

Programming Wireless Keyfobs into multiple Transceivers (BS100)

Introduction

This technical note will show detail the programming of multiple SmartLiving KF100 Keyfobs into Multiple BS100 Transceivers (101-414 / 415)

Things to know before you begin

Ensure all BS100 transceivers are the same version (e.g. BS100/10 or BS100/50). These instructions should be read in conjunction with page 15 & 16 of the BS100 'Ness_Air2_Installation&Programming_

You need to program the same 'transmission / reception RF Channel' to the same for all BS100 modules, and you also need to disable rolling codes on all BS100 modules.

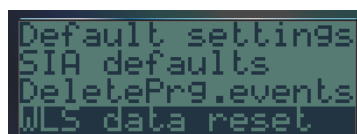
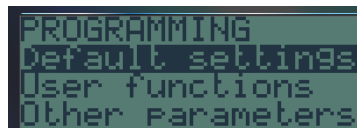
Summary of process this technical note will provide;

- Set panel in SERVICE mode
- Set all modules to the correct address
- Default all wireless using the keypad
- Exit programming mode to reset bus
- Set the rolling codes to OFF on all BS100s (phase 5, LED LD2 on)
- Set the same transmission/reception RF channel on all BS100s (phase 3, you can choose among channels 1/2/3)
- Enroll all keyfobs via keypad on one BS100
- Exit program mode on the keypad so the bus reboots
- Enrolled all keyfobs on all other BS100s using phase 1 on each device
- Set panel in normal RUN mode and test all

Programming 106-417 SmartLiving KF100 Keyfobs into multiple Wireless Transceivers.

Put the panel into Maintenance Mode during all settings.

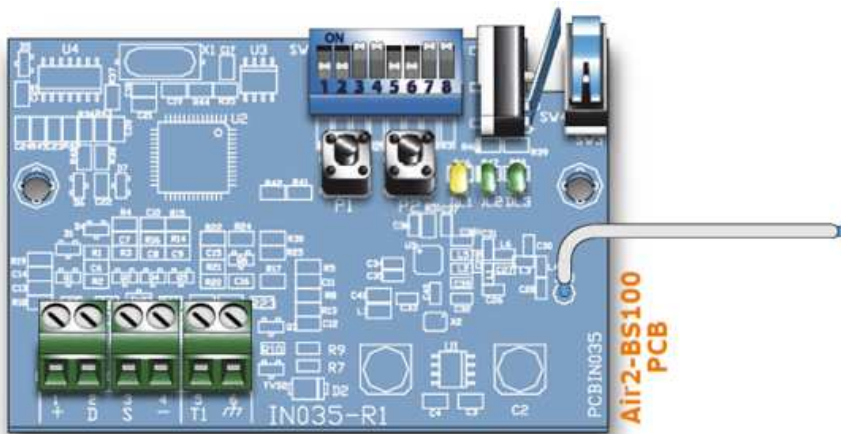
1. Set the Air2-BS100 transceivers to the correct address as required. (Keeping in mind the Air2-BS100 are addressed as a 'Card Reader' in the SmartLiving system. Therefore make sure the address set does not clash with any other Card Reader on the system (including card readers in the Alien Keypads)
2. Log into programming mode (*default 9999 then OK*), and scroll down to 'Default Settings' and default wireless data (Select WLS Data Reset under the 'Default Settings'.) to ensure there are no 'hangover' keyfobs enrolled into the Air2-BS100 that may cause confusion before you start. (This step would be ignored if you have previously programmed keyfobs into your multiple Air2-BS100 transceivers.)



3. Once WLS data has been reset, **Exit program mode** to reset the bus.
4. **Set the BS100 to the same transmission / reception RF channel on all BS100 Transceivers.**
This is done as per 'phase 3' of programming setting on the BS100 board.
(Refer below or the "Programming via the Air2-BS100 module" Section 4.2 of the Ness_Air2_Installation&Programming_manual' for full details)
5. **Set the "Rolling Code" feature "OFF" on all BS100 modules.** (Refer below or the "Programming via the Air2-BS100 module" Section 4.2 of the Ness_Air2_Installation&Programming_manual' for full details)

Programming transmission / reception RF Channel and Rolling codes enable / disable on the Air2-BS100 module.

Using the P1 buttons on the PCB of the Air2-BS100 module will step you through the 5 programming phases (*programming options*) on the BS100 to you get to phase 5. LED DL3 will indicate what programming phase you are currently on. If you get to phase 5 and press P1 again it will end programming and LED LD3 will stop flashing, pressing P1 again will cycle through the 5 phases again



6A. Change transmission/reception channel

Press P1 once LED DL3 will flash once to indicate you are in programming Phase 1. Press P1 again and LED LD3 will provide 2 flashes to indicate you are in programming phase 2. Press it a third time and LED LD3 will flash 3 times to indicate you are in phase 3 programming.

While in programming phase 2, LED DL2 (Middle LED) will flash to indicate the current transmission / reception channel it is set to. (Channel 1, 2 or 3). Pressing the P2 button on the BS100 will step you through the 3 available channels.

You need to make sure **all** your Air2-BS100 Transceivers are set to the same transmission / reception channel (e.g. Channel 1).

Once the transmission / reception channel is set, press the P1 button to step up to Phase 5 with the LED LD3 flashing 5 times, this is where you need to set 'Rolling Codes' to be disabled.

6B. Phase 5 : Enable/Disable rolling-code authentication on all Air2-KF100 keys

With LED DL3 flashing 5 times to indicate you are in programming Phase 5, press the P2 button to select Rolling Codes to be “Disabled”. LED LD2 indicates the status of this option:

- OFF = Rolling code authentication enabled;
- **ON** = Rolling code authentication **disabled**.

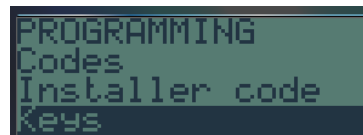
Press button P2 to toggle the status of this option so LED LD2 is “ON” which indicated rolling code is disabled.

Set the ‘Rolling-Codes’ to OFF (i.e. this is with LED2 set ON) on all of your BS100 Transceivers.

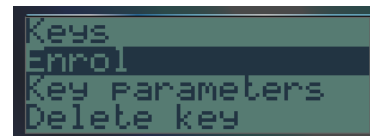
7. Enroll ALL keyfobs via the keypad into **one** of your Air2-BS100 modules

Enter back into Program Mode (default 9999 then OK)

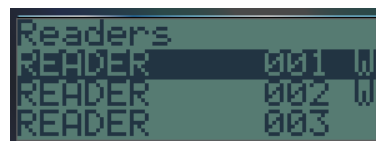
7a. Scroll down the list and select **Keys** then press **OK**.



7b. Select **Enrol** and then press **OK**

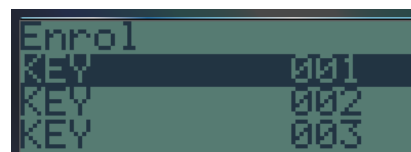


7c. Using the Down arrow, move the options to the reader that you had set the wireless Transceiver to and Press the **OK** button.

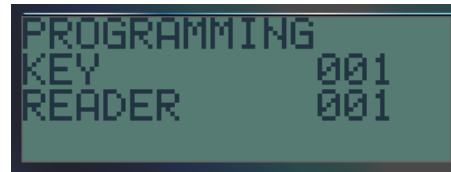


In this example Air2 BS100 Wireless Transceivers have been addressed as Reader 001 and 002, which can be identified by displaying a ‘W’ with the address, where a Hard Wired reader does not display this ‘W’

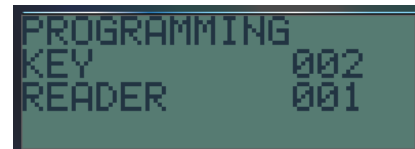
7d. Using the up / down arrow buttons on the keypad select the first **Digital Key** that you wish to learn into the system. Then press the **OK** button.



7e. The LCD display will now summarize your selections before processing. In this example we have selected Key 001 to be enrolled into Reader 001.



7f. Once it has been learnt in, the keypad will then automatically increment to the next key to be learnt in.



7g. Once all Keyfobs have been learnt in, press enter, then exit buttons and exit program mode so the bus reboots.

6. Programming Keyfobs into additional Air2-BS100 module.

Once the Keyfobs have been learnt into the first Air2-BS100 module using the keypad as per step 7 above, you then need to Enroll all Keyfobs into the additional Air2-BS100 modules. This is done directly using the “phase 1” programming similarly as you set the transmission / reception channel and Disabled the Rolling-Codes above.

(Do not use the following method for the Air2-BS100 that you enrolled the keyfobs into as per step 7 above, as they will already have been learnt into that BS100 via that method.)

Using the P1 buttons on the PCB of the Air2-BS100 module, push it once to enter programming and select Phase 1 programming (i.e with the LED LD3 giving a single flashes).

This Phase 1 programming is “Enrolling” phase. With the Air2-BS100 module in this mode, press the enroll keys on the Keyfob (F3 and F4 buttons together) to enroll them directly into the Air2-BS100 module. *(During this process the SmartLiving Panel may also arm, which you can ignore or disarm via the keypad!).* Once the ‘Enroll’ buttons are pressed on the Keyfob, within 4 seconds the LED DL1 should flash to indicate the Keyfob has been received and enrolled. Repeat this process until all your keyfobs are enrolled into all other Air2-BS100 Transceivers modules, (except for the one you originally learnt the keyfobs in via the keypad.)

7. All keyfobs should now be stored in all Air2-BS100 modules. To test the operation, disconnect all transceivers from the Bus and connecting one at a time. Operate each keyfobs to ensure they all works into each individual transceiver.

Additional Information:

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