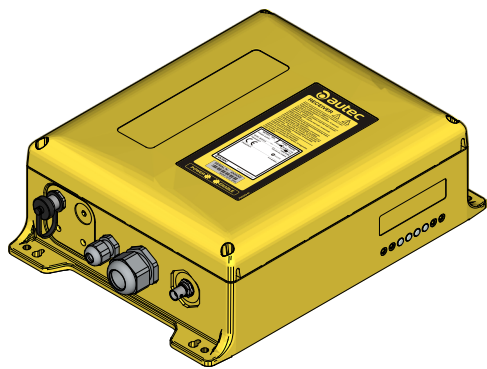


AIR SERIES

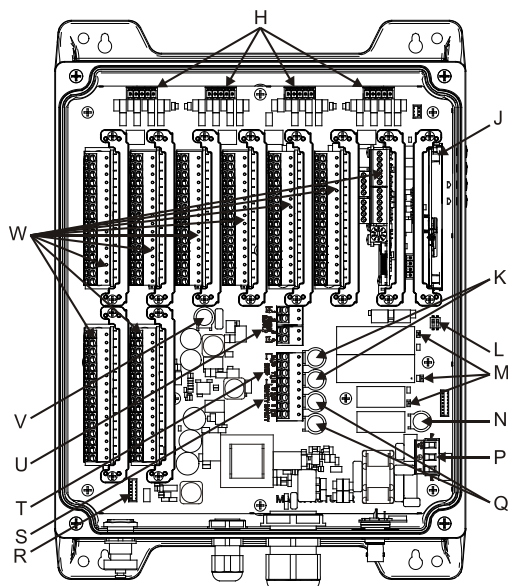
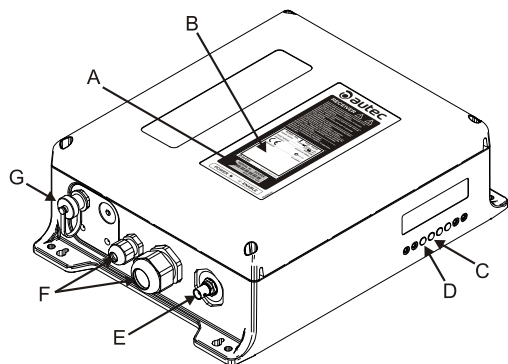
Part D: receiving unit MVRL9E (RRL)



INDEX

1	Description	2
2	Technical data	3
3	Technical data sheet	4
4	Plates	4
4.1	Plates on MVRL9E unit in a radio remote control	4
4.2	Plates on MVRL9E unit in a Take & Release radio remote control	4
4.3	Plates on MVRL9E unit in a Multi Units or Multi Receiver radio remote control	5
5	Light signals	5
5.1	POWER LED (green)	5
5.2	ENABLE LED (green)	5
6	Operation	6
6.1	Electronic module	6
6.2	DIP switches	6
6.3	Internal light signals	6
6.4	Command outputs	6
7	Malfunction signalled by the receiving unit	7

1 Description

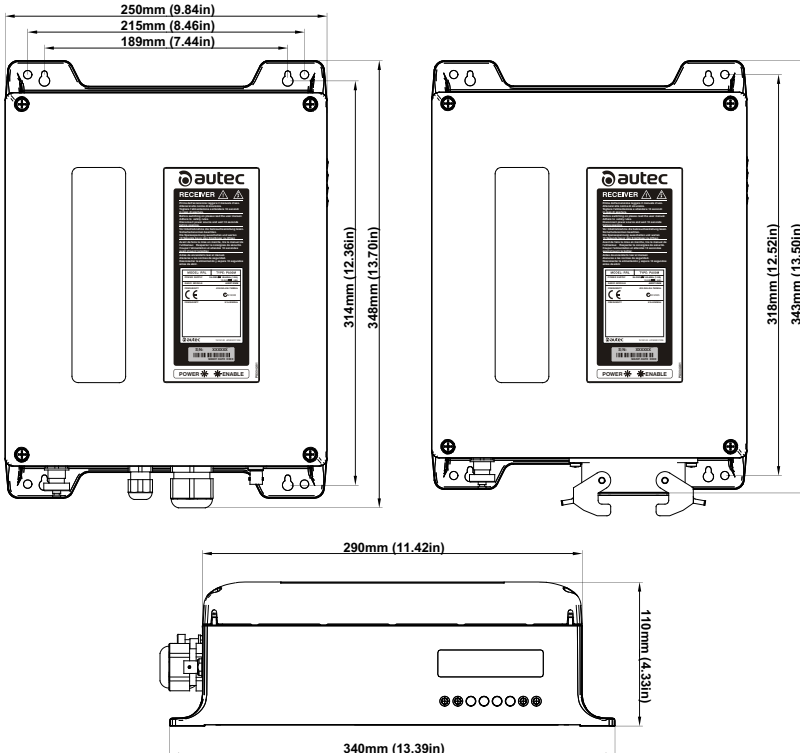


A	Identification plate
B	Technical data plate
C	POWER LED
D	ENABLE LED
E	BNC connector for external antenna kit (optional)
F	Cable gland or plug
G	Connector for cable control (optional)
H	Digital inputs
J	Electronic module and address key
K	STOP contacts protection fuses
L	DIP switches
M	Internal light signals
N	AC power supply protection fuse
P	Connector for AC power supply
Q	SAFETY contacts protection fuses
R	Connector for the cable control's wiring
S	SAFETY outputs
T	STOP outputs
U	Connectors for DC power supply
V	DC power supply protection fuse
W	Optional card (with related command outputs)

2 Technical data

AC power supply	24-240V~ (1.2A)
AC power supply protection fuse	2A T 250V (5x20mm)
DC power supply	12-24V= (4A)
DC power supply protection fuse	4A T 250V (5x20mm)
Digital inputs voltage	24/48/110V~
.....	12/24V=
Antenna	internal or dedicated
STOP contacts rated current	6A (250V~)
.....	6A (30V=)
STOP contacts protection fuses	6A T 250V (5x20mm)
SAFETY contacts rated current	10A (250V~)
.....	10A (30V=)
SAFETY contacts protection fuses	10A T 250V (5x20mm)
Housing material	PA 6 (20%fg)
Protection degree	IP65 (NEMA 4)
Weight	4.5kg (9.92Lb)

Command outputs are provided on the optional cards. Refer to technical data sheet for voltage and current rating of command outputs.



3 Technical data sheet

The technical data sheet contains the wiring diagram showing the connection between the receiving unit and the machine. It also contains the transmitting unit configuration and shows the matching between commands sent and machine functions/movements.

Each technical data sheet must be filled in, checked and signed by the installer, who is responsible for a correct wiring.

A technical data sheet must always be kept together with this manual (always keep a copy of the technical data sheet when it is used for administrative purposes).



The wiring of the receiving unit outputs must always reflect the wiring indicated in the technical data sheet.

4 Plates

4.1 Plates on MVRL9E unit in a radio remote control

Plate	Position	Content
radio remote control identification plate	On the cover of the receiving unit.	Radio remote control serial number (S/N), bar code and manufacturing year.
technical data plate	On the cover of the receiving unit.	MODEL, TYPE and main receiving unit technical data, marking and possible radio remote control marks.

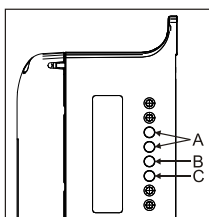
4.2 Plates on MVRL9E unit in a Take & Release radio remote control

Plate	Position	Content
radio remote control identification plate	On the cover of the receiving unit.	Radio remote control serial number (S/N), bar code and manufacturing year.
technical data plate	On the cover of the receiving unit.	MODEL, TYPE and main receiving unit technical data, marking and possible radio remote control marks.

4.3 Plates on MVRL9E unit in a Multi Units or Multi Receiver radio remote control

Plate	Position	Content
radio remote control identification plate	On the cover of each receiving unit.	Radio remote control serial number (MULTI S/N), bar code and manufacturing year.
receiving unit identification plate	On the cover of each receiving unit.	The serial number of the receiving unit (S/N) and a bar code.
technical data plate	On the cover of each receiving unit.	MODEL, TYPE and main receiving unit technical data, marking and possible radio remote control marks.

5 Light signals



A	Not used
B	POWER LED
C	ENABLE LED

5.1 POWER LED (green)

The POWER LED indicates the status of the receiving unit.

The POWER LED...	Meaning
...is off	The receiving unit is not powered.
...is on	Receiving unit is powered.

5.2 ENABLE LED (green)

The ENABLE LED indicates the status of the radio link.

The ENABLE LED ...	Meaning
... blinks once every 5 seconds	The receiving and transmitting unit do not communicate.
... blinks fast	The unit is ready to receive commands sent by the transmitting unit.

6 Operation

6.1 Electronic module

The electronic module contains the address key, where the radio remote control configuration data are also stored. The receiving unit cannot work without this address key.

6.2 DIP switches

DIP switch 1 is used to set the frequency band.

DIP switch 2 shall always be set in the OFF position: do not modify it.

6.3 Internal light signals

The activation of each relay on the mother board is signalled by an LED near the relay.

6.4 Command outputs

The data sheet contains information regarding the correspondence between the commands sent by the transmitting unit and the related output enabled in the receiving unit.

7 Malfunction signalled by the receiving unit

Use the light signals on the receiving unit to identify the radio remote control malfunction. If the problem persists after the suggested solution has been carried out, contact the support service of the machine manufacturer.

Signals	Possible reason	Solutions
The POWER LED is off.	Wrong or no power supply.	Correctly plug in the connecting plug between the radio remote control and the machine.
		Make sure that power supply wires are correctly connected and that the power supply value is within the limits specified in the technical data.
		Check the power supply protection fuse and, if needed, replace it.
The POWER LED is steady and the ENABLE LED blinks once every 5 seconds.	The transmitting and receiving unit do not communicate.	Start up the radio remote control.
The POWER LED is steady and the ENABLE LED blinks fast.	The receiving unit does not activate the outputs of the commands sent.	Check that the outputs are correctly wired and that the commands sent activate the corresponding relays.
		Check the protection fuses of the STOP contacts or of the SAFETY contacts and, if needed, replace them.

