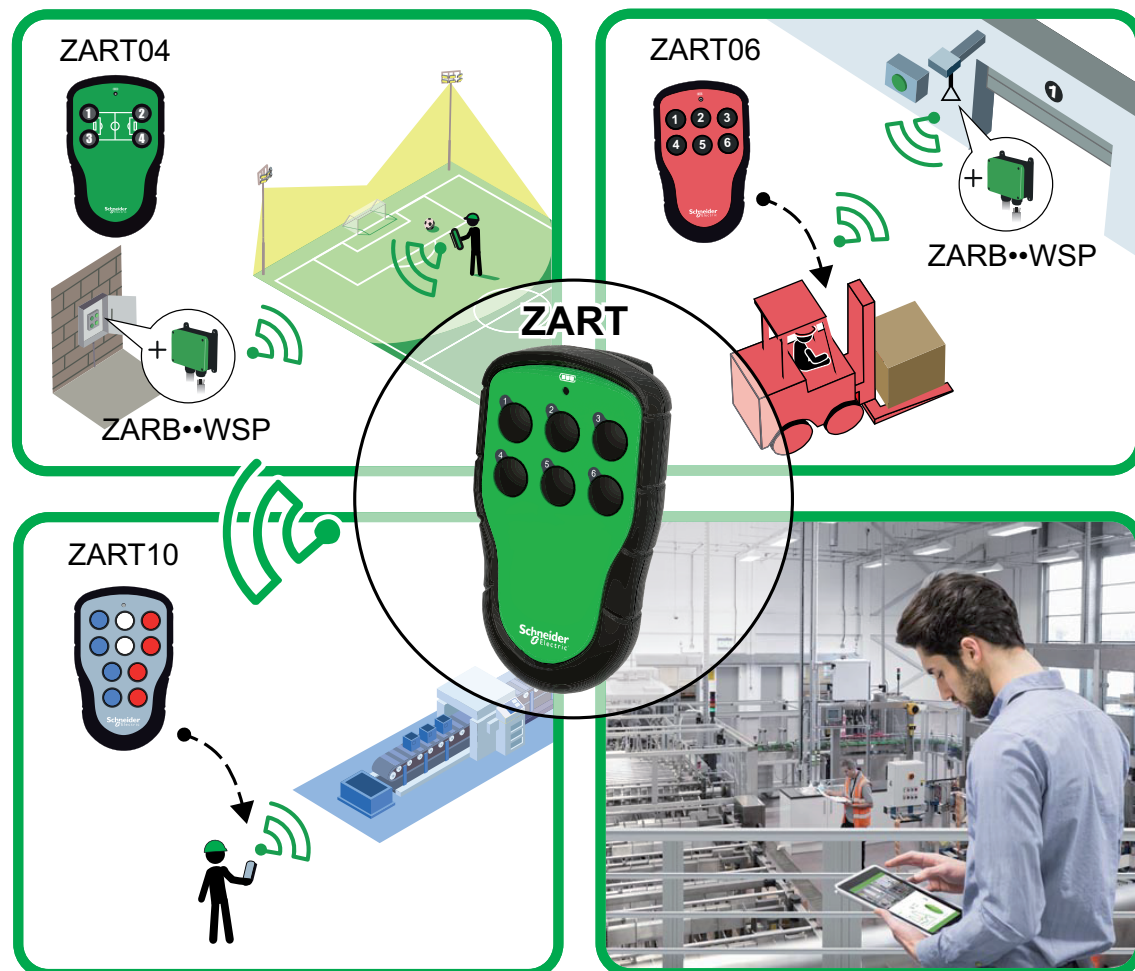


# Harmony® Pocket Remote

## Application Manual

EIO0000004968.00

11/2022



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# Safety Information

## Important Information

Read these instructions carefully, and look at the equipment to become familiar with the device before trying to install, operate, service, or maintain it. The following special messages may appear throughout this documentation or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of this symbol to a “Danger” or “Warning” safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### **DANGER**

**DANGER** indicates a hazardous situation which, if not avoided, **will result in** death or serious injury.

### **WARNING**

**WARNING** indicates a hazardous situation which, if not avoided, **could result in** death or serious injury.

### **CAUTION**

**CAUTION** indicates a hazardous situation which, if not avoided, **could result in** minor or moderate injury.

### **NOTICE**

**NOTICE** is used to address practices not related to physical injury.

## Please Note

Electrical equipment should be installed, operated, serviced, and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction and operation of electrical equipment and its installation, and has received safety training to recognize and avoid the hazards involved.

# About the Book

## Document Scope

This document presents the most common problematics that you can encounter in your systems or machinery. For each case, an appropriate solution is proposed by using Harmony Pocket Remote control. With Harmony Pocket Remote, you can easily install new or additional control command in a better and/or mobile place. The problematics and their Harmony Pocket Remote proposed solutions are sort in main themes:

- **Efficiency:** Adapt easily the installation to the needs at every moment.
- **Mobility:** some installations need too much operator/machine moves.
- **Productivity:** Increase your installation productivity.
- **Flexibility:** Offer to each operator the most adapted solution to work in good conditions.

## Advantages of Wireless

Schneider Electric proposes industrial wireless remote-control solution for applications.

The wireless offers freedom for connectivity transformed to machine flexibility, mobility, and comfort. This solution enhance machine performances and productivity gain and can also solves pain points during machine life cycles.

In the future, the devices will be connected all together for more performances and wiring simplification. When flexibility or mobility will be requested, the wireless architectures will become more and more the best solution.

## Harmony Pocket Remote Overview

Harmony Pocket Remote controls are based on an association of a transmitter and a receiver.

A radio-coded message is sent to one or more receiver(s) located several tens of meters away.

One receiver can also be activated by different transmitters.

This technology based on discontinued simplex radio mode is used for remote control applications but not for safety applications.

## Validity Note

This documentation is valid for Harmony Pocket Remote.

The technical characteristics of the devices described in this document also appear online. To access this information online:

Step	Action
1	Go to the Schneider Electric home page: <a href="https://www.se.com/">https://www.se.com/</a> .
2	In the Search box type the reference of a product or the name of a product range. <ul style="list-style-type: none"> <li>• Do not include blank spaces in the reference or product range.</li> <li>• To get information on grouping similar modules, use asterisks (*).</li> </ul>
3	If you entered a reference, go to the Product Datasheets search results and click on the reference that interests you.  If you entered the name of a product range, go to the Product Ranges search results and click on the product range that interests you.

Step	Action
4	If more than one reference appears in the Products search results, click on the reference that interests you.
5	Depending on the size of your screen, you may need to scroll down to see the data sheet.
6	To save or print a data sheet as a .pdf file, click Download product datasheet.

The characteristics that are presented in this manual should be the same as those characteristics that appear online. In line with our policy of constant improvement, we may revise content over time to improve clarity and accuracy. If you see a difference between the manual and online information, use the online information as your reference.

## Related Documents

Title of documentation	Reference number
Harmony Pocket Remote Catalog	DIA5ED2190902EN (EN) DIA5ED2190902FR (FR)
Harmony Pocket Remote - Wireless Remote Control System, User Guide	EIO0000003973 (EN) EIO0000003974 (FR)
Harmony Pocket Remote - Wireless Remote Control System, Instruction Sheet (EN)	MFR72440
ZBRA1 Antenna Mounting, Instruction Sheet	S1A57194
Harmony XB5R, Expert Instruction Sheet	EIO0000000812 (EN) EIO0000000813 (FR) EIO0000000814 (DE) EIO0000000815 (ES) EIO0000000816 (IT) EIO0000000817 (CN) EIO0000000818 (PT)
ZBRM•• Mobile Box, Instruction Sheet	S1A57210
ZBRP1 Rope Pull Switch, Instruction Sheet (EN)	S1B9058102

You can download these technical publications and other technical information from our website at [www.se.com/ww/en/download/](http://www.se.com/ww/en/download/).

## Product Related Information

The application of this product requires expertise in the design and programming of control systems.

<b>⚠ WARNING</b>
<p><b>UNINTENDED EQUIPMENT OPERATION</b></p> <ul style="list-style-type: none"> <li>• Only persons with expertise in the design and programming of control systems are allowed to program, install, alter, and apply this product.</li> <li>• Follow all local and national safety codes and standards.</li> </ul> <p><b>Failure to follow these instructions can result in death, serious injury, or equipment damage.</b></p>

# Efficiency

## Stadium Lighting

### Problematic Overview

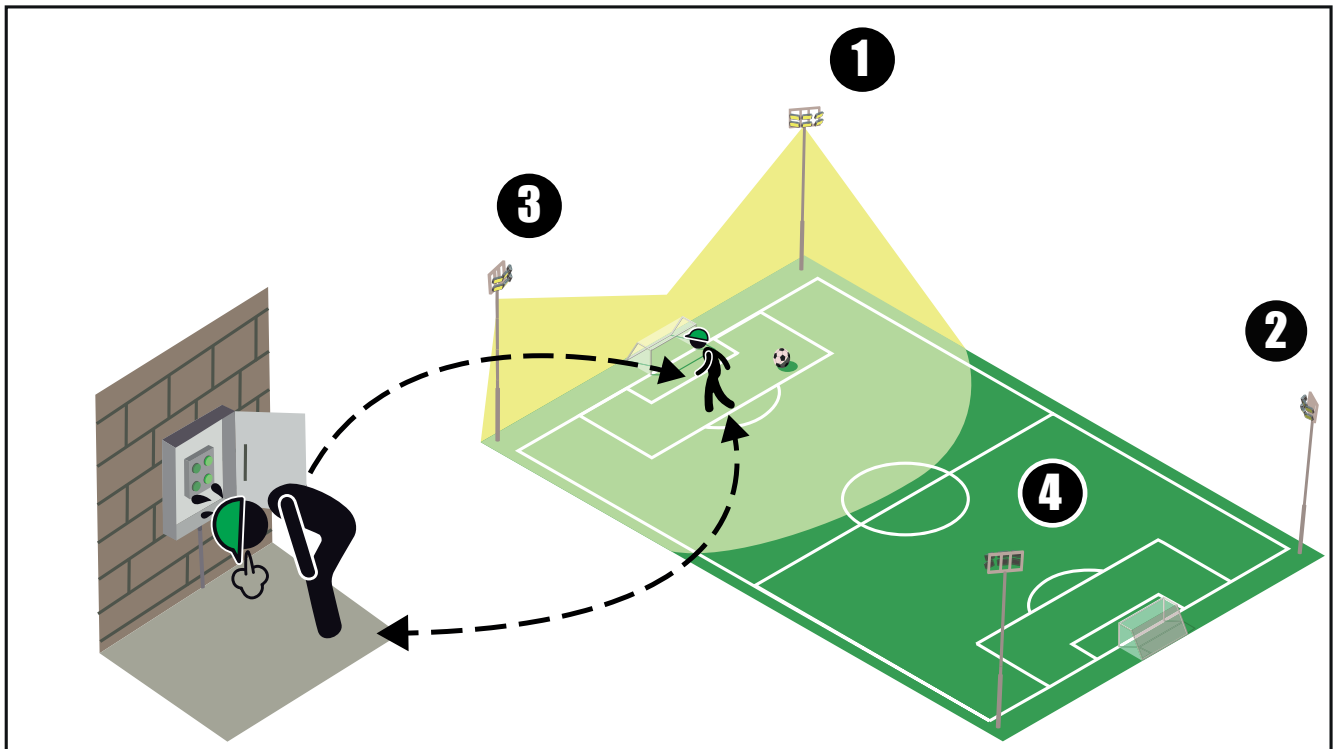
The coach needs to adapt the lighting of the stadium to his use without moving back and forth to the control cabinet.

Constraints of traditional solution	Advantages of the Pocket solution
Move back and forth to the control cabinet to switch On and Off the light.	Stay on the field and adapt the light to the needs.
Let the light level as it is, as the control cabinet is too far from the field.	Adapt permanently the light to the needs, energy efficiency, budget control.

### Problematic Example

The coach must turn On and Off the light to get the correct illumination. The control cabinet is located inside the building. When students are in the stadium, the coach must let them alone when adapting the lights.

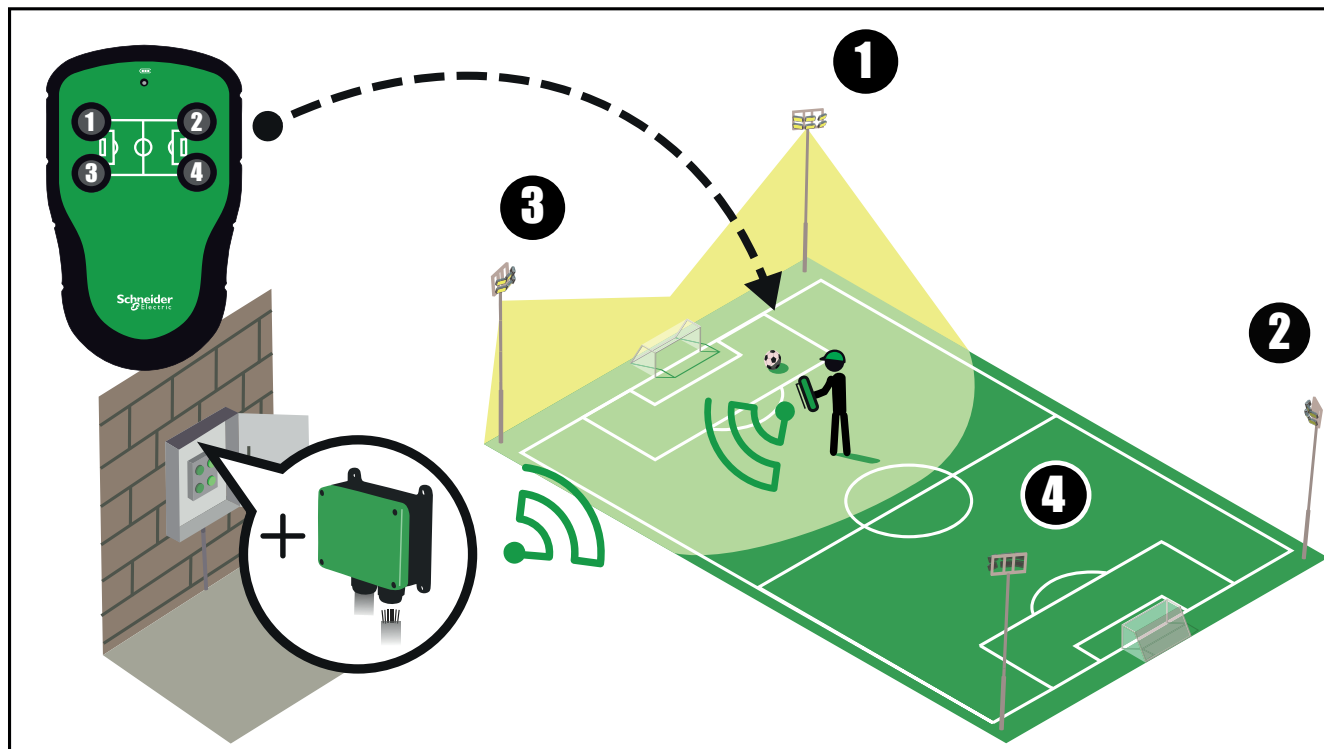
- He must go to the cabinet.
- Change the illumination to adapt to the needs.
- Move back in the stadium.
- Redo these actions when the needs change.



## Harmony Pocket Remote Solution Example

You just have to:

- Install one Pocket receiver inside the control cabinet.
- When the coach needs to adapt the illumination, he uses the Pocket transmitter and turns On and Off the individual lights.
- In case of the Control cabinet is too far from the position of the coach in the stadium, you may have to install one or more relay antenna ZBRA1.



## Harmony Pocket Remote References

Reference	Description	Link
ZART**	Pocket transmitter from 3 to 10 buttons	Harmony Pocket Remote - Wireless Remote Control System, User Guide EIO0000003973 (EN)
ZARB**	Pocket receiver with 5 or 11 relays	
ZARC***	Pocket transmitter front face	
ZBRA1	Wireless relay antenna >= V3.5	



# Mobility

## Winery Pump

### Problematic Overview

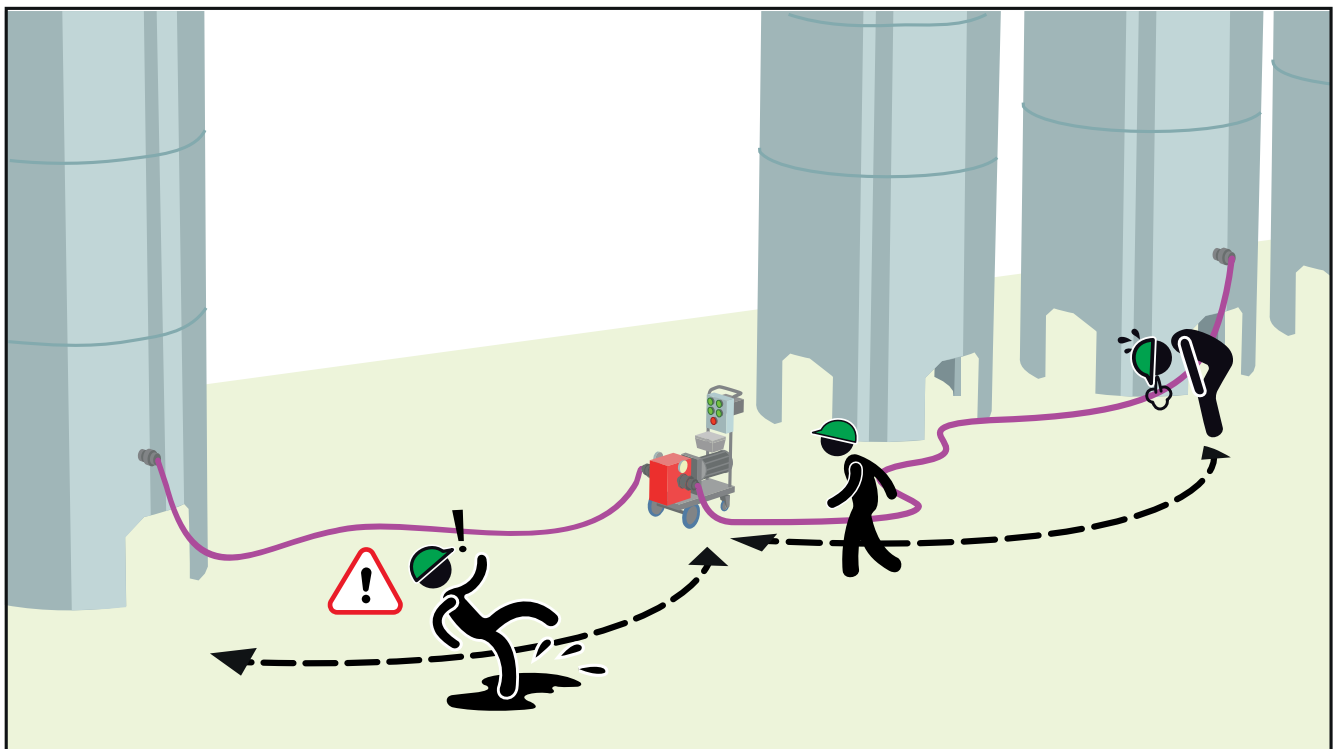
The operator must move back and forth from the pump to the tank to check the level of the liquid and adapt the pump flow.

Constraints of traditional solution	Advantages of the Pocket solution
The operator must move back and forth to operate the pump	Full mobility for the operator
	Easy and inexpensive solution to cover a large perimeter

### Problematic Example

The operator must keep is freedom during liquid transfer operation but during this time he needs to adjust the flow of the pump based on specific situations.

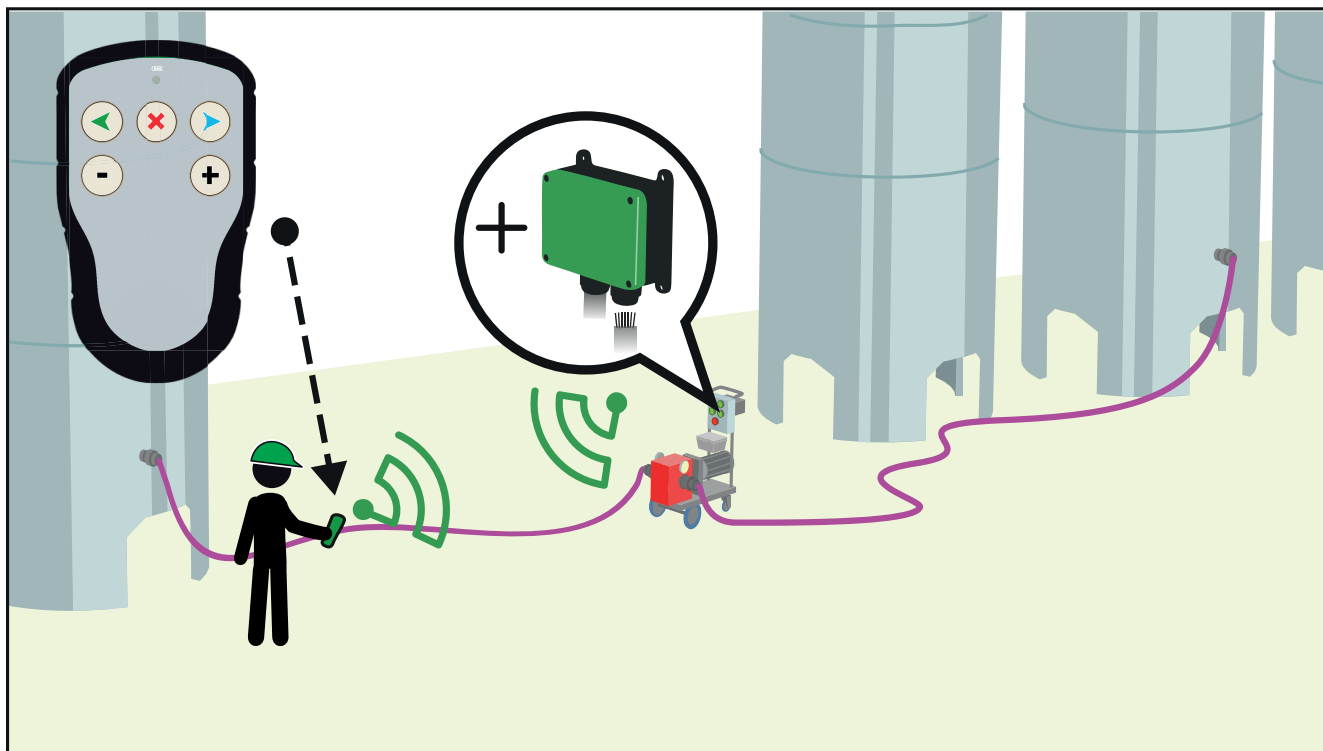
- The operator must go to the top of the tank and check the level.
- He decide to change the flow of the pump.
- He goes to the pump and adjust the speed.
- He goes back to the top of the tank.



## Harmony Pocket Remote Solution Example

You just have to:

- Install one Pocket receiver inside the control cabinet of the pump.
- When the operator needs to change the flow of the pump, he uses the Pocket transmitter he is handling and makes the right operation.
- In case of the pump is too far from the position of the operator, you may have to install one or more relay antenna ZBRA1.



## Harmony Pocket Remote References

Reference	Description	Link
ZART**	Pocket transmitter from 3 to 10 buttons	Harmony Pocket Remote - Wireless Remote Control System, User Guide EIO0000003973 (EN)
ZARB**	Pocket receiver with 5 or 11 relays	
ZARC***	Pocket transmitter front face	
ZBRA1	Wireless relay antenna >= V3.5	

# Factory Guard

## Problematic Overview

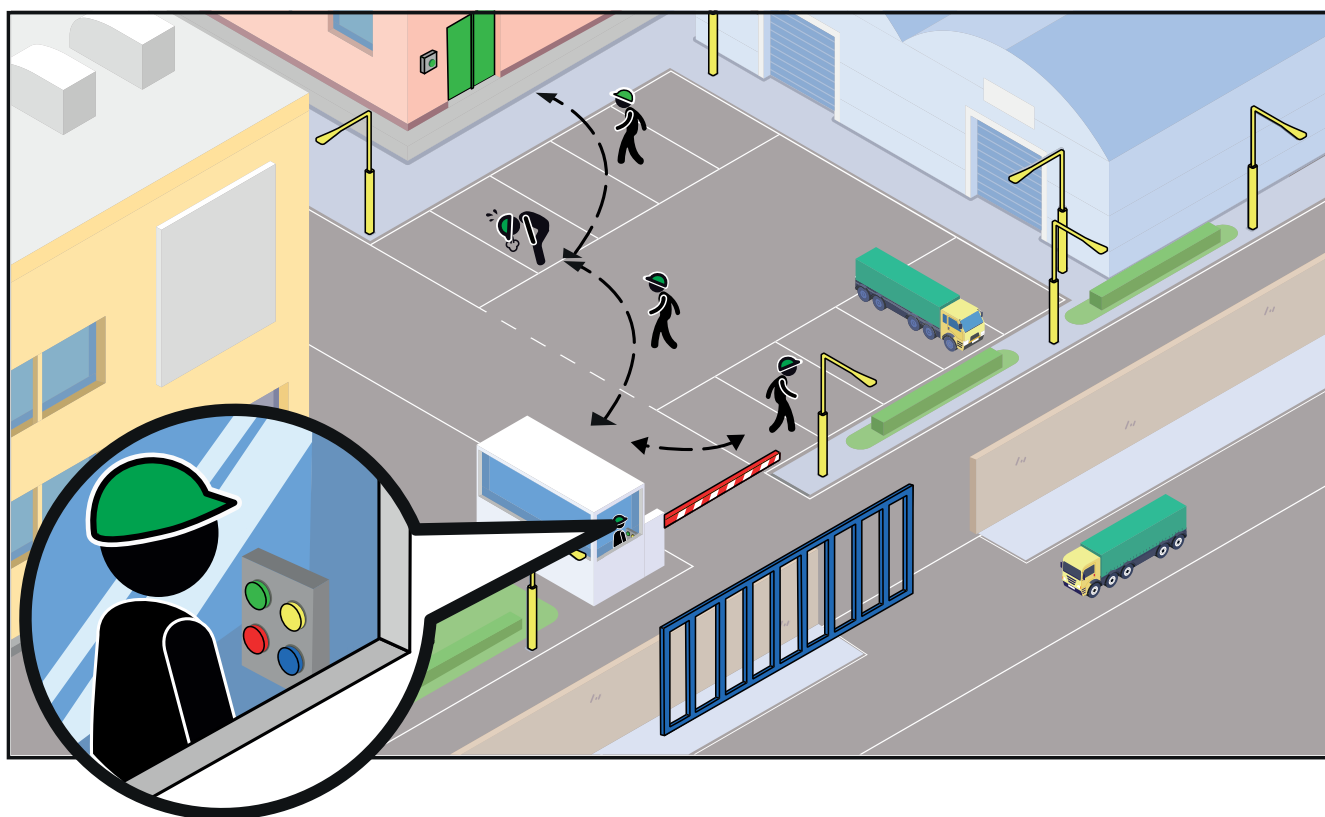
The factory guard operates the factory gate, the factory barrier, the light of the building located in the other side of the factory, open the automatic door of this building.

Constraints of traditional solution	Advantages of the Pocket solution
The factory guard must always be available to open the gate to the truck drivers.	The truck drivers are independent using the XB5R remote always efficient (no battery).
When positioned at the building side, the factory guard may be held to open the gate for an employee.	The electricians were not obliged to install long cables to manage the building from the factory guard office, the second receiver complete efficiently the solution.
	From anywhere he is, the factory guard can satisfy the needs of all employees.

## Problematic Example

The factory guard is in charge of multiple tasks from the gate to the building security (light and door).

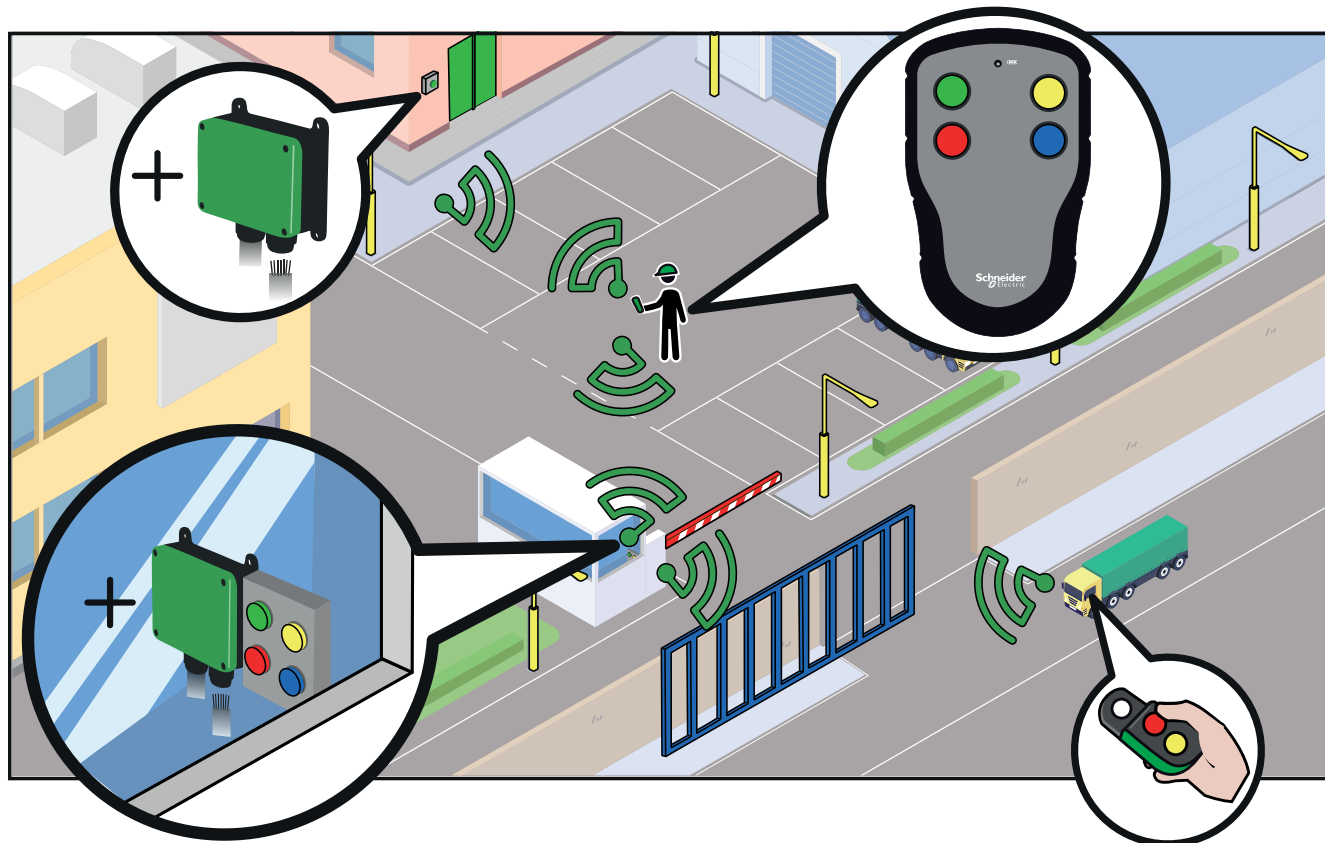
He must handle all the tasks wherever he is. He must go to the building to open the door and manage the light, but at the same time an employee could ask for the gate to be opened.



## Harmony Pocket Remote Solution Example

You just have to:

- Install a Pocket receiver at the factory guard office.
- Associate a Pocket transmitter to the Pocket receiver.
- Associate the XB5R transmitter to the Pocket receiver.
- Install a second Pocket receiver at the building side.
- Associate the Pocket transmitter to this second Pocket receiver.



## Harmony Pocket Remote References

Reference	Description	Link
ZART**	Pocket transmitter from 3 to 10 buttons	Harmony Pocket Remote - Wireless Remote Control System, User Guide EIO0000003973 (EN)
ZARB**	Pocket receiver with 5 or 11 relays	
ZARC***	Pocket transmitter front face	
ZBRA1	Wireless relay antenna >= V3.5	
XB5R	Wireless and battery less remote controls	

# Productivity

## Two Independent Production Lines

### Problematic Overview

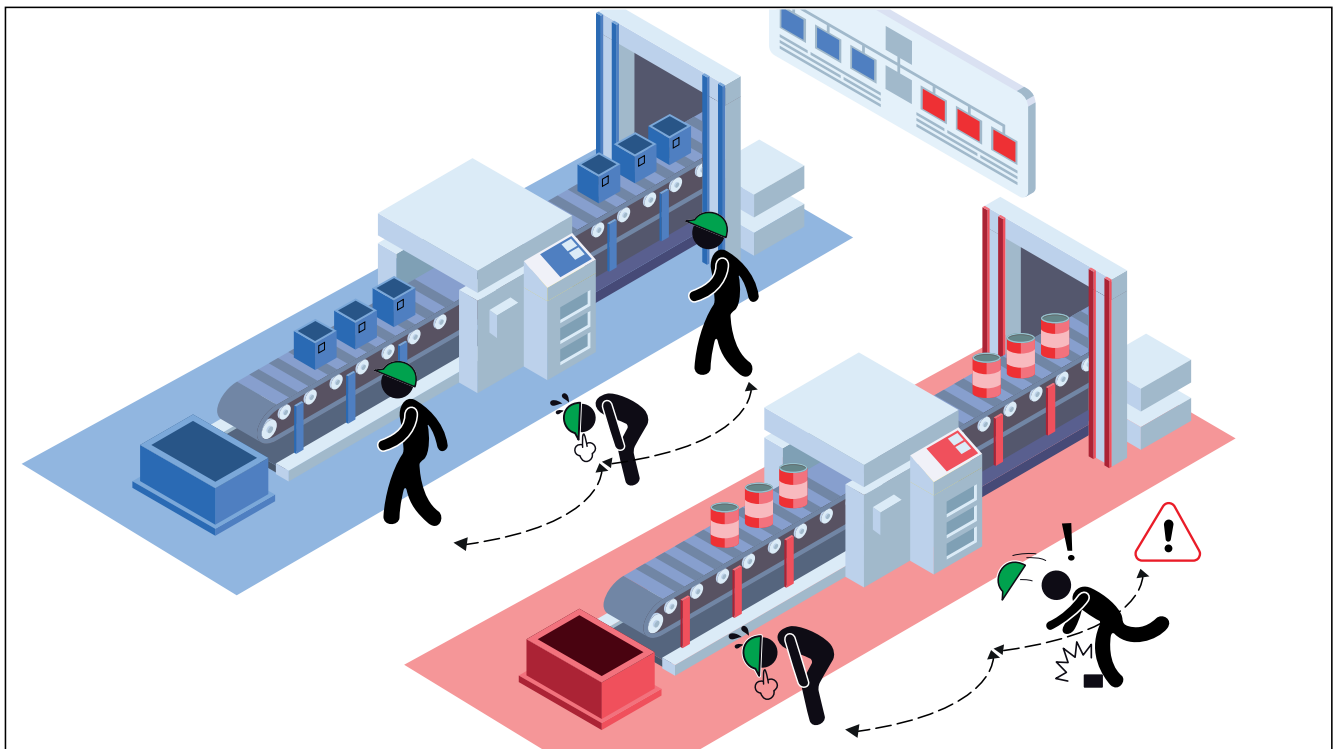
The operators must manage two production lines independently. All operating modes must be done at the best position to be very efficient.

Constraints of traditional solution	Advantages of the Pocket solution
The operator must move from the operator control panel to the efficient position on the line, risk to lose time and so productivity.	Avoid confusion on the remote that must be used for the production lines
One remote per line, risk to manipulate one line instead of the other.	Very long production line can be totally covered with the solution

### Problematic Example

Moving back to the machine control panel, the operator is losing time and can't stay at a specific position he wants to control.

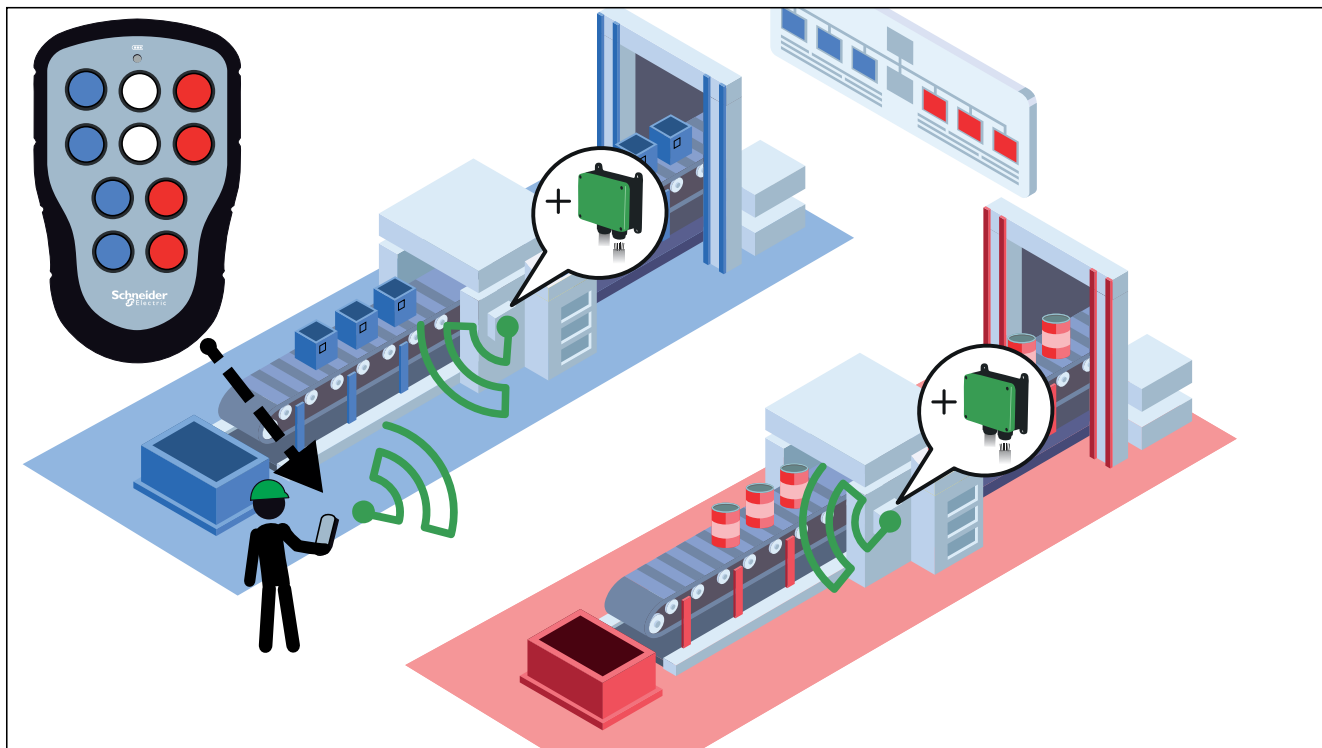
He may not apply the right command as he will not keep eyes on the issue.



## Harmony Pocket Remote Solution Example

You just have to:

- Install two Pocket receivers, one at each production line control panel.
- Associate a Pocket transmitter to each receiver.
- Define a precise and ergonomic front face for the Pocket transmitter (to handle carefully all the operating modes).



## Harmony Pocket Remote References

Reference	Description	Link
ZART**	Pocket transmitter from 3 to 10 buttons	Harmony Pocket Remote - Wireless Remote Control System, User Guide EIO0000003973 (EN)
ZARB**	Pocket receiver with 5 or 11 relays	
ZARC***	Pocket transmitter front face	
ZBRA1	Wireless relay antenna >= V3.5	

# Flexibility

## Automatic Doors

### Problematic Overview

Different categories of persons need to open the automatic doors. Pedestrians will use push buttons on the control cabinet beside the door, others will use the rope pull, but for the ones on forklift operating multiple doors a solution must be found.

Constraints of traditional solution	Advantages of the Pocket solution
Some operators are walking, others are driving forklift, using the rope pull, the forklift driver must move on and off from his forklift and could get injured	Mix different solutions on the same receiver, this avoid complex cabling
	Profit of all the advantages from the different ranges (battery less, small footprint)
	No more risk to hurt the door with the forklift when trying to use the rope pull switch

### Problematic Example

The automatic doors must be opened by different persons, pedestrians, pallet truck users and forklift drivers.

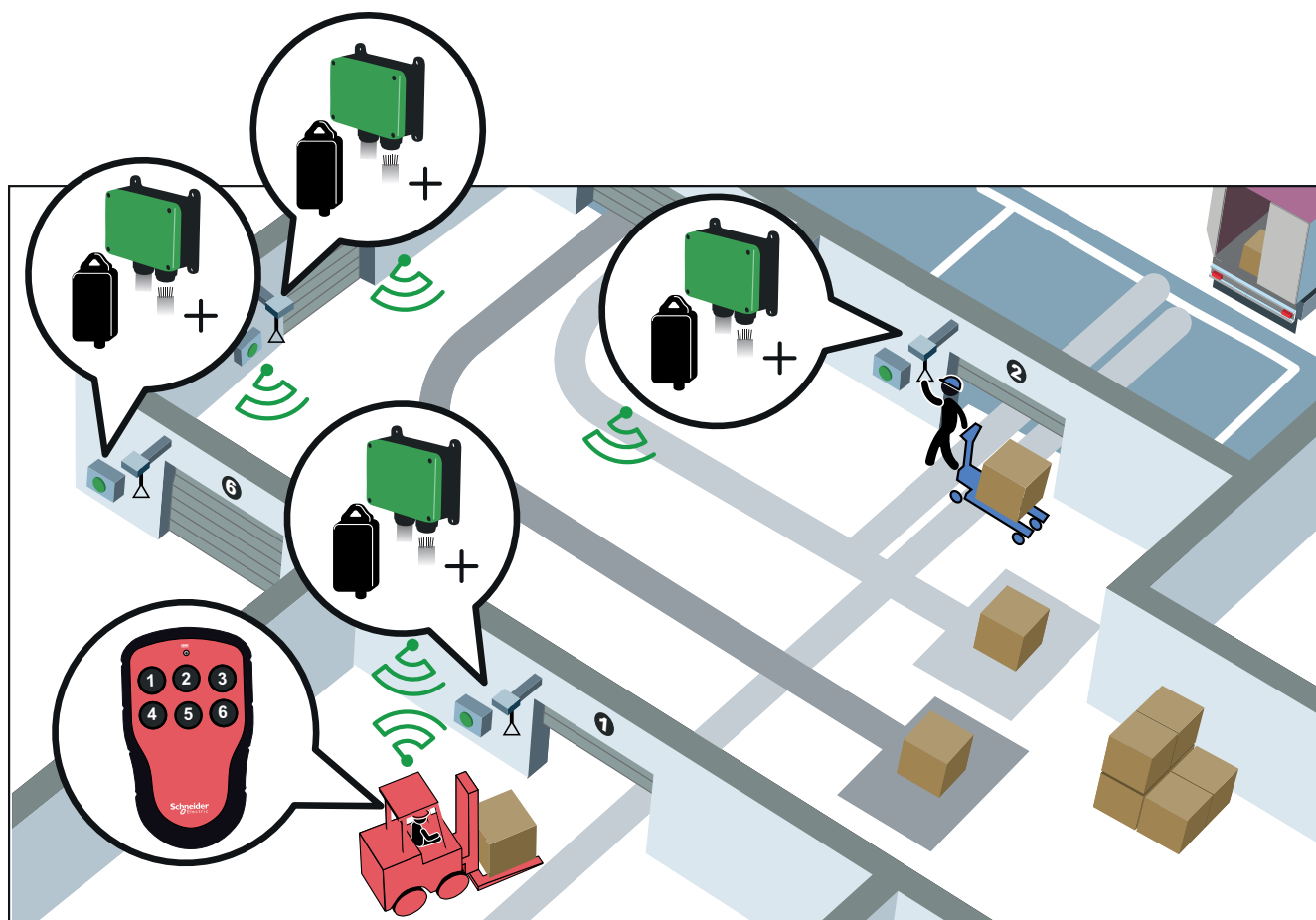
The forklift drivers must have possibility to open the different doors from a certain distance from it to avoid the risk to damage it.



## Harmony Pocket Remote Solution Example

You just have to:

- Install a Pocket receiver in the control cabinet of each automatic door.
- Associate the XB5R rope pull to the dedicated Pocket receiver.
- Associate a Pocket transmitter to the dedicated Pocket receivers.
- Associate a Pocket transmitter for all the forklift drivers to all the Pocket receivers.
- Define a precise and ergonomic front face for all the Pocket transmitters.



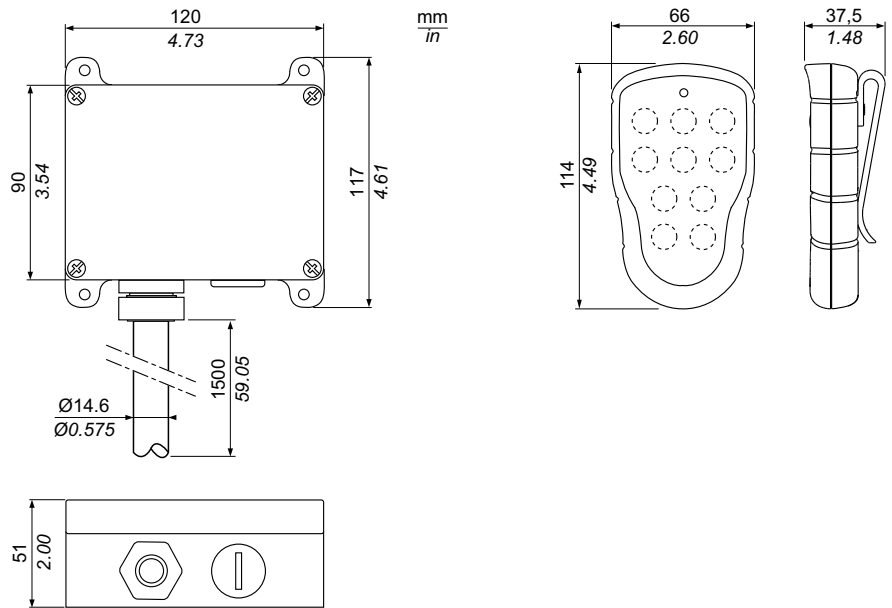
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ZARC***	Pocket transmitter front face	
ZBRA1	Wireless relay antenna >= V3.5	
XB5R	Wireless and battery less remote controls	
ZBRP1	Wireless XB5R rope pull switch	



# Dimensions

## Harmony Pocket Remote Transmitters and Receivers



Schneider Electric  
35 rue Joseph Monier  
92500 Rueil Malmaison  
France

+ 33 (0) 1 41 29 70 00

[www.se.com](http://www.se.com)

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