BeSAFE RX NEW Receiver

With the BeSAFE RX NEW radio receiver you can connect:
- up to 2 BeSafe Readers New
- up to 2 BeSafe KEYBOARD selectors
- up to 2 BeSafe NFC Readers
- up to 2 RX 2295 receivers
- up to 2 actuators / LTX 2296 Radio Transmitters

for the implementation of commands given via Remote control, Transponder, Digital keyboard and Smartphone. The BeSAFE RX NEW has a clock that is constantly operational with buffer battery for storing in the memory the last 14,000 transits occurred during operation.

- Mod. **BeSAFE RX NEW 433** :   433.92   MHz
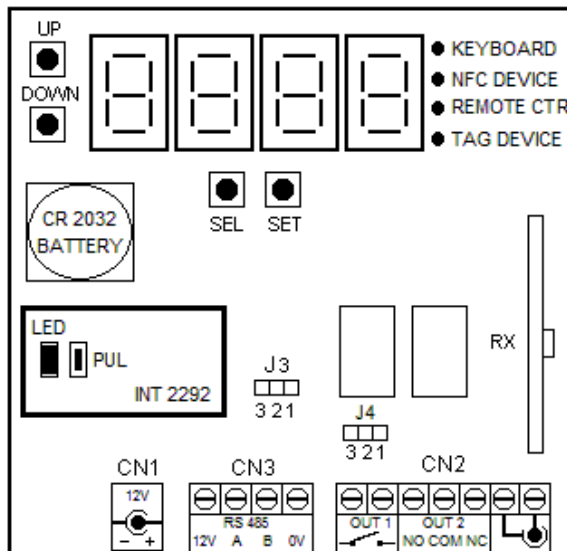- Mod. **BeSAFE RX NEW 868** :   868.30   MHz

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.
- All operations that require the casing to be opened (installation, programming, repairs, etc.) must be performed only by qualified personnel.
- The fixing of power and connection cables must be secured through the use of optional cable glands supplied.
- Fix the control unit to a wall, using the relevant support which is fitted to the casing, in such a way as to leave said support facing downwards and insert the fixing screws in the special holes.

IMPORTANT FOR THE USER

- The device can be used by children over 8 years of age and persons with reduced physical or psychological abilities or with little knowledge and experience only if supervised or educated in its operation and safe use, in order to also understand the dangers involved in its use.
- these instructions are available on the website www.seav.com
- Do not allow children to play with the device and keep the remote controls out of their reach.
- Frequently examine the system to detect any signs of damage. Do not use the device if it is in need of repair work.
-Always remember to disconnect the power supply before carrying out any cleaning or maintenance.
- Cleaning and maintenance must not be carried out by unsupervised children
- To replace the discharged battery remove the plastic lid, extract the battery in use and insert a new one, respecting the polarity indicated on the battery holder.
- The used battery must be disposed of in the appropriate containers.

ATTENTION: *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.*

the product :
The Single Channel Receiver **BeSAFE RX NEW** complies with the prescriptions of Directive R&TTE 99/5/EC.

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TECHNICAL DATA

- Power supply:	12VDC
- Max. consumption:	6 W
- Op. remote control:	12-18 Bit or Rolling Code
- Op. transponder:	BeSafe Card or Besafe Key
- Storable devices different from each other:	1000 Max
- 2 control relays:	30VDC 1A
- Operating temperature:	-10°C ÷ 55°C
- Dimensions:	110x121x47mm
- Container:	ABS (UL94V-0)
- Protection rating:	IP54
- Remote control capacity in open space:	30-70 metres

TERMINAL BOARD CONNECTIONS

CN1 :
Power supply input 12 VDC 1500mA.

CN2 :
1 : Relay output OUT 1 clean control contact (NO).
2 : Relay output OUT 1 clean control contact (NO).
3 : Relay output OUT 2 clean control contact (NO).
4 : Relay output OUT 2 clean control contact (COM).
5 : Relay output OUT 2 clean control contact (NC).
6 : Mass input.
7 : Antenna hot pole input.

CN3 :
1 : Power supply output 12 VDC Device.
2 : Communication port RS 485 signal A.
3 : Communication port RS 485 signal B.
4 : Power supply output 0 VDC device.

CN4 : Connection for "INT 2292" interface.

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. Capacity is not only related to the device technical data, but also varies depending on the site's radio-electric conditions.
The receiver is equipped with a rigid wire section antenna. Connect an RG58 50 OHM coaxial cable tuned antenna if wanting to increase sensitivity. Place the antenna externally in clearly visible points and away from metal structures.
There must be a distance of at least 5 metres between the two receivers if installation is to be successful.

OPERATING MODE WITH REMOTE CONTROLS, TAG READER, KEYBOARD AND/OR NFC READER

The receiver can be combined with Remote Controls, TAG Reader, Keyboard and/or NFC Reader and stores up to 1000 different users. We recommend you write down the corresponding "storage position - user name".

For use with remote controls, the receiver unit is equipped with an incorporated receiver; for use with other devices, the desired accessory must be connected (by carefully following the connection diagrams described in the relative operating manuals) supplied as optionals.

DATE/TIME SETTING

The receiver is equipped with a clock with buffer battery that allocates a time reference to each operation.
Proceed as follows to enter the date and time:
Date settings : use the UP or DOWN button to go to the **DATE** storage position and press SEL and SET: Digits 2, 3 and 4 will start flashing, at the same time use the UP or DOWN button to select a day of the week between MON and SUN then press SET to confirm (**STOR** will be displayed); next, Digits 1 and 2 start flashing, at the same time use the UP or DOWN button to select a number between 01 and 31 to choose the day and press SET to confirm (**STOR** will be displayed); next, Digits 3 and 4 will start flashing, at the same time use the UP or DOWN button to select a number between 01 and 12 to choose the month and press SET to confirm (**STOR** will be displayed); next, all Digits 1,2,3 and 4 will start flashing, at the same time use the UP or DOWN button to select a number between 14 and 99 to choose the year and press SET to confirm (**STOR** will be displayed), thus completing the operation.
Time settings : use the UP or DOWN button to go to the **TIME** storage position and press SEL and SET: Digits 1 and 2 will start flashing, at the same time use the UP or DOWN button to select a number between 00 and 23 to choose the hour and press SET to confirm (**STOR** will be displayed); next, Digits 3 and 4 will start flashing, at the same time use the UP or DOWN button to select a number between 00 and 59 to choose the minutes and press SET to confirm (**STOR** will be displayed), thus completing the operation.

PROGRAMMING OF REMOTE CONTROLS, TAG READER, KEYBOARD AND/OR NFC READER

Programming of the Remote Controls, TAG Reader, Keyboard and/or NFC Reader is the self-learning type and is performed as follows: use the UP or DOWN button to go to the desired storage position (shown on the display from **0001** to **0999**) paying attention to the KEYBOARD, NFC DEVICE, REMOTE CTR and TAG DEVICE LEDs since the lighting up of one of these four means that the location selected is occupied. Press SEL, all of the LEDs will start flashing and at the same time send the code with the Remote Control or move the Transponder close to the TAG Reader or digit an access code on the KEYBOARD or move the Smartphone close to the NFC Reader. **STOR** will be displayed and the LED of the corresponding Device will switch from off to on, thus completing the operation.
To delete a Device previously stored, using the UP or DOWN button go to the location of the occupied storage position, press SEL, one of the four corresponding KEYBOARD, NFC DEVICE, REMOTE CTR and TAG DEVICE LEDs will start flashing; press SET, the display will show "**DELE**" deleted and the LED will switch from on to off, thus completing the operation.

QUICK PROGRAMMING OF RADIO CONTROLS, TAG READER, KEYBOARD AND/OR NFC READER

Quick programming of the Remote Controls, TAG Reader, Keyboard and/or NFC Reader is allowed only when the receiver's entire memory is free. To make sure that the entire memory is free, follow the **Reset** procedure.
Quick programming permits you to not select a new storage location every time for an additional Device, but starting from position **0001** the control unit automatically increases the storage location and remains in standby for 15 seconds from entering a new Device to be stored.

OVERALL OPERATION TIME SLOT (TSTA ; TSTO)

With the receiver you can program a daily operation time slot for activation only at a pre-set time.
Proceed as follows to choose the operation starting time: use the UP or DOWN button to go to the **TSTA** storage position and press SEL and SET. Digits 1 and 2 will start flashing, at the same time use the UP or DOWN button to select a number between 00 and 23 to choose the operation starting hour and press SET to confirm (**STOR** will be displayed); next, Digits 3 and 4 will start flashing, at the same time use the

UP or DOWN button to select a number between 00 and 59 to choose the minutes and press SET to confirm (**STOR** will be displayed), thus completing the operation.
Proceed as follows to choose the operation ending time: use the UP or DOWN button to go to the **TSTO** storage position and press SEL and SET. Digits 1 and 2 will start flashing, at the same time use the UP or DOWN button to select a number between 00 and 23 to choose the operation ending hour and press SET to confirm (**STOR** will be displayed); next, Digits 3 and 4 will start flashing, at the same time use the UP or DOWN button to select a number between 00 and 59 to choose the minutes and press SET to confirm (**STOR** will be displayed), thus completing the operation.

NOTE: *the Devices stored in the storage positions between 0950 and 0999 are not subject to the Time Slot function.*

OVERALL ANTI PASS-BACK FUNCTION (BACK)

With the receiver you can select the Anti Pass-Back function (default = **OFF**), i.e. using a couple of TAG Readers, Keyboards and/or NFC Readers (with different operation addresses set between them) once you have accessed, you will need to exit the reserved area before accessing again. This operation can be limited also for the Number of accesses or for its duration.
Proceed as follows to select the Anti Pass-Back function: use the UP or DOWN button to go to the **BACK** storage position and press SEL and SET: all Digits will start flashing, at the same time use the UP or DOWN button to select one of the following codes **OFF** or **ON-1, ON-2,** press SET to confirm (**STOR** will be displayed); next, all Digits will start flashing, at the same time use the UP or DOWN button to select a number between N000 (N000 = all can access) and N949 for the maximum number allowed who can access the reserved area, then press SET to confirm (**STOR** will be displayed); next, all Digits will start flashing, at the same time use the UP or DOWN button to select a time between T000 minutes (000 = time excluded) and T999 minutes for the maximum time allowed for remaining within the reserved area and press SET to confirm (**STOR** will be displayed), thus completing the operation.

When selecting the Anti Pass-Back **ON-1** function, you must always enter and exit from the same access controlled by OUT 1 output. Consequently the OUT 2 output can be used for connecting a traffic light (Red/Green) indicator, for information on ramp momentarily busy or number of parking spaces still available up to the limits set.

When selecting the Anti Pass-Back **ON-2** function, you must always enter from the access controlled by the OUT1 relay and always exit from the access controlled by the OUT2 relay.

NOTE: The Anti Pass-Back function does not allow access via Remote Control.

NOTE: The Anti Pass-Back function is not allowed if the OUT1 Bistable mode was previously activated.

NOTE: The Anti Pass-Back function through the use of connected Keyboards foresees that the devices have the ability to send the same serial code but with different addresses set (one for input and the other for output), and at least a complete passage was carried out during installation.

NOTE: *the Devices stored in the storage positions between 0950 and 0999 are not subject to the Anti Pass-Back function.*

RELAY OUTPUT OPERATION (OUT 1)

With the receiver you can select the Monostable or Bistable OUT1 relay output operating mode.
The Monostable operation (default), at each transit, activates the OUT1 relay for 1 second. With the Bistable operation, a first transit activates the OUT1 relay, the next transit deactivates it.
Proceed as follows to select the desired operating mode: use the UP or DOWN button to go to the **OUT1** storage position and press SEL and SET: all Digits will start flashing, at the same time use the UP or DOWN button to select one of the following codes **MONO** = Monostable or **BIST** = Bistable, press SET to confirm (**STOR** will show on the display), thus completing the operation.

NOTE: at every OUT1 relay activation transit, the corresponding number stored will be displayed for a few seconds.

NOTE: The OUT1 Bistable mode is not allowed if the Anti Pass-Back function was previously activated.

RELAY OUTPUT OPERATION (OUT 2)

With the receiver you can select the OUT2 Timed relay output function (**O2-T**).
To select the OUT2 Timed function, go to the **O2-T** storage position and press SEL and SET: all Digits will start flashing, at the same time use the UP or DOWN button to select a time between 001 and 999 seconds, press SET to confirm (**STOR** will show on the display) and programming will be complete. In this way at each transit you will have activation of OUT2 relay and subsequent inhibition of further commands until the end of the set time.
NOTE: the Timed operating mode with a pre-set time of 000 seconds is selected in the default configuration.

SAFETY PASSWORD (PASS)

Once you have finished programming the Receiver, you can store in the **PASS** (default = **OFF**) position a numerical password or a preferred Device to disable or enable programming of the receiver, as follows:
use the UP or DOWN button to go to the **PASS** storage position and press SEL and SET: all Digits 1,2,3,4 and the KEYBOARD, NFC DEVICE, REMOTE CTR, TAG DEVICE LEDs will start flashing, at the same time use the UP or DOWN button to select a number between 0001 and 0999 as desired and press SET or send the code with the Remote Control in continuous mode for 5 seconds or move the Transponder close to the TAG Reader or digit an access code on the KEYBOARD or move the Smartphone close to the NFC Reader, not previously stored (**STOR** will be displayed) and password programming will be complete. From this moment on the settings will be displayed without the possibility of editing them.
To remove the previously entered Password and edit the receiver settings, use the UP or DOWN button to go to the **PASS** storage position and press SEL and SET: all Digits 1,2,3,4 and the KEYBOARD, NFC DEVICE, REMOTE CTR, TAG DEVICE LEDs will start flashing, at the same time use the UP or DOWN button to select the key number chosen previously and press SET or send the code with the Remote Control in continuous mode for seconds or move the Transponder close to the TAG Reader or digit an access code on the KEYBOARD or move the Smartphone close to the NFC Reader, **OFF** will be displayed. Password removed.
Repeat the above operation to enter a new Safety Password.
NOTE: if you enter a wrong password you have to wait 5 minutes to repeat the operation and then 1 hour.

RECEIVER SETTINGS DISPLAY

With the receiver you can display in succession all of the previously stored settings, as follows: use the UP or DOWN button to go to the **DISP** storage position and press SEL, the display will show in succession all of the previously stored settings. Instead, by going on each single setting and pressing SEL, the display will show only the configuration relative to the specific function.

RESET

If you need to reset the factory configurations (operation allowed only if Pass = **OFF**), press SEL, SET, UP and DOWN simultaneously and continuously for a few seconds to turn off the KEYBOARD, NFC DEVICE, REMOTE CTR and TAG DEVICE LEDs; position **- - - -** will be displayed.
NOTE: the display turns off after 1 minute of inactivity to save energy.

OUT 1 OUTPUT CONTACT J4 SELECTION JUMPER (NO/NC)

The receiver has a Jumper (J4) for selection of the type OUT1 relay output contact.
J4 pos. 1-2 = OUT1 relay contact, Normally Closed (NC) type.
J4 pos. 2-3 (default) = OUT1 contact, Normally Open (NO) type.

SELECTION (ON/OFF) TERMINATION RESISTANCE

The receiver communicates with the TAG Reader, Keyboard and NFC Reader devices via standard RS485. Connections can be made with up to 100 m length cables.
If there are communication problems, we recommend moving Jumper J3 to position 1-2 (insertion of termination resistance) on the devices at the ends of the connections:
J3 pos. 1-2 = termination resistance inserted.
J3 pos. 2-3 = termination resistance not inserted (default).

Attention

– The 3V (CR2032) Lithium battery must be replaced every two years to ensure maintenance of the Date and Time settings.
– To replace the discharged battery slide away the plastic lid, extract the battery in use and insert a new one, respecting the polarity indicated on the container.
– - The used battery must be disposed of in the appropriate containers.

ADVANCED FUNCTIONS WITH INT 2292 INTERFACE

The receiver can be connected to an INT 2292 interface supplied optional for saving and/or editing the operation settings on a MicroSD (FAT 32 pre-formatted). The MicroSD can also be inserted in a PC and consulted via the BeSafe RX New Web Application.

SAVING THE SETTINGS ON A MICROSD (S - CO)

With the receiver you can save/archive the settings previously programmed in the Receiver on a MicroSD card inserted in the INT 2292 interface. Proceed as follows to save the settings: use the UP or DOWN button to go to the **S - CO** storage position and press SEL and SET. Digits 2, 3 and 4 will start flashing, at the same time use the UP or DOWN button to select one of the following codes **OFF** or **ON** and press SET to confirm, the display will show **WRIT** = written, if the operation was successful the display will show **STOR** stored or will show **FAIL** = operation failed.

SAVING THE STORED DEVICES (RECORD) ON A MICROSD (S - RE)

With the receiver you can save/archive all codes of the devices previously programmed in the Receiver on a MicroSD card inserted in the INT 2292 interface. Proceed as follows to save the devices: use the UP or DOWN button to go to the **S - RE** storage position and press SEL and SET. Digits 2, 3 and 4 will start flashing, at the same time use the UP or DOWN button to select one of the following codes **OFF** or **ON** and press SET to confirm, the display will show **WRIT** = written and subsequent percentage display of the quantity of data being written, if the operation was successful the display will show **STOR** stored or will show **FAIL** = operation failed.

SAVING THE EVENTS ON A MICROSD (S - EV)

With the receiver you can save/archive all timed events (transits) of the stored devices previously programmed in the Receiver on a MicroSD card inserted in the INT 2292 interface. Proceed as follows to save the events: use the UP or DOWN button to go to the **S - EV** storage position and press SEL and SET. Digits 2, 3 and 4 will start flashing, at the same time use the UP or DOWN button to select one of the following codes **OFF** or **ON** and press SET to confirm, the display will show**WRIT** = written and subsequent percentage display of the quantity of data being written, if the operation was successful the display will show **STOR** stored or will show **FAIL** = operation failed.

NOTE: *the events are automatically saved on the MicroSD each day at 00:00.*

RESTORE

With the INT 2292 interface you can download all information previously archived by a BeSafe RX New Receiver onto another receiver of the same model if required.

The Restore procedure is as follows: press and hold the PUL button on the INT 2292 interface, the display will show **READ** = successfully read, if the operation will be successful the display will show **STOR** = stored or will show **FAIL** = operation failed.

SIGNALS

The INT 2292 interface has a signal LED to show the operating status:
- Off = Normal operation.
- Flashing = Read/write data flow.
- On = Faults - Errors - No MicroSD card.

ADVANCED SETTINGS VIA WEB APPLICATION

The receiver can be connected to a PC through use of an INT 2292 interface supplied optional for saving and/or editing the operation settings on the PC.

You can also take advantage of individual Advanced and Personalised settings for each Device compared to the standard configurations on the control unit.