



AL50RC

RADIO PORTABLE CONSOLLE



- Portable remote-control device for industrial lifting machines, materials handling and aerial platforms equipped with a CAN bus network and/or the RDC EVO receiver
- Double system connection (wired and radio)
- Up to 2 double-axe proportional joysticks
- Up to 10 pushbuttons
- Up to 12 led
- Emergency pushbutton with dry contacts
- Fully customizable layout
- Hamming security code for continuous work without interruptions on 434 or 868 MHz band

TECHNICAL FEATURES

MASTER CODE	AL50RC.453	
POWER SUPPLY	EXTERNAL POWER SUPPLY: 9-30 VDC BATTERY: INTEGRATED NI-MH AUTONOMY: UP TO 8 HOURS IN CONTINUOS TRANSMISSION (MAX 4 HOURS FOR A COMPLETE CHARGE)	
COMMUNICATION PORTS	NETWORK: CAN BUS 2.0B COMPLIANT (11, 29 BIT) ISO 11898 2 UP TO 1Mbit/s RADIO: 868 MHz / 434 MHz BAND	
RADIO FEATURES	BAND: 868 MHz (869.700-870.00 MHz) / 434 MHz (433.050-434.790 MHz) CHANNELS: 12 (AUTOMATIC FREQUENCY SCAN) MODULATION: 2-GFSK\	
RADIO PROTOCOL	PACKET TRANSMISISON PROTOCOL (PROPRIETARY) BIDIRECTIONAL LINK HAMMING DISTANCE = 4 SAFETY STOP INTERVENTION TIME < 0,5s	
CONNECTIONS	MAIN: SOURIAU CONNECTOR with DUST COVER CAP for external p.s., battery charge, CAN bus comunication and Emergency button NC dry contact BATTERY CHARGER: jack connector for battery charger 220VAC-12VDC adapter	
CASE	BLACK PA	
HANDLING	Waist belt/ shoulder strap	
TEMPERATURE	BATTERY SPECS: CHARGING T.: 0+45°C STORAGE T.: -20+45°C OPERATING: -10+ 60°C	ELECTRONIC SPECS: OPERATING T.: -25+70°C STORAGE T.: -40+70°C
PROTECTION	IP65	



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ELECTRONIC FEATURES

CAN BUS PROTOCOLS	CAN OPEN protocol (CIA DS401 DEVICE PROFILE FOR GENERIC I/O MODULE, WITH DS306 EDS FILE) Baud rate: 10, 20, 50, 100, 125, 250, 500, 1000 kbps (Default = 250 kbps)
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PROGRAMMING	FIRMWARE UPLOAD BY CAN BUS WITH ALOADER SOFTWARE TOOL
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STANDARDS

ELECTROMAGNETIC (EMC)	ACCORDING TO DIRECTIVE 2014/30/EU: EN 61000-6-4 EN 61000-6-2 EN 50498
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ROAD VEHICLES	ISO 7637-2: 2011 ISO 11452-1: 2005
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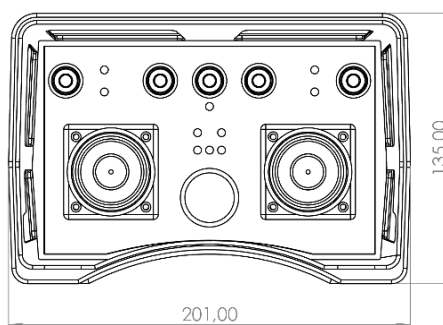
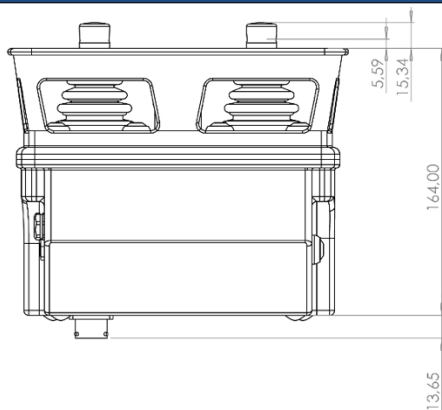
INFORMATION TECHNOLOGY EQUIPMENT – SAFETY	EN 60950-1
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RADIO SPECTRUM MATTERS (RED)	ACCORDING TO DIRECTIVE 2014/53/EU: ETSI EN 300.220-1 ETSI EN 300.220-2 ETSI EN 301.489-1 ETSI EN 301.489-3
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PERFORMANCE AND SAFETY INTEGRITY LEVEL	EN ISO 13849-1 PLC – SIL1 (SINGLE-CHANNEL INTERNAL SCHEME)
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EMERGENCY STOP BUTTON (manufacturer's specification)	EN60947-5-1 EN60947-5-5
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SIZE (mm)



Sizes may change based on the controllers layout

COMPATIBLE RADIO RECEIVER UNIT

MASTER CODE	RDC EVO (SEE THE DATASHEET FOR MORE INFORMATION)
POWER SUPPLY	9 - 30 VDC
COMMUNICATION	NETWORK: CAN BUS 2.0B COMPLIANT – CANOPEN PROTOCOL RADIO: 868 MHz / 434 MHz BAND
CONNECTIONS	MAIN: TE DEUTSCH DTF13-6P ANTENNA: SMA socket
CASE	ENCAPSULATED IN PUR RESIN - UL94 (V0)



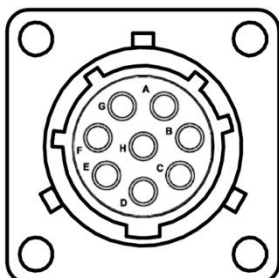


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CONNECTOR PINOUT

MAIN CONNECTOR



PIN	DESCRIPTION
A	POSITIVE power supply
B	GND power supply
C	CAN H
D	CAN L
E	Dry contact (emergency button)
F	Dry contact (emergency button)

MATING CONNECTOR CODES

SOURIAU P/N: UTG608P and UT00128SH FPM

BATTERY CHARGER CONNECTOR



VEHICLE CHARGER WITH
CIGARETTE LIGHTER
CONNECTOR (12/24
VDC)

P/N: ALNWR.276.CB.S01



BATTERY CHARGER 220
VAC ELECTRICAL SOCKET

P/N: ALNWR.276.CB.S03



AVAILABLE CONTROL ELEMENTS

EMERGENCY STOP BUTTON

MUSHROOM BUTTON WITH ROTATING RELEASE

USAGE CONDITIONS ON DRY CONTACTS:

3 A a 120 V, AC-15, B300
1,5 A a 240 V, AC-15, B300
0,1 A a 250 V, DC-13, R300
0,22 A a 125 V, DC-13, R300

JOYSTICK

UP TO N.4 ANALOG INPUT FOR:

→ No. 4 SINGLE-AXLE JOYSTICK (X-X) with out-from-center detect input
or

→ No.2 DOUBLE-AXES JOYSTICK (X-Y) with out-from-center detect input

PUSHBUTTONS

N.1 BUTTON FOR DEVICE POWER ON

UP TO 10 DIGITAL INPUTS FOR

- PUSHBUTTON
- TOGGLE SWITCH
- ROCKER SWITCHES
- OTHERS ON REQUEST

SPOTLIGHT LED

N. 5 LEDS for the indication of the operating status, the battery charge level and coded messages

UP TO 7 MONOCROMATIC LED FOR CUSTOMER USAGE

BUZZER

optional

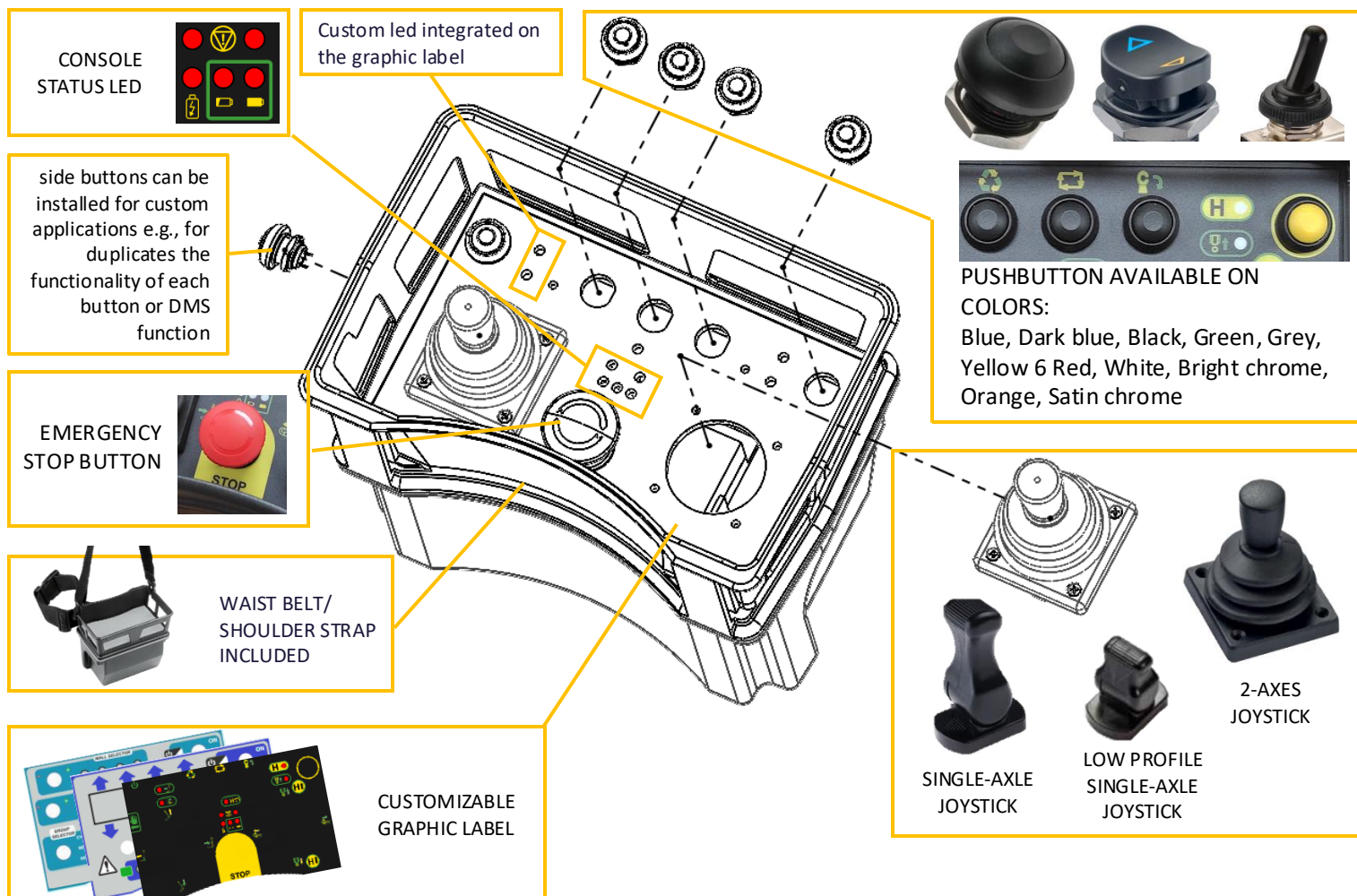


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SAMPLE LAYOUT

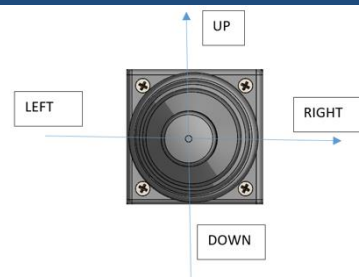
FULLY COSTUMIZABLE



JOYSTICK FEATURES

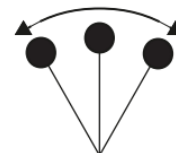
2-AXES

- HALL effect proportional manipulators 2 axes (x and y) with square/cross/diamond/circular limitation.
- Operating angle: 36°
- On request: cross limitation is done via software within 35s of the drive.
- Spring back to center.
- Output: Gain 40% (0.5-4.5V)
- Operating force 1.3N (max 400N)



SINGLE-AXLE

- HALL effect proportional manipulators
- Operating angle 25 mm
- Spring back to center.
- Available low profile (in shape) or high profile (out of shape)
- Output: Gain 40% (0.5-4.5V)
- Operating force: 75N





NOTE