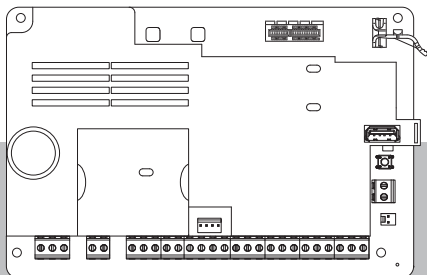


## Control panels

B Series: B6512, B5512, B4512, B3512





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# 1 Introduction

These Release Notes are for control panel firmware version 3.15.110.

## 1.1 About documentation

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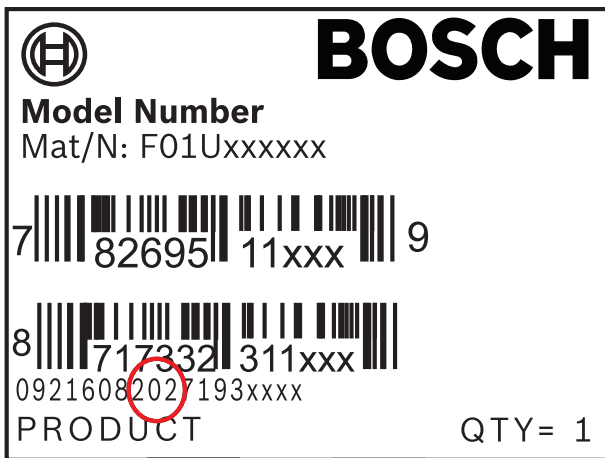
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### **Bosch Security Systems B.V. product manufacturing dates**

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)	01.10.00	2.10
D6100IPV6-LT Central station receiver, 2-line, IP	01.10.00	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.

---

### 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.

## 2 Firmware version 3.15.110

### What's new

- *UPnP Enable default changed to Disable, page 8*

### Corrections

- *Removed 3DES cipher from TLS 1.2, page 9*
- *Panel will correctly identify and update the B812, page 9*
- *Panel will correctly identify the B532 in RPS diagnostics, page 9*

### 2.1 What's new

This section examines the new features of this firmware version.

#### 2.1.1 UPnP Enable default changed to Disable

The factory default has been changed to Disable UPnP to provide a more secure environment and avoid Denial of Service attacks. For added protection, Keenfinity recommends disabling UPnP in your existing devices and removing all port forwarding rules pertaining to Bosch communication products from your router.



---

## 2.2 Corrections

This section examines the corrections made in this firmware version.

### 2.2.1 Removed 3DES cipher from TLS 1.2

Due to potential security risks, the 3DES cipher was removed from TLS 1.2.

### 2.2.2 Panel will correctly identify and update the B812

The control panel was updated to support recognition of the B812, enabling operation, firmware updates, and RPS diagnostics.

### 2.2.3 Panel will correctly identify the B532 in RPS diagnostics

The control panel was updated to support the correct recognition of the B532 for RPS diagnostics.

## 3      **Firmware version 3.15.024**

### **What's new**

- *UL 2610 2nd Edition Certification*, page 10
- *Enhanced Security*, page 10
- *Compatibility with B532 Aux. power supply and SDI2 extender* , page 11
- *Mode 2 support*, page 11

### **3.1      What's new**

#### **3.1.1      UL 2610 2nd Edition Certification**

Commercial Premises Security Alarm Units and Systems

#### **3.1.2      Enhanced Security**

- Configuration of minimum supported TLS version 1.2;

---

## 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.

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- 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.

### 3.1.3 Compatibility with B532 Aux. power supply and SDI2 extender

### 3.1.4 Mode 2 support

Additional mode 2 support for:

---

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

## **3.2 Corrections**

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

Addresses Technical Bulletin dated August 30, 2024.

- 
- 3.2.2**      **Fixed issue where phone could not be restored after a phone comm trouble**
  - 3.2.3**      **Fixed "Data Out of Range" error when adding a new user with BSM**
  - 3.2.4**      **Improved Mode 2 handling of "configured users"**
  - 3.2.5**      **Removed double logging of "Invalid Remote Access" event when Ethernet is disconnected during an RPS or Cloud Connection**
  - 3.2.6**      **SDI2 reports for open wire faults with Modem 4 are now being sent**
  - 3.2.7**      **Power supply "over current" reports for each output are now being sent**
  - 3.2.8**      **Power Supply AC Fail event now follows resend AC Fail setting**
  - 3.2.9**      **Improved Battery status updates for B520/B532 Power Supply**
  - 3.2.10**     **Keypad Output Pattern now stops if removed from panel configuration**
-

- 3.2.11**      **Mode 2 Arm Panel Areas is no longer force arming unless directed to do so**
  - 3.2.12**      **Corrected "Service Parameter" fault that may occur while bypassing points from a keypad**
  - 3.2.13**      **B901 trouble can now be cleared**
  - 3.2.14**      **User's Name change event is now logged to panel event log**
  - 3.2.15**      **Fixed issue with Mode 2 PIE Point State not always updating correctly**
  - 3.2.16**      **Automatic Door Locked even is now sent to the receiver**
  - 3.2.17**      **Updated handling of expired TLS certificates**
  - 3.2.18**      **Corrected issue sending e-mail to a server using IPv6**
  - 3.2.19**      **Updates to B430 Modem Transmit levels**
  - 3.2.20**      **When a user changes a passcode from the keypad installer menu, it no longer generates a Point Change response**
-

- 3.2.21      Updates to B915 and B920 text when multiple alarms are present**
- 3.2.22      Fixed issue where silent alarm can become audible before the configured two failures to send the event**

## 4 Firmware version 3.14.100

### What's new

- *Support for 32-Bit HID access control credentials - B6512 only, page 16*

### 4.1 What's new

This section examines the new features of this firmware version.

#### 4.1.1 Support for 32-Bit HID access control credentials - B6512 only

Support of 32-Bit MIFARE Classic credential allows customers who use the MIFARE Classic format access cards to use these cards with the B6512 and the B901 Access Control interface.

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



## 5 **Firmware revision history**

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

### 5.1 **Firmware version 3.14.012**

#### 5.1.1 **B444-A2 Plug-in Cellular Communicator support**

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

#### 5.1.2 **B444-V2 Plug-in Cellular Communicator support**

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

#### 5.1.3 **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.

#### **5.1.4      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.

#### **5.1.5      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.

#### **5.1.6      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.

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### 5.1.7 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.

### 5.1.8 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.

### 5.1.9 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.

## **5.2        Firmware version 3.12.024**

### **5.2.1        What's new**

This section examines the new features of this firmware version.

#### **5.2.1.1        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.

### **5.2.1.2 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.

## **5.3 Firmware version 3.12.020**

### **5.3.1 What's new**

This section examines the new features of this firmware version.

#### **5.3.1.1 Support for 35-Bit HID access control credentials (B6512 only)**

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. Note that this feature is available only for the B6512 control panel.

### **5.3.1.2 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.

### **5.3.2 Corrections**

This section examines the corrections made in this firmware version.

#### **5.3.2.1 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.

### **5.3.3 Known issues**

This section examines the known issues of this firmware version.

### 5.3.3.1 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.

### **5.3.3.2 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.

### **5.3.3.3 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.



#### **5.3.3.4 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.

### **5.4 Firmware version 3.11.5**

#### **5.4.1 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.

#### **5.4.2 Holiday Index 2**

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#### **Notice!**

This applies only for B6512.

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Holiday Index 2 did not execute as programmed and has been fixed in this firmware version.

### **5.4.3 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.

## **5.5 Firmware version 3.11**

### **5.5.1 Panic point type**

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

### **5.5.2 Environmental point types**

New point types are available:

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

### **5.5.3 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.

### **5.5.4 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.

### **5.5.5 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.

### 5.5.6 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 (B3512\_B4512\_ B5512\_ B6512\_FW\_3.11.xxx\_SHA.fwr).

### 5.5.7 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.

## 6 Programming the control panel for SIA Compliance

Parameter name	Required control panel settings for SIA Compliance	Default
Phone #	(Prefix backup phone number with Call Waiting <sup>1</sup> disable command)	{Blank}
Duress Type	Option 3 <sup>2</sup>	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	Yes or No	Yes

Two Man Rule?	No	No
Early Ambush?	No	No
Exit Delay Warning	Yes	Yes
Entry Tone	Yes	Yes
Exit Tone	Yes or No	Yes
Abort Display	Yes or No	Yes
Cancel Display	Yes or No	Yes
Verify time	10 to 60 seconds	60 seconds
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)
Disarm	- (Disabled) or E (Enabled)	E (Enabled)
Passcode Disarm	- (Disabled) or E (Enabled)	E (Enabled)
Entry Delay	30 seconds to 240 seconds	30 seconds
Alarm Abort	Yes or No	Yes
Abort Window	15 seconds to 45 seconds	30 seconds
Passcode Length	3 to 6 digits	Disabled
Swinger Bypass Count	1 to 2 trips <sup>3</sup>	2 trips



Remote Warning	Yes	Yes
Cross Point Timer	5 to 255 seconds	20 seconds
Cross Point	Yes or No <sup>4</sup>	No
Walk Test (All Non Fire Burg Points)	E (Enabled)	E (Enabled)
Walk Test All Fire Points	E (Enabled)	E (Enabled)
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>L14 is the default duress authority level.

<sup>3</sup>Swinger bypass count is programmable up to 4 trips. For SIA compliance, set to 1 or 2.

<sup>4</sup>Cross points must overlap (protect the same area) so that a single point can protect the area individually.

## **7 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 B6512, B5512, B4512, or B3512
- UL Listed and Classified keypad Model B942/B942W, B930, B921C/B921CW, B920, or B915/B915I
- UL Listed Local Bell
- Off -premises transmission means

## 8 Open source software 3.15.110

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The "RSA Data Security, Inc. MD5 Message-Digest Algorithm" is included in the control panel firmware.

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