

PROT. N.:

## 9 FUNCTIONS RESCUE

## 1. Part Numbers

	SISTEMATICA S.p.A. P/N	CUSTOMER P/N
KIT	XKITSE411XFHX	
HANDHELD	XS391PXSE011X	
POWER SUPPLY (2x)	XBAT02000020	
CONTROLLER	XS182RBSE111X	
WIRING HARNESS	XCBLSE181RHA	
	XANT00000090 (L=5mt)	
EXTERNAL ANTENNA	XANT000000140 (STUB)	

# 2. Handheld



PART NUMBER XS391PXSE011X



PART NUMBER XBAT020000020

POWER SUPPLY		
Alkaline 3V 2x1,5 AAA	$\boxtimes$	Supplied as kit
COMMUNICATION INTERFAC	<b>ES</b>	
RF 865.4 - 868.2 MHz	$\boxtimes$	
FEATURES		
Keyboard backlight	$\boxtimes$	
Standard sticker	$\boxtimes$	
Standard keyboard	$\boxtimes$	
Standard neck strap		
Cradle		
COMPLIANCE MARK		
CE	$\boxtimes$	
International Protection	IP66	
NOTES		The batteries are not installed in the handheld

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# 3. Controller 20



POWER SUPPLY		
12-24 V <sub>dc</sub>	$\square$	
COMMUNICATION INTERFAC	CES	
RF 865.4 - 868.2 MHz	$\square$	
INPUT-OUTPUT		
Master Output	$\square$	
Emergency Output	$\square$	
Power output number	9	Max 5 A per output
Digital input number	1	
Whole maximum current	20	Fuse rated current (Ampere)
available on the outputs (A)	20	ruse rateu current (Ampere)
OPTIONS		
External antenna	$\boxtimes$	🛛 Stub
		$\boxtimes$ Remote, cable length L = 5mt
Start Timeout (T <sub>start</sub> )	2 min.	
COMPLIANCE MARK	-	
CE	$\square$	
E24	$\square$	
International Protection	IP67	
ΝΟΤΕ		8 outputs are unused



PIN	COLOR	TYPE	NAME	NOTES
A8	WHITE	0	М.О.	Master Output
A7	GRAY/BLACK	0	E.O.	Emergency Output
B7	BLUE	0	EV 1	FLOOR UP
C7	BROWN	0	EV 2	FLOOR DOWN
A6	GRAY	0	EV 3	FLOOR IN
B6	VIOLET	0	EV 4	FLOOR OUT
A5	PINK	0	EV 5	WINCH IN
B5	ORANGE	0	EV 6	WINCH OUT
A4	TRANSPARENT	0	EV 7	WINCH TRANSLATION LEFT
B4	BEIGE	0	EV 8	WINCH TRANSLATION RIGHT
C6	BLACK/WHITE	0	EV 9	UNUSED
C5	BLUE/WHITE	0	EV 10	UNUSED
A2	BROWN/WHITE	0	EV 11	UNUSED
A1	GRAY/WHITE	0	EV 12	UNUSED
A3	RED/WHITE	0	EV 13	UNUSED
B3	VIOLET/WHITE	0	EV 14	UNUSED
C2	PINK/WHITE	0	EV 15	UNUSED
B2	ORANGE/WHITE	0	EV 16	UNUSED
C4	TRANSPARENT/WHITE	0	EV 17	LIGHT
C3	BEIGE/WHITE	Ι	IN 1	SET OUTPUT M/L
B8	RED	S	+ ALIM	
B1	BLACK	S	- ALIM	

- I: Input
- O: Output
- S: Power supply signal

CAUTION: please carefully isolate the unused wire.

4. System and functioning description

## FUNCTIONS

The system is composed by three functions, each of them with several outputs:

- Floor
  - o Up
  - o Down
  - o In
  - Out
  - Winch
    - o In
    - Out
    - Translation Left
    - Translation Right
- Light



## **BUTTON DESCRIPTION**

The handheld has 8 buttons:

- N° 1 button "SYSTEM START" / "CONFIRM FUNCTION SELECTION" (<sup>1</sup>)
  N° 1 button "SYSTEM STOP" (<sup>1</sup>)
- N° 4 buttons "HANDLING" ( $\mathbf{O}, \mathbf{O}, \mathbf{O} \in \mathbf{O}$ )
- N° 1 button "LIGHT" (
- N° 1 button "SELECTION" (
  ) (FLOOR/WINCH)

The following table describes the operation(s) of each buttons:

SYSTEM START / CONFIRM FUNCTION SELECTION	START		STOP	SYSTEM STOP
FLOOR: UP WINCH: IN	0		0	FLOOR: DOWN WINCH: OUT
FLOOR: IN WINCH: TRANSLATION LEFT	0	••••	0	FLOOR: OUT WINCH: TRANSLATION RIGHT
LIGHT				FUNCTION SELECTION (FLOOR/WINCH)

#### **BACKLIGHT DESCRIPTION**

The handheld has one light sensor that allows to turn ON the keyboard backlight when necessary.



## LEDS DESCRIPTION

The handheld has 2 LEDs. Each LED corresponds to a different function and their behavior depicts the system status:

SYMBOL	LED	FUNCTION	LED STATUS	_	DESCRIPTION LED
			FAST BLINK	(1)	FUNCTION SELECTION MODE
			SLOW BLINK	(2a)	FUNCTION FLOOR CONFIRMED
			DOUBLE FLASH	(3a)	TRANSMISSION
	GREEN	FLOOR	BLINK (WITH "WINCH" FUNCTION SELECTED)	(4a)	ALMOST LOW BATTERY
			FIXED (WITH "WINCH" FUNCTION SELECTED)	(5a)	LOW BATTERY
	GREEN WINCH		FAST BLINK	(1)	FUNCTION SELECTION MODE
			SLOW BLINK	(2b)	FUNCTION WINCH CONFIRMED
			DOUBLE FLASH	(3b)	TRANSMISSION
· .		WINCH	BLINK (WITH "FLOOR" FUNCTION SELECTED)	(4a)	ALMOST LOW BATTERY
			FIXED (WITH "FLOOR" FUNCTION SELECTED)	(5a)	LOW BATTERY

(1) <u>FAST BLINK</u>: when button "SELECTION" ( $\bigcirc$ ) is pressed, the LEDs blink quickly (each 0,5s) alternately (FLOOR $\leftrightarrow$ WINCH). This status is named "FUNCTION SELECTION".

(2a) <u>SLOW BLINK</u>: the green LED "FLOOR" blink slowly (each 1,5s) to indicate that "FLOOR" function is confirmed. With "HANDLING" buttons, it is possible to activate the related outputs.

(2b) <u>SLOW BLINK</u>: the green LED "WINCH" blink slowly (each 1,5s) to indicate that "WINCH" function is confirmed. With "HANDLING" buttons, it is possible to activate the related outputs.

(3a) <u>DOUBLE FLASH</u>: the green LED "FLOOR" flashes twice when an "HANDLING" button is pressed. If the button is held down and the command is confirmed by the controller, then the LED flashes twice each 1,5 seconds.

(3b) <u>DOUBLE FLASH</u>: the green LED "WINCH" flashes twice when an "HANDLING" button is pressed. If the button is held down and the command is confirmed by the controller, then the LED flashes twice each 1,5 seconds.

(4a) <u>BLINK (WITH "WINCH" FUNCTION SELECTED</u>: the green LED "FLOOR" blinks when an "HANDLING" button is pressed during the execution of "WINCH" function. It indicates that battery level is almost low.

(4b) <u>BLINK (WITH "FLOOR" FUNCTION SELECTED</u>): the green LED "WINCH" blinks when an "HANDLING" button is pressed during the execution of "FLOOR" function. It indicates that battery level is almost low.

(5a) <u>FIXED (WITH "WINCH" FUNCTION SELECTED</u>): the green LED "FLOOR" remains ON when an "HANDLING" button is pressed during the execution of "WINCH" function. It indicates that battery level is low.

(5b) <u>FIXED (WITH "FLOOR" FUNCTION SELECTED</u>): the green LED "WINCH" remains ON when an "HANDLING" button is pressed during the execution of "FLOOR" function. It indicates that battery level is low.



## FUNCTIONS ACTIVATION

Follow the procedure below to activate the outputs:

**1.** Press "SELECTION" button( to activate "FUNCTION SELECTION" mode. "SELECTION" button allow to select a function between FLOOR or WINCH. The green LED "FLOOR" on the handheld begins to flash each 0,5 second (fast blink).









ON by flashing each 0,5 second.

**2.** Press again "SELECTION" button (**9**<sup>+</sup>) until the LED of the desired function turns



LED OPERATION



"SB": "SELECTION" button

**3.** After selecting the desired function, press "START" button (<sup>10)</sup>) to confirm the selection: the corresponding LED starts flashing each 1,5 seconds (slow blink).

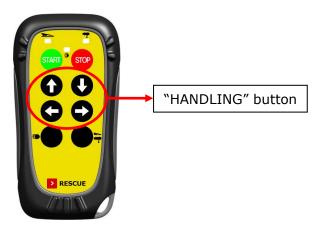


LED OPERATION WITH SELECTION CONFIRMED (EXAMPLE: WINCH FUNCTION)





**4.** Press the "HANDLING" buttons (**①**, **♥**, **♥** o **♥**) to activate the outputs related to the selected function.



**5.** To select another function press "STOP" button (<sup>10)</sup>), then perform the procedure from step 1.

## INPUT

The controller has one digital input that allows to configure the outputs in M (MAINTAINED) mode or L (LATCHED) mode.

The possible input connections are described in the following table:

WIRE	CONNECTION	<b>OUTPUTS MODE</b>
	- ALIM.	М
BEIGE/WHITE	+ ALIM.	L

M: MAINTAINED function. As long as the user holds the button pressed, the correspondent output on the controller stays on. It will be switched off as soon as the user releases the button.

L: LATCHED function (or ON/OFF). The controller output stays on when the button is released. It will be switched off with the next pression of the same button.

The following tables illustrates how the system works according to the selected function.



Green LED "FLOOR" (



) is blinking on the handheld.

#### **INPUT CONNECTED TO "- ALIM."**

BUTTON	FUNCTION	CONTROLLER OUTPUTS BEHAVIOUR	MODE
(START)	SYSTEM START	E.O. On	-
👓 (STOP)	SYSTEM STOP	E.O. Off	-
0	FLOOR UP	M.O. + EV 1	М
0	FLOOR DOWN	M.O. + EV 2	М
0	FLOOR IN	M.O. + EV 3	М
	FLOOR OUT	M.O. + EV 4	М
	LIGHT <sup>1</sup>	EV 17	L

## **INPUT CONNECT TO "+ ALIM."**

BUTTON	FUNCTION	CONTROLLER OUTPUTS BEHAVIOUR	MODE
(START)	SYSTEM START	E.O. On	-
(STOP)	SYSTEM STOP	E.O. Off	-
0	FLOOR UP	M.O. + EV 1	L
0	FLOOR DOWN	M.O. + EV 2	L
0	FLOOR IN	M.O. + EV 3	L
0	FLOOR OUT	M.O. + EV 4	L
	LIGHT <sup>1</sup>	EV 17	L

M: MAINTAINED function. As long as the user holds the button pressed, the correspondent output on the controller stays on. It will be switched off as soon as the user releases the button.

L: LATCHED function (or ON/OFF). The controller output stays on when the button is released. It will be switched off with the next pression of the same button.

<sup>1</sup>: this function can also be activated when the system is in "STOP SYSTEM" mode.

With this function, simultaneous activation of two or more outputs may occur only as per the following table:

•					•	
		1	2	3	4	17
1		\	Ν	Ν	Ν	Y
2		Ν	$\backslash$	Ν	Ν	Υ
3		Ν	Ν	$\setminus$	Ν	Y
4		Ν	Ν	Ν	$\setminus$	Υ
17	7	Υ	Υ	Υ	Υ	

#### Y: possible N: not possible



Green LED "WINCH" (



) is blinking on the handheld.

## **INPUT CONNECTED TO "- ALIM."**

BUTTON	FUNCTION	CONTROLLER OUTPUTS BEHAVIOUR	MODE
(START)	SYSTEM START	E.O. On	-
(STOP)	SYSTEM STOP	E.O. Off	-
0	WINCH IN	M.O. + EV 5	М
0	WINCH OUT	M.O. + EV 6	М
0	WINCH TRANSLATION LEFT	M.O. + EV 7	М
•	WINCH TRANSLATION RIGHT	M.O. + EV 8	М
	LIGHT <sup>1</sup>	EV 17	L

## INPUT CONNECT TO "+ ALIM."

BUTTON	FUNCTION	CONTROLLER OUTPUTS BEHAVIOUR	MODE
(START)	SYSTEM START	E.O. On	-
👓 (STOP)	SYSTEM STOP	E.O. Off	-
0	WINCH IN	M.O. + EV 5	L
0	WINCH OUT	M.O. + EV 6	L
•	WINCH TRANSLATION LEFT	M.O. + EV 7	L
	WINCH TRANSLATION RIGHT	M.O. + EV 8	L
	LIGHT <sup>1</sup>	EV 17	L

M: MAINTAINED function. As long as the user holds the button pressed, the correspondent output on the controller stays on. It will be switched off as soon as the user releases the button.

L: LATCHED function (or ON/OFF). The controller output stays on when the button is released. It will be switched off with the next pression of the same button.

<sup>1</sup>: this function can also be activated when the system is in "STOP SYSTEM" mode.

With this function, simultaneous activation of two or more outputs may occur only as per the following table:

	5	6	7	8	17
5	$\setminus$	Ν	Ν	Ν	Υ
6	Ν	$\backslash$	Ν	Ν	Υ
7	Ν	Ν	$\backslash$	Ν	Υ
8	Ν	Ν	Ν	$\setminus$	Υ
17	Υ	Υ	Υ	Υ	

Y:	possible	N:	non	possible
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# 5. Wiring harness

