



SIA Standards Committee
Security Control Panels Subcommittee
Teleconference Meeting
Thursday, February 9, 2006
2:00 – 5:00 PM
Contact: mvago@siaonline.org for call-in information

DRAFT AGENDA

1. Call to Order..... T. Nesse
2. Roll Call M. Vago
3. [SIA Antitrust Policy](#) M. Vago
4. Approval of Draft Agenda..... T. Nesse
5. Approval of the Draft Minutes of the [2005/08/25 Meeting](#)..... T. Nesse
6. Chairman's Remarks T. Nesse
7. Request(s) for Interpretation for ANSI/SIA CP-01-2000 T. Nesse
[Listing of Requests for Interpretation to Date and their Disposition]
 - a. UL Request on Annunciation Signals for Abort and Cancel (Section 4.2.5)
 - b. Honeywell Request on VP 21 Unique Duress Code
8. Contributions for the Revision of ANSI/SIA CP-01-2000
[Listing of Revisions to Date and their Disposition]
 - a. Discussion on User Manual Clarifications 4.6.1 M. Vago
 - b. Review of Annex F Incorporation into the Revision M. Vago
9. Discussion on Draft Next Steps
 - a. Ballot? Meeting Vote for BSR-8 Submission (ANSI Public Review)
 - b. Meeting at ISC West and then PR?
10. Update on CP-01 Study M. Visbal
11. Open Discussion All
12. Next Meeting and Adjournment T. Nesse



Agenda Item 7.a.

Formal Interpretation Request Form

Formal requests for interpretation should be submitted to SIA Standards via email standards@siaonline.org or fax. These requests will be considered by the appropriate committee responsible for maintaining the standard. Below are the elements of the request that are needed in order to provide information to the committee participants.

Security Industry Association • 635 Slaters Lane • Suite 110 • Alexandria VA 22314-1177 • 703-683-2075 (P) • 703-683-2469 (F)

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Date
Submitted: 2 December 2005

SIA Document #: CP-01 **Edition:** **Paragraph**
Reference: p 4.2.5

Please state your interest in the matter and identify other parties involved:

Lou Chavez (Principal Engineer, Security Equipment & Systems, Underwriter's Laboratories) asked the following question:

"Is it the committee's intention to require differentiating annunciation signals for Abort and Cancel situations? Please reference paragraphs 4.2.5.1.2 and 4.2.5.4.1 for published text.

Would an annunciation display on a keypad indicating "Alarm Cancel" be sufficient to comply with both paragraphs 4.2.5.1.2 (abort) and 4.2.5.4.1(cancel)? In this situation the annunciation is not distinct or different for the abort situation."

I offered the following personal opinion:

"I looked at the relevant paragraphs, and the standard is not explicit about the nature of the annunciations to be provided. My personal opinion is that the committee did not intend that these must be distinct annunciations. 'Alarm Cancel' seems to provide suitable information for the end user in either of the cases referenced."

Question (should be worded so that it can be answered with either yes or no):

Would an annunciation display on a keypad indicating "Alarm Cancel" be sufficient to comply with both paragraphs 4.2.5.1.2 (abort) and 4.2.5.4.1(cancel)?



Formal Interpretation Request Form

Formal requests for interpretation should be submitted to SIA Standards via email standards@siaonline.org or fax. These requests will be considered by the appropriate committee responsible for maintaining the standard. Below are the elements of the request that are needed in order to provide information to the committee participants.

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Name: Rich Hinkson

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Phone /
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Email: Rich.Hinkson@honeywell.com

Date
Submitted: 31 Jan 2006

SIA Document #: CP-01 **Edition:** **Paragraph**
Reference: p 4.2.6.2 + VP21

Please state your interest in the matter and identify other parties involved:

Paragraph 4.2.6.2 states "The control panel shall not derive the Duress code from an existing operating code such as a "use code plus Duress digit" sequence. The panel shall not allow the duplication of any operation code including duress codes"

One of the tests in VP21 states "Attempt to program the duress code as a user code, but with the last digit incremented by 1. Verify that the panel will not accept it"

In my opinion "deriving" the duress code means that each entry of a user code also automatically generates a corresponding duress code, which might duplicate an existing code. For example, entering 1234 would cause entry of 1235 to be treated as a duress.

Programming of a Duress code that is 1 greater than an existing code does not check to see if it is "derived" from an existing code.

Question (should be worded so that it can be answered with either yes or no):

2 questions:

- 1) Is the requirement that a panel "not allow the duplication of any operation code" within the scope of false alarm prevention if no operation codes match the duress code?
- 2) The VP21 has a test where an attempt is made to enter a duress code that happens to be 1 greater than an existing code. Should this be considered to be a valid test for any part of the requirements of p4.2.6.2

Agenda Item 8.a.

At the August 2005 meeting, the Subcommittee received a request for further clarification to be made on what should be contained in the User Manual. Direction was given to include the text below in Annex F.

2005/08/25	Annex F	4.6.1 Need for clarification on what should be included in the manual (UL)	<p>Add the following to Appendix F: "The operation of CP-01 features that interact directly with the user shall be documented in the user manual. This includes:</p> <ul style="list-style-type: none">• 4.2.2.1 Exit Time• 4.2.2.2 Progress Annunciation• 4.2.2.3 Exit Time Restart• 4.2.2.5 Unvacated Premises• 4.2.3.1 Entry Delay• 4.2.3.2 Progress Annunciation• 4.2.3.3 Disarm• 4.2.4.1 Control Buttons• 4.2.4.2 Manual Alarms• 4.2.4.3 System Acknowledgment• 4.2.4.4 Remote Arming• 4.2.4.5 Remote Disarming• 4.2.5.1.1 Disarm• 4.2.5.1.2 Abort• 4.2.5.3 Disarm• 4.2.5.4 Cancel Window• 4.2.6.2 Duress Code• 4.2.7 Initiation of Manual Alarms• 4.6.3 System Test• 4.6.6 Test in Progress• 4.6.7.1 Automatic Termination	<p>Under Review at 2005/08/25 Meeting</p> <p>To be discussed at the February 2006 meeting.</p> <p>Currently incorporated into the latest draft.</p>
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At that same meeting, there was agreement to incorporate as much of Annex F into the text of the standard. At this time, the text above has been incorporated into the Revision draft as is under section 4.6.1. Staff are seeking further clarification and discussion on this item for the resolution of the issue.

Agenda Item 8.b.

At that 2005/08 meeting, there was agreement to incorporate as much of Annex F into the text of the standard. At this time, the text above has been incorporated into the Revision draft as indicated below. Participants are requested to review the disposition.

2005/08/25	Annex F	Incorporation of All Requests for Interpretation to date on the 2000 document into this revision effort when possible.	<p>Raised at the 2005/08/25 Meeting and agreed to by the participants. As of 2006/01/31 the following was the list in Annex F:</p> <p>General A requirement is a feature that the control panel must perform under all circumstances. A required option is a programmable feature that must be in the control panel. An allowed option is a programmable feature that is not required or prohibited by the standard. An allowed feature is a non-programmable feature that is not required or prohibited by the standard.</p> <p>UL Listing Since the standard requires both a local alarm and off premise transmission, UL is requiring that products they test to it be UL listed for both a local and off premises reporting. Any hardware device added to a system to meet the requirements of this standard needs to be UL listed, or UL will test to verify that a failure of this device does not compromise the existing UL requirements of the system.</p> <p>3.2.29 Fire Alarm Verification Fire alarm verification is meant to be a function of either the control panel or the sensor/detector. When “fire alarm verification” is a function of the control panel, delaying transmission of the fire alarm signal (after the initial sensor trip) until a second sensor trip occurs, within the confirmation period, meets the SIA CP-01 requirements.</p> <p>4.1 Partitioned Systems Each partition needs to be able to support the requirements in Clause 4. In testing, it will be acceptable to test 2 partitions as indicative of the products ability to meet the requirements in all partitions.</p> <p>4.1 & 4.2.2.2 Progress Annunciation The standard does not specifically prohibit a silent exit feature in a partitioned system. It does require that it follow the same criteria as a non-partitioned system when it is invoked.</p> <p>4.2.2 Arming and Exit The standard does not specifically address the features and requirements for automatic arming. It would be considered an allowed option. If employed, however, it would need to follow the requirements of clause 4. The standard addresses Remote Arming and Remote Disarming of alarm systems, using remote control devices, to help reduce false alarms caused by unintentional violation of exit and entry delays.</p> <p>4.2.2.1 Exit Time – The minimum time given is an absolute minimum, and panels are not to allow Exit Time(s) of less than 45 seconds.</p> <p>4.2.2.1 Silent Exit Approval – refers to a Silent Exit feature that is invoked by the system user at the time of arming. CP-01 does not require this feature. CP-01 does require, however, that when this feature is invoked, the exit delay for that arming cycle must be doubled. When invoked, the Silent Exit feature will halt the exit progress annunciation for the entire system or partition for only one arming cycle.</p>	<p>Added in Section 3.1.5</p> <p>Added to Annex E</p> <p>Added to 3.2.29</p> <p>Added to Clause 4.1</p> <p>Added in 4.1</p> <p>Added to Clause 4.2.2</p> <p>Added to Clause 4.2.2.1</p> <p>Added to Clause 4.2.2.1</p> <p>Added to</p>
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		<p>4.2.2.2 Progress Annunciation – A control panel may meet this requirement by having two separate buttons for arming where one is arm normal (with progress annunciation) and one is arm silent (no annunciation).</p> <p>4.2.2.2 Silent Exit Approval – allows the exit progress annunciation to be completely programmed out of individual keypads (for bedrooms, etc). Section 4.2.2.2 does not allow for a control panel to disable exit progress annunciation for an entire system.</p> <p>4.2.2.3 Exit Time Restart - Since exit time restart is a required option, panels will have the ability to have this feature disabled at the time of installation.</p> <p>4.2.2.4 Exit Error – The standard does not address panel response if a non-entry/exit zone is violated at the end of the Exit Time.</p> <p>4.2.2.6 Recent Closing – A Recent Closing transmission is allowed, but not required, if an alarm condition occurs between Arming and the end of the Exit Time. The Recent Closing signal is separate from the closing signal.</p> <p>4.2.3.1 Entry Delay – The minimum time given is an absolute minimum, and panels are not to allow Entry Delay(s) of less than 30 seconds.</p> <p>4.2.3.2 Progress Annunciation - The early progress annunciation of an entry delay needs to be audible at a minimum.</p> <p>4.2.3.3 Disarm (during Entry Delay) - The alternative methods mentioned are referring to keystrokes on the keypad, such as a disarm command followed by a code. This section is stating these methods can work in addition to the code only method.</p> <p>If multiple keypads are annunciating the entry delay, one or all keypads may be momentarily silenced.</p> <p>4.2.4.1 Control Buttons - The requirements for control buttons are not the same as for manual alarms. Control buttons only need the mechanical design. For testing, the manufacturer may need to provide (in their product literature or otherwise) rationale on their mechanical design and how it minimizes inadvertent activation.</p> <p>4.2.4.2 Initiation of Manual Alarms - The manufacturer's product literature may be needed to ascertain the design features employed to achieve a double action trigger.</p> <p>4.2.4.3 System Acknowledge - The user needs to know the end result of the action taken. This can be by virtue of the knowing which button he or she pushed followed by a common acknowledgment or by separate and distinct acknowledgment for arm and disarm.</p> <p>4.2.5.1 Abort Window – The minimum time given is an absolute minimum, and panels are not to allow an Abort Window of less than 15 seconds. The Abort Window cannot be globally disabled, nor can all zones but fire be disabled, with a single programming option.</p> <p>4.2.5.1.1 Disarm (during Abort Window) - The local alarm sounding device is only delayed during the entry delay. It will be sounding during the abort delay period. 4.2.5.1.1 does require a momentary silencing of the local sounder while a code is being entered. If this is unsuccessful the local alarm will restart. The minimum timings in the SIA standard do allow for harmony with the existing UL standards.</p> <p>An RFID interface is an equivalent means and that the passcode backup must comply with the CP-01 requirements.</p>	<p>Clause 4.2.2.2</p> <p>See last paragraph Clause 4.2.2.2</p> <p>Added to Clause 4.2.2.3</p> <p>Added to Clause 4.2.2.4</p> <p>Added to Clause 4.2.2.6</p> <p>Added to Clause 4.2.3.1</p> <p>Added to Clause 4.2.3.2</p> <p>Added to Clause 4.2.3.3</p> <p>Added to Clause 4.2.4.1</p> <p>Added to Clause 4.2.4.2</p> <p>Added to Clause 4.2.4.3</p> <p>Added to Clause 4.2.5.1</p> <p>Added to Clause 4.2.5.1.1</p>
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		<p>4.2.5.4.1 Cancel – Some panels may require a special function key after Disarm to send a Cancel signal.</p> <p>4.3.1 Cross Zoning - UL has certain requirements for employing cross zoning. Because this feature is a programmable one the 2 standards should be able to co-exist.</p> <p>4.4.2 Labelling - The voltage which needs to be specified on the interconnect label is a DC value of the zone circuit in which proper operation of the zone is affected due to excess wire or device (detector) resistance.</p> <p>4.4.3 Restoration of Power - The state should be retained indefinitely. The control panel is required to come up in the disarmed state if that is the state it was in when it powered down.</p> <p>4.5 Call Waiting - All that should be required in testing is to prove that the control can dial all the digits on a standard DTMF phone including *. A DTMF test set can be used for this purpose.</p> <p>4.6.1 Quick Reference - The quick reference section can be contained in the manual so long as it is a separate section.</p> <p>4.6.1 User Manual – The operation of CP-01 features that interact directly with the user shall be documented in the user manual. This includes:</p> <ul style="list-style-type: none"> • 4.2.2.1 Exit Time • 4.2.2.2 Progress Annunciation • 4.2.2.3 Exit Time Restart • 4.2.2.5 Unvacated Premises • 4.2.3.1 Entry Delay • 4.2.3.2 Progress Annunciation • 4.2.3.3 Disarm • 4.2.4.1 Control Buttons • 4.2.4.2 Manual Alarms • 4.2.4.3 System Acknowledgment • 4.2.4.4 Remote Arming • 4.2.4.5 Remote Disarming • 4.2.5.1.1 Disarm • 4.2.5.1.2 Abort • 4.2.5.3 Disarm • 4.2.5.4 Cancel Window • 4.2.6.2 Duress Code • 4.2.7 Initiation of Manual Alarms • 4.6.3 System Test • 4.6.6 Test in Progress • 4.6.7.1 Automatic Termination <p>4.6.3 System Test - System Test can be a procedure outlined in the manuals.</p> <p>4.6.7.1 Automatic Test Termination - The test termination annunciation must be given whenever a test is terminated automatically regardless of the length of the test. This would require that an automatic test termination could not take place in less than 5 minutes, though the test can be terminated manually in less than 5 minutes. Since the person testing the system is probably not going to be at the arming station at all times, the annunciation should be audible.</p> <p>4.6.7.2 State at Termination - The standard does not prohibit the annunciation and/or the reporting of fire alarm trouble during a test mode, so is not in conflict with UL standards.</p>	<p>Added to Clause 4.2.5.4.1 Note added in 4.3.1</p> <p>Added to clause 4.4.2</p> <p>Added to clause 4.4.3</p> <p>Added to note in clause 4.5</p> <p>Added to 4.6.1</p> <p>Added to 4.6.1</p> <p>Added to 4.6.3</p> <p>Added to 4.6.7.1</p> <p>Added to 4.6.7.2</p>
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Control Panel Standard - Features for False Alarm Reduction

ANSI/SIA CP-01-200x (Revision of ANSI SIA CP-01-2000)

Working Draft Dated 2006/01/31

Sponsor

Security Industry Association

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Deleted: 2003

Contents

Page

Foreword	v
Introduction.....	ix
1 Scope.....	10
2 Normative references.....	10
2.1 Related Areas (Bibliography?).....	10
2.2 Supporting Documents.....	11
2.3 Precedence	11
3 Conventions and Definitions.....	11
3.1 Conventions.....	11
3.1.1 Units of Measurement.....	11
3.1.2 Tolerances.....	11
3.1.3 Special Capitalization	12
3.1.4 Nomenclature and Identification of Clauses	12
3.1.5 Binding Language	12
3.2 Terms and definitions	12
4 Requirements.....	18
4.1 Partitioned Systems	18
4.2 User Caused False Alarms	18
4.2.1 Annunciation.....	18
4.2.2 Arming and Exit.....	18
4.2.3 Entry and Disarming	20
4.2.4 Remote Control Devices	21
4.2.5 Alarm Transmission Sequence	21
4.2.6 Inadvertent Duress.....	23
4.2.7 Initiation of Manual Alarms	23
4.3 Sensor Caused False Alarms.....	23
4.3.1 Cross Zoning	24
4.3.2 Swinger Shutdown.....	24
4.3.3 Fire Alarms.....	24
4.4 Power caused false alarms	24
4.4.1 Power Variations	24
4.4.2 Labelling.....	24
4.4.3 Restoration of Power	25
4.5 Call Waiting	25
4.6 Installation and Test.....	25
4.6.1 Quick Reference	25
4.6.1.A System Configuration Identification.....	26
4.6.2 Partitioned Systems	26
4.6.3 System Test	26
4.6.4 Initiation of Test.....	26
4.6.5 Communications	26
4.6.6 Test in Progress	27
4.6.7 Termination of Test	27
4.7 Default Settings	27

Deleted: 2004

Annex A (informative) Programmable Features.....	28
Annex B (informative) Arming, Disarming, and Transmission Sequences.....	30
Annex C (informative) Event Timing Diagrams	32
Annex D (informative) Recommended Self Validation Procedures	34
Annex E (informative) Product Marking.....	49
Annex F (informative) Clarifications and Interpretations.....	50
Annex G (informative) New Central Station Signals.....	54
I. New Signals Required by CP-01-2000.....	54
II. New Signals Allowed or Recommended by CP-01-2000	55

Deleted: Foreword . v¶
Introduction . x¶
1 Scope . 11¶
2 Normative references . 11¶
2.1 Related Areas (Bibliography?) . 11¶
2.2 Supporting Documents . 12¶
2.3 Precedence . 12¶
3 Conventions and Definitions . 12¶
3.1 Conventions . 12¶
3.1.1 Units of Measurement . 12¶
3.1.2 Tolerances . 12¶
3.1.3 Special Capitalization . 12¶
3.1.4 Nomenclature and Identification of Clauses . 13¶
3.1.5 Binding Language . 13¶
3.2 Terms and definitions . 13¶
4 Requirements . 19¶
4.1 Partitioned Systems . 19¶
4.2 User Caused False Alarms . 19¶
4.2.1 Annunciation . 19¶
4.2.2 Arming and Exit . 19¶
4.2.3 Entry and Disarming . 20¶
4.2.4 Remote Control Devices . 21¶
4.2.5 Alarm Transmission Sequence . 22¶
4.2.6 Inadvertent Duress . 23¶
4.2.7 Initiation of Manual Alarms . 23¶
4.3 Sensor Caused False Alarms . 24¶
4.3.1 Cross Zoning . 24¶
4.3.2 Swinger Shutdown . 24¶
4.3.3 Fire Alarms . 24¶
4.4 Power caused false alarms . 24¶
4.4.1 Power Variations . 24¶
4.4.2 Labelling . 24¶
4.4.3 Restoration of Power . 25¶
4.5 Call Waiting . 25¶
4.6 Installation and Test . 25¶
4.6.1 Quick Reference . 25¶
4.6.2 Partitioned Systems . 25¶
4.6.3 System Test . 25¶
4.6.4 Initiation of Test . 25¶
4.6.5 Communications . 26¶
4.6.6 Test in Progress . 26¶
4.6.7 Termination of Test . 26¶
4.7 Default Settings . 26¶
Annex A (informative) Programmable Features . 27¶
Annex B (informative) Arming, Disarming, and Transmission Sequences . 29¶
Annex C (informative) Event Timing Diagrams . 31¶
Annex D (informative) Recommended Self Validation Procedures . 33¶
Annex E (informative) Product Marking . 48¶
Annex F (informative) Clarifications and Interpretations . 49¶

Deleted: 2003

Foreword

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Requests to modify this document are welcome at any time from any party, regardless of membership affiliation with SIA. Such requests, which must be in writing and sent to the address set forth below, must clearly identify the document and text subject to the proposed modification and should include a draft of proposed changes with supporting comments. Such requests will be considered in accordance with SIA's standards development policies and procedures.

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Requests to modify a standard, requests for interpretations of a standard, or any other comments are welcome and may be sent to:

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Alexandria, VA, 22314
P (703) 683-2075

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ACKNOWLEDGEMENTS

This standard was developed by the SIA Control / Communicator Standards Subcommittee. The voting members of the Subcommittee are listed below.

SIA gratefully acknowledges the efforts of the many volunteers from the security industry that helped the Subcommittee to develop this standard.

SIA Control / Communicator Standards Subcommittee, February 1994 (Baseline of the Standard)

Chairman of the SIA Standards Committee:

Silent Knight Security Systems Theodore A. Nesse

Chairman of the SIA Control / Communicator Standards Subcommittee:

Caddx-Caddi Controls Jim Stevens

Company Voting Members of the SIA Control / Communicator Standards Subcommittee:

Ademco Security Group Frank Marino
ADT Security Systems Bernard Worst
Aritech Corporation William Lautzenheiser
AT&T Consumer Products Don Hornback
Caddx-Caddi Controls Jim Stevens
Central Station Alarm Association Tom Lewin
Fire Burglary Instruments Ted Simon
Interactive Technologies Robert Brunius
National Burglar and Fire Alarm Association Brad Shipp
Radionics, Inc. Pat Kelly
Scantronic (USA), Inc. Bill Nuffer
Sentrol, Inc. David S. Terrett
Silent Knight Security Systems Glen Wontorcik
SIA Staff Administrator L. Virginia Williams

SIA also gratefully recognizes the efforts of the SIA Control Panels Working Group who developed the *Recommended Self-Validation Test Procedures* for the 1997 revision of this standard.

Chairman of the SIA Standards Committee:

L. T. Fiore, Inc. Louis T. Fiore

Chairman of the SIA Control / Communicator Standards Subcommittee:

Caddx-Caddi Controls Jim Stevens

Company Voting Members of the SIA Control / Communicator Standards Subcommittee:

Ademco Security Group Richard Hinkson
ADT Security Systems..... Samuel S. Wen
C & K Systems, Inc..... Steve Suthers
Caddx-Caddi Controls, Inc. Jim Stevens

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Fire Burglary Instruments, Inc.	Robert Orlando
Interactive Technologies, Inc.	Richard Buus
Sentrol, Controls Group	David S. Terrett
Underwriters Laboratories	Jim E. Lesniak
SIA Staff Administrator	L. Virginia Williams
SIA Staff Administrator	Guy Schroff

SIA Control Panel Standards Subcommittee, April 1999 (1999 Revision of the Standard)

Chairman of the SIA Standards Committee:

ADT Security Systems William Moody

Chairman of the SIA Control / Communicator Standards Subcommittee:

Caddx Controls Jim Stevens

SIA Staff Administrator L. Virginia Williams

SIA Staff Administrator Guy Schroff

Open industry vote, ballots cast by the following companies: (85% approval in ballots cast)

Ademco	Richard Hinkson
ADI	Stan Martin
ADT	Charles Erichson
Advanced Algorithms, Inc.	Greg Spar
Advanced Technology Associates	David S. Terrett
Aegis Security	George M. Fotiades
AIREF Model States Program – California	Pamela L. Harlan
AIREF Model States Program – Illinois	Dan Petesch
Alarm Detection Systems	Bob Bonifas
Alarm Security Protection Co., Inc. (A.S.P.)	Carl E. Spiegel
Anchor Alarm, Inc.	Ed Bruerton
Best Access Systems	James Abney
Brinks Home Security	Mitchel Christopher
C&K Systems	Steve Aguilar
Caddx Controls	Jim Stevens
Central Signal Corp.	Paul Carroll
Detection Systems / Radionics	Kevin Patterson / Drew Chernoy
Discopy, Inc.	Ed Grinovich
Digital Security Controls (DSC) Ltd.	David Clark
Electronic Security Services	Bill Gerth
EMAR Group, Inc.	Anthony Dell'Isola
Emergency 24	Maureen Gold
Fire Burglary Instruments, Inc. (FBI)	Ted Simon
The Greater Alarm Company, Inc.	Richard A. Johnson
Greystone Systems	Jim Hamilton
Kismet Group Ltd.	Craig Leiser
McInerney Consulting	William D. McInerney
Moon Security Service	Michael A. Miller
National Burglar and Fire Alarm Assn.	Brad Shipp
Optex (America)	Paul Van Winkle
Phoenix Police Department	Patti Rea
Security Associates International	Ron Carr
Security Equipment Inc.	Sid Meridith
Security Systems by Hammond	M. B. Hammond

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Security Systems, Inc. Ronald D. LaFontaine
Secumet Protective Services Lamar D. Fuller
Sentrol - SLC Technologies, Inc. Barry M. Clarke
Transcience Don Bosak
Underwriters Laboratories Isaac I. Papier
Westec Home Security Robert L. Ohm

SIA Security Control Panel Standards Subcommittee, 200x

Revision History

The following are changes made to this document, listed by revision.

FEBRUARY 1994 BASELINE

Original Publication

AUGUST 1997 REVISION

Added Appendix: Recommended Self-Validation Test Procedures

APRIL 1999 REVISION

Numerous and extensive changes, including:

- Conventions used in the document
- Ranges and default settings of time sensitive features
- Terms used to describe certain timing features
- Specific treatment of features that are allowed though not required
- Additional requirements for arming stations, especially for remote arming and manual alarms
- Additional requirements for power caused false alarms
- Minor clarifying language throughout
- Reference to programming at installation
- Reference to UL product listing to this standard

JANUARY 2000 REVISION

Substantive Change

- 4.2.5.1 Abort Window - Change the line in the programming range chart from "*Maximum 30-255 sec*" to "*Maximum 45 sec*".

Non-Substantive Change

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- 3.2 Definition of Duress - Add the following phrase after “a facility”: or commit some other act or action “against the individual’s will.”
- 3.2 Definition of Zone Type - Change to: zone type - a zone or group of zones identified by common function or operating mode.
- 4.2.4.1 Description of Control Buttons - add after “Remote control device buttons, including Duress, Holdup and Panic, shall be mechanically designed ... be minimized.
- 4.2.5.1.2 Abort Window - Add a note that an abort signal may be sent.
- 4.6.1. Add a note to Quick Reference that user manuals should contain the following statement, or one similar: “There is a communicator delay of 30 seconds in this control panel. It can be removed, or it can be increased up to 45 seconds, at the option of the end user by consulting with the installer.”
- Appendix A – 4.2.5.1- Changed range from “15 sec - 30 sec (255 sec max)” to “15 sec - 45 sec”
- Appendix B – 4.2.5.1 – Changed from “15 to between 30 and 255 seconds” to “15 to 45 seconds.”
- Appendix D – Test Procedures 4.2.5.1 –
- Changed maximum Abort Window delay from ‘255 sec’ to ‘45 sec’
- Changed verification parameters from “time between the trip and the local alarm” to “time between the local alarm and the alarm signal”. (correction)
- Added Abort Window verification test for 46 seconds

XXXXXXX 200x REVISION

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Control Panel Standard - Features for False Alarm Reduction

1 Scope

This standard details recommended design features for security system control panels and their associated arming and disarming devices to reduce the incidence of false alarms. These features are applicable to both residential and commercial properties protected by an electronic security system.

This standard is intended for use by manufacturers in the design of control panels and alarm signal receivers. It is also intended for reference by all affected parties, including security system installers, specifiers, and users; central station owners and operators; manufacturers of central station products, such as receivers and automation software; and local authorities.

This standard assumes that communications to the central station will be conducted by a robust contemporary communication protocol such as the SIA *Digital Communication Standard - "SIA Format" Protocol for Alarm System Communications*.

This standard is voluntary.

2 Normative references

2.1 Related Documents

Additional guidance on areas relating to this standard, as noted and otherwise, can be obtained from the sources below.

- Features within this standard are, in part, based on data and recommendations from the following publications:
- Standards Committee Report (1994-1995), Central Station Alarm Association
 - 1994 Study of False Alarms, Security Industry Association
 - Model Cities Executive Summaries, Alarm Industry Research and Education Foundation (AIREF)

This standard is intended to allow compliance with the following standards:

National Fire Protection Association

- NFPA 72, National Fire Alarm Code

Underwriters Laboratories, Inc.

- UL 609, Local Burglar-Alarm Units and Systems
- UL 611, Central-Station Burglar-Alarm Systems
- UL 681, Installation and Classification of Mercantile and Bank Burglar-Alarm Systems

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- UL 864, Control Units for Fire-Protective Signaling Systems
- UL 985, Household Fire Warning System Units
- UL 1023, Household Burglar-Alarm System Units
- UL 1076, Proprietary Burglar Alarm Units and Systems
- UL 1610, Central Station Burglar-Alarm Units
- UL 1635, Digital Burglar Alarm Communicator System Units
- UL 1641, Installation and Classification of Residential Burglar Alarm Systems

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2.2 Supporting Documents

The digital communications features detailed in this standard are supported by the Security Industry Association *Digital Communication Standard - "SIA Format" Protocol for Alarm System Communications*.

2.3 Precedence

In the event of conflict between this standard and other reference documents mentioned herein, the order of precedence shall be:

- 1) National Fire Protection Association
- 2) Underwriters Laboratories, Inc.
- 3) this standard
- 4) other reference documents

3 Conventions and Definitions

3.1 Conventions

3.1.1 Units of Measurement

In accordance with SIA Policy, the units of measurements used throughout this publication are the units of the System International d' Unites (SI), commonly known as metric units. Equivalent English Units, enclosed in parenthesis, are also used in this publication. These equivalent English Units are approximate conversions and are provided for easy reference.

3.1.2 Tolerances

Unless otherwise specified, the tolerance for measurements specified within this standard shall be 10 percent ($\pm 10\%$).

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3.1.3 Special Capitalization

Alarm sequence events, alarm system commands and states, and digital communication codes transmitted by the control panel to the central station are capitalized within the text of this standard.

3.1.4 Nomenclature and Identification of Clauses

Clauses and subclauses within this standard are identified and referenced by the number preceding each clause. Unless otherwise specified, references to a clause refer to only that clause and not to subsequent subclauses within the clause.

3.1.5 Binding Language

This standard uses the term “shall” to convey binding requirements.

The term “may” is used to convey features that are allowed but not required.

Terms such as “is”, “are”, “will”, and others are used to convey statements of fact for advisory purposes only.

The annotation “NOTE:” also precedes advisory information.

Where this standard is silent on a feature, the feature is permitted so long as it is not in conflict with the requirements contained herein.

A requirement is a feature that the control panel must perform under all circumstances. A required option is a programmable feature that must be in the control panel. An allowed option is a programmable feature that is not required or prohibited by the standard. An allowed feature is a non-programmable feature that is not required or prohibited by the standard.

Normative Annexes contain binding information.

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3.2 Terms and definitions

For the purposes of this standard, the following terms and definitions apply:

3.2.1
24-hour alarm
an alarm produced by a trip on a 24-hour zone.

3.2.2
24-hour zone
a zone that is always active, usually used for smoke detectors.

3.2.3
abort
a manual intervention after a system trip that prevents an alarm from being sent.

3.2.4
abort window
a period of time after a sensor initiated alarm condition that allows the user additional time to Disarm the system before an alarm is transmitted.

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3.2.5**alarm**

a condition indicating a state of alert, duress, perimeter violation, or fire at the premises.

3.2.6**alarm signal**

a transmission of an alarm condition or alarm report.

3.2.7**annunciator**

a low level audio or visual device, such as a speaker or LED, whose purpose is to inform the system user the condition or status of the security system or designated part of the security system.

3.2.8**Arm**

to turn on a security system.

3.2.9**arming station**

the part(s) of a security system from which a human operator can Arm and Disarm the system, manipulate the system operation, or otherwise interact with the system.

3.2.10**Away**

see *Full Arm*.

3.2.11**Bell**

a specific type of sounder which produces a ringing or gong sound through the striking of its hammer to its metal part.

3.2.12**Cancel**

a transmission indicating that the previous alarm signal, or alarm in process, is to be disregarded.

3.2.13**Close**

the act of Arming a security system.

3.2.14**code**

a parcel of electronic data, usually represented by a short series of letters or numbers corresponding to a specific event or status of the security system, which is generated by the control panel and sent as a report or part of a report.

3.2.15**communicator**

the part of the security system that sends electronic data outside the premises, typically to a central station.

3.2.16**communicator delay**

a period of time which elapses before the control panel sends a transmission to the central station. See *Abort Window*.

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3.2.17

control

the part of the security system that determines the operation and interaction of the system based on programmed logic.

3.2.18

control panel

the part of a security system that handles control and communication, whether as combined or separate physical units.

3.2.19

cross zoning

a configuring of logic within the control panel such that two or more zones of the security system are interdependent in causing an alarm condition.

3.2.20

delayed zone

a zone or circuit configured to provide a time delay, when tripped, before an alarm is generated.

3.2.21

Disarm

to turn off a security system.

3.2.22

double action trigger

a manual operation that requires two simultaneous or sequential actions.

3.2.23

Duress

the presence of one or more persons trying to force an individual to enter or re-enter a facility, or commit some other act or action against the individual's will.

3.2.24

Entry Delay

the period of time allowed, after entry to the premises, to Disarm the security system before the panel initiates an Alarm Transmission Sequence.

3.2.25

entry/exit zone

a delayed zone on the perimeter of the protected premises.

3.2.26

Exit Error

a signal produced when an entry/exit zone is still violated at the expiration of the Exit Time.

3.2.27

Exit Time

the period of time allowed, after Arming a security system, to exit the premises without tripping an alarm.

3.2.28

false alarm

an alarm transmission sent by the security system indicating the presence of an alarm condition when none exists.

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3.2.29**fire alarm verification**

an operation that ensures that an alarm condition persists by resetting a tripped sensor in a fire zone and confirming that the sensor remained tripped or waiting for the sensor to re-trip within a set period of time. ~~(e.g. if the smoke detector is self-resetting or auto-restoring, checking that the sensor trips more than once or remains tripped within a set period of time.)~~ Fire alarm verification is meant to be a function of either the control panel or the sensor/detector. When “fire alarm verification” is a function of the control panel, delaying transmission of the fire alarm signal (after the initial sensor trip) until a second sensor trip occurs, within the confirmation period, meets the SIA CP-01 requirements.

Deleted: (e.g. Cycling power to a smoke detector to ensure the condition persists when power is restored.)

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3.2.30**fire zone**

a zone or circuit installed upon which are sensors designed to detect a fire condition (e.g. smoke, heat, carbon monoxide, etc.)

3.2.31**follower zone**

a non entry/exit zone, typically an interior zone located on an entry/exit path, that is treated as an entry/exit zone during an Entry Delay or Exit Time.

3.2.32**Full Arm**

an armed state of a security system where all zones and sensors are activated.

3.2.33**Holdup**

the presence of one or more criminals attempting to take goods or funds with implied or actual threat of force.

3.2.34**Home**

see *Stay Arm*.

3.2.35**instant zone**

a non-24 hour zone that causes an alarm immediately upon being tripped.

3.2.36**key fob**

a type of *remote control device*.

3.2.37**keypad**

see *arming station*.

3.2.38**local alarm**

an alarm indication given at the protected premises by activation of a sounder.

3.2.39**manual reset**

the act of clearing an alarm condition in a security system by human intervention, either at an arming station or by remote control.

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3.2.40**Open**

the act of Disarming a security system.

3.2.41**operating code**

a numeric sequence used to control the alarm system, usually entered manually at a keypad.

3.2.42**option**

a functional or performance feature that is required by this standard but may be implemented as a selectable part of a product's performance capability.

3.2.43**Panic**

a general type of perceived emergency, including the presence of one or more unwanted persons trying to gain entry or observed intruders on the private grounds.

3.2.44**partition**

a defined area within the security system that can be Armed and Disarmed independent of the other area(s), but operated under a single system control. (Dedicated or shared user interfaces may be used to operate a partition.)

3.2.45**point**

an electronically addressable sensor, sometimes used interchangeably with the term *sensor*. The term is usually used in multiplex alarm systems or for RF (wireless) sensors.

3.2.46**premises**

the facility being protected by a security system.

3.2.47**primary power**

power provided by a commercial source that is normally available at the premises.

3.2.48**Recent Closing**

a transmission indicating that the security system has recently been Armed.

3.2.49**report**

an electronic transmission sent by the control panel to the central station containing detailed information about an event detected by or status of the security system.

3.2.50**remote control device**

any device that can be used at a location remote from the control panel to control the functions of the control panel. This includes portable wireless devices, dead bolt sensors located in the entry door assembly, or any other device intended to arm or disarm the control panel when activated. One of the purposes of a remote control device is to eliminate the need for arming and disarming delays, by giving the user a means of arming or disarming before, or simultaneous with, entry or exit. Some remote control devices (i.e., key fobs) can also give the user a means of remotely initiating manual alarms.

Deleted: a portable wireless device that controls functions of a control panel, such as Arm, Disarm, or other features provided by the manufacturer.

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3.2.51**secondary power**

power provided from a secondary source, such as a battery or generator, upon the loss of primary power.

3.2.52**silent exit**

a user initiated feature that silences the audible progress annunciation of the exit delay.

3.2.53**siren**

a type of *sounder*.

3.2.54**sounder**

a high level audio device whose purpose is to alert person(s) at the protected premises of an alarm condition.

3.2.55**Stay Arm**

an armed state of a security system where some zones or sensors are active while other zones or sensors are made inactive, allowing occupants to be inside the protected premises without causing an alarm.

3.2.56**swinger shutdown**

an operating mode in which the control panel, when a sensor or zone is repeatedly tripping, ignores the trips on that zone after a limited number of them.

3.2.57**transmission**

an electronic message sent from the control panel to the central station.

3.2.58**trip**

an alarm state (of the security system) produced as a result of detection by a sensor.

3.2.59**user code**

the numeric sequence of digits that correlates to a valid user number.

3.2.60**user interface**

see *arming station*.

3.2.61**user number**

an identification number assigned to a person who operates or has access to the security system, or a default identification number assigned to a security system for quick Arming of the system.

3.2.62**violated**

a condition at the premises detected by a sensor that causes a trip.

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3.2.63**zone**

a dedicated input to the control panel containing one or more sensor devices which will trip that input upon activation of any one sensor device.

3.2.64**Zone in Error**

the zone that has produced an erroneous alarm condition.

3.2.65**zone type**

a group of zones identified by common function or operating mode.

4 Requirements

4.1 Partitioned Systems

Partitioned systems shall provide the requirements of Clause 4.2 User Caused False Alarms, 4.3 Sensor Caused False Alarms, and 4.6 Installation and Test for each partition. Each partition needs to be able to support the requirements in Clause 4. In testing, it will be acceptable to test 2 partitions as indicative of the product's ability to meet the requirements in all partitions.

The standard does not specifically prohibit a silent exit feature in a partitioned system. It does require that it follow the same criteria as a non-partitioned system when it is invoked.

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4.2 User Caused False Alarms

4.2.1 Annunciation

The control panel shall support an output to activate an auxiliary annunciation device for all sounds required by this standard.

The control panel shall support annunciation of exit and entry time in multiple locations within the premises.

4.2.2 Arming and Exit

To reduce the incidence of false alarms during Full Arming or automatic Arming, the following shall be required except as noted in clause 4.2.4.4 Remote Arming. The standard does not specifically address the features and requirements for automatic arming. It would be considered an allowed option. If employed, however, it would need to follow the requirements of clause 4. The standard addresses Remote Arming and Remote Disarming of alarm systems, using remote control devices, to help reduce false alarms caused by unintentional violation of exit and entry delays.

4.2.2.1 Exit Time

A programmable Exit Time shall be included. The programmable range for all Exit Times shall be from forty-five (45) seconds to at least two (2) minutes, but shall not exceed two hundred and fifty-five (255) seconds. The control panel default setting for all Exit Times shall be sixty (60) seconds. The minimum time given is an absolute minimum, and panels are not to allow Exit Time(s) of less than 45 seconds.

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If the control panel supports a silent exit feature and it has been invoked, the Exit Time shall be doubled for that exit period only. When invoked, the Silent Exit feature will halt the exit progress annunciation for the entire system or partition for only one arming cycle.

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4.2.2.2 Progress Annunciation

The control panel shall annunciate a distinct pulsating audible sound throughout the duration of the Exit Time to warn person(s) still within the premises that the exit period is in process.

An audible annunciation, whose pulsating rate is distinctly different, shall sound during the last ten (10) seconds of the Exit Time to warn person(s) that the Exit Time is running out.

A control panel may meet this requirement by having two separate buttons for arming where one is arm normal (with progress annunciation) and one is arm silent (no annunciation).

If the control panel supports a silent exit feature and it has been invoked, the audible progress annunciation shall be silenced for that exit period only.

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The control panel shall not allow progress annunciation to be disabled for the entire system, but may allow annunciation to be disabled for individual keypads.

4.2.2.3 Exit Time Restart

An option shall be provided where violation, restoral, and then a second violation of an entry/exit zone prior to the end of the Exit Time shall restart the Exit Time. The panel shall not allow the Exit Time to be restarted more than once. The default setting for this option shall be that it is enabled.

Since exit time restart is a required option, panels will have the ability to have this feature disabled at the time of installation.

If the control panel supports a silent exit feature and it has been invoked, the audible progress annunciation shall remain silenced during the additional Exit Time, and the duration of the additional Exit Time shall be doubled for that additional exit period only.

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4.2.2.4 Exit Error

An Exit Error sequence shall be initiated if an entry/exit zone is violated at the expiration of the Exit Time. The standard does not address panel response if a non-entry/exit zone is violated at the end of the Exit Time.

An Exit Error shall be processed as follows:

- The local alarm shall immediately sound.
- The annunciator shall sound an Entry Delay or an alarm condition.
- An Entry Delay shall be initiated.
- If the alarm system is not Disarmed at the end of the Entry Delay, the Alarm Transmission Sequence shall be initiated.
- The Alarm Transmission shall include the alarm and an Exit Error.

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4.2.2.5 Unvacated Premises

An option shall be provided which allows the security system to Arm in the Stay Arm mode if the Exit Time expires and no exit has been made. The default setting for this option shall be that it is enabled.

This option is not required when the system is Armed with a remote control device.

4.2.2.6 Recent Closing

A Recent Closing transmission shall be sent if an alarm occurs within two (2) minutes after the expiration of the Exit Time. If the user number is available, it shall be included in the Recent Closing transmission.

Recent Closing transmissions are not required for Fire alarms.

A Recent Closing transmission is allowed, but not required, if an alarm condition occurs between Arming and the end of the Exit Time. The Recent Closing signal is separate from the closing signal.

4.2.3 Entry and Disarming

To reduce the incidence of false alarms during Entry and Disarming, the following shall be required for all armed states.

4.2.3.1 Entry Delay

Programmable Entry Delays shall be included. The programmable range for all Entry Delays shall be from thirty (30) seconds to at least four (4) minutes. The control panel default setting for all Entry Delays shall be thirty (30) seconds. If the system is not disarmed during the Entry Delay, the Alarm Transmission Sequence shall begin when the Entry Delay expires.

The minimum time given is an absolute minimum, and panels are not to allow Entry Delay(s) of less than 30 seconds.

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4.2.3.2 Progress Annunciation

A distinct annunciation shall be produced upon entry to warn person(s) entering the premises that the Entry Delay has begun. This annunciation shall be distinct from the annunciation produced when the system is in alarm. The early progress annunciation of an entry delay needs to be audible at a minimum.

4.2.3.3 Disarm

When the system is in an Entry Delay, the system shall Disarm by entering a user code only. Alternative co-existing methods of Disarming are permitted. The alternative methods mentioned are referring to keystrokes on the keypad, such as a disarm command followed by a code. This section is stating these methods can work in addition to the code only method.

If multiple keypads are annunciating the entry delay, one or all keypads may be momentarily silenced.

Progress annunciation shall be silenced upon entry of the first digit of the user code. Progress annunciation shall resume upon entry of an invalid user code or after a manufacturer specified time during the Entry Delay.

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4.2.4 Remote Control Devices

Devices that remotely control the functions of the alarm system, if used, shall have the following features.

4.2.4.1 Control Buttons

Remote control device buttons, including Duress, Holdup and Panic, shall be mechanically designed in such a way so that inadvertent activation of remote commands shall be minimized.

The requirements applied for all control buttons are not the same those as for manual alarms (see section 4.2.4.2) . Control buttons only need to implement the mechanical design features to prevent inadvertant activation, not the dual action requirements of section 4.2.4.2. For testing, the manufacturer may need to provide (in their product literature or otherwise) rationale on their mechanical design and how it minimizes inadvertent activation.

4.2.4.2 Manual Alarms

The requirements of clause 4.2.7.1 Initiation of Manual Alarms shall be met when activating manual alarms by remote control devices. For testing, the manufacturer may need to provide (in their product literature or otherwise) rationale on their design features, employed to achieve a double action trigger.

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4.2.4.3 System Acknowledgment

The control panel shall provide acknowledgment of Arm and Disarm commands from the remote control device such that the acknowledgment can be discerned from the exterior of the premises. The user needs to know the end result of the action taken. This can be by virtue of the knowing which button the user pushed followed by a common acknowledgment or by separate and distinct acknowledgment for arm and disarm.

4.2.4.4 Remote Arming

When the system is Armed using a remote control device, the control panel may be programmed to Arm the system without an Exit Time and the associated progress annunciation as described in clause 4.2.2.1 Exit Time through 4.2.2.6 Recent Closing. The default configuration for the control panel shall be to Arm the system using the Exit Time and progress annunciation.

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Deleted: and 4.2.2.2 Progress Annunciation

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4.2.4.5 Remote Disarming

When the system is Disarmed using a remote control device, such that an Entry Exit Zone is not violated prior to disarming the system, the progress annunciation described in clause 4.2.3.1 through 4.2.3.3 will not start.

4.2.5 Alarm Transmission Sequence

To reduce the incidence of false alarms during alarm transmissions, the following sequence of events shall be required.

4.2.5.1 Abort Window

A programmable Abort Window shall be included for all non-fire zones. During an Abort Window, the local alarm shall sound and the annunciator shall annunciate an alarm. The minimum time given is an absolute

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~~minimum, and panels shall not allow an Abort Window of less than 15 seconds.~~ NFPA requirements shall be met when the Abort Window is applied to any fire zone.

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Deleted: The Abort Window cannot be globally disabled, nor can all zones but fire be disabled, with a single programming option.¶

The Abort Window may be disabled by zone or zone type. The default setting for the Abort Window shall be that it is enabled for all non-fire zones and zone types. ~~It shall not be possible to globally disable the Abort Window.~~

The programming for the Abort Window for all non-fire zones shall be as follows:

Table 1 — Programming for the Abort Window for all Non-Fire Zones

Programming Range:	
Minimum	15 sec
Maximum	45 sec
Default Time	30 sec
May Disable	By Zone or Zone Type

NOTE In accordance with UL standards, this standard intends that the aggregate of the Entry Delay and Abort Window will not be programmed to exceed one minute.

4.2.5.1.1 Disarm

When the system is in an alarm condition, the system shall Disarm by entering a user code only. Alternative co-existing methods of Disarming are permitted, ~~including the use of an RFID device.~~

Alarm annunciation ~~at the keypad~~ shall be silenced upon entry of the first digit of the user code. Alarm annunciation shall resume upon entry of an invalid user code or after a manufacturer specified time during the Abort Window. ~~If this is unsuccessful the local alarm annunciation will restart. The minimum timings in this standard do allow for harmony with the existing UL standards.~~

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Deleted: An RFID interface is an equivalent means and that the passcode backup must comply with the CP-01 requirements.¶

4.2.5.1.2 Abort

If the alarm system is Disarmed within the Abort Window, no alarm transmission shall occur.

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An option shall be provided that the alarm system will annunciate that no alarm signal was transmitted. The default setting for this option shall be that it is enabled.

NOTE: A transmission may be sent indicating that an alarm has been aborted.

4.2.5.2 Alarm Transmission

The Alarm Transmission shall occur at the end of the Abort Window.

4.2.5.3 Disarm

Upon disarming the system after any alarm has been reported (except for a Duress alarm), the panel shall indicate that an alarm had occurred and shall, at a minimum, indicate which zone(s) had been violated during the armed period.

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4.2.5.4 Cancel Window

A period of time shall be provided, starting at the end of the Abort Window, during which a user can Cancel the alarm. The minimum duration of the window shall be five (5) minutes. The Cancel Window shall apply to all alarms that have been subjected to the Abort Window.

4.2.5.4.1 Cancel

If an alarm has previously been transmitted, a Cancel signal shall be transmitted if either the alarm system is Disarmed, or both a Disarm and function key are depressed during the Cancel Window. Some panels may require a special function key after Disarm to send a Cancel signal.

✓ An option shall be provided that the alarm system will annunciate that a Cancel was transmitted. The default setting for this option shall be that it is enabled.

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An option may be provided to delay the Cancel signal and other non alarm signals until after termination of active two-way voice sessions, in the instance that the end user initiates a cancel sequence while a two-way voice session is already in progress.

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4.2.6 Inadvertent Duress

To reduce the incidence of inadvertent Duress signals, the following shall be required.

4.2.6.1 Use of Duress Feature

If a Duress feature is provided, its default setting shall be that it is disabled.

4.2.6.2 Duress Code

A Duress signal shall be sent by a unique Duress code only. The control panel shall not derive the Duress code from an existing operating code such as a "user code plus Duress digit" sequence. The panel shall not allow duplication of any operation code including Duress codes.

4.2.7 Initiation of Manual Alarms

Alarms that are manually initiated at an arming station shall require a double action trigger.

NOTE: Implementation of this feature may include, but is not limited to, any of the following:

- Simultaneous depression of two buttons, where if either of the buttons have multiple functions, the two buttons are non-adjacent.
- Depression of a single button after lifting the cover that normally protects it, if the cover protects only emergency function buttons.
- Depression of a single button for at least two seconds.

4.3 Sensor Caused False Alarms

To reduce the incidence of false alarms caused by sensors, the following shall be required.

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4.3.1 Cross Zoning

A cross zoning option shall be included with the following features:

- The cross zone option shall be programmable by zone.
- The cross zone option shall require a trip on two zones, within a given time period, to start an Alarm Transmission Sequence as described in Clause 4.2.5 Alarm Transmission Sequence and its subclauses.
- The time period shall be initiated by the trip of the first zone.
- The time period shall be programmable or specified by the manufacturer, and shall be consistent with the requirements of any UL standards for which the panel is listed.

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The default setting for the cross zone option shall be that it is disabled.

NOTE: When the time period elapses without the trip of the second zone, it is recommended that an error transmission be sent that reports a trip in a cross zone was not verified.

Deleted: NOTE: UL has certain requirements for employing cross zoning. Because this feature is a programmable one these standards should be able to co-exist.¶

4.3.2 Swinger Shutdown

A programmable swinger shutdown shall be required for each non-fire zone, such that one or two trip shall shut down the zone. The zone shall be restored by a manual reset or may be reset automatically after forty eight (48) hours with no trips on any zones. The default setting for this option shall be one trip for swinger shutdown.

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NOTE: A Swinger Trouble code may be transmitted upon the occurrence of additional trips on the zone.

NOTE: Swinger shutdown may be disabled on any non-fire zone that does not require police response.

4.3.3 Fire Alarms

Fire alarm verification shall be an available option on fire zones. When used, the system shall begin an Alarm Transmission Sequence once the conditions for fire alarm verification are met. The default setting for the fire alarm verification option shall be that it is disabled.

4.4 Power caused false alarms

To reduce the incidence of false alarms caused by power problems, the following shall be required.

4.4.1 Power Variations

The control panel shall prevent false alarms due to variations of primary and secondary power sources, or due to complete loss of primary or secondary power or both.

4.4.2 Labelling

In order to allow the installer to match the operating ranges of sensors to the operating range of the control panel, the panel shall specify, on the interconnect label, the voltage under the full rated load at which point the panel ceases to process sensor trips. The specification limit may be provided as either as a DC input voltage or a total field wiring circuit resistance beyond which proper operation of the zone is not assured.

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4.4.3 Restoration of Power

Upon the restoration of power after a complete loss of primary and secondary power, the control panel shall resume operation in the same Arm state and with the same zones bypassed as when the panel lost primary and secondary power. The panel shall disregard input from all sensors for a minimum of sixty (60) seconds from the time of the primary power restoration. The panel arming state shall be retained indefinitely during a power loss.

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4.5 Call Waiting

To help prevent a call waiting line from interfering with the alarm verification process (causing the indication of a continuous ring when the phone line is actually in use), a programmable option for call waiting cancel shall be required. The default setting for this option shall be that it is disabled.

Note: The dial sequence for call waiting cancel is typically <*70><pause> on a DTMF line, but may vary depending on the region of the country. To test this feature, a DTMF test set may be used to confirm that the control can dial <*> and all the digits on a standard DTMF phone.

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Should a connection not be established on the initial attempt, an alternate dialing method shall be provided to assure that the connection failure was not due to the use of the call waiting cancel feature on a non- call waiting line.

A caution shall be included with the panel alerting the installer that a call waiting cancel on a non- call waiting line will prevent successful connection to the central station.

4.6 Installation and Test

To assist in both the installation and testing of panels to this standard, the following shall be required.

4.6.1 Quick Reference

A quick reference chart or card for the installer detailing the programming locations and testing procedures associated with the features of this standard shall be included. The quick reference section may be contained in the manual so long as it is a separate section.

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NOTE: User manuals should contain the following statement, or one similar:

"There is a communicator delay of 30 seconds in this control panel. It can be removed, or it can be increased up to 45 seconds, at the option of the end user by consulting with the installer."

The operation of CP-01 features that interact directly with the user shall be documented in the user manual. This includes:

- 4.2.2.1 Exit Time
- 4.2.2.2 Progress Annunciation
- 4.2.2.3 Exit Time Restart
- 4.2.2.5 Unvacated Premises
- 4.2.3.1 Entry Delay
- 4.2.3.2 Progress Annunciation
- 4.2.3.3 Disarm
- 4.2.4.1 Control Buttons
- 4.2.4.2 Manual Alarms
- 4.2.4.3 System Acknowledgment

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- [4.2.4.4 Remote Arming](#)
- [4.2.4.5 Remote Disarming](#)
- [4.2.5.1.1 Disarm](#)
- [4.2.5.1.2 Abort](#)
- [4.2.5.3 Disarm](#)
- [4.2.5.4 Cancel Window](#)
- [4.2.6.2 Duress Code](#)
- [4.2.7 Initiation of Manual Alarms](#)
- [4.6.3 System Test](#)
- [4.6.6 Test in Progress](#)
- [4.6.7.1 Automatic Termination](#)

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4.6.1.1 System Configuration Identification

For system configurations comprised of interchangeable components (e.g. control equipment, arming station, annunciator, local alarm, communicator, sub assembly, etc.) a list of components that comprise of the CP-01 compliant system shall be provided. The list shall be prominently available as part of the equipment's installation manual and shall include applicable information such as model numbers of the system components, so that the complaint minimum system configuration is identified.

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4.6.2 Partitioned Systems

For partitioned systems, the requirements of clause 4.6 Installation and Test and its subclauses shall be capable of being implemented independently for each partition.

4.6.3 System Test

A mode of operation that allows testing of all zones, the control, all sounders, and the communicator shall be included. ~~A procedure outlined in the manuals is an acceptable alternative to a special mode of operation.~~

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4.6.4 Initiation of Test

4.6.4.1 Panel Status

The panel shall ensure that a system test cannot be initiated from an armed state.

4.6.4.2 Initiation Report

At the initiation of a test, the control panel shall send a message to the central station that a test is in progress. The message shall include the user number if it is available.

4.6.5 Communications

Communication with the monitoring station regarding the partition(s), zones, or points and sensors under test shall be inhibited for the duration of the test except for the requirements of clause 4.6.4.2 Initiation Report.

A feature may be provided to transmit test signals. The default setting for this feature, if provided, shall be disabled.

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4.6.6 Test in Progress

During a test, the control panel shall give a clear, prominent, and continuous indication that the system is being tested. This indication shall be made at all wired system arming stations.

4.6.7 Termination of Test

4.6.7.1 Automatic Termination

When a panel automatically terminates a test, the panel shall annunciate a warning, different from the annunciation specified in clause 4.6.6 Test in Progress, beginning five (5) minutes prior to the termination of the test. The test termination annunciation must be given whenever a test is terminated automatically regardless of the length of the test. This would require that an automatic test termination could not take place in less than 5 minutes, though the test can be terminated manually in less than 5 minutes. Since the person testing the system is probably not going to be at the arming station at all times, the annunciation should be audible.

4.6.7.2 State at Termination

Termination of a test shall leave the security system in a disarmed state. 24 hour alarm zones are exempt from this requirement. Should a point in a 24 hour alarm zone be in violation at the termination of a test, the panel shall suppress the alarm and treat the zone as a trouble condition. The standard does not prohibit the annunciation and/or the reporting of fire alarm trouble during a test mode.

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4.6.7.3 Termination Report

When a test is terminated, the control panel shall send a message to the central station that the test is over.

4.7 Default Settings

All features of this standard implemented as selectable options shall be selected as the factory default except where otherwise indicated. Default settings are listed in Annex A.

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Annex A (informative) Programmable Features

Table A.1 — Shipping Defaults and Recommended Programming

PARAGRAPH	FEATURE	REQUIREMENT	RANGE	SHIPPING DEFAULT	RECOMMENDED PROGRAMMING *
4.2.2.1	Exit Time	Required (programmable)	For full or auto arming: 45 sec. - 2 min. (255 sec. max.)	60 Seconds	60 Seconds
4.2.2.2	Progress Annunciation / Disable - for Silent Exit	Allowed	Individual keypads may be disabled	All annunciators enabled	All annunciators enabled
4.2.2.3	Exit Time Restart	Required Option	For re-entry during exit time	Enabled	Enabled
4.2.2.5	Auto Stay Arm on Unvacated Premises	Required Option (except for remote arm)	If no exit after full arm	Enabled	Enabled
4.2.4.4	Exit Time and Progress Annunciation / Disable - for Remote Arm	Allowed Option (for remote arm)	May be disabled - for remote arming	Enabled	Enabled
4.2.3.1	Entry Delay(s)	Required (programmable)	30 sec. - 4 min. **	30 Seconds	At least 30 Seconds **
4.2.5.1	Abort Window – for Non-Fire Zones	Required Option	May be disabled - by zone or zone type	Enabled	Enabled (all zones)
4.2.5.1	Abort Window Time – for Non- Fire Zones	Required (programmable)	15 sec. - 45 sec. **	30 Seconds	At least 15 seconds **
4.2.5.1.2	Abort annunciation	Required Option	Annunciate that no alarm was transmitted	Enabled	Enabled
4.2.5.4.1	Cancel Annunciation	Required Option	Annunciate that a Cancel was transmitted	Enabled	Enabled
4.2.6.1 & 4.2.6.2	Duress Feature	Allowed Option	No 1+ derivative of another user code No duplicates with other user codes	Disabled	Disabled

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PARAGRAPH	FEATURE	REQUIREMENT	RANGE	SHIPPING DEFAULT	RECOMMENDED PROGRAMMING *
4.3.1	Cross Zoning	Required Option	Programming needed	Disabled	Enabled and two (or more) zones programmed
4.3.1	Programmable Cross Zoning Time	Allowed	May Program	Per manufacturer	Per walk path in protected premises
4.3.2	Swinger Shutdown	Required (programmable)	For all non-fire zones, shut down at 1 or 2 trips	One trip	One trip
4.3.2	Swinger Shutdown Disable	Allowed	For non- police response zones	Enabled	Enabled (all zones)
4.3.3	Fire Alarm Verification	Required Option	Depends on panel and sensors	Disabled	Enabled unless sensors can self verify
4.5	Call Waiting Cancel	Required Option	Depends on user phone line	Disabled	Enabled if user has call waiting

* Programming at installation may be subordinate to other UL requirements for the intended application.

** Combined Entry Delay and Abort Window should not exceed 1 minute.

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Annex B (informative)

Arming, Disarming, and Transmission Sequences

Table B.1 — System Arming and Exit Sequence — Clause 4.2.2

Event	Time	Action	Comments
Exit Time Clause 4.2.2.1	45 to between 120 to 255 seconds. Default = 60 seconds	Initiates Progress Annunciation.	Time doubles if the silent exit feature is invoked.
Progress Annunciation Clause 4.2.2.2	During Exit Time. Last 10 seconds of Exit Time.	Audible Annunciation. Distinct Audible Annunciation.	Disabled if the silent exit feature is invoked. Default: Annunciate ON
2nd Violation of Entry/Exit Zone	During Exit Time. Clause 4.2.2.3	May Restart Exit Time One Time Only	2nd Violation = violation, restore, violation of entry/exit zone
Violated Entry/Exit Zone	End of Exit Time Clause 4.2.2.4	Initiates an Exit Error Sequence.	
Arm	End of Exit Time.	Arms the Alarm System.	Option: Shall Stay Arm if no exit was made during Exit Time. Clause 4.2.2.5
Alarm	Within 2 minutes of the end of the Exit Time. Clause 4.2.2.6	Transmit Recent Closing.	Include user number in transmission if available. Not required for Fire alarms.

Table B.2 — Entry and System Disarming Sequence — Clause 4.2.3

Event	Time	Action	Comments
Entry Delay Clause 4.2.3.1	30 seconds to ≥4 minutes. Default = 30 seconds	Initiates Progress Annunciation.	
Progress Annunciation Clause 4.2.3.2	During Entry Delay.	Audible Annunciation.	
Disarm Clause 4.2.3.3	Prior to Expiration of the Entry Delay.	Disarms the Alarm System.	System shall Disarm by, at a minimum, entry of the user code only.

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Table B.3 — Alarm Transmission Sequence — Clause 4.2.5

Event	Time	Action	Comments
Abort Window Clause 4.2.5.1	Non-Fire: 15 to 45 seconds.	Sounds the Local Alarm. Annunciator Sounds Alarm Condition.	May disable by zone / zone type Default time: Non-Fire = 30 sec.
Disarm Clause 4.2.5.1.1 & 4.2.5.1.2	During Abort Window.	Aborts the Alarm Transmission Sequence.	System shall Disarm by entry of the user code only. Option - Annunciate that no Alarm Transmission was made.
Transmit Alarm Clause 4.2.5.2	End of the Abort Window.	Transmits Alarm Signal.	
Cancel Window Clause 4.2.5.4	Starts at the end of the Abort Window. ≥ 5 minutes		Applies to all alarms that have been subject to the Abort Window.
Disarm or Disarm + Function Key Clause 4.2.5.4.1	During the Cancel Window.	Transmit a Cancel Signal.	Cancel Signal is transmitted during the Cancel Window if an alarm was previously transmitted.
Disarm Clause 4.2.5.3	After an alarm report.	Disarms the Alarm System.	Panel will indicate an alarm occurred and which violated zone(s) caused the alarm.

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Annex C
(informative)
Event Timing Diagrams

The following event timing diagrams use the default panel settings as prescribed in the text of the standard.

The diagrams also assume that no commands are made to the panel during the sequence unless otherwise indicated.

Areas shown in grey are not defined by the standard and may be used as the manufacturer requires.

System Arm without violations (Clause 4.2.2.1 and 4.2.2.2)

TIME (MIN/SEC) :00 :50 1:00

SYSTEM STATE	Unarmed	Exit Time		Armed
ANNUNCIATOR		Exit Annunciation	Unique	
LOCAL ALARM				
COMMUNICATION				

User Arms the Alarm System ↗

System Arm with multiple trips of the entry/exit zone during Exit Time (Clause 4.2.2.1, 4.2.2.2 and 4.2.2.3)

TIME (MIN/SEC) :00 < 1:00 :00 :50 1:00

SYSTEM STATE	Unarmed	Exit Time	Restart Exit Time		Armed
ANNUNCIATOR		Exit Annunciation	Exit Annunciation	Unique	
LOCAL ALARM					
COMMUNICATION					

User Arms the Alarm System ↗

↗ Exit Delay Restart occurs 1 time only at the trip after the 1st restoral of an entry/exit zone

System Arm with premises unvacated (Clause 4.2.2.1, 4.2.2.2 and 4.2.2.5)
Entry/exit zone untripped during Exit Time

TIME (MIN/SEC) :00 :50 1:00

SYSTEM STATE	Unarmed	Exit Time		Armed in the Stay Arm mode
ANNUNCIATOR		Exit Annunciation	Unique	
LOCAL ALARM				
COMMUNICATION				

User Arms the Alarm System ↗

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Exit Error - System Arm with entry/exit zone in violation at the end of the Exit Time (Clause 4.2.2.1, 4.2.2.2, 4.2.2.4 and 4.2.5)

TIME (MIN/SEC) :00 :50 1:00 1:30 2:00

SYSTEM STATE	Unarmed	Exit Time		Entry Delay	Abort Window	Alarm Transmission
ANNUNCIATOR		Exit Annunciation	Unique	Entry or Alarm Annunciation	Alarm Annunciation	
LOCAL ALARM				Sounds	Sounds until alarm time-out	
COMMUNICATION						TX Alarm & Exit Error

User Arms the Alarm System ➤

⚡ Entry/exit zone violated between times :00 and 1:00 and remains violated at the end of the Exit Time

System Entry and Disarm (Clause 4.2.3)

TIME (MIN/SEC) :00 < :30

SYSTEM STATE	Armed	Entry Delay	Disarmed
ANNUNCIATOR		Entry Annunciation	
LOCAL ALARM			
COMMUNICATION			

Violation of an entry/exit (delayed) zone ➤

⚡ Entry of Valid Disarm code

Trip of entry/exit zones (Clause 4.2.3 and 4.2.5)

TIME (MIN/SEC) :00 :30 1:00

SYSTEM STATE	Armed	Entry Delay	Abort Window	Alarm Transmission
ANNUNCIATOR		Entry Annunciation	Alarm Annunciation	
LOCAL ALARM			Sounds until alarm time-out	
COMMUNICATION				Transmit Alarm

Violation of a delayed zone ➤

Trip of non-entry/exit and non-Fire zones (Clause 4.2.5)

TIME (MIN/SEC) :00 :30

SYSTEM STATE	Armed	Abort Window	Alarm Transmission
ANNUNCIATOR		Alarm Annunciation	
LOCAL ALARM		Sounds until alarm time-out	
COMMUNICATION			Transmit Alarm

Violation of an instant zone ➤

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Annex D (informative) Recommended Self Validation Procedures

The following procedures are intended to ascertain compliance with the requirements of the Security Industry Association's *Control Panel Standard - Features for False Alarm Reduction*.

Although a control panel can be validated as a stand alone unit, these procedures are written for a system test where various peripherals (sensors, annunciators, etc.) are used with a control panel. They refer to the control panel being tested (including its arming stations) as the Unit Under Test (UUT).

These procedures are organized by the clauses of their associated requirements in the standard to provide convenient reference, but they are not intended to suggest the sequence of testing. While all features should be tested, it is understood that individual product implementations will dictate optimum sequencing of tests.

These procedures assume that, unless otherwise specified:

- all programmable options are initially programmed to the default settings specified in the standard
- the UUT is Disarmed and returned to its default configuration after each test, noted as End of Test (EOT)

These procedures are generic and highlight various implementation details specific to an individual UUT in *italics print*, where the standard allows certain freedom of design.

These procedures are non-binding and are not intended to add to or supplant the requirements of the standard. When the requirements of the standard and these procedures appear to be in conflict, the requirements of the standard have precedence.

VALIDATION PROCEDURE	REFERENCE
Pre-test Verify that all selectable options of the UUT are defaulted as listed by the table in Appendix A of the standard. (Refer to the UUT's quick reference chart or card.)	4.7 & Appendix A (4.6.1)

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SECTION 1 USER CAUSED FALSE ALARMS (to be performed on each partition of the UUT)

VALIDATION PROCEDURE	REFERENCE
VP 1 Panel Annunciation <ul style="list-style-type: none"> Verify that the UUT has an output for an auxiliary annunciation device that will sound all annunciations required by the standard. Verify that the UUT has an output for remote annunciation devices that will sound progress annunciation during Entry Delay and Exit Time. EOT	4.2.1
EXIT TIME	
VP 2 Exit Time <ul style="list-style-type: none"> Verify that the UUT's Exit Time is defaulted <i>(for all entry/exit zones that have a unique default settings)</i> to 60 seconds. Arm the UUT. Verify that the time between the last arming keystroke and a Full Arm (Exit Time) is 60 seconds. Disarm the UUT. Program the Exit Time to 44 seconds, and verify that the Exit Time is 45 seconds or greater. <i>(Note: If the UUT did not accept programming to 44 seconds, proceed to the next test.)</i> Program the Exit Time to 45 seconds, and verify that the Exit Time is 45 seconds. Program the Exit Time to 120 seconds, and verify that the Exit Time is 120 seconds. Program the Exit Time to 256 seconds, and verify that the Exit Time is 255 seconds or less. <i>(Note: If the UUT did not accept programming to 256 seconds, proceed to the next test.)</i> Return the UUT to the default Exit Time setting. Arm the UUT. Trip an entry/exit zone. Verify that the time between the last arming keystroke and the local alarm is 60 seconds. Disarm the UUT. <p><i>If the UUT has a silent exit feature:</i></p> <ul style="list-style-type: none"> Arm the UUT with the silent feature, and verify that the Exit Time is 120 seconds. Arm the UUT normally, and verify that the Exit Time is 60 seconds. EOT	4.2.2.1

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VALIDATION PROCEDURE	REFERENCE
<p>VP 3 Progress Annunciation</p> <ul style="list-style-type: none">Arm the UUT.Verify that Exit Time is annunciated.Verify that the annunciation changes during the last 10 seconds of the Exit Time (after 50 seconds of Exit Time.) <p><i>If the UUT has a silent exit feature:</i></p> <ul style="list-style-type: none">Arm the UUT with the silent featureVerify that there is no progress annunciation during the Exit Time.Disarm and rearm the UUT.Verify that Exit Time is annunciated. <p>EOT</p>	4.2.2.2
<p>VP 4 Exit Time Restart</p> <ul style="list-style-type: none">Arm the UUT.During the Exit Time:<ul style="list-style-type: none">- Trip an entry/exit zone, restore it, then trip it again.Verify that the time between the second trip of the entry/exit zone and the start of the local alarm is 60 seconds.Disarm the UUT.Arm the UUT.During the Exit Time:<ul style="list-style-type: none">Trip an entry/exit zone, restore it, then trip it again.Then restore the entry/exit zone, and trip it again.Verify that the time between the second trip of the entry/exit zone and the start of the local alarm is still 60 seconds.Disarm the UUT. <p><i>If the UUT has a silent exit feature:</i></p> <ul style="list-style-type: none">Arm the UUT with the silent featureDuring the Exit Time:<ul style="list-style-type: none">Trip an entry/exit zone, restore it, then trip it again.Verify that the time between the second trip of the entry/exit zone and the start of the local alarm is 120 seconds. <p>EOT</p>	4.2.2.3

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VALIDATION PROCEDURE	REFERENCE
VP 5 Exit Error <ul style="list-style-type: none"> Arm the UUT. Violate an entry/exit zone, and leave it violated through the entire Exit Time. Verify that an Exit Error sequence commences at the end of the Exit Time with the following features: <ul style="list-style-type: none"> The local alarm sounds. The annunciator sounds an entry annunciation or an alarm condition. An Entry Delay begins. Disarm the UUT prior to the expiration of the Entry Delay, and verify that no signal is sent. Repeat VP 5 without Disarming the UUT. Verify that the alarm is transmitted 60 seconds after the local alarm sounds. Verify that the transmission includes the appropriate alarm code and an Exit Error. EOT	4.2.2.4
VP 6 Unvacated Premises <ul style="list-style-type: none"> Verify that the UUT is defaulted with automatic Stay Arm / unvacated premises enabled. Arm the UUT. Do <u>not</u> trip any entry/exit zones during the Exit Time. Verify that the UUT Arms in the Stay Arm mode. EOT	4.2.2.6
VP 7 Recent Closing <ul style="list-style-type: none"> Arm the UUT. Wait 107 seconds after the expiration of the Exit Time, then trip any non-fire, <u>non-delayed</u> zone. Verify that a Recent Closing is transmitted along with the appropriate alarm code. Verify that the transmission includes the appropriate user number when available. Disarm the UUT. Arm the UUT. Wait 133 seconds after the expiration of the Exit Time, then trip any non-fire, <u>non-delayed</u> zone. Verify that the UUT does <u>not</u> send a Recent Closing transmission or a user number along with the alarm code. EOT	4.2.2.6
ENTRY DELAY	

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VALIDATION PROCEDURE	REFERENCE
VP 8 Entry Delay <ul style="list-style-type: none"> Verify that the UUT Entry Delay is defaulted (<i>for all entry/exit zones that have a unique default settings</i>) to 30 seconds. Arm the UUT, and wait for the Exit Time to expire. Trip an entry/exit zone. Verify that the time between the trip and the local alarm (Entry Delay) is 30 seconds. Disarm the UUT. Reprogram the Entry Delay to 29 seconds, and verify that the time between the trip and the local alarm is 30 seconds or greater. (<i>Note: If the UUT did not accept programming to 29 seconds, proceed to the next test.</i>) Reprogram the Entry Delay to 240 seconds, and verify that the time between the trip and the local alarm is 240 seconds. Disarm the UUT. EOT	4.2.3.1
VP 9 Progress Annunciation <ul style="list-style-type: none"> Arm the UUT, and wait for the Exit Time to expire. Trip an entry/exit zone. Verify that the UUT annunciates during the Entry Delay, and that the annunciation is different than an alarm. EOT	4.2.3.2
VP 10 Disarm <ul style="list-style-type: none"> Arm the UUT, and wait for the Exit Time to expire. Trip an entry/exit zone. During the Entry Delay, enter a user code. Verify that Progress Annunciation is silenced on the first keystroke of the user code. Verify that the system Disarms. Arm the UUT, and wait for the Exit Time to expire. Trip an entry/exit zone. During the Entry Delay, enter an invalid user code. Verify that Progress Annunciation is silenced on the first keystroke of the invalid user code. Verify that Progress Annunciation resumes after the last digit of the invalid user code (<i>or after the time specified by the manufacturer</i>). Verify that the Entry Delay is still 30 seconds. EOT	4.2.3.3
REMOTE CONTROL DEVICES	

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VALIDATION PROCEDURE	REFERENCE
VP 11 Control Buttons <ul style="list-style-type: none"> Verify that the remote control device buttons are mechanically designed so that inadvertent activation is minimized. <i>(Reference the manufacturer's product literature if necessary.)</i> EOT	4.2.4.1
VP 12 Manual Alarms <ul style="list-style-type: none"> Arm the UUT. Activate a manual alarm. Verify that a double action trigger was used to activate the alarm. (Acceptable double action trigger activation is typified by the examples given in clause 4.2.7 of the standard.) <i>(This test should be repeated for all types of manual alarm activations supported by the remote control device.)</i> EOT	4.2.4.2
VP 13 System Acknowledgment <ul style="list-style-type: none"> Arm the UUT from the remote control device. Verify that the UUT acknowledged the command in a manner that would normally be discernible from the exterior of the premises. Disarm the UUT from the remote control device Verify that the UUT acknowledged the command in a manner that would normally be discernible from the exterior of the premises. EOT	4.2.4.3
VP 14 Remote Arming <ul style="list-style-type: none"> Arm the UUT from the remote control device. Verify that the Exit Time is 60 seconds and that Progress Annunciation occurs. <i>If the remote <u>control</u> device has a silent exit feature:</i> <ul style="list-style-type: none"> Arm the UUT from the remote control device with the silent feature invoked Verify that the Exit Time is 120 seconds. Arm the UUT normally from the remote control device Verify that the Exit Time is 60 seconds. EOT	4.2.4.4
	(4.2.2.1 and 4.2.2.2)
ALARM TRANSMISSION	

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VALIDATION PROCEDURE	REFERENCE
<p>VP 15 Abort Window</p> <ul style="list-style-type: none">Verify that the UUT's Abort Window is defaulted (<i>for all non-fire zones that have a unique default settings</i>) to 30 seconds.Arm the UUT, and wait till the Exit Time expires.Trip a non-fire zone.Verify that the time between the local alarm and the alarm signal (Abort Window) is 30 seconds.Disarm the UUT.Reprogram the Abort Window to 14 seconds <i>(Note: If the UUT did not accept programming to 14 seconds , proceed to the next test.)</i>Verify that the time between the local alarm and the alarm signal is 15 seconds or greater.Disarm the UUT.Reprogram the Abort Window to 15 secondsVerify that the time between the local alarm and the alarm signal is 15 seconds.Disarm the UUT.Reprogram the Abort Window to 45 seconds, and verify that the time between the local alarm and the alarm signal is 45 seconds.Disarm the UUT.Reprogram the Abort Window to 46 seconds <i>(Note: If the UUT did not accept programming to 46 seconds , proceed to the next test.)</i>Verify that the time between the local alarm and the alarm signal is 45 seconds or less.Disarm the UUT. <p><i>Perform the above sequence for all non-fire zones on the UUT.</i></p> <p>EOT</p>	<p>4.2.5.1</p>

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VALIDATION PROCEDURE	REFERENCE
VP 16 Disarm <ul style="list-style-type: none"> Program the UUT with a User Code. Arm the UUT and wait for the Exit Time to expire. Trip a non-entry/exit, non-fire zone. During the Abort Window, enter a user code. Verify that Alarm Annunciation is silenced on the first keystroke of the user code. Verify that the system Disarms. Arm the UUT, and wait for the Exit Time to expire. Trip an entry/exit zone. During the Abort Window, enter an invalid user code. Verify that Alarm Annunciation is silenced on the first keystroke of the invalid user code. Verify that Alarm Annunciation resumes after the last digit of the invalid user code <i>(or after the time specified by the manufacturer)</i>. Verify that the Abort Window is still 30 seconds. EOT	4.2.5.1.1
VP 17 Abort <ul style="list-style-type: none"> Verify that the UUT is defaulted to annunciate that no alarm has been transmitted when the alarm is Aborted. Arm the UUT, and wait for the Exit Time to expire. Trip a non-fire type zone. Disarm the UUT. Verify that the UUT does not transmit an alarm Verify that the UUT annunciates that no alarm was transmitted. EOT	4.2.5.1.2
VP 18 Alarm Transmission <ul style="list-style-type: none"> Arm the UUT. Trip a non-fire type zone. Verify that the UUT transmits the alarm 30 seconds after the local alarm sounds. EOT	4.2.5.2
VP 19 Disarm <ul style="list-style-type: none"> Arm the UUT, and wait for the Exit Time to expire. Trip a zone, and allow the system to report the alarm. Disarm the UUT. Verify that the UUT indicates an alarm has occurred and which zone was violated. EOT	4.2.5.3

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VALIDATION PROCEDURE	REFERENCE
VP 20 Cancel Window <ul style="list-style-type: none"> Arm the UUT, and wait for the Exit Time to expire. Trip a zone, and allow the system to report the alarm. Wait 4 minutes and 30 seconds after the transmission of the alarm. <i>Disarm the UUT, or Disarm and depress the appropriate function key to cancel the alarm.</i> Verify that the UUT annunciates that a Cancel has been transmitted. Verify that the UUT transmits a Cancel signal and annunciates that a Cancel was transmitted. EOT	4.2.5.4 & 4.2.5.4.1
OTHER USER CAUSED FALSE ALARMS	
VP 21 Unique Duress Code <i>(If duress is supported)</i> <ul style="list-style-type: none"> Verify that the UUT duress feature is disabled as a default. Arm the UUT. Attempt to initiate a Duress alarm. Verify that no Duress alarm was initiated. Disarm the UUT. Reprogram the duress feature to enable it. Arm the UUT. Initiate a Duress alarm. Verify that a duress alarm is transmitted. Disarm the UUT. Attempt to program the duress code as a user code, but with the last digit incremented by 1. Verify that the UUT will not accept it (either in programming or in use). Attempt to program the duress code to match each of the other codes accepted by the UUT. Verify that the UUT will not accept it (either in programming or in use). Program the UUT with a valid duress code. Attempt to program a user code to match the duress code. Verify that the UUT will not accept it (either in programming or in use). EOT	4.2.6.1 & 4.2.6.2

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VALIDATION PROCEDURE	REFERENCE
<p>VP 22 Initiation of Manual Alarms</p> <ul style="list-style-type: none">• Arm the UUT.• Activate a manual alarm.• Verify that a double action trigger was used to activate the alarm. (Acceptable double action trigger activation is typified by the examples given in Clause 4.2.7 of the standard.) <p><i>(This should be done for all types of manual alarm activations supported by the remote control device.)</i></p> <p>EOT</p>	4.2.7

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SECTION 2 SENSOR CAUSED FALSE ALARMS (to be performed on each partition of the UUT)

VALIDATION PROCEDURE	REFERENCE
VP 23 Cross Zoning <ul style="list-style-type: none"> Verify that no zones are defaulted in a cross zoned arrangement. <u>Program two zones in a cross zoned arrangement.</u> Arm the UUT and wait until the Exit Time is expired. Trip one of the zones that are programmed as a cross zone. At the expiration of the cross zone time, verify that there is no local alarm and that no alarm has been transmitted. <i>If the feature is available</i>, verify that an error is transmitted that reports that a trip in a cross zone was not verified. Disarm and rearm the UUT. <u>Program two zones in a cross zoned arrangement.</u> Arm the UUT and wait until the Exit Time is expired. Trip the other zone in the cross zoned pair. At the expiration of the cross zone time, verify that there is no local alarm and that no alarm has been transmitted. <i>If the feature is available</i>, verify that an error is transmitted that reports that a trip in a cross zone was not verified. Disarm and rearm the UUT. <u>Program two zones in a cross zoned arrangement.</u> Arm the UUT, and wait until the Exit Time is expired. Trip one of the zones that are programmed as a cross zone. After the cross zone time has expired, trip the other zone in the cross zoned pair. At the end of the second cross zone time, verify that there is no local alarm and that no alarm has been transmitted. <i>If the feature is available</i>, verify that 2 error transmissions were made that report the unverified trips in a cross zone. Disarm and rearm the UUT. <u>Program two zones in a cross zoned arrangement.</u> Arm the UUT and wait until the Exit Time is expired. Trip one of the zones that are programmed as a cross zone. During the cross zone time, trip the other zone in the cross zone pair. Verify that the Alarm Transmission Sequence (local alarm) starts at the second trip. EOT	4.3.1

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VALIDATION PROCEDURE	REFERENCE
<p>VP 24 Swinger Shutdown (Not required for fire alarms.)</p> <ul style="list-style-type: none">• Arm the UUT, and allow the Exit Time to expire.• Trip a zone and allow the accompanying alarm to be reported.• Wait for the local alarm to reset, then trip the same zone again.• Verify that the system does <u>not</u> go into alarm. <p><i>If the UUT supports two-trip Swinger Shutdown:</i></p> <ul style="list-style-type: none">• Arm the UUT, and allow the Exit Time to expire.• Trip a zone and allow the accompanying alarm to be reported.• Wait for the local alarm to reset, then trip the same zone again.• Wait for the local alarm to reset, then trip the same zone a third time.• Verify that the system does <u>not</u> go into alarm. <p>EOT</p>	4.3.2
<p>VP 25 Fire Alarms</p> <ul style="list-style-type: none">• Arm the UUT and wait until the Exit Time is expired.• Trip a sensor on a fire zone.• Verify that the UUT does not reset the zone.• <u>Program the UUT for fire alarm verification.</u>• Disarm and rearm the UUT, and wait until the Exit Time is expired.• Trip a sensor on a fire zone.• Verify that the UUT resets the zone.• <u>Disarm and rearm the UUT, and wait until the Exit Time is expired.</u>• Trip a fire zone.• When the zone is reset, trip it again <i>within the time frame designated by the manufacturer.</i>• Verify that an alarm signal is transmitted after the second trip. <p>EOT</p>	4.3.3

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SECTION 3 POWER CAUSED FALSE ALARMS

VALIDATION PROCEDURE	REFERENCE
VP 26 Power Variations <ul style="list-style-type: none"> Arm the UUT and wait until the Exit Time is expired. Vary the primary and secondary power supplied to the UUT between the <i>maximum manufacturers specifications</i> and 0 (zero). Verify that no alarms are transmitted. EOT	4.4.1
VP 27 Labelling <ul style="list-style-type: none"> Verify that labelling is present on the UUT interconnect label that indicates the voltage under the full rated load at which the UUT ceases to process sensor trips. EOT	4.4.2
VP 28 Restoration of Power <ul style="list-style-type: none"> Arm the UUT, and wait until the Exit Time is expired. Reduce the primary and secondary power to 0 (zero). Restore the primary power. Verify that the UUT resumes the same state of arming and bypassed zones as when power was removed. Trip any sensor within 60 seconds of restoral of primary power. Verify that the UUT disregards input from the sensor. EOT	4.4.3

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SECTION 4 CALL WAITING

VALIDATION PROCEDURE	REFERENCE
VP 29 Call Waiting <ul style="list-style-type: none"> Program a CALL WAITING CANCEL dialing sequence. Arm the UUT, and wait till the Exit Time has expired. Trip any zone, and wait till an alarm transmission is started. Verify, by use of a standard dial verifier, that the call waiting cancel sequence was sent before the dialed phone number. When the UUT senses that a connection was not made, verify that an alternative dialing method was employed. Verify that a warning to installers, not to use the call waiting cancel feature inappropriately, is provided with the UUT. EOT	4.5

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SECTION 5 INSTALLATION AND TEST (to be performed on each partition of the UUT)

VALIDATION PROCEDURE	REFERENCE	
VP 30 Quick Reference <ul style="list-style-type: none"> Verify that a quick reference chart or card is provided with the UUT, which details all programming locations for the features in the standard and their associated test procedures. EOT	4.6.1	<div>Formatted: Indent: Left: 0.9 pt, Bulleted + Level: 1 + Aligned at: 18 pt + Tab after: 36 pt + Indent at: 36 pt, Tabs: 18.9 pt, List tab + Not at 36 pt</div>
VP 31 System Test <ul style="list-style-type: none"> Verify that the UUT has a test feature which supports tests VP 32 through VP 37 below. Verify that the test feature may be independently activated for each partition of the UUT. EOT	4.6.2 & 4.6.3	<div>Formatted: Indent: Left: 0.9 pt, Bulleted + Level: 1 + Aligned at: 18 pt + Tab after: 36 pt + Indent at: 36 pt, Tabs: 18.9 pt, List tab + Not at 36 pt</div>
VP 32 Initiation of Test <ul style="list-style-type: none"> Arm the UUT and wait until the Exit Time is expired. Start a test sequence and verify that the UUT does not enter the test mode. Disarm the UUT. Start a test sequence, and verify that the UUT sends a transmission that a test is in progress. (When the user number is available, verify that it is included in the message) EOT	4.6.4.1 & 4.6.4.2	<div>Deleted: ¶</div> <div>Formatted: Indent: Left: 0.9 pt, Bulleted + Level: 1 + Aligned at: 18 pt + Tab after: 36 pt + Indent at: 36 pt, Tabs: 18.9 pt, List tab + Not at 36 pt</div> <div>Deleted: ¶</div>
VP 33 Communications <ul style="list-style-type: none"> If the UUT can be programmed to transmit information regarding system tests, verify that the setting for this feature is defaulted to disable test communications. Start a test sequence. Trip a zone, and verify that the UUT does not send any transmission. EOT	4.6.5	<div>Formatted: Indent: Left: 0.9 pt, Bulleted + Level: 1 + Aligned at: 18 pt + Tab after: 36 pt + Indent at: 36 pt, Tabs: 18.9 pt, List tab + Not at 36 pt</div>
VP 34 Test in Progress <ul style="list-style-type: none"> Start a test sequence. Verify that indication of a test in progress is present at all wired system arming stations. EOT	4.6.6	<div>Formatted: Indent: Left: 0.9 pt, Bulleted + Level: 1 + Aligned at: 18 pt + Tab after: 36 pt + Indent at: 36 pt, Tabs: 18.9 pt, List tab + Not at 36 pt</div>
TERMINATION OF TEST		
VP 35 Automatic Termination <p>If the UUT supports automatic termination of test:</p> <ul style="list-style-type: none"> Start a test sequence. Cause the UUT to automatically terminate the test. (Refer to manufacturer's instructions.) Verify that the UUT provides annunciation of an impending test termination at all wired arming stations beginning 5 minutes prior to the termination of the test. Verify that the annunciation is different than that given during the test in progress. EOT	4.6.7.1	<div>Formatted: Indent: Left: 0.9 pt, Bulleted + Level: 1 + Aligned at: 18 pt + Tab after: 36 pt + Indent at: 36 pt, Tabs: 18.9 pt, List tab + Not at 36 pt</div> <div>Deleted: 2004</div>

VALIDATION PROCEDURE	REFERENCE
VP 36 State at Termination <ul style="list-style-type: none"> Start a test sequence. Terminate the test sequence, and verify that the UUT resumes operation in a Disarmed state. Start a test sequence. Trip a 24 hour zone. Terminate the system test. Verify that no alarm signal is transmitted, but that a trouble condition is indicated. EOT	4.6.7.2
VP 37 Termination Report <ul style="list-style-type: none"> Start and terminate a test sequence. Verify that an end of test message is transmitted. EOT	4.6.7.3
VP 38 Default Settings <ul style="list-style-type: none"> Using the manufacturer's supplied installation manual, confirm that each relevant programmable feature has the default value as shown in Annex A (alternative procedure) Obtain a UUT configured for shipment Using the UUT's built-in programming mode, confirm that each relevant programmable feature has the default value as shown in Annex A. EOT	4.7
END OF SELF VALIDATION PROCEDURE	

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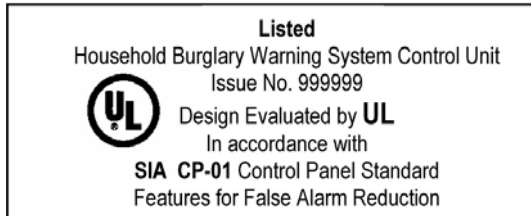
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Annex E (informative) Product Marking & Listing

The following mark is available from Underwriters Laboratories, Inc. (UL) and is issued to compliant products tested and listed in accordance with UL procedures.



UL Listing

Since the standard requires both a local alarm and off premise transmission, UL is requiring that products they test to it be UL listed for both a local and off premises reporting. Any hardware device added to a system to meet the requirements of this standard needs to be UL listed, or UL will test to verify that a failure of this device does not compromise the existing UL requirements of the system.

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Annex F (informative) Clarifications and Interpretations

-none-	
General	<p>A requirement is a feature that the control panel must perform under all circumstances. A required option is a programmable feature that must be in the control panel. An allowed option is a programmable feature that is not required or prohibited by the standard. An allowed feature is a non-programmable feature that is not required or prohibited by the standard. <u>[Moved to clause 3.1.5]</u></p>
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UL Listing	<p>Since the standard requires both a local alarm and off premise transmission, UL is requiring that products they test to it be UL listed for both a local and off premises reporting. Any hardware device added to a system to meet the requirements of this standard needs to be UL listed, or UL will test to verify that a failure of this device does not compromise the existing UL requirements of the system. <u>[Moved to Annex E]</u></p>
3.2.29	<p>Fire Alarm Verification - Fire alarm verification is meant to be a function of either the control panel or the sensor/detector. When "fire alarm verification" is a function of the control panel, delaying transmission of the fire alarm signal (after the initial sensor trip) until a second sensor trip occurs, within the confirmation period, meets the SIA CP-01 requirements.</p>
4.1	<p>Partitioned Systems - Each partition needs to be able to support the requirements in Clause 4. In testing, it will be acceptable to test 2 partitions as indicative of the products ability to meet the requirements in all partitions. <u>[Added to clause 4.1]</u></p>
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4.1 & 4.2.2.2	<p>Progress Annunciation - The standard does not specifically prohibit a silent exit feature in a partitioned system. It does require that it follow the same criteria as a non-partitioned system when it is invoked. <u>[Added to 4.1]</u></p>
4.2.2	<p>Arming and Exit - The standard does not specifically address the features and requirements for automatic arming. It would be considered an allowed option. If employed, however, it would need to follow the requirements of clause 4. <u>The standard addresses Remote Arming and Remote Disarming of alarm systems, using remote control devices, to help reduce false alarms caused by unintentional violation of exit and entry delays. [Added to 4.2.2]</u></p>
4.2.2.1	<p>Exit Time - The minimum time given is an absolute minimum, and panels are not to allow Exit Time(s) of less than 45 seconds.</p>
	<p><u>Silent Exit Approval - refers to a Silent Exit feature that is invoked by the system user at the time of arming. CP-01 does not require this feature. CP-01 does require, however, that when this feature is invoked, the exit delay for that arming cycle must be doubled. When invoked, the Silent Exit feature will halt the exit progress annunciation for the entire system or partition for only one arming cycle.</u></p>
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	<u>[Both added to 4.2.2.1]</u>
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4.2.2.2 Progress Annunciation — A control panel may meet this requirement by having two separate buttons for arming where one is arm normal (with progress annunciation) and one is arm silent (no annunciation).

~~**Silent Exit Approval** — allows the exit progress annunciation to be completely programmed out of individual keypads (for bedrooms, etc). Section 4.2.2.2 does not allow for a control panel to disable exit progress annunciation for an entire system.~~

~~[Both added to 4.2.2.1]~~

4.2.2.3 Exit Time Restart — Since exit time restart is a required option, panels will have the ability to have this feature disabled at the time of installation. [added to 4.2.2.3]

4.2.2.4 Exit Error — The standard does not address panel response if a non entry/exit zone is violated at the end of the Exit Time. [added to 4.2.2.4]

4.2.2.6 Recent Closing — A Recent Closing transmission is allowed, but not required, if an alarm condition occurs between Arming and the end of the Exit Time. The Recent Closing signal is separate from the closing signal. [added to 4.2.2.6]

4.2.3.1 Entry Delay — The minimum time given is an absolute minimum, and panels are not to allow Entry Delay(s) of less than 30 seconds. [added to 4.2.3.1]

4.2.3.2 Progress Annunciation — The early progress annunciation of an entry delay needs to be audible at a minimum. [added to 4.2.3.2]

4.2.3.3 Disarm (during Entry Delay) — The alternative methods mentioned are referring to keystrokes on the keypad, such as a disarm command followed by a code. This section is stating these methods can work in addition to the code only method.

~~If multiple keypads are annunciating the entry delay, one or all keypads may be momentarily silenced [added to 4.2.3.3]~~

4.2.4.1 Control Buttons — The requirements for control buttons are not the same as for manual alarms. Control buttons only need the mechanical design. For testing, the manufacturer may need to provide (in their product literature or otherwise) rationale on their mechanical design and how it minimizes inadvertent activation. [added to 4.2.4.1]

4.2.4.2 Initiation of Manual Alarms — The manufacturer's product literature may be needed to ascertain the design features employed to achieve a double action trigger. [added to 4.2.4.2]

4.2.4.3 System Acknowledge — The user needs to know the end result of the action taken. This can be by virtue of the knowing which button he or she pushed followed by a common acknowledgment or by separate and distinct acknowledgment for arm and disarm. [added to 4.2.4.3]

4.2.5.1 Abort Window — The minimum time given is an absolute minimum, and panels are not to allow an Abort Window of less than 15 seconds. The Abort Window cannot be globally disabled, nor can all zones but fire be disabled, with a single programming option. [added to 4.2.5.1]

4.2.5.1.1 Disarm (during Abort Window) — The local alarm sounding device is only delayed during the entry delay. It will be sounding during the abort delay period. 4.2.5.1.1 does require a momentary silencing of the local sounder while a code is being entered. If this is

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unsuccessful the local alarm will restart. The minimum timings in the SIA standard do allow for harmony with the existing UL standards.

An RFID interface is an equivalent means and that the passcode backup must comply with the CP-01 requirements. [added to 4.2.5.1.1]

~~4.2.5.4.1 Cancel~~ Some panels may require a special function key after Disarm to send a Cancel signal. [added to 4.2.5.4.1]

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4.3.1 **Cross Zoning** – UL has certain requirements for employing cross zoning. Because this feature is a programmable one the 2 standards should be able to co-exist. [added to 4.3.1]

4.4.2 **Labelling** – The voltage which needs to be specified on the interconnect label is a DC value of the zone circuit in which proper operation of the zone is affected due to excess wire or device (detector) resistance. [added to 4.4.2]

~~4.4.3 Restoration of Power~~ The state should be retained indefinitely. The control panel is required to come up in the disarmed state if that is the state it was in when it powered down. [added to 4.4.3]

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4.5 **Call Waiting** – All that should be required in testing is to prove that the control can dial all the digits on a standard DTMF phone including *. A DTMF test set can be used for this purpose. [added to 4.5]

4.6.1 **Quick Reference** – The quick reference section can be contained in the manual so long as it is a separate section.

User Manual – The operation of CP-01 features that interact directly with the user shall be documented in the user manual. This includes:

- 4.2.2.1 Exit Time
- 4.2.2.2 Progress Annunciation
- 4.2.2.3 Exit Time Restart
- 4.2.2.5 Unvacated Premises
- 4.2.3.1 Entry Delay
- 4.2.3.2 Progress Annunciation
- 4.2.3.3 Disarm
- 4.2.4.1 Control Buttons
- 4.2.4.2 Manual Alarms
- 4.2.4.3 System Acknowledgment
- 4.2.4.4 Remote Arming
- 4.2.4.5 Remote Disarming
- 4.2.5.1.1 Disarm
- 4.2.5.1.2 Abort
- 4.2.5.3 Disarm
- 4.2.5.4 Cancel Window
- 4.2.6.2 Duress Code
- 4.2.7 Initiation of Manual Alarms
- 4.6.3 System Test
- 4.6.6 Test in Progress
- 4.6.7.1 Automatic Termination

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[added to 4.6.1]

4.6.3 System Test — System Test can be a procedure outlined in the manuals. [added to 4.6.3]

4.6.7.1 Automatic Test Termination — ~~The test termination announcement must be given whenever a test is terminated automatically regardless of the length of the test. This would require that an automatic test termination could not take place in less than 5 minutes, though the test can be terminated manually in less than 5 minutes. Since the person testing the system is probably not going to be at the arming station at all times, the announcement should be audible.~~ [added to 4.6.7.1]

4.6.7.2 State at Termination — ~~The standard does not prohibit the announcement and/or the reporting of fire alarm trouble during a test mode, so is not in conflict with UL standards.~~ [added to 4.6.7.2]

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Annex G (informative) New Central Station Signals

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This annex describes the new signals alarm panels will send in compliance with the SIA CP-01 false alarm reduction standard. It is divided into two categories; required and optional signals.

Note: The DC-03 and DC-05 references provided below are for information only. Please refer to the appropriate SIA Standard for the latest information.

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I. New Signals Required by CP-01-2000

Exit Error – This signal is sent if an entry/exit zone is violated at the expiration of an exit delay.

In accordance with SIA-DC-03 this signal can be one of 2 signals:

1. EA + zone ID
2. EE + User Number

When SIA-DC-05 is used, this signal is sent as:

1 + 374 + Zone ID

In addition, the following signal may also be sent:

1 + 457 + User Number

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Recent Closing – This signal is sent if an alarm occurs within two minutes of the expiration of an exit delay.

In accordance with SIA-DC-03 this signal is sent as:

CR + User Number

When SIA-DC-05 is used, this signal is sent as:

1 + 459 + User Number

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Cancel – This signal is sent when an alarm is canceled. Cancel is not a new signal but it is mentioned for inclusion in the Central Station Standards.

In accordance with SIA-DC-03 this signal can be one of 2 signals:

1. BC + Zone ID
2. OC + User Number

When SIA-DC-05 is used, this signal is sent as:

1 + 406 + User Number

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Start Test – This signal is sent when the system is put into the test mode.

In accordance with SIA-DC-03 this signal is sent as:

TS

When SIA-DC-05 is used, this signal is sent as:

1+ 607 + User Number

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End Test – This signal is sent when the system is taken out of the test mode.

In accordance with SIA-DC-03 this signal is sent as:

TE

When SIA-DC-05 is used, this signal is sent as:

3 + 607 + User Number

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II. New Signals Allowed or Recommended by CP-01-2000

Cross Zone Error (CP-01, Clause 4.3.1) – This optional signal is sent at the then end of a cross trip verification time if the trip was not verified by a second zone trip. The purpose is to alert the central station that a possible faulty zone exists.

In accordance with SIA-DC-03 this signal(s) may be sent as Unverified Events:

BG
FG
UG

When SIA-DC-05 is used, this signal is sent as:

1+ 378 + Zone ID

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Swinger Trouble – A zone that is shut down because of a swinger has just activated again.

In accordance with SIA-DC-03 this signal is sent as:

BD + Zone ID

When SIA-DC-05 is used, this signal is sent as:

1+ 377 + Zone ID

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Swinger Trouble Restore – A zone that is shut down because of a swinger has just restored. It is still shutdown but the state of the zone is now restored.

In accordance with SIA-DC-03 this signal is sent as:

BE + Zone ID

When SIA-DC-05 is used, this signal is sent as:

3+ 377 + Zone ID

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Annex H (informative) Common Nomenclature

This annex describes the common nomenclature for Alarm Panels. Because many operators, of alarm panels, are required to manage several panels located in multiple locations (Home, work, relatives, etc.) it is desirable that the most common functions be named alike. The following are the basic functions that may be named alike.

Disarm - That portion of the system that is designed to detect unauthorized entry into the protected premises is not in use. (Other forms of protection may or may not be in use).

Arm - That portion of the system that is designed to detect unauthorized entry into the protected premises is in use. (Other forms of protection may or may not be in use).

Premises Arm - That portion of the system that is designed to detect unauthorized entry into the protected premises, when there are inhabitants within, and with the exception of the entry portal, is in use. (Other forms of protection may or may not be in use).

No Entry Arm - That portion of the system that is designed to detect unauthorized entry into the protected premises, when there are inhabitants within, is in use. (Other forms of protection may or may not be in use).

Bypass - A point of protection (window, door, etc.) is temporarily disabled from performing its intended function.

Quick Bypass - Upon exiting, and wishing to Arm the system, and a Point(s) is not in its intended position for Arming, the panel will allow Arming with the Point(s) disabled from performing its intended function.

Duress - When about to Disarm the system, the user is approached by a would-be perpetrator, and the user uses a unique function, which Disarms the system and transmits a "Duress" alarm to the monitoring center.

Police Emergency - A user of the alarm system has observed a situation that requires police response, and activates a unique function, which transmits a Police Emergency alarm to the monitoring center.

Fire Emergency - A user of the alarm system has observed a situation that requires fire department response, and activates a unique function, which transmits a Fire alarm to the monitoring center.

Medical Emergency - A user of the alarm system has observed a situation that requires emergency medical assistance, and activates a unique function, which transmits a Medical Emergency alarm to the monitoring center.

Quick Arming - An abbreviated or shorten function that Arms the system. (See Arm)

Monitor Mode - The system in not Armed, and any time a perimeter point of protection is activated, the alarm panel emits a sound.

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Summary of Requests for Interpretation on ANSI/SIA CP-01-2000

Meeting Date for Issue	Section of the Standard	Issue / [Requestor]	Committee Disposition	Formal Ratification
2003/05/21	4.2.2.1	Silent Exit Approval	Committee agreed to the following text: "Section 4.2.1.1 refers to a Silent Exit feature that is invoked by the system user at the time of arming. CP-01 does not require this feature. CP-01 does require, however, that when this feature is invoked, the exit delay for that arming cycle must be doubled. When invoked, the Silent Exit feature will halt the exit progress annunciation for the ENTIRE system or PARTITION for only ONE arming cycle."	Approved at Committee Meeting 2003/05/21 Will add section 4.2.1.1 in Annex F in the revision effort; added to the Revision list.
2003/05/21	4.2.2.2	Silent Exit Approval	Committee agreed to the following text: "Section 4.2.2.2 allows the exit progress annunciation to be COMPLETELY programmed out of INDIVIDUAL keypads (for bedrooms, etc). Section 4.2.2.2 does NOT allow for a control panel to disable exit progress annunciation for an entire system."	Approved at Committee Meeting 2003/05/21. Will add section 4.2.2.2 in Annex F in the revision effort; added to the Revision list.
2003/10/03	4.7	Default Settings - "a means by which end user can easily identify and confirm that the panel is in the default setting mode." [UL] Question Asked – Can a switch be added that allows the system to be programmed outside of CP-01 and still have the mark?	Committee agreed that if a panel has a switch that enables CP-01 or non-CP-01 compliance, it will not get a label (deemed non-compliant). In addition, the participants agreed that the previous interpretation provided in Appendix F, section 4.7 be removed. The text was "Default settings may be activated, or re-activated, through SIA Defaults software "switch"."	Approved at Committee Meeting 2004/03/31 – Will remove section 4.7 in Annex F in the revision effort; added to the Revision list.
2003/10/03	Add 4.6.1.A	System Configuration Marking – Component Labeling Clarification [UL]	Committee agreed to the following text: System Configuration Identification For system configurations comprised of interchangeable components (e.g. control equipment, arming station, annunciator, local alarm, communicator, sub assembly, etc.) a list of components that comprise of the CP-01 compliant system shall be provided. The list shall be prominently available as part of the equipment's installation manual and shall include applicable information such as model numbers of the system components, so that the complaint minimum system configuration is identified.	Approved at Committee Meeting 2004/11/03. Will add wording to 4.6.1.A in the revision effort; added to the Revision list.
2004/11/03	3.2.29	Fire Alarm Verification [Honeywell]	Request to expand Fire Verification requirements as they apply to wireless devices. Committee reviewed "Fire Alarm Verification" definition and agreed that any device using any	No changes made.

Meeting Date for Issue	Section of the Standard	Issue / [Requestor]	Committee Disposition	Formal Ratification
			media would fall under that definition as it currently exists.	
2004/11/03	3.2.29	<p>Fire Alarm Verification [UL]</p> <p>1) How does the example given in the "fire alarm verification" definition apply to wireless smoke detectors? Based on technology available today, it is very difficult to power down a wireless smoke detector and then restore power in order to verify an alarm condition persist by resetting a tripped sensor.</p> <p>2) Is fire alarm verification meant to be a function of the control panel or sensor / detector? Based on the definition of "fire alarm verification" it is unclear.</p> <p>3) Appendix D, VP -25 insinuates that the verification process is conducted on the control panel (UUT). The definition of fire alarm verification implies that the sensor is to be reset in order to confirm fire alarm verification. Please clarify where the verification process is to take place (ie. sensor or control panel.)</p> <p>4) If "fire alarm verification" is a function of the control panel, does delaying transmission of the fire alarm signal (after the initial sensor trip) until a second sensor trip occurs, within the confirmation period, meet the SIA CP-01 requirements?</p>	<p>1) Committee agreed that for wireless; there is no need to power down; there could be any means of restoring. Sensors may not be powered from the control panel. The power example was based on technology at the time. The participants agreed that another example more suitable for wireless technology would be clearer and that it should be incorporated into the example accompanying the definition.</p> <p>2) Committee agreed that "Fire alarm verification is meant to be a function of either the control panel or the sensor/detector."</p> <p>3) Committee agreed that no longer a relevant question based on 1) and 2) above.</p> <p>4) Committee agreed "When "fire alarm verification" is a function of the control panel, delaying transmission of the fire alarm signal (after the initial sensor trip) until a second sensor trip occurs, within the confirmation period, meets the SIA CP-01 requirements."</p> <p>Subsequent to meeting the following modification to the example in 3.2.29 was submitted:</p> <p>"(e.g. if the smoke detector is self-resetting or auto-restoring, checking that the sensor trips more than once or remains tripped within a set period of time.)"</p>	<p>Approved at Committee Meeting 2004/11/03</p> <p>Modify definition of 3.2.29 to have an example. Added to the Revision list.</p> <p>Committee Responses to 2) and 4) will be added to Annex F of the in the revision effort; added to the Revision list.</p>
2004/11/03	4.2.3.3	<p>Disarm – Request regarding progress annunciation silencing [UL]</p> <p>Question: Progress annunciation shall be silenced by the entry of the first digit of the users code. If multiple keypads</p>	<p>Committee agreed to the following text: "One or all keypads may be momentarily silenced."</p>	<p>Approved at Committee Meeting 2004/11/03</p> <p>Will add section 4.2.3.3 in Annex F in the revision effort; added to the Revision list.</p>

Meeting Date for Issue	Section of the Standard	Issue / [Requestor]	Committee Disposition	Formal Ratification
		are annunciating the entry delay, do all keypads need to be momentarily silenced or just the specific keypad where the code is being entered?		
2005/04/06		Two-way Audio Verification [SafetyCare] Questions: 1) Can we suppress Central Station Cancel Signals while a Control is in two-way mode and transmit once the panel is back in a normal state while staying CP-01 compliant? 2) Can we suppress subsequent Central Station Burglary and low level Signals while a Control is in two-way mode and transmit once the panel is back in a normal state while satisfying UL?	The first question was discussed and the final ruling was that suppression of the Cancel Signal would not be supported. The second question was discussed and it was agreed that this was not permitted. There seemed to be agreement that based on the discussions surrounding the questions at this meeting it would be appropriate if another request for interpretation was submitted with specific timing limits and also consider precedence of signals as well. No changes will be made to the document.	Approved at Committee Meeting 2005/04/06
2005/04/06		Cancel Function [GE] Question: Can the entire 'Cancel' function be an option provided that the default configuration enables it?"	Committee agreed that the cancel function is required; it cannot be an option. No changes will be made to the document.	Approved at Committee Meeting 2005/04/06
2005/04/06	4.2.5.1.1	RFID Tokens [Bosch] Question: Is it permissible to use a token at an RFID interface to perform this function? Although our control panel does support a passcode backup, RFID tokens are the primary method for controlling the system.	Committee agreed that the RFID interface is an equivalent means and that the passcode backup must comply with the CP-01 requirements.	Approved at Committee Meeting 2005/04/06 Will add section 4.2.5.1.1 in Annex F in the revision effort; added to the Revision list.
2005/08/25	4.6.3	System Test [UL] Proposed removal of Section 4.6.3 from Annex F Question: Can the requirements of Section 4.6.3 be met with a procedure	Committee agreed that the answer to the question is: "No, an automatic test is not required." Further discussion noted that in section 4.6.3 further text should be added to note that during this test operation in this	Approved at Committee Meeting 2005/08/25 Will add text in section 4.6.3

Meeting Date for Issue	Section of the Standard	Issue / [Requestor]	Committee Disposition	Formal Ratification
		outlined in the product manual if the product does not have a test mode implemented?	section alarm events should not be transmitted.	
2005/08/25	4.6.1	Test Procedures [UL] Proposal for clarification in Annex F Question: Do the test procedures referred to in paragraph 4.6.1 need to be described in the user manual for the product?	After discussion at the meeting, the request was withdrawn	Reviewed at the 2005/08/25 Meeting and request was withdrawn.
2005/08/25	4.2.5.1	Request for interpretation regarding the application of an abort window on a carbon monoxide detector alarm zone. [UL]	Is it the intent of CP-01 to consider a carbon monoxide (CO) alarm (zone) to be handled similar to that of a fire zone with regard to an abort window not applying to these life-safety circuits? Currently the standard is silent on this issue and it does not seem prudent to allow an abort feature / window for a life safety signaling circuit. The standard only provides guidance for fire and non- fire zones. The committee agreed that the answer to the question was "yes".	Section 3.2.30, Definition of fire zone modified to: A zone or circuit installed upon which are sensors designed to detect a fire condition (e.g. smoke, heat, carbon monoxide , etc.)

Summary of Revisions to ANSI/SIA CP-01-2000

Meeting Date	Section	Issue (Requestor)	Committee Disposition	Status
2003/05/21	4.2.2.1	Silent Exit Approval	Committee agreed to the following text: "Section 4.2.1.1 refers to a Silent Exit feature that is invoked by the system user at the time of arming. CP-01 does not require this feature. CP-01 does require, however, that when this feature is invoked, the exit delay for that arming cycle must be doubled. When invoked, the Silent Exit feature will halt the exit progress annunciation for the ENTIRE system or PARTITION for only ONE arming cycle."	Approved at Committee Meeting 2003/05/21 Will add section 4.2.1.1 in Annex F in the revision effort; added to the Revision list.
2003/05/21	4.2.2.2	Silent Exit Approval	Committee agreed to the following text: "Section 4.2.2.2 allows the exit progress annunciation to be COMPLETELY programmed out of INDIVIDUAL keypads (for bedrooms, etc). Section 4.2.2.2 does NOT allow for a control panel to disable exit progress annunciation for an entire system."	Approved at Committee Meeting 2003/05/21. Will add section 4.2.2.2 in Annex F in the revision effort; added to the Revision list.
2003/10/03		Remote Arming and Disarming operations (Larry Dischert, ADT)	Suggested Changes documented in Attachment C of the 2003/10/03 Minutes	Incorporated into the latest draft ANSI/SIA CP-01-200x
2003/10/03	4.7	Default Settings - "a means by which end user can easily identify and confirm that the panel is in the default setting mode." [UL] Question Asked – Can a switch be added that allows the system to be programmed outside of CP-01 and still have the mark?	Committee agreed that if a panel has a switch that enables CP-01 or non-CP-01 compliance, it will not get a label (deemed non-compliant). In addition, the participants agreed that the previous interpretation provided in Appendix F, section 4.7 be removed. The text was "Default settings may be activated, or re-activated, through SIA Defaults software "switch"."	Approved at Committee Meeting 2004/03/31 – Will remove section 4.7 in Annex F in the revision effort; added to the Revision list.
2003/10/03	Add 4.6.1.A	System Configuration Marking – Component Labeling Clarification [UL]	Committee agreed to the following text: System Configuration Identification For system configurations comprised of interchangeable components (e.g. control equipment, arming station, annunciator, local alarm, communicator, sub assembly, etc.) a list of components that comprise of the CP-01 compliant system shall be provided. The list shall be prominently available as part of the equipment's installation manual and shall include applicable information such as model numbers of the system components, so that the complaint minimum system configuration is identified.	Approved at Committee Meeting 2004/11/03. Will add wording to 4.6.1.A in the revision effort; added to the Revision list.
2004/03/31	Informative	New Central Station Signals (DC-03)	Add an additional annex for information purposes. Final text	Incorporated into the

Meeting Date	Section	Issue (Requestor)	Committee Disposition	Status
	Annex	and DC-05)	presented as part of agenda for 2004/11/03 meeting.	latest draft ANSI/SIA CP-01-200x
2005/04/06	Informative Annex	Nomenclature (ARM Committee)	Suggested Changes documented in Attachment C of the 2005/04/06 Minutes Additional information provided for review at 2005/08/25 meeting for inclusion as an informative annex.	Under Review at 2005/08/25 Meeting Informative Annex incorporated into the latest draft.
004/11/03	3.2.29	<p>Fire Alarm Verification [UL]</p> <p>1) How does the example given in the "fire alarm verification" definition apply to wireless smoke detectors? Based on technology available today, it is very difficult to power down a wireless smoke detector and then restore power in order to verify an alarm condition persist by resetting a tripped sensor.</p> <p>2) Is fire alarm verification meant to be a function of the control panel or sensor / detector? Based on the definition of "fire alarm verification" it is unclear.</p> <p>3) Appendix D, VP -25 insinuates that the verification process is conducted on the control panel (UUT). The definition of fire alarm verification implies that the sensor is to be reset in order to confirm fire alarm verification. Please clarify where the verification process is to take place (ie. sensor or control panel.)</p> <p>4) If "fire alarm verification" is a function of the control panel, does delaying transmission of the fire alarm signal (after the initial sensor trip) until a second sensor trip occurs, within the confirmation period, meet the SIA CP-01 requirements?</p>	<p>1) Committee agreed that for wireless; there is no need to power down; there could be any means of restoring. Sensors may not be powered from the control panel. The power example was based on technology at the time. The participants agreed that another example more suitable for wireless technology would be clearer and that it should be incorporated into the example accompanying the definition.</p> <p>2) Committee agreed that "Fire alarm verification is meant to be a function of either the control panel or the sensor/detector."</p> <p>3) Committee agreed that no longer a relevant question based on 1) and 2) above.</p> <p>4) Committee agreed "When "fire alarm verification" is a function of the control panel, delaying transmission of the fire alarm signal (after the initial sensor trip) until a second sensor trip occurs, within the confirmation period, meets the SIA CP-01 requirements."</p> <p>Subsequent to meeting the following modification to the example in 3.2.29 was submitted:</p> <p>"(e.g. if the smoke detector is self-resetting or auto-restoring, checking that the sensor trips more than once or remains tripped within a set period of time.)"</p>	<p>Approved at Committee Meeting 2004/11/03</p> <p>Modify definition of 3.2.29 to have an example. Added to the Revision list.</p> <p>Committee Responses to 2) and 4) will be added to Annex F of the in the revision effort; added to the Revision list.</p> <p>Incorporated into the latest draft ANSI/SIA CP-01-200x</p>

Meeting Date	Section	Issue (Requestor)	Committee Disposition	Status
2004/11/03	4.2.3.3	<p>Disarm – Request regarding progress annunciation silencing [UL]</p> <p>Question: Progress annunciation shall be silenced by the entry of the first digit of the users code. If multiple keypads are annunciating the entry delay, do all keypads need to be momentarily silenced or just the specific keypad where the code is being entered?</p>	Committee agreed to the following text: “One or all keypads may be momentarily silenced.”	<p>Approved at Committee Meeting 2004/11/03</p> <p>Will add section 4.2.3.3 in Annex F in the revision effort; added to the Revision list.</p> <p>Incorporated into the latest draft ANSI/SIA CP-01-200x</p>
2005/04/06	4.2.5.1.1	<p>RFID Tokens [Bosch]</p> <p>Question: Is it permissible to use a token at an RFID interface to perform this function? Although our control panel does support a passcode backup, RFID tokens are the primary method for controlling the system.</p>	Committee agreed that the RFID interface is an equivalent means and that the passcode backup must comply with the CP-01 requirements.	<p>Approved at Committee Meeting 2005/04/06</p> <p>Will add section 4.2.5.1.1 in Annex F in the revision effort; added to the Revision list.</p> <p>Incorporated into the latest draft ANSI/SIA CP-01-200x</p>
2005/08/25	4.2.5.4.1	Two-way Audio Verification (SafetyCare)	<p>Proposal to add the following text: “An option shall be provided that “Cancel” Signal transmissions will be postponed until after termination of “active” two-way voice sessions, in the instance that the end user initiates a cancel sequence while a two-way voice session is already in progress.”</p>	<p>Under Review at 2005/08/25 Meeting</p> <p>Add section: “An option may be provided to delay the Cancel signal and other non alarm signals until after termination of “active” two-way voice sessions, in the instance that the end user initiates a cancel sequence while a two-way voice session is already in progress.”</p> <p>Incorporated into the latest draft ANSI/SIA</p>

Meeting Date	Section	Issue (Requestor)	Committee Disposition	Status
2005/08/25	4.2.2.4	Exit Error (DMP)	<p>Proposal to make the following changes:</p> <p>4.2.2.4 Exit Error. An Exit Error sequence shall be initiated if an entry/exit zone is violated at the expiration of the Exit Time.</p> <p>An Exit Error shall be processed as follows:</p> <ul style="list-style-type: none"> • The local alarm shall immediately sound <i>and be on for a minimum of two (2) seconds.</i> • The annunciator shall sound an Entry Delay or an alarm condition <i>or a fault condition.</i> • An Entry Delay shall <i>may</i> be initiated. • If the alarm system is not Disarmed at the end of the Entry Delay, the Alarm a Transmission Sequence shall be initiated. The Alarm Transmission shall include the <i>an alarm or fault</i> and an Exit Error. 	<p>CP-01-200x</p> <p>Discussed at the 2005/08/25 Meeting at which time further revisions were not accepted.</p>
2005/08/25	4.2.5.1.1	Disarm (DMP)	<p>4.2.5.1.1 Disarm. When the system is in an alarm condition, the system shall Disarm by entering a user code only. Alternative coexisting methods of Disarming are permitted.</p> <p>Alarm annunciation (<i>control or annunciator</i>) shall <i>may</i> be silenced upon entry of the first digit of the user code. Alarm annunciation shall be resumed upon entry of an invalid user code or after a manufacturer specified time during the Abort Window.</p>	<p>Considered at the 2005/08/25 Meeting; agreed to to following text change:</p> <p>“Alarm annunciation at the keypad (<i>control or annunciator</i>) shall be silenced upon entry of the first digit of the user code.”</p> <p>Incorporated into the latest draft ANSI/SIA CP-01-200x</p>
2005/08/25	Annex D / Section 4.7	Missing Procedure (UL)	<p>Add the following at the end:</p> <p>VP 38 Default Settings (Reference 4.7)</p> <ul style="list-style-type: none"> • using the manufacturer’s supplied installation manual, confirm that each relevant programmable feature has the default value as shown in Annex A • (alternative procedure) • Obtain a UUT configured for shipment • Using the UUT’s built-in programming mode, confirm that each relevant programmable feature has the default value as shown in Annex A <p>EOT</p>	<p>Under Review at 2005/08/25 Meeting</p> <p>Incorporated into the latest draft ANSI/SIA CP-01-200x</p>

Meeting Date	Section	Issue (Requestor)	Committee Disposition	Status
2005/08/25	Annex F	4.6.1 Need for clarification on what should be included in the manual (UL)	<p>Add the following to Appendix F: "The operation of CP-01 features that interact directly with the user shall be documented in the user manual. This includes:</p> <ul style="list-style-type: none"> • 4.2.2.1 Exit Time • 4.2.2.2 Progress Annunciation • 4.2.2.3 Exit Time Restart • 4.2.2.5 Unvacated Premises • 4.2.3.1 Entry Delay • 4.2.3.2 Progress Annunciation • 4.2.3.3 Disarm • 4.2.4.1 Control Buttons • 4.2.4.2 Manual Alarms • 4.2.4.3 System Acknowledgment • 4.2.4.4 Remote Arming • 4.2.4.5 Remote Disarming • 4.2.5.1.1 Disarm • 4.2.5.1.2 Abort • 4.2.5.3 Disarm • 4.2.5.4 Cancel Window • 4.2.6.2 Duress Code • 4.2.7 Initiation of Manual Alarms • 4.6.3 System Test • 4.6.6 Test in Progress • 4.6.7.1 Automatic Termination 	<p>Under Review at 2005/08/25 Meeting</p> <p>To be discussed at the February 2006 meeting.</p> <p>Currently incorporated into the latest draft.</p>
2005/08/25	2.1	Unable to get product tested to CP-01 b/c UL 1076 was not on the List [Pacom Systems]	<p>Replace: "This standard is intended to allow compliance with the following standards." With: "This standard is intended to not conflict with the following standards."</p> <p>Add: "UL 1076 Proprietary Burglar Alarm Units and Systems" to the list</p>	<p>Under Review at 2005/08/25 Meeting</p> <p>Reference added to section 2.1.</p>
2005/08/25	VP 7	Inconsistencies in the Procedure [Honeywell]	<p>Replace: "Wait 107 seconds after the expiration of the Exit Time, then trip any non-fire zone." With: "Wait 107 seconds after the expiration of the Exit Time, then trip any non-fire, non-delayed zone."</p> <p>Replace "Wait 133 seconds after the expiration of the Exit Time, then trip any non-fire zone." With: "Wait 133 seconds after the expiration of the Exit Time, then trip any non-fire, non-delayed zone."</p>	<p>Under Review at 2005/08/25 Meeting</p> <p>Change made to VP 7.</p> <p>Incorporated into the latest draft ANSI/SIA CP-01-200x</p>
2005/08/25	Annex F	Incorporation of All Requests for	Raised at the 2005/08/25 Meeting and agreed to by the	

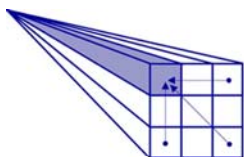
Meeting Date	Section	Issue (Requestor)	Committee Disposition	Status
		Interpretation to date on the 2000 document into this revision effort when possible.	<p>participants. As of 2006/01/31 the following was the list in Annex F:</p> <p>General A requirement is a feature that the control panel must perform under all circumstances. A required option is a programmable feature that must be in the control panel. An allowed option is a programmable feature that is not required or prohibited by the standard. An allowed feature is a non-programmable feature that is not required or prohibited by the standard.</p> <p>UL Listing Since the standard requires both a local alarm and off premise transmission, UL is requiring that products they test to it be UL listed for both a local and off premises reporting. Any hardware device added to a system to meet the requirements of this standard needs to be UL listed, or UL will test to verify that a failure of this device does not compromise the existing UL requirements of the system.</p> <p>3.2.29 Fire Alarm Verification Fire alarm verification is meant to be a function of either the control panel or the sensor/detector. When “fire alarm verification” is a function of the control panel, delaying transmission of the fire alarm signal (after the initial sensor trip) until a second sensor trip occurs, within the confirmation period, meets the SIA CP-01 requirements.</p> <p>4.1 Partitioned Systems Each partition needs to be able to support the requirements in Clause 4. In testing, it will be acceptable to test 2 partitions as indicative of the products ability to meet the requirements in all partitions.</p> <p>4.1 & 4.2.2.2 Progress Annunciation The standard does not specifically prohibit a silent exit feature in a partitioned system. It does require that it follow the same criteria as a non-partitioned system when it is invoked.</p> <p>4.2.2 Arming and Exit The standard does not specifically address the features and requirements for automatic arming. It would be considered an allowed option. If employed, however, it would need to follow the requirements of clause 4. The standard addresses Remote Arming and Remote Disarming of alarm systems, using remote control devices, to help reduce false alarms</p>	<p>Added in Section 3.1.5</p> <p>Added to Annex E</p> <p>Added to 3.2.29</p> <p>Added to Clause 4.1</p> <p>Added in 4.1</p> <p>Added to Clause 4.2.2</p>

Meeting Date	Section	Issue (Requestor)	Committee Disposition	Status
			<p>caused by unintentional violation of exit and entry delays.</p> <p>4.2.2.1 Exit Time – The minimum time given is an absolute minimum, and panels are not to allow Exit Time(s) of less than 45 seconds.</p> <p>4.2.2.1 Silent Exit Approval – refers to a Silent Exit feature that is invoked by the system user at the time of arming. CP-01 does not require this feature. CP-01 does require, however, that when this feature is invoked, the exit delay for that arming cycle must be doubled. When invoked, the Silent Exit feature will halt the exit progress annunciation for the entire system or partition for only one arming cycle.</p> <p>4.2.2.2 Progress Annunciation – A control panel may meet this requirement by having two separate buttons for arming where one is arm normal (with progress annunciation) and one is arm silent (no annunciation).</p> <p>4.2.2.2 Silent Exit Approval – allows the exit progress annunciation to be completely programmed out of individual keypads (for bedrooms, etc). Section 4.2.2.2 does not allow for a control panel to disable exit progress annunciation for an entire system.</p> <p>4.2.2.3 Exit Time Restart - Since exit time restart is a required option, panels will have the ability to have this feature disabled at the time of installation.</p> <p>4.2.2.4 Exit Error – The standard does not address panel response if a non-entry/exit zone is violated at the end of the Exit Time.</p> <p>4.2.2.6 Recent Closing – A Recent Closing transmission is allowed, but not required, if an alarm condition occurs between Arming and the end of the Exit Time. The Recent Closing signal is separate from the closing signal.</p> <p>4.2.3.1 Entry Delay – The minimum time given is an absolute minimum, and panels are not to allow Entry Delay(s) of less than 30 seconds.</p> <p>4.2.3.2 Progress Annunciation - The early progress annunciation of an entry delay needs to be audible at a minimum.</p> <p>4.2.3.3 Disarm (during Entry Delay) - The alternative methods mentioned are referring to keystrokes on the keypad, such as a disarm command followed by a code. This section is stating these methods can work in addition to the code only method.</p> <p>If multiple keypads are annunciating the entry delay, one or all</p>	<p>Added to Clause 4.2.2.1</p> <p>Added to Clause 4.2.2.1</p> <p>Added to Clause 4.2.2.2</p> <p>See last paragraph Clause 4.2.2.2</p> <p>Added to Clause 4.2.2.3</p> <p>Added to Clause 4.2.2.4</p> <p>Added to Clause 4.2.2.6</p> <p>Added to Clause 4.2.3.1</p> <p>Added to Clause 4.2.3.2</p> <p>Added to Clause 4.2.3.3</p> <p>Added to Clause</p>

Meeting Date	Section	Issue (Requestor)	Committee Disposition	Status
			<p>keypads may be momentarily silenced.</p> <p>4.2.4.1 Control Buttons - The requirements for control buttons are not the same as for manual alarms. Control buttons only need the mechanical design. For testing, the manufacturer may need to provide (in their product literature or otherwise) rationale on their mechanical design and how it minimizes inadvertent activation.</p> <p>4.2.4.2 Initiation of Manual Alarms - The manufacturer's product literature may be needed to ascertain the design features employed to achieve a double action trigger.</p> <p>4.2.4.3 System Acknowledge - The user needs to know the end result of the action taken. This can be by virtue of the knowing which button he or she pushed followed by a common acknowledgment or by separate and distinct acknowledgment for arm and disarm.</p> <p>4.2.5.1 Abort Window – The minimum time given is an absolute minimum, and panels are not to allow an Abort Window of less than 15 seconds. The Abort Window cannot be globally disabled, nor can all zones but fire be disabled, with a single programming option.</p> <p>4.2.5.1.1 Disarm (during Abort Window) - The local alarm sounding device is only delayed during the entry delay. It will be sounding during the abort delay period. 4.2.5.1.1 does require a momentary silencing of the local sounder while a code is being entered. If this is unsuccessful the local alarm will restart. The minimum timings in the SIA standard do allow for harmony with the existing UL standards.</p> <p>An RFID interface is an equivalent means and that the passcode backup must comply with the CP-01 requirements.</p> <p>4.2.5.4.1 Cancel – Some panels may require a special function key after Disarm to send a Cancel signal.</p> <p>4.3.1 Cross Zoning - UL has certain requirements for employing cross zoning. Because this feature is a programmable one the 2 standards should be able to co-exist.</p> <p>4.4.2 Labelling - The voltage which needs to be specified on the interconnect label is a DC value of the zone circuit in which proper operation of the zone is affected due to excess wire or device (detector) resistance.</p> <p>4.4.3 Restoration of Power - The state should be retained indefinitely. The control panel is required to come up in the disarmed state if that is the state it was in when it powered</p>	<p>4.2.4.1</p> <p>Added to Clause 4.2.4.2</p> <p>Added to Clause 4.2.4.3</p> <p>Added to Clause 4.2.5.1</p> <p>Added to Clause 4.2.5.1.1</p> <p>Added to Clause 4.2.5.4.1</p> <p>Note added in 4.3.1</p> <p>Added to clause 4.4.2</p> <p>Added to clause 4.4.3</p>

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			<p>down.</p> <p>4.5 Call Waiting - All that should be required in testing is to prove that the control can dial all the digits on a standard DTMF phone including *. A DTMF test set can be used for this purpose.</p> <p>4.6.1 Quick Reference - The quick reference section can be contained in the manual so long as it is a separate section.</p> <p>4.6.1 User Manual – The operation of CP-01 features that interact directly with the user shall be documented in the user manual. This includes:</p> <ul style="list-style-type: none"> • 4.2.2.1 Exit Time • 4.2.2.2 Progress Annunciation • 4.2.2.3 Exit Time Restart • 4.2.2.5 Unvacated Premises • 4.2.3.1 Entry Delay • 4.2.3.2 Progress Annunciation • 4.2.3.3 Disarm • 4.2.4.1 Control Buttons • 4.2.4.2 Manual Alarms • 4.2.4.3 System Acknowledgment • 4.2.4.4 Remote Arming • 4.2.4.5 Remote Disarming • 4.2.5.1.1 Disarm • 4.2.5.1.2 Abort • 4.2.5.3 Disarm • 4.2.5.4 Cancel Window • 4.2.6.2 Duress Code • 4.2.7 Initiation of Manual Alarms • 4.6.3 System Test • 4.6.6 Test in Progress • 4.6.7.1 Automatic Termination <p>4.6.3 System Test - System Test can be a procedure outlined in the manuals.</p> <p>4.6.7.1 Automatic Test Termination - The test termination annunciation must be given whenever a test is terminated automatically regardless of the length of the test. This would require that an automatic test termination could not take place in less than 5 minutes, though the test can be terminated manually in less than 5 minutes. Since the person testing the system is probably not going to be at the arming station at all times, the annunciation should be audible.</p>	<p>Added to note in clause 4.5</p> <p>Added to 4.6.1</p> <p>Added to 4.6.1</p> <p>Added to 4.6.3</p> <p>Added to 4.6.7.1</p>

Meeting Date	Section	Issue (Requestor)	Committee Disposition	Status
			4.6.7.2 State at Termination - The standard does not prohibit the annunciation and/or the reporting of fire alarm trouble during a test mode, so is not in conflict with UL standards.	Added to 4.6.7.2



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September 9, 2005

TO: Larry Dischert (ADT)
Mark Visbal (SIA)

RE: PHASE I FINAL REPORT

PROJECT: SIA FALSE ALARM STUDY

This report provides a summary of information researched and discovered from Phase I of our false alarm study and recommendations for the implementation of Phase II.

BACKGROUND:

In June 2005, SIA authorized a 2 phase research program to determine the true impact of CP-01 compliant panels on the incidence of false alarms across the U.S. Phase I was designed to research and discover whatever data exists among central stations, jurisdictions, large dealers, and any other source that might suggest an answer to the question of CP-01 effectiveness. In the event that relevant information were discovered it was to be analyzed using the "Two Mean" and "Chi Square" statistical techniques assuming that geographical representation and sample size met professional criteria. The analysis was to determine the singular impact of CP-01 panels vs. other types of panels in reducing false alarms.

Since there was initial skepticism among members of the false alarm committee regarding the quality of data that exists for this analysis, a Phase II program was conceived to produce the needed information. It would consist of a communications effort across trade and jurisdictional levels of the industry to outline a method of record-keeping that would segregate the alarm occurrences of CP-01-equipped premises with those equipped with other types of panels. There would be a waiting period, presumed to be approximately 6 months, for this information to accumulate in various geographic areas of the U.S. J.P. Freeman would proceed to collect the information and conduct the required analysis to factually determine if CP-01 compliant panels are more effective than others in the reduction of false alarms.

I. RESEARCH SOURCES

Every known organization and person was contacted to determine the existence of false alarm data and to network for the purpose of determining if other possibly unknown organizations might maintain such data. These individuals and organizations are listed in the weekly reports of the work as it proceeded to completion. They include trade associations, central station companies, large dealers, and two important jurisdictions; Montgomery County, Maryland, and the Phoenix Police Dept.

Manufacturers of CP-01 panels were also interviewed to determine their manufacturing policies regarding CP-01 panels, the general locations of their shipments, and their perceptions of CP-01 effectiveness. These companies included Honeywell (Ademco), Napco, and Bosch.

II. FINDINGS

The primary finding is that, with the exception of the Phoenix Police Dept., quality false alarm data do not exist in any usable format. This initially suspected finding has been confirmed and verifies the need for the activation of Phase II.

Related findings that are important and relevant to Phase II are as follows:

1. In the absence of actual data and relying only on perceptions, industry experts report conflicting opinions on CP-01 effectiveness. As an example, Stan Martin of SIAC believes strongly that there is no question about the positive effectiveness of CP-01 panels in reducing false alarms while Roy Pollack of Guardian International in Florida (which was active in the promotion of the Palm Beach ordinance requiring installation of CP-01 panels) believes that his company has experienced no reduction in falses through the installation of CP-01's.
2. As a result of the lack of clear evidence regarding actual CP-01 performance and the mixed opinions of experts, organizations have implemented stricter call verification procedures. ADT now has an Enhanced Call Verification program, and is reported to have reduced the incidence of false alarms in the process.

At least two manufacturers (Honeywell and Napco) feel that the false alarm control answer lies more in the development and marketing of keyless entry locks that obviate the problem of the timed alarm delay.

Implementation of stricter call verification procedures and the marketing of keyless entry locks add two false alarm reduction variables into the current market environment of alarm control. These variables will have to be addressed in Phase II to isolate a clear picture of CP-01 effectiveness.

3. Skepticism exists in various quarters regarding CP-01 effectiveness, and this affects objectivity. Three examples demonstrate this lack of full endorsement of CP-01 panels. The first is the rising popularity of stricter call verification procedures. The second is the manufacturer belief that keyless entry locks will contribute to false alarm control. Inasmuch as these new entry locks would be new products and therefore represent a source of incremental revenue, there is an automatic manufacturer incentive to introduce them in greater numbers thereby steadily obscuring the isolated impact of CP-01's. The third is that, as part of our research, Montgomery County, MD fielded a survey among its organization as to the effects of CP-01 installations. The response was less than even nominal.

The importance of the skepticism issue is that it has the potential to affect the successful implementation of Phase II. Industry and jurisdictional attitudes can potentially be dispirited to the point at which cooperation with requests for participation in accurate alarm record-keeping can be negatively impacted. Therefore, every effort should be made to overcome any reluctance to participate in this important cooperative effort.

III. PHASE II RECOMMENDATIONS

The singular objective of Phase II is to determine the effectiveness of CP-01 panels in reducing false alarms. To achieve this, J.P. Freeman recommends that these primary operational goals be established:

1. Create a data collection system that is comprised of a simple format requiring little time to complete so that any reluctance in compliance is minimized.
2. While the format would be simple and capable of completion in only minutes, include the capability of measuring other false alarm control impacts not limited to stricter call verification procedures and the introduction of wireless key entry products. This could include the measurement of such as community education programs that jurisdictions may utilize in raising local awareness of the need to reduce false dispatches.
3. Make the reporting format amenable to local objectives such as collecting evidence for law enforcement, legal, and local publicity actions by individual jurisdictions, and invite those jurisdictions to provide industry feedback on a periodic basis even after the Phase II research is completed so that an ongoing exchange of enforcement/industry information can be considered as a joint effort in making police action increasingly cost-effective.
4. Minimize any CP-01 skepticism by communicating to the intent of SIA to create "a dialog" with jurisdictions for the purpose of minimizing false dispatches through any steps its membership can take with the CP-01 research being the first step in that direction. The intent is to provide a

benefit to compliers that is mutual in nature and that other jurisdictions may therefore want to emulate.

5. Using “responsible” publicity efforts, enlist and recruit all elements of the industry and enforcement communities (manufacturers, central stations, alarm dealers, integrators, professional police organizations, and industry trade groups) in the needed participation so that the effort is seen as a national contribution to the importance of effective police work in the era of terrorism and heightened concern for homeland security.*

** reference the comments of Homeland Security Secretary Michael Chertoff on the necessity for homeowners to also be prepared for terrorist incidents.*

PROJECT TIME—FINAL REPORT

5 hours

Respectfully,

Joseph P. Freeman, Sc.D.
CEO

cc: Megan Lewis
Jack Nickerson
James Rancourt