B Series Control Panel
## Installer Quick Start Guide

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Use this guide to quickly install a Bosch B6512/B5512/B4512/B3512 security system. Additional information is found in the Control Panels Installation Manual.

When you see this icon, use your smart phone with a QR code reader app to view helpful videos.

For additional training:

Bosch YouTube channel:
1. Scan QR code.
2. Scroll down.
3. Locate and select your region for additional videos.

B Series Installer's Site:
(North America only)

Installation sequence:
Scan and follow these videos in sequential order to the steps listed below.

Control panel component layout
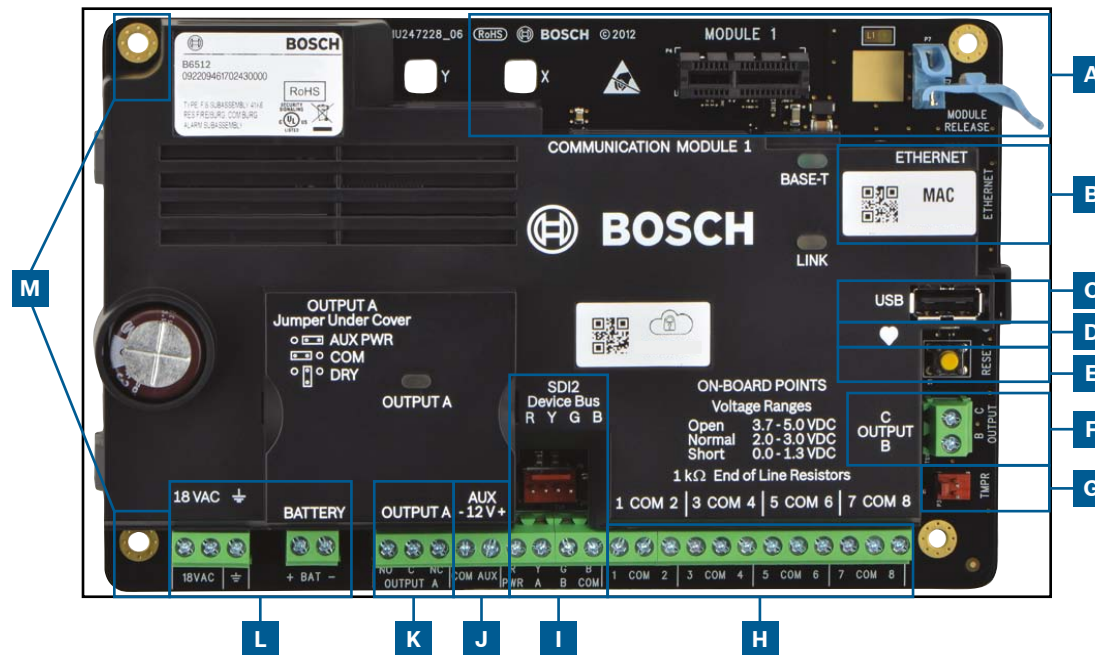
Control panel connection location

Location	Item	Description	Specification
A	MODULE 1	Plug-in comm module	Communication module options
B	ETHERNET	Ethernet port	built-in on-board Ethernet connection (10Base-T/100Base-T)
C	USB	USB port	USB connector (for firmware updates and RPS connection)
D	♥	Heartbeat LED	Slow=normal, rapid=service mode
E	Reset	Reset switch	Hold five seconds to enter or exit service mode
F	B C	Outputs B(2) C(3)	Open collector, 50mA, active low
G	TMPR	Tamper	Optional tamper switch connector (ICP-EZTS)
H	1 COM 2 to 7 COM 8	Alarm inputs	End Of Line (EOL) resistor supervised alarm inputs
I	R Y G B	SDI2 bus	SDI2 device bus
J	COM AUX	Aux power	12 VDC, 800mA
K	NO C NC	Output A(1)	Programmable relay output
L	+ BAT − , 18 VAC, ⏚	Battery, Earth ground, 18 VAC	Primary/Secondary power and Earth Ground connections
M	Mounting	Mounting holes	Mounting holes for control panel

Step 1 — Mounting the control panel [M]
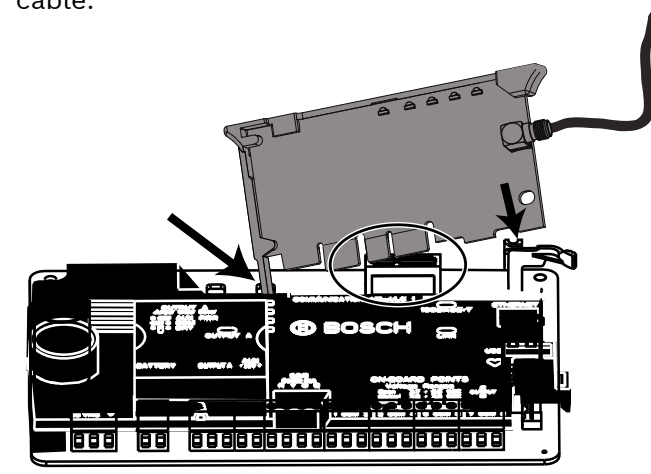
Bosch tips:
▶ Mount the enclosure prior to mounting the control panel.
▶ Mount control panel into enclosure with hardware provided.

B10

B11
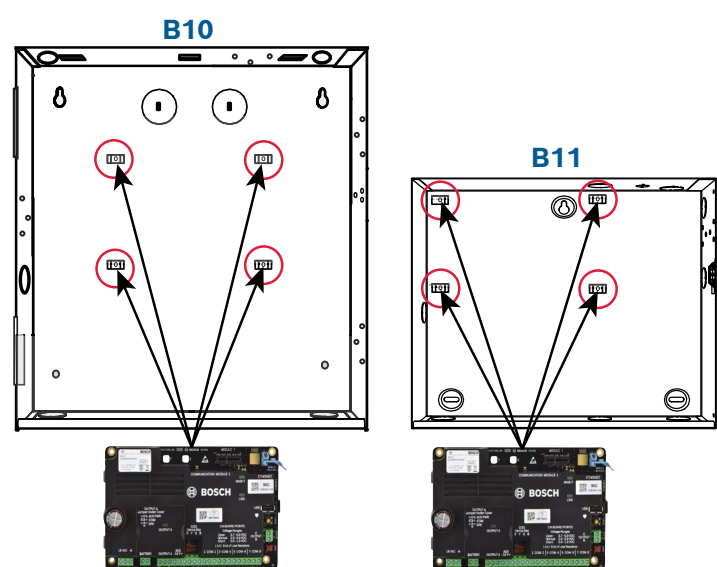
Step 2 — Installing a communication module [A]

Bosch tips:
▶ Insert leg of module into slot marked "x."
▶ **Cellular:** Place antenna on top of enclosure and run cable inside, then connect to module.
▶ **PSTN:** Connect module to a D166 (RJ31x) jack using a D161/D162 cable.


Step 3 — Installing a keypad [I]

Bosch tips:
▶ When installing a compatible Bosch keypad, refer to keypad installation guide for specific wiring diagrams. Basic keypad wiring is shown below.
▶ When installing more than one keypad, refer to keypad installation guide for unique address settings.
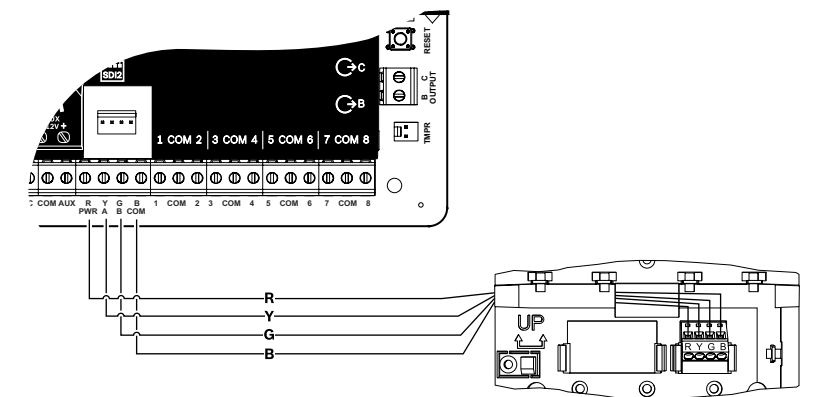
## Step 4 — Installing expansion modules [I]

Bosch tips:
▶ If installing more than one device that is similar, refer to the module's installation guide for address settings (for example, two of the same device).
▶ If installing a RADION B810 wireless receiver, use address 1 only.
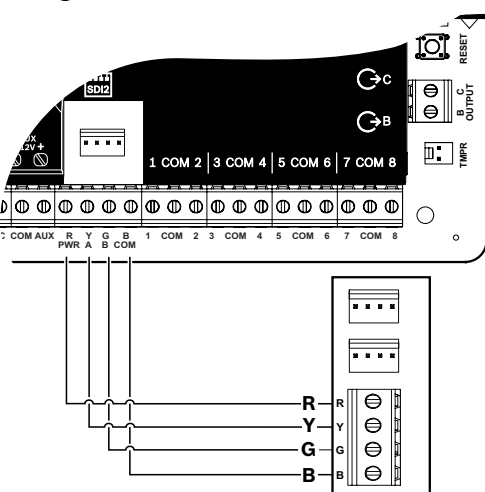
Step 5 — Installing wired inputs [H]

Bosch tips:
▶ If using a dual EOL, 2K EOL, or no EOL, refer to control panel installation guide for control panel settings.
▶ If using 2-wired powered devices, use a B201 or D125B.
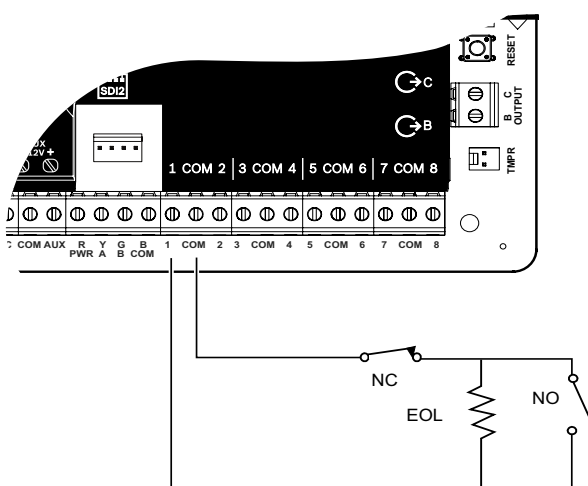
NOTE: Not all modules are available in all regions.

## Step 6 — Installing a bell or siren [J] [K]

Bosch tips:
▶ Output A can supply up to 1 A at 12 VDC when sourced from a control panel (jumper in AUX PWR position).
▶ Output A can support up to 3 amps at 12 VDC when using a separate power supply (jumper in DRY position).
▶ Output B and C are open collectors and are limited to 50 mA at 12 VDC.
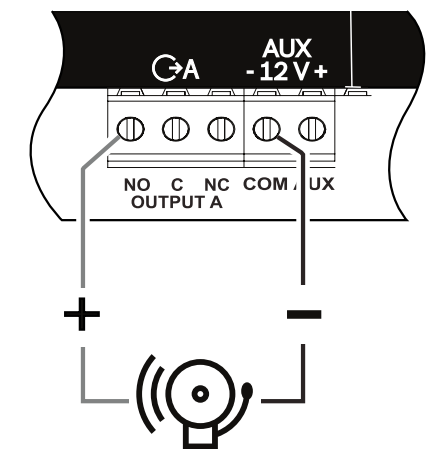
Step 7 — Powering the control panel [L]

Bosch tips:
▶ Connect wires to control panel before applying battery or AC power.
▶ Connect earth ground to a cold water pipe (copper) or other solid connection to ground.
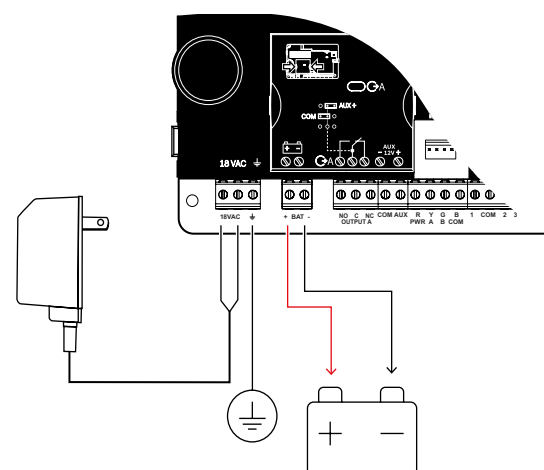
Step 8 — Create panel accounts using RPS

Bosch tips:
▶ If configuring using the Installer Services Portal, go to **Step 11**.
▶ Install Remote Programming Software (RPS) v6.06 or later. You can download RPS from the RPS product page.
▶ Follow the RPS Account Assistant instructions to create new control panel accounts. The Account Assistant helps you create a new panel account.
▶ If RPS is not available, keypad programming is an option. Refer to keypad installation instructions.
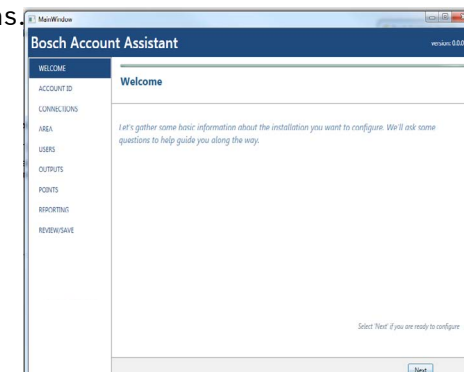
Step 9 — Connecting the control panel using RPS [B] [C]

Bosch tips:
▶ Connect a computer with RPS installed. Direct RPS connections can be done through a USB connection or Ethernet connection.
▶ The Account Assistant automatically launches when you create a new account.
▶ For USB direct connection, use a B99 USB cable.

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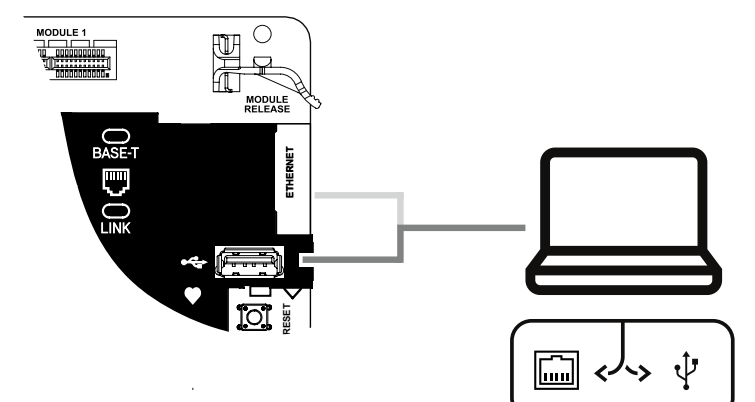
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Step 10 — Configure and send to control panel using RPS

Bosch tips:

▸ Program your configuration information using Account Assistant.

1. Press **close Account Assistant, and connect to control panel.** This opens the **Panel Communication** window.
2. Press **Connect** and send configuration programming to control panel.
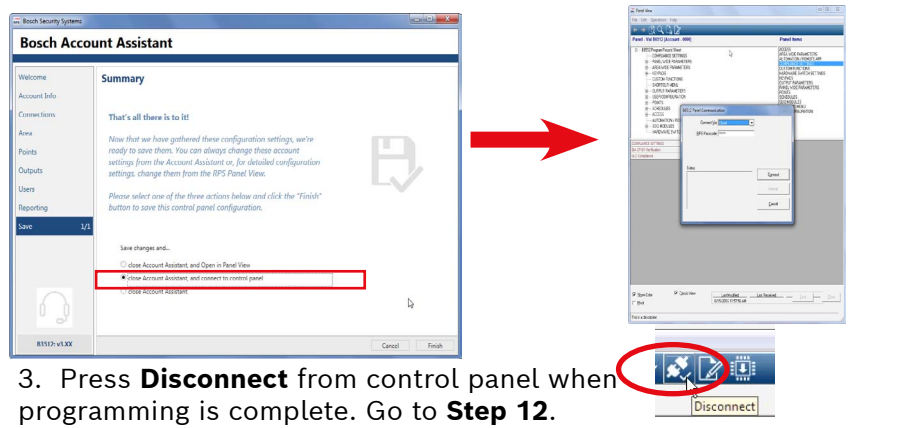
3. Press **Disconnect** from control panel when programming is complete. Go to **Step 12**.

Step 11a — Accessing the Installer Service Portal and create panel account

Bosch tips:

Using the Installer Services Portal: (Not in all regions)

▸ Before you can use Installer Services Portal you must register for services at: https://sp.boschsecurity.com.

▸ Make sure the control panel is connected to the network.

1. Log into the Installer Services Portal.
2. Click on **New** and select **Device** to create a panel account.
3. Add panel account information.
4. Activate CloudID. ISP searches database for registered ID.
5. Select **Activate**.
6. Click **Add Panel**.
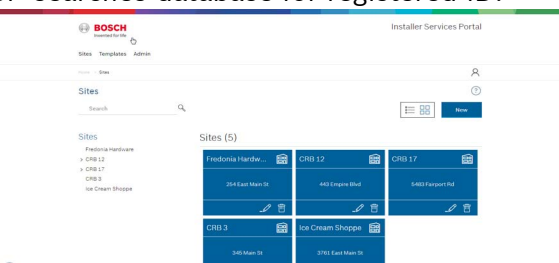
Step 11b — Connect and send using the Installer Service Portal

Bosch tips:

Using the Installer Services Portal:
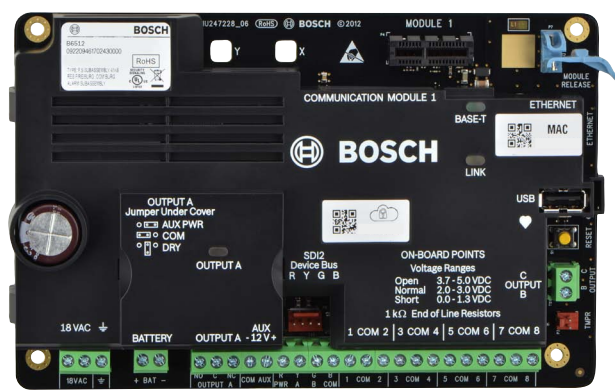
▸ Search or select device to connect to a control panel. Type in panel account name in the Search field to locate new account.

1. Select the panel account.
2. Click **Connect**.
3. Click **Configuration**. Program your configuration information.
4. Click the 3 vertical dots and select **Push Pending Changes to Panel** to send configuration.
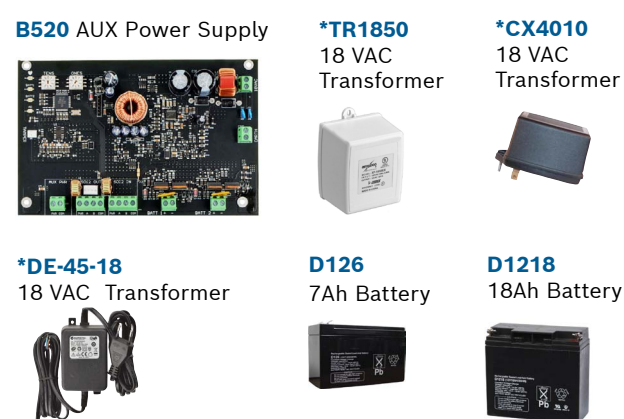5. Click **Disconnect** when configuration is complete.
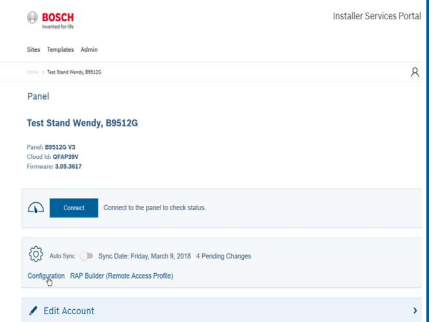
B Series control panel accessories (partial list)

Note: Not all products and features are available in all regions. Consult your Bosch representative or product datasheets for details.
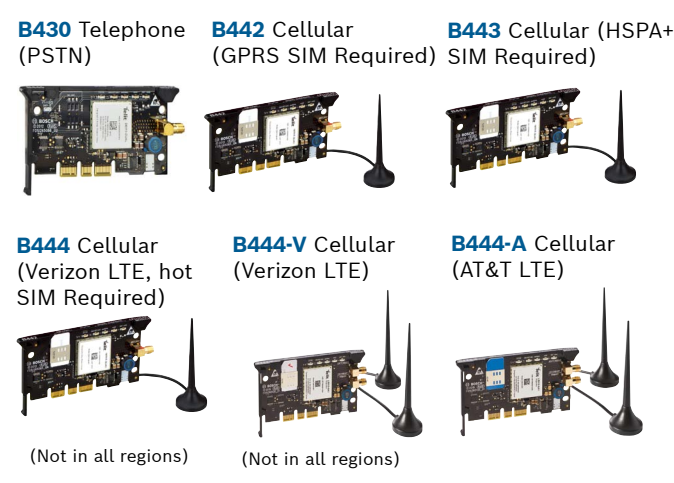
Control panel

RADION wireless devices

-A versions of RADION devices are used in North and South America. Non -A versions are used in Europe, Africa, and Australia.

B810 SDI2 Wireless Receiver
RFRP Wireless Repeater

RFPR–C12 Curtain PIR, Pet Immune 40 x 5 ft.

RFDL–11 PIR Microwave TriTech 35 x 25 ft.

RFPR–12 PIR, Pet Immune 40 ft.

RFGB Glass Break Detector

(Not in all regions)

RFDW–RM Recessed Door/ Window Contact

RFDW–SM Surface Mount Door/Window Contact

RFUN Universal Transmitter w/ Door/Window Contact

RFSM Wireless Smoke Detector

RFBT Billtrap Transmitter

RFPB–SB RFPB–TB 1 & 2 Button Panic

RFKF–TBS RFKF–FBS 2 & 4 Button Keyfobs

Inovonics wireless devices

B820 Wireless Interface

EN4200 Serial Receiver

(Not in all regions)   (Not in all regions)

Programing and software

D5500CU RPS Upgrade

B99 USB Cable

Remote Security Control Mobile App

Installer Services Portal

(Not in all regions)

Power

B520 AUX Power Supply

*TR1850 18 VAC Transformer

*CX4010 18 VAC Transformer

*DE-45-18 18 VAC Transformer

D126 7Ah Battery

D1218 18Ah Battery

D135A Low-Battery Disconnect Module

*Country specific, variants will apply

Keypads

B942 Touch Screen

B942W Touch Screen

B940W Touch Screen

B930 Text w/ Soft Keys

B921C Capacitive Touch

B920 Text w/ Function Keys

(Not in all regions)   (Not in all regions)

B915 Text   **B915I** Text

RFID tags (for Readers & B942 Keypads)

ACA-ATR13   **ACD-ATR11ISO**   **ACD-ATR14CS**

IP camera integration

Any Bosch IP camera

Enclosures & accessories

B11 Small Enclosure

B10 Medium Enclosure

D137 Mounting Bracket

D138 Mounting Bracket Right Angle

ICP–EZTS Universal Tamper

B56 Keypad Backbox

D101 Lock and Key set

Communicators

B430 Telephone (PSTN)

B442 Cellular (GPRS SIM Required)

B443 Cellular (HSPA+ SIM Required)

B444 Cellular (Verizon LTE, hot SIM Required)

B444-V Cellular (Verizon LTE)

B444-A Cellular (AT&T LTE)

(Not in all regions)   (Not in all regions)

B450 Remote Cellular Interface

Residential fire

D132A Reversing Relay

D125B Dual Class B Initiating Module

D192G Bell Super Vision Module

(Not in all regions)   (Not in all regions)

B201 2–wire powered loop

F220/F220–B6R Smoke Detector plus Base

Access modules

B901 Access Module (B6512 only)

I/O expansion modules

B208 Octo-Input Module

B308 Octo-Output Module

*Home automation

G450 Z-Wave Home Control Gateway

Remote Security Plus Mobile App
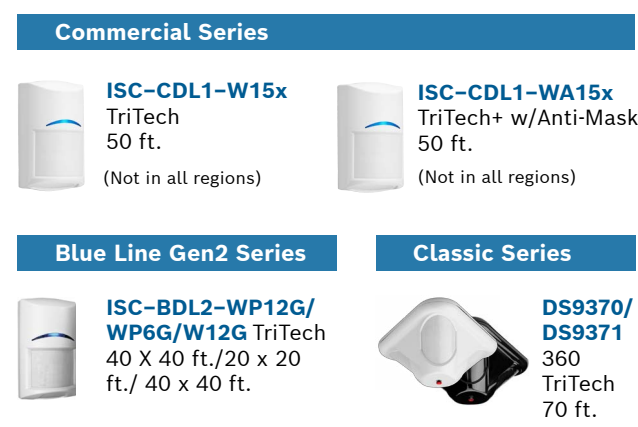
*Home automation may not be available in all regions. Consult your Bosch representative for details.

Wired motion detectors

Commercial Series

ISC–CDL1–W15x TriTech 50 ft.

(Not in all regions)

ISC–CDL1–WA15x TriTech+ w/Anti-Mask 50 ft.

(Not in all regions)

Blue Line Gen2 Series

ISC–BDL2–WP12G/ WP6G/W12G TriTech 40 X 40 ft./20 x 20 ft./ 40 x 40 ft.

Classic Series

DS9370/ DS9371 360 TriTech 70 ft.

Step 12 — Test the system

After system installation and control panel programming, you must perform a complete system test. A complete system test includes testing the control panel, all devices, and communication destinations for proper operation.

Bosch tips:

▸ Perform a Walk Test
1. Select **Actions**.
2. Select **Test**.
3. Select **Walk Test**.
4. Choose a test to run.

▸ Send a test report

(B942 is keypad shown)

FAQs

What is my default code?
User Code: **123456**
Installer Code: **123**

How do I use Output B and C?
Outputs B and C are Open Collector Outputs. Wiring can be found in control panel installation manual, section heading **Open Collector Outputs**.

How do you remotely turn on and turn off the control panel?
This can be done through the use of the Remote Security Control App.

How do I connect directly to the control panel with Ethernet?
By default, the control panel is set up to auto detect and negotiate a connection to RPS when an ethernet cable is connected between them.

What do I need to be able to send personal notifications?
SMS (Text) messages require the use of a cellular module and emails can be sent by either an Ethernet or Cellular connection.

How do I enter "Service Mode"?
Press and hold the yellow reset button on the control panel for 5 seconds (repeat to exit).

Where can I go for additional information?

www.boschsecurity.com

6 | Audible tones

The keypad has a built-in speaker that produces several distinct warning tones. The keypad backlight illuminates when it emits an audible tone.

Tone	Description
Fire alarm	When an area is in fire alarm, the keypad emits a pulsed, high-pitched bell tone.
Gas alarm	When a gas point activates, the keypad emits a unique high pitched tone.
User alarm	When a user alarm (such as panic and medical alarms) occurs, the tone sounds for the programmed amount of time.
Burglary alarm	When an area is in alarm, the keypad emits a steady, high pitched bell tone.
Entry delay	The keypad emits an intermittent beep tone during entry delay periods to remind the user to disarm the area.
Exit delay	The keypad emits an intermittent beep tone during exit delay.
Invalid button buzz	When an invalid button, or sequence of buttons, is pressed, the keypad emits a flat buzz tone.
Keypress	The keypad emits a muted beep tone as each button is pressed to indicate that the entry was accepted.
Trouble	When a trouble event occurs, such as a service alert, the keypad emits a two-tone warble until you enter a programmed passcode with the appropriate authority.
Watch point fault	A single clean tweedle tone alerts the user anytime a watch point is faulted.

Table 6.1: Keypad audible tones

7 | Supervision

The control panel supervises all keypads on the SDI2 bus. If a supervised keypad fails to respond to the control panel, the control panel declares a Missing Keypad Trouble. When the control panel can again communicate with the keypad, it restores the Missing Keypad Trouble. During a Missing Keypad Trouble, any connected keypad that maintained contact with the control panel shows the Missing Keypad Trouble as its idle text, and shows the missing keypad's address. The communicating keypads also sound a trouble tone. Users can silence the trouble tone. If no other troubles exist, the tone silences when the missing keypad restores.

8 | Show the firmware version

Showing the keypad firmware version:
1. Remove the keypad from the base to remove power to the keypad. Refer to *Figures 2.1* and *2.2*.
2. Return the keypad to the base to restore power.
The keypad shows the model number, keypad address, and firmware version for 10 seconds.

> **NOTICE!**
> You can also view a keypad's firmware version in RPS.

9 | Keypad cleaning

Use a soft cloth and non-abrasive cleaning solution to clean your keypad (for example, microfiber cloth and eyeglass cleaner). Spray the cleaner onto the cloth. Do not spray cleaners directly onto the keypad.

10 | Certifications

Region	Certification
US	UL 365 - Police Station Connected Burglar Alarm Units and Systems
	UL 609 - Local Burglar Alarm Units and 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
	CSFM - California Office of The State Fire Marshal
	FCC Part 15 Class B
CA	Canada CAN/ULC S303 - Local Burglar Alarm Units and Systems
	CAN/ULC S304 - Signal Receiving Centre and Premise Alarm Control Units
	ULC-ORD C1023 - Household Burglar Alarm System Units
	ULC-ORD C1076 - Proprietary Burglar Alarm Units and Systems
	ICES-003 - Digital Apparatus

11 | Specifications

Dimensions	6.2 in x 4.7 in x 1 in (158 mm x 120 mm x 26 mm)
Voltage (input)	12 VDC nominal
Current	35 mA in standby mode 80 mA in alarm mode
Operating temperature	0°C to +50°C (+32°F to +122°F)
Relative humidity	5% to 93% at +32°C (+90°F) non-condensing
Terminal wire size	12 AWG to 22 AWG (2 mm to 65 mm)
SDI2 wiring	Maximum distance - wire size (unshielded wire only): 1000 ft (305 m) - 22 AWG (0.65 mm)
Compatibility	B9512G/B9512G-E B8512G/B8512G-E B6512 B5512 B4512 B3512 D9412GV4 version 2.0 and higher D7412GV4 version 2.0 and higher (Refer to the control panel installation document for number of supported devices.)

ATM Style Alphanumeric Keypad (SDI2)
B930

BOSCH

en Installation Guide

Bosch Security Systems, Inc. product manufacturing dates
Use the serial number located on the product label and refer to the Bosch Security Systems, Inc. website at http://www.boschsecurity.com/datecodes/.

1 | Overview

B930 keypads are SDI2 bus compatible devices. Each keypad has user adjustable options such as volume and display brightness, and an LCD display that shows five-line system messages.

B930 keypads connect to the SDI2 bus on the control panel using terminal wiring. You can connect more than one keypad to the control panel by wiring them in parallel.

You can program, diagnose, and troubleshoot the system from the control panel keypad as well as remotely through Remote Programming Software (RPS).
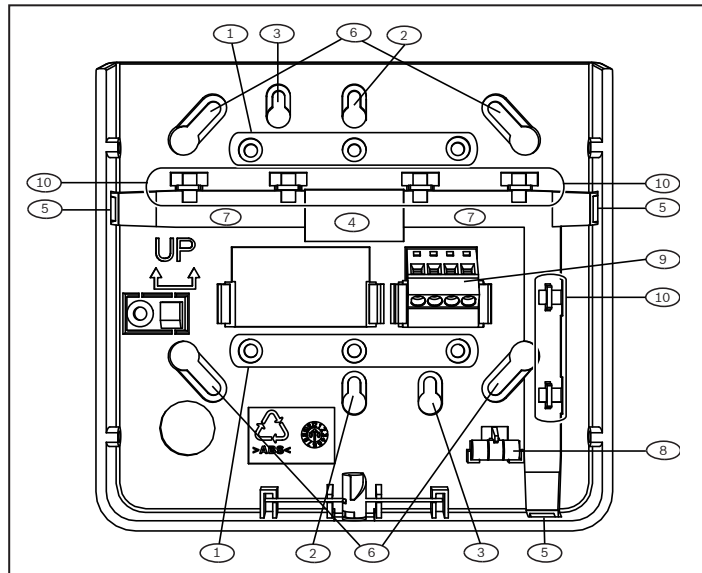

Figure 1.1: Keypad base overview

Callout — Description
1 — Wall mount holes
2 — Single gang box holes
3 — Double gang box holes
4 — Wire opening
5 — Surface mount wire openings
6 — Gang box holes (3-4 in)
7 — Surface mount wire channel
8 — Bubble level
9 — SDI2 wiring terminal block
10 — Wire tie posts

2 | SDI2 address switches

Two switches determine the address for the keypad. The control panel uses the address for communications. Use a slotted screwdriver to set the switches.

2.1 | Access the address switches

1. Unlock the keypad by turning the lock counter-clockwise. Refer to *Figure 2.1*.
2. Hold the keypad by the base in one hand. With the other hand, gently push down on the keypad to remove it from the base. Refer to *Figure 2.2*.
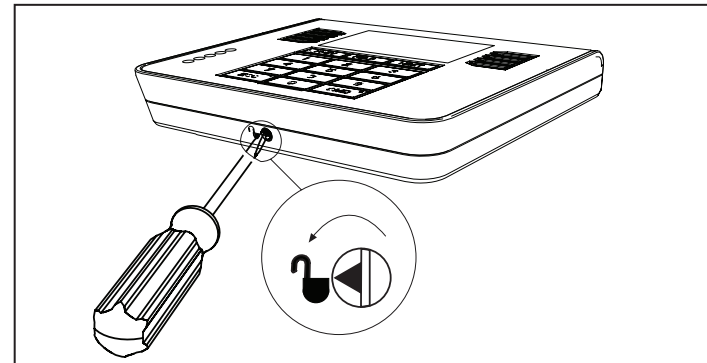3. Look at the back of the keypad, and locate the switches. Refer to *Figure 2.3*
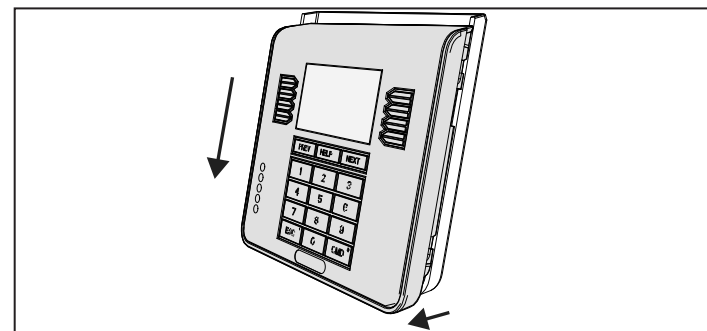

Figure 2.1: Unlocking the keypad
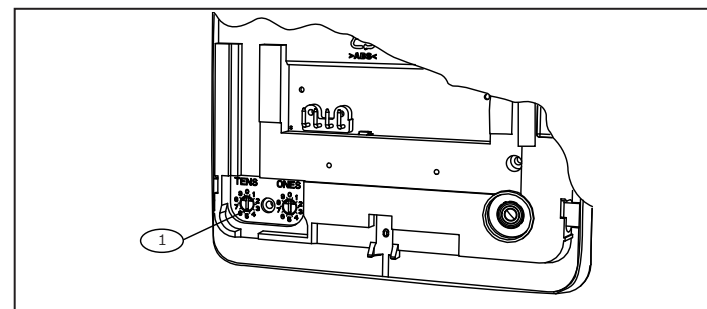

Figure 2.2: Removing the keypad from the base

Figure 2.3: Switches location

Callout — Description
1 — Address switches

2.2 | Set the address switches

Set the address switches per the control panel configuration. If multiple SDI2 keypads reside on the same system, each SDI2 keypad must have a unique address. For single-digit addresses 1 through 9, set the tens switch to 0. *Figure 2.4* shows the address switch setting for address 1.
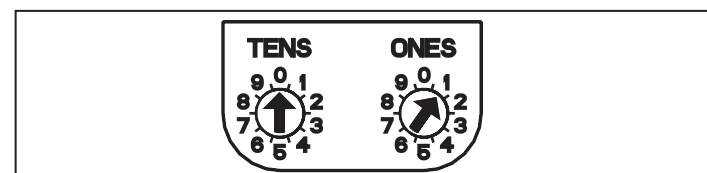

Figure 2.4: Address switches

3 | Installation

After you set the address switches for the proper address, mount the keypad base, wire to the control panel, and attach the keypad to the base.

⚠️ **Caution!**
Remove all power (AC and battery) before making any connections. Failure to do so might result in personal injury and/or equipment damage.

3.1 | Mount the keypad

You can surface mount the keypad, or mount it to standard electrical boxes, including single gang boxes.

Mounting the keypad:
1. Use the base as a template to mark the desired mounting surface. Refer to *Figure 1.1* for mounting hole and wiring locations.
2. Pull the wiring through the desired wire opening in the base.
3. Use the appropriate mounting hardware (supplied) to mount the base to the desired mounting surface. Refer to *Figure 1.1* for mounting hole and wiring locations.

3.2 | Wire to the control panel

When you wire the keypad to a control panel, use the control panel terminals labeled R, Y, G, B (PWR, A, B, COM). Connect them to the keypad terminals labeled R, Y, G, B. Refer to *Figure 3.1*.

You can connect keypads to the SDI2 data bus by parallel wire run from the control panel to each keypad, wire from keypad to keypad, or a combination of the two techniques. Refer to *Figure 3.2*.
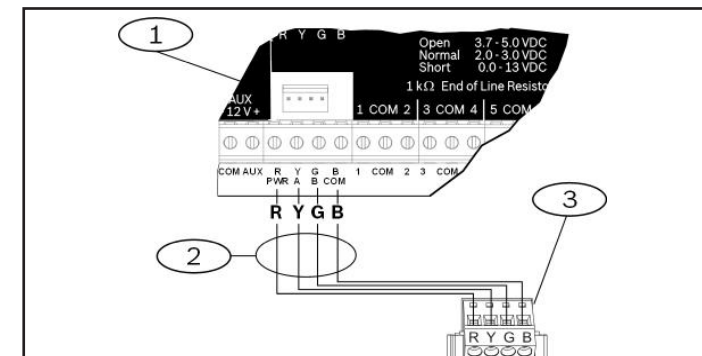

Figure 3.1: Wiring the keypad to the SDI2 bus connection (B5512 shown)

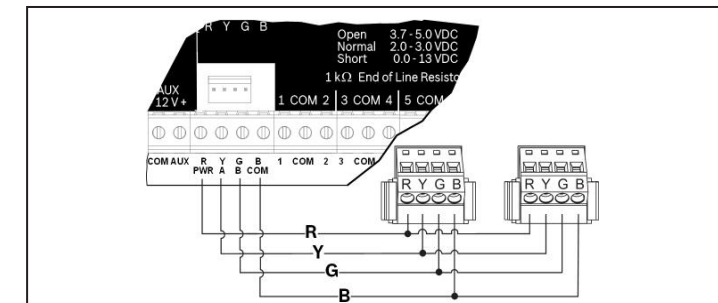| Callout — Description |
|---|
| 1 — Control panel |
| 2 — Terminal wiring |
| 3 — Keypad's SDI2 wiring terminal block |

Figure 3.2: Installing multiple keypads using the SDI2 terminals

Reconnect the keypad to the base by sliding the keypad onto the base (reverse of *Step 2*). The keypad automatically locks onto the base. Apply power to the system.

4 | Display

You can adjust the keypad's display brightness level, and you can turn the keypad's nightlight feature on or off.

Adjusting the keypad display brightness:
1. Press [MENU] to open the Main menu.
2. Use [NEXT] to go to the Press 5 for Settings Menu option, or simply press [5].
3. Use [NEXT] to go to the Press 4 for Keypad Config option, or simply press [4].
4. Press [1] to adjust the brightness.
5. Use [PREV] or [NEXT] to adjust the brightness level. The changes apply immediately.
6. Press [ESC] to exit the menu.

Turning the keypad nightlight on or off (control panel version 2.01 or higher):
1. Press [MENU] to open the Main menu.
2. Use [NEXT] to go to the Press 5 for Settings Menu option, or simply press [5].
3. Use [NEXT] to go to the Press 4 for Keypad Config option, or simply press [4].
4. Use [NEXT] to go to the Press 4 for Nightlight option, or simply press [4].
5. Use [PREV] or [NEXT] to toggle between the Yes and No options.
6. Press [ENTER] while viewing the desired option to save the programming.
7. Press [ESC] to exit the menu.

5 | Status indicators

You can diagnose and troubleshoot the system using the keypad's status indicators. Refer to *Table 5.1*.

Status indicator	Function
✓	Ready to turn on (arm)
🔒	Turned on (armed)
⚠️	System trouble
GAS	Gas alarm
🔌	AC power present

Table 5.1: Keypad status indicators