Control panels
G Series: B9512G, B8512G

en  Release notes
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1  Introduction

These *Release Notes* are for control panel firmware version 3.09.050.

1.1  About documentation

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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 6.09 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**

<table>
<thead>
<tr>
<th>Receiver/Gateway</th>
<th>CPU version</th>
<th>D6200CD version</th>
</tr>
</thead>
<tbody>
<tr>
<td>D6600 Central station receiver, 32-line</td>
<td>01.10.00</td>
<td>2.10</td>
</tr>
<tr>
<td>(with D6641 Telephone line card installed only)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D6100IPV6-LT Central station receiver, 2-line, IP</td>
<td>01.10.00</td>
<td>2.10</td>
</tr>
</tbody>
</table>

**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.
ULC-S304 and ULC-S559 compliant report format

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 3.09.050

What's new
- B444-A and B444-V support, page 8
- ANSI-SIA DC-09 format, page 9
- California Security of Connected Devices Act, page 9

Corrections
- Output Response Type operation, page 10

Known issues
- Personal notification email, page 10

2.1 What's new

This section examines the new features of this firmware version.

2.1.1 B444-A and B444-V support

The system now supports B444-A Plug-in cell module, AT&T LTE and B444-V Plug-in cell module, Verizon LTE.
B444-A/B444-V SIM card activation

**Caution!**
Activate the B444-A/B444-V SIM card before inserting. Failure to do so might result in failed communications to the control panel/module. Upon first power-up of the B444-A/B444-V, it might take up to 15 minutes for the activation process to be completed.

### 2.1.2 ANSI-SIA DC-09 format
The system now supports the following network communicator formats:
- Conettix Modem4
- Conettix ANSI-SIA Contact ID
- ANSI-SIA DC-09

**Notice!**
UL and ULC LISTED applications
ANSI-SIA DC-09 format is not available for UL and ULC LISTED applications.

### 2.1.3 California Security of Connected Devices Act
In order to comply with the California Security of Connected Devices Act (TITLE 1.81.26. Security of Connected Devices) this product uses a unique connection password. The “RPS Passcode” for the initial connection to this product must match the unique Cloud ID of the product. Ensure your RPS Operator uses the unique Cloud ID that is labeled on the product and included on the card in the box of the product.
2.2 Corrections

This section examines the corrections made in this firmware version.

2.2.1 Output Response Type operation

In control panel firmware v3.09.024, the configuration selections 1 and 2 of the Output Response Type operation were not working correctly. This has been corrected in control panel firmware v3.09.050. If you made changes in control panel firmware v3.09.024 to ensure proper operation, those changes are no longer required.

- In Output Response Type operation, return configuration selections 1 and 2 back to their expected, and documented, configuration.

2.3 Known issues

This section examines the known issues of this firmware version.

2.3.1 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.
3 Firmware revision history

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

3.1 Firmware version 3.08

3.1.1 Language support

Adds support for Dutch, German, and Swedish.

When both the control panel first language and the second language are set to Dutch, English, French, German, Hungarian, Italian, Portuguese, Spanish, or Swedish, the system uses the Standard, Latin-1 character set.

When either the control panel first language or the second language is set to Chinese, Greek, or Polish, the system uses the Extended, UTF-8 Unicode character set.

Notice!

Only B915/B915i and B942 keypads support Extended, UTF-8.

Only B915/B915i keypads with firmware version 1.01.010 or higher, and B942 keypads with firmware version 1.02.022 or higher support the Extended, UTF-8 character set.

3.1.2 Door shunt time

The longest possible selection for the door shunt time has been extended from 240 seconds to 8 hours.

This selection is available with the following firmware versions:
Control panel firmware v3.08 or higher
- Remote Programming Software firmware v6.08 or higher
- B901 firmware version v1.05 or higher.

### 3.1.3 Backup destination devices
The control panel can send reports to four different route groups using one primary and up to three backup destination devices for each route group.

### 3.1.4 Custom test report
Either send a normal test report or a custom test report can be sent:
- Normal test report: Includes all route groups that have the test report function enabled, independent of which destination device is used to communicate. The test report is sent to the first successful destination device in a route group.
- Custom test report: You can select the route group and destination device you want to test. You can either test one destination device per route group or all configured destination devices for a route group.

### 3.1.5 Incorrect output behavior
In panel firmware v3.08.002, regardless of panel programming, output 3(C) activates any time an on-board point is faulted. This is resolved in panel firmware v3.08.004.

### 3.2 Firmware version 3.07

#### Notable features
- **Incoming RPS connections, page 13**
- **B444 signal strength indication, page 13**

Bosch Security Systems B.V.
3.2.1 **Incoming RPS connections**

In addition to answering incoming calls from RPS using UDP (User Datagram Protocol), incoming calls from RPS using TCP (Transfer Control Protocol) are also supported. RPS version 6.07 is required for this modified connection method.

3.2.2 **B444 signal strength indication**

The B444 signal strength LED indication has been modified to more accurately represent performance. While LTE tower switching may still occur, their individual signal strength indications are more accurate.

3.2.3 **Stabilization of cell card performance**

Cell card stability enhancements are included within this firmware release.

3.2.4 **APN usage for B442 and B443**

The B442 and B443 plug-in cellular modules shall attempt connections using APNs in the following order:

1. Primary configured APN
2. gne
3. wyless.apn
4. wyless.com.attz

The plug-in cellular module will select and use the most appropriate APN.

If the APN is erroneous, the panel keypads may not display the details of this trouble condition.
3.3 Firmware version 3.06

Notable features
- Language support, page 14
- Keypad programming, page 15
- PSTN, page 15
- Point Profile Circuit Style, page 15
- System Tamper Response, page 15
- Passcode [Esc], page 15
- New default for network Access Point Name (APN) parameter, page 15

3.3.1 Language support
Adds support for Chinese, Greek, Hungarian, Italian, and Polish.

When both the control panel first language and the second language are set to English, French, Hungarian, Italian, Portuguese, or Spanish, the system uses the Standard, Latin-1 character set.
When either the control panel first language or the second language is set to Chinese, Greek, or Polish, the system uses the Extended, UTF-8 Unicode character set.

Notice!
Only B915/B915i and B942 keypads support Extended, UTF-8
Only B915/B915i keypads with firmware version 1.01.010 or higher, and B942 keypads with firmware version 1.02.022 or higher support the Extended, UTF-8 character set
3.3.2  **Keypad programming**

Added keypad programming options to the Installer Menu, such as a *Device* menu and a *Miscellaneous* menu. Detailed menu tree information can be found within the updated Installation Manual.

3.3.3  **PSTN**

Expanded PSTN compatibility parameter to support additional countries.

3.3.4  **Point Profile Circuit Style**

Expanded Point Profile Circuit Style options to include “Dual 1K EOL with Tamper”, “Single 1K EOL with Tamper”, and “Single 2K EOL with Tamper” selections. Selecting any of these styles enables sending the new *Point Tamper Alarm* and *Point Tamper Alarm Restoral* reports.

3.3.5  **System Tamper Response**

Added *System Tamper Response* parameter to configure system behavior and reporting during armed states.

3.3.6  **Passcode [Esc]**

Keypad *Passcode [Esc]* option now applies to both SDI and SDI2 keypads.

3.3.7  **New default for network Access Point Name (APN) parameter**

Firmware version 3.06 and RPS version 6.05 changed the default network APN parameter to *eaaa.bosch.vzwentp*. The previous default - *wyless.apn* - is still valid. There is no need to change the APN for existing accounts.
3.4 Firmware version 3.05

Notable features
- B444 4G VZW LTE Cellular Support, page 16
- Concurrent Mode 2 connections support, page 17
- 37 bit credentials with site code support, page 17
- Secure connections using TLS v1.1 and v1.2 now supported, page 17
- Brazil Daylight Saving Time scheme update, page 17

Corrections
- “Ready to turn on” indication, page 18
- Custom function unbypass, page 18
- Force arming with faulted non-bypassable points, page 18
- Shared area reports, page 18
- Fire walk test for multiple latching smokes on one circuit, page 19
- Bypassed points incorrectly reviewed, page 19
- Open/Close personal notifications, page 19
- Automation Mode 2 and faulted points, page 19
- Aux power supply supervisory point silenced keypad display, page 20

3.4.1 B444 4G VZW LTE Cellular Support
This firmware update supports the B444 Conettix Plug-in 4G VZW LTE Cellular Communicator. This module is for the US market only. Note: Upon initial power-up of the B444 or B444-C, it can take up to 15 minutes for activation to complete. This will only occur during the first power application to the B444 and B444-C.
3.4.2 Concurrent Mode 2 connections support
The control panel now supports up to three automation Mode 2 connections concurrently. In previous versions of firmware, the control panel supported one automation Mode 2 connection at a time.

3.4.3 37 bit credentials with site code support
For B6512 control panels only
In addition to 26 bit and 37 bit (no site code) HID credentials, the control panel now supports 37 bit HID credentials with site codes. The control panel now supports the following:
- 37 bit HID H10304 (With Site Code)
- 37 bit HID H10302 (No Site Code)
- 26 bit HID H10301
- EM EM4200 (3-byte or 5-byte)

3.4.4 Secure connections using TLS v1.1 and v1.2 now supported
The firmware now supports secure connections, including personal notification email servers, using TLS v1.0 (strong ciphers only), v1.1, and v1.2. In previous versions of the firmware, control panel TLS connections required TLS v1.0 support.

3.4.5 Brazil Daylight Saving Time scheme update
Panels configured for “Brazil DST” will have the new Daylight Saving Time scheme now starting on the first Sunday of November, and in force since the beginning of 2018. The panels also support Carnival calendar variability.
3.4.6  “Ready to turn on” indication

In previous versions of the firmware, for systems with a B810 RADION or B820 Inovonics wireless receiver, keypads might not display the proper Ready to turn on indication. For example, showing “Ready to turn on” while points are faulted. This is resolved in this version of the firmware.

3.4.7  Custom function unbypass

In previous versions of firmware, unbypassing points using a Custom Function did not correctly unbypass faulted, controlled points. This is resolved in this firmware version. Faulted points in disamerd areas are now unbypassed correctly when using the custom function. Faulted 24-hour points are not unbypassed.

3.4.8  Force arming with faulted non-bypassable points

In a previous version of the firmware, the control panels might have allowed you to force arm (turn on) the system if non-bypassable points were faulted during the force arming review. This is resolved in this firmware version. The control panel does not allow you to force arm by bypassing unbypassable points.

3.4.9  Shared area reports

In previous versions of firmware, when a user turned on (armed) or turned off (disarmed) an associate area, causing the shared area to turn on or off, only the associate area status was sent to the central station receiver and stored in the event log. Starting in this firmware version, the control panel sends and records the shared area status in addition to the associate area.
3.4.10 Fire walk test for multiple latching smokes on one circuit
In previous versions of this firmware, when performing a fire walk test, the smoke detector did not reset without ending the fire walk test. Therefore, if more than one smoke detector was connected to a circuit, you could not test all smoke detectors on the loop without ending the fire walk test and starting it again.
This is resolved in this firmware version.

3.4.11 Bypassed points incorrectly reviewed
In previous versions of the firmware, when force arming the control panel, the keypad would show additional points for force arming. For example, if you force armed the lobby, the keypad asked if you also wanted to force arm bypassed points on an upper floor.
This is resolved in this firmware version.

3.4.12 Open/Close personal notifications
In previous firmware versions, control panels configured with authority levels that restrict sending open/close events and also configured to send Open/Close event personal notifications incorrectly sent the Open/Close events for the restricted user over personal notifications. The issue did not impact events sent to the central station receiver.
This is resolved in this firmware version.

3.4.13 Automation Mode 2 and faulted points
In firmware v3.03, the control panel let automation Mode 2 clients arm with faulted points. This is corrected in v3.05.
3.4.14 **Aux power supply supervisory point silenced keypad display**

In previous firmware versions, when the user silenced a faulted point that used an Aux AC Supervision point index and then reset without returning to normal, the keypad display did not show the faulted point. This issue is resolved in this firmware version.

3.5 **Firmware version 3.03.014**

**Notable features**

- ULC-S559 listing, page 20
- ULC Canada Compliance affects keypad message during firmware updates, page 21
- Remote Connect Service support, page 21
- Date/time formats, page 21
- Input point End-of-line options, page 22
- Control panel disconnect no longer required, page 22
- Watch mode after power up, page 22
- Comm Trouble sound options, page 22
- Updated B440/B441 support, page 22

3.5.1 **ULC-S559 listing**

The control panel now carries the ULC-S559 Fire Signal Receiving Centres and Systems listing for Canada. Refer to the *ULC Installation Guide* for listed modules, enclosures, and installation instructions. The control panel can be configured to meet the requirements of a ULC-S559 system or a ULC-S304 system.

The control panel can be configured to meet the requirements of a combined ULC-S559 and ULC-S304 system.
3.5.2 ULC Canada Compliance affects keypad message during firmware updates

Setting the ULC Canada Compliance parameter in RPS to Yes adjusts the control panel operation for UL Canada compliance. Beginning in this version, this includes reducing the keypad settings to show a Call for Service message after 90 seconds of disconnect instead of 180 seconds. This might cause a keypad to show the Call for Service message during a firmware update, even when a call is not required. The keypad shows idle text when the firmware update completes.

3.5.3 Remote Connect Service support

Remote Connect Service enables a secure control panel connection to mobile apps and remote programming software using Bosch Cloud services. The service allows a secure TLS connection to a control panel without specific port and router settings and without a static IP or DNS.

Notice!

North America only

Remote Connect Services and Bosch Cloud services are currently available in North America only.

3.5.4 Date/time formats

The keypad settings now provide users the option to select a format for both the date and time. For date, users can choose between MM/DD/YY, DD/MM/YY, and YY/MM/DD formats. For the time, users choose between 12-hour AM/PM format and 24 hour formats.
3.5.5  **Input point End-of-line options**
The control panel now supports 1 kΩ, dual EOL (1 kΩ + 1 kΩ), and 2 kΩ end-of-line (EOL) resistors as well as a No EOL option for on-board and B208 input points. Prior to this version, control panel supported 1 kΩ EOL and dual EOL (1 kΩ + 1 kΩ).

3.5.6  **Control panel disconnect no longer required**
The control panel now responds to RPS programming changes without needing to disconnect. In RPS, simply send the changes. The control panel immediately applies the new configuration.

3.5.7  **Watch mode after power up**
If the control panel is set for Watch Mode, the Watch Mode condition (On or Off) now persists through a power cycle (battery and AC power removed and reapplied).

3.5.8  **Comm Trouble sound options**
RPS now includes a parameter to set the Comm Troubles to visible (shown at the keypad and follows the trouble tone settings of the keypad) or invisible (no indication shows at the keypad). This only affects communication troubles not route group failures.

3.5.9  **Updated B440/B441 support**
Control panel firmware v3.02 and v3.03 support the latest versions of the B440 and B441 plug-in cellular modules (B440 v15.00.026 and B441 v18.02.022). The latest B440/B441 firmware includes updated libraries to maintain Verizon certification.
Control panel firmware v3.03, combined with the latest B440/B441 firmware, correctly shows the MEID on the keypad through the Installer menu. With control panel firmware v3.02, the MEID was truncated. This required you to read the MEID off the label instead of through the keypad, but otherwise did not affect normal operation.
4  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.

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

Updating to a B9512G/B8512G account:
1. In the Panel list window, highlight the control panel account, then right-click the account and select 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 firmware update completes, exit RPS, if desired.
5 Open source software 3.09.050

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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