B942 Touch Screen Keypad

www.boschsecurity.com





The B942 keypad is an SDI2 bus compatible device. The keypad features an illuminated touch screen and graphical interface. With an elegant design and low profile, the keypad fits with any modern decor. Each keypad has user adjustable options such as volume and brightness. They have four inputs and one output. The keypad shows system messages for all areas.

System overview

- For commercial use, install the keypad in building entrances and areas with unrestricted access.
 Mounting a keypad near exterior doors in hotel or business lobbies allows people to identify the type and location of the emergency.
- For residential use, install the keypad near the front and rear entrances to the home. Install additional keypads in a kitchen or in a bedroom.
- Use multiple keypads in a large building with many separate areas of security. Program multiple keypads to control multiple areas.
- Audible tones from the keypad sounder alert personnel to fire events and assist fire fighters in locating the keypad.

- ► Color graphic touch screen display uses a combination of simple icons and text for easy operation
- ▶ Built-in presence detector lights the display when user approaches keypad
- ▶ Built-in proximity reader allows use of a token or card as replacement for a passcode, or for use with dual authentication for high security areas
- ► Four inputs and one output provide cost effective expansion
- ▶ Slim, modern design blends with any decor

Functions

Display

The touch screen display uses icons, words, numbers, and symbols to show the status of the security system and for interacting with the security system. When several events occur, the keypad shows each event in order of priority. The keypad detects when a user approaches and automatically activates the display.

User icons and keys

The keypad greets the user with a home screen that shows the system status at one glance using a large icon. The user can change the system status by simply touching this home screen icon. The touch screen display also offers icons on the ribbon bar. These visually pleasing graphical icons are easy to use for accessing menus and other options. The keypad has a variety of keyboards for entering alphanumeric characters. The keypad screen has numeric keys and one function [CMD] key. When pressed, keys emit a muted beep. Use the keyboards for entering passcodes, activating commands, and entering alphanumeric characters.

Audible tones

The keypad has a built-in speaker that produces several distinct warning tones. The tones are differentiated so that the user can recognize an event simply by hearing its associated tone. The keypad backlight illuminates when it emits an audible tone. Users can use a passcode or credential to silence the tone.

Status indicators

The status indicators on the keypad provide a quick visual reference for system status.

✓	The indicator lights when the system is ready to turn on (arm).
	The indicator lights when the system is on (armed).
Δ	The indicator lights when there is a trouble condition.
GAS	The indicator lights when dangerous gases are present including carbon monoxide (NFPA 720).
#	The indicator lights when the system has power.

Proximity reader

The proximity reader allows users to use a token or card in place of a passcode to turn on or off the security system. The proximity reader supports EM4102 (125 kHz) credentials. The Bosch ACA-ATR13-RFID tag and Bosch ACD-ATR11ISO-RFID card are examples.

Certifications and approvals

Region	Certification	
Europe	CE	EMC, LVD, R&TTE, RoHS
USA	UL	UL 365 - Police Station Connected Burglar Alarm Units
	UL	UL 609 - Standard for Local Burglar Alarm Units and Systems
	UL	UL 636 - Holdup Alarm Units and Systems
	UL	UL 985 - Household Fire Warning System Units
	UL	UL 1023 - Household Burglar Alarm System Units
	UL	UL 1076 - Proprietary Burglar Alarm Units and Systems
	UL	UL 1610 - Central Station Burglar Alarm Units
	CSFM	see our website
	FCC	Part 15 Class B
Canada	ULC	CAN/ULC S303 - Local Burglar Alarm Units and Systems
	ULC	CAN/ULC S304 - Standard for Signal Re- ceiving Center and Premise Burglar Alarm

Region	Certification	
	ULC	CAN/ULC S545 - Residential Fire Warning System Control Units
	ULC	ULC-ORD C1023 - Household Burglar Alarm System Units
	ULC	ULC-ORD C1076 - Proprietary Burglar Alarm Units and Systems
	IC	ICES-003 - Information Technology Equipment (ITE)

Installation/configuration notes

Power supply

A compatible control panel supplies the power and data requirements to the keypad through a four-wire connection.

Mounting and wiring

Mount in dry indoor locations.

Includes a slim mounting plate for recessing wiring, and a surface mounting plate for surface mounting and wiring.

Compatible control panels

B9512G/B9512G-E B8512G/B8512G-E

B6512

B5512/B5512E firmware v2.03 and higher B4512/B4512E firmware v2.03 and higher B3512/B3512E firmware v2.03 and higher D9412GV4/D7412GV4 v2.03 and higher

Parts included

Quant.	Component
1	Keypad
2	Mounting plates (slim and surface)
1	Hardware pack
4	$1k \Omega$ EOL Resistors
1	Installation Guide
1	User's Quick Reference Guide

Technical specifications

Properties

Dimensions	6.2 in x 4.7 in x 0.65 in (158 mm x 120 mm x 16.5 mm)
Weight	11.3 oz (0.32 kg)
Material	Acrylonitrile butadiene styrene (ABS) Poly(methyl methacrylate) (PMMA)
Display window	Touch screen Multi-line messages

3 | B942 Touch Screen Keypad

Indicators	Power indicator LED Status indicators Main icon Warning and indicating tones
Inputs	4 (four) $1k\Omega$ supervised inputs
Output	1 (one) NO (normally open) contact

Environmental considerations

Relative humidity	5% to 93% at +32°C (+90°F) non- condensing
Temperature (operating)	0°C to +50°C (+32°F to +122°F)

Power requirements

Current with proximity reader disabled	Standby: 200 mA Alarm: 300 mA
Current with proximity reader enabled	Standby: 300 mA Alarm: 400 mA
Voltage (input)	12 VDC nominal

Wiring

Terminal wire size	18 AWG to 22 AWG (1.02 mm to 0.65 mm)
SDI2 wiring with prox detector disabled	Maximum distance - wire size (unshielded wire only): 200 ft (61 m) - 22 AWG (0.65 mm) 520 ft (159 m) - 18 AWG (1.02 mm)
SDI2 wiring with prox detector enabled	Maximum distance - wire size (unshielded wire only): 150 ft (46 m) - 22 AWG (0.65 mm) 390 ft (119 m) - 18 AWG (1.02 mm)

Inputs and output

On-board points voltage ranges	Open: 2.2 to 5.0 VDC Normal: 1.4 to 1.8 VDC Short: 0.0 to 1.0 VDC Short circuit current: 2.3 mA
Relay contact rating	24 VDC, 1 A, power factor: 1

Ordering information

B942 Touch Screen Keypad

Black SDI2 touch screen keypad with inputs and one output.

Order number **B942**

B942W Touch Screen Keypad

White SDI2 touch screen keypad with inputs and one output.

Order number **B942W**

Accessories

B56 Keypad Surface Mount Box

Surface mount box for mounting a keypad to concrete or block.

Order number **B56**

B96 Keypad Trim Bezel

Cover the wall footprint of previous keypads when replacing them with the new, slim design of B Series keypads. The white trim bezel is 8.6 in $\times 6.3$ in $\times 0.12$ in ($22 \text{ mm} \times 16 \text{ mm} \times 3 \text{ mm}$).

Order number B96

Represented by:

Europe, Middle East, Africa:
Bosch Security Systems B.V.
P.O. Box 80002
5600 JB Eindhoven, The Netherlands
Phone: + 31 40 2577 284
emea.securitysystems@bosch.com
emea.boschsecurity.com

Germany: Bosch Sicherheitssysteme GmbH Robert-Bosch-Ring 5 85630 Grasbrunn Germany www.boschsecurity.com

North America:
Bosch Security Systems, Inc.
130 Perinton Parkway
Fairport, New York, 14450, USA
Phone: +1 800 289 0096
Fax: +1 585 223 9180
onlinehelp@us.bosch.com
www.boschsecurity.us

Asia-Pacific:
Robert Bosch (SEA) Pte Ltd, Security Systems
11 Bishan Street 21
Singapore 573943
Phone: +65 6571 2808
Fax: +65 6571 2699
apr.securitysystems@bosch.com
www.boschsecurity.asia