Programming the BOSCH Solution 2000 & 3000 with the Icon Keypad

This programming guide will show you the simplest steps required to program the basic features of the system in order to make it operational for domestic use. Each programming method assumes that you are not in programming mode, and that the system is in its normal state and disarmed.

Press the button sequences inside the **[square brackets]** to complete the task at each step in the method.

- **Installer Code** (default) = **1 2 3 4** (use this code to enter programming mode).
- **User 1 Code** (default) = **2 5 8 0** (this is also a master code).

Most of the required programming uses the following four-step method:

1. Enter programming mode: **[1 2 3 4 #]** — two beeps sound and the Stay (person inside house) and Away (person outside house) indicators flash on the keypad.
2. Go to the required location: **[loc. no.] [#]**
3. Change the data in that location (i.e., enter a number between 0 - 15), e.g.: **[1 5 *]**
4. Save and exit programming mode: **[9 6 0 #]** — or move to another location to make more changes.

The alarm system stores information related to each feature at unique "locations". Each location will store a number between 0 - 15 that will indicate the option(s) selected for that particular feature. Depending on the type of feature, the stored number may literally represent the actual number (e.g., a number 1 may literally mean the number 1, which will be the case for a user code location), or it may represent a specific function (e.g., a 1 may indicate that something is activated, selected, or turned on, which is the case for the RF receiver location, where 1 means the RADION receiver has been set). Some locations will require that you combine numbers to select multiple options. For example, if option 1 means "Reporting functions allowed" and option 2 means "Remote arming by telephone allowed", then entering the number 3 at that location would select both of those options, since 1 + 2 = 3.

Apart from programming mode, some settings can be programmed quickly via installer code / master code operations, which require you to enter the code, followed by a number representing the required operation, and then pressing [#] to confirm — three beeps will sound and the Stay (person inside house) and Away (person outside house) indicators flash on the keypad. For an example of this, please refer to "XV. Set Date & Time."

Before You Begin — Important Notes

- By default, Zone 8 is programmed to be a 24-hour tamper zone, which will activate the sirens if the zone is unsealed, even if the alarm system is disarmed. If you are using a Solution 2000, then your tampers should be assigned to Zone 8; we suggest you leave the battery disconnected, close the lid on the metal enclosure, power up the system via the AC power, default the panel, then temporarily change the zone type for Zone 8 to "Not Used" whilst you finish programming (see "II. Assign Zone Types"). If you are using a Solution 3000, your tampers will be assigned to Zone 16, so you can simply seal Zone 8 by placing a 3K3 resistor across the Z8 and COM terminals.

- The system may power up in an armed state, so you will have to disarm the system before you begin programming.

Arm/Disarm

Enter your user code and press [#] to arm or disarm the system, e.g., **[2 5 8 0 #]**

I. Default Panel

It is recommended that you default the panel to ensure you start with factory settings.
There are two methods for doing this:

Method 1

1. Enter programming mode: **[1 2 3 4 #]**
2. Default the panel: **[9 6 1 #]**
3. Save and exit: **[9 6 0 #]**

Method 2

1. Disconnect the 12V battery and turn off the AC power transformer to shut down the system's power supply.
2. Hold down the default button on the panel PCB.
3. Reconnect power to the system (either AC or battery) and continue to hold down the default button for at least 6 seconds.
4. Release the default button and the system will reset to default settings.

II. Assign Zone Types

You need to configure the zone type for each zone so that the system knows what each zone is supposed to do, e.g., Should Zone 6 in the master bedroom set the alarm off instantly if triggered whilst the system is armed?

Below are the basic zone types you will need to assign:

- **Instant** — When the system is armed, a zone with this zone type will activate the sirens and strobe if it is triggered. Use an instant zone type for zones that should not be accessed whilst the system is armed.

- **Handover** — When the system is armed, a zone with this zone type will carry on the entry delay time if it is triggered after a zone with a delay zone type; if it is triggered prior to a delay zone, it will activate the sirens and strobe. Use a handover zone type for zones that may only be triggered following the triggering of a delay zone, and not before.

- **Delay-1** — This is the ideal zone type for the zone covering your primary entry point. It will allow you time to disarm the system before activating the sirens and strobe, so long as you pass through this zone first.

- **24-Hour Tamper** — Whether the system is armed or disarmed, if a zone with this zone type is triggered, it will activate the sirens and strobe. You may wish to use this on the zone that hosts your tamper switches; otherwise, an instant zone type will do.

- **Not Used** — Assign this to zones that you do not intend to use, so that they are removed from the system.

Each zone has a unique location that specifies its zone type. **In order to select one of the above zone types for a specific zone, you will need to enter its corresponding number into the zone type location for that zone:**

- 0 = Instant
- 1 = Handover
- 2 = Delay-1
- 9 = 24hr Tamper
- 15 = Not Used

These are the locations for the zone types for all zones (including default zone types):

- Zone 1 = 267 (default = 2 — Delay-1)
- Zone 2 = 274 (default = 1 — Handover)
- Zone 3 = 281 (default = 1 — Handover)
- Zone 4 = 288 (default = 1 — Handover)
- Zone 5 = 295 (default = 0 — Instant)
- Zone 6 = 302 (default = 0 — Instant)
- Zone 7 = 309 (default = 0 — Instant)
- Zone 8 = 316 (default = 9 — 24-Hour Tamper)
- Zone 9 = 323 (default = 15 — Not Used)
- Zone 10 = 330 (default = 15 — Not Used)
- Zone 11 = 337 (default = 15 — Not Used)
- Zone 12 = 344 (default = 15 — Not Used)
- Zone 13 = 351 (default = 15 — Not Used)
- Zone 14 = 358 (default = 15 — Not Used)
- Zone 15 = 365 (default = 15 — Not Used)
- Zone 16 = 372 (default = 15 — Not Used)

The following example will show you how to set up a standard system with Zone 1 as an entry delay, Zone 2 as a "handover", Zone 3 as an "instant", Zones 4 - 8 as "not used", and Zone 16 as your tampers (Solution 3000):

1. Enter the text menu: **[1 2 3 4 #]**
2. Enter address program: **[8 1]**
3. By default, Zone 1 is already set as Delay-1, so we can leave it.
4. By default, Zone 2 is already set as a Handover, so we can leave it.

5. Go to the location of the zone type for Zone 3: **[2 8 1 #]**
6. Change the 1 (Handover) to a 0 (Instant): **[0 *]**
7. Go to the location of the zone type for Zone 4: **[2 8 8 #]**
8. Change the 1 (Handover) to a 15 (Not Used): **[1 5 *]**
9. Go to the location of the zone type for Zone 5: **[2 9 5 #]**
10. Change the 0 (Instant) to a 15 (Not Used): **[1 5 *]**
11. Go to the location of the zone type for Zone 6: **[3 0 2 #]**
12. Change the 0 (Instant) to a 15 (Not Used): **[1 5 *]**
13. Go to the location of the zone type for Zone 7: **[3 0 9 #]**
14. Change the 0 (Instant) to a 15 (Not Used): **[1 5 *]**
15. Go to the location of the zone type for Zone 8: **[3 1 6 #]**
16. Change the 9 (24-Hour Tamper) to a 15 (Not Used): **[1 5 *]**
17. Zones 9 - 15 are set as "Not Used" by default, so can be left as they are.
18. Go to the location of the zone type for Zone 16: **[3 7 2 #]**
19. Change the 15 (Not Used) to either a 9 or 0: **[9 *]** or **[0 *]**
20. Save and exit programming mode: **[9 6 0 #]**

To further elaborate, using Zone 3 as an example:

1. We went to the location of the zone type for Zone 3: **[2 8 1 #]**. The number 1 was in that location, indicating that the zone type for Zone 3 was a handover.
2. We changed the 1 (Handover) to a 0 (Instant): **[0 *]**

Using the above information, make the necessary programming changes to your system. If you are using a Solution 2000, only zones 1 - 8 can be used, so you should use Zone 8 as your tamper zone, which is already a 24-hour tamper by default.

III. Handover Delay Sequential

If you have zones with a handover zone type, those handover zones must be triggered in order (i.e., Zone 2, Zone 3, etc.) following a delay zone in order to carry on its entry time, otherwise an alarm will activate. If you require a system with handover zones that may be triggered out of order following a delay zone (e.g., Zone 3, Zone 2), then you may choose handover delay to be non-sequential:

1. Enter programming mode: **[1 2 3 4 #]**
2. Go to the location for System Options 3: **[4 9 4 #]**
3. Change the 8 to a 0: **[0 *]**
4. Save and exit: **[9 6 0 #]**

Options

- 8 = Handover delay to be sequential
- 0 = Handover delay to be non-sequential

IV. Change Entry Time 1

Entry Time 1 is the time specified for a zone with a Delay-1 zone type. You can change this time by programming two locations: 466 & 467 — combining the time set in these two locations will give you the total time specified for Entry Time 1. Location 466 uses increments of 1 second, with a maximum of 15 seconds; location 467 uses 16-second increments, with a maximum of 240 seconds, since the greatest value you can enter into a location is 15 (i.e., 16 secs x 15 = 240 secs).

The following example will show you how to program a time of 60 seconds for Entry Time 1:

1. Enter programming mode: **[1 2 3 4 #]**
2. Go to the first location for Entry Time 1: **[4 6 6 #]**
3. Enter a time of 12 seconds: **[1 2 *]**
4. Go to the second location for Entry Time 1: **[4 6 7 #]**
5. Specify a time of 48 seconds by selecting three 16-second increments: **[3 *]**
6. Save and exit: **[9 6 0 #]**

Combining the time of 12 seconds in location 466 with the 48 seconds in location 467 gives a total time of 60 seconds for Entry Time 1. Thus, allowing 60 seconds to disarm the alarm system upon entry through a Delay-1 zone.

V. Change Exit Time

Once you have registered your desire to arm the alarm system, exit time is the amount of time allowed before the system arms (a long tone will indicate the final 10 seconds of the countdown when arming in Away mode).

Again, two locations must be programmed: 470 (increments of 1 second) and 471 (increments of 16 seconds).

The following example will show how to program the exit time to allow 120 seconds (2 minutes):

1. Enter programming mode: **[1 2 3 4 #]**
2. Go to the first location for Exit Time: **[4 7 0 #]**
3. Enter a time of 8 seconds: **[8 *]**
4. Go the the second location for Exit Time: **[4 7 1 #]**
5. Specify a time of 112 seconds by selecting seven 16-second increments: **[7 *]**
6. Save and exit: **[9 6 0 #]**

Combining the time of 8 seconds in location 470 with the time of 112 seconds specified in location 471 will give a total exit time of 120 seconds.

VI. Set Stay Mode 1

Stay Mode 1 can be used to have the system partially armed with some zones isolated, whilst others remain active. This is ideal if you still want some zones armed whilst you are at home, especially at night when you are sleeping, e.g., doors, windows, bottom storey, back rooms, shed, garage — zones unlikely to be entered by household members.

You can specify which zones are to be isolated in Stay Mode 1 by selecting the option "Isolated in Stay Mode 1" in Zone Options 2 for the required zone. Each zone stores its Zone Options 2 information at a unique location.

These are the locations for Zone Options 2 for each zone:

- Zone 1 = 271
- Zone 2 = 278
- Zone 3 = 285
- Zone 4 = 292
- Zone 5 = 299
- Zone 6 = 306
- Zone 7 = 313
- Zone 8 = 320

- Zone 9 = 327
- Zone 10 = 334
- Zone 11 = 341
- Zone 12 = 348
- Zone 13 = 355
- Zone 14 = 362
- Zone 15 = 369
- Zone 16 = 376

To select a zone for isolation in Stay Mode 1, you must enter a 15 at its location for Zone Options 2.

For example, to have Zone 5 isolated in Stay Mode 1:

1. Enter programming mode: **[1 2 3 4 #]**
2. Go to the location of Zone Options 2 for Zone 5: **[2 9 9 #]**
3. Change the 14 to a 15: **[1 5 *]**
4. Save and exit: **[9 6 0 #]**

You can arm the alarm system in Stay Mode 1 by either holding down the [* STAY] button for three seconds, or by entering your user code and pressing [* STAY], e.g., **[2 5 8 0 *]**. The isolated zones will flash on the keypad and the Stay (person inside house) indicator will display.

VII. Change Installer Code

Each number of the installer code is stored in its own location. **There are four locations:**

- 181 (default number = 1)
- 182 (default number = 2)
- 183 (default number = 3)
- 184 (default number = 4)

You need to change the number in each location to change the installer code.

The following example will show you how to change the installer code from 1 2 3 4 to 6789:

1. Enter programming mode: **[1 2 3 4 #]**
2. Go to the location for the first number: **[1 8 1 #]**
3. Change the 1 to a 6: **[6 *]**
4. Go to the location for the second number: **[1 8 2 #]**
5. Change the 2 to a 7: **[7 *]**
6. Go to the location for the third number: **[1 8 3 #]**
7. Change the 3 to an 8: **[8 *]**
8. Go to the location for the fourth number: **[1 8 4 #]**
9. Change the 4 to a 9: **[9 *]**
10. Save and exit: **[9 6 0 #]**

The installer code has now been changed to 6 7 8 9, so you will need to press [6 7 8 9 #] in order to enter programming mode. However, we will continue to use the default installer code of 1 2 3 4 throughout this guide.

VIII. **Add/Delete User Codes**

User codes are also stored across four locations, but you can change them easily by using the master code (MC) operation [MC 1 #] and changing the code for the required user. Since User 1 is a master code by default, it can be used to complete this operation.

For example, to change the code for User 1 from 2 5 8 0 to 3 0 1 5:

1. Enter the user master code operation: **[2 5 8 0 1 #]**
2. Specify the user number (1 - 32) you want to change the code for: **[1 #]**
3. Enter the new code: **[3 0 1 5 #]**

The code for User 1 has been changed to 3 0 1 5, however, we will continue using the default master code of 2 5 8 0 throughout this guide.

If you wish to delete a user code:

1. Enter the user master code operation: **[2 5 8 0 1 #]**

2. Specify the user number (1 - 32) you want to delete the code for, e.g.: **[8 #]**
3. Press the **[*]** button to delete it.

IX. Assign RF Receiver

You must specify the RF receiver to be used if you intend to use RF devices, such as remote key fobs or wireless detectors — this can be done at location 395.

Options

- 0 = Not Used
- 1 = Use RADION (Solution 3000 only)
- 2 = Use WE800EV2 (Solution 2000)

For example, to assign a RADION B810 as the RF receiver:

1. Enter programming mode: **[1 2 3 4 #]**
2. Go to the location for receiver assignment: **[3 9 5 #]**
3. Select option 1: **[1 *]**
4. Save and exit: **[9 6 0 #]**

X. Add/Delete RF Key Fobs

Adding a key fob is similar to adding a user code, except that you enter a key fob RFID number, instead of a PIN code. Additionally, key fob numbers are between the range of 301 - 332, as opposed to 1 - 32 for user codes.

To add a RADION key fob:

1. Make sure you have assigned the RADION receiver.
2. Enter the user master code operation: **[2 5 8 0 1 #]**
3. Enter the user number (301 - 332) you wish to assign the key fob to, e.g.: **[3 0 1 #]**
4. Enter the nine-digit RFID number on the key fob, e.g.: **[1 2 3 4 5 6 7 8 9 #]**
5. Press **[#]** to confirm the operation and exit.

To delete a RADION key fob:

1. Enter the user master code operation: **[2 5 8 0 1 #]**
2. Enter the key fob number (301 - 332) you want to delete, e.g.: **[3 0 1 #]**
3. Press the **[*]** button to delete it.

XI. Adjust External Siren Beep Volume for Key Fob Arm/Disarm

When you arm/disarm the system via a remote key fob, the external siren beeps briefly to acknowledge this.

You can adjust the volume of these beeps (0 = no beeps, 15 = loudest beeps; default = 13):

1. Enter programming mode: **[1 2 3 4 #]**
2. Go to the location for Speaker Beep Volume: **[4 9 1 #]**
3. Select a volume, e.g., no beeps: **[0 *]**
4. Save and exit: **[9 6 0 #]**

XII. Strobe Indication for Key Fob Arm/Disarm & Assign Key Fob Button to Arm Stay Mode 1

If you still wish the strobe light to indicate when you arm/disarm via remote key fob, you can program that feature in; additionally, you can program the fourth button on the remote key fob to be able to arm the system in Stay Mode 1 — both features are stored at the location for System Options 1.

1. Enter programming mode: **[1 2 3 4 #]**
2. Go to the location for System Options 1: **[4 9 2 #]**
3. Change the 1 to a 13: **[13 *]**
4. Save and exit: **[9 6 0 #]**

Options

- Default = 1
- Strobe Indication via Remote Arm/Disarm = 4
- Button 4 Stay Mode 1 = 8

Thus, 1 + 4 + 8 = 13

XIII. Add/Delete RF Device (Wireless Zones)

If you need to add RADION PIR detectors and other wireless RF devices, you can do so using the following installer code operation:

1. Make sure you have assigned the RADION receiver.
2. Enter the RF device installer code operation: **[1 2 3 4 0 #]**
3. Enter the zone number (1 - 16) that you wish to assign the RF device to, e.g.: **[9 #]**
4. Enter the nine-digit RFID number on the RF device, e.g.: **[1 2 3 4 5 6 7 8 9 #]**
5. Specify the RF zone option (can be left as 0 = All, or as 1 = Input 1): **[0 #]**

To delete an RF device:

1. Enter the RF device installer code operation: **[1 2 3 4 0 #]**
2. Enter the zone number (1 - 16) of the RF device you want to delete, e.g.: **[9 #]**
3. Press the **[*]** button to delete it.

XIV. Program Phone Numbers

If the alarm system is connected to the phone line or a 2G/3G GSM device, then you can program two phone numbers into the system that will be called in the event of an alarm.

First, you need to set the system up for domestic dialling:

1. Enter programming mode: **[1 2 3 4 #]**
2. Activate domestic dialling: **[9 6 5 #]**
3. Save and exit: **[9 6 0 #]**

Next, you need to program the first (primary) number you want the system to call in the even of an alarm:

1. Enter the domestic phone master code operation: **[2 5 8 0 2 #]**
2. Select phone number 1 to enter: **[1 #]**
3. Enter the phone number, e.g.: **[0 4 1 1 9 6 0 8 8 7 #]**

If you would like to enter a second phone number:

1. Enter the domestic phone master code operation: **[2 5 8 0 2 #]**
2. Select phone number 2 to enter: **[2 #]**
3. Enter the phone number, e.g.: **[0 4 0 1 8 9 9 6 7 0 #]**

In the event of an alarm, the system calls the primary number first, making several attempts of each number until it is successful. **To acknowledge the alarm event, you need to answer the call, then press the [*] button during the pause of the siren tone that is transmitted by the alarm system.**

If you wish to disable domestic dialling and cancel the phone numbers from the system, enter the following master code sequence: **[2 5 8 0 2 # 1 * 5 #]**, then press **[#]** again to confirm and exit.

XV. Set Date & Time

The date and time can also be set using the master code operation: [MC 6 #]. The date uses the following format: DD/MM/YY, whilst time is in 24-hour time in the following

format: hhmm. Both must be entered together in a single sequence, i.e.:
DDMMYYhhmm.

For example, to enter a date and time of 26th July 2015, 4:30 pm:

1. Enter the date and time master code operation: **[2 5 8 0 6 #]**
2. Enter the date and time: **[2 6 0 7 1 5 1 6 3 0 #]**

You will need to reprogram the date and time whenever power is lost to the system.

Need more information?

Hopefully this guide has helped you program your Solution 2000/3000 alarm system and you now have an understanding of the programming principles. Please refer to the User's Guide for a better understanding of basic user operations, such as arming, disarming and testing the system. The Quick Reference Guide and Installation Guide offer more detail on installation and advanced programming — use them to find a more complete list of locations and operations.