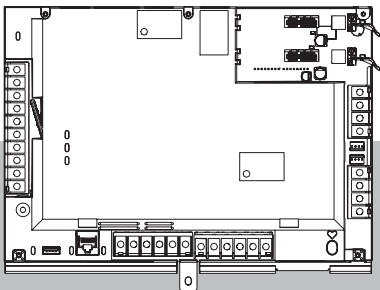




**BOSCH**

## Control panels

G Series: B8512G, B9512G



**en**      Release notes



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# 1 Introduction

These *Release Notes* are for control panel firmware version 3.15.024.

## 1.1 About documentation

### Copyright

This document is the intellectual property of Bosch Security Systems B.V. and is protected by copyright. All rights reserved.

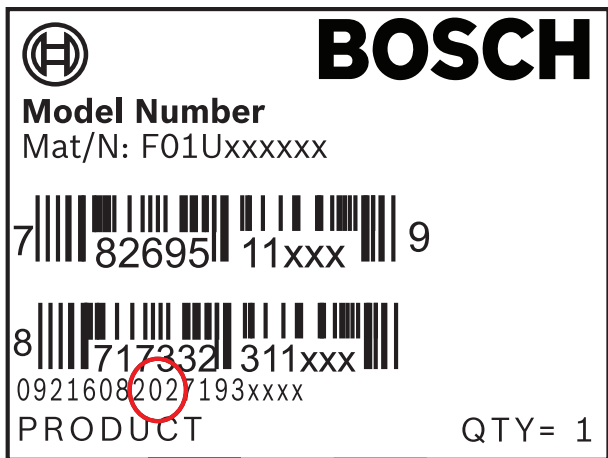
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All hardware and software product names used in this document are likely to be registered trademarks and must be treated accordingly.

### Bosch Security Systems B.V. product manufacturing dates

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

The following image shows an example of a product label and highlights where to find the manufacturing date within the serial number.



## 1.2 Requirements

This section shows requirements for RPS (Remote Programming Software) and Conettix Receiver/Gateways to support this control panel firmware version.

### 1.2.1 Remote Programming Software (RPS)

To use all new features of this firmware version, you must use RPS version 6.15 or higher.

## 1.2.2 Conettix Receiver/Gateway

### Conettix Modem4 format

When you configure the control panel to send reports in Conettix Modem4 format, the Conettix central station receiver/gateway and the D6200CD Receiver programming software might require an update.

### Conettix Modem4 reporting format requirements

Receiver/Gateway	CPU version	D6200CD version
D6600 Central station receiver, 32-line (with D6641 Telephone line card installed only)	01.10.0 0	2.10
D6100IPV6-LT Central station receiver, 2-line, IP	01.10.0 0	2.10

### Conettix ANSI-SIA Contact ID format

When you configure the control panel to send reports in Conettix ANSI-SIA Contact ID format, the Conettix central station receiver/gateway and the D6200CD Receiver programming software might require an update.

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## ULC-S304 and ULC-S559 compliant report format

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### Notice!

ULC-S304 and ULC-S559 compliant report format



For ULC-S304 and ULC-S559 compliant report formats, the Conettix central station receiver/gateway and the D6200CD Receiver programming software need to use the version in the table.

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### ANSI-SIA DC-09 format

Use of the ANSI-SIA DC-09 format requires a central station receiver that supports this IP communicator format. Bosch Conettix central station receivers do not currently support this format.



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## 2 Firmware version 3.15.024

### What's new

*UL 2610 2nd Edition Certification, page 9*

*Enhanced Security, page 9*

*Compatibility with B532 Aux. power supply and SDI2 extender , page 10*

*Mode 2 support, page 10*

### 2.1 What's new

This section examines the new features of this firmware version.

#### 2.1.1 UL 2610 2nd Edition Certification

Commercial Premises Security Alarm Units and Systems

#### 2.1.2 Enhanced Security

- Configuration of minimum supported TLS version 1.2;

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**Warning!**

This version of panel firmware will enforce the use of TLS 1.2. The TLS setting can only be set to TLS 1.0 or 1.1 using RPS version 6.15 and higher. If you have tools that require TLS versions 1.0 or 1.1, DO NOT update the panel firmware until you have RPS 6.15 or higher.

Note: When a B426 or B450 is also in use in the system, these modules must also update their firmware to version 3.15 to enforce the TLS settings.

- 
- Disabling of non FIPS compliant TLS ciphers;
  - Updated TLS and network stack libraries;
  - Verified to NIST CAVP (cert # A5272);
  - Temporary programmable lockout after five consecutive remote access password failures.

### **2.1.3 Compatibility with B532 Aux. power supply and SDI2 extender**

### **2.1.4 Mode 2 support**

Additional mode 2 support for:

- User management;
- Authority level configuration;
- Holiday indexes;
- Open/close windows.

## **2.2 Corrections**

### **2.2.1 Corrected POPIT Missing which occurred during a programming update**

Addresses Technical Bulletin dated August 30, 2024.

- 2.2.2 Fixed issue where phone could not be restored after a phone comm trouble**
- 2.2.3 Fixed "Data Out of Range" error when adding a new user with BSM**
- 2.2.4 Improved Mode 2 handling of "configured users"**
- 2.2.5 Removed double logging of "Invalid Remote Access" event when Ethernet is disconnected during an RPS or Cloud Connection**
- 2.2.6 SDI2 reports for open wire faults with Modem 4 are now being sent**
- 2.2.7 Power supply "over current" reports for each output are now being sent**
- 2.2.8 Fixed issue with "open wire" fault of a D1255 keypad not indicated on G series control panel**
- 2.2.9 Power Supply AC Fail event now follows resend AC Fail setting**
- 2.2.10 Improved Battery status updates for B520/B532 Power Supply**

- 2.2.11 Keypad Output Pattern now stops if removed from panel configuration**
- 2.2.12 Mode 2 Arm Panel Areas is no longer force arming unless directed to do so**
- 2.2.13 Corrected "Service Parameter" fault that may occur while bypassing points from a keypad**
- 2.2.14 B901 trouble can now be cleared**
- 2.2.15 User's Name change event is now logged to panel event log**
- 2.2.16 Fixed issue with Mode 2 PIE Point State not always updating correctly**
- 2.2.17 Automatic Door Locked even is now sent to the receiver**
- 2.2.18 All non MNS Keypad in alarmed area will now indicate an MNS Alarm**
- 2.2.19 Updated handling of expired TLS certificates**

- 2.2.20 Corrected issue sending e-mail to a server using IPv6**
- 2.2.21 Updates to B430 Modem Transmit levels**
- 2.2.22 B8512G now supports Open/Close Windows 5-8**
- 2.2.23 When a user changes a passcode from the keypad installer menu, it no longer generates a Point Change response**
- 2.2.24 Updates to B915 and B920 text when multiple alarms are present**
- 2.2.25 Fixed issue where silent alarm can become audible before the configured two failures to send the event**

---

## 3 Firmware version 3.14.100

### What's new

- *Support for 32-Bit HID access control credentials, page 15*

### 3.1 What's new

This section examines the new features of this firmware version.

#### 3.1.1 Support for 32-Bit HID access control credentials

Support of 32-Bit MIFARE Classic credential allows customers who use the MIFARE Classic format access cards to use these cards with Bosch panels and the B901 Access Control interface.

This is in addition to the previously supported 26-bit, 35-bit, and 37-bit format.

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## 4 Firmware version 3.14.012

### What's new

- *B444-A2 Plug-in Cellular Communicator support, page 17*
- *B444-V2 Plug-in Cellular Communicator support, page 17*

### Corrections

- *Force Arm Returnable Updated, page 18*
- *Entering 26-bit Card Type access data from keypad, page 18*
- *Door Unlock command from a SKED or Custom Function, page 18*
- *Panel will not fall back to "cloud over cellular" connection if Ethernet DNS failure occurs, page 19*
- *Cellular operation may fail if Ethernet DNS is not public, page 19*

### Known issues

- *Area Opening Report not sent when switching from All-On to Part-On arm state, page 20*
- *Technical Bulletin - G Series, B Series personal notification email, page 20*



## Refer to

- *B444-A Plug-in Cellular Communicator Module Is Not Recognized, page 21*
- *Fail to Close Report, page 21*

## 4.1 What's new

This section examines the new features of this firmware version.

### 4.1.1 B444-A2 Plug-in Cellular Communicator support

New cellular module support for the B444-A2 Plug-in cell module, AT&T LTE.

### 4.1.2 B444-V2 Plug-in Cellular Communicator support

New cellular module support for the B444-V2 Plug-in cell module, Verizon LTE.

## 4.2 Corrections

This section examines the corrections made in this firmware version.

#### **4.2.1 Force Arm Returnable Updated**

In previous firmware versions, when the Force Arm Returnable parameter of a point profile was set to YES, after disarming the system, the user had to manually unbyypass any forced points with that profile. With firmware version 3.14.010, when the Force Arm Returnable parameter is set to YES, any forced point(s) will automatically unbyypass and return to normal, once the system is disarmed.

#### **4.2.2 Entering 26-bit Card Type access data from keypad**

In firmware version 3.11 and 3.12, access card data being entered from a keypad did not upload to the control panel accurately.

#### **4.2.3 Door Unlock command from a SKED or Custom Function**

In firmware version 3.11, the Door Unlock feature allowed a user to unlock a door via a SKED or Custom Function, even if the area was armed. This correction prevents the Door Unlock command from a SKED or Custom Function during an armed state.

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#### **4.2.4 Panel will not fall back to "cloud over cellular" connection if Ethernet DNS failure occurs**

If both Ethernet and cellular Cloud Remote Connect parameters are enabled, the panel will not switch to "cloud over cellular" if "cloud over Ethernet" connection has a DNS failure. This issue has been corrected.

#### **4.2.5 Cellular operation may fail if Ethernet DNS is not public**

When programming a specific DNS server IP address for IPv4 Ethernet, it will be shared by cellular. If the IPv4 DNS address for Ethernet is not accessible on the public network, then the cellular interface will be unable to resolve URLs.

When using both on-board Ethernet and cellular, a private IPv4 DNS is required for Ethernet. A separate DNS setting for plugin cellular is now available.

### **4.3 Known issues**

This section examines the known issues of this firmware version.

### **4.3.1 Area Opening Report not sent when switching from All-On to Part-On arm state**

An **Area Open Report** might not send if a user changes the area from **All-On**, then to **Part-On**, and then disarms. When switching from **Part-On to Disarm**, **Area Open Reports** are only sent if **Part-On Reports** are enabled. These reports are off by default. Enabling the **Part-On Reports** addresses this issue.

### **4.3.2 Technical Bulletin - G Series, B Series personal notification email**

The personal notification email messaging may stop working for some customers, due to email provider security features using Two-Step Verification. Use the email provider's security page (Google, for Example) to create an App Password. That password will be used in the control panel, as the email server Authentication Password, to allow the personal notification emails to function. Please see the "Technical Bulletin G Series, B Series personal notification email" for more information.

---

## 5 Firmware revision history

This section examines the notable features of previous revisions of this firmware.

### 5.1 Firmware version 3.12.024

#### 5.1.1 B444-A Plug-in Cellular Communicator Module Is Not Recognized

Some B444-A cellular modules may report as "invalid" during installation and will not be recognized by the B or G Series control panel. This firmware version allows the cellular host device to properly recognize these B444-A modules.

#### 5.1.2 Fail to Close Report

Some problematic Arming scenarios may send a Fail to Close report. This report should only be sent if the Area has not been Closed at the end of the Closing Window. This firmware version resolves this potential issue.

## **5.2 Firmware version 3.12.020**

### **5.2.1 Support for 35-Bit HID access control credentials**

Support of 35-bit HID credentials allows customers who use the Corporate 1000 format to use these cards with Bosch panels and the B901 Access Control interface. This is in addition to the 26-bit and 37-bit format cards that were previously supported.

### **5.2.2 New point types and output types**

In support of the upcoming release of Mass Notification system functionality, several new point types and outputs have been added.

Note that for a UL2572 Mass Notification System, new hardware is required that has been UL labeled for this purpose. This hardware will be available in early 2022.

### **5.2.3 Enhanced AT&T cellular communications**

Enhancements have been added to improve B444-A operation and accommodate changes in the AT&T cellular network associated with the upcoming 3G sunset.

## **5.2.4 Corrections**

This section examines the corrections made in this firmware version.

### **5.2.4.1 Forced Arming Issue with Firmware 3.11.530**

The 3.12 firmware version corrects an issue regarding the force-arm feature in our B9512G, B8512G, B6512, B5512, B4512 and B3512 control panels that may cause points that have been force-armed to remain bypassed with no indication at the keypad. Note that this issue exists only in firmware version 3.11.530.

## **5.2.5 Known issues**

This section examines the known issues of this firmware version.

### **5.2.5.1 Passcode security synchronization with RPS and new panel**

When connecting to a new control panel with v3.11 firmware using RPS v6.11, and then receiving the configuration from the new panel, the next send/receive option will open the Panel Synchronization

window because the Passcode Security parameter in the control panel does not match the setting of the Passcode Security parameter in RPS.

Clicking the **See data differences** option in the Panel Synchronization window does not show a difference between the Passcode Security parameter in RPS and the control panel.

### **Recommendation**

Send the RPS configuration to the panel to make RPS and the panel Passcode Security parameters match.

#### **5.2.5.2 Programming new point types on firmware versions older than v3.11**

When using RPS 6.11 to program a new Panic Point or Environmental Point (Water, High Temp, Low Temp) on a control panel system with earlier firmware versions than v3.11, the system will not generate alerts and conditions as expected.

For some scenarios, the Low Temp point type will generate a trouble event and in all scenarios the Panic, Water and High temp point types will not generate any event condition.

### **Recommendation**



Upgrade the control panel firmware to v3.11 or higher if these new point types are needed.

### **5.2.5.3 Personal notification email**

When using email personal notifications, some server configuration options (e.g. Gmail's 2-Step verification, Allow less secure apps: Off) may not work properly. In order to ensure operation, disable additional email server options.

### **5.2.5.4 Keypad lockdown period (keypad lockouts on failed passcode attempts)**

If the value of lockout time is beyond 6553 seconds, the keypad lockout operation may not work properly. In order to ensure operation, set the lockout time below 6553 seconds.

## **5.3 Firmware version 3.11.5**

### **5.3.1 Improved connectivity to the Verizon network**

FW V3.11.5 improves the management of the Verizon APN when using the B444-V or B444 Cellular Communicators, resulting in enhanced connection reliability.

### **5.3.2 History log corruption during firmware upgrade**

Panel firmware upgrades from v3.06, or earlier, to v3.07 through v3.09 may lose events from the history log. The issue occurs during a reset or reboot of the control panel. The history log from the older panel should be uploaded prior to an upgrade to v3.07 - v3.09.

V3.10 resolves this issue and removes any corruption within the history log.

## **5.4 Firmware version 3.11**

### **5.4.1 Panic point type**

Added the Panic point type to the panel, which is a 24-hr burglary alarm intended for a panic input device.

### **5.4.2 Environmental point types**

New point types are available:

- Water - alarm to indicate a water leak event.
- High Temp - alarm for a high temperature event.
- Low Temp - alarm for a low temperature event.

### **5.4.3 Configurable passcode security**

User passcode tamper is now configurable for keypads and Automation clients to detect and act based on a defined number of invalid authentication attempts.

### **5.4.4 Temporary passcode**

A one-time (single use) disarm authority passcode can be granted to a user for 1 or multiple control panel areas for temporary access. The associated authority level defines the user as a temporary user and only allows the user to disarm the system once, then the authority/passcode expires.

### **5.4.5 IP camera wired input support**

The IP Camera Point Source now includes 2 wired inputs of an IP camera.

Configure the IP camera sources in RPS Point Assignments within Point groups. For example, Points 10 and 19 for IP camera 1, Points 20 and 29 for IP camera 2, Points 30 and 39 for IP camera 3, up to the number of cameras available on each control panel type.

#### **5.4.6 B9512G IP camera support**

The B9512G panel now supports up to 59 IP cameras.

#### **5.4.7 FIPS compliant control panel firmware**

RPS has been updated to operate in a secured Windows environment, such as FIPS (Federal Information Processing Standards).

- An additional AES/SHA encrypted firmware package is available for the B Series and G Series control panels in the Downloads > Software section of the Bosch Intrusion product catalog. This firmware can be used by any RPS 6.11 or newer installation.
- The appropriate firmware encrypted file is named by control panel type, firmware version number with the `_SHA.fwr` extension to indicate SHA encryption (*B9512G\_B8512G\_FW\_3.11.xxx\_SHA.fwr*).

---

### 5.4.8 Support for updated B and G Series control panel certificates

Control panel firmware v3.11 introduces a new security certificate in advance of the current certificate expiration in April, 2022. This certificate is used for most automation (integration) and RPS TLS connections to the panel. The panel Cloud certificate is not affected. All Cloud connections will continue to function as they do today.

RPS v6.11 has been updated to accommodate this new panel security certificate automatically.

---

#### **Notice!** **Important**



Customers upgrading or installing panels with firmware v3.11 must upgrade RPS to v6.11, and review other integrated applications (Bosch or 3rd Party) that need to use the new Bosch certificate, in order to maintain TCP connections to the panel after March, 2022.

Customers using RPS with panel firmware v3.10 or older will not be affected by the certificate expiration and operations will continue without interruption.

## **5.5 Firmware version 3.10**

### **5.5.1 Configurable outputs**

Output Profiles support custom programming and provide a way for outputs to operate based on unique application requirements.

Once an Output Profile is created, it can be reused and assigned to multiple outputs enabling quick output programming.

You can create Output Profiles that define how an output operates when specific events occur. Output Profiles provide a way to assign and use consistent output effects throughout the system.

### **5.5.2 UL 864 - 10th Edition**

This firmware version now supports the latest edition of:

- UL 864 - Control Units and Accessories for Fire Alarm Systems (Commercial Fire)

### **5.5.3 UL 985 - 6th Edition**

This firmware version now supports the latest edition of:

- UL 985 Household Fire Warning Systems Units

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## 6 Update a legacy account in RPS for 3.08

The B9512G is a direct replacement for previous control panel models D9412GV4, D9412GV3, D9412GV2, and D9412G.

The B8512G is a direct replacement for previous control panel models D7412GV4, D7412GV3, D7412GV2, and D7412G.

If you replace an existing G Series control panel with a B9512G/B8512G, you can update the existing RPS account to a B9512G/B8512G account so that you do not need to recreate the account.

---

### Notice!



Before you upgrade an existing account to a B9512G/B8512G account in RPS, read the control panel update information in the *RPS Release Notes*.

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### 6.1 Update an existing G Series control panel account to a B9512G/B8512G account



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### Updating to a B9512G/B8512G account:

1. In the Panel list window, highlight the control panel account, then right-click the account and select Panel Data View. The Panel Data - View window opens.
2. Click Edit. Locate the Panel Type selection on the right side of the Data View window.
3. From the Panel Type dropdown list, select the desired control panel type, and then click OK. When you upgrade a control panel to a B8512G or a B9512G, RPS makes an account copy automatically.
4. Confirm the new, automatically changed configuration values match those needed for the control panel. Make any necessary changes.

Once the conversion completes and you confirmed the changes, send the updated program to the control panel:

1. Open the new control panel account you just created in the previous steps.
2. Click Connect. The Panel Communication dialog box appears.
3. Enter the current Panel Passcode into the RPS Passcode text box and click connect. The Panel Sync dialog box appears.

4. Select Send ALL Updated RPS Data to Panel and click OK. Note: Do not select Receive Panel Data.
5. When the Send ALL RPS data progress completes, you can exit from RPS.

## 7 Programming the control panel for SIA Compliance

<b>Parameter name</b>	<b>Required control panel settings for SIA Compliance</b>	<b>Default</b>
Phone #	(Prefix backup phone number with Call Waiting <sup>1</sup> disable command)	{Blank}
Duress Type	Option 3	0 (Disabled)
Cancel Reports	Yes	Yes
Exit Delay Time	45 seconds to 255 seconds	60 seconds
Duress Enable	Yes	No
Exit Delay Restart	Yes or No	Yes

All On - No Exit <sup>2</sup>	Yes or No	Yes
Two Man Rule?	No	No
Early Ambush?	No	No
Exit Delay Warning	Yes	Yes
Entry Tone	Yes or No	Yes
Exit Tone	Yes or No	Yes
Abort Display	Yes or No	Yes
Cancel Display	Yes or No	Yes
Alarm Verify	Yes or No	No
Passcode Enter Function	Arm/Disarm	Arm/ Disarm

All On Instant	- (Disabled)	- (Disabled)
Part On Instant	- (Disabled)	- (Disabled)
Send Duress	- (Disabled) or E (Enabled)	E (Enabled) <sup>3</sup>
Disarm	- (Disabled) or E (Enabled)	E (Enabled) <sup>3</sup>
Passcode Disarm	- (Disabled) or E (Enabled)	E (Enabled) <sup>3</sup>
Entry Delay	30 seconds to 240 seconds	30 seconds
Alarm Abort	Yes or No	Yes <sup>4</sup>
Abort Window	15 seconds to 45 seconds	30 seconds
Passcode Length	3 to 6 digits	Disabled

Swinger Bypass Count	1 to 2 trips <sup>5</sup>	2 trips
Remote Warning	Yes	Yes
Cross Point Timer	5 to 255 seconds	20 seconds
Cross Point	Yes or No <sup>6</sup>	No
Delay Response, Disarmed	00:00	00:00
Delay Response, Armed	00:00	00:00

<sup>1</sup>Call waiting does not apply to cellular networks or PSDN (Public Switched Data Network) communication. A call waiting disable command on a non-call waiting line will prevent successful connection to the central station.

<sup>2</sup>The All On - No Exit parameter is ignored when arming with a SKED.

<sup>3</sup>L14 is the default duress authority level.

<sup>4</sup>The default for Alarm Abort is No for Point Assignments 1 and 8.

<sup>5</sup>Swinger bypass count is programmable up to 4 trips. For SIA compliance, set to 1 or 2.

<sup>6</sup>Cross points must overlap (protect the same area) so that a single point can protect the area individually.

## **8 Minimum system requirements for ANSI/SIA CP-01**

Minimum system requirements for classification in accordance with ANSI/SIA CP-01:

- UL Listed and Classified control unit Model B9512G or B8512G
- UL Listed and Classified keypad Model B942/ B942W, B930, B926F, B925F, B921C, B920, B915/ B915I, D1260, D1257/D1257RB,
- D1256/D1256RB, D1255/D1255R/D1255RB
- UL Listed Local Bell
- Off -premises transmission means



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## 9 Open source software 3.15.024

Bosch includes the open source software modules listed below in the firmware for this control panel. The inclusion of these modules does not limit the Bosch warranty.

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