

Whitepaper

Mass Notification System (MNS) Configuration Guide

1. Introduction

Bosch Intrusion Systems, when integrated with a Bosch PRAESENSA Public Address and Voice Alarm System, introduces a [UL 2572](#) compliant Mass Notification System (MNS) with comprehensive emergency mass notifications for life/safety events such as fire, CO, active shooter, tornado, etc.

2. System Overview

The integration of a Bosch PRAESENSA system with a Bosch intrusion system requires configuring one Area of the intrusion panel system as an “MNS” area.

Once a panel area is configured as the “MNS” area, you will configure all the MNS related input points, outputs, keypads and specified behaviors relating to that same MNS area.

The MNS area should be limited to only the Mass Notification life/safety related devices along with the associated panel keypad, input points and outputs. When a life/safety alarm occurs in the MNS area, the solution will be configured for the alarm to be indicated on the intrusion MNS keypads, strobe outputs, and an audible and/or visible notification from the PRAESENSA system.

The Bosch MNS integrated solution relies on configurations within the Bosch PRAESENSA and Intrusion Systems:

1. Bosch Intrusion System reacts after receiving information from the Bosch PRAESENSA MNS system. This relies on configuring outputs in the PRAESENSA system to send information and Intrusion system Points to receive information.
2. Bosch PRAESENSA MNS System reacts based on information received from its own inputs and from the Bosch Intrusion System Outputs. This relies on configuring Outputs in the Intrusion System to activate MNS related inputs within the PRAESENSA system.

2.1. System components overview

- PRAESENSA Public Address and Voice Alarm System & Components configured & operational
 - Notification Appliance Circuit(s) (ex. Altronix® R1002ULADA)
 - PRAESENSA Autonomous Control Unit (ex. PRA-FP3-US ACU)
- Bosch (RPS) Remote Programming Software (v6.12 or newer)
- Bosch MNS supported G Series Intrusion System (FW v3.12 or newer)
- Bosch MNS approved Keypad(s) (ex. B926M)
- Intrusion System Physical input modules/devices
 - Bosch Input module(s) (ex. B208 Octo Input)
 - Fire points such as fire pull stations, smoke detectors, etc
 - Gas points such as CO detectors
 - Other emergency MNS points or pull stations (active shooter, severe weather, etc)
 - Bosch Notification Appliance Circuit Supervision Module (ex. D192G)
 - Notification Appliance Circuit Module (ex. Altronix R1002ULADA)
 - Bosch MNS approved Keypad(s) (ex. B926M)
- Integrated Panel Inputs. Configured to 'listen' for PRAESENSA
 - PRAESENSA indicating any of the above types of inputs (fire, gas, or MNS)
 - PRAESENSA indicating MNS system troubles
 - Trouble inputs from strobe drivers (D192G and NAC)
- Intrusion System Physical output modules/devices
 - Bosch Output module(s) (ex. B308 Octo Output)
 - Bosch Notification Appliance Circuit Supervision Module (ex. D192G)
 - Notification Appliance Circuit Module (ex. Altronix R1002ULADA)
 - Strobes (via NAC)
 - Active alarm (fire, gas, MNS) outputs to PRAESENSA
 - Bosch MNS approved Keypad(s) (ex. B926M) again?
- Integrated Panel Outputs. Configured to 'send' to PRAESENSA
 - Fire Drill output to PRAESENSA
 - MNS related trouble output to PRAESENSA

An MNS area should have at least one B926M keypad configured with scope to the MNS area. It will also include at least one PRAESENSA PRA-FP3-US ACU control station. The B926M keypad and the PRA-FP3-US ACU are typically located next to one another in compliance with UL 2572.

Figure 1 shows an example physical interconnection of the system for an MNS area that contains at least one of each point type and output type. Actual configurations will vary in number of these items.

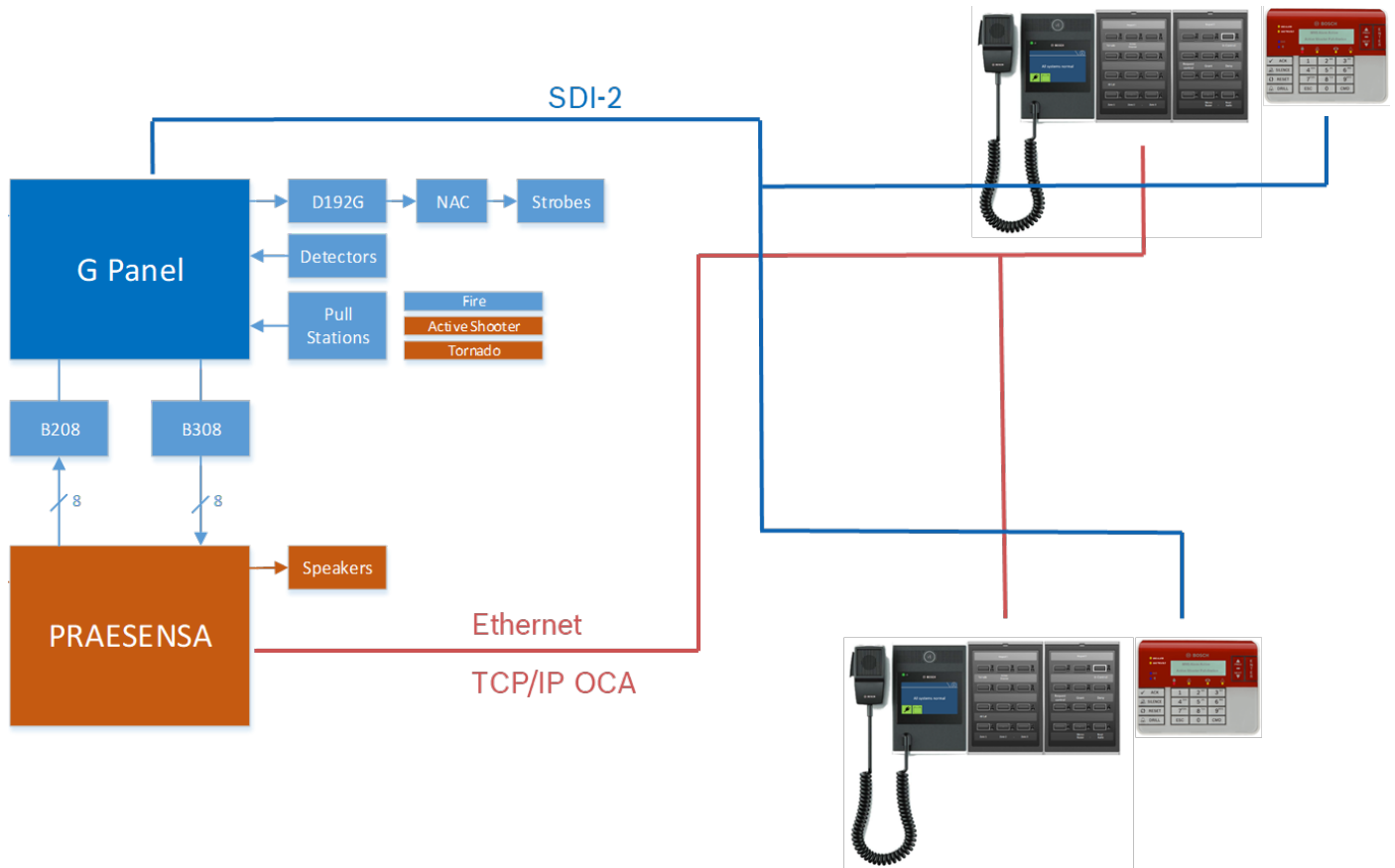


Figure 1. MNS Integrated System Pictorial Diagram

Figure 2. Schematic representation of the integrated system.

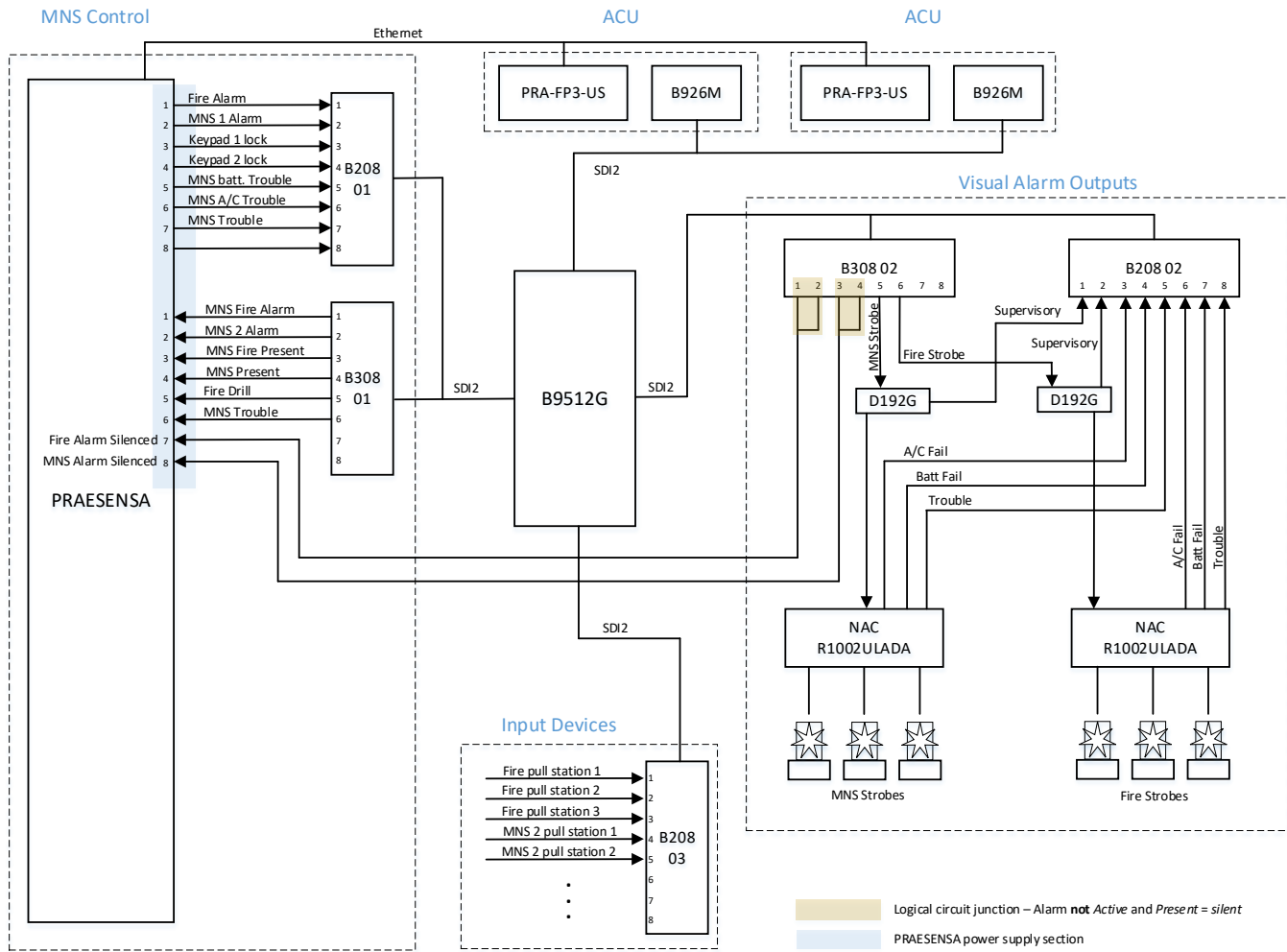


Figure 2. MNS Integrated System Block Diagram

The “logical circuit junction” highlighted in Figure 2 represents a combination of wiring that enables PRAESENSA to determine if a particular alarm type is active in the system but silenced. An example wiring of such a junction for Fire is shown below in Figure 3.

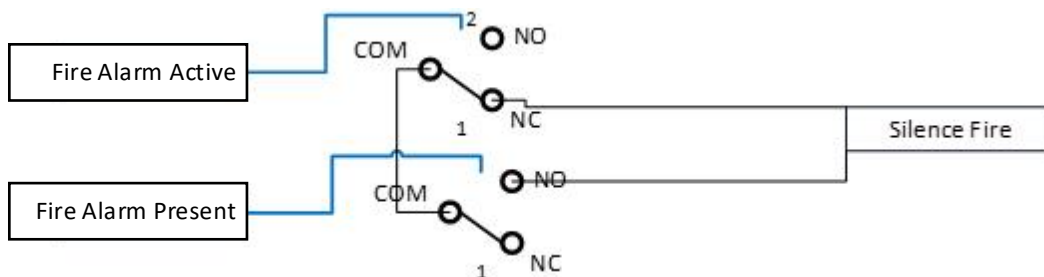


Figure 3. Logical Circuit Junction for Alarm Silence State

In Figure 3, the alarm signals from the panel are as follows:

- Alarm Active – the alarm is currently visible or audible via strobe or alarm outputs from the intrusion panel
- Alarm Present – the alarm is currently indicated in the intrusion panel, may either be audible, visible, or silenced, and has not been cleared

3. RPS Configuration

3.1. Use Case

The use case detailed in this document and configurations represent a typical MNS integration, as illustrated in Figure 2. The following sections detail the RPS configuration in each category related to an MNS integration. Most of these settings are included in the MNS-related RPS templates provided by Bosch. At time of publication, two B9512G example templates are available:

- “MNS Template – Typical.xml”: Provides a Panel template pre-configured to align with the scenario detail in this document.
- “MNS Template – Large.xml”: Provides a Panel template pre-configured for an expanded MNS integration. The integration follows the same basic structure as an Average integration with additional MNS related monitoring, hardware, Input devices, Output devices, Keypads, ACU stations and Alarms.

3.2. PANEL WIDE PARAMETERS

3.2.1. PANEL WIDE PARAMETERS > Alarm Reporting

Non-fire and non-gas MNS alarms are reported to the Central Station as burglar alarms. The report groups (Figure 4.) should be set according to desired route group reporting. The default settings shown are typically acceptable but can be changed to meet local requirements.

BURGLAR REPORTS	Route Group 1	Route Group 2	Route Group 3	Route Group 4
Alarm Report	Yes	Yes	Yes	Yes
Burg Restore (After Trouble)	Yes	Yes	Yes	No
Duress	Yes	Yes	Yes	Yes
Missing Alarm	Yes	Yes	Yes	No
User Code Tamper	Yes	Yes	Yes	No
Trouble Report	Yes	Yes	Yes	No
Missing Trouble	Yes	Yes	Yes	No
Non-Fire Supervision	Yes	Yes	Yes	No
Point Bus Fail	Yes	Yes	Yes	No
Point Bus Restoral	Yes	Yes	Yes	No
Non-Fire Cancel	Yes	Yes	Yes	No
Alarm Restore	Yes	Yes	Yes	No
Supervision Missing	Yes	Yes	Yes	No
Unverified Event	Yes	Yes	Yes	No

Figure 4. Communicator route group devices and Enhanced Communication destination should be set as usual.

3.2.2. PANEL WIDE PARAMETERS > Miscellaneous Settings (Figure 5.)

Miscellaneous > Fire Alarm Priority over MNS should be set to Yes or No per the AHJ (Authority Having Jurisdiction). The default is No.

Miscellaneous > MNS Summary Sustain must be set to Yes (default) to meet UL 2572 requirements.

Miscellaneous > MNS Resound defaults to “None” but can be set to “Noon” or “Midnight” as desired.

<ul style="list-style-type: none"> [-] B9512G Program Record Sheet <ul style="list-style-type: none"> [-] COMPLIANCE SETTINGS <ul style="list-style-type: none"> [-] PANEL WIDE PARAMETERS <ul style="list-style-type: none"> Phone and Phone Parameters On Board Ethernet Communicator Cellular Plug-in Module Cloud Remote Connect IP Cameras Report Routing <ul style="list-style-type: none"> Communicator Enhanced Communication SDI2 RPS / Enhanced Comm Power Supervision RPS Parameters Miscellaneous Personal Notification AREA WIDE PARAMETERS 	MISCELLANEOUS	Entry
	Duress Type	1
	Cancel Reports	Yes
	Call for Service Text - First Language	Contact your dealer
	Call for Service Text - Second Language	
	On-site Authorization for Firmware Update	No
	System Tamper Response	Trouble
	Enclosure Tamper Enable	No
	Fire and Gas Summary Sustain	Yes
	Fire Supervision Event Type	Fire Supervision Restoral
	Fire and Gas Resound	None
	Fire Alarm Priority over MNS	No
	MNS Summary Sustain	Yes
	MNS Resound	None
	Fire Drill Duration	20
Early Ambush Time	10	

3.2.3. PANEL WIDE PARAMETERS > Personal Notification (Figure 6.)

Personal notifications are **not** permitted in an MNS integrated system per UL 2572 regulatory requirements, so personal notifications will need to be turned off (all disabled).

Figure 6. RPS Personal Notification Reports for MNS

<ul style="list-style-type: none"> [-] B9512G Program Record Sheet <ul style="list-style-type: none"> [-] COMPLIANCE SETTINGS <ul style="list-style-type: none"> [-] PANEL WIDE PARAMETERS <ul style="list-style-type: none"> Phone and Phone Parameters On Board Ethernet Communicator Cellular Plug-in Module Cloud Remote Connect IP Cameras Report Routing <ul style="list-style-type: none"> Communicator Enhanced Communication SDI2 RPS / Enhanced Comm Power Supervision RPS Parameters Miscellaneous Personal Notification <ul style="list-style-type: none"> Personal Notification Destinations Personal Notification Reports Personal Notification Routing Attempts Email Server Configuration AREA WIDE PARAMETERS KEYPADS 	Personal Notification Reports	Route Group 1	Route Group 2	Route Group 3	Route Group 4
	Personal Notification 1	0:Disabled	0:Disabled	0:Disabled	1:
	Personal Notification 2	0:Disabled	0:Disabled	0:Disabled	2:
	Personal Notification 3	0:Disabled	0:Disabled	0:Disabled	3:
	Personal Notification 4	0:Disabled	0:Disabled	0:Disabled	4:
	Personal Notification 5	0:Disabled	0:Disabled	0:Disabled	5:
	Personal Notification 6	0:Disabled	0:Disabled	0:Disabled	6:
	Personal Notification 7	0:Disabled	0:Disabled	0:Disabled	7:
	Personal Notification 8	0:Disabled	0:Disabled	0:Disabled	8:

3.3. AREA WIDE PARAMETERS

3.3.1. AREA WIDE PARAMETERS > Area/Bell Parameters, Open/Close Options (Figure 7.)

Area Type needs to be set to MNS in order to operate as the MNS area. This use case example will assume Area 1 with a name of “MNS Area”.

MNS Time, the number of minutes that an MNS alarm will remain active once triggered, is to be set as needed for Area 1(the MNS Area). The default is 0, which means a triggered MNS alarm will remain on until it has been silenced or cleared.

Area 1 - 16	Area 1	Area 2	Area 3
Area Name Text	MNS Area	Area 2	Area 3
Area Name Text (Second Language)			
Area On	Yes	No	No
Account Number	0000	0000	0000
Force Arm / Bypass Max	2	2	2
Delay Restorals	No Delay	No Delay	No Delay
Exit Tone	Yes	Yes	Yes
Exit Delay Time	60	60	60
Auto Watch	Manual	Manual	Manual
Restart Time	5	5	5
Duress Enable	No	No	No
Area Type	MNS	Regular	Regular
Two Man Rule?	No	No	No
Early Ambush?	No	No	No
Fire and Gas Time	6	6	6
Fire Pattern	Pulsed	Pulsed	Pulsed
Burg Time	6	6	6
Burg Pattern	Steady	Steady	Steady
Gas Pattern	Temporal Code 4	Temporal Code 4	Temporal Code 4
Environmental Time	6	6	6
Environmental Pattern	Steady	Steady	Steady
MNS Time	0	0	0
Single Ring	No	No	No
Bell Test	No	No	No

Area Arming Text > Area # Is Off text for Area 1 can be set to “System Ready” or other similar text to avoid burglary-related language. (Figure 8.)

Figure 8. Area Arming Text for MNS

	AREAARMING TEXT	Area # Not Ready Text (Second Language)	Area # Is Off Text (First Language)	Area # Is Off Text (Second Language)
[-] B9512G Program Record Sheet				
[-] COMPLIANCE SETTINGS				
[-] PANEL WIDE PARAMETERS	Area 1		System Ready	
Phone and Phone Parameters	Area 2			
On Board Ethernet Communicator	Area 3			
Cellular Plug-in Module	Area 4			
Cloud Remote Connect	Area 5			
IP Cameras	Area 6			
Report Routing	Area 7			
Communicator	Area 8			
Enhanced Communication	Area 9			
SDI2 RPS / Enhanced Comm	Area 10			
Power Supervision	Area 11			
RPS Parameters	Area 12			
Miscellaneous	Area 13			
Personal Notification	Area 14			
[-] AREA WIDE PARAMETERS	Area 15			
[-] Area/Bell Parameters, Open/Close Options	Area 16			
Area 1 - 16	Area 17			
Area 17 - 32	Area 18			
Area Arming Text	Area 19			
[-] KEYPADS				

3.4. POINTS

The following assumes the integrated system has been configured with inputs as shown in Figure 2. Table 1 indicates the point number to be configured for the various inputs.

Table 1. Point Assignments for MNS

Input (Point)	Point Number
PRAESENSA Fire Alarm	11
PRAESENSA Active Shooter Alarm	12
PRAESENSA Keypad 1 lock	13
PRAESENSA Keypad 2 lock	14
PRAESENSA MNS Battery Trouble from PRAESENSA	15
PRAESENSA Main A/C Missing	16
PRAESENSA MNS Trouble	17
D192G (MNS) Supervisory input	21
D192G (Fire) Supervisory input	22
MNS NAC A/C Fail	23
MNS NAC Battery Fail	24
MNS NAC Trouble	25
Fire NAC A/C Fail	26
Fire NAC Battery Fail	27
Fire NAC Trouble	28
Fire pull station 1	31
Fire pull station 2	32
Fire pull station 3	33
Weather pull station 1	34
Weather pull station 2	35
... (others as needed)	...

Table 2 details the point profiles assumed to be configured in RPS (*POINTS > Point Profiles*)

Table 2. Point Profiles for MNS

Profile	Point Type	Point Profile Text	Configuration
33	MNS Point 1	MNS Type 1	Circuit Style: EOL 1k Point Response: 1 (T/I/T/I) Other parameters default same as Fire Pull Station (profile 3)
34	MNS Point 2	MNS Type 2	Circuit Style: EOL 1k Point Response: 1 (T/I/T/I) Other parameters default same as Fire Pull Station (profile 3)
35	MNS Point 3	MNS Type 3	Circuit Style: EOL 1k Point Response: 1 (T/I/T/I) Other parameters default same as Fire Pull Station (profile 3)
36	MNS Point 1	MNS Trouble	Circuit Style: EOL 1k Point Response: 3 (T/T/T/T) Other parameters default same as Fire Pull Station (profile 3)
37	MNS Point 1	Keypad Lockout	Circuit Style: EOL 1k Point Response: 7 (T/b/T/b) Other parameters default NOTE: in this configuration, the PRAESENSA system will short the point to lockout the keypad

3.4.1. POINTS > Point Assignments

Each point used by the integration is aligned with Table 1 listing of inputs by configuring the following details shown in Figure 9.

MNS Points (Table 1) are associated with individual MNS Point Profiles (Table 2) by programming the Point Assignment details shown in Figure 9.

- Point Number: 11-17, 21-28, 31-35 (per this example setup)
- Source (Octo-Input)
- Text (description of the input as desired)
- Profile (select the profile number that matches the input type)
- Area (set to the designated MNS area, in this case, Area 1)

POINT	Source	Text	2nd Lang	Profile	Area	Debounce	Output
Point 1	Onboard	Point 1		4: Smoke Detector	1: MNS Area	820 ms	0: Unassigned
Point 2	Onboard	Point 2		8: Part On: Delay	1: MNS Area	820 ms	0: Unassigned
Point 3	Onboard	Point 3		8: Part On: Delay	1: MNS Area	820 ms	0: Unassigned
Point 4	Onboard	Point 4		13: Interior: Follower	1: MNS Area	820 ms	0: Unassigned
Point 5	Onboard	Point 5		13: Interior: Follower	1: MNS Area	820 ms	0: Unassigned
Point 6	Onboard	Point 6		7: Part On: Instant	1: MNS Area	820 ms	0: Unassigned
Point 7	Onboard	Point 7		7: Part On: Instant	1: MNS Area	820 ms	0: Unassigned
Point 8	Onboard	Point 8		1: 24-hr Inst Open/Short	1: MNS Area	820 ms	0: Unassigned
Point 11	Octo-Input	PRAESENSA Fire Alarm		3: Pull Station	1: MNS Area	820 ms	0: Unassigned
Point 12	Octo-Input	PRAESENSA Active Shooter Alarm		33: MNS Type 1	1: MNS Area	820 ms	0: Unassigned
Point 13	Octo-Input	PRAESENSA Keypad 1 Lock		37: Keypad Lockout	1: MNS Area	820 ms	0: Unassigned
Point 14	Octo-Input	PRAESENSA Keypad 2 Lock		37: Keypad Lockout	1: MNS Area	820 ms	0: Unassigned
Point 15	Octo-Input	PRAESENSA PA Battery Trouble		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 16	Octo-Input	PRAESENSA Main A/C Missing		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 17	Octo-Input	PRAESENSA MNS Trouble		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 21	Octo-Input	D192G MNS Supervisory		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 22	Octo-Input	D192G Fire Supervisory		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 23	Octo-Input	MNS NAC A/C Fail		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 24	Octo-Input	MNS NAC Batt Fail		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 25	Octo-Input	MNS NAC Trouble		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 26	Octo-Input	Fire NAC A/C Fail		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 27	Octo-Input	Fire NAC Batt Fail		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 28	Octo-Input	Fire NAC Trouble		36: MNS Trouble	1: MNS Area	820 ms	0: Unassigned
Point 31	Octo-Input	Fire Pull Station 1		3: Pull Station	1: MNS Area	820 ms	0: Unassigned
Point 32	Octo-Input	Fire Pull Station 2		3: Pull Station	1: MNS Area	820 ms	0: Unassigned
Point 33	Octo-Input	Fire Pull Station 3		3: Pull Station	1: MNS Area	820 ms	0: Unassigned
Point 34	Octo-Input	Severe Weather Pull Station 1		34: MNS Type 2	1: MNS Area	820 ms	0: Unassigned
Point 35	Octo-Input	Severe Weather Pull Station 2		34: MNS Type 2	1: MNS Area	820 ms	0: Unassigned

3.5. KEYPADS

3.5.1. KEYPADS > Keypad Assignments (Figure 10.)

Configure the B926M keypads as a *B92x Two-line Keypad* and assign it *Area Wide* to *Area 1* (the MNS area). *Passcode Enter Function* should **not** include arming/disarming functions.

Figure 10. Keypad Assignment for MNS

B9512G Program Record Sheet		KEYPAD ASSIGNMENTS	Address 1	Address 2	Address
COMPLIANCE SETTINGS		Keypad Name	B926M 1	B926M 2	Keypad
PANEL WIDE PARAMETERS		Keypad Name(Second Language)			
AREA WIDE PARAMETERS		Keypad Type	B92x Two-line Keypad	B92x Two-line Keypad	No Keyp
KEYPADS		Area Assignment	1: MNS Area	1: MNS Area	1: MNS A
Keypad Assignments		Keypad Language	First Language, follow User language	First Language, follow User language	First Lan
Global Keypad Setting		Scope	Area Wide	Area Wide	Area Wk
Global Wireless Keypob Settir		Area(s) in Scope	1	1	1
CUSTOM FUNCTIONS		Passcode Follows Scope?	Yes	Yes	Yes
SHORTCUT MENU		Enter Key Output	0: Unassigned	0: Unassigned	0: Unass
OUTPUTS		Passcode Enter Function	Login Only	Login Only	Arm/Diss
USER CONFIGURATION		Dual Authentication	No	No	No
POINTS		Dual Authentication Duration	20 Seconds	20 Seconds	20 Seco
Point Assignments		Assign Door	0: No Door	0: No Door	0: No Do
Cross Point Parameters		Trouble Tone	Yes	Yes	Yes
Point Profiles		Entry Tone	Yes	Yes	Yes
Point Profiles 1 - 16		Exit Tone	Yes	Yes	Yes
Point Profiles 17 - 32		Arm Area Warning Tone	Yes	Yes	Yes
Point Profiles 33 - 48		Close Door Warning Tone	Yes	Yes	Yes
Point Profiles 49 - 63		Idle Scroll Lock	No	No	No
SCHEDULES		Function Lock	No	No	No
ACCESS		Abort Display	Yes	Yes	Yes
AUTOMATION / REMOTE APP		Cancel Display	Yes	Yes	Yes
SDI2 MODULES		Nightlight Enable	No	No	No
HARDWARE SWITCH SETTINGS		Nightlight Brightness	2	2	2
		Silence Keypress Tone	No	No	No
		Show Date and Time	No	No	No
		Keypad Volume	7	7	7
		Keypad Brightness	6	6	6
		Disable Presence Sensor	No	No	No
		Disable Token Reader	Yes	Yes	Yes
		Enable Tamper Switch	No	No	No
		Feature Button Option	Language Selection	Language Selection	Languag
		Supervision	Yes	No	No
		Passcode [Esc] Option	No	No	Yes
		Lockout Point	13: PRAESENSA Keypad 1 Lock	14: PRAESENSA Keypad 2 Lock	0: Unass

3.6. OUTPUTS

The following assumes a system that has been configured as shown in Figure 2 and will primarily use the Output Profiles feature. Table 3 indicates the Intrusion System Output numbers to be configured for the various MNS related outputs.

Table 3. Outputs for MNS

Output	Output Number
MNS Fire Alarm to PRAESENSA	11
Severe Weather Alarm to PRAESENSA	12
MNS Fire Present	13
MNS Present	14
Fire Drill to PRAESENSA	15
MNS Trouble to PRAESENSA	16
Fire Alarm Active to PRAESENSA	21
Fire Alarm Present to PRAESENSA	22
MNS Alarm Active to PRAESENSA	23
MNS Alarm Present to PRAESENSA	24
MNS Strobe	25
Fire Strobe	26

*** See section 2.1 for explanations of “Alarm Active” and “Alarm Present”.*

The RPS Output Profiles (*OUTPUTS > Output Profiles*) should be configured as detailed in Table 4 and shown in Figures 11a and 11b. These Output Profiles will be pre-configured when using the RPS MNS template.

Table 4. Output Profiles Configuration for MNS

Profile	Name	Trigger	Setting
14	MNS 1 Alarm Active	MNS 1 Alarm	Scope: Area Wide Scope Filter: 1 Pattern: On Steady Duration: Until Off
15	MNS 2 Alarm Active	MNS 2 Alarm	Scope: Area Wide Scope Filter: 1 Pattern: On Steady Duration: Until Off
16	MNS 3 Alarm Active	MNS 3 Alarm	Scope: Area Wide Scope Filter: 1 Pattern: On Steady Duration: Until Off
17	Fire Alarm Active	Fire MNS Alarm	Scope: Area Wide Scope Filter: 1 Pattern: On Steady Duration: Until Off
18	Gas Alarm Active	Gas MNS Alarm	Scope: Area Wide Scope Filter: 1 Pattern: On Steady Duration: Until Off
19	MNS Alarm Active	Summary MNS Alarm	Scope: Area Wide Scope Filter: 1 Pattern: On Steady Duration: Until Off
20	Fire Drill Active	Fire Drill	Scope: Area Wide Scope Filter: 1 Pattern: On Steady Duration: Follows Trigger
21	MNS Alarm Present	Summary MNS Alarm	Scope: Area Wide Scope Filter: 1 Pattern: On Steady Duration: Until Clear
22	Fire Alarm Present	Fire MNS Alarm	Scope: Area Wide Scope Filter: 1 Pattern: On Steady Duration: Until Clear
23	Gas Alarm Present	Gas MNS Alarm	Scope: Area Wide Scope Filter: 1 Pattern: On Steady Duration: Until Clear

Figure 11a. Output Profiles (14-16) for MNS.

OUTPUT PROFILES 1 - 16	12	13	14	15	16
Profile Name	Burg Supervisory (Monitor)	Entry / Exit Delay	MNS 1 Alarm Active	MNS 2 Alarm Active	MNS 3 Alarm Active
Output Behavior [A]					
Trigger 1	Burglary Supervisory	Entry / Exit delay	MNS 1 Alarm	MNS 2 Alarm	MNS 3 Alarm
Scope	Panel Wide	Panel Wide	Area Wide	Area Wide	Area Wide
Scope Filter	0	0	1: MNS Area	1: MNS Area	1: MNS Area
AND Trigger 2	Disabled	Disabled	Disabled	Disabled	Disabled
Scope	Panel Wide	Panel Wide	Panel Wide	Panel Wide	Panel Wide
Scope Filter	0	0	0	0	0
Pattern	On Steady	Half Second Pulses	On Steady	On Steady	On Steady
Delay	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00
Duration	Until Off	Follows Trigger	Until Off	Until Off	Until Off

Figure 11b. Output Profiles (17-23) for MNS.

OUTPUT PROFILES 17 - 32	17	18	19	20	21	22	23
Profile Name	Fire Alarm Active	Gas Alarm Active	MNS Alarm Active	Fire Drill Active	MNS Alarm Present	Fire Alarm Present	Gas Alarm Present
Output Behavior [A]							
Trigger 1	Fire MNS Alarm	Gas MNS Alarm	Summary MNS Alarm	Fire Drill	Summary MNS Alarm	Fire MNS Alarm	Gas MNS Alarm
Scope	Area Wide	Area Wide	Area Wide	Area Wide	Area Wide	Area Wide	Area Wide
Scope Filter	1: MNS Area	1: MNS Area	1: MNS Area	1: MNS Area	1: MNS Area	1: MNS Area	1: MNS Area
AND Trigger 2	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled	Disabled
Scope	Panel Wide	Panel Wide	Panel Wide	Panel Wide	Panel Wide	Panel Wide	Panel Wide
Scope Filter	0	0	0	0	0	0	0
Pattern	On Steady	On Steady	On Steady	On Steady	On Steady	On Steady	On Steady
Delay	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00	00:00:00
Duration	Until Off	Until Off	Until Off	Follows Trigger	Until Cleared	Until Cleared	Until Cleared

3.6.1. OUTPUTS > Area Wide Outputs (Figure 12)

For UL 2572 compliance reasons, the MNS area will not use Area Wide Outputs for Fire and Gas bells. These will be set to 0 here. The Fire and Gas strobe and PRAESENSA output will be configured later using *Output Profiles*.

Figure 12. Area Wide Outputs disabled for MNS

Template - B9512G Customer MNS - Full (Account - 0000)						
Output Area 1 - 16	Area 1	Area 2	Area 3	Area 4	Area 5	
Alarm Bell	0		1	1	1	
Fire Bell	0		1	1	1	
Reset Sensors	3	3	3	3	3	
Fail To Close / Part On Armed	0	0	0	0	0	
Force Armed	0	0	0	0	0	
Watch Mode	0	0	0	0	0	
Area Armed	0	0	0	0	0	
Area Off	0	0	0	0	0	
Area Fault	0	0	0	0	0	
Duress Output	0	0	0	0	0	
Part On Fault	0	0	0	0	0	
Silent Alarm	0	0	0	0	0	
Gas Bell	0		1	1	1	
Environmental Bell	0	0	0	0	0	

3.6.2. OUTPUTS > Panel Wide Outputs (Figure 13.)

The panel wide output, *Summary MNS Trouble*, will provide the MNS trouble output to the PRAESENSA system. Per Table 3, this Summary MNS Trouble output was defined to be Output number 16.

Figure 13. Panel Wide Outputs for MNS

PANEL WIDE OUTPUTS	Entry
AC Failure	0
Battery Trouble	0
Phone Fail	0
Comm Fail	0
Log % Full	0
Summary Fire	0
Summary Alarm	0
Summary Fire Trouble	0
Summary Supervisory Fire	0
Summary Trouble	0
Summary Supervisory Burg	0
Summary Gas Output	0
Summary Gas Supervisory Output	0
Summary Gas Trouble Output	0
Summary MNS	0
Summary MNS Trouble	16

3.6.3. OUTPUTS > Output Assignments (Figure 14.)

The remaining MNS related outputs will be configured using predefined Output Profiles (*OUTPUTS > Output Profiles*). The numbering and purpose of each output correspond to Table 3.

Output Assignments	Output Source	Output Text	Output Text (Second Language)	Output Profile	Hide Fr
Output A(1)	On-board A	Output A (1)		0: Unassigned	No
Output B(2)	On-board B	Output B (2)		0: Unassigned	No
Output C(3)	On-board C	Output C (3)		0: Unassigned	No
Output 11	Octo-output	Fire Alarm to PRAESENSA		17: Fire Alarm Active	No
Output 12	Octo-output	MNS 2 Alarm to PRAESENSA		15: MNS 2 Alarm Active	No
Output 13	Octo-output	Fire Alarm Present to PRAESENSA		22: Fire Alarm Present	No
Output 14	Octo-output	MNS Alarm Present to PRAESENSA		21: MNS Alarm Present	No
Output 15	Octo-output	Fire Drill To PRAESENSA		20: Fire Drill Active	No
Output 16	Octo-output	Summary MNS Trouble		0: Unassigned	No
Output 21	Octo-output	Fire Alarm Active to PRAESENSA		17: Fire Alarm Active	No
Output 22	Octo-output	Fire Alarm Present to PRAESENSA		22: Fire Alarm Present	No
Output 23	Octo-output	MNS Alarm Active to PRAESENSA		19: MNS Alarm Active	No
Output 24	Octo-output	MNS Alarm Present to PRAESENSA		21: MNS Alarm Present	No
Output 25	Octo-output	MNS Strobe		19: MNS Alarm Active	No
Output 26	Octo-output	Fire Strobe		17: Fire Alarm Active	No

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