

GARAGEDOORS**ONLINE**

# **RD20X2ANSA CONTROL BOX**

## **Installation Guide for Roller Garage Doors**

Edition 2022/1



# 1. Installing Receiver Box (SAFETY EDGE)

- 1 To gain access to the board of the panel remove the dark grey plastic cover at the bottom and this will reveal a screw in each corner and the spare fuses for the board, remove these screws and the light grey cover will come away (fig.1).
- 2 Remove the top white plastic light cover by squeezing each side and easing away the cover and disengaging the top clip (fig.2).
- 3 Place the Receiver box on the wall with the cable pointing downwards at a comfortable height to operate the push buttons, but out of the easy reach of children. Between 1500mm up from the floor and 300mm down from the roof/ceiling is recommended (fig.3) the lid of the box that the unit came in can be used as a template for the 3 fixings.
- 4 If you have a safety break with a cable then run the two core cable from the safety brake end across to the same end as the receiver box, making sure to securely fix the cable out of the way of the working mechanism.
- 5 Motor Wiring: Connection of the motor's open and close cables (black & brown) must suit the motor handing as per the diagram (fig.4).
- 6 Safety Brake: if you have a safety brake connection then remove the link from COM24V and STP (fig.5), connect in the brown 2 core cable to COM24V and blue 2 core cable to STP (fig.6).
- 7 Aerial: Steel wire aerial must be connected to terminal EXT A and be facing down out of the bottom of the unit.
- 8 Optional Extra Alarm System: if you have purchased an alarm system it will need to be fixed to the wall and connected to the receiver box, first enter the cable from the alarm into the box through one of the grommets on the bottom and run the cable around and up to the left hand side top corner where the connector is, simply push fit to connect (fig.7), then you know how much cable is available to install the alarm to the wall (fig.8).



fig.1



fig.2



fig.3

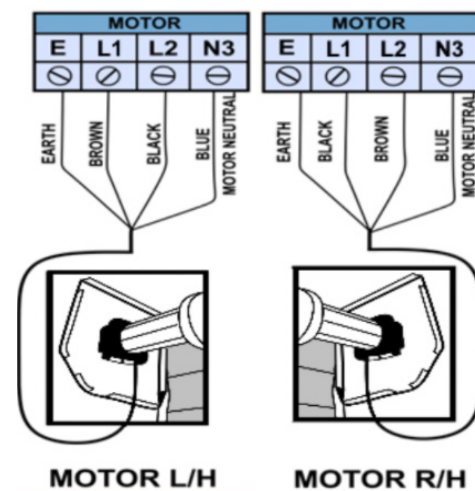


fig.4



**WARNING:** do not install the alarm module next to the radio receiver tile.

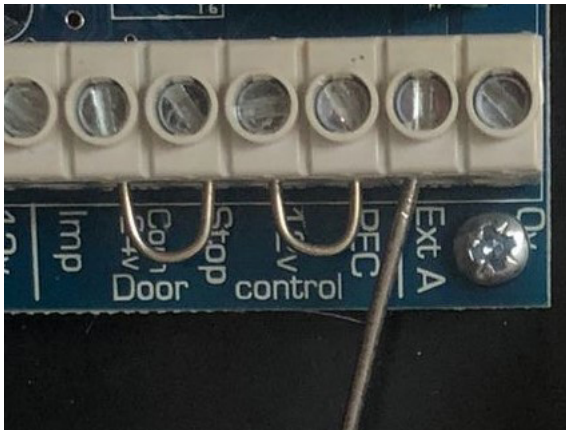


fig.5

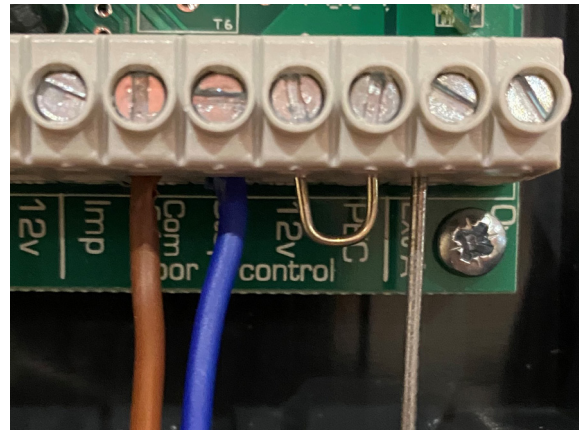


fig.6



fig.7



fig.8

## 2. Setting up Wireless Safety Edge Kit (RD20X2 OPTICAL SAFETY EDGE)



**WARNING:** The Installation of this system **MUST** be carried out in the order as detailed below.

### Programming Base Rail Unit

- 1 With the power isolated remove link wire from 12v to PEC (fig.6) and keep safe for later, the control box is now in hold to run operation for open and close, if the limits of the motor have not been set then please set them now using the Door run button, please be aware the door run button works sequentially but the LED on the board next to it will tell you which way it is moving either open or close. Once limits are set return link wire from 12v to PEC.
- 2 Open the door to around chest height so you can easily access the base rail, on the base rail is 2 pre-drilled holes for the door magnet, these will be on the same side as the motor or for double doors there will be holes both sides, attach the magnet making sure it is the correct way up (fig.9).
- 3 Close the curtain all the way to the floor, wipe both of the guide runners to make sure they are clear of all debris and dust.
- 4 Attached the smart track to the guide runner on the same side as magnet, peel the adhesive strip on the back off and apply to the inner edge of the guide runner. The track must be straight with the cable coming out of the top (fig.10) and the bottom of the rail in line with the magnet on the base rail (fig.11).
- 5 Smart Track Wiring: run cables from track to the receiver box, turn power off and wire in as (fig.12).



fig.9



fig.10



fig.11

**6** Commissioning:

(A) Turn power back on and run the curtain to the fully open position.

(B) Press and hold the operation button on the front of the receiver box next to RED LED (fig.13) for 1 second then release.

(C) Wait 2 seconds then press and release the door run button, the door will start to close, it will travel down and stop just before it touches the floor. The curtain will then partially reopen to confirm that the commissioning has been a success.



fig.13



**WARNING:** you must not stop the door at any point during the commissioning cycle. If the door is stopped or the commissioning doesn't work please repeat from Step (A).

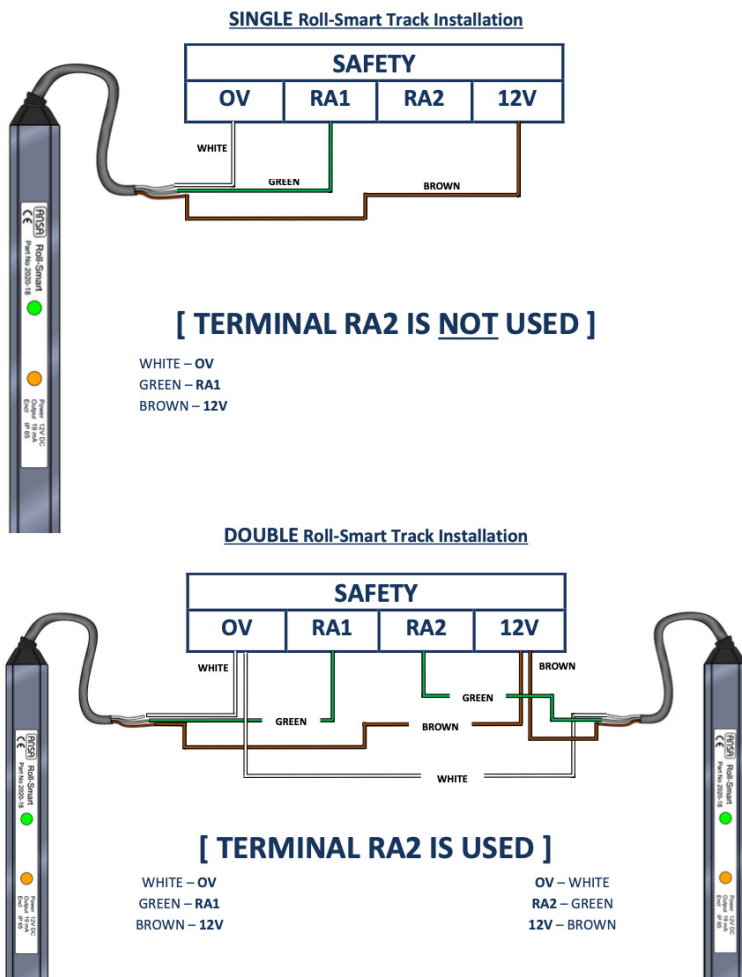


fig.12

## 3. Programming of Remote Control Handsets

### Sequential Operation

- 1 Handsets that come supplied with the receiver box are normally programmed in and work in a sequential operation but if any extra handsets need programming please follow instructions below.
- 2 Press and hold the operation button on receiver box next to the RED LED for roughly 5 seconds and release when the RED LED goes out (**fig.13 & fig.14**).
- 3 The RED LED will flash once to say it is programming mode: With the new unprogrammed handset in hand, press and release the top button (**fig.15**) and the red LED will flash once again, repeat for every handset to be added.
- 4 After programming all desired handsets wait 30 seconds for the RED LED to come back on solid and the door is out of programming mode and ready to use, test handset to check and repeat the process if programming hasn't worked.



fig.14



fig.15

### Clearing Memory of Remote Control Handsets

- 1 Turn mains power off.
- 2 Move dip switch number 6 in the up position (**fig.16**).
- 3 Turn mains power on, the YELLOW LED "set radio" will light up for 5 seconds.
- 4 Turn mains power off, Move dip switch number 6 back down, turn mains power on. All handsets are wiped.

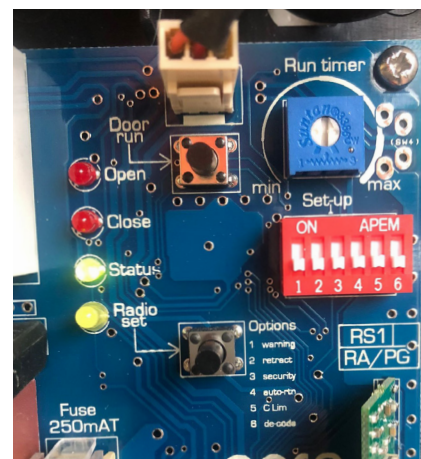


fig.16

## Alarm System

- 1** Operation: The unit will automatically arm on closure, a break in alarm signal is triggered if the button rail is forced open.
- 2** Alarm LED status: the alarm has a LED status LED light, if the light is GREEN then the door is closed and the alarm is set; if the LED is RED the door is open and the alarm is off; if the LED is flashing then the door is in motion or is part open.
- 3** Activation: Should the alarm be activated it will continue the alarm until either the handset is operated to reset the alarm or it will automatically reset after 15 minutes.

## Factory Reset

- 1** Open the door fully, remove the connection going into STOP terminal on the main board (fig.5 / fig.6), the LED next to Status should turn from GREEN to RED, then turn the power off.
- 2** Press and hold the Door Run button on the board (fig.16), whilst holding this button down turn the power on, the RED LED on the box should slowly flash off and on (fig.13).
- 3** Re-insert the connection into the STOP terminal on the main board (fig.5 / fig.6), the Status LED should turn back to green.
- 4** Turn power off and leave for 10 seconds then turn power back on, reset is now complete.

## 4. Optional Extras

### Hard Wired Rocker / Key Switch

#### Wiring As Follows:

##### Grey 11 Terminal Block on Right Hand Side (fig.17):

Switches work on a sequential action so from an initial position of door closed it will be the following cycle: (open, stop, close, top, open etc.)

IMP – UP & DOWN Wire.

COM – Common wire from supply to switch.

##### Rocker Switch (fig.18):

4 – Up wire

3 – Down wire

5 – Common wire for the supply to the switch

Fit Link wire from 5 to 2

To open rocker switch remove screws.

##### Key Switch (fig.19):

Right Block 13 – Up wire

Left Block 14 – Down wire

Right Block 14 – Common wire for the supply to the switch

Left Block 13 – Right Block 14 Link wire between terminals

To open key switch remove screw then turn key a quarter turn.



fig.17

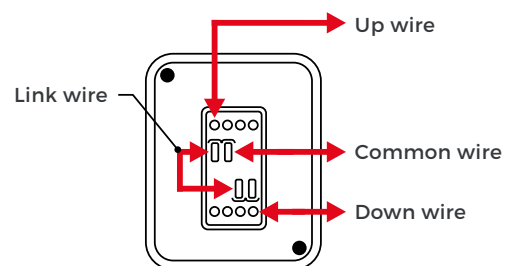


fig.18

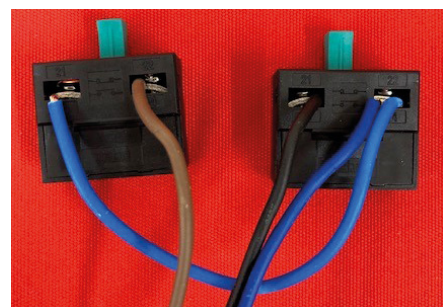


fig.19A

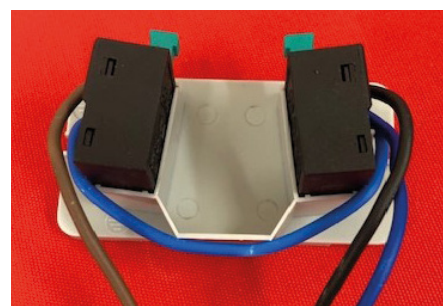


fig.19B



# Wireless Key Pad

## Installation

- 1** Undo and remove the two back-plate securing screws from the top and bottom of the unit and remove the back-plate.
- 2** Using the back-plate as a template, mark the positions of two suitable fixing holes onto the wall then secure the back-plate to the wall using the plugs and fixing screws provided.
- 3** Remove the battery cover from the rear of the keypad and fit the 9 volt battery supplied. Refit the battery cover and fixings. Push the keypad onto the back-plate and secure in place with the two fixing screws.



fig.20

## Pairing Using Access Code

- 1** The keypad is supplied with factory pre-set master code number "9999" and factory access code number "1234".
- 2** To pair keypad to receiver box, press and hold the operation button on receiver box next to the RED LED for roughly 5 seconds and release when the RED LED goes out (**fig.13 & fig.14**).
- 3** The RED LED will flash once to say it is programming mode: Enter the factory access code "1234" (the LED keys flash to confirm each key entry and then flash twice once full code has been entered to indicate the correct access code) the red LED on the box will flash once again to confirm programming.
- 4** Wait 30 seconds for the RED LED to come back on solid and the door is out of programming mode and ready to use, test keypad code to check and repeat the process if programming hasn't worked.

## Changing Access Code

For security reasons it is essential that the access code number is changed to another 4, 5 or 6 digit number these numbers can be in any combination of numbers 0-9, excluding # and \*.

To change access code follow this sequence: press # master code # existing code # new code # new code. The LED keys flash twice confirming the new access code is acknowledged. (Example from "1234" to "5689", you follow this sequence: press # 9999 # 1234 # 5689 # 5689.) WARNING: You must keep this new unique access code safe as if lost or forgotten the Keypad will need to be replaced, which is not covered under warranty.

## Operation

Entering your personal access code turns on the keypad and operates the control unit, A 20 second time delay is activated and you may press any numerical key, 0- 9 (excluding # or \*) to operate the control box which is in sequential operation ( down, stop, up, stop etc.)the same manner as a key fob transmitter normally used to operate the Receiver Box.

## Keypad Features

- 1** At night the \* key can be pressed to illuminate the keypad.
- 2** Every number entered is confirmed by the LED keys flashing.
- 3** If an incorrect access code is accidentally entered, press \* and re-enter the correct code.
- 4** Flat battery warning - when using the keypad, the LED keys will flash rapidly if the battery is low, indicating the battery needs replacing.
- 5** The Keypad has an anti-tamper feature - if 6 - 9 incorrect random access codes are entered [or 36 incorrect keystrokes] the unit will automatically switch off for 10 minutes. If the battery is disconnected in an attempt to defeat the anti-tamper, the time out restarts when the battery is reconnected.

# 5. Operating Diagnostics

RSI LED Signal	Door Status	Cause	Solution
LED On	Operational	No fault	Door in stand-by mode
LED Off	Door is not operational	<u>Power supply fault</u> Fuse in plug has blown PCB fuses have blown  Other fault	Test mains power supply and switch on. Reset circuit breaker Replace 5amp fuse in 3 pin plug (or spur unit) Replace PCB main fuse (coloured white) 6.3amp 5mmx20mm Replace PCB control fuse (clear) 500ma 5mmx20mm (note: spare fuses are fitted to RS-1 cover - See figure 7, page 2) Possible PCB failure - Contact your Installer
LED On	Door is not operational	<u>Possible Motor Fault</u> Motor thermal trip has activated Motor limit switches need to be set Possible motor fault has developed	Allow door motor to cool for approximately 20 minutes before attempting to operate the door Adjust or set motor limit switches in accordance with door manufacturers instructions Close door with manual override. Switch on dip switch number 3 Try to operate door using RS-1 control button. A possible motor fault is indicated if the door fails to operate but the door open and door close LEDs illuminate. If so - Contact your Installer
LED flashing rapidly 3 times, gap, repeating	Door opens but will not close (doors with Roll-Smart Safety System)	Roll-Smart Track GREEN LED is ON  Roll-Smart Track GREEN LED is OFF	Check Roll-Smart sensor magnet position Check all Roll-Smart track cable connections are secure Check that Roll-Smart commissioning has been carried out in line with 6.2 F  Check all Roll-Smart track cable connections are secure  * If no fault is found - Contact your Installer - Door can be closed using 'hold-to-run' mode (see Figure 2.4, page 2)
LED flashing rapidly	Door opens but will not close (doors with photocell safety system)	<u>Possible Safety System Fault</u> Photoelectric cell (PEC) beam is obstructed Green PEC LED is ON & yellow PEC LED is off or flashing	Remove any obstacles in the doorway  Ensure the Photoelectric cell and Reflector are clean Check alignment of the Photoelectric cell  * If no fault is found - Contact your Installer - Door can be closed using 'hold-to-run' mode (see Figure 2.4, page 2)
LED On	Door is operational but sometimes re-opens when closing	Photoelectric cell problem  Roll-Smart System problem	Check that Photoelectric cell brackets are secure Check Photoelectric cell alignment  Check that the Roll-Smart sensor magnet is correctly fitted Switch on DIP option switch No. 1 (see fig. 8 page 4) which increases the system response time
LED flashing slowly every 2 seconds	Door is not operational	Stop circuit is activated  Additional push button control is of the wrong type or has a wiring fault  RS-1 control button is faulty	Rs 1 PCB status LED should be in green. If it is red - check that the PCB link (or Stop push button) connected to terminals COM and STP is correctly installed  Do not connect push buttons having neon illumination Push buttons should be 'push to make' type Check for short circuit in push button or wiring Check RS-1 control button operation. Button should click when pressed. If no fault is found - Contact your installer
LED On	Door stops randomly at any height	Motor current sensing system is activated	Switch on DIP switch 5 (see 15.6 - page 9)
LED On	Door is operational but has reduced range from keyfob transmitter	Battery in transmitter is weak - keyfob LED is dim  Aerial has not been fitted to RS-1 control unit	Renew keyfob transmitter battery  Install steel wire aerial (see 4.7, page 4 and Figure 3, page 5)