

# RD20X2SOM SOMFY CONTROL BOX

## Installation Guide for Roller Garage Doors

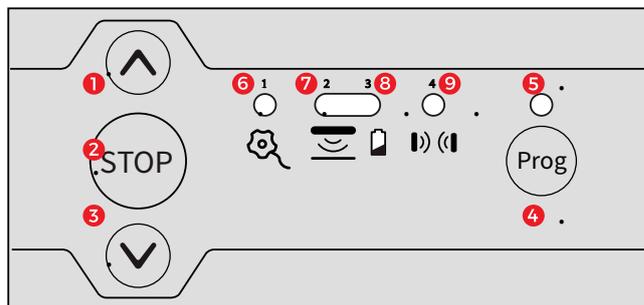
Edition 2022/1



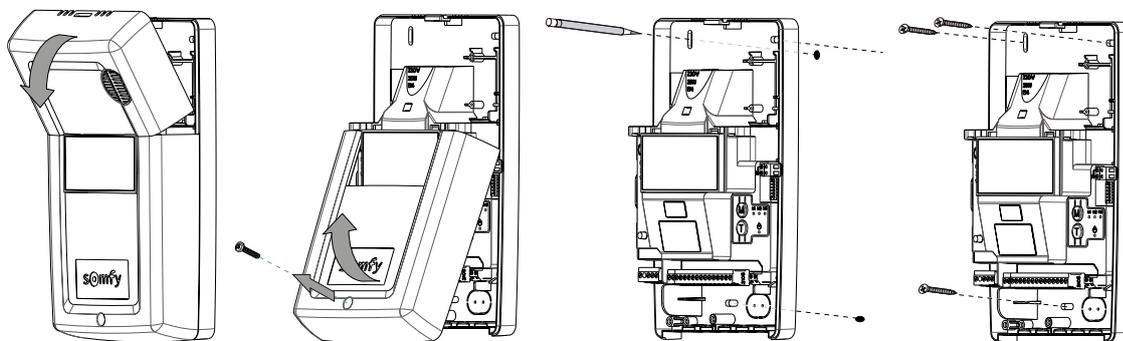
# 1. Somfy Optical Safety Edge (ROLLIXO RTS)

## Somfy Rollixo RTS Control Panel

No.	Description
1	Up button
2	Stop button
3	Down button
4	Prog button
5	Prog LED
6	Motor & safety brake LED
7	Safety edge LED
8	Battery LED
9	Photocell LED



## Mounting The Rollixo RTS



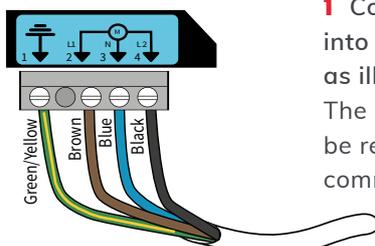
**1** Remove the courtesy light cover.

**2** Unscrew and remove the panel cover.

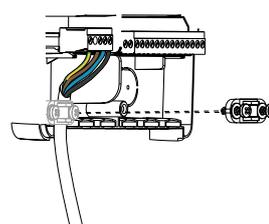
**3** Mark the wall drilling positions.

**4** Secure the Rollixo RTS in place.

## Motor Wiring

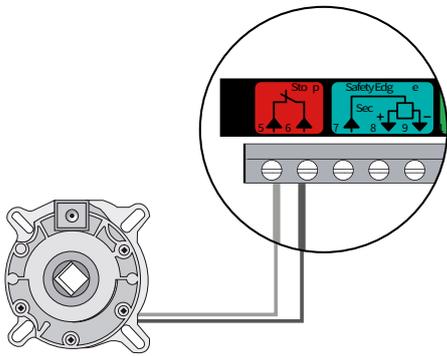


**1** Connect the motor wires into terminals 1, 2, 3 & 4 as illustrated above. Note: The motor direction can be reversed during the commissioning procedure.

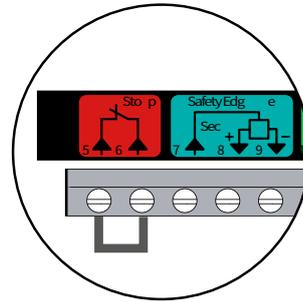


**1** Secure the motor supply cable in place with the cable clamp.

## Safety Brake Wiring

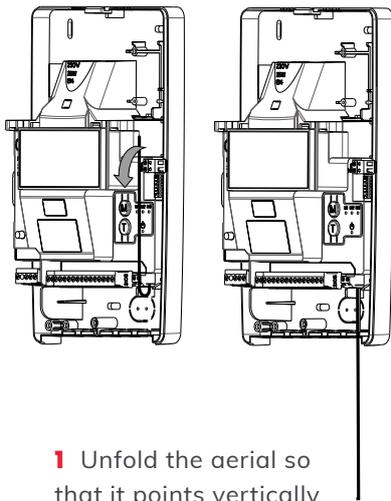


**1** Connect the safety brake into terminals 5 & 6.

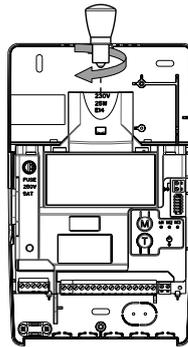


**2** Use the ink provided to connect terminals 5 & 6 if no safety brake is required.

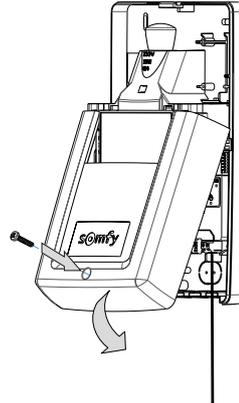
## Powering Up The Rollixo Rts



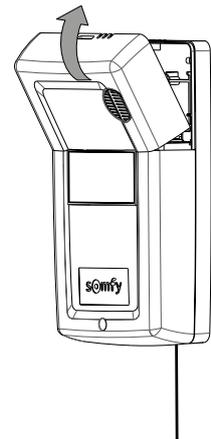
**1** Unfold the aerial so that it points vertically downwards.



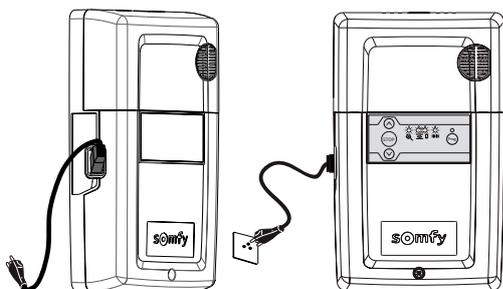
**2** Screw the bulb supplied into the light fitting.



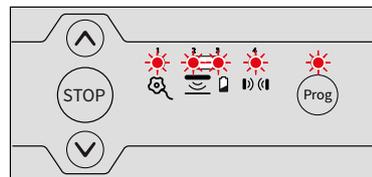
**3** Refit the panel cover and secure with the screw.



**4** Refit the courtesy light cover.



**5** Plug in the supply cable and connect the mains supply.



All the LED's come on briefly and then go out.



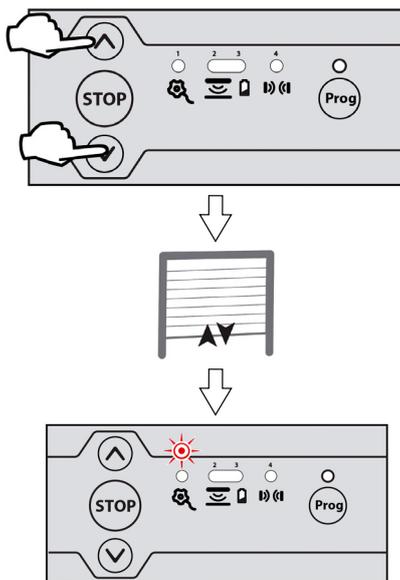
If the motor LED comes on, check the safety brake or link connection.



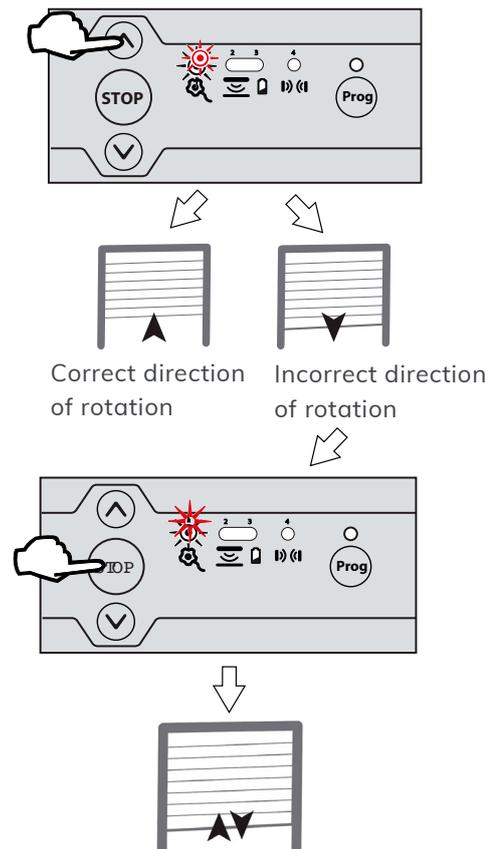
If the safety edge LED comes on, the safety edge transmitter has not been recognised. (This is normal if the safety edge transmitter has not been paired to the Rollixo RTS yet).

## 2. Motor Direction of Rotation Setting

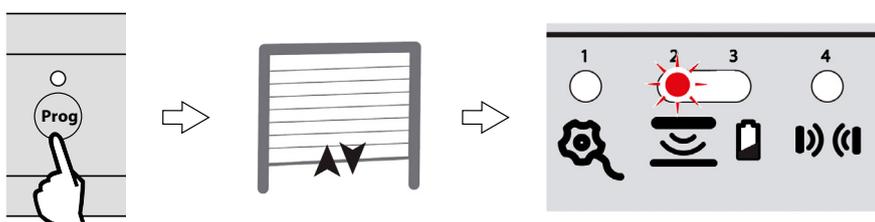
**1** At the same time press and hold the UP & DOWN buttons on the control panel until the door moves forward AND backwards, then release the buttons – the controller is now in 'motor adjustment mode', the motor LED light will flash slowly. In motor adjustment mode, the Up & Down control buttons are in 'hold to run' mode - you must press and hold the button in to operate the door up and down.



**2** Press and hold the UP button to check the motor direction. If the motor direction is correct, move on to set the limits of the door. If the motor direction is incorrect, you can either swap the black and brown motor wires around or press and hold the STOP button until the door judders up and down > the direction has been reversed > check again and then move on to set the limits of the door.

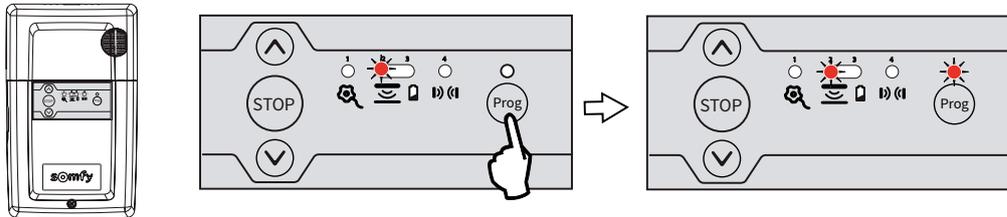


**3** Briefly press the PROG button until the door jogs to complete the motor set up procedure. The motor & safety brake LED goes out and the safety edge LED comes on.

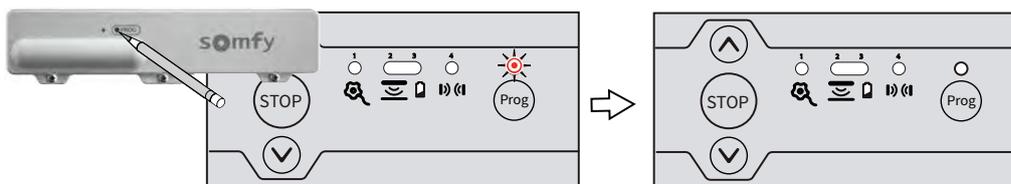


## Pairing The Somfy Safety Edge Transmitter

- 1 Bring the door and the bottom rail to a workable eye level. Press and hold the 'Prog' button on the Rollixo panel until the LED light above it comes on – Then let go!



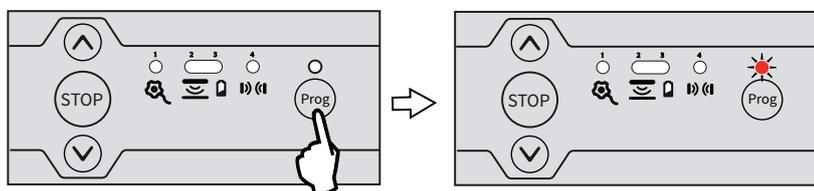
- 2 Now approach the Transmitter on the Bottom Rail – Using a small tool press the 'Prog' button on the unit until the Rollixo panel 'Prog' LED flashes, then let go (this could be up to 5 seconds) the 2 units are now active.



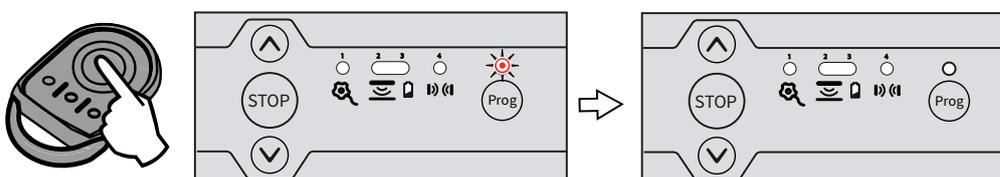
- 3 Check the operation of the door by pressing the Rollixo Up & Down control buttons.
- 4 Check that the safety edge works by activating the edge.

## Pairing RD20/4SOM Handsets

- 1 Press the 'Prog' button on the Rollixo RTS front panel until the LED above the Prog button lights up RED.



- 2 Press the button on the keyfob that you want to control the Rollixo RTS controller with until the 'Prog' LED on the Rollixo RTS controller flashes and then goes out.



## Positioning Of Magnets

**1** Bring the door down to its final closed/end limit position. If the door lands on floor and stops, go to point. If the door comes to floor and retracts (bounces back) then see check the detail below, this happens because the doors safety edge system has been activated;

Q. Are the end blocks sat in a final position that is lower than the floor level?

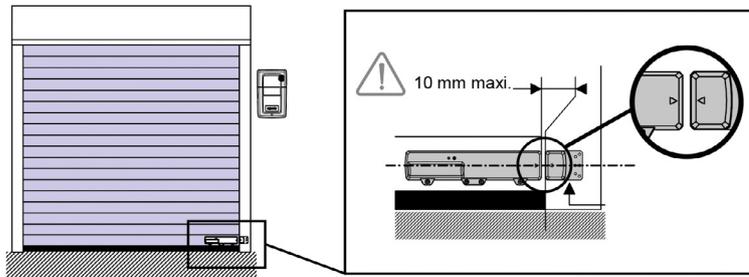
A. Raise the blocks and build up with packing.

Q. Is there a high point or bump in the floor?

A. Floor needs to be levelled.

**2** Once you are happy that the door has been installed within its operating parameters then we can fit the bottom magnet.

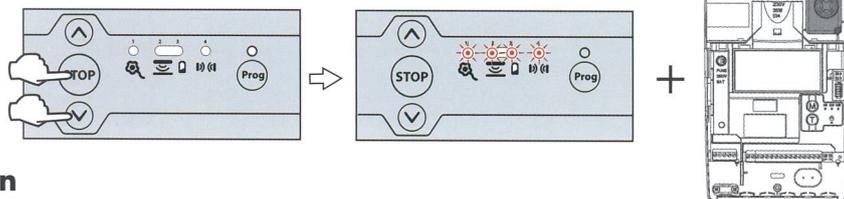
Mark the guide rail at its lowest point to match the arrow indicated on the right of the Transmitter. Now move the door up out of the way and use the temporary sticky pad to locate the magnet, now permanently and mechanically fix the magnet with screws provided in place. The magnet arrows should now be aligned and no more than 10mm apart.



## Activating/Deactivating The Alarm

To activate/deactivate the alarm, simultaneously press the "STOP" and buttons on the receiver until the 4 indicator lights flash rapidly.

The alarm emits a beep if it has been activated.



### Alarm Operation

The alarm is triggered for 2 minutes if the door is raised manually.

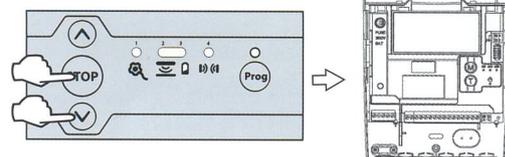
No movement of the door is possible when the alarm is sounding.

When the alarm sounds, press a button on a remote control memorised in the receiver to stop it. The alarm can only be stopped with a memorised remote control.

### Alarm Operation Test

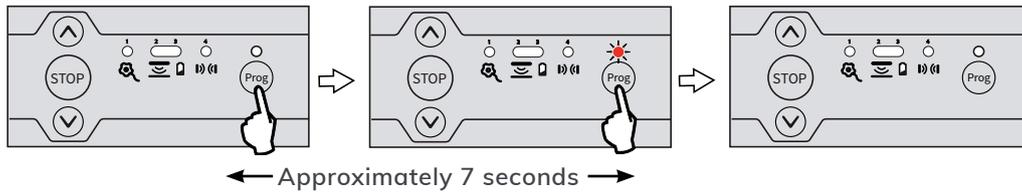
Press "STOP" and the Down button on the receiver simultaneously.

The alarm triggers briefly to indicate that it is activated.

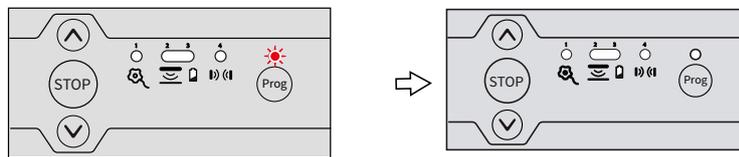


## Deleting All Somfy Remote Controls From The Memory

1 Press the 'Prog' button on the Rollixo RTS front panel for approximately 7 seconds until the LED goes out:

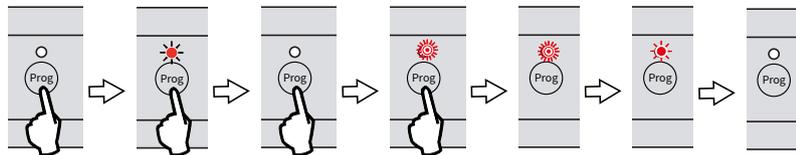


The LED will then begin to flash slowly and then go out - all remote controls have been deleted.



## Deleting The Safety Edge Transmitter

1 Press the 'Prog' button on the Rollixo RTS front panel for approximately 14 seconds:



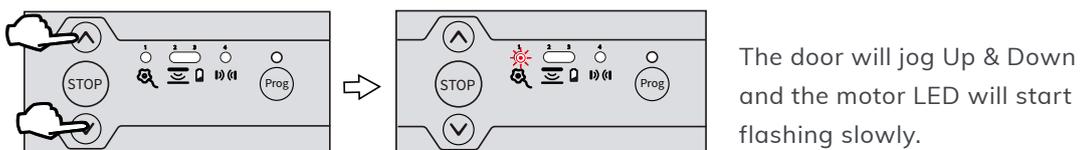
The LED will: come on - go out - start to flash rapidly - then let go of the 'Prog' button.

The LED will flash slower then go out.

The safety edge transmitter has been deleted.

## Return To The Factory Mode

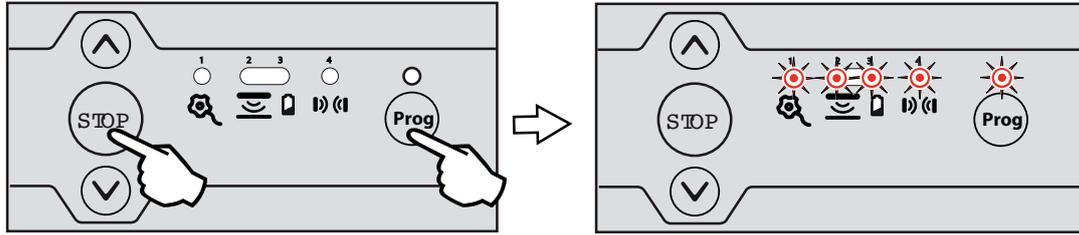
1 After deleting all the remote controls and safety edge transmitters from the memory: Press simultaneously the Up & Down buttons on the front panel.



The Rollixo RTS control panel has now been set back to the factory mode.

## Locking The Front Of Panel

1 Press button STOP and PROG on the receiver until all the indicator lights flash.



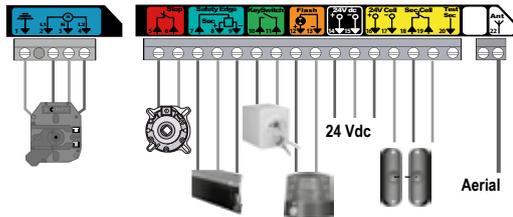
2 Entry into programming mode by pressing button PROG the receiver is locked.

Entry into motor end limit setting mode via pressing buttons  and  on the receiver is locked.

The parameter setting of the operating modes is locked.

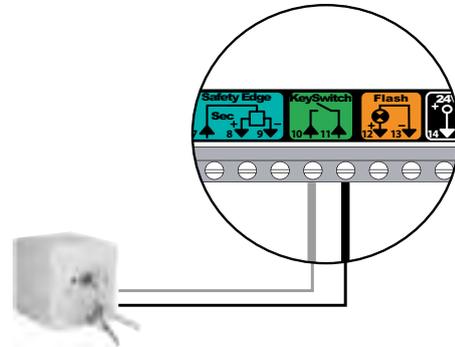
## Connecting Additional Somfy Devices

### General Wiring Diagram



### Key Switch

Successive presses cause the motor to move (initial position: door closed) as per the following cycle: open, stop, close, stop, open etc.

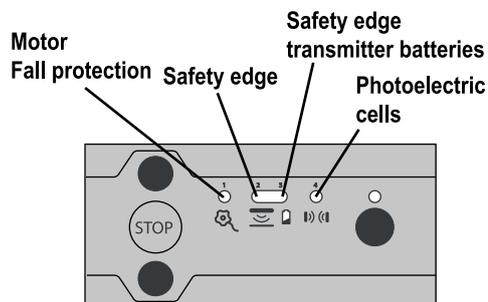


Terminal	Type of terminal	Connection	Comments
1	Earth	RDO CSI 50 or 60	
2	L1	motor	
3	Neutral		
4	L2		
5	Contact	Fall protection - NC	
6	Shared	contact	
7	Contact	Safety edge safety input	Wired 8k2 resistive safety edge (terminals 7 - 8)
8	12 Vdc	12 Vdc safety edge power supply	Wired optical safety edge (terminals 7 - 8 - 9)
9	0 Vdc		
10	Contact	NO contact	Sequential control
11	Shared		
12	24 Vdc	24V - 3.5 W orange light output	Maximum 4 W bulb
13	0 Vdc		
14	24 Vdc	TX cell 24 V power supply	Transmitting photoelectric cell/Reflex photocell power supply
15	0 Vdc		
16	24 Vdc	RX cell 24 V power supply	Receiving photoelectric cell power supply
17	0 Vdc		
18	Shared		
19	Contact	Cell safety input (NC)	
20	Test output	Cell safety test output	Reflex photocell self-test
22		433.42 MHz aerial	Do not connect an offset aerial (incompatible)

## Operating Diagnostics

The indicator lights on the front of the Rollixo receiver notify the user of the installation's status.

Indicator light status		Meaning
○	Off	Functional installation
☀	Rapid flashing	Deactivation/activation in progress
☀	Permanently lit	Installation fault/failure



	Indicator light status					Diagnostics	Consequences	Actions/ Troubleshooting
	☀	☀	☀	☀	Prog			
<b>Motor</b>	☀	○	○	○	○	Activated motor thermal protection	No movement possible	Wait around 10 minutes.
<b>Radio safety edge</b>	○	☀	○	○	☀	Radio interference on the safety edge transmitter	Opening and stopping ok Closed by pressing and holding down	If a powerful radio system is present on the site (infrared detector, TV transmitter, etc.) and is transmitting on the same frequency, the receiver will wait for the transmission to end to before controlling the door again.
	○	☀	☀	○	○	Safety edge transmitter low battery indication.	Opening ok Closed by pressing and holding down	If the fault persists, replace the safety edge transmitter batteries.
	○	☀	○	○	○	Obstacle detection	Remove the obstacle by automatic partial opening	Check that no obstacle is causing the safety edge to detect.
<b>Photoelectric cells</b>	○	○	○	☀	○	Cell fault	Opening ok Closed by pressing and holding down	Check that no obstacle is cutting across the cell beam.
	○	○	○	☀	○	Obstacle detection	Remove the obstacle by full automatic opening	Check that no obstacle is cutting across the cell beam

## Wireless Key Pad



### Key pad

Commissioning (for first use)

1. Open the Digipad with the key provided.
2. Press the RESET button.
3. Check that the Digipad has been commissioned by pressing on one of the keypad buttons. If the lower indicator light comes on, the Digipad has been commissioned. If it does not come on, press the RESET button again and check that it has been commissioned.

Press button Prog on the receiver until the indicator light comes on permanently.

Enter 6 x 0 on keypad then press the desired operating button.

### Changing the main code

By default, the main code is 000000 on a new Digipad.

To change the main code:

1. Enter the main code and confirm with the SET button.
2. Press the SET button until the lower light turns on (approximately 7 seconds). The lower light remains on.
3. Enter the chosen replacement code (between 4-8 characters) and confirm with the SET button. The lower light will turn off & come on again.
4. Enter the code again and confirm with the SET button. The lower light will turn off. The main code is recorded.

### Main code forgotten and full reset

The Digipad must be reset: stored settings cleared, codes and radio protocol reset to factory settings.

#### To reset the Digipad:

1. Open the Digipad with the key provided.
2. Press the ADR button (approximately 10 seconds). The upper light will come on when the button is pressed and then the 2 lights will flash 7 times. The Digipad is reset.
3. Close the Digipad.
4. Repeat the full installation procedure: programming, changing main code, etc.