Notice

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About This Manual

This manual describes the programming parameters available to the D2112 and D2112E Control/ Communicator. This manual follows the organization of the D2112 product handler in the D5200 Programmer. The D2112 product handler programs both the D2112 and the D2112E.

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 outlined italic letters. For example, ***Phone 1***.

Use the *D2112/D2112E Program Record Sheet* (74-07114-000) to record your program entries.

For a more complete understanding of the D2112 Control/Communicator, read the following manuals in addition to this program entry guide:

D2112 and D2112E Installation Manual

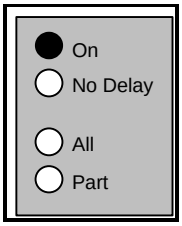
Security System User's Guide

Other Lettering Conventions used in this manual…

D6500 reports are shown in "typewriter style" letters. For example, `AC FAILED` indicates the report sent when the panel reports an AC power failure.

Using this Guide for Keypad Programming

A box similar to the one below appears on each page of this guide. It shows the lights on the Keypad that indicate the group you are programming.



●= Light on

Numbered lights indicate the current program item.

For an explanation of *Keypad Programming*, see the last page of this manual.

Default Entries and Selections for Keypad Programming are shown in shaded areas. In addition, information that is specific to Keypad Programming is also shown in shaded areas in this manual

.

Warning② Text next to the padlock icon warns you that changing the entry for the prompt you're programming can lock you out of programming from the keypad.

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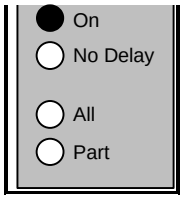


1. ACCOUNT

The *ACCOUNT Group* contains sensitive account information. Use the ***ACCOUNT Grp Lock*** prompt in this group to prevent access to the group when programming from the keypad. If you are programming from a keypad, take care not to inadvertently lock yourself out.

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.

Programming from the Keypad? See *Keypad Programming* on the last page of this manual for instructions on entering letters, and special characters.

2 *Phone 1*

Default:	**Blank**	**Blank**
Selections:	**0 to 9, C, D, #, *, Blank**	**0 to 9, A (=#), B (=*), C, D, Blank**

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.

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

C produces a 3 second dial delay.

D produces a 7 second dial tone wait. If the panel detects dial tone before the 7 second delay expires, it continues dialing immediately.

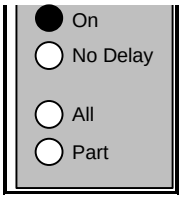
3 *Phone 2*

Default:	**Blank**	**Blank**
Selections:	**0 to 9, C, D, #, *, Blank**	**0 to 9, A (=#), B (=*), C, D, Blank**

Use the same programming selection guidelines as shown in ***Phone 1.***

Phone 2 is a backup receiver phone number the panel dials in the event it can't communicate using the ***Phone 1*** number. Leaving both ***Phone 1*** and ***Phone 2*** blank creates a local system with no reports transmitted.

If ***Phone 2*** is left blank, five attempts are made to ***Phone 1***. If ***DTMF Dialing*** is set to Yes, the first two attempts are DTMF dialed and the remaining three are pulse dialed. If both numbers are programmed the panel dials as shown on the following page.



1. ACCOUNT Group

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

4 *RAM Phone*

Default:	**Blank**	**Blank**
Selections:	**0 to 9, C, D, #, *, Blank**	**0 to 9, A (#), B (*), C, D, Blank**

Enter up to 19 characters for the panel to dial to reach a remote programmer. 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.

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

C produces a 3 second dial delay.

D produces a 7 second dial tone wait. If the panel detects dial tone before the 7 second delay expires, it continues dialing immediately.

Remote Programming Initiated from the keypad (Key 2 + passcode)

If ***RAM Phone*** is blank – After Key 2 is pressed and the passcode is entered, the D2112 seizes the phone line and waits for the remote programmer handshake.

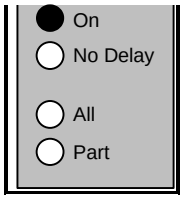
If ***RAM Phone*** is programmed with a phone number – After Key 2 is pressed and the passcode is entered, the panel seizes the phone line, dials the ***RAM Phone*** number and waits for the remote programmer handshake.

Programming from the Keypad? See *Keypad Programming* on the last page of this manual for instructions on entering letters, and special characters.

5 *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.



6 *Instlr Code*

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

Installers enter this code 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 (in *USER CONFIGURATION*) is less than 6, you must enter 6 digits here. If you enter less than 6 digits and increase the ***Passcode Length*** later, the Installer Code is disabled.

The programmers and the user "Change Passcode" feature will not let you program the same passcode for the installer and a user. When you are programming from the keypad, however, the system does not prevent 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.

7 *ACCOUNT Grp Lock*

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

Programming ***ACCOUNT Grp Lock*** Yes, locks the *ACCOUNT Group*. This prevents keypad programming access to all of the items in the *ACCOUNT Group*.

You must use the D5200 programmer or a remote programmer to regain access to the *ACCOUNT Group*.

Warning② ***Programming from the Keypad?***

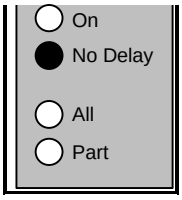
Don't lock yourself out of the* ACCOUNT Group *by changing this entry to 1. Changes to this program item take effect when you exit the ACCOUNT Group.

8 *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. See *Keypad Programming* on the last page of this manual 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. PHONE

The *PHONE Group* contains prompts that configure the system for dialing and receiving on the telephone line. It also contains the ***Program Lock*** prompt which disables keypad programming.

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. If the system can not communicate with the receiver it switches to the pulse dialing. See ***Phone 1***, ***Phone 2*** in the *ACCOUNT Group* for details of the dialing sequence .

When ***DTMF Dialing*** is set to No the panel pulse dials.

2 *Answer Armed*

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

Set the number rings you would like the D2112 to wait before seizing the phone line for a remote programming session when the system is All On (armed).

The D2112 will not seize the phone line when the system is All On (armed) if this prompt is set to 0 (zero).

When ***Answer Machine*** is programmed Yes, the entry in ***Answer Armed*** has no effect.

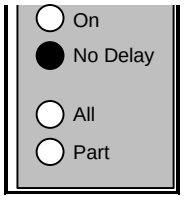
3 *Answer Disarmed*

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

Set the number rings you would like the D2112 to wait before seizing the phone line for a remote programming session when the system is Off (disarmed), Part On, All On with no delay, or Part On with no delay.

If this prompt is set to 0 (zero), the D2112 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 effect.



2. PHONE Group

4 *Answer Machine*

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

Set this prompt to Yes to enable the D2112'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 is set for the “Toll Saver” mode.

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 Detected 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.
	After the above events occur, the D2112 picks up on the first ring.	Re-dial the panel phone number. When the 2112 picks up the phone, begin remote programming.

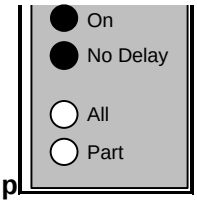
5 *Program Lock*

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.

Warning② ***Programming from the Keypad?***

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



3. RECEIVER FORMAT

1 *Rcvr Format*

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

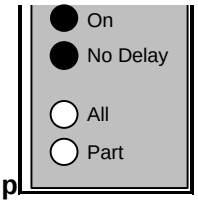
Set ***Rcvr Format*** to Modem to transmit reports in Radionics Modem II format with its advanced reporting capabilities. The D6500 line card ack tone table must contain “Modem II for D9112.” See the *6500:Line Program Entry Guide*. The ***Modem II Reports Chart*** shows reports available.

Set ***Rcvr Format*** to Pulse to transmit in 4x2 Pulse format. Be sure to program codes for each Report Group. See ***Pulse Report Groups*** and the ***Pulse Report Group Tables***.

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.
ALARM REPORT POINT 001 (-099)	Alarm report from points 1 to 8 or from an A, B, C, key. See *A, B, C KEYS* for instructions on setting reports from the keys.
BATTERY LOW	System battery is low.
BATTERY MISSING	System battery is missing.
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 *USER CONFIGURATION Group*. 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.
COMM RESTORAL	Successful communication after a communication failure event. See ***Phone 1***, ***Phone 2*** in *ACCOUNT*.
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 *USER CONFIGURATION Group.*
FIRE ALARM POINT 001 (-008)	Fire Alarm report from points 1 to 8.
OPENING REPORT	Turning the system Off with a keyswitch or a remote programmer sends this opening report with no user ID.

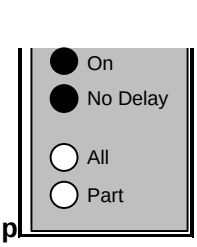
Chart continues on next page.



3. RECEIVER FORMAT Group

Modem II Reports Chart, Continued

OPENING REPORT ID 001 (-008)	Opening report 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 ***Passcode Rquired*** in *USER CONFIGURATION*.
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 ***Passcode Rquired*** in *USER CONFIGURATION*.
PERM DLAY ARMED ID 001 (-008)	User with ID shown (1 to 8) turned the system Part On (with Delays).
POINT BYPASS POINT 001 (-008)	Point 1 to 8 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.
RAM ACCESS FAIL	Remote programmer made connection with panel, but passcode was incorrect, *or* call was not terminated with a Goodbye or ResetBye.
RESTORAL REPORT POINT 001 (-008)	Restoral report from points 1 to 8.
RESTORAL REPORT POINT 098	Short removed from terminal 9, Aux Power. D2112E: Fuse restored.
RESTORAL REPORT POINT 099	Short removed from terminal 6, Alarm Output. D2112E: Fuse restored.
RE-BOOT	Panel reset with the Standby Pin (See *D2112 Installation Manual*) or a remote programmer.
SWINGER BYPASS POINT 001 (-008)	Point 1 to 8 bypassed automatically by the system after 4 alarms or troubles in one armed or disarmed period. Use the point code to program this feature by point. See the *POINT CODES Group*.
TEST REPORT	Automatic test timer report.
TROUBLE REPORT POINT 001 (-008)	Trouble on points 1 to 8, Fire and Non-Fire combined.
TROUBLE REPORT POINT 098	Short on terminal 9, Aux Power. D2112E: Fuse open.
TROUBLE REPORT POINT 099	Short on terminal 6, Alarm Output. D2112E: Fuse open.
USR CODE TAMPER	This report transmitted after 6 attempts to enter an invalid passcode.
WATCHDOG RESET	System automatically reset. Call Radionics if reports persist.



If you choose Modem format, skip to the REPORTS Group. The prompts in the remainder of this group and RPT GROUPS FOR PULSE have no meaning for the Modem format.

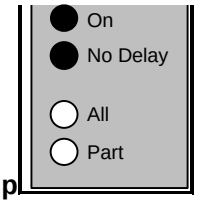
Pulse Report Groups

If you select the pulse format you also need to set the report code for each report group. D2112 pulse 4x2 reports consist of a 4 digit account number, a one digit report group code, and a one digit point or user 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.

Use the Pulse Report Group Tables on the next 2 pages to designate Report Group codes for this installation.

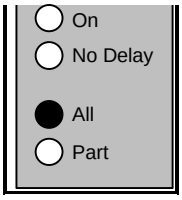
Warning② ***Do not duplicate report group codes. You will not be able to distinguish reports from groups with duplicated codes.***



Pulse Report Group Table 1

Table 1 shows the Report Group prompts in this programming group. There are more Report Group prompts in the next programming group, *RPT GROUPS FOR PULSE*, on the next 2 pages.

Report Group	Default / Selections	Point, User Number	Description
2 ***Fire Group***	**0** **0 - 9, B - F**	1 to 8 0 to 9	Fire alarm from points 1 to 8. Fire alarm from key A, B, or C. See *A,B,C Keys Group*.
3 ***Non-Fire Group***	**0** **0 - 9, B - F**	1 to 8 0 to 9	Non-Fire alarm from points 1 to 8. Non-Fire alarm from key A, B, or C. See *A,B,C Keys Group*.
4 ***Pt Trbl Group***	**0** **0 - 9, B - F**	1 to 8	Trouble, bypass, or swinger bypass on points 1 to 8, Fire and Non-Fire combined.
5 ***Restoral Group***	**0** **0 - 9, B - F**	1 to 8	Restoral on points 1 to 8, 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 Required* prompt), 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.
8 ***Cancel Group***	**0** **0 - 9, B - F**	0 1 to 8	Cancel report when keyswitch is used. Cancel report with user ID for users 1 to 8.



4. RPT GROUPS FOR PULSE

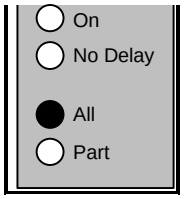
You only need to set the prompts in this group if you are transmitting reports to the receiver in the Pulse format. See *RECEIVER FORMAT Group.*

Pulse Report Group Table 2

Table 2 shows the Report Group prompts in this programming group. There are more Report Groups in the previous programming group, *RECEIVER FORMAT*. Table 2 continues on the next page.

Report Group	Default / Selections	Point, User Number	Description
1 ***Sys Trbl Group***	**0** **0 - 9, B - F**	1	Reports an unsuccessful attempt to connect a remote programmer.
		2	Automatic test timer report
		3	The system automatically reset. Call Radionics if reports persist.
		4	Short on terminal 9, Aux Power. D2112E: Fuse Open.
		5	Short on terminal 6, Alarm Output. D2112E: Fuse Open.
		6	Reports battery is missing.
		7	Reports battery is low.
		8	No AC power to system. Panel is running on battery.

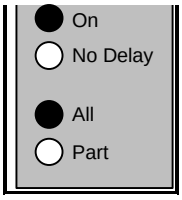
Table continues on next page.



Pulse Report Group Table 2, Continued

Table 2 shows additional Report Group prompts available in this programming group for pulse reporting. The table begins on the previous page.

Report Group	Default / Selections	Point, User Number	Description
2 ***Sys Res Group***	**0** **0 - 9, B - F**	1	Successful connection to a remote programmer.
		2	Successful communication after a communication failure event. See the ***Phone 1***, ***Phone 2*** prompts.
		3	Panel reset with the Stand-By Switch (See the *D2112 Installation Manual*) or a remote programmer.
		4	Short removed from terminal 9, Aux Power. D2112E: Fuse Restored.
		5	Short removed from terminal 6, Alarm Output. D2112E: Fuse Restored.
		6	Not used.
		7	Reports missing or low battery restored.
		8	AC power is restored.
3 ***Duress Group***	**0** **0 - 9, B - F**	1 to 3	Not used
		4	This report transmitted after 6 attempts to enter an invalid passcode.
		5	Duress passcode entered at keypad. See ***Code 8 = Duress***.
		7,8	Not used



5. REPORTS

Use the prompts in this group to select and configure reporting options.

1 *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***.

For points programmed with 2, 3, 7, or 8 in digit two, the system waits the seconds entered at the ***Delay Alrm Rpt*** prompt before transmitting alarm 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.

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

2 *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.

3 *Restoral Rpts*

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

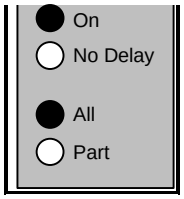
Set the ***Restoral Rpts*** prompt to Yes to send restoral reports to the receiver for all points. The system sends restoral reports when points return to normal (not faulted) after an alarm or trouble report.

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

4 *Delay Res Rpts*

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

Set the ***Delay Res Rpts*** prompt to Yes to delay sending restoral reports until bell time expires.



5 *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**

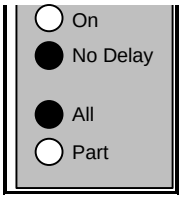
The D2112 monitors AC power. When AC power to terminals 1 and 2 is interrupted the D2112 waits 60 seconds. If AC power is not restored within 60 seconds it provides the response programmed in ***AC Fail Buzz/Rpt***.

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 the next report sent to the receiver.



6. SYSTEM OPTIONS

Use the prompts in this group to select and configure system options and functions.

1 *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 functioning. The OK light winks to indicate a system trouble.

Warning② ***You cannot enable the system from the keypad after setting this prompt to Yes. The system turns off all user and installer functions.***
You must use the D5200 programmer or a remote programmer to enable the system after using this prompt to disable it.

2 *Excursion*

Default:	**Disabled**	**0**
Selections:	**Disabled**	**0**
	All Inst	**1**
	Part Inst	**2**
	All & Part	**3**

Use ***Excursion*** to select the armed state(s) when the user can access the *"**Step Outside**"* feature.

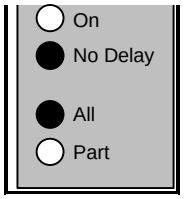
All Inst only allows users access to the Excursion function when All of the system is On with No Delay (instant).

Part Inst only allows users access to the Excursion function when Part of the system is On with No Delay (instant).

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

The ***Excursion*** feature allows users to exit through a delayed door without having to turn the system off. Users might use this feature to answer the door or retrieve the morning paper.

If you enable the ***Excursion*** 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.



3 *Keyswitch*

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

See the *D2112/D2112E Installation Manual* for instructions on connecting a momentary keyswitch to a point. The D2112 is not compatible with maintained contact keyswitches.

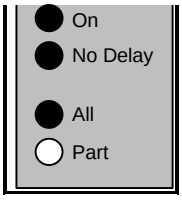
Operating the keyswitch turns the system All On with delays if the system is Off. Any faulted controlled points (point code digit 1 is 6, 7, 8, or 9) are automatically bypassed.

If the system is All On or Part On, with or without delays, operating the keyswitch turns the system off.

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

Set the ***Keyswitch*** prompt to Easikey if you are connecting the system to a Radionics Easikey access control. Easikey can be used to disarm the system. It can not be used to arm the system. See the *D2112/D2112E Installation Manual* for instructions.

When the ***Keyswitch*** prompt is set to Easikey, shorting a keyswitch point turns the system off if it is All On or Part On. If the system is off, shorting the keyswitch point does not turn the system on.



7. 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 the *POINT CODES*.

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 the *POINT CODES Group*.

Exiting through a protected point or moving through a protected area after exit delay expires causes an alarm event to occur. The D2112 sounds three long tones at the keypads at the end of exit delay.

3 *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) feature.

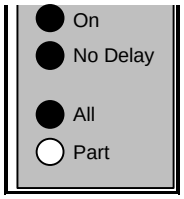
Program ***Exit Tone*** Yes to enable the exit delay tone and excursion tone.

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

4 *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 with the 9 key. If any points are bypassed, bypass reports are also sent. The D2112 transmits opening reports when users turn the system off from the All On state.



5 *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.

6 *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. It only sends closing reports when a point is bypassed. This applies to All On and Part On arming.

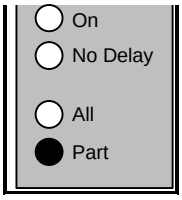
7 *Bell Test*

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

If you set the ***Bell Test*** prompt to Yes the system sounds the bell for 2 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.



8. A,B,C KEYS

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

You can program the relay drivers, terminals 11 and 12, to respond to these keys in the *RELAYS Group*.

1 *A-Key Report*

2 *B-Key Report*

3 *C-Key Report*

Default:	**00**	**00**
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 twice. 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 10 at the ***A-Key Report*** prompt, the system transmits `ALARM REPORT POINT=010`, 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.

Warning② *Do not enter a report that conflicts with other system or point reports. The Pulse Report Group Table in RECEIVER FORMAT shows all system and point reports. Test the A,B,C buttons to be certain they transmit the reports you expect.*

4 *A-Key Alarm Output*

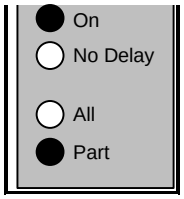
5 *B-Key Alarm Output*

6 *C-Key Alarm Output*

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

These prompts set the system response to the A, B, and C key for 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 bell time expires.

Set the prompt to Pulse for a pulsed (Fire) output at the Alarm Output. A user must enter a passcode at the keypad to silence the output before bell time expires.



9. BELL & TEST TIMER

The prompts in this group configure the Alarm Output (Bell) at terminals 6 and 7. They also set up the system's automatic test timer.

1 *Bell Time*

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 Burg 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 3 minutes in ***Bell Time***.

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

2 *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 alarm output. It does not prevent reports from being sent.

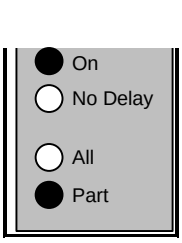
3 *Alarm on 2 Fail*

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

Setting the ***Alarm on 2 Fail*** prompt to Yes provides a steady 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 3 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* for information on programming points for alarm output.



4 *Test Intrvl*

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

Set ***Test Intrvl*** 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.

5 *Hours to Next*

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

Enter the hours to 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 at the end of your programming session.

6 *Minutes to Next*

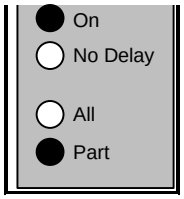
Default:	**0**	**0**
Selections:	**0 to 59**	**0 to 59**

Enter the minutes to 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 at the end of your programming session.

> If you are using a remote programmer, the waiting period begins after you complete the programming session.
>
> For D5200 or Keypad programming, the waiting period begins after you return the Standby Pin to normal operation.

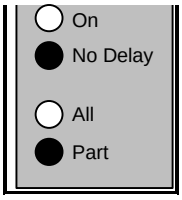


7 *Defer Test Rpt*

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. POINT CODES

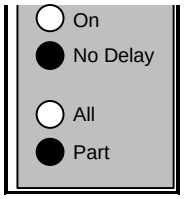
Use the Point Code Charts to set a three-digit point code for each point. The point code determines how the system responds to changes on the point sensor loops. Points 1 to 6 respond to opens and shorts. ***Points 7 and 8 only respond to opens, and are not available on the D2112E.*** See the *D2112/D2112E Installation Manual* for a complete description of the point sensor loops.

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

	Default	Default Description
1 ***Point 1***	**260**	**Fire Point** Fire point with verification. Reports and alarm output enabled. On the D2112, Point 1 is powered for 2-wire smoke detectors.
2 ***Point 2***	**882**	**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***	**882**	**Delay Door** Same responses as ***Point 2***.
4 ***Point 4***	**982**	**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***	**782**	**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***	**782**	**Motion Detector** Same responses as ***Point 5***.

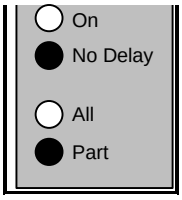
Points 7 and 8 only respond to opens. D2112E has only six points, 1 to 6.

7 ***Point 7***	**781**	**Tamper** 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 open when the system is off. Swinger bypass enabled. Alarm report delay enabled.
8 ***Point 8***	**781**	**Tamper** Same responses as ***Point 7***.

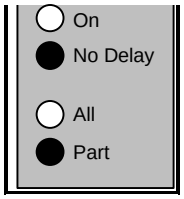


Digit 1, Point Type

0	**Disabled**	Point doesn't respond to opens or shorts.
1	**Fire**	Short on sensor loop starts fire alarm response. Digit 3 doesn't apply to fire points. Open on sensor loop causes trouble response. Fire points are not bypassable. One-Ring option does not apply to fire points.
2	**Fire with verification**	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 30 seconds of reset starts alarm response. If the point remains normal or open for the 30 second verification window there is no alarm response.
3	**Buzz on Fault**	When the panel is off, a short or open buzzes the keypad. No reports unless the point is programmed for trouble reports in Digit 3. When the panel is All or Part On (armed), a short or open causes an alarm response. Buzz on Fault points are not bypassable. One ring programming option applies. See ***Single Ring***.
4	**24 hr, visible**	Short or open causes alarm response if no Trouble option. See Digit 3. 24 hr points are not bypassable. One ring programming option applies. See ***Single Ring***.
5	**24 hr, invisible**	Short or open causes alarm response if no Trouble option. See Digit 3. No alarm or trouble tones at keypad unless programmed for alarm output in Digit 2. Point lights do not light for faults, troubles, or alarms. 24 hr points are not bypassable. One ring programming option applies. See ***Single Ring***.
6	**Controlled, All, Delay**	When panel is All On (armed) short or open starts entry delay if no Trouble option. See Digit 3. Delay points that are faulted at the end of exit delay do not start entry delay, they cause an immediate alarm. "All" points must be normal (not faulted) or bypassed before panel can be "All" armed.
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.
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. Delay points that are faulted at the end of exit delay do not start entry delay, they cause an immediate alarm. "Part" points must be normal (not faulted) or bypassed before panel can be "Part" armed.
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.



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.

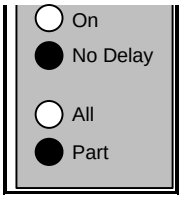


Digit 2, Alarm Response

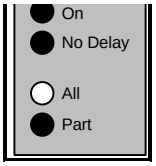
	0	1	2	3	4	5	6	7	8	9
Reports - Points send alarm, cancel, trouble, bypass, swinger bypass, and restoral reports as programmed. Bypass reports are only sent with closing reports.		X	X	X	X		X	X	X	X
Alarm Report Delay - If a user enters their passcode to silence an alarm before the programmed Alarm Report 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.			X	X				X	X	
Swinger Bypass - After 4 alarms or troubles in an armed or disarmed period, the system automatically bypasses points programmed for Swinger Bypass. Turning the system Off clears the bypass. If a 24 hr point swinger bypasses while the system is Off, turning the system On 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 pulsed output. Non-Fire points 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, Options for Non-Fire Points (Digit 1 = 3,4,5,6,7,8,9,or A)

	0	1	2	3	4	5	6	7
Trouble on Open - An Open on the sensor loop for 24 hr points (Digit 1 = 3, 4, 5, or A) causes a trouble response when the panel is Off, and an instant alarm when the panel is 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.		X				X		
Trouble on Short - A short on the sensor loop for 24 hr points (Digit 1 = 3, 4, or 5) causes a trouble response when the panel is Off, and an instant alarm when the panel is 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	
Trouble on Open or Short - An Open or Short on the sensor loop for 24 hr points (Digit 1 = 3, 4, or 5) causes a trouble response when the panel is Off, and an instant alarm when the panel is All or Part On. When the system is On, Controlled, Delay Points (Digit 1 = 6 or 8) start entry delay on an open or short.				X				X
Double Knock - Points programmed for double knock require 2 alarm activations within 30 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 30 second double knock window, there is no alarm response. Do not use Double Knock with the Keyswitch point type.					X	X	X	X



Recommended Point Codes	Trouble on Open	Trouble on Short	No Trouble
Smoke Detector			
Reports, Audible, No Swinger Bypass: Verification / No Verification	260 / 160		
Panic			
Reports, Swinger Bypass, Silent			
Visible	441	442	440
Invisible	541	542	540
No Reports, Audible			
Visible	451	452	450
Invisible	551	552	550
Keyswitch			
Reports & Swinger Bypass: Audible / Silent	A91 / A41	A92 / A42	A90 / A40
No Reports: Audible / Silent	A51 / A01	A52 / A02	A50 / A00
Tamper			
Reports, Swinger Bypass, & Alarm Report Delay: Audible / Silent	781 / 731	782 / 732	780 / 730
No Reports: Audible / Silent	751 / 701	752 / 702	750 / 700
Door, Delay			
Reports, Swinger Bypass, & Alarm Report Delay: Audible / Silent			
Delay Open		882 / 832	
Delay Short	881 / 831		
Delay Open & Short			880 / 830
No Reports: Audible / Silent			
Delay Open		852 / 802	
Delay Short	851 / 801		
Delay Open & Short			850 / 800
Door, No Delay			
Reports, Swinger Bypass, & Alarm Report Delay: Audible / Silent	981 / 931	982 / 932	980 / 930
No Reports: Audible / Silent	951 / 901	952 / 902	950 / 900
Motion, No Delay			
Reports, Swinger Bypass, & Alarm Report Delay: Audible / Silent	781 / 731	782 / 732	780 / 730
No Reports: Audible / Silent	751 / 701	752 / 702	750 / 700



11. 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 *D2112/D2112E Installation Manual* for instructions.

You can program each of the system's two relay outputs with 1 or 2 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 8*** (Yes, No). The parameter prompts tell the system what points the relay is to follow.

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

Relay Functions

1 *Relay 1, Func 1*

Default:	**No Output**	**0**
Selections:	**See *Relay Function Selections* on the next page.**	

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

2 *Relay 1, Func 2*

Default:	**No Output**	**0**
Selections:	**See *Relay Function Selections* on the next page.**	

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

3 *Relay 2, Func 1*

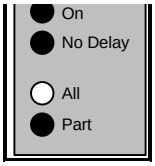
Default:	**No Output**	**0**
Selections:	**See *Relay Function Selections* on the next page.**	

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

4 *Relay 2, Func 2*

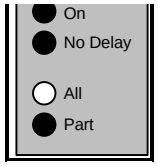
Default:	**No Output**	**0**
Selections:	**See *Relay Function Selections* on the next page.**	

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 output stops when the point returns to the normal condition. *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. *Select the points to monitor for alarm memory at the Parameter prompt.*
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 Tone* in the *User's Guide*. *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 10 seconds. **Do not program both relays for this function.** If both relays share this function, only Relay 1 activates. *Select the Function Keys to monitor at the Parameter prompt.*
Off with Passcode	**9**	Activates the relay for 10 seconds when a selected user turns the system off with a passcode. **Do not program both relays for this function.** If both relays share this function, only Relay 1 activates. *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**	Pulses the relay output during entry and exit delay when the system is All On. The output remains activated until the system is turned off.
Part On	**12**	Pulses the relay output during entry and exit delay when the system is Part On. The output remains activated until the system is turned off.



Relay Function Selections, Continued

Reset	**13**	Activates the relay output when a user presses the 3 key to reset the system. The relay output activates for 4 seconds. **Do not program both relays for this function.** If both relays share this function, only Relay 1 activates.
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 after 10 attempts. 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.
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.** If both relays share this function, only Relay 1 activates.

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.

5 *Relay 1 Logic*

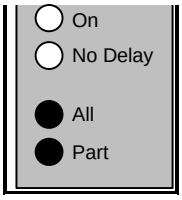
6 *Relay 2 Logic*

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 it. 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.



12. 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 the *RELAYS Group*) with a Relay Function from 1 to 9 (see *Relay Selections* in the *RELAYS Group*), or you left the RELAYS Group prompts at their defaults, leave the prompts in this group at their defaults.

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

Setting the ***Relay 1, Func 1*** Parameter prompt to 0 (zero) disables the selected function if a parameter is required for the function. It has no effect if the function does not require a parameter.

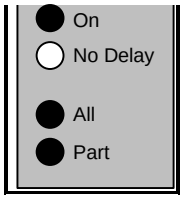
Set the parameter prompt to one of the values listed below to choose point, user, or Emergency Button as a parameter. ***Add the values to choose more than one.***

For example, if you set ***Relay 1, Func 1*** to Follow Point and you wanted to follow points 3 and 5 you would enter 20 at the ***Relay 1, Func 1 Parameter*** prompt. 20 comes from adding 4 (the entry for point 3) and 16 (the entry for point 5).

Prompt	Default
1 ***Relay 1, Func 1 Parameter***	**0 (Disabled)**
2 ***Relay 1, Func 2 Parameter***	**0 (Disabled)**
3 ***Relay 2, Func 1 Parameter***	**0 (Disabled)**
4 ***Relay 2, Func 2 Parameter***	**0 (Disabled)**

Enter **1** for	Point 1	User 1	A-Key
Enter **2** for	Point 2	User 2	B-Key
Enter **4** for	Point 3	User 3	C-Key
Enter **8** for	Point 4	User 4	
Enter **16** for	Point 5	User 5	
Enter **32** for	Point 6	User 6	
Enter **64** for	Point 7	User 7	
Enter **128** for	Point 8	User 8.	

Add the values to choose more than one point, user, or function key.



13. USER CONFIGURATION

User Test Configuration

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 2 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 4 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 terminate the test by pressing the Clear key.

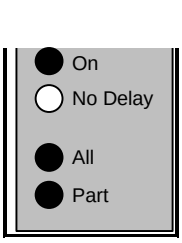
Set this prompt to Yes for UL 1023, Household Fire systems.

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 6 attempts to send the report if only one phone number is programmed. It makes 10 attempts if two numbers are programmed. See ***Phone 1***, ***Phone 2***, in the *ACCOUNT Group*.



Passcode Configuration

4 *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**② ***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 4 digits, 396 becomes 396F. It is not possible to enter an F from the keypad. Passcode 396 has effectively been disabled.***

5 *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.

6 *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 the System All On with no delay. (Press 9, enter passcode, press 9.)

To turn the system Part On users press 0 and 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.)

7 *Change Passcode*

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

Disabled prohibits passcode changes from the keypad.

Owner only allows Owner user types to change passcodes from the keypad. The Key 5 passcode change feature is disabled. See the *Security System User's Guide* for instructions on how Owner type users can change passcodes.

Owner & User allows Owners and Users to change their passcodes from the keypad using Key 5.

14. PASSCODES, D5200 and Remote Programming Only!

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 *Usr# Type*

(# represents numbers 1 to 8)

Default: **Owner** (for User 1)
Disabled (for Users 2 to 8)

Selections: **Disabled**
Owner
User
One-time

See User's Guide for instructions on setting User Type.

Disabled disables the passcode for this user number.

Owner allows this user number to configure "Watch Tone" responses, and reactivate One-time passcodes. If ***Change Passcode*** in the *User Configuration Group* is programmed for Owner or Owner and User, it can also change other users' passcodes and user types (using the Key 6 Show User function). All other user functions are also available.

User allows this user number to change only their own passcode. (***Change Passcode*** in the *User Configuration Group* must be programmed for Owner and User.) A User can not change their user type. A User can not change other users' passcodes and user types. A User can not adjust "Watch Tone" responses, or reactivate One-time passcodes. All other user functions are available.

One-Time allows the user to disarm the system only one time before the disarming function of the passcode is disabled. (Owners can reactivate One-time passcodes.) One-time passcode types have access to the same features as User types, with the exception of the one-time disarming restriction.

2 *Usr# Passcode*

(# represents numbers 1 to 8)

Default: **123 (456)** for User 1
Blank for Users 2 to 8

Selections: **0 to 9, Blank**

See User's Guide for instructions on setting User Passcodes.

The ***Usr# Passcode*** prompt sets the passcode for each user.

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

Keypad Programming

Putting the D2112 into Keypad Programming Mode

1. Lock the D2112 Standby Switch down.
2. Press the **1** key on the 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**. Lights on the keypad indicate the functions that are available. Light **8** must be lit to program from the keypad.
4. Press the **8** key to enter programming mode.

If you press the (CLEAR) key now the keypad exits the programming mode and shows the available installer functions.

Knowing where you are

The **On**, **No Delay**, **All**, and **Part** lights show you which group you are in. At the top of each page of the *Program Entry Guide* is a diagram that shows which lights are on for each programming group.

Lights 1 to 8 show the prompt number you are on.

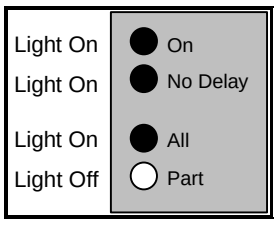
Warning② Watch for these warnings. Changing the entry for these prompts can lock you out of programming from the keypad.

Getting Around C

- To advance from one group to the next, press the Next Group (**C**) key.
- To select a programming prompt, press the key corresponding to the prompt number.

For example: To get to group 7, *OPEN/CLOSE* the ***Exit Dly Time*** prompt...

1. Make sure you are in the Keypad Programming mode.
2. Press the Next Group (**C**) key six times. Notice the group lights:



3. Press (2). Light **2** comes on. You are now ready to Modify or Play Back the entry for ***Exit Dly Time***.

Special Keys

A	B	C
Modify	**Play Back**	**Next Group/ Alt**

Playing Back a Program Entry B

Press the "Play Back" key to show the value stored in the current prompt. The value plays back one digit at a time by lighting lights next to keys 1 to 0.

When Alpha characters are stored, they play back with light 1 on in addition to a light from 2 to 7.

Lights for Hexadecimal Alpha Characters

1 & 2	1 & 3	1 & 4	1 & 5	1 & 6	1 & 7
A	**B**	**C**	**D**	**E**	**F**

Modifying a Program Entry A

To modify the entry for the current prompt:

1. Press the "Modify" key. The light for the current prompt flashes to indicate that you are in Modify mode.
2. Make your new entry.
   - The (CLEAR) key erases your entry as well as the previously stored entry. If you do not want a blank entry, re-enter a valid entry after you press (CLEAR) – *OR* –
   - To restore the previously stored entry and exit Modify mode, press the "Alt" key followed by the (CLEAR) key.
3. Press "Modify" again to store your new entry.

Select another prompt in the same group, or press the (**C**) key to advance to the Next Group. Pressing (CLEAR) exits programming mode.

Entering Special Characters C

To enter an Alpha character from A to F press the "Alt" key and then a key from 2 to 7.

Entering Hexadecimal Alpha Characters

C + 2	C + 3	C + 4	C + 5	C + 6	C + 7
A	**B**	**C**	**D**	**E**	**F**

For example, to enter an ***Account Number*** of 3B6C, go into the modify mode then press:

(3) (C) (3) (6) (C) (4).

