

# AIR SERIES

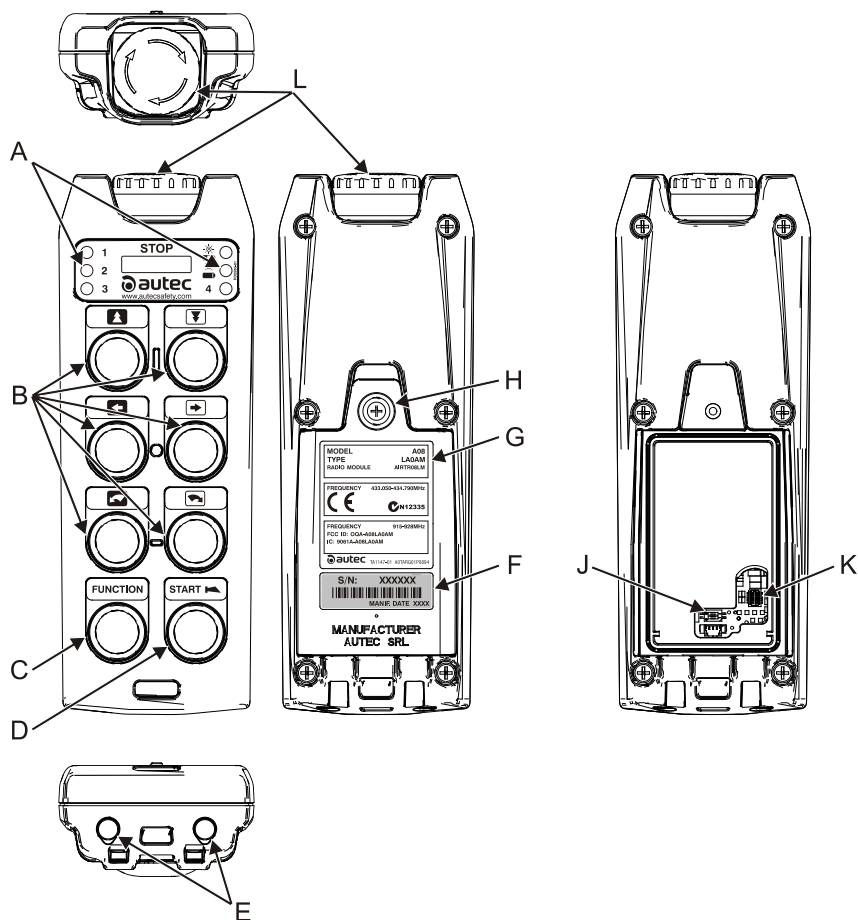
## Part C: A8 transmitting unit



### INDEX

<b>1</b>	<b>Description .....</b>	<b>2</b>
<b>2</b>	<b>Technical data .....</b>	<b>3</b>
<b>3</b>	<b>Technical data sheet .....</b>	<b>3</b>
<b>4</b>	<b>Plates .....</b>	<b>3</b>
4.1	Plates on A8 unit in a radio remote control .....	3
4.2	Plates on A8 unit in a Take & Release radio remote control .....	4
4.3	Plates on A8 unit in a Multi Units or Multi Receiver radio remote control .....	4
<b>5</b>	<b>Light signals .....</b>	<b>5</b>
<b>6</b>	<b>General operating instructions .....</b>	<b>6</b>
6.1	Radio remote control start up with PIN code .....	6
6.2	Command activation .....	7
6.3	Data Feedback Function .....	7
6.4	FUNCTION pushbutton .....	7
6.5	STOP pushbutton .....	7
6.6	Switching off .....	8
6.7	Recharging the A8 unit .....	8
6.8	ID internal tx memory .....	9
6.9	BACK-UP UNIT .....	9
<b>7</b>	<b>Malfunction signalled by the transmitting unit .....</b>	<b>10</b>

## 1 Description



<b>A</b>	LED	<b>G</b>	Technical data plate
<b>B</b>	Command pushbuttons	<b>H</b>	Screw and battery cover
<b>C</b>	FUNCTION pushbutton	<b>J</b>	DIP switches
<b>D</b>	START pushbutton	<b>K</b>	ID internal tx memory (if present)
<b>E</b>	Contacts for recharge	<b>L</b>	STOP pushbutton
<b>F</b>	Identification plate		

## 2 Technical data

Power supply (battery AIRBM3V7L) .....	Li-ion 3.7V---
Antenna .....	internal
Housing material .....	PA 6 (20%fg)
Protection degree .....	IP65 (NEMA 4)
Dimensions .....	64.5x179x37.5mm (2.54x7.05x1.48In)
Weight .....	250g (0.55Lb)
Run time at 20°C (68°F) .....	40h

## 3 Technical data sheet

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

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 A8 unit in a radio remote control

Plate	Position	Content
<b>radio remote control identification plate</b>	This is on the battery lid.	Radio remote control serial number (S/N), bar code and manufacturing year.
<b>technical data plate</b>	This is on the battery lid.	MODEL, TYPE and main transmitting unit technical data, marking and possible radio remote control marks.

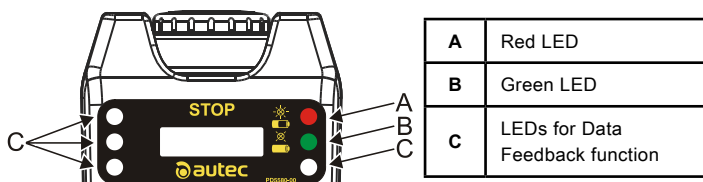
#### **4.2 Plates on A8 unit in a Take & Release radio remote control**

<b>Plate</b>	<b>Position</b>	<b>Content</b>
<b>radio remote control identification plate</b>	This is on the battery lid.	Radio remote control serial number (S/N), bar code and manufacturing year.
<b>technical data plate</b>	This is on the battery lid.	MODEL, TYPE and main transmitting unit technical data, marking and possible radio remote control marks.

#### **4.3 Plates on A8 unit in a Multi Units or Multi Receiver radio remote control**

<b>Plate</b>	<b>Position</b>	<b>Content</b>
<b>radio remote control identification plate</b>	This is on the battery lid.	Radio remote control serial number (MULTI S/N), bar code and manufacturing year.
<b>technical data plate</b>	This is on the battery lid.	MODEL, TYPE and main transmitting unit technical data, marking and possible radio remote control marks.

## 5 Light signals



The green LED...	Meaning
...is off.	The transmitting unit is switched off.
... is steady on.	The transmitting and receiving unit do not communicate.
... blinks fast.	The transmitting and receiving unit communicate. It is possible to start the radio remote control by pressing the START pushbutton.
... blinks slowly (one blink per second).	It is possible to send commands.

The red LED ...	Meaning
...is off.	The transmitting unit works correctly.
... is steady on.	At start-up, the STOP pushbutton is pressed or damaged.
... blinks twice per second.	At start up, at least one of the pushbuttons is pressed or damaged.
... blinks three times per second.	The unit is discharged at start up.
... is steady on for 2s.	The transmitting unit does not work correctly.
... blinks slowly (one blink per second).	The battery has a run time of approximately 4h.
... blinks fast.	The battery has a 10min run time.

See paragraph 6.3 to check signals related to LEDs for the Data Feedback function.

## 6 General operating instructions

### 6.1 Radio remote control start up with PIN code



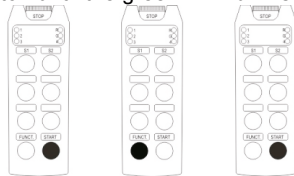
As required by standard IEC 60204-1 60204-32, the radio remote control start up is protected by a PIN code, in order to prevent non authorised use of the machine.

During the start up phase, press each pushbutton within 3 seconds from the release of the previous pushbutton, or the transmitting unit will switch off.

#### 6.1.1 Start up through factory-set PIN

When the receiving unit is powered on, perform the following procedure:

1. press the START pushbutton until the green LED illuminates
2. press the FUNCTION pushbutton
3. press the START pushbutton until the green LED blinks slowly.



1) START      2) FUNCTION      3) START

#### 6.1.2 Start up through customised PIN

If the risk assessment requires this, the PIN code may be modified to prevent unauthorised use. The procedure to set a customised PIN is provided in the document "Menu of Transmitting Unit (MTU)"; you can find this document in the dedicated section on Autec's website.

When the receiving unit is powered on, perform the following procedure:

1. press the START pushbutton until the green LED illuminates
2. press the pushbutton sequence PIN 1, PIN 2 and PIN 3 related to the PIN code provided in the technical data sheet (if PIN 1 and/or PIN 3 is the START pushbutton, it is not to be considered as part of the code sequence)
3. press the START pushbutton until the green LED blinks slowly.



1) START      PIN 1      PIN 2      PIN 3      2) PIN      3) START

## 6.2 Command activation

---

Press pushbuttons related to the commands you want to carry out.

## 6.3 Data Feedback Function

---

The user receives information and/or signals concerning the controlled machine by means of the Data Feedback function.

Pay particular attention to LED indications during normal radio remote control operation: they can be helpful to evaluate the machine's working status.



**Any information signalled by LEDs for the Data Feedback function can never be considered or used as a safety signal or for legal metrology.**

**When operating and moving the machine, remember that the radio remote control does not intervene autonomously when potential hazardous situations are signalled.**

Specific machine conditions (i.e. load limits, limit switch, ...) are signalled through the illumination of the LEDs for the Data Feedback function. The signalled conditions depend on the settings chosen by the machine manufacturer.

## 6.4 FUNCTION pushbutton

---

The FUNCTION pushbutton can be matched with different relay functions on the receiving unit (see technical data sheet).

## 6.5 STOP pushbutton

---



**The STOP pushbutton should be pressed when it is necessary to immediately stop the machine when a dangerous condition occurs.**

When the STOP pushbutton is pressed, the machine stops and the transmitting unit switches off.

To start working again after the STOP pushbutton has been pressed, do the following:

- make sure that the working and usage conditions are safe
- pull or turn the STOP pushbutton in the arrow direction to unlock it
- start up the radio remote control.

## 6.6 Switching off

The A8 unit automatically switches off in the following cases:

- voluntarily when the START pushbutton and immediately afterwards the FUNCTION pushbutton are deeply pressed until the red LED illuminates
- as a response when the STOP pushbutton is pressed
- automatic switch off when there are no enabled commands for a predetermined time frame. This time frame is provided in the technical data sheet (SWITCH-OFF).

Before the A8 unit switches off automatically, the green and red LEDs blink alternating for 30 seconds.

## 6.7 Recharging the A8 unit

The A8 unit contains a rechargeable battery; the provided battery is partially charged.

Use the docking station AIRDOCK01 to recharge the A8 unit.

To correctly use the A8 unit and its battery, the "Part E" of the manual shall be fully understood and kept into account.

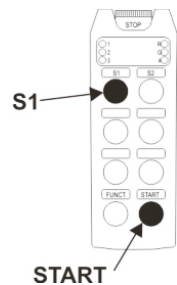
### Indication of A8 unit run time

Perform the following procedure to check the transmitting unit's run time:

1. switch off the transmitting unit and unlock the STOP pushbutton
2. keep pushbuttons S1 and START pressed until the 3 left LEDs illuminate showing the unit's run time (3 illuminated LEDs correspond to the highest run time). Run time indication disappears after some seconds.



MAX → MIN






## 6.8 ID internal tx memory

In the transmitting unit, the radio remote control address is stored in the unit itself or in an "ID internal tx memory", located under the battery. The technical data sheet indicates if the "ID internal tx memory" is present.

## 6.9 BACK-UP UNIT

If the main transmitting unit cannot be used because it has been lost or damaged, it can be replaced with a transmitting unit called "BACK-UP UNIT".

It is identical to the unit that cannot be used anymore; the only difference is the presence of the plate "BACK-UP UNIT" on the battery housing.

 <b>WARNING</b>	<p><b>Set DIP switch 2 in the "BACK-UP UNIT" as shown in the technical data sheet.</b></p> <p><b>If no "ID internal tx memory" is present in the transmitting unit that can no more be used, perform the PAIR procedure to pair the "BACK-UP UNIT" with a receiving unit (the technical data sheet shows which PAIR procedure to use).</b></p> <p><b>If an "ID internal tx memory" is present in the transmitting unit that can no more be used, move it to the "BACK-UP UNIT" and perform the address saving procedure described below.</b></p>
---	--

### Address storage

With fully charged battery and "ID internal tx memory" in the "BACK-UP UNIT", perform this procedure:

1. press the START pushbutton until the green and red LEDs light up.
2. wait until the green LED blinks slowly
3. within 3 seconds, activate in sequence the pushbuttons related to PIN 1, PIN 2 and PIN 3 that compose the PIN code provided in the technical data sheet.

If the PIN code is incorrect, the red LED illuminates and the transmitting unit switches off. In this case, the storage procedure shall be repeated.

If the PIN code is correct, the green LED turns steady on and the transmitting unit switches off: this indicates that the address has been stored in the "BACK-UP UNIT". It is now possible to start the radio remote control and control the machine with the "BACK-UP UNIT" transmitting unit.

## **7 Malfunction signalled by the transmitting unit**

Use the light signals on the transmitting 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.

LED	Signals	Possible reason	Solutions
Green	On	The transmitting and receiving unit do not communicate.	Start up the radio remote control. If the radio remote control does not start up, check that the receiving unit is powered on.
	Blinks fast	The radio remote control is not started up.	Press the START pushbutton until the green LED blinks slowly.
	Blinks slowly (one blink per second)	The radio remote control is started up.	See "Receiving unit signals" in Part D.
Red	On at start up	The STOP pushbutton is pressed or damaged.	Unlock the STOP pushbutton.
	Blinks twice per second at start up	At least one of the pushbuttons is pressed or damaged.	Bring the pushbuttons to the rest position.
	Blinks three times per second at start up	The unit is discharged.	Recharge the unit.
	On for two seconds	The unit does not work correctly.	Contact the support service.
	Blinks slowly (one blink per second)	Approx. 4 h run time left	Bring the system "machine+radio remote control" to a safe state as soon as possible and recharge the unit.
	Blinks fast	10 min run time left.	Bring the system "machine+radio remote control" to a safe state and recharge the unit.

LED	Signals	Possible reason	Solutions
Green and red	<b>Blink alternating</b>	30 s left before the unit automatically switches off.	The auto switch off time is reset by pressing any pushbutton.
	<b>The green LED blinks and the red LED is on at start up</b>	The transmitting unit is not paired with any receiving unit.	Perform the PAIR procedure to match the transmitting unit with a receiving unit.

