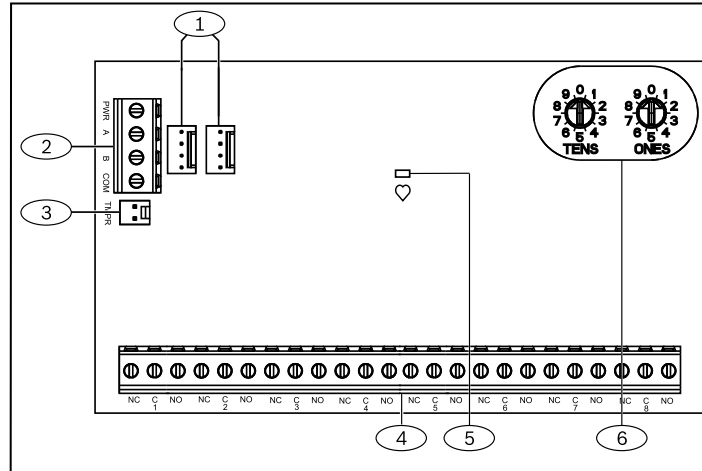## 1 | Overview

This module is a supervised device that provides 8 programmable outputs (Form C relays) and connects to control panels through the SDI2 bus.

| Callout — Description |
|---|
| 1 — SDI2 interconnect connectors - connect SDI2 control panel and SDI2 devices |
| 2 — SDI2 terminal strip - connect SDI2 control panel and SDI2 devices |
| 3 — Tamper switch connector |
| 4 — Terminal strip (outputs) |
| 5 — Heartbeat LED (blue) |
| 6 — Address switches |

2 | SDI2 address settings

i NOTICE!
The module reads the switch setting only during power up. Cycle the power to the module to enable the new setting.

Set the switches per the control panel configuration. Each B308 module must have a unique address.

The module's switches provide a tens and ones value for the module's address. For single-digit address numbers 1 through 9, set the tens switch to 0 and the ones digit to the appropriate number. The following illustration shows the address switches setting for addresses 1 and 11.

= Outputs 11 to 18

= Outputs 111 to 118
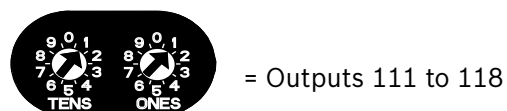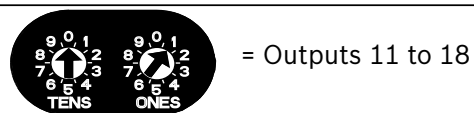
2.1 | Valid addresses and output numbers per control panel

Valid B308 addresses are dependent on the number of outputs allowed by a particular control panel.

Control panel	Valid B308 addresses	Corresponding output numbers
B9512G	01 - 59	11 - 18, 21 - 28, 31 - 38, 41 - 48, 51 - 58, 61 - 68, 71 - 78, 81 - 88, 91 - 98, 101 - 108, 111 - 118, 121 - 128, 131 - 138, 141 - 148, 151 - 158, 161 - 168, 171 - 178, 181 - 188, 191 - 198, 201 - 208, 211 - 218, 221 - 228, 231 - 238, 241 - 248, 251 - 258, 261 - 268, 271 - 278, 281 - 288, 291 - 298, 301 - 308, 311 - 318, 321 - 328, 331 - 338, 341 - 348, 351 - 358, 361 - 368, 371 - 378, 381 - 388, 391 - 398, 401 - 408, 411 - 418, 421 - 428, 431 - 438, 441 - 448, 451 - 458, 461 - 468, 471 - 478, 481 - 488, 491 - 498, 501 - 508, 511 - 518, 521 - 528, 531 - 538, 541 - 548, 551 - 558, 561 - 568, 571 - 578, 581 - 588, 591 - 598
B8512G	01 - 09	11 - 18, 21 - 28, 31 - 38, 41 - 48, 51 - 58, 61 - 68, 71 - 78, 81 - 88, 91 - 98
B6512	01 - 09	11 - 18, 21 - 28, 31 - 38, 41 - 48, 51 - 58, 61 - 68, 71 - 78, 81 - 88, 91 - 96
B5512	01 - 05	11 - 18, 21 - 28, 31 - 38, 41 - 48, 51 - 58
B4512	01 - 03	11 - 18, 21 - 28, 31 - 38
D9412GV4	01 - 12	11 - 18, 21 - 28, 31 - 38, 41 - 48, 51 - 58, 61 - 68, 71 - 78, 81 - 88, 91 - 98, 101 - 108, 111 - 118, 121 - 128
D7412GV4	01 - 06	11 - 18, 21 - 28, 31 - 38, 41 - 48, 51 - 58, 61 - 64
D7212GV4	01 - 02	11 - 18, 21 - 24

To find the output numbers for each address, multiply the address number by 10 for the base number, and then use numbers 1 through 8 in the ones place for the output numbers. For examples, refer to *Section 8*.
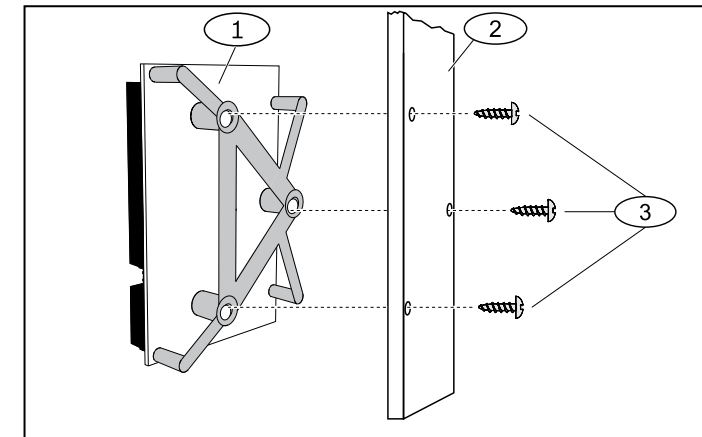
3 | Installation

⚠ 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 | Install the module in the enclosure

Refer to the following illustration for installing into the enclosure.

Callout — Description
1 — Module with mounting bracket installed
2 — Enclosure
3 — Mounting screws (3)

3.2 | Install and wire the tamper switch

You can connect an optional enclosure door tamper switch for one module in an enclosure.
1. Put the ICP-EZTS Tamper Switch (P/N: F01U009269) into the enclosure's tamper switch mounting location. For complete instructions, refer to *EZTS Cover and Wall Tamper Switch Installation Guide* (P/N: F01U003734).
2. Plug the tamper switch wire onto the module's tamper switch connector.

3.3 | Attach to the control panel

Use either the module's terminal strip labeled with PWR, A, B, and COM, or the module's interconnect wiring connectors (wire included) to attach to the control panel. Interconnect wiring parallels the PWR, A, B, and COM terminals on the terminal strip. Refer to the following illustrations for wiring.
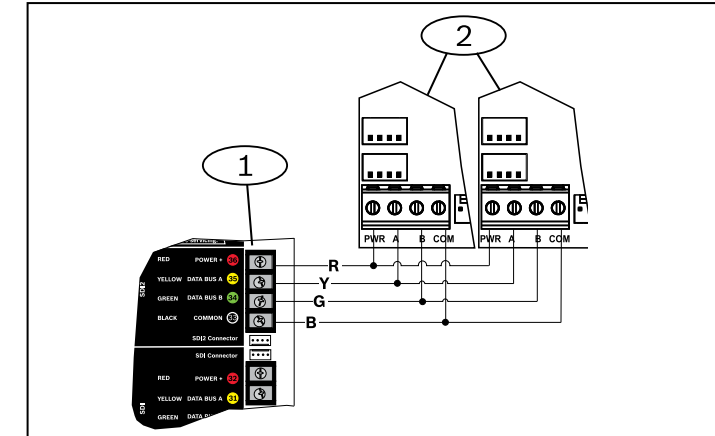
i NOTICE!
Use the terminal strip wiring **or** interconnect wiring connector to the control panel. Do not use both. When connecting multiple modules, combine terminal strip and interconnect wiring connectors in series.
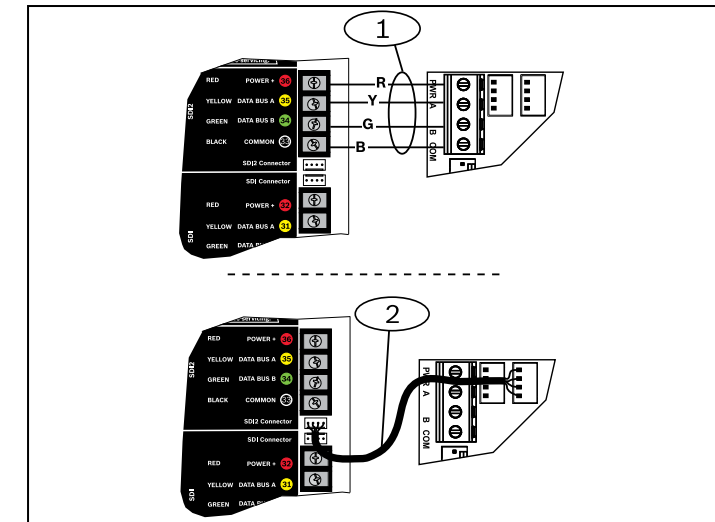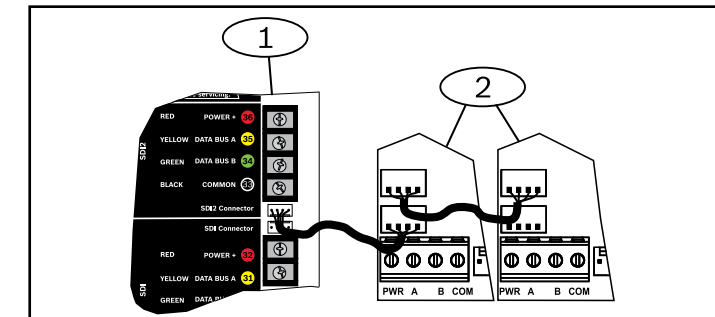
Callout — Description
1 — Terminal strip wiring (SDI2)
2 — Interconnect cable (P/N: F01U079745) (included)

Callout — Description
1 — Bosch control panel
2 — B308 modules

Callout — Description
1 — Bosch control panel
2 — B308 modules

3.4 | Relay output wiring

Each output provides a NO and a NC output. The NO, C (COMMON), and NC terminals are available in each terminal or connection output position. The silkscreen on the edge of the circuit board shows the function of each terminal and the relay output number.

The middle terminal of each output position is the COMMON and is labeled C. When the output is inactive, the NC (Normally Closed) terminal has continuity with the C terminal. When the output is active (energized), the NO (Normally Opened) has continuity with the C terminal.

ⓘ NOTICE!
Do not exceed relay contact ratings of 1.0 A, 24 VDC, resistive load.

4 | LED descriptions

The module includes one heartbeat LED to indicate that the module has power and to indicate the module's current state. Refer to the following table.

| Flash Pattern	Function
Flashes once every 1 second	Normal operation state.
3 quick flashes every 1 second	Communication error state: Indicates an SDI2 communication error.
ON Steady	LED trouble state: Not powered (for OFF Steady only), or some other trouble condition.
OFF Steady	

5 | Show the firmware version

With a tamper switch:
1. Open the enclosure door.
2. Push and release the switch

Without a tamper switch:
1. Quickly short the tamper pins.
2. Refer to the illustration below.
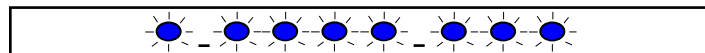
When the tamper switch is on, the heartbeat LED stays OFF for 3 second before showing the firmware version. The LED flashes the major, minor, and micro digits of the firmware version, with a 1 second pause after each digit.

For example, the version 1.4.3 shows as LED flashes:
[3 second pause] *__****__*** [3 second pause, then normal operation].

6 | Certifications

Region	
US	UL 365 - Police Station Connected Burglar Alarm Units and Systems
	UL 609 - Local Burglar Alarm Units and Systems
	UL 864 - Control Units and Accessories for Fire Alarm 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
	FDNY - Fire Department of New York
	FM Approval 3010
Canada	CAN/ULC-S303 Local Burglar Alarm Units and Systems
	CAN/ULC-S304 Central and Monitoring Station Burglar Alarm Units
	ICES-003 - Information Technology Equipment (ITE)
	ULC/ORD-C1023 Household Burglar Alarm System Units
	ULC/ORD-C1076 Proprietary Burglar Alarm Units and Systems

7 | Specifications

Dimensions	2.9 in x 5.0 in x 0.6 in (73.5 mm x 127 mm x 15.25 mm)
Voltage (operating)	12 V nominal
Current (maximum)	150 mA (22 mA for digital section + 16 mA per energized relay)
Operating temperature	+32°F to +122°F (0°C to +50°C)
Relative humidity	5% to 93% at +90°C (+32°C) non-condensing
Relay outputs	Dry contacts rated for .001 to 1.0 A at 5 to 24 VDC (resistive load).
Terminal wire size	12 AWG to 22 AWG (2 mm to 0.65 mm)
SDI2 wiring	Maximum distance - Wire size (Unshielded wire only): 400 ft (122 m) - 22 AWG (0.65 mm) 1000 ft (305 m) - 18 AWG (1.02 mm)
Compatibility	B9512G/B9512G-E B8512G/B8512G-E B6512 B5512/B5512E B4512/B4512E D9412GV4/D7412GV4/D7212GV4 (Refer to the control panel installation document for number of supported devices.)

8 | Point number examples

For B308 address **01** the output numbers for the output devices are 11 through 18:

Terminal no	1	2	3	4	5	6	7	8
Output no	11	12	13	14	15	16	17	18

For B308 address **11** the output numbers for the output devices are 111 through 118:

Terminal no	1	2	3	4	5	6	7	8
Output no	111	112	113	114	115	116	117	118

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El-gr: Μεταβείτε στη διεύθυνση https://gr.boschsecurity.com/el/ για την τεκμηρίωση σε αυτήν τη γλώσσα.

Es-es: Visite https://es.boschsecurity.com/es/ para obtener documentación en este idioma.

Fr-fr: Accédez à l'adresse https://fr.boschsecurity.com/fr/ pour obtenir la documentation dans cette langue.

Hu-hu: A honosított dokumentációt lásd a https://hu.boschsecurity.com/hu/oldalon.

It-it: Andare a https://it.boschsecurity.com/it/ per la documentazione in questa lingua.

Nl-nl: Voor de documentatie in uw taal, ga naar https://www.boschsecurity.com/nl/nl

Pl-pl: Dokumentacja w tym języku znajduje się w witrynie https://pl.boschsecurity.com/pl/

Pt-br: Acesse http://pt.boschsecurity.com/pt/ para obter a documentação neste idioma.

SE-sv: For documentation in this language, go to https://www.boschsecurity.com/xn/en/
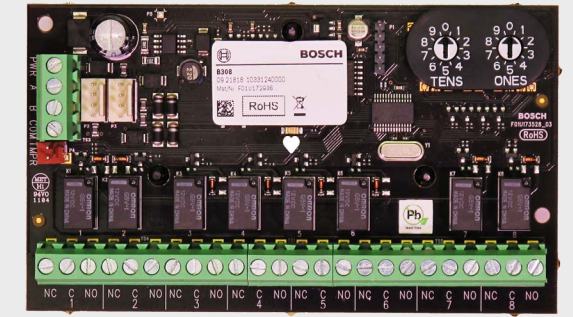
Octo-output Module
B308

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