

ARF18 - 6513E

User Guide

PRESENTATION		3
PRODUCT INSTALLATION		4
<i>Power supply</i>	4	
<i>Display</i>	4	
SERIAL LINK		5
<i>Setting</i>	5	
<i>Wiring</i>	5	
<i>Data frame</i>	5	
ANTENNA WIRING		6
TECHNICAL DATA		7
<i>Receiver</i>	7	
<i>Dimensions</i>	7	
<i>Product references</i>	7	

DECLARATION OF CONFORMITY

selon les normes ISO/IEC Guide 22 et EN45014



Manufacturer's name: **ADEUNIS R.F.**
Manufacturer's address: Parc technologique PRE ROUX IV
283 rue Paul Louis NEEL
38920 CROLLES - FRANCE

declares that the product

Product Name: ARF18
Product Number(s): ARF6513E
Product options:

conforms to the RTTE Directive 99/5/EC :

EMC: conformity is proven by compliance to the standard EN 301489 according to the requirements of EMC Directive 89/336/EEC.

Safety: conformity to the standard EN 60950 according to the requirements of Low Voltage Directive 73/23/EEC.

Radio: conformity is proven by compliance to harmonised standard EN 300220 covering essential radio requirements of the RTTE directive.

Notes: - Conformity has been evaluated according to the procedure described in Annex III of the RTTE directive.
- The use of the spectrum is harmonised by the fact that the product never falls in one of the restrictions listed in appendix 3 (Annex 1, band E) of the CEPT recommendation 70-03.
- Receiver class (if applicable): 2.

Crolles, April 4th, 2001

VINCENT Hervé / Quality manager

PRESENTATION

The ARF6513E serial decoder operates in the European 433 MHz band. It has full right of use.

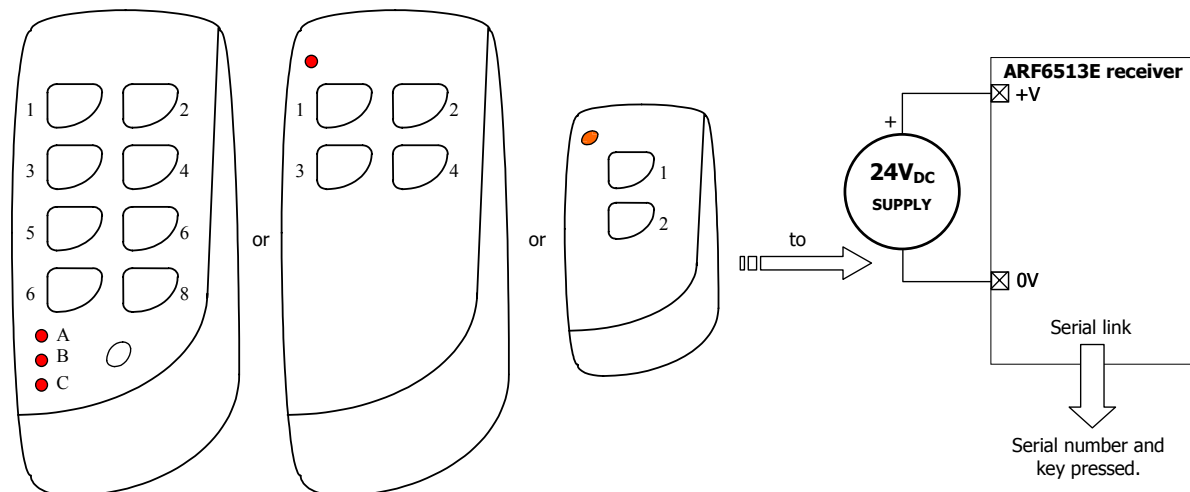
It enables the orders transmitted by an ARF18 remote control to be decoded. These orders are transmitted on a serial link in 8 N 1 format.

The ASCII character string obtained is composed of the remote control serial number (single number) and the button number.

There is no learning phase, any frame transmitted by an ARF6141A (2-buttons) ARF6142A (4-buttons) or ARF6143A (8-buttons 24-channel) remote control is decoded.

Applications: autonomous control of tertiary or industrial equipment.

Order transmission safety is achieved by means of a proprietary rotating code.

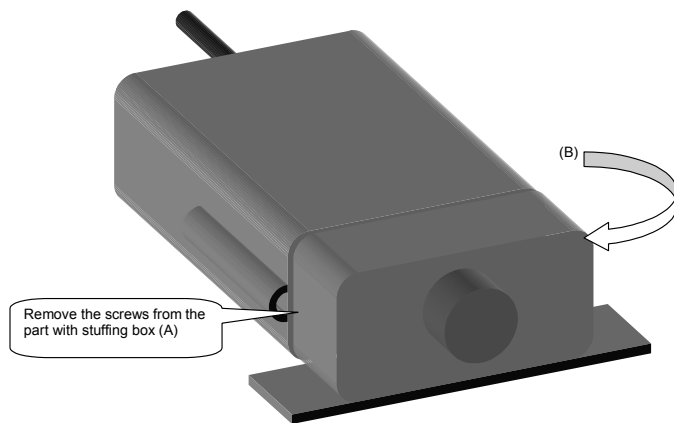


The products are available either in board version to be integrated in an assembly, or standalone in an IP65 housing.

PRODUCT INSTALLATION

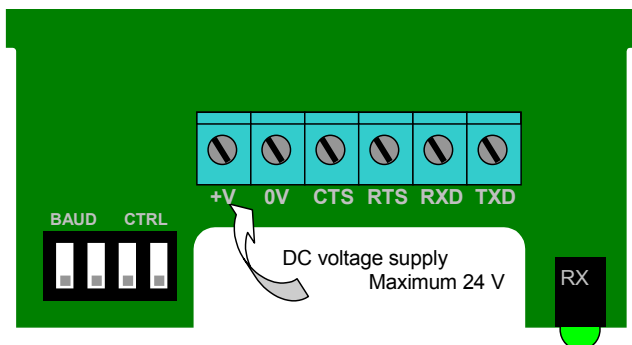
The ARF6513E receivers are fixed by the fixing lugs onto the top (antenna) and bottom (stuffing box) parts of the housing. Any operation (drilling...) performed on the housing makes it lose its IP65 tightness rating.

Remove the two stainless steel screws (A and B) and take the bottom part off to access the power supply terminal blocks and contacts.



- **Power supply**

Turn off the power supply, then wire the power supply to the screw terminals marked + and -.



Power supply $7V < +V < 24V$

- **Display**

The ARF6513E receiver is equipped with a green LED, that is lit when decoding is valid.

SERIAL LINK

- Setting

- **Switches:** for setting the parameters of the interface between the serial link and the ARF6513 decoder

- **Configuration** of the devices using this link:

8 data bits, no parity, 1 stop bit.

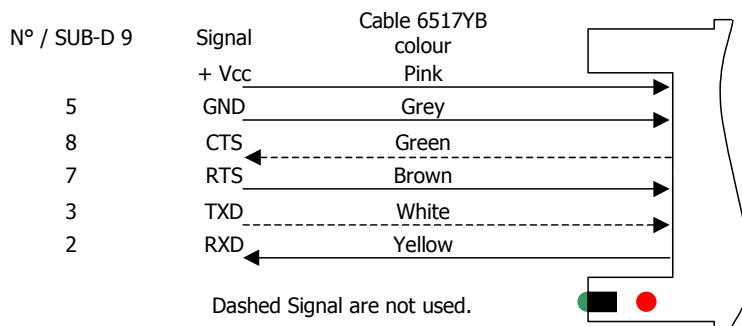
- **Switches 1 and 2:** speed on the serial link

Switch 1	Switch 2	Speed
ON	ON	1200
ON	OFF	2400
OFF	ON	4800
OFF	OFF	9600

- **Switches 3 and 4:** type of flow control on the serial link

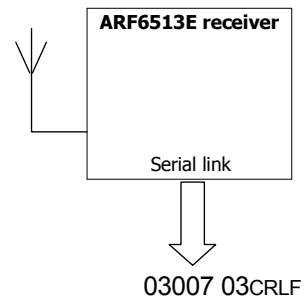
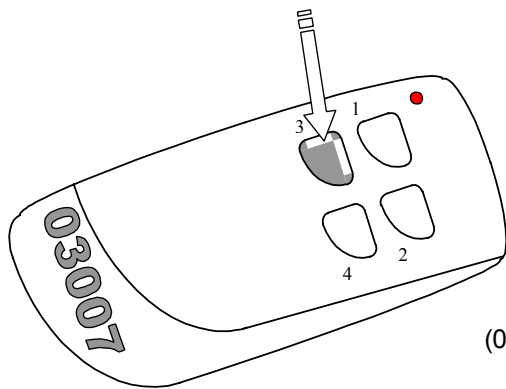
Switch 4	Switch 3	Speed
ON	ON	Position prohibited
ON	OFF	RTS / CTS
OFF	ON	Xon / Xoff
OFF	OFF	no control

- Wiring



- Data frame

On receipt from a button, the data frame is as follows:



(03007 is the serial number and 03 the key number).

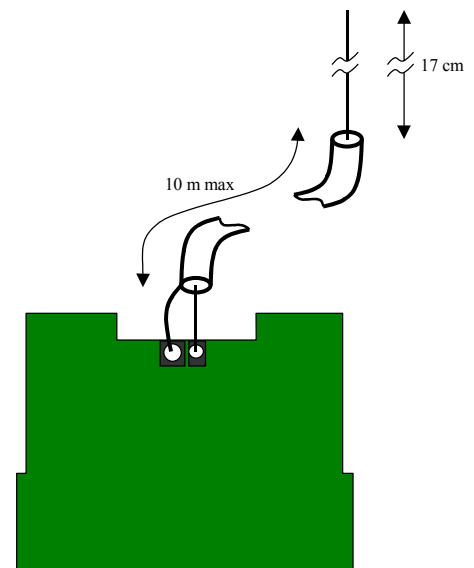
Data output can be suspended by activating the modem RTS input.

ANTENNA WIRING

In daughter board version, an antenna has to be added to achieve correct communication between the products.

This antenna should be a wire with a length of $\frac{1}{4}$ wave i.e. about 17 cm. This value is the length that will have to extend outside the housing if this housing is metallic.

This antenna can be remote located using a coaxial cable with its braid stripped over the last 17 centimetres.



TECHNICAL DATA

- Operating temperature: -20°C to $+70^{\circ}\text{C}$
- Power supply: 7 to 24 V_{DC}
- Connection by M3 screw terminal block: 1.5 / 2.5 mm²
- Random key encryption

Receiver

- AM frequency 433.92MHz
- Sensitivity: better than 1.2 μV
- Consumption: 20 mA excluding output

Dimensions

- Board: 65 x 90 x 25 mm
- IP65 housing: 104 x 300 x 35 mm
- Distance between fixing points: 4 holes diam. 4 to 92 x 61 mm

Product references

- ARF6513E: Remote controller decoder.
- ARF6523A: 4-relays receiver daughter board
- ARF6523B: 4-relays receiver in IP65 housing
- ARF6524A: 2-relays receiver daughter board
- ARF6141A: 2-button remote control
- ARF6142A: 4-button remote control
- ARF6143A: 8-button 24-channel remote control
- ARF03: Antenna kit for the ARF6513 in board version

