7000/RND-2 Fire Alarm Control Panels are completely field programmable. Although programming requires no special software skills, a thorough working knowledge of Fire Alarm Control Panels and devices is assumed. There are two ways to program an MPC-6000/7000/RND-2 fire alarm system control unit:

1. Auto Program. Using Auto Program will quickly configure the FACP in a General Alarm configuration.

2. Manual Program. Editing the program manually using the keypad.

Both methods require that the Technician password be entered so that the Technician functions may be accessed. Jump to the Quick Start section if you need to get a system up and running quickly.

The Access levels

The MPC-6000/7000/RND-2 system has three functional levels as follows:

- User Level, no password is required to access these functions.
- Maintenance Level, accessed using the Maintenance password, allows access to the maintenance menu functions.
- Technician Level, accessed using the Technician password, allows access to trained technician menu functions.

User Level

The User Level functions accessible to the system user are protected from unauthorized use by the lock on the front of the cabinet. Pressing the Menu button on the lower right of the operator interface accesses the user functions. The functions available to the User are as follows:

- Activate a General Alarm
- Activate an Alert event
- Activate a Recall event
- Activate a Lamp Test
- Activate a Drill
- View event history
- Go to Maintenance Level (with the password)
- Go to Technician Level (with the password)
- Log on to a remote panel

Maintenance Level

The Maintenance Level is accessed via the User Menu and the correct password. The functions accessible in the Maintenance Level are as follows:

- Enable or disable devices, outputs, groups, zones, status relays and option modules
- Configure and run a Quick Test
- Print History
- Print Detector Levels
- Edit Device and system labels
- Set the system time and date
- Change the Maintenance Level access password
- Program a device
- Clear event history
- Enable or disable application

Technician Level

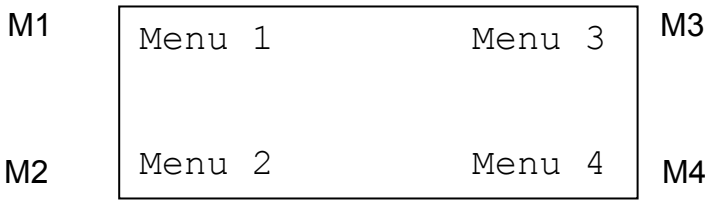
The Technician Level is accessed via the User Menu and entering the correct password. The functions accessible in the Technician Level are as follows:

- Configure devices, outputs, groups, zones and option modules
- Set System parameters (i.e., automatic silence, alarm silence inhibit, reset inhibit, etc.)
- Configure MPCnet network options (Future use)
- Configure bell codes
- Validate the backup configuration
- Swap the primary and backup configuration
- Copy the primary to the backup configuration
- Print the primary and backup configuration
- Change the Technician Level access password

The Operator Interface

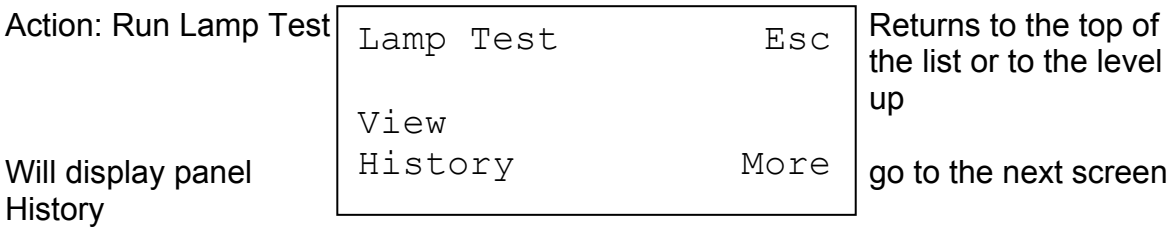
Interface for User and Maintenance Levels

The operator interface for configuring and programming the MPC-6000/7000 uses the 4 line by 20 character LCD display, the M1 through M4 buttons on the left and right of the display and sixteen push buttons at the bottom of the interface. User Level and Maintenance Level utilize the LCD display and the four buttons (two on each side of the display) to navigate and alter the basic operation of the panel. The display will show messages in the four corners of the display that will be adjacent to the four buttons M1 through M4. The message on the display adjacent to the button indicates the action that will occur when the button is pressed. Therefore pressing M1 will cause the function labeled as “Menu 1” to be pressed.



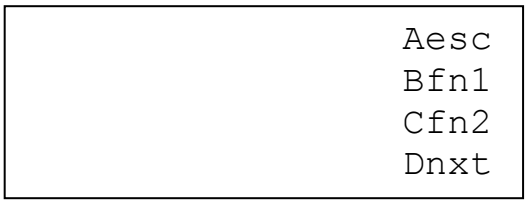
Note: When programming in Technician Level, M1=1 on the keypad, M2=* on the keypad, M3=A on the keypad and M4=D on the keypad.

For example, in the following figure, menu item 1 (Lamp Test) is described as having an ***Action*** of ‘Run Lamp Test’. If the button next to Lamp Test is depressed, Lamp Test will be performed. Menu item 2 (View History) will cause the first event in the event history to be displayed on the screen.



Interface for the Technician Level

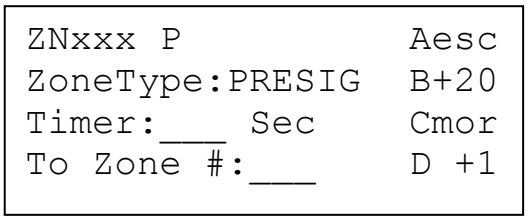
When the Technician Level is accessed using the password, the LCD display and the keypad are used to program the panel, and to view the programming if desired. The display acts as a menu and the keypad allows the user to navigate through the menu of functions and change or print the programming. The following figure describes the navigation used in this context:



A-esc: will backup to previous screen
B-fn1: will perform function 1
C-fn2: will perform function 2
D-Nxt: will step to the next screen

Each menu item is associated with "**A**", "**B**", "**C**", or "**D**" buttons on the keypad. Pressing one of these keys will cause the panel to go to the function associated with the button.

For example



A-Esc, will backup to previous screen
B-+20 Jumps ahead 20 devices
C-mor shows further options in list
D-+1, Jumps ahead 1

Entering Alphanumeric Characters

Entry of alphanumeric data using the keypad is as follows:

- Each character is entered using a two-keystroke sequence on the keypad.
- Numerals are entered using the sequence 0x, where x is the numeral to be entered.
- Letters are entered using 1x, 2x, 3x, and 4x sequences, based on the letters appearing above the numbers on the keypad, where the first digit (1, 2, 3 or 4) is the position of the letter and the second digit is the numerical key on which that letter appears. For example, to enter the letter “A” use the sequence “12”. To enter the letter “N” use the sequence “26”. Exceptions are the letters “Q” and “Z” which do not appear on the keypad. The letter "Q" is entered using the sequence "27", as though "Q" appears on the "7" between "P" and "R". The letter "R" is entered as "37" and "S" as "47". Similarly, "Z" is entered as "49", as though "Z" appears on the "9" key. Punctuation marks are entered using 5x, 6x, 7x, and 8x sequences, as shown below:

CHARACTER	SEQUENCE	CHARACTER	SEQUENCE
<space>	50	>	70
!	51	?	71
"	52	@	72
#	53	[	73
$	54	¥	74
%	55	]	75
&	56	^	76
´	57	_	77
(	58	`	78
)	59	{	79
*	60	|	80
+	61	}	81
,	62	→	82
-	63	¦	83
.	64		
/	65		
:	66		
;	67		
<	68		
=	69		

- Insert and overwrite modes can be toggled using the "**C**" key.
- Entering the same letter into a position in overwrite mode will change the case of the letter (i.e., if a position contains the letter "f", and the user enters "33" in overwrite mode, the "f" will change to "F").
- A character may be deleted by pressing the “**9**” key.
- Pressing the * key will move the cursor back one space; pressing the # key will move the cursor forward one space.

QUICK START

Automatic programming of a new system

This is the quickest way to get a system operational. After all of the devices, notification appliances and option modules have been programmed and installed, check all wiring for grounds, shorts and opens. Connect SLUs, SRUs, NACs and any other field wiring to the panel.

Automatic programming is selected from the Technician Level. Below are the steps to access the Technician Level.

Step	Action	Description
1	Press “Menu” and then press “More” until the option “Tech. Level” is displayed.	
2	Press “Tech. Level”.	The display will show the entry screen for the technician level access password.
3	Enter the password on the keypad. The default is “0 1 2 3 4 5”.	The password will appear in the screen.
4	Press “Enter” or “D”.	The display will show the starting screen of the Technician Level.

Once the Technician Level has been accessed, following are the steps to activate the autoprogram function.

Step	Action	Description
1	Select “Edit” by pressing “4”.	The display will show the first screen of the Edit functions with “Auto Pgm” as one of the options.
2	Select “Autoprgm” by pressing “7”.	The display will show the Autoprgm screen.
3	Start the autoprogram by pressing the “D” key.	The display will show all of the addresses being checked as the auto program is performed. This could take several minutes. As each new device is found, the display will allow the installer to chose whether to include the found device. When the autoprogram is finished, the screen will return to the Edit options.

Note	NOTE #1: The backup configuration will now contain a configuration as follows: all input points in group #241 (General Alarm). The General Alarm System group is pre-programmed to activate all output zones. Any Remote LCD displays that were connected at the time of Auto Program will also be activated. However remote relay (SRUs) and remote Led modules (SLUs) will not be detected and so will not be in the configuration.	
4	At the **EDIT BACKUP** screen, press **"A"** and escape back to **TECH LEVEL** screen.	The display will show the starting technician menu.
5	Use "C" to get to the next set of functions and select "validate".	This will cause the data in the backup configuration to be checked. Correct any errors found before continuing.
6	Press the "*****" key followed by the "**C**" key when prompted. This action will cause the autoprogrammed configuration to be swapped into the primary memory and the panel will be restarted. (You now have as the primary configuration the result of the Auto Program. In other words, a General Alarm system.)	The panel will reset and reinitialize.

Manual programming of a system

Manual programming is a much more involved operation and requires knowledge of the operation of the system before proceeding. The basic steps to programming a system configuration are as follows:

Step Number	Configure	Description
1	System configuration	Set a number of overall system parameters.
2	Loops	Set up each loop, one in the case of the 6000 and (up to) four in the case of the 7000.
3	Input groups/system groups	Set up the behavior of the input group or system groups--the bell codes it will activate and the output zones that will be activated by this input group. Note that an input group must be configured to activate an output group to cause any output activations.
4	Devices	Set the address and other parameters for each of the devices that will be installed into the system. Configure the input group of each device. Note that devices must be connected to an input group for any output to be activated. If the panel is networked, also setup the network group that this device will activate.

5	Notifications appliance circuits	Configure the behavior of the NACs and the output zone that will activate each NAC. Note that a NAC must be configured as connected to an output zone or it will not activate.
Optional 6	RDC-2 Annunciators	If there are any remote RDC-2 displays, set whether installed.
Optional 7	Remote LEDs	If there are any remote LED modules, configure each of the remote LEDs. Select the Output zone that will activate the LED.
Optional 8	Remote Relays	If there are any remote Relay modules, configure each of the remote Relays. Note that the Relays must be connected to an Output Zone in order to activate.
Optional 9	DACT line/DACT account	If a dialer is installed, configure the line and account data.
10	Validate	Run validate and fix any errors that are reported.
11	Activate	Swap the backup configuration with the primary configuration.

IMPORTANT NOTE: Special considerations apply to programming an RND-2 panel as opposed to either an MPC-6000 or MPC-7000 panel. No devices (inputs or outputs), no NACs, no SLUs nor any SRUs can be connected or programmed. Only the MPC-DACT DACT board or the CT-1K City Tie board, the RDC-2 Annunciator and the network may be connected and programmed to an RND-2 panel.

Programming Concepts

Program Memory

The program memory consists of two components, the **PRIMARY** (active) configuration and the **BACKUP** (editable) configuration. The primary configuration is the active (running) configuration that determines the current function of the FACP. The backup configuration is the configuration that is edited to make changes or additions to the existing active panel program. This allows the program to be edited while the FACP operates normally.

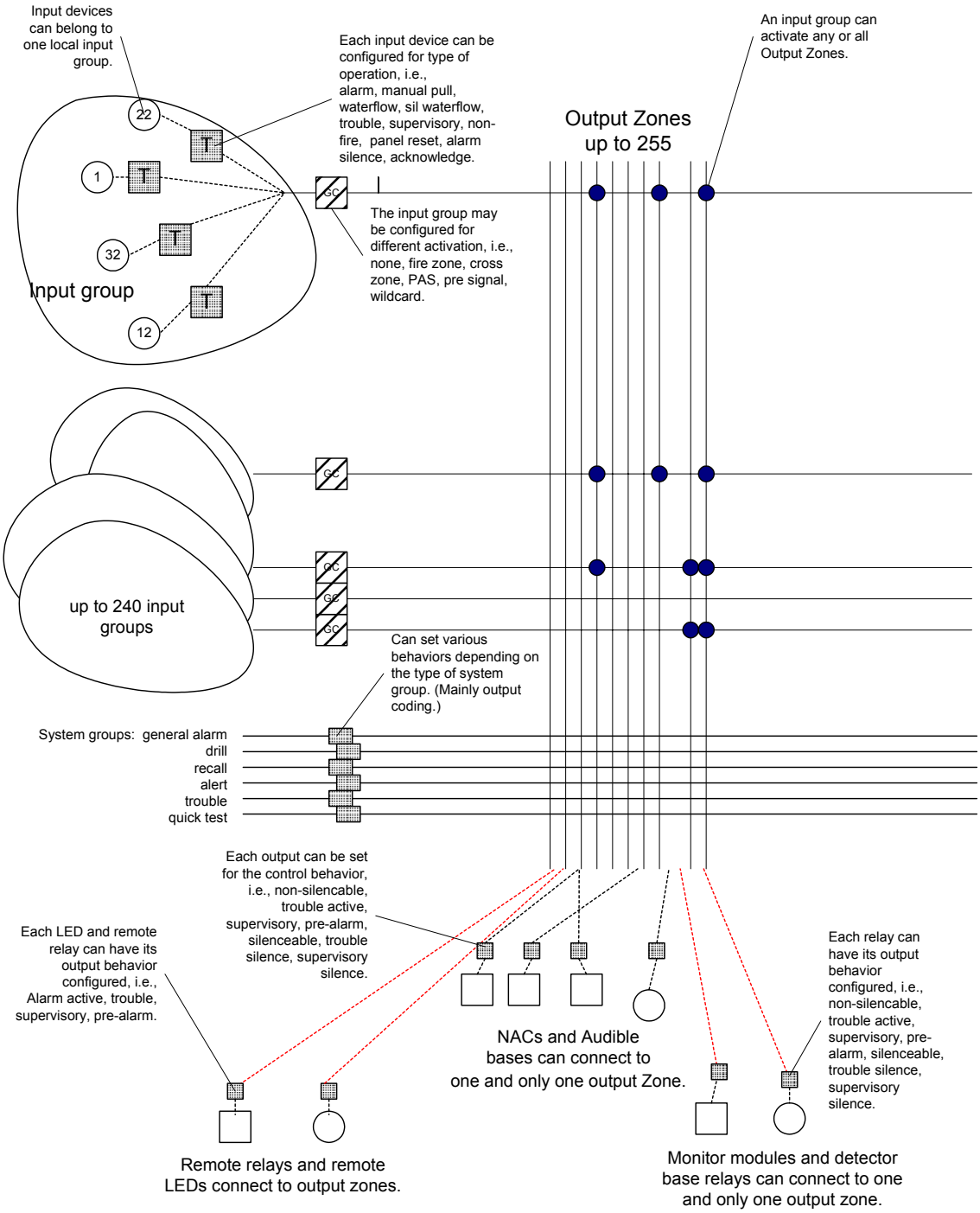
Before the backup configuration is activated, it first must be validated to make sure that the configuration follows the installation rules. The validation process ensures no values or operating parameters are out of limits.

When the edited configuration is activated, all changes are implemented at once by swapping the primary and backup configurations. The backup configuration becomes the primary (running) configuration and the configuration that was running becomes the backup configuration.

NOTE: At this point it is advisable to copy the primary configuration to the backup so that both configurations are identical. There is a copy feature that allows the operator to copy the primary configuration to the backup.

The programming model of the system

The following diagram shows the programming model of the MPC-6000 and MPC-7000 systems.



The MPC-6000 and MPC-7000 programming model

The basic concept is that loop devices are configured and grouped into input groups. The input groups are set to have a certain behavior and activate output zones. The output devices—whether relay bases, audible bases, NACs, serial LEDs or Serial relays—are configured and connected to Output Zones.

Automatic Programming

Auto-program can be done with a new, non-configured control unit or to augment an existing configuration. Augmenting an existing program adds new points but leaves previously programmed points unaffected. Discrepancies in the configuration will be presented individually for acceptance. Again, auto program writes information into the backup and must be validated before becoming the primary operating configuration.

Auto Program will recognize the types of devices connected and will set up different parameters depending on the devices it finds. The following tables show the settings for the different device types.

Smoke and thermal detectors

Parameter	Description
Label	Generic label identifying the detector by loop number and address.
Application	If FireSmart detectors are found, the application will not be changed in the device. Factory default is none.
Sensitivity	The sensitivity of the detectors will be left as found. The factory default is 3.00%.
ROR	Rate of rise will be off.
Led off	LED will be defaulted to ON.
Pre-alarm	Pre-alarm will be off.
Verification	Verification will be as found in the detector.
Input Usage	The input usage will be set to Alarm.
Input Group	All detectors will be set to input group 241 (General Alarm).
Network Group	This will not be set and will need to be set manually. (Future use)
Relays and Audible bases	Will be set for auto activation. The relay or audible base will activate when the device activates.

Monitor Modules, Manual Stations and Conventional Zone modules

Parameter	Description
Label	Generic label identifying the detector by loop number and address.
Led off	LED will be defaulted to ON.
Input Usage	Input usage will be set to alarm.
Input Group	All inputs will be set to input group 241 (General Alarm).
Network Group	This will not be set and will need to be set manually. (Future use)

Monitor Modules with relay and single input

Parameter	Description
Label	Generic label identifying the detector by loop number and address.
Led off	LED will be defaulted to ON.
Input Usage	Input usage will be set to alarm.
Input Group	Inputs will be set to input group 241 (General Alarm).
Network Group	This will not be set and will need to be set manually. (Future use)
Output Type	Will be set to non-silenceable.
Output Zone	Will be set to 1.

Intelligent LEDs

Parameter	Description
Label	Generic label identifying the detector by loop number and address.
Output Type	Will be set to non-silenceable.
Output Zone	Will be set to 1.

NACs

Parameter	Description
Notification Device Type	Set to Audible.
Output Type	Will be set to silenceable.
Output Zone	Will be set to 1.

System Parameter

Parameter	Description
Label	Set to “FARADAY AUTO Prgrmd”
Drill Enable	ON
Auto Silence Timer	Off
Alarm Silence Inhibit	Off
Panel Reset Inhibit	Off
Auto Alarm silence	Off
Trouble Reminder	12 hours
NAC sound time	5 seconds
Quick test exit	30 minutes
City Tie Activation	Not changed
Global Commands	Not changed
Printer ESC	Not changed

- The presence of RDC-2 Annunciators is detected and their address is programmed automatically when the system is initialized.

Not included in auto-program

The following devices cannot be detected automatically:

- Bell Codes
- Serial Remote Processor LEDs
- Serial Remote Processor Relays
- DACT
- City Tie

Programming of these points is not changed by Auto-Program and must be done manually in the panel's Technician Level.

User Level

Pressing the menu button displays the User Level functions. The user menu allows the operator to activate General Alarm, Alert, Drill, Recall or Lamp Test. It also allows for viewing the Event History. The Maintenance Level programming and Tech Level programming can be accessed from the User menu as well.

Following are the various functions that may be performed at the User level.

Activating a General Alarm

It is possible to sound a general alarm from the keypad using the following steps:

Action	Result
1. Press “Menu”.	
2. Press “General Alarm”.	Display requests “Yes/No” confirmation of the General Alarm.
3. Press “Yes” to activate a General Alarm.	The display will return to normal indicating General Alarm has been activated.
4. Press “System Reset” or “Alarm Silence” to stop.	

Activating an Alert

It is possible to sound an Alert from the keypad using the following steps:

Action	Result
1. Press “Menu”.	
2. Press “Alert”.	Display requests “Yes/No” confirmation of the Alert.
3. Press “Yes” to activate an Alert.	The display will return to normal indicating an Alert has been activated.
4. Press “System Reset” or “Alarm Silence” to stop.	

Activating a Drill

It is possible to sound a drill from the keypad using the following steps:

Action	Result
1. Press “Menu”.	
2. Press “More”.	
3. Press “Drill”.	Display requests “Yes/No” confirmation of the Drill.
4. Press “Yes” to activate a Drill.	The display will return to normal indicating Drill has been activated.
5. Press “System Reset” or “Alarm Silence” to stop.	

Activating a Recall

It is possible to sound a Recall from the keypad using the following steps:

Action	Result
1. Press “Menu”.	
2. Press “More”.	
3. Press “Recall”.	Display requests “Yes/No” confirmation of the Recall.
4. Press “Yes” to activate a Recall.	The display will return to normal indicating Recall has been activated.
5. Press “System Reset” or “Alarm Silence” to stop.	

Performing a Lamp Test

It is possible to perform a lamp test of the LEDs on the front of the Panel by following the steps below:

Action	Result
1. Press “Menu”.	
2. Press “More”.	
3. Press “More.”	
4. Press “Lamp Test”.	LEDs in the front panel will be lit for approximately 5 seconds.

Viewing the Event History

The Event History screen displays the last 2000 events reported to a panel. The information displayed includes the date and time, the type of event (TRB, ALM, SUP etc.), the device reporting the event and the event reported.

Action	Result
1. Press “Menu”.	
2. Press “More”.	
3. Press “More.”	
4. Press “View History”.	The display will show the most recent event.
5. Press the two buttons to the left of the display to scroll forward and backward through the events.	(Press M1 to go to an older event, press M2 to go to a more recent event.)
6. Press the upper right hand button (M3) to escape back to the user menu.	

Accessing Maintenance Functions

There are other functions available after the maintenance password has been entered. Follow the steps below to access the maintenance functions:

Action	Result
1. Press “Menu”.	
2. Press “More”.	
3. Press “More.”	
4. Press “More”.	
5. Press “Maint. Level”.	The display will show the screen to enter the four-digit maintenance password.
6. Enter the four-digit password (default is 0 1 2 3) and press “Enter”.	

Accessing Technician Functions

There are other functions available after the technician password has been entered. Follow the steps below to access the technician functions:

Action	Result
1. Press “Menu”.	
2. Press “More”.	
3. Press “More”.	
4. Press “More”.	
5. Press “Tech. Level”.	The display will show the screen to enter the six-digit technician password.
6. Enter the six-digit password (default is 0 1 2 3 4 5) and press “Enter”.	

Maintenance Level

Following are the details of the Maintenance level functions.

Enabling/Disabling Devices

The disable / enable screens allow the operator to disable or enable devices and components of the system. System Inputs, Outputs, etc., can be disabled / enabled.

Action	Result
1. Press “Disable/Enable”.	
2. Press “Inputs”.	
3. Press “Devices”.	The display will show a screen for the address of the device.
4. Enter the address through the keypad.	When the address is entered, the status of the device will be displayed.
5. Use the “Enable(Disable)” button to change the state of the device.	Status will toggle on the display.

Enabling/Disabling Input Groups

The input group may be disabled/enabled as follows:

Action	Result
1. Press “Disable/Enable”.	
2. Press “Inputs”.	
3. Press “Groups”.	The display will show a screen for the address of the group.
4. Enter the address through the keypad.	When the address is entered, the status of the group will be displayed.
5. Use the “Enable(Disable)” button to change the state of the group.	Status will toggle on the display.

Enabling/Disabling Applications

The applications in the FireSmart detector that prevent false activation often make it difficult to test the detectors using canned smoke. This function allows the Applications in the detectors to be turned off for testing. A trouble is posted as a reminder to reset them later.

Action	Result
1. Press “Disable/Enable”.	
2. Press “Appl”.	The display will show the current status of the applications.
3. Use the “Enable(Disable)” button to change the status of the applications in the FireSmart detectors.	Status will toggle on the display.`

Enabling/Disabling the Output Zones

The output zones may be disabled/enabled as follows:

Action	Result
1. Press “Disable/Enable”.	
2. Press “Outputs”.	
3. Press “Zones”.	The display will show a screen for the address of the zone.
4. Enter the address through the keypad.	When the address is entered, the status of the zone will be displayed.
5. Use the “Enable(Disable)” button to change the state of the zone.	Status will toggle on the display.

Enabling/Disabling NACs

The Notification Appliance Circuits may be disabled/enabled as follows:

Action	Result
1. Press “Disable/Enable”.	
2. Press “Outputs”.	
3. Press “NACs”.	The display will show a screen for the number of the NAC.
4. Enter the number through the keypad and press “Enter”.	When the address is entered, the display will show the current state of the NAC.
5. Use the “Enable(Disable)” button to change the state of the NAC.	Status will toggle on the display.

Enabling/Disabling City Tie

The City Tie Circuit may be disabled/enabled as follows:

Action	Result
1. Press “Disable/Enable”.	
2. Press “Outputs”.	
3. Press “More”.	
4. Press “City Tie”.	The display will show the status of the City Tie.
5. Use the “Enable(Disable)” button to change the state of the City Tie.	Status will toggle on the display.

Enabling/Disabling the DACT

The DACT (Digital Alarm Communication Transmitter) may be disabled/enabled as follows:

Action	Result
1. Press “Disable/Enable”.	
2. Press “Outputs”.	
3. Press “More”.	
4. Press “DACT”.	The display will show the status of the DACT.
5. Use the “Enable(Disable)” button to change the state of the DACT.	Status will toggle on the display.

Enabling/Disabling the Status Relays

The Status Relays may be disabled/enabled as follows:

Action	Result
1. Press “Disable/Enable”.	
2. Press “Outputs”.	
3. Press “More”.	
4. Press “More”.	
5. Press “Status Relays”.	The display will show the state of the Status Relays.
6. Use the “Enable(Disable)” button to change the state of the Status Relays.	Status will toggle on the display.

Changing the Maintenance Password

The password for access to the Maintenance level menus may be changed as follows from the Maintenance starting screen:

Action	Result
1. Press “More”.	
2. Press “More”.	
3. Press “More”.	
4. Press “Change Password”.	The display will show request for password change.
5. Use the keypad to change the password and press “Enter”.	

Setting the Time*

The time and the time format are adjustable.

Action	Result
1. Press “More”.	
2. Press “More”.	
3. Press “More”.	
4. Press “Time/Date”.	
5. Press “Time”.	
6. Press “Set Time”.	The display will show the time with the cursor under the hours.
7. Use the keypad to enter new time. Pressing “Clr” will clear the entry. Pressing “Set” will set the time.	

*The time for a networked system can be set from any point in the system. It can take up to one minute before all of the points on the system are in sync.

Setting the Time Format

The time and the time format are adjustable.

Action	Result
1. Press “More”.	
2. Press “More”.	
3. Press “More”.	
4. Press “Time/Date”.	
5. Press “Time”.	
6. Press “Set Time Format”.	The display will show the current time format.
7. Use the “12 hour”, “24 hour” buttons to set the time format.	

Enabling Daylight Savings Time Adjustment

The MPC-6000/MPC-7000/RND-2 can adjust for daylight savings automatically. Follow the steps below to enable or disable the automatic daylight savings adjustment feature:

Action	Result
1. Press “More”.	
2. Press “More”.	
3. Press “More”.	
4. Press “Time/Date”.	
5. Press “Time”.	
6. Press “DST Adjust”.	The display will show whether the DST automatic adjustment is enabled or disabled.
7. Use the “Enable/Disable” button to change the status.	The state will toggle on the display.

Setting the Date

The date and the date format are adjustable.

Action	Result
1. Press “More”.	
2. Press “More”.	
3. Press “More”.	
4. Press “Time/Date”.	
5. Press “Date”.	
6. Press “Set Date”.	The display will show the current date.
7. Use the keypad to enter new date. Pressing “Clr” will clear the entry. Pressing “Set” will set the date.	

Setting the Date Format

The date and the date format are adjustable.

Action	Result
1. Press “More”.	
2. Press “More”.	
3. Press “More”.	
4. Press “Time/Date”.	
5. Press “Date”.	
6. Press “Set Date Format”.	The display will show the current date format.
7. Use the two date format buttons to select the desired date format.	

Clearing the History

The panel can store the last 2000 events in the event history. The information displayed includes the date and time, the type of event (TRB, ALM, SUP, etc.), the device reporting the event and the event reported. This event history may be cleared using the following steps.

Action	Result
1. Press “More”.	
2. Press “More”.	
3. Press “More”.	
4. Press “Clear History”.	The display will then request a yes or no confirmation.
5. Press “Yes” to clear the event history.	The display will flash a short message to indicate the history has been cleared.

Printing the History

The panel can store the last 2000 events in the event history. The information displayed includes the date and time, the type of event (TRB, ALM, SUP, etc.), the device reporting the event and the event reported. This event history may be printed using the following steps.

Action	Result
1. Press “More”.	
2. Press “Print Hist”.	The display will show the “Print Fwd” and “Print Reverse” options.
3. Select the direction of printing that is desired.	The display will show a message that history is being printed.

Printing the Sensitivity Levels

The sensitivity levels of all of the detectors in the system may be printed. Follow the steps below:

Action	Result
1. Press “More”.	
2. Press “Print Sensor Levels”.	The display will indicate that the sensor levels are being printed.

Editing the System Label

The system label may be changed as follows:

Action	Result
1. Press “More”.	
2. Press “More”.	
3. Press “Edit Labels”.	
4. Press “System”.	The display will show the system label.
5. Use the keypad keys to change the system label text. Pressing Bsav will save the changes.	

Editing the Device Labels

The device labels may be changed as follows:

Action	Result
1. Press “More”.	
2. Press “More”.	
3. Press “Edit Labels”.	
4. Press “Device”.	
5. Enter the Device and Loop address, then press Dnxt.	The display will show the label for the device at this address.
6. Use the keypad keys to change the device label text. Pressing Bsav will save the changes.	

Starting Quick Test

The Quick Test mode allows quick and easy testing of the installation. It will allow the devices to be activated and the NACs to sound for a short period of time.

Action	Result
1. Press “Quick Test”.	
2. Press “Start”.	The display will prompt for a “Yes” or “No” confirmation to start Quick Test.
3. Press “Yes” to start Quick Test.	The display will show NAC sound time, the status of the printer and the time until autoexit.
4. Press “Stop” to reset the panel.	

Configuring NAC sound time for Quick Test

The period of time that the NACs will be active after each event in Quick Test is set as follows:

Action	Result
1. Press “Quick Test”.	
2. Press “Configure”.	
3. Press “NAC time”.	The display will indicate the time in seconds that the NACs will sound during Quick Test.
4. Use the “Inc” and “Dec” buttons to set the time either to “off” or from 1 to 30 seconds.	

Configuring the printer during Quick Test

Printing may be enabled or disabled during Quick Test as follows:

Action	Result
1. Press “Quick Test”.	
2. Press “Configure”.	
3. Press “Printer”.	The display will indicate whether the printer is enabled or disabled during Quick Test.
4. Use the “Enable/Disable” button to change state.	The display will toggle to indicate the state.

Programming a Device

It is possible to program a device address without the programming tool. Following is the procedure that is used when adding a new device to the loop.

Action	Result
1. Press “More”.	
2. Press “More”.	
3. Press “Program device”.	The panel will display a message as it is looking for the new device. When a new device has been found, the display will show a screen to enter a device address.
4. Use the keypad and “Program” buttons to enter the address and program the new device. Pressing “Clr” will clear the entry.	

Technician Level

The Technician level allows complete programming of the MPC-6000/MPC-7000/RND-2. See the User level functions for the method to access the Technician level. The steps below assume that the Technician level has been accessed and that the panel is displaying the starting screen of the Technician level.

Editing a Device Configuration

A device's configuration may be edited as follows:

Action	Result
1. Select "Edit".	
2. Select "Manual Pgm".	
3. Select "Devices".	
4. Enter the device address.	The user may now navigate through screens which allow setting of the various parameters for a device.

The loop devices are addressed using a four-digit address. The first (left most digit) is the loop number while the next three digits specify the address on the loop. The setup of an input device will vary depending on the type of device installed at that address. The types of devices that can be installed in the system are listed in Appendix C on page 38.

The parameters that may be set for AutoOutput Activation are shown in the following table.

Parameter	Description	Applies to
DvOut (Device Output Type)	Type of event that will cause activation of the output. Also, whether or not it is silenceable.	8710, 8712, 8713, 8704, 8726
AutoOutput	If enabled, the detector can activate its own output device. Otherwise, the device will only activate when its Output Zone is activated.	8710, 8712, 8713
Device Zone	The Output Zone to which the output device is assigned.	8710, 8712, 8713, 8704, 8726
On Delay	Delay in seconds between when the zone activates and when the output device activates.	8710, 8712, 8713, 8704, 8726
Off Delay	Delay in seconds between when the zone activates and when the output device de-activates. When used with the On Delay, this parameter can be used to turn an output device on only for a certain period of time when its zone is activated. If this parameter is set to zero, the device will not deactivate (0=infinite).	8710, 8712, 8713, 8704, 8726

Below are the different parameters that may be set for each of the different devices:

	Loop Devices								
	FireSmart Smoke Detector	Thermal Detector	Photo Smoke Detector	Pull station	Single input monitor module	Dual input monitor module	Single input monitor module with relay	Conven-tional Zone module	LED output
Parameter	8713	8712	8710	8700-S 8700-D 8700-M	8701 8702	8703	8704	8705	8726
Label	X	X	X	X	X	X	X	X	X
Application	X	-	-	-	-	-	-	-	-
Sensitivity	When app off	-	X	-	-	-	-	-	-
ROR	-	X	-	-	-	-	-	-	-
Led off	X	X	X	-	X	X	X	X	-
Pre-alarm	When app off	-	X	-	-	-	-	-	-
Verification	When app off*	-	X	-	-	-	-	X**	-
Alarm	X	X	X	X	X	X	X	X	-
Waterflow	-	-	-	-	X	X	X	X	-
Sil. Waterflow	-	-	-	-	X	X	X	X	-
Trouble	-	-	-	-	X	X	X	-	-
Supervisory	X	-	X	-	X	X	X	X	-
Panel reset	-	-	-	-	X	X	X	-	-
Alarm silence	-	-	-	-	X	X	X	-	-
Acknowledge	-	-	-	-	X	X	X	-	-
Test	-	-	-	-	X	X***	X	-	-
Manual Pull	-	-	-	-	-	-	-	X	-

* Except when used in DUCT application.
** Except when used for manual pull station.
***Available only for first input usage.
NOTE: When programming requires yes or no, press 1 for YES and 0 for NO.

The following table provides a description of the parameters that may be set for each device.

Parameter	Description
Label	Each device may have a forty character label assigned to it to describe the input. This label will be displayed when the input becomes active.
Application	The FireSmart detectors have internal algorithms that may be set for different environments. A setting of “none” turns off the algorithms and allows the detector sensitivity to be set manually and verification to be selected.
Sensitivity	This sets the level of smoke that will cause the device to generate an alarm. This is only appropriate for smoke detectors.
ROR	Rate of rise thermal alarm. This is used for the FireSmart detector and the thermal detector when the temperature rises at a rate of 15 degrees/minute.
Led off	Used to disable the LED on the device so that it does not indicate polling. It will still flash red for alarm.
Pre-alarm	Selected when an early warning of a fire alarm is required. The LED will flash yellow if the device is in trouble.
Verification	This is selected to cause the device to go through the UL defined verification cycle to eliminate false alarms.

The following table provides a description of the usages that may be set for each device.

Usage	Description
Alarm	This usage is selected for fire alarm causing devices.
Waterflow	Selection for devices connected to Waterflow sensors in sprinkler systems. Generates a non silenceable alarm event.
Sil. Waterflow	If connected to Waterflow sensors in sprinkler systems but the alarm is silenceable.
Trouble	Activation of this device will cause a trouble event in the system.
Supervisory	Activation of this device will cause a supervisory event in the system.
Panel reset	An input with this usage will cause the panel to reset.
Alarm silence	An input with this usage will silence the alarm on the panel.
Acknowledge	An input with this usage will acknowledge the event on the system.
Test	An input with this usage will cause all the logic associated with a device—typically a duct detector—to activate along with all its associated output zones.
Input Group	Each loop input device must belong to one and only one local input group. This is a way of allowing multiple detectors in one area to be grouped together to provide a common action.

Editing an Input Group Configuration

An input group's configuration may be edited as follows:

Action	Result
1. Select "Edit".	
2. Select "Manual Pgm".	
3. Select "Groups".	
4. Select "Input Groups".	
5. Enter the input group number.	The user may now navigate through screens that allow setting of the various parameters for a group.

Input Groups

The loop devices must be grouped together (a group of one is possible). There are 240 input groups on the MPC-6000 and MPC-7000 that can be programmed as one of the following types:

Group Type	Description
Fire	Typical fire group. Activates selected output zones when an event occurs in the group.
Cross	Used for Cross Zoning operation. In this mode of operation, at least the number of devices given on the Activation Threshold screen must be active before the corresponding Output Zones will activate. NFPA 72 National Fire Alarm Code requires the following for Cross Zoning: 1) There shall be at least two automatic detectors in each protected space. 2) The alarm verification feature shall not be used. 3) The detectors shall be installed at spacing determined in NFPA 72, when used to initiate fire safety functions or fire extinguishing systems. 4) The detectors shall be installed at a linear spacing not more than 0.7 times the linear spacing determined in NFPA 72, when used to activate public mode notification.

PAS	Positive Alarm Sequence group as defined by NFPA. The signal from a device selected for positive alarm sequence operation shall be acknowledged within 15 seconds in order to initiate the alarm investigation phase. If the signal is not acknowledged within 15 seconds a general alarm will sound. The investigation phase (Timer) can last up to 180 seconds. If the system is not reset during this period, the group selected in the Timeout Group will activate. The length of this phase is adjusted using the Timer parameter. If a second PAS alarm occurs during the investigation phase, the general alarm will sound.
Pre-Signal	Pre-signal as defined by NFPA allows initial Fire Alarm signals to sound only in department offices, control rooms, fire brigade stations or other constantly attended central locations for which human action is subsequently required to activate general alarm or a feature that allows the control equipment to delay the general alarm by more than 1 minute after the start of alarm processing. Where there is a connection to a remote location, it shall activate upon the initial alarm signal.
Wild Card	Wild Card zone for non-fire operation allows monitoring of critical functions with logging or control function. The event will latch and will not reset until the panel is reset.

The coding of the bells for alarm, trouble, supervisory and pre-alarm events may be selected for each input group from Steady on, March time, Temporal, California, 3-Pulse Temporal and Alert. Only trouble event codes can be set for Wild Card groups.

An input Group may also be configured to activate 1 or all of the 255 Output Zones.

Editing a System Group Configuration

There are a number of system groups, which may be configured as follows:

Action	**Result**
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Select “Groups”.	
4. Select “System Groups”.	
5. Select the system group to be edited.	The user may now navigate through screens that allow setting the bell codes that the system group will use and the outputs which this system group will activate.

Configuring the NACs

There are a number of parameters that may be configured for the NACs.

Action	Result
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Select “Outputs”.	
4. Select “NACs”.	
5. Enter the number of the NAC to be configured.	The user may now navigate through screens that allow setting the parameters of the NACs.

The parameters that may be set for the NACs are shown in the following table.

Parameter	Description
Notification device type	Either Audible, Strobe or Horn/Strobe.
Output Zone	Which output Zone activates this NAC.
Output type	Alarm Silenceable, Alarm Non-Silenceable, Trouble Silenceable, Trouble Non-Silenceable, Supervisory Silenceable, Supervisory Non-Silenceable and Pre-alarm Non-Silenceable.
Output	Set to indicate if the NAC is operating or not.
On Delay	Delay in seconds before the NAC turns on.

Configuring the Remote Relays (SRUs)

Following are the steps that need to be followed to configure the remote relay units.

Action	Result
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Select “Outputs”.	
4. Select “SRUs”.	
5. Enter the address of the relay to be configured	
6. Enter a “1” to enable the relay.	The user may now navigate through screens that allow setting the parameters of the address relay.

The relays in the serial relay unit must be logically connected to an output zone in order to operate. When the selected output zone becomes active, the relay will become active based on the type of activation that has been selected, i.e., alarm, trouble, supervisory, pre-alarm. Set the output type and the output zone that will activate this relay.

Configuring the Remote LEDs (SLUs)

Following are the steps that need to be followed to configure the remote LED units.

Action	Result
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Select “Outputs”.	
4. Select “SLUs”.	
5. Enter the address of the LED to be configured.	
6. Enter a “1” to enable the LED. (Use the * and # buttons to navigate left and right.)	The user may now navigate through screens that allow setting the parameters of the address LED.

The LEDs in the serial LED unit must be logically connected to an output zone in order to activate. When the addressed output zone becomes active, the LED will become active depending on the type of activation that has been selected, i.e., alarm, trouble, supervisory, pre-alarm. Set the output type and the output zone that will activate this LED.

Configuring the Remote LCDs (RDC-2s)

Following are the steps that need to be followed to configure the remote LCD units.

Action
1. Select “Edit”.
2. Select “Manual Pgm”.
3. Use “Cmor” and select “RS-485 NW”.
4. Select “RDC Annciatrs”.
5. Enter a “1” in the map to enable the RDC at the selected address. (Use the * and # buttons to navigate left and right.)
6. Press Bsav to save the selection.

Installing the DACT

Following are the steps that need to be followed to install the DACT.

Action
1. Select “Edit”.
2. Select “Manual Pgm”.
3. Select “Outputs”.
4. Use “Cmor” and select “Option Mods”.
5. Select “DACT CFG”.
6. Follow the screen prompts to set up the DACT.

These are the parameters that need to be set when installing the DACT.

Test Time	The time that the DACT will regularly call in to the central station to check the connection.
Select the line number	The DACT can connect to two lines. Select which one is to be configured.
Select the dialing method	The DACT can dial using pulse or tone. Select which is needed.

Configuring the DACT Accounts

Following are the steps that need to be followed to configure the DACT Accounts.

Action
1. Select “Edit”.
2. Select “Manual Pgm”.
3. Select “Outputs”
4. Use “Cmor” and select “Option Mods”.
5. Select “DACT ACCTS”.
6. Follow the screen prompts to set up the DACT Accounts.

The following information is set up for the two possible DACT accounts.

Format	This is the format that is used to report to the Central station. The options are SIADCS8, SIADCS20, ADEMCO, 4/2-1400, 3/1-1400, 3/1-2300, 4/2-2300.
Number of attempts	This is the number of times that the DACT will attempt to dial the account before trying the next account.
Must report event type	When selected yes, the DACT must report these events to the selected account “x”. If not selected and the DACT cannot report the event to account “x” for whatever reason, it will try a different account “y”. If it successfully reports it to account “y”, it will not go back to account “x” and try again. If Must Report is selected, it will keep trying to report to account “x” until it is successful, whether or not it has already successfully reported it to a different account.
Account number	The number to identify the account at the central station.
CIC prefix	The prefix used by the DACT to dial through a PBX to access a line.
Phone number	The phone number which the DACT will dial for this account.

Setting System Timers

Following are the steps to set system timers.

Action
1. Select “Edit”.
2. Select “Manual Pgm”.
3. Use “Cmor” and select “Sys Params”.
4. Use “Cmor” and select “Timers”.
5. Use “Cmor” to select the timers to be set.

Below is a list of the timers and their functions:

Parameter	Description
Alarm Silence Inhibit	The period of time that the alarm will sound before it can be silenced.
Panel Reset Inhibit	The period of time that the panel is prevented from being reset after an alarm is annunciated.
Trouble Reminder	The time period before a trouble will come back to remind the installer.
Quick test NAC time	The length of time that the NACs will sound in Quickest.
Quick test exit	The time that Quick test will exit automatically after inactivity.

Configuring the City Tie Activation

The City Tie, once installed, may be activated by a trouble, a supervisory or both.

Action
1. Select “Edit”.
2. Select “Manual Pgm”.
3. Use “Cmor” and select “Sys Params”.
4. Select “CityTrbActvn”.
5. Use the screen to select which activation is required and press “Bsav”.

Setting Trouble Ack Required

Troubles and supervisory events are normally self-restoring; however, if it is required that they need to be acknowledged before clearing, follow the procedure below:

Action
1. Select “Edit”.
2. Select “Manual Pgm”.
3. Use “Cmor” and select “Sys Params”.
4. Select “Trb Ack Req”.
5. Press 1 for yes and then press “Bsav”.

Setting the System Reporting Type

Depending on the type of system configured, the panel will report power failure in different periods of time. (No reporting for Local, Auxiliary, 6 hours for Central Station and 15 hours for Remote Station.)

Action
1. Select “Edit”.
2. Select “Manual Pgm”.
3. Use “Cmor” and select “Sys Params”.
4. Select “System Type”.
5. Use the screen to select which system type is required and press “Bsav”.

Copying the Primary to the Backup

Once the primary configuration has been checked out and is running correctly, it is a good idea to copy the configuration into the backup. This is accomplished as follows:

Action	Result
1. Select “Edit”.	
2. Select “Copy Primary”.	
3. Select “Cyes” to start the copy.	The screen will indicate the copy is in progress. It will take several minutes.

Printing the Primary/Backup Configuration

The primary/backup configurations may be printed via the printer port on the panel.

Action	Result
1. Select “Print Configs”.	
2. Select “Print”.	
3. Select “Print Primary” or “Print Backup”.	The configuration will be printed on the printer connected to the panel printer port.

Validating the Backup Configuration

The validation process will check to see that the configuration in the backup memory is correct.

Action	Result
1. Use “Cmor” and select “Validate”.	The display will indicate that the validity check is running
	Display will show invalid settings in the configuration if found.

Activating the Backup*

When the configuration is correct it may be made the primary configuration as follows:

Action	Result
1. Use “Cmor” and select “Activate”.	
2. Select “Cyes” to switch to the backup configuration.	The display will show the swap in progress.

*Refer to Programming Concepts on page 9 for a description of Primary and Backup configurations.

Hard Reset

This function re-initializes the panel in the same way as power up:

Action	Result
1. Use “Cmor” and select “Hard Reset”.	The panel will re-initialize.

Changing Access Passwords

The passwords used to access the Maintenance and Technician Levels may be changed as follows:

Action
1. Use “Cmor” and select ”Change PWs”.
2. Change the maintenance and technician passwords as needed and press “Bsav”.

Enabling the Network Connection to the Panel

This setting is used when the control panel is to be connected to a network. The networking communications in the panel must be enabled as follows:

Action	Result
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Press “Cmor” twice to select “Network Setup”.	
4. Select “1” to install the network or “0” to remove the network setting.	When “1” is selected, Dnxt appears so other network settings can be made.

Setting the Node Number

If the panel is networked, it must have its network node number set as follows:

Action	Result
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Press “Cmor” twice to select “Network Setup”.	
4. Select “Dnxt”. Type in the Node number.	Be certain to enter leading zeros for nodes 1-9. A maximum of 99 nodes can be entered.
5. Select “Dnxt” to continue to next setting or “Bsav” to save the setting.	When “Dnxt” is selected, the screen for the printer setting displays. When “Bsav” is selected, the Network Connection screen displays.

Setting the Printer*

If the printing of events from this node printer is required on the network, then it must be set as follows:

Action	Result
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Press “Cmor” twice to select “Network Setup”.	
4. Select “Dnxt”.	
5. Select “Dnxt”.	
6. To Print Events for the node, select “1” for yes or “0” for no.	
7. Select “Dnxt” to continue to next setting or “Bsav” to save the setting.	When “Dnxt” is selected, the screen for the Total Number of Nodes displays. When “Bsav” is selected, the Network Connection screen displays.

*For an MPC-6000 / MPC-7000, the default setting for the printer is OFF.
For an RND-2, the default setting for the printer is ON.

Setting the Total Number of Nodes

Follow the steps below to set the total number of nodes (panels, RNDs and printers) in the network.

Action	Result
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Press “Cmor” twice to select “Network Setup”.	
4. Select “Dnxt”.	
5. Select “Dnxt”.	
6. Select “Dnxt”.	The setting for the Total Number of Nodes displays.
7. Type in the Total Number of Nodes.	Be certain to enter leading zeros if the total number of nodes is from 1-9. A maximum of 99 nodes can be entered.
8. Select “Dnxt” to continue to next setting or “Bsav” to save the setting.	When “Dnxt” is selected, the screen for Accepting/Sending Global Commands displays. When “Bsav” is selected, the Network Connection screen displays.

Enabling Accepting/Sending Global Commands

Allows the panel to accept/send commands from a network annunciator, i.e., RND-2.

Action	Result
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Press “Cmor” twice to select “Network Setup”.	
4. Select “Dnxt”.	
5. Select “Dnxt”.	
6. Select “Dnxt”.	
7. Select “Dnxt”.	The setting for Accepting Global Commands displays.
8. Select “1” to enable the panel to accept global commands or select “0” and the panel will not accept global commands.	When “1” is selected, the panel can accept global commands.
9. Press the # key to move to the setting for sending global commands.	
10. Select “1” to enable the panel to send global commands or select “0” and the panel will not send global commands.	When “1” is selected, the panel can send global commands and control other panels.
11. Press the * key to move back to the setting for accepting global commands, if desired.	
12. Select “Bsav” to save the setting.	When “Bsav” is selected, the Network Connection screen displays.

Assigning a Message to a Network Link

This setting only appears when a network connection has been enabled. The network link in the panel can be assigned a text message as follows:

Action	Result
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Press “Cmor” twice to select “Network Link”.	
4. Type in the number of the node to which this panel will report.	The default setting is 01. The maximum setting is 99. Assignments can be made in the Input Group Configuration to have this link observe or control activity.
5. A custom message can be assisgned to this link. Follow the instructions on page 5 of this manual for entering alphanumeric characters.	
6. Press Bsav to save the settings.	

Creating the Notify Link and the Observe Link

This setting is used to create the Notify link and Observe link.

Action	Result
1. Select “Edit”.	
2. Select “Manual Pgm”.	
3. Selectr “Groups”.	
4. Select “Input Groups”.	
5. Select “Fire”, then Dnxt.	
6. Select “Coding”, then Dnxt.	
7. Select “Output Zones”, then Dxnt.	
8. Type in the number of the link that you wish this input group to notify.	Be certain to enter leading zeros if the total number of nodes is from 1-9. The maximum node number is 255; 0 = none.
9. Select Dxnt .	
10. Type in the number of the link that you wish this input group to observe.	Be certain to enter leading zeros if the total number of nodes is from 1-9. The maximum node number is 255; 0 = none.
11. Select Bsav to save the setting.	

Exiting the Technician Level

Follow the steps below to exit the Technician Level and return to User Level:

Action	Result
1. Use “Cmor” and select ”Exit Tech LvL”.	The Display will return to the user level.

APPENDIX A: GLOSSARY

Alarm Signal. A signal indicating an emergency requiring immediate action, such as an alarm for fire from a manual station, a waterflow alarm, an automatic smoke detector, etc.

Alarm Silence Inhibit. An option that prevents a human operator from silencing the notification appliances for a preset period of time.

Alarm System. A combination of compatible initiating devices, control units and notification appliances designed and installed to produce an alarm signal in the event of a fire or other condition, as designed.

Alarm Verification. A preset option that causes the control unit to verify alarms originated by smoke detectors before indicating an alarm.

Annunciator. A remotely located, electrically powered display, separate from the control unit, containing LCDs, LEDs or lamps to indicate the states of the fire alarm system.

Audible Signal. A sound made by one or more audible notification appliances, such as bells or horns, in response to the operation of an initiating device.

Authority Having Jurisdiction (AHJ). The organization, office, or individual responsible for approving equipment, installation or procedures.

Auxiliary Relays. Control relays that energize only during alarm conditions that are used to either apply power to or remove power from other equipment during an alarm condition.

City Tie. Provides connections for shunt, local energy, central station or remote station.

Class A Circuit. An initiating device or notification appliance circuit within which all components remain fully functional, even though a single open or ground exists in the circuit.

Class B Circuit. An initiating device or notification appliance circuit within which some or all components may be disabled when a single open or ground exists in the circuit.

DACT. Digital Alarm Communicator Transmitter (see NFPA 72).

Detector - FireSmart™. An intelligent fire detector that blends photoelectric, thermal and neural network technologies for superior protection without false alarms.

Detector - Smoke, Photoelectric Type. A detector employing the photoelectric principle of reflection or obstruction of light by smoke.

Detector - Thermal Type. An addressable thermal sensor that is programmable as either a fixed temperature (135° F) or as a rate of rise detector.

EOLR. End-of-line resistor, used for termination purposes.

FACP. Fire Alarm Control Panel.

General Alarm. A term usually applied to the simultaneous operation of all the notification appliances on a system.

Ground Fault. A trouble condition in which a low resistance has been detected between the system wiring and conduit ground.

Initiating Device. A manually or automatically operated device such as a manual pull station, smoke detector, heat detector, waterflow switch or tamper switch.

Input Group. Detectors and devices are grouped together for convenience into input groups. This will usually represent an area in the building, for instance “the first floor”.

Labeled. Equipment or materials to which have been attached a label, symbol, or other identifying mark of an organization acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of the production of such labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

Listed. Equipment or materials included in a list published by an organization acceptable to the authority having jurisdiction and concerned with product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

NEC. National Electrical Code, also published as NFPA 70.

National Fire Alarm Code. Also published as NFPA 72.

Notification Appliance. An electrically operated appliance used to indicate the system status, such as a bell, horn, strobe light or speaker.

Notification Appliance Circuit (NAC). A circuit to which notification appliances are connected.

Output Zone. There may be 255 output zones. Normally used to specify an area of the building for signaling. The output devices such as notification appliances, audible bases, relay bases, SLUs and SRUs are connected to these output zones so that when the output zones become active the devices will become active.

Power Supply. That portion of the fire alarm control unit that provides the power needed to operate all control unit modules, as well as that needed to operate all electrically powered initiating devices and all notification appliances.

Quick Test. A term pertaining to the test mode of the system that automatically resets after a service tech tests initiating devices.

Signaling Line Circuit (SLC). A circuit to which intelligent devices are connected. Also called a detection loop. A detection loop in the case of the MPC-6000 and MPC-7000 may contain up to 252 detectors or devices, all of which may have outputs. Each detection loop will be driven by an FDLC (Faraday device loop card).

Supervisory Alarm. A signal indicating the operation of a supervisory device.

Supervisory Device. A device that monitors the condition of a sprinkler system such as a gate-valve switch, water level switch, low pressure switch, low temperature switch or fire pump monitor.

Trouble Signal. An audible signal indicating trouble of any nature, such as a circuit break or ground, occurring in the device or wiring associated with a fire alarm signal.

Waterflow Switch. An assembly approved for service and so constructed and installed that any flow of water from a sprinkler system equal to or greater than that from a single automatic sprinkler head will result in activation of this switch and subsequent indication of an alarm condition.

APPENDIX B: REFERENCES

- NFPA 72: National Fire Alarm Code (National Fire Protection Association)
- NFPA 70: National Electrical Code (Delmar Publishers)
- MPC-6000 / MPC-7000 / RND-2 Faraday Fire Alarm Control Panel Owner's Manual, P/N 315-447309
- Faraday web site: http://www.faradayfirealarms.com

APPENDIX C: COMPATIBLE DEVICES FOR SIGNALING LINE CIRCUITS (FDLC)

Model	Description
8700-S	Single action pull station
8700-D	Dual action pull station
8700-M	Metal manual pull station
8701	Single input mini monitor module
8702	Single input monitor module
8703	Dual input monitor module
8704	Monitor module with single input and relay
8705	Conventional zone input module
8710	Faraday photo detector
8712	Faraday thermal detector
8713	Faraday FireSmart detector with algorithms
8726C[1]	Ceiling mounted intelligent LED
8726W[1]	Wall mounted intelligent LED

[1]The 8726(C/W) is a device that is assigned to an output zone only. When an input group that is “connected to” its output zone becomes active, the 8726 will blink red, provided the event that occurred in the group is the same as the Output Type selected for the 8726W.

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