

INSTALLATION GUIDE

DOCUMENT AVAILABLE ON WEBSITE alma-alma.fr

DI 013 EN A


RC-FIOUL REMOTE CONTROL



A	2014/02/13	Creation	DSM	MV
Rev.	Date	Nature of modification	Wrt.	Chk


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2. PARTS LIST

EQUIPMENTS DELIVERED BY ALMA				
Item	Equipment	Designation	Qty	Option*
1		RC-FIOUL REMOTE CONTROL RECEIVER	1	-
2		RC-FIOUL REMOTE CONTROL TRANSMITTER 3 or 4 switch (provided with mural holder)	1	-
Option*: equipments sold as an option by ALMA. Must be installed on the measuring system if required by the certificate.				

3. INSTALLATION OF THE RC-FIOUL REMOTE CONTROL RECEIVER

The RC-FIOUL REMOTE CONTROL RECEIVER can be installed outside (IP68) or inside the driver's cab. However, some driver's cabs interfere with the reception of the RC-FIOUL transmitter signal. If that is the case, the RC-FIOUL REMOTE CONTROL RECEIVER must be installed outside.



THE DRIVER'S CAB MUST NOT INTERFERE WITH THE SIGNAL RECEPTION.

Test the reception of the RC-FIOUL transmitter signal before you set the RC-FIOUL REMOTE CONTROL RECEIVER.

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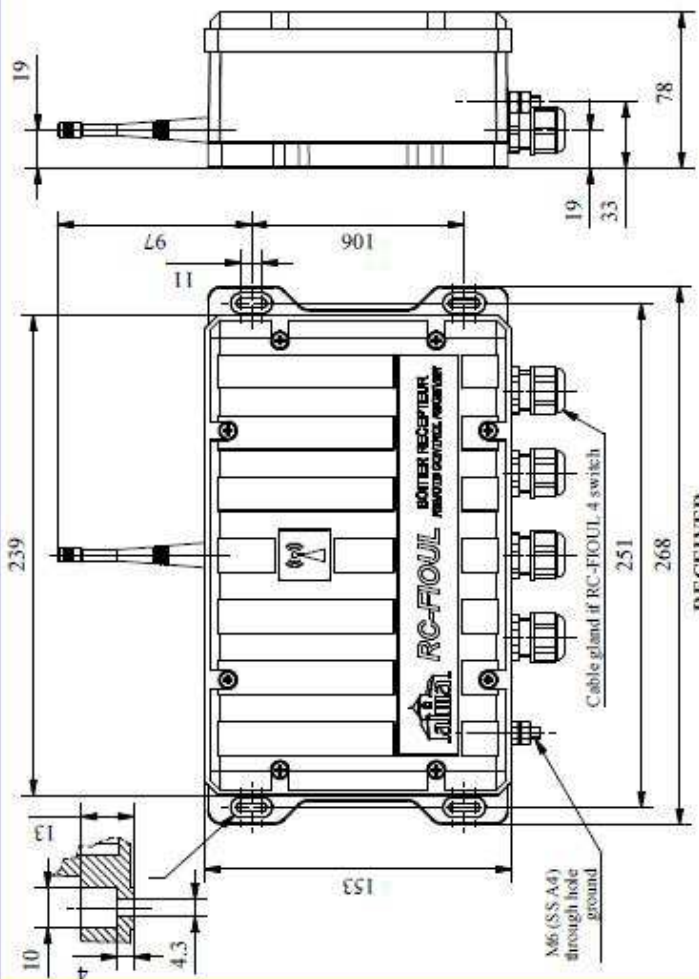


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Units of measure:
Length: mm
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4. RC-FIOUL REMOTE CONTROL

ALMA RC-FIOUL REMOTE CONTROL	
RC-FIOUL REMOTE CONTROL 3 SWITCH - Code: 0337	
	
RC-FIOUL REMOTE CONTROL 4 SWITCH - Code: 0338	
	



Features :

- Frequency: 868 MHz
- Range: 1000m
- Operating temperature: -10 to +50°C

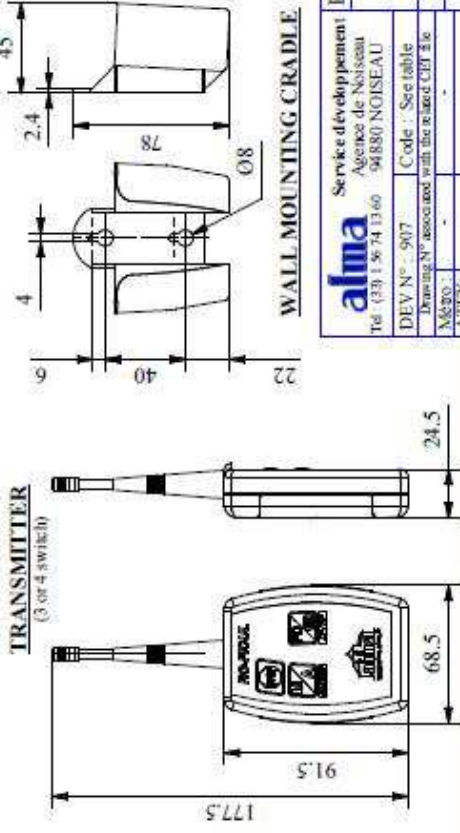
RECEIVER :

- Enclosure: ABS black (Non ATEX)
- Protection classification: IP68
- Supply: 12-32Vcc
- Outputs: 4 relays, 10A 28Vcc (NO-COM-NC)
- Cable glands: 3 or 4 (cable Ø5 to 10)
- Mass: 1 kg

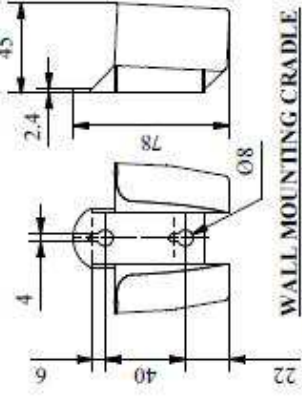
TRANSMITTER :

- Enclosure: ABS black (Non ATEX)
- Protection classification: IP68
- Battery type: 3xAAA (supplied)
- Switch: 3 or 4 according to model
- Mass: 0.123 kg

TRANSMITTER
(3 or 4 switch)



WALL MOUNTING CRADLE



PRESENTATION DRAWING		PPN710		Description of the amendment N°	
RC-FIOUL REMOTE CONTROL		PPN710		A 2/2	
907	PPN710	A	2/2	Modified on:	16/01/2014
Dev N°	Drawing N°	Rev	Folio	Created on:	16/01/2014
				by	EG
				verified by	FDS

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RC-FIOUL REMOTE CONTROL

RC-FIOUL REMOTE CONTROL

Units of measure:
 Length: mm
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5. ELECTRICAL WIRING REMOTE CONTROL RECEIVER

TERMINAL ASSIGNMENTS OF ELECTRONIC BOARD

EQUIPMENTS CONNECTED TO RC-FIOUL REMOTE RECEIVER							RECEIVER ELECTRONIC BOARD				
Option	Equipments	N°	Alma	type	Function	Colour or No	Terminal block	Terminal	Function	Observation	
-	POWER SUPPLY TRUCK 24Vcc	-	-	ADR 2x1	0V 24Vdc	-	BN1	0V +V	0V 24Vdc	POWER	
-	MICROCOMPT+	-	-	ADR 2x1	G/S	-	BN2	NO COM	0V	G/S	
					LF/HF	-	BN3	NO COM	0V	LF/HF	
-	EMERGENCY STOP RELAY	-	-	ADR 2x1	S.E.	-	BN4	NO COM NC	-	S.E.	
•	HOSE REEL CONTROL	-	-	ADR 2x1	Ctrl	-	BN5	NO COM NC	-	Ctrl	

- Connect the ground to the through hole ground terminal of the RC-FIOUL receiver.


6. NOTES – GENERAL RECOMMENDATIONS

IN ORDER TO AVOID ALL THE PROBLEMS CONCERNING THE INSTALLATION, THE OPERATION AND THE MAINTENANCE OF THE EQUIPMENTS, BEING ABLE TO CREATE INOPPORTUNE FAILURE, PLEASE RESPECT THE FOLLOWING RECOMMENDATIONS.

BEFORE ANY WORK, MAKE SURE THAT THE EQUIPMENTS ARE NOT POWERED.

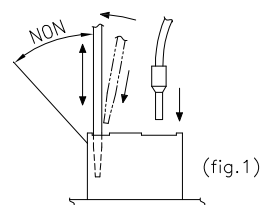
MECHANICAL RECOMMENDATIONS

- Respect the recommendations of the instruction manual specifying the installation, operation and maintenance conditions of the ATEX equipments (instruction manual supplied with the equipments).
- Take care to place the equipments in order to facilitate their installation, operation and maintenance by the technicians (working ergonomics).
- Take care to position properly the equipment; the display must be readable without any difficulty.
- Apply a tightening torque suitable with size and material of the fixation element except particular specifications mentioned on the presentation drawing or in the installation guides.
- Mechanically protect the cables with the corrugated conduit if the cables are not ADR (corrugated conduit adapted to vehicles used for "carriage of dangerous goods of road" - hydrocarbons, LPG ... - and meet the requirements of French standard NF R13-903).
- Ensure there are a good mechanical strength and a good sealing between cable glands and cables, and between cable glands and corrugated conduit.
- Respect cables and corrugated conduit radii of curvature.
- Leave enough flexibility to wires in order to avoid any risk of stripping.
- Allow the drainage of the water in the lower loop (siphon) of the corrugated conduit (not water retention inside the corrugated conduit).


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ELECTRICAL RECOMMENDATIONS

- Respect the recommendations of the instruction manual specifying the installation, operation and maintenance conditions of the ATEX equipments (instruction manual supplied with the equipments).
- Connect the supply of the equipments downstream cut-out, on the power supply reserved to the measured distribution.
- Put a delayed protection of 5A upstream the 24Vdc supply to protect equipments in case of reverse polarity or overcurrent.
- Use ADR specific cable, if it is not the case, use at minimum a cable resisting to hydrocarbons. Mechanically protect this cable with a corrugated conduit (corrugated conduit adapted to vehicles used for "carriage of dangerous goods by road" - hydrocarbons, LPG ... - and meet the requirements of French standard NF R13-903).
- Take care not to damage the terminals of the different electronic boards while wiring.
 - Screw terminals: do not damage the screw heads of the terminals.
 - Spring terminals: do not block the springs (if a spring is blocked, the electronic board must be replaced).
 - Use flat screwdriver 0.4x2.5 (see fig.1).
 - Insert the screwdriver slightly tilted, then push it perpendicularly to the terminal.
 - Do not exceed the upright position when the screwdriver is down in order not to block the spring.
 - Insert or remove the wire and remove the screwdriver.



- Pass the power supply cores (24Vdc truck) through the ferrites by carrying out a loop (ALMA supply).
- Do not use wires of section higher than 1.5mm².
- Use insulated lugs and insulated wire ferrules adapted to the section of wires.
- Do not insert more than two wires in a terminal, if necessary use an insulated twin wire ferrule (unless otherwise indicated).
- Strictly respect the polarities of the input/output when wiring, in accordance with serigraphy on the cards and/or with the installation guide indications.
- Whenever possible, perform a wired test, after wiring and before powering.
- Whenever possible, respect the locations of the cables specified in the installation guide.
- Equipments must be connected to the frame ground (external ground connection).
- Whenever possible, use shielded cables with a 360° connection through the metal cable glands (see the documentation delivered with the equipments). Otherwise, connect the shields to devices inside the equipment (ground terminal, earth bar, earth boss...).
- Whenever possible, label the cables and cores according to the installation guide to facilitate the later maintenance operations.


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- Respect a homogeneous wire colour code.
- Printer TMU295: before positioning the printer on its support, check that configuration switches of the data link protocol, located under the printer, are well positioned: No 3 on "ON" and the 7 others on "OFF".
- Current of the MICROCOMPT+ and printer:

ALMA equipments	Supply voltage	Current mini.	Current maxi.
MICROCOMPT+	24Vcc +/-10%	0.7 A	1.5 A
PRINTER	24Vcc +/-10%	0.1 A	5.5 A (switch-on)

- Colour code according to DIN 47100.
- Code for designation of colours according to IEC 60757 (except FR codes):

FR				EN	IT	ES	DE
Couleurs	Codes		Standard codes IEC 60757	Colours	Colori	Colores	Farbe
Blanc	Bc		WH	White	Bianco	Blanco	Weiß
Marron	Mr		BN	Brown	Marrone	Marrón	Braun
Vert	Vt		GN	Green	Verde	Verde	Grün
Jaune	Jn		YE	Yellow	Giallo	Amarillo	Gelb
Gris	Gr		GY	Grey	Grigio	Gris	Grau
Rose	Rs		PK	Pink	Rosa	Rosa	Lila
Bleu	Bl		BU	Blue	Blu	Azul	Blau
Rouge	Rg		RD	Red	Rosso	Rojo	Rot
Noir	Nr		BK	Black	Nero	Negro	Schwarz
Violet	Vi		VL	Violet	Viola	Violeta	Violett
Orange	Or		OG	Orange	Arancio	Naranja	Orange
Vert/Jaune	V/J		GNYE	Green/Yellow	Verde/Giallo	Verde/Amarillo	Grün/Gelb

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PNEUMATIC RECOMMENDATIONS

- Air must be filtered – from 40 to 20µm. Specific recommendations may be added in the installation guides or on the presentation drawings.
- The air lubrication must be permanent and correct to avoid any damage on the pneumatic components.
- The air supply pressure to the inlet of the equipments must be at least 6 bar. Specific recommendations may be added in the installation guides or on the presentation drawings.
- The pneumatic supply pipes (6/4) must be cut straight (no slanting cut) and should not be crushed after cutting to prevent leakage on fittings.
- Respect the radii of curvature of the pneumatic pipes indicated by the manufacturer.
- Use colored pneumatic pipes to ease maintenance operation.
- In no case the exhaust holes of the pneumatic organs should be plugged, obstructed, unless if that is clearly specified in the installation guides or on presentation drawings.
- The use of muffler is not allowed under any circumstances (fouling, frost...). Put a pneumatic pipe of sufficient length so that its end is placed in a protected area (L = 100 mm min.).
- Pressure unit conversion:

PRESSURE UNIT CONVERSION				
Unit	Bar	PSI	Pascal	kg/cm²
1 Bar =	1	14,5	100 000 (1x10 ⁵)	1,0197
1 PSI =	0.069	1	6894,5	0,07031
1 Pascal =	1x10 ⁻⁵	14,5x10 ⁻⁵	1	1,0197x10 ⁻⁵
1 kg/cm ² =	0,98	14,22	98066,5	1

PSI = Pound per Square Inch (livre par pouce carré)

1 bar = 100 kPa = 0.1 MPa (1 MPa = 10 bar)

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