
Section 1

System Overview

This manual describes installation, operation, and programming of the Model 9500 Central Station Receiver. The 9500 is a dual line desk-top receiver. This section will list features, optional accessories, compatible formats, and SIA options supported. This section also contains conventions held throughout the manual, terminology relevant to this product, and other information.

1.1 Features

Hardware:

- Supports both 120 and 240 VAC installations at 60 and 50Hz operation.
- External annunciation with auxiliary Form C dry contact relay. (Programmable)
- On-board PZT alert. (Programmable.)
- 1 parallel port.
- 2 serial ports.
- 2 rear SBUS connectors.
- Modular configuration for easy replacement and repair.
- 4 line LCD Display with 20 characters for each line.
- On-board touchpad for manual operation and programming.
- LEDs to indicate system operations.
- One line card will communicate with all supported formats.
- Supports up to 2 line cards which operate independent of each other.
- Line card parameters are stored on the MCPUC for faster removal and replacement.
- Line cards support Caller ID and Caller Name Delivery.
- Line cards are individually programmable for format priority and ring parameters.
- Line cards support direct connect phone line monitoring.

Software:

- Programmable display options for time and date information.
- View or print the history information by priority or by call or by event.
- Two user profiles to control user access to the receiver.
- Supports up to 40 users.
- Listen-in and trap accounts support wild card variables. Up to 20 accounts available per line card. (20 for listen-in and 20 for trap accounts.)
- Listen-in selectable for direct, hook flash, or PBX phone system.
- Programmable port configuration for automation, printer and backup support.
- 500 event history buffer.

1.2 Optional Accessories

The following accessories for the Model 9500 receiver are available from Silent Knight Sales Department unless otherwise indicated. You can contact Silent Knight Sales Department by phone or by mail. The Sales Department’s toll free and local numbers are 800-446-6444 and 612-493-6435. Our mailing address is 7550 Meridian Circle, Maple Grove, MN 55369-4927.

Table 1-1: Optional Accessories for the 9500 receiver

Item	Silent Knight Model Number (if applicable)	Description/Comments
Line card	9810	The line card monitors the phone line, detects ring and processes the message from the communicating panel.
Backup battery	6712 (See Section 3.9 for installation.)	A 12VDC 7ah battery which will provide a minimum 4 hours of backup power during an AC power loss. (See Section 2.3.2 for UL backup power requirements.)
Printer cable	Not available from Silent Knight	A standard 25-pin cable used to connect the 9500 receiver to an external parallel printer.
UL Conduit Connector Kit	9512 (See Section 3.8.2 for installation.)	Required to meet UL requirements for NFPA 72 Central Station Service.
Automation Software	9540	Dispatcher , alarm monitoring software with report generation (250 accounts Maximum).
	9541	Dispatcher Plus , alarm monitoring software with report generation (no account limit).
	9542	Reporter , unmonitored event capture, storage and report generation software.

1.3 Formats Compatible with the 9500

The 9500 receiver is compatible with all Silent Knight UL listed communicators.

Table 1-2 shows the formats that the 9500 receiver can decode and the handshake frequency groups which accommodate that format (see Section 5.4 for line card programming). Each line card can decode every format listed below. Setting the handshake order only prioritizes the type of communication done by each line card. Section 6 of this manual describes the formats in greater detail.

Table 1-2: Formats compatible with the 9500

Format Name	Handshake
BFSK	1400 or 2300 Hz
SK FSK, FSK 0, FSK 80	1400 or 2300 Hz
SK FSK 1, FSK 1, FSK 81	1400 or 2300 Hz
FSK II, FSK 86	1400 Hz
SK 4+2	1400 Hz
SK 3+1/3+1 Extended	1400 or 2300 Hz
Sescoa 3+1/Franklin 3+1	2300 Hz
Radionics 3+1 Checksum	1400 or 2300 Hz
4+1 Extended	1400 or 2300 Hz
FBI 4+3+1	1400 or 2300 Hz
SX-III, SX-IVA	2225 Hz
SX-IVB	2225 Hz
ITI SX-V	2225 Hz
ITI Commander	2225 Hz
ITI RF Commander, Harbor Gard	2225 Hz
ITI Commander 2000, LifeGard	2225 Hz
ITI CareTaker+, SecurityPro 4000	2225 Hz
ITI UltraGard	2225 Hz
SIA DCS	2225 Hz
SIA 2000 (pending approval)	2225 Hz
Ademco Contact ID	1400 and 2300 Hz
Ademco Super Fast	1400 and 2300 Hz
Acron Touch Tone	1400 and 2300 Hz
Ademco Express	1400 and 2300 Hz
DTMF 4+2	1400 and 2300 Hz
Westec	Westec
Modem II	Modem II
Modem IIe	Modem IIe

1.4 9500 Supported SIA Digital I-III Levels

Table 1-3 compares the 9500 receiver to SIA Digital Compatibility Levels I, II, and III and indicates which of them we comply with.


Table 1-3: 9500 and SIA Levels I-III comparison

		9500	Function/Capability	Transmitter	Receiver
Level I	Level II	4	Support Tonal Acknowledgments	required	required
		4	Support N blocks with Zone Numbers Only	required	required
		4	Support single Account Block per Call	required	required
		4	Support O Blocks	(optional)	required
		4	Support X Blocks	(optional)	required
		4	Support 300 Baud (Fast)	(optional)	required
			Support Configuration Block	required	required
			Support Data Acknowledgments	required	required
			Support Modifier codes <i>id</i> , <i>da</i> and <i>ti</i> .	(optional)	required
			Support Multiple Account Blocks per Call	(optional)	required
	Level III	4	Support E Blocks	(optional)	required
		4	Support Data Codes with Units Numbers	(optional)	required
			Support RECEIVER call out and Access Passcode	required	required
			Support Reverse Channel C Blocks	required	required
			Support Reverse Channel P Blocks	required	(optional)
			Support Reverse Channel A Blocks	(optional)	required
			Support Dynamic block and Group Sizes	(optional)	required
		4	Support Listen-in	(optional)	required
		4	Support A Blocks to RECEIVER	(optional)	required
			Support V-Channel communication	(optional)	(optional)

1.5 How to Use this Manual

This manual contains information on how to install, operate and program the 9500 receiver. Silent Knight strongly suggests that the manual be reviewed in its entirety to become familiar with procedures and parameters of the product. Once you are familiar with the product, the manual can be used as a reference document.

The manual uses the following conventions:

- A small graphic of each touchpad button is used to represent which touchpad key is to be pressed for a given operation. For example, an up-arrow would be shown as: 
- LCD display This typeface represents messages that appear on the LCD.
- 2225Hz This typeface represents an editable field that appears on the LCD.
- Pages of the manual are numbered by section. For example, a page numbered as “5-1” is Page 1 of Section 5.
- When this manual refers to **default settings**, it means programmable options set at the factory. Any programming after the receiver is powered up will change these setting.

1.6 Terminology

This section lists terminology that is specific to this product and their meaning.

Term	Meaning
Communication Group	Silent Knight has separated the different types of communication by handshake type. These handshake types can be assigned in a numbered order. (See Section 6 for more details.)
Listen-in	Listen-in is the ability to listen in to what is happening real-time from the central station to a remote location. This can help the central station operator determine if he or she should dispatch for a particular alarm situation.
PZT	PZT is an abbreviation for a piezo alert sounder.
PIN	An abbreviation for Personal Identification Number. PINs are used to log in and out of the receiver.
SBUS	Serial Bus interface to connect a 9500 receiver to 9510 Line cards and the LCD display.
MCPU	Master Central Processing Unit.
Main Menu	The main menu will be displayed as either <Installer Menu> or <Operator Menu> . However, this manual will refer to them as the main menu.
ACK	Stands for acknowledgment.
NACK	Stands for no acknowledgment.

1.7 What's in the Box

This section contains a list of the parts that are shipped with the 9500 receiver and a brief description of their intended use.

Item	Quantity	P/N	Description
Alert Relay Wiring Harness	1	130393	Wiring harness used to connect the 9500 receiver to a backup battery. It also provides a normally open or normally closed output for an alert sounder.
9500 Installation & Operation Manual	1	151059	A manual covering installation and operation information related to the 9500 receiver.
Central Station Receiver	1	9500	The central station receiver assembly.
Line Card	1	9810	Line card for land lines.
Strain Relief Tie Wrap	1	120101	Tie wrap used as a strain relief on the phone cord. See Figure 3-3 for location of strain relief tabs.
Telephone Cord	1	130071	A 7 foot long telephone cable with RJ-11 connectors.
Power Cable	1	119229	AC power cable used to connect the 9500 receiver to an AC wall plug.

1.8 How to Contact Silent Knight

If you have a question or encounter a problem not covered in this manual, contact Silent Knight Technical Support at 800-328-0103 (or 612-493-6455). To order parts, contact Silent Knight Sales at 800-446-6444 (or 612-493-6435).