

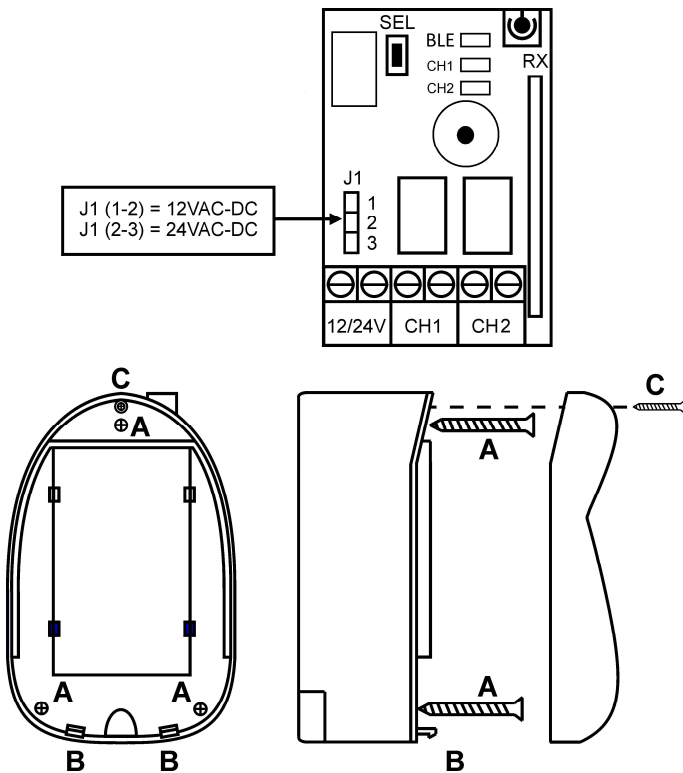
RXB 2224 Dual channel receiver GB

The RxB 2224 Plus dual channel radio receiver allows the remote control of electric and electronic devices via Smartphone and/or one or more Seav Radio controls.

- Mod. **RSB 2224** Narrow band : Bluetooth + 433,92 MHz
- Mod. **RHB 2224** Narrow band : Bluetooth + 868,30 MHz

Technical Data:

- Work frequency: see model
- Power supply: 12-24VAC-DC
- Max. consumption: 5W
- Op. radio control: 12-18-32 Fixed Bits, 66-80 bit Rolling Code
- Bluetooth Commands from Smartphone : IOS/Android
- Total Radio controls/Smartphone (CH1 + CH2) : 330 Max
- no. 2 x Control relays: 30VDC 1A
- Working temperature: -10-55°C
- Dimensions: 53x82x40mm
- Radio control range in open space: 50-100m
- Bluetooth range in open space: 10-80m
- Protection rating: IP54



CN1 Terminal Board Connections:

- 1: Power supply 12-24 VAC-DC
- 2: Power supply 0V
- 3: "Normally open" contact output CH1
- 4: "Normally open" contact output CH1
- 5: "Normally open" contact output CH2
- 6: "Normally open" contact output CH2

Installation of the Receiver:

It is very important to choose the place of installation carefully in order for the transmitter and the receiver to function well. The range is not only affected by the technical features of the device, but also varies depending on the radio-electric conditions of the site. The receiver has a tuned antenna. The antenna must be positioned where it can be seen well away from metal structures.

There must be a distance of at least 5 metres between the two receivers if installation is to be successful.

Power Supply Selection:

The power supply voltage can be selected by selection of the Jumper J1:

- Jumper J1:** 12/24 VAC-DC power supply selection.
- Pos. 1-2 = 12VAC-DC.
- Pos. 2-3 = 24VAC-DC (default).

CH1 and CH2 Operating Mode:

The receiver is capable of separately managing two channels and Monostable operating mode.

Sound Alerts:

- 1 SHORT BEEP** = Confirms Storage/Connection.
- 2 SHORT BEEPS** = Receiver ready to operate.
- 3 SHORT BEEPS** = Storage/Programming Failed.

- 1 LONG BEEP** = Bluetooth Disconnection.
- 2 LONG BEEPS** = Radio controls/Smartphone Cancellation.
- 3 LONG BEEPS** = Reset.

Rule for the 1st Radio Control Stored:

The following rule applies when programming the radio controls: if the first radio control to be stored is the Rolling Code Plus type, the control unit will only accept Rolling Code Plus radio controls, thus guaranteeing a high degree of anti-cloning safety. If the first radio control to be stored is the Rolling Code type, the control unit will accept only Rolling Code and Rolling Code Plus radio controls, thus guaranteeing a good level of anti-cloning safety. Whereas if the first radio control to be stored is the fixed code type, the receiver will accept fixed code radio controls and Rolling Code and Rolling Code Plus radio controls without managing the anti-cloning algorithm.

RCD Stand Alone programming:

The programming of the Radio controls to be associated is the Self-learning type and is performed with the **antenna not connected** in the following way:

press SEL once; the CH1 LED will start to flash; then send the chosen code with the radio control, at a distance of a few meters, when the CH1 LED remains on steady, the receiver will emit a short Beep for confirmation, signalling that the radio control has been programmed on channel CH1.

To store a new radio control code in channel CH2, perform the same procedure described above and pressing the SEL key twice.

The memorisation procedure can be repeated up to a max. of 330 codes. When the memory is full by repeating the programming operation, the CODE CH1 and CODE CH2 LEDs will start to flash very quickly, the receiver will emit three short Beeps for confirmation, indicating that it is not possible to store any more codes.

Smartphone Stand Alone programming:

The programming of the Smartphone to be associated is the Self-learning type and is performed in the following way:

press the SEL key three times, the Leds CH1 and CH2 will start flashing, then open the "BeLite" application and connect to the detected receiver, when the Leds CH1 and CH2 remain on steady, the receiver will emit a short beep confirms, indicating that the programming of the Smartphone in the receiver has been completed.



The memorisation procedure can be repeated up to a max. of 330 codes. When the memory is full by repeating the programming operation, the CODE CH1 and CODE CH2 LEDs will start to flash very quickly, the receiver will emit three short Beeps for confirmation, indicating that it is not possible to store any more codes.

Reset HW (only in Stand Alone use) :

If the receiver must be restored to default settings (i.e. no code memorised), press the SEL key continuously for 10 seconds. The CH1 and CH2 LEDs will flash three times quickly and then switch-off. The receiver will emit three long beeps for confirmation.

Advanced Programming by Smartphone:



The receiver can only receive advanced programming via Smartphone, thanks to the specific SEAV “**BeTech**” app. The app allows the installer to have a work instrument for all installations performed.



Once the automation has been installed, upon request it will be possible to also configure a Client “**BeLite**” App for normal use via Smartphone for sending remote commands.

Important: it is possible to carry out advanced programming through the BeTech application as long as no Stand Alone programming has been carried out before. Once the radio controls and smartphones have been memorized via the BeTech application, to guarantee the exclusivity of the system, the installer will have to change the default password, in this way, the SEL key on the receiver will be disabled and consequently any programming possibility stand alone.

BeTech and BeLite Apps:

The SEAV “**BeTech**” app has a Directory where all installed plant data is contained. It is also used to set a Plant Name and Password (Default: 1 2 3 4) to subsequently access the various configurations; the possibility of restoring a faulty receiver with a new one, reloading all information contained in the app directory. Furthermore, by entering an e-mail address, it will be possible to receive a Back-up of all the plants in case of Smartphone failure. Option of generating access codes to activate Client “**BeLite**” App. See the Diagnostics menu for troubleshooting and much more. The Client “**BeLite**” App also allows you to send commands via Smartphone even automatically, namely you can send the command by simply approaching the receiver.

CH1 and CH2 Operating Mode:

The receiver can manage the two channels separately and also, only for CH2, allows to have different operating modes configurable by means of the SEAV “**BeTech**” App:

Channel CH1: only monostable operation.

Channel CH2: various functions available :

- Monostable (Default)
- Bistable
- Timed (1 – 600 sec.) Retriggerable
- Timed (1 – 600 sec.) NOT Retriggerable
- Timed (1 – 600 sec.) Resettable.

Settings :

Using the dedicated SEAV “**BeTech**” app via Smartphone allows the receiver to manage a directory with 330 total positions between stored Radio controls and Smartphones, which can be programmed and/or deleted even individually.

Radio control code programming:

The receiver can store up to 330 radio controls with different codes, such as Fix, Rolling Code or Plus. The transmission code must be programmed as follows: press the CODE key of the SEAV “**BeTech**” app via Smartphone, at the same time send the pre-selected code of the desired radio control; when the receiver emits a confirmation Beep, programming will be completed. *If all 330 available codes have been stored, by repeating the programming operation, the receiver will emit three short Beeps, indicating that it is not possible to store any more codes.*

Programming the user Smartphone:

The receiver can store up to 330 different Smartphones. To enable a Smartphone for operation on the receiver, download the “**BeLite**” App and enter only the first activation code supplied by the installer (generated with the BeTech App). If all 330 available codes have been stored, by repeating the programming operation, the receiver will emit three short Beeps, indicating that it is not possible to store any more codes.

Deletion of Radio control/Smartphone :

The deletion of a single Radio control / Smartphone or complete deletion can only be carried out with the SEAV “**BeTech**” App, by accessing the Directory of the plant and selecting weather you want to delete a single Radio control/smartphone or all of them. The receiver will emit two long Beeps for confirmation, preceded by a series of visible communications on the Smartphone.

Programming by Remote RCD :

Using the dedicated SEAV “**BeTech**” App via Smartphone, it is possible to select the radio control Programming function remotely via a radio control already present in the memory: The Radio control can be programmed remotely as follows: continuously sending a previously-stored radio control code for more than 10 seconds. At this point the control unit switches to programming mode, as described above in the paragraph “RCD Stand Alone programming”.

Caution : CH2 (in Pgm remote mode, operation is only monostable).

Reset :

The control unit can be used to reset it to default settings through the dedicated SEAV “**BeTech**” app; press RESET on the Smartphone and the receiver will emit three long Beeps for confirmation at the same time.

Diagnostics :

Using the dedicated SEAV “**BeTech**” App, the control unit allows for the Real time monitoring of the status of all OUTPUTS, the number of radio controls present in the Memory and their Type and other information useful to the installer.

IMPORTANT FOR THE INSTALLER

- *The control unit must be powered by an extra low voltage safety source compliant with Standard EN61558-2-6. The loads connected to the relays must also comply with an extra low safety voltage.*

IMPORTANT FOR THE USER

- *The device must never be used by children or persons with reduced physical-psychological abilities, unless supervised or trained on the functioning and the use modalities.*
- *Do not allow children to play with the device and keep the remote controls out of their reach.*
- *CAUTION: keep this instruction manual safe and observe the important safety requirements contained herein. Failure to comply with the requirements may cause damage and serious accidents.*
- *Frequently examine the system to detect any signs of damage. Do not use the device if it is in need of repair work.*

SEAV s.r.l. declares that the products

RSB 2224 - RHB 2224 Receivers

*comply with the specifications of the Directives
RED 2014/53/EU, EMC 2014/30/EU.*



Further information, the full text regarding the EU Declaration of Conformity are available at the following Internet address:

<http://www.seav.it>



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