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1. SYSTEM CONFIGURATION

The SYSTEM CONFIGURATION Group contains the Account Number, Swinger Count, Keyswitch, Custom Idle Text, and Custom Service Text prompts.

1 Account Number

Default:	0000	0000
Selections:	0 to 9, B to F	0 to 9, B to F

Enter four characters for the Account Number to transmit to the receiver. Enter leading zeroes (0) for account numbers less than four digits. For example, Enter 0123 for account number 123.

2 Swinger Count

Default:	4	4
Selections:	1, 2, 3, 4	1, 2, 3, 4

The Swinger Count prompt sets the swinger count for the Swinger Bypass point option. When the number of alarms or troubles reaches the swinger count, the system automatically bypasses points programmed for Swinger Bypass. Turning the system Off clears the bypass. If a 24-hour point swinger bypasses while the system is Off, turning the system On (starting exit delay) and then turning it off (pressing clear during exit delay) clears the bypass.

SIA recommends the swinger count be set to 1.

Use Digit 2 of the point code to assign the Swinger Bypass feature to a point.

3 Keyswitch

Default:	Momentary	0
Selections:	Easikey, Momentary	1, 0

See the D2212 Installation Manual for instructions on connecting a momentary keyswitch to a point. The D2212 is not compatible with maintained contact keyswitches.

Operating the keyswitch (shorting the point) turns the system All On with delays if the system is Off. Any faulted controlled points (point code digit 1 is 6, 7, 8, 9, B, or C) are automatically bypassed.

If the system is All On or Part On, with or without delays, operating the keyswitch (shorting the point) turns the system Off.

Leave the Keyswitch prompt set to Momentary if you are not using a keyswitch on your system.

Setting the Keyswitch prompt to Easikey allows a properly connected Easikey system to disarm the system. It can not be used to arm the system. If the system is All On or Part On, with or without delays, presenting the electronic key to the Easikey reader (the Easikey shorts the point) turns the system Off. If the system is Off, presenting the electronic key to the Easikey reader (the Easikey shorts the point) has no effect on the D2212.

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4 Custom Idle Text

5 Custom Idle Text 2

Default:	RADIONICS	RADIONICS D2212
Selections:	A to Z, 0 to 9, ! # , . - / : < >	A to Z, 0 to 9, ! # ‘ , - / : < >

The system displays the two lines of custom text you enter here at all text keypads when ever the system is Off and idle. Each line contains a maximum of 16 characters.

Up to 15 Seconds for Text to Load:It may take up to 15 seconds for the custom text you program here to appear in all text keypads connected to the system.

6 Custom Service Text

Default:	Blank	Blank
Selections:	A to Z, 0 to 9, ! # , . - / : < >	A to Z, 0 to 9, ! # ‘ , - / : < >

The system displays the text you enter here in the second line of the keypad display when ever the first line reads, “CALL FOR SERVICE.” You may want to enter the phone number for your service department as the Custom Service Text.

Up to 15 Seconds for Text to Load:It may take up to 15 seconds for the custom text you program here to appear in all text keypads connected to the system.

2. PHONE

The PHONE Group contains prompts that configure the system for dialing and sending reports on the telephone line.

1 DTMF Dialing

Default:	Yes	1
Selections:	Yes, No	1,0

When DTMF Dialing is set to Yes, the panel dials in the DTMF (Dual Tone Multi-Frequency) format for all dialing attempts. When DTMF Dialing is set to No, the panel pulse dials for all dialing attempts.

2 Phone 1

3 Phone 2

Default:	Blank	Blank
Selections:	0 to 9, C, D, #, *, Blank	0 to 9, C, D, #, *, Blank

Leaving both Phone 1 and Phone 2 'Blank' creates a local system with no reports transmitted.

Enter up to 19 characters for each phone number. The # and * characters only work when the panel is DTMF dialing. The panel dials these characters just as if you pressed them on a telephone keypad. Enter C for a three-second delay. Enter D for a seven-second dial tone wait.

If you program a # or * to disable call waiting, warn your customer that eliminating their call waiting service requires a change to their security system.

4 Phone Routing

Default:	No	0
Selections:	Yes, No	1, 0

Phone Routing set to No

When this prompt is set to the default, No, the panel dials as shown in the table below. The panel only sends reports to Phone 2 after two failed attempts sending to Phone 1.

Attempt	Phone Number	Attempt	Phone Number
1	Phone Number 1	6	Phone Number 2
2	Phone Number 1	7	Phone Number 1
3	Phone Number 2	8	Phone Number 2
4	Phone Number 2	9	Phone Number 1
5	Phone Number 1	10	Phone Number 2
		11	Communication Fail Event

If Phone 2 is left blank, five attempts are made to Phone 1.

If you set the Phone Routing prompt to No, skip to the REPORTS Group (page 6). The prompts in the remainder of this group set the routing groups

Phone Routing set to Yes

Set this prompt to Yes to route reports to Phone 1 or Phone 2. Reports are routed by group. A description of each routing group follows. The panel makes five attempts to each routing destination.

Reports routed to Phone 1 have a higher priority than reports routed to Phone 2. When the panel has reports to send to Phone 1 and Phone 2, it sends all reports for Phone 1 then starts sending the reports for Phone 2. If the panel fails to send an event to Phone 1, it creates a Communication Fail Event for Phone 1 and begins the Phone 2 reports.

If the panel is working on Phone 2 reports and there is a new event for Phone 1, the panel continues with the Phone 2 reports until the Phone 2 buffer is empty, and then goes to the Phone 1 event.

Route Group	Default / Selections		Reports
5 Fire Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	Fire alarm reports from points or ABC keys.
6 Non-Fire Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	Non-Fire alarm reports from points or ABC keys. Point tamper alarms. Point missing alarms.
7 Pt Trbl Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	Trouble, missing, missing RF, low battery RF, bypass, or swinger bypass reports from Fire and Non-Fire points combined. Point tamper troubles.
8 Restoral Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	Restoral reports from Fire and Non-Fire points combined. RF battery restorals. Point tamper restorals.
9 Closing Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	Closing reports.
10 Opening Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	Opening reports.
11 Cancel Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	Cancel reports.

Route	Default / Selections		Reports
12 Sys Trbl Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	RAM Access Fail reports (unsuccessful attempt to connect a remote programmer). Comm Fail reports (communication failure event) for Phone 1 and Phone 2. Watchdog reset reports (system automatically reset). Battery Missing reports. Battery Low reports. AC Fail reports. RF Receiver Trouble (Address 7, Address 8). RF Receiver Tamper (Address 7, Address 8).
13 Sys Res Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	RAM Access OK reports (successful connection to a remote programmer). Comm Restoral reports (successful communication after a communication failure event). Re-Boot reports (panel reset with the Standby Switch or a remote programmer. Battery Restoral reports (missing or low battery restored). AC Restore reports. RF Receiver Trouble Restoral (Address 7, Address 8). RF Receiver Tamper Restoral (Address 7, Address 8).
14 Duress Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	Duress reports. User Tamper (six attempts with bad passcode).
15 Test Route	Local Phone 1 Only Phone 2 Only, Both	0 1 2 3	Test reports. Service Start (Standby Switch locked down, Installer code entered). Service Stop (Standby Switch unlocked. The panel only sends a Service Stop report if a Service Start was transmitted).

3. REPORTS

1 O/C Rpts-All On

Default:	No	0
Selections:	Yes, No	1, 0

If you set the O/C Rpts-All On prompt to Yes, the system transmits closing reports to the receiver when users turn the system All On. If any points are bypassed, bypass reports are also sent. The D2212 transmits opening reports when users turn the system Off from the All On state.

If the user turns the system Off after an alarm, the system attaches an AFTER ALARM message to the Modem II opening report. See RECEIVER Group, page 10 for a description of the Modem II report format.

If you set the O/C Rpts-All On prompt to No, the system does not send closing reports to the receiver when users turn the system All On.

2 O/C Rpts-Part On

Default:	No	0
Selections:	Yes, No	1, 0

If you set the O/C Rpts-Part On prompt to Yes, the system transmits closing reports to the receiver when users turn the system Part On with the 0 (zero) key. If any points are bypassed, bypass reports are also sent. It transmits opening reports when users turn the system Off from the Part On state.

If the user turns the system Off after an alarm, the system attaches an AFTER ALARM message to the Modem II opening report. See RECEIVER Group page 10 for a description of the Modem II report format.

If you set the O/C Rpts-Part On prompt to No, the system does not send closing reports to the receiver when users turn the system Part On with the 0 (zero) key.

3 Restricted O/C

Default:	No	0
Selections:	Yes, No	1, 0

Set the Restricted O/C prompt to Yes and the system only sends opening reports when the user turns the system Off after an alarm. The system attaches an AFTER ALARM message to the Modem II opening report. See RECEIVER Group, page 10 for a description of the Modem II report format.

With the Restricted O/C prompt set to Yes, the system only sends closing reports when a point is bypassed.

Set the Restricted O/C prompt to No to send unrestricted opening and closing reports.

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4 Delay Alrm Rpt

Default:	0	0
Selections:	0 to 255	0 to 255

Delay Alrm Rpt helps prevent false alarm reports. Reporting characteristics for individual points are programmed in digit two of the Point Code.

Special Voice Verification function when you set the Delay Alrm Rpt prompt to 255. See 255 = Voice Verification below.

If a point with 2, 3, 7, or 8 in Digit 2 creates an alarm event, the system waits the number of seconds you entered at the Delay Alrm Rpt prompt before transmitting reports to the receiver.

If a user enters a passcode to silence an alarm or turns the system Off before Delay Alrm Rpt expires:

- No alarm, cancel, or restoral reports are sent to the receiver for these points.
- All other reports, including alarm reports for points programmed with a 1,4,5,6, or 9 in Digit 2 are sent. If programmed for cancel reports, a cancel report is sent for points with a 1,4,5,6, or 9 for Digit 2.
- 'Missing' alarms are sent as 'missing' troubles, and 'Tamper' alarms are sent as 'tamper' troubles.

If no passcode is entered before Delay Alrm Rpt expires, all reports are sent.

If the system is On with No Delay, alarm output at terminals 6 and 7 follows the alarm delay programmed here. The alarm sounds at the keypad without delay.

When mixing Delay Alarm points (Digit 2 set for 7 or 8), with No Delay Alarm points (Digit 2 set for 5, 6, or 9), the alarm output follows the programmed alarm delay if Delay Alarm points are faulted first.

255 = Voice Verification. Only set the Delay Alrm Rpt prompt to 255 when using an optional 2-way Voice Verification Module. When the Delay Alrm Rpt is set to 255, an alarm event on a point with 2, 3, 7, or 8 in Digit 2, sends an alarm report and begins the 2-way voice verification process. Do not set the Delay Alrm Rpt to 255 if a Voice Verification Module is not connected to the panel as unexpected panel operation will result.

Duress reports and A, B, C Key reports are affected by Alarm Report Delay. These reports are sent immediately in all cases.

SIA (Security Industry Association) recommends the Delay Alarm Report feature be enabled with the delay set to 15 seconds. Enter 15 at this prompt to comply with the SIA recommendation.

Zero (0) disables the Delay Alrm Rpt feature for all points.

5 Cancel Rpt

Default:	Yes	1
Selections:	Yes, No	1, 0

Set the Cancel Rpt prompt to Yes to enable cancel reports. If a user turns the system Off after an alarm, but before bell time expires, the alarm report is followed by a cancel report.

If the user turns the system Off before Delay Alrm Rpt time expires, the panel sends no alarm, cancel, or restoral report for points programmed with a 2, 3, 7, or 8 in digit two of the Point Code.

If you set the Cancel Rpt prompt to No, the panel does not send cancel reports.

6 Restoral Rpts

Default:	Yes	1
Selections:	No, Yes, Delay	0, 1, 2

Set the Restoral Rpts prompt to Yes to send restoral reports to the receiver for all points. The system sends restoral reports when points return to normal (not faulted) after an alarm or trouble report.

Set the Restoral Rpts prompt to No to prevent the system from sending restoral reports for any point.

Set the Restoral Rpts prompt to Delay to delay sending restoral reports until bell time expires.

7 AC Fail Buzz/Rpt

Default:	No Buzz, No Report	0
Selections:	No Buzz, No Report	0
	Buzz, No Report	1
	Buzz, Report	2
	Buzz, Tag-Along Rpt	3
	No Buzz, Report	4
	No Buzz, Tag-Along Rpt	5

The D2212 monitors AC power. When AC power to terminals 1 and 2 is interrupted, the D2212 waits 60 seconds. If AC power is not restored within 60 seconds, it provides the response programmed in AC Fail Buzz/Rpt.

When set to No Buzz, No Report, the system only winks the OK light at the keypad to indicate a system trouble. It does not sound the trouble tone or send a report to the receiver.

When set to Buzz, No Report, the system winks the OK light at the keypad to indicate a system trouble and sounds the trouble tone. No report is sent to the receiver.

When set to Buzz, Report, the system winks the OK light at the keypad, sounds the trouble tone, and sends an AC Fail report to the receiver.

When set to Buzz, Tag-Along Rpt, the system winks the OK light and sounds the trouble tone at the keypad after 60 seconds. It sends an AC Fail report to the receiver as a tag along with all reports sent to the receiver until AC restores.

When set to No Buzz, Report, the system winks the OK light at the keypad and sends an AC Fail report to the receiver.

When set to No Buzz, Tag-Along Rpt, the system winks the OK light. It sends an AC Fail report to the receiver as a tag along with all reports sent to the receiver until AC restores.

8 Point User Flag

Default:	No	0
Selections:	Yes, No	1, 0

Set this prompt to Yes to send a flag with each Modem II report that tells the D6500 to convert the D2212 point numbers to Radionics' D8112 style ZONEX format, and User ID numbers to D8112 type COMEX format.

4. RECEIVER

1 Rcvr Format

Default:	Modem	1
Selections:	Modem, Pulse	1, 0

Set Rcvr Format to Modem to transmit reports in Radionics Modem II format with its advanced reporting capabilities. You must have firmware revision 8.00 or greater installed in your D6500 receiver. The Modem II Reports Chart below shows reports available.

The D6500 Line Card Ack Tone table must contain "Modem II for D9112." See the 6500: Line Program Entry Guide.

Set Rcvr Format to Pulse to transmit in 4x2 Pulse format. Be sure to program codes for each Report Group. See the Pulse Report Group Table on page 15.

Modem II Reports Chart

Modem II Report	Description
AC FAILURE	No AC power to system. Panel is running on battery.
AC RESTORE	AC power is restored to normal.
ALARM REPORT POINT 001 (-099)	Alarm report from points 1 to 24 or from an A, B, C key. See A, B, C KEYS for instructions on setting reports from the keys.
ALARM REPORT RECENT CLOSING ID=001 POINT=001(24)	If there is an alarm within two minutes of a closing event, the system sends an ALARM RECENT CLOSE report.
ALARM CROSS POINT 001 (-099)	Alarm report from points 1 to 24 with point code for Cross or Partner Point The ALARM RECENT CLOSE message overrides the ALARM CROSS POINT message. The ALARM EXIT ERROR message does not apply to Cross, Partner, Double Knock, or Alarm Verification Points.
BATTERY LOW	System battery is low.
BATTERY MISSING	System battery is disconnected. Battery must be missing for 60 seconds.
BATTERY RESTORE	Missing or low battery is restored.
CANCEL REPORT	Cancel report from keyswitch.
CANCEL REPORT ID 001 (-008)	Cancel report with user ID for users 1 to 8.
CLOSING REPORT	Closing report when passcode is not used. See the Passcode Rquired prompt in the PASSCODES Group, page 51. Using a keyswitch or a remote programmer also sends this closing report with no user ID.
CLOSING REPORT ID 001 (-008)	Closing report with user ID for users 1 to 8.

Modem II Report	Description
COMM FAIL PHONE (1-2)	Communication failure event. See Phone 1, Phone 2 in the PHONE Group.
COMM RESTORAL PHONE (1-2)	Successful communication after a communication failure event. See Phone 1, Phone 2 in the PHONE Group.
DURESS ID 008	Passcode 8 used to turn the system On, turn the system Off, or to silence an alarm. See the Code 8 = Duress prompt in the PASSCODES Group.
EXIT ERROR 001 (-024)	When a point is faulted at the end of exit delay, it generates an Exit Alarm. Exit alarm report from points 1 to 24.
FIRE ALARM POINT 001 (-099)	Fire Alarm report from points 1 to 24.
FIRE ALARM CROSS POINT 001 (-024)	Cross Point Fire Alarm report from points 1 to 24.
MISSING ALARM POINT 001 (-024)	Missing non-fire controlled point, point is On (armed). Alarm response locally.
MISSING TROUBLE POINT 001 (-024)	Missing non-fire controlled point, point is Off (disarmed), or 24-hr non-fire point. Trouble response locally.
OPENING REPORT	Turning the system Off with a keyswitch or a remote programmer sends this opening report with no User ID.
OPENING REPORT ID 001 (-008)	Opening report with User ID for users 1 to 8.
OPEN FROM ALARM	Turning the system Off after an alarm with a keyswitch point or a remote programmer sends this opening report with no User ID.
OPEN FROM ALARM ID 001 (-008)	Opening report after an alarm with User ID for users 1 to 8.
PERM INST ARMED	Remote programmer used to turn the system Part On with No Delays, or user turned the system Part On with No Delays and no passcode is required. See the Passcode Rquired prompt in the PASSCODES Group.
PERM INST ARMED ID 001 (-008)	User with ID shown (1 to 8) turned the system Part On with No Delays.
PERM DLAY ARMED	Remote programmer used to turn the system Part On (with Delays), or user turned the system Part On with Delays and no passcode is required. See the Passcode Rquired prompt in the PASSCODES Group.
PERM DLAY ARMED ID 001 (-008)	User with ID shown (1 to 8) turned the system Part On (with Delays).
POINT BYPASS POINT 001 (-024)	Point 1 to 24 bypassed. Points can be bypassed from the keypad or from a remote programmer. Bypass reports are only sent when Opening and Closing reports are enabled in the OPEN/CLOSE Group
RAM ACCESS OK	Normal remote programmer session termination.

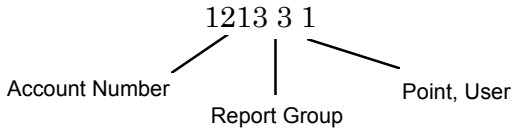
Modem II Report	Description
RAM ACCESS FAIL	Remote programmer made connection with panel, but passcode was incorrect, or call was not terminated with a Good-bye or Reset-Bye.
RESTORAL REPORT POINT 001 (-024)	Restoral report from points 1 to 24.
RE-BOOT	Panel reset with the Standby Pin (See D2212 Installation Manual) or a remote programmer.
RF BATTERY LOW POINT 001 (-024)	Battery is low in RF Sensor, keypad, or arming device.
RF BATT RESTORE POINT 001 (-024)	Battery is restored in RF Sensor, keypad, or arming device.
RF Rcvr Tamper SDI 7 (8)	Enclosure tamper from premises RF receiver (D208RF, D216RF). SDI number is the device address (7 or 8). See ADDRESS CONFIGURATION, page 28.
RF Rcvr Tamper Restoral SDI 7 (8)	Enclosure tamper restoral from premises RF receiver (D208RF, D216RF). SDI number is the device address (7 or 8). See ADDRESS CONFIGURATION, page 28.
RF Rcvr Trouble Device 7 (8)	Trouble from premises RF receiver (D208RF, D216RF). SDI number is the device address (7 or 8). See ADDRESS CONFIGURATION, page 28.
RF Rcvr Trbl Restoral Device 7 (8)	Restoral from premises RF receiver (D208RF, D216RF). SDI number is the device address (7 or 8). See ADDRESS CONFIGURATION, page 28.
RF TAMPER TROUBLE	Tamper RF point, controlled point, system Off.
RF TAMPER RESTORAL	Tamper restoral, RF point.
SERVICE START	Installer mode entered (Standby Switch locked down, Installer passcode entered).
SERVICE STOP	Installer mode exited.
SWINGER BYPASS POINT 001 (-024)	Point 1 to 24 bypassed automatically by the system after four alarms or troubles in one armed or disarmed period. You can program the swinger bypass feature to activate after less than four alarms or troubles. See Swinger Count. Use the point code to program this feature by point. See the POINT CODES Group, page 29.
TEST REPORT	Automatic test timer report.
TROUBLE REPORT POINT 001 (-024)	Trouble on points 1 to 24, Fire and Non-Fire combined.
USR CODE TAMPER	This report transmitted after six attempts to enter an invalid passcode.
WATCHDOG RESET	System automatically reset. Call Radionics if reports persist.

If you choose Modem format, skip to the REMOTE PROGRAMMING Group on page 18. The prompts in the remainder of the RECEIVER Group have no meaning for the Modem format.

Pulse Report Groups

If you select the pulse format, you need to set the report code for each report group. D2212 pulse 4x2 reports consist of a four-digit account number, a one-digit report group code, and a one-digit point or User ID number.

For example, a panel with the Account Number prompt set to 1213, the Rcvr Format prompt set to pulse, the Fire Group prompt set to 3, and point 1 programmed as a fire point would send the following report for an alarm on Point 1.



The pulse format allows for only one digit in the Point, User position. If you install more than eight points and report in pulse format, the D2212 combines reports as shown in the table below.

Point Number reported in Pulse Format	1	2	3	4	5	6	7	8
Point Number displayed at keypad	1	2	3	4	5	6	7	8
	9	10	11	12	13	14	15	16
	17	18	19	20	21	22	23	24

Use the Pulse Report Group Tables on the next three pages to designate Report Group codes for this installation.

Warning! Do not duplicate report group codes. You will not be able to distinguish reports from groups with duplicated codes.

Pulse Report Group Table

The table below shows the Report Group prompts. There are more Report Group prompts on the next two pages.

The expanded reports available in the Modem II format are not available in the pulse format.

Report Group	Default / Selections	Point, User Number	Description
2 Fire Group	0 0 - 9, B - F	1 to 8 9 or 0	Fire alarm from points 1 to 24. Fire alarm from key A, B, or C. See A,B,C KEYS Group. There is no pulse format versions of the Modem II `ALARM CROSS POINT` report. The Cross Point feature creates two point alarms. See the POINT CODES Group, page 29.
3 Non-Fire Group	0 0 - 9, B - F	1 to 8 9 or 0	Non-Fire alarm from points 1 to 24. Non-Fire alarm from key A, B, or C. See A,B,C KEYS Group. There are no pulse format versions of the Modem II `ALARM RECENT CLOSE`, `ALARM CROSS POINT`, or `EXIT ALARM` reports. All occur as ALARM reports. The Cross Point feature creates two point alarms. See the POINT CODES Group, page 29.
4 Pt Trbl Group	0 0 - 9, B - F	1 to 8	Trouble, missing, bypass, or swinger bypass reports from Fire and Non-Fire points combined. Multiple trouble conditions may create duplicate trouble reports. For example: a point could send a trouble for a open sensor loop, then a trouble for missing.
5 Restoral Group	0 0 - 9, B - F	1 to 8	Restoral on points 1 to 24, Fire and Non-Fire combined.
6 Closing Group	0 0 - 9, B - F	0 1 to 8	Closing report when passcode not required to turn system on (see Passcode Rquired prompt on page 52.), or keyswitch is used. Closing report with User ID for users 1 to 8.
7 Opening Group	0 0 - 9, B - F	0 1 to 8	Opening report when keyswitch is used, or Part On no delay, or Part On with delay. Opening report with User ID for users 1 to 8.

Report Group	Default / Selections	Point, User Number	Description
8 Cancel Group	0 0 - 9, B - F	0	Cancel report when keyswitch is used.
		1 to 8	Cancel report with User ID for users 1 to 8.
9 Sys Trbl Group	0 0 - 9, B - F	1	Reports an unsuccessful attempt to connect a remote programmer.
		2	Not used.
		3	The system automatically reset. Call Radionics if reports persist.
		4	Not used.
		5	Not used.
		6	Reports battery is missing.
		7	Reports battery is low.
		8	No AC power to system. Panel is running on battery.
		9	Communication failure event for Phone 1.
		B	Communication failure event for Phone 2.
		C	RF Tamper (points or receiver).
		D	RF Low Battery.
		E	RF Receiver 7 Trouble.
		F	RF Receiver 8 Trouble.
10 Sys Res Group	0 0 - 9, B - F	1	Successful connection to a remote programmer.
		2	Not Used.
		3	Panel reset with the Standby Switch (see the D2212 Installation Manual) or a remote programmer.
		4	Not used.
		5	Not used.
		6	Not used.
		7	Reports missing or low battery restored.
		8	AC power is restored.
		9	Communication restoral for Phone 1.
		B	Communication restoral for Phone 2
		C	RF Tamper Restore (points or receiver).
		D	RF Battery Restore.
		E	RF Receiver 7 Restoral.
		F	RF Receiver 8 Restoral.

Report Group	Default / Selections	Point, User Number	Description
11 Duress Group	0 0 - 9, B - F	1 to 3	Not used.
		4	This report transmitted after six attempts to enter an invalid passcode.
		5	Duress passcode entered at keypad. SeeCode 8 = Duress.
		7,8	Not used.
12 Test Group	0 0 - 9, B - F	1 to 5	Not used.
		6	Service Stop.
		7	Service Start.
		8	Test Report.

5. REMOTE PROGRAMMING

Use the prompts in this group to configure your system for programming with a Radionics remote programmer.

1 RAM Passcode

Default:	999999	999999
Selections:	0 to 9, A to F	0 to 9, A to F

Six characters required. Remote programmers send this code to the panel to gain access to the panel.

2 RAM Phone

Default:	Blank	Blank
Selections:	0 to 9, C, D, #, *, Blank	0 to 9, C, D, #, *, Blank

Enter up to 19 characters for the panel to dial to reach a remote programmer. The# and * characters are only dialed when the panel is programmed for DTMF dialing. See DTMF Dialing. The panel dials these characters just as if you pressed them on a telephone.

If you program a # or * to disable call waiting, warn your customer that canceling Call Waiting service will require a change to their security system.

C produces a three-second dial delay.

D produces a seven-second dial tone wait. If the panel detects dial tone before theseven-second delay expires, it continues dialing immediately.

Remote Programming Initiated from the keypad (Key 2)

If RAM Phoneis blank – After you press the 2-Key and enter your passcode, the D2212 seizes the phone line and waits for the remote programmer handshake.

If RAM Phoneis programmed with a phone number – After you press the 2-Key, the panel seizes the phone line, dials the RAM Phonenumber and waits for the remote programmer handshake.

3 Answer Armed

Default:	0	0
Selections:	0 to 15	0 to 15

Set the number of rings you would like the D2212 to wait before seizing the phone line for a remote programming session when the system is All On (armed).

The D2212 will not seize the phone line when the system is All On (armed) if this prompt is set to 0 (zero).

When Answer Machineis programmed Yes, the entry in Answer Armed has no affect on the panel's operation.

4 Answer Disarmed

Default:	0	0
Selections:	0 to 15	0 to 15

Set the number of rings you would like the D2212 to wait before seizing the phone line for a remote programming session when the system is Off (disarmed), Part On, or On with no delay.

If this prompt is set to 0 (zero), the D2212 will not seize the phone line when the system is Off (disarmed), Part On, or On with no delay.

When Answer Machine is programmed Yes, the entry in Answer Disarmed has no affect on the panel's operation.

5 Answer Machine

Default:	No	0
Selections:	Yes, No	1, 0

Set this prompt to Yes to enable the D2212's answering machine bypass feature.

When Answer Machine is programmed Yes, you must set the answering machine to pick up the phone on four or more rings. This feature does not work if the answering machine picks up the phone after one ring.

When Answer Machine is programmed Yes, the panel picks up the phone for a remote programming session if it detects the following events in order:

Events at the Panel	What you do from the Remote Programmer
1. 2 rings.	Dial the panel phone number. Listen for two rings. Hang up.
2. 30 seconds with no rings.	Wait 30 seconds.
3. 2 rings.	Re-dial the panel phone number. Listen for two rings. Hang up.
4. 30 seconds with no rings.	Wait 30 seconds.
5. D2212 picks up on first ring.	Re-dial the panel phone number. When the D2212 picks up the phone, begin remote programming. If you are using a text keypad "SYSTEM PROGRAM, USING PHONE LINE," appears in the keypad display.

6. OPEN/CLOSE

Use the prompts in this group to set entry and exit delays and other opening/closing options.

1 Entry Dly Time

Default:	30	30
Selections:	0 to 255	0 to 255

Entry delay is the time the system allows users to turn the system off. If the user fails to turn off the system before entry delay expires, an alarm event occurs. Users must enter through a point programmed for entry delay to start the entry delay timer. All controlled points are delayed once the timer starts. See POINT CODES on page 29.

2 Exit Dly Time

Default:	60	60
Selections:	0 to 255	0 to 255

Exit delay is the time the system allows users to exit the premises. All controlled points are delayed once the timer starts. See POINT CODES on page 29.

Exiting through a protected point or moving through a protected area after the exit delay expires causes an alarm event to occur. The D2212 sounds three long tones at the keypads at the end of exit delay.

3 Extended Dly

Default:	120	120
Selections:	0 to 255	0 to 255

Use the Extended Delay for systems requiring extended entry and exit delays for some points. For example: you could use this feature to allow system users to enter and exit through an overhead garage door.

The system uses the Extended Delay for controlled points programmed with B or C for digit one of the point code. If a user starts exit delay and then faults an Extended Point (opens the garage door), the system switches from Exit Delay Time to the Extended Delay. You can program this delay with enough time to allow the user to open the garage door, drive out, and then close the door.

If you bypass an Extended Delay Point, the system switches to the Extended Delay. The system makes the switch even if the point is not faulted when you bypass it.

If you bypass an Extended Delay Point and the point is faulted and then returns to normal within the extended exit delay, the point returns to the system. This allows users to turn the system on with the garage door open and still have protection on the door. Any other point type that is bypassed and returns to normal during exit delay does not automatically return to the system.

If the system is On and a user enters through an Extended Point (opens the garage door) first, the system uses the Extended Delay for entry delay. If the user enters through a point not programmed for extended delay (the front door) first, and then through an Extended Delay Point (opens the garage door), the system will NOT use the Extended Delay for entry delay.

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4 Exit Tone

Default:	Yes	1
Selections:	Yes, No	1, 0

Use this prompt to turn off the keypad tone that annunciates Exit Delay, and the Excursion (Step Outside and Exit) feature.

Program Exit Tone Yes to enable the exit delay tone and excursion tone.

Program Exit Tone No to disable the exit delay tone and excursion tone.

5 No Delay

Default:	Part On	1
Selections:	Disabled, Part On, All On, All & Part	0 to 3

The No Delay feature allows users to turn their system On with no Entry or Exit Delay (Instant Arming). If this prompt is set to Part, users can turn their system Part On with No Delay by pressing the 0 (zero) key twice.

If this prompt is set to All, users can turn their system All On with No Delay by pressing the 9 key twice. If this prompt is set to All & Part, users can turn their system All or Part On with no delay.

If this prompt is set to Disabled, users can not turn their system on with No Delay. Entry and exit delay are always provided.

Selecting Disabled for the No Delay prompt also disables the Excursion Feature. See Excursion below.

6 Excursion

Default:	Disabled	0
Selections:	Disabled	0
	All Step	1
	Part Step	2
	All & Part Step	3
	All Exit	4
	Part Exit	5
	All & Part Exit	6

Use the Excursion prompt to configure the system for either the Step Outside or Exit user features.

Step Outside

If you enable the Step Outside feature, pressing the Clear key at the keypad when the system is On with No Delay starts the Exit delay tone (if Exit Tone is programmed Yes) and bypasses all points programmed for delay (digit 1 of point code is 6 or 8). The rest of the system remains On.

The tone and bypass remain until the user presses the Clear key a second time, returning the system to it's fully On state. If a point is faulted when the user presses the Clear key the second time, the tone and bypass continue. The user must either clear the fault (close the door) or turn the system off with their passcode.

The Step Outside feature allows users to pick up the morning paper or let the dog out without turning the system off.

All Step only allows users access to the Step Outside feature when the system is All On with No Delay (instant).

Part Step only allows users access to the Step Outside feature when the system is Part On with No Delay (instant).

All & Part Step allows users access to the Step Outside feature when either All or Part of the system is On with No Delay (instant).

Exit

If you enable the Exit feature, pressing the Clear key at the keypad when the system is On with No Delay starts exit delay. The system sounds the Exit delay tone (if Exit Tone is programmed Yes) and bypasses all points programmed for exit delay (Digit 1 of point code is 6 or 8). The rest of the system remains Onwith No Delay. The tone and bypass remain until the exit delay expires. The system returns to theOn with No Delay state. The Exit feature allows one user to exit a system that is On with No Delay, leaving whoever is left inside fully protected.

If the user presses Clear during the 'exit delay,' the system returns to On, No Delay.

A faulted point (open door) at the end of 'exit delay' creates an 'Exit Error' alarm.

If there is an alarm within two minutes of the end of 'exit delay,' the system sends an 'Alarm Recent Close' report.

All Exit only allows users access to the Exit feature when the system is All On with No Delay (instant).

Part Exit only allows users access to the Exit feature when the system is Part On with No Delay (instant).

All & Part Exit allows users access to the Exit feature when either All or Part of the system.

7. A,B,C KEYS

Use the prompts in this group to set the report code, the custom text, and alarm output for the keypad's A, B, C keys.

You can program the relay outputs, terminals 11 and 12, to respond to these keys in the RELAYS Group See page 45.

Users must press the A, B, C keys twice to activate them. This 'double action' prevents accidental activation.

If using a 4-Button Keychain Keypad, its special (*) key performs the same functions as programmed for the C key.

1 A-Key Report

Default:	00	0
Selections:	0 to 9 2 digits required for Pulse Format	0 to 9 2 digits required

Enter the report the system transmits to the receiver when a user presses the A-Key, B-Key, or C-Key. The panel does not send reports for the 00 default entry.

Review your entries for the prompts in RECEIVER FORMAT before you program this prompt.

Modem Format Example: If you enter 25 at the A-Key Report prompt, the system transmits `ALARM REPORT POINT=025`, when you press the A-Key.

Pulse Format Example: The first digit you program here sets the report group. The second digit sets the point number. If you enter 10 at the A-Key Report prompt, the system transmits an alarm report, report group 1, point 0.

> Warning! Do not enter a report that conflicts with other system or point reports. The Pulse Report Group Table in RECEIVER FORMAT, page 10, shows all system and point reports. Test the A,B,C buttons to be certain they transmit the reports you expect.

2 A-Key Alarm Output

Default:	No Output	0
Selections:	No Output	0
	Steady	1
	Pulse	2

These prompts set the system response to the key at the Alarm Output, terminals 6 and 7. Set the prompt to Steady for steady output. A user must enter a passcode at the keypad to silence the output before the bell time expires.

Set the prompt to Pulse for a pulsed (Fire) output at the Alarm Output. If the system is programmed for the Modem transmission format (see RECEIVER Group, page 10), the panel sends a fire alarm. A user must enter a passcode at the keypad to silence the output before the bell time expires.

3 A-Key Ack Tone

Default:	No	0
Selections:	Yes, No	1 2

When this prompt is set to Yes, the system sounds an acknowledgment tone at the keypad when the report sent by the activation of the key is acknowledged by the receiver

If the key is not programmed to send reports (see A-Key Report above), there is no acknowledgment tone.

4 A-Key Text

Default:	A-KEY (B-KEY, C-KEY)	A-KEY (B-KEY, C-KEY)
Selections:	A to Z, 0 to 9, ! # , - / : < >	A to Z, 0 to 9, ! # ‘ . , - / : < >

Enter up to 16 Characters of custom text. The system displays this text when the key is activated.

5 B-Key Alarm Report

6 B-Key Output

7 B-Key Ack Tone

8 B-Key Text

See the descriptions for the A-Key prompts above.

9 C-Key Alarm Report (* Key for 4-Button Keychain Keypads)

10 C-Key Output (* Key for 4-Button Keychain Keypads)

11 C-Key Ack Tone (* Key for 4-Button Keychain Keypads)

12 C-Key Text (* Key for 4-Button Keychain Keypads)

See the descriptions for the A-Key prompts above.

8. BELL

The prompts in this group configure the Alarm Output (Bell) at terminals 6 and 7.

1 Bell Timer

Default:	6	6
Selections:	0 to 255	0 to 255

The Bell Time prompt sets the minutes of alarm output at terminals 6 and 7. Both Fire Bell function (pulsed output) and the Burglary Bell function (steady output) follow the Bell Time duration.

Enter the number of minutes of alarm output at terminals 6 and 7 for both fire and burglary (non-fire) functions. If you are using the Alarm on 2 Fail feature, program at least three minutes in Bell Time. See below.

Check with your AHJ (Authority Having Jurisdiction) to determine the appropriate Bell Time for your installation. Many communities restrict bell time.

2 Bell Test

Default:	No	0
Selections:	Yes, No	1, 0

If you set the Bell Test prompt to Yes, the system sounds the bell for two seconds when users turn the system All On with key 9. If the system sends closing reports, the bell sounds when the closing report is acknowledged by the receiver. If the system does not send closing reports, the bell sounds at the expiration of Exit Delay.

3 Single Ring

Default:	No	0
Selections:	Yes, No	1, 0

Set the Single Ring prompt to Yes to limit the alarm output from the same non-fire point to one per arming cycle. Setting this prompt to No allows every alarm activation from a non-fire point to generate an alarm output during an arming cycle.

Fire points always provide alarm output for every alarm activation. Single Ring only affects the alarm output. It does not prevent reports from being sent.

4 Alarm on 2 Fail

Default:	No	0
Selections:	Yes, No	1, 0

Setting the Alarm on 2 Fail prompt to Yes provides an alarm output after two failed attempts to transmit an alarm report from any point when the system is On. Alarm output is provided even if the point is not programmed for alarm output. Bell Time must be programmed with at least three minutes to use the Alarm on 2 Fail feature.

Set this prompt to No if you want to prevent an alarm output from silent points even when the system fails to communicate with the receiver.

See the POINT CODES Group, page 29 for information on programming points for alarm output.

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9. TEST TIMER

The prompts in this group configure the system's automatic test report timer.

1 Test Interval

Default:	No Report	0
Selections:	No Report	0
	1 Day	1
	7 Days	2
	28 Days	3

Set Test Intrval to No Report to disable the test report feature.

Set Test Interval to 1 Day to transmit test reports every 24 hours.

Set Test Interval to 7 Days to transmit test reports every 7 days.

Set Test Interval to 28 Days to transmit test reports every 28 days.

2 Hour to Next

Default:	0	0
Selections:	0 to 23	0 to 23

Enter the number of hours until the next test report at this prompt.

The system adds the entries in the Hours to Next and Minutes to Next prompts and waits that period before it sends the next test report to the receiver. From that report on, the system sends reports at the interval set by the Test Intrvl prompt.

If both the hours and minutes are 0 (zero), the system sends the next report one interval from the end of your programming session.

> If you are using a remote programmer, the waiting period begins after you complete the programming session. If you did not send program changes to the panel during the remote programming session, you must end the programming session with a Reset Bye.
>
> For D5200 or Keypad programming, the waiting period begins after you return the Standby Switch to normal operation.

3 Minutes to Next

Default:	0	0
Selections:	0 to 59	0 to 59

Enter the number of minutes until the next test report at this prompt.

The system adds the entries in the Hours to Next and Minutes to Next prompts and waits that period before it sends the next test report to the receiver. From that report on, the system sends reports at the interval set by the Test Intrvl prompt.

If both the hours and minutes are 0 (zero), the system sends the next report one interval from the end of your programming session.

> If you are using a remote programmer, the waiting period begins after you complete the programming session. You must end the programming session with a Reset Bye.
>
> For D5200 or Keypad programming, the waiting period begins after you return the Standby Switch to normal operation.

4 Defer Test Rpt

Default:	No	0
Selections:	Yes, No	1,0

Set the Defer Test Rpt prompt to Yes to defer the test report one interval if any other report is transmitted in the current interval.

The report is deferred one interval from the time of the last report. For example if the Test Intrvl prompt is set to 1 Day and the system transmits an opening report at 9:00PM, the interval begins at 9:00PM. If the system transmitted no other reports before 9:00PM the following day, at 9:00PM the system would transmit the test report.

10. ADDRESSCONFIGURATION

Use the prompts in this group to configure the system for devices connected to the Data terminal (terminal 8).

Remember, you can only connect four point expanders to the Data terminal (terminal 8). Count Text Keypads with Points as point expanders.

1 Address 1

2 Address 2

3 Address 3

4 Address 4

5 Address 5

6 Address 6

7 Address 7

8 Address 8

Default:	Text Keypad (Address 1) Not Used (Addresses 2-8)	2
Selections:	Not Used	0
	LED Keypad	1
	Text Keypad	2
	Text Keypad with Points	3
	RF Point Expander, 8	4
	RF Point Expander, 16	5
	Point Expander	6

Enter the type of device connected to the system for each address. Remember, you can only connect four point expanders to the system.

Do not connect more than one device with the same address to the panel.

Although LED Keypads have no means to set an address, you must enter the LED Keypad selection for one address if you are going to connect one to the system. Use one address for all LED Keypads.

If you are using one text keypad, you must set its address to Address 1. If you are using more than one text keypad, be sure one of them has its address set to Address 1.

The system stores the master copy of the Custom Idle Text, Custom Service Text, and point text in the text keypad with its address set to 1.

Keypad programming requires a text keypad with its address set to 1. You will always be able to program from a text keypad with its address set to 1, even if you change the Address 1 prompt from the default Text keypad.

If you are using an RF Point Expander, its address must be set for Address 7 or Address 8. If you are using two RF Point Expanders, set one for address 7 and the other for address 8.

11. POINT CODES

Use the Point Code Charts to set afive-digit point code for each point. The point code determines how the system responds to changes on the point sensor loops. Points respond to opens and shorts.RF expansion points respond with 'short' for faulted devices When an RF point is tripped, another trip of the same sensor will not be detected for 5 or more seconds, depending upon sensor type.See the D2212 Installation Manuafor a complete description of point sensor loops.

The charts on the pages that follow show the defaults and selections for programming.

	Default Code/Text		Default Description
1 Point 1	2600A	PT1 FIRE/VERIFY	Fire Point Fire point with alarm verification. Reports and alarm output enabled. Point 1 is powered for two-wire smoke detectors.
2 Point 2	8820A	PT2 PART/DELAY	Delay Door Delayed "Part" point. Point arms when user turns the system Part (or All) On. Point will start entry delay. Reports and alarm output enabled. Trouble on short when the system is off. Swinger bypass enabled. Alarm report delay enabled.
3 Point 3	8820A	PT3 PART/DELAY	Delay Door Same responses as Point 2.
4 Point 4	9820A	PT4 PART/NO DLY	Door, No Delay No Delay "Part" point. Point arms when user turns the system Part (or All) On. Point will not start entry delay. Reports and alarm output enabled. Trouble on short when the system is off. Swinger bypass enabled. Alarm report delay enabled.
5 Point 5	7820A	PT5 ALL/NO DELAY	Motion Detector No Delay "All" point. Point only arms when user turns the system All On. Point will not start entry delay. Reports and alarm output enabled. Trouble on short when the system is off. Swinger bypass enabled. Alarm report delay enabled.
6 Point 6	7820A	PT6 ALL/NO DELAY	Motion Detector Same responses as Point 5.
7 Point 7	7820A	PT7 ALL/NO DELAY	Motion Detector Same responses as Point 5.
8 Point 8	7820A	PT8 ALL/NO DELAY	Motion Detector Same responses as Point 5.
9 to 24 Points 9 to 24	0000A	PT## PT DISABLED	Point Disabled The system does not monitor disabled points.

Digit 1, Point Type

For Digit 1 selections 3, 4, 5, 6, 7, 8, 9, B, C:

- If an alarm occurs on these points within two minutes of a closing (exit time expired, Excursion/Exit included), the system sends a `RECENT CLOSING` message with the alarm report.

For Digit 1 selections 6, 7, 8, 9, B, C:

- If these points are faulted at the end of exit delay, the system waits a period equal to the entry delay before sending an alarm report. If the system is not turned off, it sends an `EXIT ERROR` message with the alarm report.

Set Digit 1 to O (zero) for points used for RF keypads and arming devices:

- If you want to use an RF Keypad or other arming device, you must assign each device to a point number in order to 'learn' the device into the system. SetDigit 1 to 0 for RF Keypad and arming device points.

0 Disabled	Point doesn't respond to opens or shorts. Set digit 1 to 0 if you are using this point number for an RF Keypad or arming device.
1 Fire	Short on sensor loop starts fire alarm response. Open on sensor loop causes trouble response. Fire points are not bypassable. Single Ring programming option does not apply to fire points. 'Missing' fire points generate a trouble response when the system is On or Off.
2 Fire with Alarm Verification (use Fire with Alarm Verification for Point 1 only)	Short on sensor loop starts verification process: 1. Panel removes power to Point 1 for four seconds to reset smoke detectors. 2. Short on loop within 120 seconds of reset starts alarm response. If the point remains normal or open for the 120 second verification window there is no alarm response. Verification is not recommended for RF points. 'Missing' fire points generate a trouble response when the system is On or Off. 'RF Tamper' for fire points generates a trouble response when the system is On or Off. Do not use Fire Alarm Verification points as Cross or Partner points. See Digit 3.

3 Buzz on Fault (Voice Active)	When the panel is off, a short or open buzzes the keypad. When the panel is All or Part On (armed), a short or open causes an alarm response. Buzz on Fault points are not bypassable. Single Ring programming option applies. See Single Ring. Buzz on fault points do not generate trouble reports even if you program Digit 3 to send them. See Digit 3. When you program Digit 3 for trouble reports text keypads display a trouble condition for faults on Buzz on Fault points, otherwise they sound the trouble tone only with no display. 'Missing' Buzz on Fault points generate an alarm response when On, a trouble response when Off. 'RF Tamper' for a Buzz on Fault point generates an alarm response when On, a trouble response when Off. Voice Active Function: When the Delay Alrm Rpt prompt is set to 255, the Buzz on Fault point type works differently for on-board points (see Delay Alrm Rpt on page 7). The Delay Alrm Rpt prompt is only set to 255 when a 2-way Voice Verification Module is connected to the panel. The Voice Verification Module shorts a Buzz on Fault (Voice Active) point to tell the panel a 2-way Voice Verification session is active.

4 24-hour, visible	Short or open causes alarm response if no Trouble option. SeeDigit 3. 24-hour points are not bypassable. Single Ring programming option applies. See Single Ring. 'Missing' 24-hour points generate a trouble response when the system is On or Off. 'RF Tamper' for a 24-hour point generates a trouble response when the system is On or Off.
5 24-hour, invisible	Short or open causes alarm response if no Trouble option. SeeDigit 3. No alarm tones at keypad, except when point is programmed for alarm output. If point is programmed for alarm output, keypad sounds alarm tones for point alarms. Point lights do not light for alarms. 24-hour points are not bypassable. Single Ring programming option applies. See Single Ring. 'Missing' 24-hour points generate a trouble response when the system is On or Off. 'RF Tamper' for a 24-hour point generates a trouble response when the system is On or Off.
6 Controlled, All, Delay	When panel is All On (armed), short or open starts entry delay if no Trouble option. See Digit 3. "All" points must be normal (not faulted) or bypassed before panel can be "All" armed. If an alarm occurs on these points within two minutes of a closing (exit time expired, Excursion/Exit included), the system sends a `RECENT CLOSING` message with the alarm report. If these points are faulted at the end of exit delay, the system waits a period equal to entry delay before sending an alarm report. If the system is not turned off, it sends an `EXIT ERROR` message with the alarm report. 'Missing' Controlled points generate an alarm response when On, a trouble response when Off. 'RF Tamper' for a Controlled point generates an alarm response when On, a trouble response when Off.
7 Controlled, All, No Delay	When panel is All On (armed), short or open causes alarm response. "All" points must be normal (not faulted) or bypassed before panel can be "All" armed. If an alarm occurs on these points within two minutes of a closing (exit time expired, Excursion/Exit included), the system sends a `RECENT CLOSING` message with the alarm report. If these points are faulted at the end of exit delay, the system waits a period equal to entry delay before sending an alarm report. If the system is not turned off, it sends an `EXIT ERROR` message with the alarm report. 'Missing' Controlled points generate an alarm response when On, a trouble response when Off. 'RF Tamper' for a Controlled point generates an alarm response when On, a trouble response when Off.

8 Controlled, Part, Delay	When panel is All or “Part” On (armed) short or open starts entry delay if no Trouble option. See Digit 3. “Part” points must be normal (not faulted) or bypassed before panel can be “Part” armed. If an alarm occurs on these points within two minutes of a closing (exit time expired, Excursion/Exit included), the system sends a RECENT CLOSING message with the alarm report. If these points are faulted at the end of exit delay, the system waits a period equal to entry delay before sending an alarm report. If the system is not turned off, it sends an EXIT ERROR message with the alarm report. ‘Missing’ controlled points generate an alarm response when On, a trouble response when Off. ‘RF Tamper’ for a Controlled point generates an alarm response when On, a trouble response when Off.
9 Controlled, Part, No Delay	When panel is All or Part On (armed), short or open causes alarm response. “Part” points must be normal (not faulted) or bypassed before panel can be “Part” armed. If an alarm occurs on these points within two minutes of a closing (exit time expired, Excursion/Exit included), the system sends a RECENT CLOSING message with the alarm report. If these points are faulted at the end of exit delay, the system waits a period equal to entry delay before sending an alarm report. If the system is not turned off, it sends an EXIT ERROR message with the alarm report. ‘Missing’ Controlled points generate an alarm response when On, a trouble response when Off. ‘RF Tamper’ for a Controlled point generates an alarm response when On, a trouble response when Off.
A Keyswitch	Shorting then restoring Keyswitch points toggles the panel from All (or Part) On to Off, off to All On. The trouble option, see Digit 3, determines how keyswitch points respond to opens when the system is Off. When the system is All or Part On, an open produces an alarm response. A keyswitch always causes a trouble condition if it is opened in the Off state, regardless of the value programmed in Digit 3. If an alarm occurs on these points within two minutes of a closing (exit time expired, Excursion/Exit included), the system sends a RECENT CLOSING message with the alarm report. ‘Missing’ keyswitch points generate an alarm response when On, a trouble response when Off. ‘RF Tamper’ for keyswitch points generates an alarm response when On, a trouble response when Off. On-board Points 7 and 8 are not configurable for keyswitch operation.

B Extended Delay, All	When panel is All On (armed) short or open starts Extended Delay if no Trouble option. See Digit 3. You must fault the extended delay point first. If a non-extended delay point is faulted first, extended delay is not used. Faulting an Extended Delay point when the system is in exit delay extends exit delay to the value programmed in the Extended Delay prompt. See Extended Delay in the OPEN / CLOSE Group for a detailed explanation of the Extended Delay feature. "Extended Delay" points must be normal (not faulted) or bypassed before the system can be "All" armed. If you bypass an Extended Delay Point the system switches to the Extended Delay. The system makes the switch even if the point is not faulted when you bypass it. Extended delay points that are bypassed and then restore during exit delay are automatically unbypassed and returned to the system. If an alarm occurs on these points within two minutes of a closing (exit time expired, Excursion/Exit included), the system sends a RECENT CLOSING message with the alarm report. If these points are faulted at the end of exit delay, the system waits a period equal to entry delay before sending an alarm report. If the system is not turned off, it sends an EXIT ERROR message with the alarm report. 'Missing' Extended delay points generate an alarm response when On, a trouble response when Off. 'RF Tamper' for an Extended delay point generates an alarm response when On, a trouble response when Off.
C Extended Delay, Part	When panel is Part or All On (armed) short or open starts Extended Delay if no Trouble option. See Digit 3. You must fault the extended delay point first. If a non-extended delay point is faulted first, extended delay is not used. Faulting an Extended Delay point when the system is in exit delay extends exit delay to the value programmed in the Extended Delay prompt. See Extended Delay in the OPEN / CLOSE Group for a detailed explanation of the Extended Delay feature. "Extended Delay" points must be normal (not faulted) or bypassed before the system can be "Part" or "All" armed. If you bypass an Extended Delay Point the system switches to the Extended Delay. The system makes the switch even if the point is not faulted when you bypass it. Extended delay points that are bypassed and then restore during exit delay are automatically unbypassed and returned to the system. If an alarm occurs on these points within two minutes of a closing (exit time expired, Excursion/Exit included), the system sends a RECENT CLOSING message with the alarm report. If these points are faulted at the end of exit delay, the system waits a period equal to entry delay before sending an alarm report. If the system is not turned off, it sends an EXIT ERROR message with the alarm report. 'Missing' extended delay points generate an alarm response when On, a trouble response when Off. 'RF Tamper' for extended delay points generates an alarm response when On, a trouble response when Off.

Digit 2, Alarm Response

	0	1	2	3	4	5	6	7	8	9
No Alarm Response- set Digit 2 to 0 (zero) only if you want no alarm response for this point. Set Digit 2 to 0 if you are using this point number for an RF Keypad or arming device.	X									
Reports - Points send alarm, cancel, trouble, bypass, swinger bypass, and restoral reports as programmed. Bypass reports are only sent with closing reports.		X	X	X	X		X	X	X	X
Alarm Report Delay- If a user enters their passcode to silence an alarm before the programmed Alarm Report Delay time expires, the alarm is canceled. No alarm, cancel, or restoral report is sent. Program Delay Alrm Rpt in REPORTS to determine the duration of the delay. Voice Active Function When the Delay Alrm Rpt prompt is set to 255, Alarm Report Delay points (Digit 2 = 2, 3, 7, or 8) begin the 2-way Voice Verification process. See Delay Alrm Rpt on page 7. Duress reports and A, B, C Key reports are NOT affected by the Alarm Report Delay. These reports are sent immediately in all cases.			X	X				X	X	
Swinger Bypass- The Swinger Count prompt in the SYSTEM CONFIGURATION Group sets the swinger count for this Swinger Bypass point option. When the number of alarms or troubles in an armed or disarmed period reaches the swinger count, the system automatically bypasses points programmed for Swinger Bypass. Turning the system Off clears the bypass. If a 24-hour point swinger bypasses while the system is Off, turning the system On (starting exit delay) and then turning the system Off (pressing Clear) clears the bypass.				X	X				X	X
Alarm Output - Points programmed for alarm output provide output at terminals 6 and 7 as part of the alarm response. Fire points provide a pulsed output. Non-Fire points provide a steady output. Output lasts for the duration programmed in Bell Time. Fire output always takes precedence over non-fire output.						X	X	X	X	X

Digit 3, Point Operations

If Digit 1 is set to 1 (fire point) and Digit 3 is set to 9, the point functions as a Cross Fire Point. If Digit 1 is set to 1 and Digit 3 is set to D, the point functions as a Partner Fire Point. Programming digit 3 to other than 9, 0, or D (when Digit 1 = 1, fire point) causes inappropriate point behavior.

	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
No Point Options- set Digit 3 to 0 (zero) for no point options. Set Digit 3 to 0 if you are using this point for an RF Keypad or arming device.	X															
Trouble on Open- An Open on the sensor loop for 24-hour points (Digit 1 = 4, 5, or A) causes a trouble response when the panel is Off, All, or Part On. When the system is On, Controlled, Delay Points (Digit 1 = 6 or 8) start entry delay on short only. An open causes an instant alarm. When the system is Off, an open causes a trouble response. When the system is NOT disarmed, an open on a keyswitch (Digit 1=A) causes an instant alarm.		X				X				X				X		
Trouble on Short- A short on the sensor loop for 24-hr. points (Digit 1 = 4 or 5) causes a trouble response when the panel is Off, All, or Part On. When the system is On, Controlled, Delay Points (Digit 1 = 6 or 8) start entry delay on an open only. A short causes an instant alarm.			X				X				X				X	
Trouble on Open or Short- An Open or Short on the sensor loop for 24-hour points (Digit 1 = 4 or 5) causes a trouble response when the panel is Off, All, or Part On. When the system is On, Controlled, Delay Points (Digit 1 = 6 or 8) create instant alarms on an open or short.				X				X				X				X
Double Knock- Points programmed for double knock require two alarm activations within 120 seconds (open and/or short on the sensor loop) before the system begins an alarm response. If the point returns to and remains in a normal or trouble condition for the duration of the 120 second double knock window, there is no alarm response. Do not use Double Knock with the Keyswitch point type.					X	X	X	X								

Cross Point- Cross Points are paired with a Partner Point The Partner Point is always the next highest point number. For example, if Point 1 is a Cross Point, Point 2 must be its Partner Point. Cross and Partner points require an alarm activation on their paired point within 120 seconds (open and/or short on the sensor loop) before the system begins an alarm response. If a cross (or partner) point returns to the normal state in the 120 second Cross Point window and there is no alarm event on the point its paired with, there is no alarm response. If the point remains in alarm for the duration of the 120 second Cross Point window, the panel generates an alarm response, even if the point its paired with does not go into alarm. If you Bypass a Cross or Partner Point, it swinger Bypasses, or it is in a trouble condition (point trouble, RF trouble, missing) its paired point generates alarm responses on its own. Alarm reports will not include the CROSS POINT message unless the alarm response is generated by both points of the pair. If a Cross (or Partner) Point is not paired with a Partner (or Cross Point), it generates alarm responses on its own. Radionics recommends that you do not pair different point types for the Cross/Partner function.								X	X	X	X				
Partner Point- See Cross Pointabove.												X	X	X	X

Digit 4, Device Address

Digit 4 tells the system what device a point is connected to. Digit 5 tells the system the sensor loop on the device. The panel's on-board points are numbered 1 to 8. Leave Digits 4 and 5 at their default setting ('0' for Digit 4, 'A' for Digit 5) for on-board sensor loops. If you program a point number less than 8 to a point expander, the system ignores the panel's on-board sensor loop for that point.

For example: to make Point 5 a motion detector connected to loop D of a D222 Text Keypad with Address 7, set the Address 7 prompt in the ADDRESS CONFIGURATION Group and Digits 4 and 5 of the point code as follows:

- Address 7 = Text Keypad with Points
- Digit 4 = 7
- Digit 5 = D (motion detector wired to loop D of the D222 Text Keypad)

The panel ignores the on-board sensor loop for Point 5.

Although eight addresses are available, you can only connect four devices with point expansion to the panel's 'DATA' terminal.

Important! Points with Digit 4 set to an address that is not programmed for a point expander will not generate alarm, trouble, or missing reports. Check the ADDRESS CONFIGURATION Group to be certain that any address programmed in Digit 4 of a point code is programmed for a point expander.

	0	1	2	3	4	5	6	7	8
On-Board - Detection devices for this point are connected to one of the panel's on-board sensor loops.	X								
Address 1 - Detection devices for this point are connected to an expansion device with Address 1. If you are connecting a text keypad to the system, you must use Address 1. If you connect more than one text keypad, make sure one of the keypads is set for Address 1.		X							
Address 2 - Detection devices for this point are connected to an expansion device with Address 2.			X						
Address 3 - Detection devices for this point are connected to an expansion device with Address 3.				X					
Address 4 - Detection devices for this point are connected to an expansion device with Address 4.					X				
Address 5 - Detection devices for this point are connected to an expansion device with Address 5.						X			
Address 6 - Detection devices for this point are connected to an expansion device with Address 6.							X		
Address 7 - Detection devices for this point are connected to an expansion device with Address 7. If you are connecting a RF Point Expander to the system, it can only use Address 7 or Address 8.								X	
Address 8 - Detection devices for this point are connected to an expansion device with Address 8. If you are connecting a RF Point Expander to the system, it can only use Address 7 or Address 8.									X

Digit 5, Sensor Loop

Digit 5 of the point code tells the panel what sensor loop to use for the point. Sensor loops for off-board points are lettered (A to P). Enter the letter of the sensor loop you're using for this point.

For example, to make Point 5 a motion detector connected to loop D of a D222 Text Keypad with Address 7, set Digits 4 and 5 of the point code as follows:

- Digit 4 = 7 (keypad set for Address 7)
- Digit 5 = D (motion detector wired to loop D of the D222 Text Keypad)

The panel ignores the on-board sensor loop for Point 5.

If you have an RF point expander connected to the system and are using an RF keypad, you must assign the keypad a point number.

For example, you could include a D204RF Keypad in your system by following the steps below.

1. Connect a D208RF Point Expander module to the panel as shown in the module instructions.
2. Select a point number for the RF keypad. Low battery reports for the keypad will include this point number. You might want to assign RF keypads to the highest point numbers to avoid having the keypads appear in the middle of points assigned to detection devices.
3. Program the point code for the point selected in step 2. Digits 1, 2, and 3 should be set to 0. Digit 4 should be set to the address of the point expander you connected in step 1. Remember RF point expanders can only use addresses 7 or 8. Set Digit 5 to the sensor loop on the point expander you want to use for the RF keypad.
4. 'Learn' the keypad into the system as the point number you selected in step 2. The Keypad Diagnostics Manual contains complete instructions for learning RF points.

The panel's on-board sensor loops are fixed to point numbers as labeled on the panel, 1 to 8. If you are using an on-board sensor loop, you need to set Digit 4 to 0 (zero). You can leave Digit 5 at the default, 'A.' The panel actually ignores Digit 5 if Digit 4 is set to 0 (zero).

Selection	Digit 1 Point Type	Digit 2 Alarm Response	Digit 3 Point Options	Digit 4 Device Address	Digit 5 Sensor Loop
0	Disabled Set to 0 for RF keypad.	No reports, No Swinger, No Output Set to 0 for RF keypad	No Troubles, Not Cross Point, Not Partner Point Set Digit 3 to 0 for RF keypad	On-Board	
1	Fire	Reports, No Report Delay, No Swinger, No Output	Trouble Open, No Trouble Short, No Double Knock, No Cross Point, No Partner Point	Device Address 1	
2	Fire w/Alarm Verify (use w/ Point 1 only)	Reports, Report Delay, No Swinger, No Output	No Trouble Open, Trouble Short, No Double Knock, No Cross Point, No Partner Point	Device Address 2	
3	Buzz on Fault	Reports, Report Delay, Swinger, No Output	Trouble Open, Trouble Short, No Double Knock, No Cross Point, No Partner Point	Device Address 3	
4	24hr, Visible	Reports, No Report Delay, Swinger, No Output	No Trouble Open, No Trouble Short, Double Knock, No Cross Point, No Partner Point	Device Address 4	
5	24hr, Invisible	No Reports, No Report Delay, No Swinger, Output	Trouble Open, No Trouble Short, Double Knock, No Cross Point, No Partner Point	Device Address 5	
6	Controlled, All, Delay	Reports, No Report Delay, No Swinger, Output	No Trouble Open, Trouble Short, Double Knock, No Cross Point, No Partner Point	Device Address 6	
7	Controlled, All No Delay	Reports, Report Delay, No Swinger, Output	Trouble Open, Trouble Short, Double Knock, No Cross Point, No Partner Point	Device Address 7	
8	Controlled, Part, Delay	Reports, Report Delay, Swinger, Output	No Trouble Open, No Trouble Short, No Double Knock, Cross Point, No Partner Point	Device Address 8	
9	Controlled, Part, No Delay	Reports, No Report Delay, Swinger, Output	Trouble Open, No Trouble Short, No Double Knock, Cross Point, No Partner Point		
A	Keyswitch		No Trouble Open, Trouble Short, No Double Knock, Cross Point, No Partner Point		A
B	Extended Delay, All		Trouble Open, Trouble Short, No Double Knock, Cross Point, No Partner Point		B
C	Extended Delay, Part		No Trouble Open, No Trouble Short, No Double Knock, No Cross Point, Partner Point		C
D			Trouble Open, No Trouble Short, No Double Knock, No Cross Point, Partner Point		D
E			No Trouble Open, Trouble Short, No Double Knock, No Cross Point, Partner Point		E
F			Trouble Open, Trouble Short, No Double Knock, No Cross Point, Partner Point		F
G to P					G to P

Some Recommended Point Codes

The tables below show some recommended point codes. Many other point code options are available. You can create custom point functionality using the many point features available. Be sure to thoroughly test any point code to be certain the system functions as you expect.

Smoke Detector
(trouble on open, alarm output)

	Reports	Local
Alarm Verification (Pt 1 only)	260##	250##
No Verification	160##	150##
Cross Point	168##	158##
Partner Point	16C##	15C##
RF Point	160##	150##

Door with Entry/Exit Delay
(swinger bypass, alarm output, alarm report delay)

	Reports	Local
Delay on Open Trouble on Short	882##	852##
Delay on Short Trouble on Open	881##	851##
Delay on Open or Short No Troubles	880##	850##
RF Point	880##	850##

Door or Window with No Entry/Exit Delay
(swinger bypass, alarm output, alarm report delay)

	Reports	Local
Trouble on Short	982##	952##
Trouble on Open	981##	951##
No Troubles	980##	950##
RF Point	980##	950##

Garage Door with Extended Entry/Exit Delay
(swinger bypass, alarm output, alarm report delay)

	Reports	Local
Trouble on Short	B82##	B52##
Trouble on Open	B81##	B51##
No Troubles	B80##	B50##
RF Point	B80##	B50##

Motion Detector
(swinger bypass, alarm output, alarm report delay)

	Reports	Local
Trouble on Short	782##	752##
Trouble on Open	781##	751##
No Troubles	780##	750##
Cross Point Trouble on Short	78A##	75A##
Cross Point Trouble on Open	789##	759##
Cross Point No Troubles	788##	758##
Partner Point Trouble on Short	78E##	75E##
Partner Point Trouble on Open	78D##	75D##
Partner Point No Troubles	78C##	75C##
RF Point	780##	750##

Tamper
(swinger bypass, alarm output, alarm report delay)

	Reports	Local
Trouble on Short	782##	752##
Trouble on Open	781##	751##
No Troubles	780##	750##
RF Point	780##	750##

RF Keyswitch or Other Arming Device
(no alarm response)

RF arming devices do not create ‘point’ alarms. Program all points assigned to RF keypads or other RF arming devices to 000###.

Panic Device
(swinger bypass)

	Reports	Local
Silent, Invisible Alarm on Open Trouble on Short	542##	552##
Silent, Invisible Alarm on Short Trouble on Open	541##	551##
Silent, Invisible	540##	550##
Alarm on Open or Short No Troubles		
Alarm Output Alarm on Open Trouble on Short	592##	552##
Alarm Output Alarm on Short Trouble on Open	591##	551##
Alarm Output	590##	550##
Alarm on Open or Short No Troubles		
RF Point Silent, Invisible	540##	550##
RF Point Alarm Output	540##	550##

Keyswitch
(swinger bypass, alarm output)

	Reports	Local
Trouble on Open	A91##	A51##

On-board points 7 and 8 are not configurable for Keyswitch Operation.

12. POINT TEXT

1 to 24 Point Text		
Default:	See Point Code Table.	
Selections:	A to Z, 0 to 9, ! # ‘ , - / : < >	A to Z, 0 to 9, ! # ‘ , - / : < >

Enter custom text to appear in text keypads for each point. The default text appears in the point code table at the beginning of the POINT CODES Group section of this manual.

Up to 15 Seconds for Text to Load: It may take up to 15 seconds for the custom text you program here to appear in all text keypads connected to the system.

13. RELAYS

A D133 Relay Module is required to use the system's external relay outputs (terminals 11 and 12). One module is required for each output used. See the D2212 Installation Manual for instructions.

You can program each of the system's two relay outputs with one or two functions. With the Relay # Logic prompts, you can configure the outputs so that they activate when the condition for either function exists, or only activate when the conditions for both functions exist.

The D5200 programmer displays an additional Relay Parameter prompt if the relay function you've selected requires that you program additional information.

For example: if you select the Follow Point function for Relay 1, Func 1 and press Enter, the D5200 displays the parameter prompts - Point 1 (Yes, No), followed by Point 2 (Yes, No), ... and finally Point 24 (Yes, No). The parameter prompts tell the system what points the relay is to follow.

If you select Reset for Relay 1, Func 1 and press Enter, the D5200 goes directly to Relay 1, Func 2. The Reset function does not require any parameters.

Relay Function Logic

The Relay 1, and Relay 2, Logic prompts allow you to further define the conditions under which the panel activates the relay drivers.

1 Relay 1 Logic

2 Relay 2 Logic

Default:	Function 1 Only	0
Selections:	Function 1 Only	0
	Function 1 or 2	1
	Function 1 and 2	2

When Relay 1 Logic or Relay 2 Logic is set to Function 1 Only, the system activates the relay output when Function 1 calls for activation. Function 2 is ignored.

When Relay 1 Logic or Relay 2 Logic is set to Function 1 or 2, the system activates the relay output when either Function 1 or Function 2 calls for activation, or when both do.

When Relay 1 Logic or Relay 2 Logic is set to Function 1 and Function 2, both Function 1 and Function 2 must call for activation before the system activates the relay output.

Relay Functions

3 Relay 1, Func 1

Default: No Output | 0 to 24

Selections: See Relay Function Selections

The Relay 1, Func 1 prompt sets Function 1 for Relay Output 1 (terminal 11).

4 Relay 1, Func 2

Default: No Output | 0 to 24

Selections: See Relay Function Selections

The Relay 1, Func 2 prompt sets Function 2 for Relay Output 1 (terminal 11).

5 Relay 2, Func 1

Default: No Output | 0 to 24

Selections: See Relay Function Selections

The Relay 2, Func 1 prompt sets Function 1 for Relay Output 2 (terminal 12).

6 Relay 2, Func 2

Default: No Output | 0 to 24

Selections: See Relay Function Selections

The Relay 2, Func 2 prompt sets Function 2 for Relay Output 2 (terminal 12).

Relay Function Selections

Programmers / Keypad		Description
No Output	0	No output at the relay terminal.
Alarm	1	Provides a steady output when a point is in an alarm condition. The relay output follows Bell Time. This output does not occur for alarms caused by A, B, C Keys. Entering a combination to acknowledge an alarm resets the relay. Select the points to monitor for alarms at the Parameter prompt.
Alarm Memory	2	Provides a steady output when a point shows alarm memory at the keypad. Turning the system On clears alarm memory and ends the output. This output does not occur for alarms caused by A, B, C Keys. Select the points to monitor for alarm memory at the Parameter prompt.

Programmers / Keypad		Description
Point Trouble	3	Provides a steady output when selected points are in trouble. Select the points to monitor for troubles at the Parameter prompt.
Follow Point	4	Provides a steady output when selected points are faulted (including point trouble and alarm). Select the points to monitor for faults at the Parameter prompt.
Watch Tone	5	Activates the relay output in parallel to the watch tone for selected points. See Key 7, Watch Tonein the User's Guide If you set the watch tone to No Tone, the Watch Tone relay does not activate. Select the points for Watch Tone monitor at the Parameter prompt.
A,B,C Key, Steady	6	Activates the relay output when a user presses a selected function key. The relay output remains activated until a user performs a System Reset (presses 3 and enters their passcode). Select the Function Keys to monitor at the Parameter prompt.
A,B,C Key, Pulse	7	Activates the relay output when a user presses a selected function key. The relay output pulses until a user performs a System Reset (presses 3 and enters their passcode). Select the Function Keys to monitor at the Parameter prompt.
A,B,C Key, Momentary	8	Activates the relay output when a user presses a selected function key. The relay output activates for ten seconds. Do not program both relays for this function, doing so may cause inconsistent relay operation Select the Function Keys to monitor at the Parameter prompt.
Off with Passcode	9	Activates the relay for ten seconds when a selected user turns the system off with a passcode. Do not program both relays for this function, doing so may cause inconsistent relay operation. Select the Users to monitor at the Parameter prompt.
Follow Alarm Output	10	Parallels activity at the alarm output (terminals 6 and 7).
All On	11	Activates the relay at the start of exit delay when the system is All On. The output remains activated until the system is turned off.
Part On	12	Activates the relay at the start of exit delay when the system is Part On. The output remains activated until the system is turned off.
Reset	13	Activates the relay output when a user presses the 3 key to reset the system. The relay output activates for four seconds. Do not program both relays for this function, doing so may cause inconsistent relay operation
AC Failure	14	Provides a steady output when the system detects a loss of power at terminals 1 and 2. The driver remains activated until AC power restores.
Battery Trouble	15	Provides a steady output when the system detects a low or missing battery condition. The relay remains activated until the battery restores.
Communication Fail	16	Provides a steady output when the system fails to communicate with the receiver within ten dialing attempts when two phone numbers are programmed, or five dialing attempts when one phone number is programmed. The relay remains activated until the system successfully communicates a report to the receiver.
Communicating	17	Activates the relay output when the system seizes the phone line. The relay remains activated until the system releases the phone line.

Programmers / Keypad		Description
Ground Start	18	Activates the relay output for 900 milliseconds after the system seizes the phone line. Use this function to generate dial tone on ground start systems. Do not program both relays for this function; doing so may cause inconsistent relay operation.
Entry and Exit Delay	19	Relay provides a steady output during entry and exit delays.
Extended Delay	20	Relay provides a steady output during extended delay. The relay will not activate if you fault an extended delay point before you start exit delay, or if you bypass the extended delay point while you are in exit delay.
Pulsed Output	21	This function provides a continuous pulsed output. Do not assign this function to a relay without 'anding' it to another function. See Relay 1 (2) Logic. For example: 'anding' this function to the Alarm function results in pulsed output for the duration of Bell Time. The Pulsed Output does not activate when alarms from A, B, C Keys occur.
2-Second Output	22	Provides a two-second output. 'And' this function to another function for a two-second output. See Relay 1 (2) Logic. For example: 'anding' this function to the Follow Point function results in a two-second relay activation on a point fault. 2-Second Output does not activate when alarms from A, B, C Keys occur. Do not 'and' this function to the A B C Key, Momentary, A B C Key, Pulse, Ground Start, or Follow Alarm Output functions. Do not use this function for both Relay 1 and Relay 2.
RF, Light Key	23	Pressing the 'light' key (light bulb graphic) on RF keypads toggles this relay off and on.
Voice Request	24	The Voice Request relay function is intended for use with an optional 2-way Voice Verification Module. The Voice Request relay activates for two seconds when the acknowledgment of an alarm report from an Alarm Report Delay point (Digit 2 = 2, 3, 7, or 8) is received at the panel. Panels with firmware revision 2.5 or earlier, Relay function 24 does not provide the Voice Request Function. For those panels, Relay Function 24 is RF Special Key.

RELAY PARAMETERS (for Keypad Programming Only)

The parameter prompts shown in the tables that follow are for programming from the keypad.

If you didn't program one of the Relay Functions (the first four prompts in this group) with a Relay Function from 1 to 9 (see Relay Selections), or you left the RELAYS Group prompts at their defaults, leave the prompts below at their defaults.

If you selected a Relay Function from 1 to 9, you need to program a parameter for that function. Take care to read the instructions carefully.

Each relay parameter has its own group. Each prompt in the group allows you to assign a point or user to the relay function.

For example: if you chose Alarm for the relay 1, function 1; you would use the prompts in Group 18, Relay 1, Func 1 Parameter to tell the system which points you wanted to activate the relay.

Group	Prompt	Default
18 Relay 1, Func 1 Parameter	1 Point 1 (or User 1) 2 Point 2 (or User 2) to . . . 24 Point 24	No No No
19 Relay 1, Func 2 Parameter	1 Point 1 (or User 1) 2 Point 2 (or User 2) to . . . 24 Point 24	No No No
20 Relay 2, Func 1 Parameter	1 Point 1 (or User 1) 2 Point 2 (or User 2) to . . . 24 Point 24	No No No
21 Relay 2, Func 2 Parameter	1 Point 1 (or User 1) 2 Point 2 (or User 2) to . . . 24 Point 24	No No No

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14. USER TEST

If the user presses 1 at the keypad and then enters their passcode, the system performs a user test. Prompts 1 to 3 tell the system what functions to perform for the user test.

1 Usr Tst, Bell

Default:	No	0
Selections:	Yes, No	1,0

Setting the Usr Tst, Bell prompt to Yes makes a bell test part of the user test. The system activates the Alarm Output (terminals 6 and 7) for three seconds. Light 1 on the keypad winks for the duration of the test.

Set this prompt to Yes for UL 1023, Household Fire systems.

2 Usr Tst, Battery

Default:	No	0
Selections:	Yes, No	1,0

Setting the Usr Tst, Battery prompt to Yes makes a battery test part of the user test. Pressing 1 causes the system to run solely on battery power for four minutes. Light 1 winks while the panel is on battery power. If the battery voltage falls below 12.1 VDC during that four minutes, the system restores AC power and displays a system trouble at the keypad by flashing the OK light. See System Troubles in the User's Guide.

The system sends a low battery report to the receiver.

Users can end the test by pressing the Clear key.

Set this prompt to Yes for UL 1023, Household Fire systems.

3 Usr Tst, Comm

Default:	No	0
Selections:	Yes, No	1,0

Setting the Usr Tst, Comm prompt to Yes makes a communication test part of the user test. When the user presses 1 and enters a passcode, the system sends a test report to the receiver. Light 1 winks during the test. If the system fails to communicate with the receiver, the system goes into Communication Failure and displays a system trouble at the keypad by flashing the OK light. See Check System in the User's Guide.

The system makes five attempts to send the report if only one phone number is programmed. It makes ten attempts if two numbers are programmed. See Phone 1, Phone 2 in the PHONE Group, page 3.

15. PASSCODES

If you are programming from the keypad, you must exit the programming mode to program passcodes. Use Show User (the 6 key) and your installer passcode. Follow the instructions in the Security System User's Guide.

1 Instlr Code

Default:	654321	654321
Selections:	0 to 9, Blank	0 to 9

Installers enter this passcode to perform keypad programming. They can also use it to perform tests and to change passcodes. You can not use the installer's passcode to turn the system off.

The installer passcode always requires six digits. Even when the Passcode Length prompt (next prompt) is less than 6, you must enter six digits for this prompt. If you enter less than six digits and increase the Passcode Length later, the Installer Code is disabled.

The D5200 and remote programmers will not let you program the same passcode for the installer and a user. The system will prevent users changing their own passcodes at the keypad from duplicating the installer code. However, the system does not prevent installers programming from the keypad from programming the same passcode for the installer and a user.

Use the D5200 or Remote Programmer to fill this prompt with spaces to disable the installer passcode.

2 Passcode Length

Default:	3	3
Selections:	3 to 6	3 to 6

You can fix the length of user passcodes from 3 to 6 digits. All passcodes have the same length.

> Warning! If you shorten the passcode length after entering passcodes, you could possibly create duplicate passcodes. For example passcodes 1235 and 1236 both shorten to 123.
>
> If you lengthen passcodes you disable some. For example if you add passcode 396 and then increase the passcode length to four digits, 396 becomes 396F. It is not possible to enter an F from the keypad. Passcode 396 has effectively been disabled.

3 Code 8 = Duress

Default:	No	0
Selections:	Yes, No	1, 0

Setting this prompt to Yes makes the passcode for User 8 the duress passcode. The passcode will operate the system normally and send a duress report to the receiver.

4 Passcode Rquired

Default:	No	0
Selections:	Yes, No	1, 0

Setting this prompt to Yes configures the system so that users have to enter a passcode to turn the system on (press 9, enter passcode).

Pressing 9 after entering the passcode turns System All On with no delay (press 9, enter passcode, press 9).

To turn the system Part On, users press 0 then enter their passcode (press 0, enter passcode). Pressing 0 after entering the passcode turns the System Part On with no delay (press 0, enter passcode, press 0).

5 Change Passcode

Default:	Owner & User	2
Selections:	Disabled	0
	Owner	1
	Owner & User	2

Disabled prevents any user from changing their passcode from the keypad.

Owner only allows Owner types to change passcodes from the keypad.

Owner & User allows Owner and User types to change passcodes from the keypad.

The Security System User's Guide provided with each keypad contains complete instructions for changing passcodes from the keypad.

Prompts 6 through 21 allow you to choose Passcode Type and to input a unique passcode for up to 8 users.

Passcode # Type

(There are 8 passcodes available. The "#" represents passcodes 1 to 8.)

Default:	Owner (for User 1) Disabled (for Users 2 to 8)	See User's Guide for instructions on setting User Type.
Selections:	Disabled Owner User One-Time	

Disabled disables the passcode.

Owner allows the user to change other users' passcodes and passcode types, and is required to configure the "Watch Tone" responses. All other user functions are also available.

User allows a user to change only their own passcode. A User passcode type can not change passcode type. A User can not change other users' passcodes. A User can not adjust "Watch Tone" responses. All other user functions are available.

One-Time allows the user to disarm the system one time. All other system functions are available. Owners can reactivate One-Time passcodes.

Passcode

(There are eight passcodes available. The "#" represents passcode number 1 to 8.)

Default:	123 (456) for Passcode 1 Blank for Passcodes 2 to 8	See User's Guide for instructions on setting User Passcodes.
Selections:	0 to 9, Blank	

The Passcode # prompt sets the passcode for each user.

The passcode length for all passcodes is set by the Passcode Length prompt. Enter the number of digits for the passcode set by the Passcode Length.

Note that Usr 1 Passcode in the default program is 123456. Passcode Length in the default program is set at 3. Effectively, the passcode for User 1 is 123.

- If you change Passcode Length to 4, the Passcode 1 becomes 1234.
- If you change Passcode Length to 5, the Passcode 1 becomes 12345.
- If you change Passcode Length to 6, the Passcode 1 becomes 123456.

16. RF PARAMETERS

Use the prompts in this group to configure the system for Premises RF devices. If you don't intend to use RF devices, there is no need to change these prompts from their defaults.

1 Supervision Interval

Default:	24 (hours)	1
Selections:	12, 24	0,1

The Supervision Intervalis the number of hours the RF receiver waits to hear from an RF point before it sends a missing report to the receiver for that point.

DANGER!

If you're programming from the keypad, you can lock yourself out of the panel by changing prompts in this group from their defaults!

17. PROGRAM LOCK

Use the prompts in this group to return all prompts to their factory defaults, lock out programming from the keypad, and disable the system.

1 Return to Default
(Keypad Programming Only

Default:	This prompt only appears when programming from the Keypad.	0
Selections:		1,0

This prompt only appears during Keypad programming. Entering 1 returns all prompts to their factory defaults. The change occurs when you press the Modify key after making your entry. SeeKeypad Programmingon the next page for instructions on using the Modify key.

The DataLock code does not return to its default. DataLock codes can only be changed using the D5200 programmer or a remote programmer.

2 Program Lock

Default:	No	0
Selections:	Yes, No	1, 0

Set this prompt to Yes to prevent programming from the keypad. Use the D5200 or a remote programmer to re-activate keypad programming.

Programming from the Keypad? Don't accidentally lock yourself out of the panel's keypad programming feature by changing this prompt to 1. Changes to this program item take effect when you exit keypad programming.

3 Disable System

Default:	No	0
Selections:	Yes, No	1, 0

Set this prompt to Yes to disable the system. Point processing stops and the keypad stops functioningwhen you unlock the Standby Switch at the conclusion of the programming session. Keypads indicate a system trouble. Text keypads display "DISABLE" and the text you programmed inCustom Service Text

> Warning! You cannot enable the system from the keypad after setting this prompt to Yes. The system turns off all user and installer functionsYou must use the D5200 programmer or a remote programmer to enable the system after using this prompt to disable it.

Keypad Programming

Getting Started

Text Keypad Required: You must have a text keypad with its address set to 1 connected to the panel to use keypad programming. You can not program the D2212 from an LED keypad. You don't need to leave the text keypad connected to the system after the programming session.

You do not have to reserve an address for a text keypad to use keypad programming. When the standby switch is locked down, the system will allow you to use a text keypad with its address set to 1 for keypad programming, even though address 1 may be programmed for another device.

Follow the steps below to start keypad programming:

1. Lock the D2212 Standby Switch down. You must connect a D222 Text Keypad (Address set to 1) to the panel to program. The D222 can be removed after programming.
2. Press the 1 key on the D222 keypad.
3. Enter your "Installer" passcode. The default Installer passcode is 654321. The default passcode length is 3, so if you have not changed the default entries, press 654.

   The keypad begins scrolling the installer menu.
4. Press the 8 key to enter keypad programming, View Mode. If you press the CLEAR key now the keypad exits the programming mode and returns to the installer menu.

View Mode

What's View Mode?

In View Mode you are able to 'view' each program prompt. You must enter the Modify Mode to make changes for any prompt. When you first enter View Mode you are at Group 1, Prompt 1. The example below shows Group 1, Prompt 1, Account Number, with an entry of 1234.

```
1.1
1234
```

The group and prompt number appear in line 1. For most prompts, the current entry for the prompt is in line 2. The exceptions are the prompts containing phone numbers, Phone 1, Phone 2, and RAM Phone. The first seven characters for these prompts appear on line 1 with the group and prompt numbers. The remaining characters appear on line 2.

View Mode Keys

A-Key	Pressing the A-Key while in View Mode enters Modify Mode where you can change the entry for a prompt. Modify Mode is described in the next section.
B-Key	Pressing the B-Key in View Mode moves you to the first prompt in the previous group. If you were at 3.2 (group 3, prompt 2), pressing the B-Key would move you to 2.1 (group 2, prompt 1).
C-Key	Pressing the C-Key in View Mode moves you to the first prompt in the next group. If you were at 3.2 (group 3, prompt 2), pressing the C-Key would move you to 4.1 (group 4, prompt 1).
*-Key	Pressing the *-Key in View Mode moves you to the next prompt in the group. If you are at the last prompt in the group when you press the * key the system wraps to prompt 1.
Clear	Pressing the Clear-Key in View Mode exits keypad programming.

Modify Mode

What's Modify Mode?

In Modify Mode you are able to 'modify' the entry for any prompt. Pressing the A-Key in view mode puts the system in modify mode. MOD (short for modify) appears to the right of the group and prompt numbers. See below.

```
1.1 MOD
B
```

The current entry for the prompt is cleared from line 2 of the display. The first character of the scroll list appears in the leftmost position of the display. Using the scroll list to complete the new entry is described below. See Modify Mode Keys below.

Even though the current value of the prompt was cleared when you entered modify mode, you can leave modify mode and return to view mode without changing the entry by pressing the Clear key.

Modify Mode Keys

A-Key — Pressing the A-Key while in View Mode enters Modify Mode. Pressing the A-Key while in Modify Mode writes the displayed value to panel memory and returns to View Mode. The display shows the new value. Because the system is no longer in modify mode, MOD is no longer appears to the right of the group and prompt numbers.

B-Key — Pressing the B-Key in Modify Mode scrolls backward through the scroll list of characters. See Scroll Lists below.

C-Key — Pressing the C-Key in Modify Mode scrolls forward through the scroll list of characters. See Scroll Lists below.

*-Key — Pressing the *-Key in Modify Mode accepts the character displayed in the current character position and then moves one character position to the right. Do not press the star key unless you intend to enter another character to the right of the current character position. If your entry is complete, press the A-Key to accept your entry.

Clear — Pressing the Clear-Key in modify mode exits modify mode and returns to view mode with out changing the current value of the prompt.

0 to 9 — Pressing the 0 to 9 keys in modify mode enters the corresponding digit in the display in the current character position. You must press the * key to move to the next character position.

Scroll Lists

Many prompts have alphabetic characters as valid entries. Scroll lists allow you to enter alphabetic and other special characters without having to enter numeric 'codes' for these non-numeric characters.

When you press the A-Key to move to modify mode from view mode, the system erases the current value of the prompt from the display, adds 'MOD' to the right of the group and prompt numbers in the top line of the display, and displays the first character of the scroll list in the leftmost character position of the bottom line of the display.

Scroll lists display allowable alphabetic characters (A to Z) first, then the allowable numeric characters (0 to 9), then the special characters (! # ' , - / : < >), and finally the 'space' character.

The C-Key moves forward through the scroll list. The B-Key moves backward through the scroll list.

Yes and No Entries

In view mode the system spells out YES or NO for Yes/No prompts. When you enter modify mode the system always displays N for no. Pressing either the B-Key or C-Key toggles Y for yes into the display.

An Example, Entering Custom Text

There are four types of custom text you can program for the system. Idle text, Service text, ABC key text, and point text.

The example below describes the procedure for entering custom text at the keypad. You may find it helpful to set up the system and try entering the text as shown. We'll change the default point text for point 2, 'PT2 PART/DELAY', to 'GARAGE'.

The procedure starts from the first prompt in view mode.

The first display in view mode appears below.

1.1 0000

Note that the second line shows the factory default for the first prompt in the first group (1.1), 0000.

Press the C-Key eleven times to scroll the display to the first prompt in group 12.

12.1 PT1 FIRE/VERIFY

Press the *-Key to move to the second prompt in group 12.

12.2 PT2 PART/DELAY

Press the A-Key to enter Modify mode. 'MOD' appears to the right of the group and prompt numbers. 'A' replaces the default text in the second line. 'A' is the first character in the scroll list.

12.2 MOD A

For this example we're entering 'GARAGE' for the point 2 custom text. Press the C-Key to scroll forward through the scroll list. After the first press the display shows 'B' in the second line of the display.

12.2 MOD B

Press the C-Key five more times to scroll 'G' into the display.

12.2 MOD G

Press the *-key to accept the 'G' and move to the second character position in line 2. 'A' appears in the second position.

12.2 MOD GA

Press the *-key to accept the second letter, ‘A’ , and move to the third character position in line 2. ‘A’ appears in the third position.

```
12.2 MOD
GAA
```

Press the *-key until ‘R’ appears in the display, then press * to accept the ‘R’ and move to the fourth character position. ‘A’ appears in the fourth position.

Continue using the C-key and the *-key to enter GARAGE.

Did you remember not to press the *-key when the ‘E’ appeared in the display?

If you didn’t the display now looks like this:

```
12.2 MOD
GARAGEA
```

If your display looks correct (GARAGE appears in the second line) go ahead and add the ‘A’ by pressing the *-key so we can show you how to recover.

You can quickly remove the last ‘A’ by pressing any of the numeric keys (0 to 9) to backspace.

Now the display looks like the figure below.

```
12.2 MOD
GARAGE
```

Press the A-Key to exit Modify mode. ‘MOD’ disappears from the display. You’re back in view mode, looking at entry you just made. Make sure it’s correct before moving to the next prompt.

Keypad Programming Tips

- Be careful when backspacing, you can backspace beyond your entry and into the first line of the display. If this happens, press the Clear-key and start your entry over again.
- Remember you can exit Modify Mode at any prompt without changing the entry by pressing the clear key.
- When you’re not sure of your entry or where you’re at while keypad programming pressing the Clear key is always the safest action to take.
- View Mode will always show you the current value of any prompt.
- Numbers can be entered directly, except at prompts for custom text. For example, to enter a ‘5’ in the telephone number, you can press the 5-key. You don’t have to use the scroll list.
- Remember the B-key scrolls you backwards through scroll lists. Sometimes the quickest route to the character you want is backwards. For example, the quickest way to get from the first character in the text scroll list, ‘A’ to the ‘space’ character, the last character, is by pressing the B-key.

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D2212 Control/Communicator
Program Entry Guide

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About This Manual

This manual describes the programming parameters available to the D2212 Control/Communicator. This manual follows the organization of the D2212 product handler in the D5200 Programmer. Each programming section, program item and its page number is listed in the table of contents on the following pages.

Throughout the rest of this manual, programming prompts are shown in bold italic letters. For example, ***Phone 1***.

Use the D2212 Program Record Sheet (74-07114-000) to record your program entries.

For a more complete understanding of the D2212 Control/Communicator, read the following manuals in addition to this program entry guide:

D2212 Installation Manual (74-07361-000)
Security System User's Guide (71-07373-000)

Other Lettering Conventions used in this manual...

D6500 reports are shown in “typewriter style” letters. For example, `AC FAILED` indicates the report that the D2212 sends when the panel reports an AC power failure.

Using this Guide for Keypad Programming

A text keypad is required for keypad programming.

For an explanation of Keypad Programming, see page 56 of this manual.

Default Entries and Selections for Keypad Programming appear in shaded areas. Information that is specific to Keypad programming is also shown in shaded areas in this manual.