



Digital Communications Standard - SIA 2000 Protocol for Alarm System Communications

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TABLE OF CONTENTS

1.	INTRODUCTION.....	1
1.1	GENERAL DESCRIPTION.....	1
1.2	PURPOSE.....	1
1.3	OBJECTIVES	1
1.4	GENERAL OVERVIEW	2
1.5	DOCUMENT ORGANIZATION.....	3
2.	GLOSSARY	3
3.	REFERENCE DOCUMENTS.....	6
4.	MEDIA IMPLEMENTATION.....	7
4.1	PUBLIC SWITCHED TELEPHONE NETWORK (NORMAL COMMUNICATIONS).....	7
4.1.1	Answer Sequence	8
4.1.2	Timing Considerations	10
4.1.3	SIA 2000 Compliance Levels	11
4.2	PUBLIC SWITCHED TELEPHONE NETWORK (HIGH SPEED COMMUNICATION).....	13
4.3	DIRECT COMMUNICATION (RS232)	13
4.4	INFRARED COMMUNICATION.....	13
4.5	MULTIDROP COMMUNICATION (RS485)	13
4.6	CELLULAR DIGITAL PACKET DATA.....	14
4.7	RADIO FREQUENCY.....	14
4.8	BROADBAND COAX.....	14
5.	MESSAGES	14
5.1	DATA REPRESENTATION.....	14
5.2	HEADER	14
5.3	LENGTH FIELD.....	16
5.4	AUTHENTICATION FIELD.....	16
5.5	ERROR CHECK FIELD.....	16
6.	MESSAGE TYPES	16
6.1	BURST MESSAGES.....	17
6.1.1	Message Layouts	17
6.1.2	Message Layout Tables	17
6.1.3	Definitions of Primitive Data Elements	18
6.2	SUPPLEMENTAL TEXT MESSAGES.....	20
6.3	FLOW CONTROL MESSAGES	20
6.3.1	Communications Turnaround.....	21
6.3.2	Flow Control Directive Messages	21
6.3.3	Flow Control Positive Acknowledgment	22
6.3.4	Flow Control Negative Acknowledgment	23
6.4	OPEN CHANNEL COMMANDS (EXTENDED COMMUNICATIONS).....	23
6.5	PROGRAMMING MESSAGES	24
6.6	AUTOMATION MESSAGES	24
6.7	UNKNOWN MESSAGES	24
7.	REGULATIONS AND STANDARDS.....	24
7.1	REGULATORY AGENCY COMPLIANCE.....	25
7.2	UNDERWRITERS LABORATORY STANDARDS	25
8.	STANDARD ENFORCEMENT AND REVISIONS	25

8.1	REVISIONS TO THE STANDARD.....	25
8.1.1	Changes to Communications or Flow Control.....	25
8.1.2	Requests for Event Table Additions	26
8.1.3	Indication of Additions in Products.....	26
8.1.4	Document Revision Date vs. Protocol Header Revision Information	26
9.	REPORTING	27
9.1	BASIC REPORTING.....	27
9.2	REPORTING WITH DATALOCK	27
9.3	REPORTING WITH OPEN CHANNEL	28
9.4	REPORTING WITH TURN-AROUND.....	29
9.5	USING THE PASSWORD COMMAND.....	30
9.6	SUPPLEMENTAL EVENT INFORMATION.....	31
10.	ALARM TYPES.....	32
10.1	SUMMARY TABLE OF GENERAL TYPES	32
10.2	TABLES OF EVENTS	34
10.2.1	UL Priority	34
10.3	POINT/ZONE TABLES.....	35
10.3.1	Table 1 – Specific and General Types (1 – 4).....	35
10.3.2	Table 2 – Specific and General Types (5-6).....	42
10.3.3	Table 3 – Specific and General Types (7-8).....	48
10.3.4	Table 4 – Specific and General Types (9-10)	54
10.3.5	Table 5 – Specific and General Types (11-12)	60
10.3.6	Table 6 – Specific and General Types (13-14)	66
10.4	TABLES OF OTHER GENERAL TYPES.....	72
10.5	STATUS BIT DEFINITIONS.....	87
10.5.1	Status Bits for Point Related General Types	87
10.5.2	Status Bits for Non-Point Related General Types.....	89
11.	APPENDIX B - MESSAGE EXAMPLES	90
11.1	BURST MODE MESSAGE EXAMPLES	90
11.1.1	Typical Alarm Message Examples.....	90
11.1.2	Typical Non-Alarm Reports.....	90
11.1.3	Maximum Message Length Example	91
11.2	DATE / TIME FIELD EXAMPLES	92
11.2.1	Date/Time Scenario 1:.....	92
11.2.2	Date/Time Scenario 2:.....	94
	APPENDIX C - FLETCHER CHECKSUM ALGORITHM	96



Digital Communications Standard - SIA 2000 Protocol – for Alarm System Communication

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1. INTRODUCTION

1.1 General Description

The SIA-2000 protocol structures the communication between a control and a central station receiver. The basic form of this communication conveys information such as alarms, alarm cancels, troubles, and restorals. This involves transferring information records from the control to the central station, and receiving acknowledgments from the receiver for each record.

To support features such as remote panel programming and alarm verification through audio or video means, the protocol has provisions to extend the communication session. Once extended, the receiver can query the control for information or change the control's configuration. The extended session can also be used for verification. It is at this point, that communication using SIA-2000 ends and the appropriate form of communication for verification begins.

1.2 Purpose

The purpose of this specification is to define a communication protocol that will support current and

future needs over a diverse range of control and receiver types. Specifically the intent is to define a flexible, universal, extensible reporting message format that can be used across a wide variety of physical media and transfer protocols.

1.3 Objectives

- (a) Provide a protocol that can be used for monitored alarm system communication, remote downloading, and direct wire implementations.
- (b) Spend minimal practical time on line per transaction, to minimize the number of receivers required to handle the traffic and minimize telephone charges.
- (c) Minimize the transmission error rate.
- (d) Allow for a variable length data message, if necessary.
- (e) Be amenable to transmission and reception by a variety of economical (non-proprietary) and reliable means, and be adaptable to changing technology in data communication.
- (f) Anticipate the future need for significant data