

# Harmony™ Wireless, Batteryless Push Buttons

XB5R plastic and XB4R metal

Catalog  
2013






# Harmony™ XB5R plastic and XB4R metal...

 It all adds up to the Simple Solution  
for your advanced Push Button  
requirements.

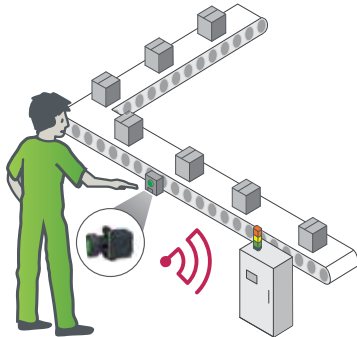
# Reduce installation time with Harmony™ wireless, batteryless XB5R and XB4R push buttons

By totally eliminating cabling and components between the push button and the electrical cabinet, you save installation time, and reduce your installation costs.

-  **Simplified machine cabling**  
with completely wireless push buttons
-  **Easier integration through open protocols**  
by serial link Modbus™ and Ethernet Modbus/TCP
-  **Architecture solutions**  
for integration into industrial and building environments

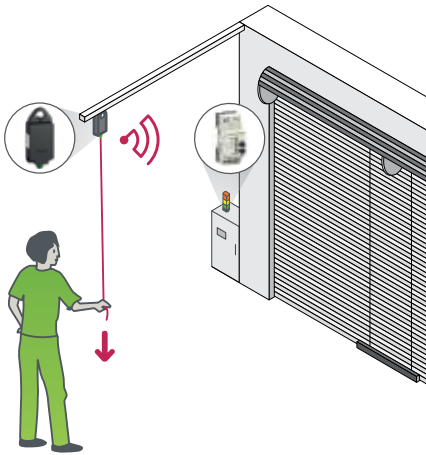


# Simplified cabling +



Installing a new hard-wired push button quickly on your conveyor system can be challenging.

You have to take many factors into account: (a) the length of cable and connections to the push button, (b) the cabling and connections in the cabinet, and (c) the time required for fitting the cables in covers or existing cable ducting.



Using the new Harmony™ wireless, batteryless XB5R and XB4R push buttons, or ZBRP1 rope pull switch, the only cabling required is for the receiver in the cabinet.

## Proven reliability

- Continuous availability of control function
- Reduced maintenance with no battery to replace, recharge or recycle
- Energy-efficient, thanks to a non-current consuming transmitter

## Robust functionality

- High resistance to contamination from dust (no cable entry)
- No risk of cable damage or loosened screws on the transmitter
- Proven quality and high performance of the Harmony product range



**no** battery to replace

## Economical and flexible

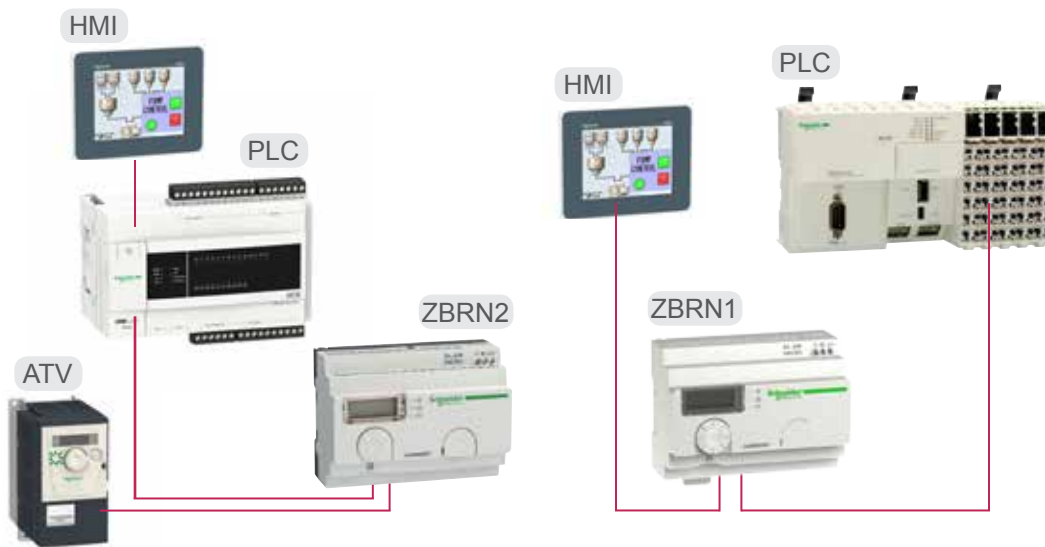
- Reduction in installation costs and time
- No configuration required, thanks to ready-to-use packs
- Freedom of movement
- Ideal solution when you need to add or move a control function

**20% less** installation costs compared to a hard-wired solution

# Easy integration and open protocols

## Integration into industrial automation systems via a field bus link

- Modbus™ serial link: found on all Schneider Electric PLCs
- Modbus/TCP: integrated into the latest models of Schneider Electric PLCs and HMIs



**2**  
Open standard protocols

## Simple and economical



Double RJ45 port enables network continuity without using hubs or switches

Up to **60**  
transmitters  
connected on the  
same bus

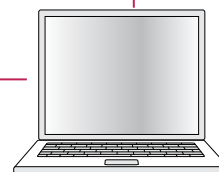
## Easy set up



Manual parameter interface

DTM interface and web pages with PC

SD card + csv files with PC



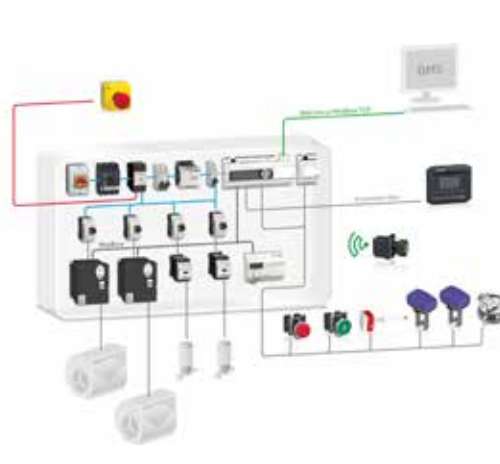
**3**  
setting modes

# Solutions architecture +

Harmony™ XB5R and XB4R Push Buttons are designed to easily integrate into MachineStruxure™ architectures for OEM machine builders and into PlantStruxure™ architectures for process environments.



Examples of architectures – Machine



Examples of architectures – HVAC

## Industrial applications

Suitable for a wide range of industrial applications, including explosive atmospheres for dust and gas environments.



Packaging



Cement



Automatic doors



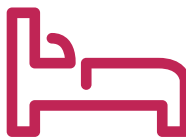
Hospital



Food & Beverage



Automotive



Hotel





Lighting

## Building applications

Compliant with DIN 43380 standard.

# Comprehensive product range +

From individual products to ready-to-use packs

Push button <b>ZB5RTA2</b>	Rope pull switch <b>ZBRP1</b>	Mushroom head push button <b>ZB5RTC2</b>	Receiver <b>ZBRRA</b>	Ethernet Modbus™/ TCP Module <b>ZBRN1</b> Ethernet Modbus serial module <b>ZBRN2</b>
				

## Ready-to-use solution packs

- Designed to meet the requirements of most applications
- Simple to order with only one reference number
- Easy to install with factory pre-programmed transmitter and receiver

Only 1 transmitter per receiver	Up to 32 transmitters per receiver
 <p style="text-align: center;">Plastic head <b>XB5RFB01</b></p> <p style="text-align: center;">Metal head <b>XB4RFB01</b></p> <ul style="list-style-type: none"> <li>• Transmitter with plastic or metal push button</li> <li>• Non-programmable receiver, 1 relay output</li> </ul>	 <p style="text-align: center;">Plastic head <b>XB5RFA02</b></p> <p style="text-align: center;">Metal head <b>XB4RFA02</b></p> <ul style="list-style-type: none"> <li>• Transmitter with plastic or metal push button</li> <li>• Set of 10 push button caps</li> <li>• Programmable receiver, 2 relay outputs</li> </ul>
 <p style="text-align: center;">Plastic head <b>XB5RMB03</b></p> <ul style="list-style-type: none"> <li>• Transmitter with plastic push button ZB5R in ergonomic enclosure</li> <li>• Non-programmable receiver, 1 relay output</li> </ul>	 <p style="text-align: center;">Plastic head <b>XB5RMA04</b></p> <ul style="list-style-type: none"> <li>• Transmitter with plastic push button ZB5R in ergonomic enclosure</li> <li>• Set of 10 push button caps</li> <li>• Programmable receiver, 2 relay outputs</li> </ul>





# Harmony™

## XB5R plastic and XB4R metal

Wireless, batteryless 22 mm push buttons

---

### XB5R and XB4R wireless, batteryless push buttons

- Introduction ..... 10
- Description
  - Description of “ready-to-use packs” product ranges ..... 11
  - Description of the components ..... 12
- References
  - Ready-to-use packs ..... 13
  - Transmitter components for wireless, batteryless push buttons ..... 14
  - Transmitter components for wireless, batteryless rope pull switch ..... 14
  - Programmable receivers ..... 15
  - Accessories ..... 15

### ZBRN1 and ZBRN2 Access points

- Introduction ..... 16
- Description ..... 16
- References
  - Programmable access points ..... 17
  - Communication module ..... 17
  - Accessories ..... 17

# Harmony™ XB5R plastic and XB4R metal

Wireless, batteryless 22 mm push buttons

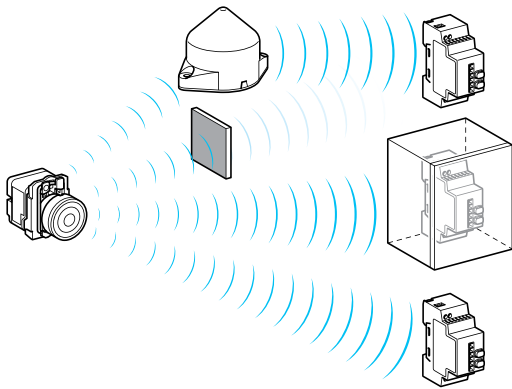


Figure A: radio transmission between 1 transmitter and 3 receivers

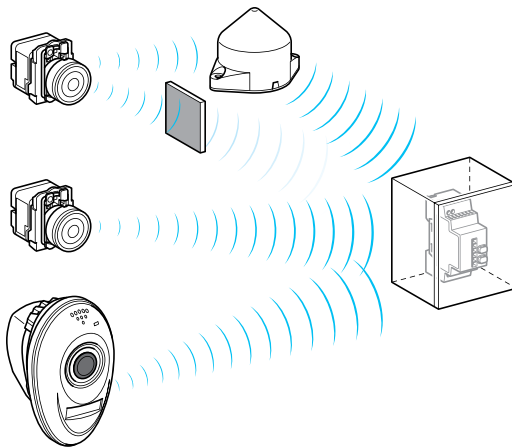


Figure B: radio transmission between 3 transmitters and 1 receiver

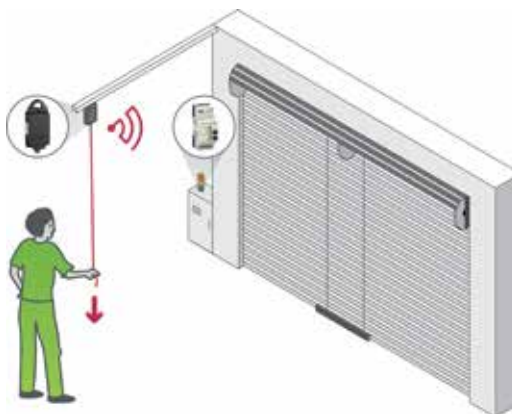


Figure C: Harmony ZBRP1 rope pull switch for automatic doors

## Introduction

The Harmony wireless, batteryless push button product range enables remote control of a relay (receiver) by means of a push button (transmitter). The control is by radio transmission, where the transmitter is fitted with a “dynamo” type generator that converts mechanical energy – produced when the push button is pressed – to electrical energy. A radio-encoded message with a unique ID code is sent as a single pulse to one or more receivers located several dozen meters away (see figure A). A single receiver can also be actuated by up to 32 different transmitters (see figure B).

Depending on the application, a Repeater can be used to “transmit around” an obstacle that impedes transmission, or to increase the range (see figures A and B).

The possible distance (2) between a transmitter and a receiver is approximately:

- 100 m/3937 ft where there are no obstacles,
- 25 m/984 ft if the receiver is installed in a metal housing or in a closed metal enclosure,
- 300 m/11811 ft if a Repeater is located between the transmitter and the receiver (receiver installed in a metal housing or in a closed metal enclosure).

The wireless, batteryless push button reduces installation time and costs, by eliminating wiring and associated equipment between the transmitters and the control panel.

This technology also allows an operator to be mobile or have a control mounted on-board a vehicle (trolley, truck). The push button is always available and requires no maintenance (no battery needed).

The new wireless, batteryless ZBRP1 rope pull switch is designed for easy operation of automatic doors. This switch can be either mounted directly on the panel or between two ropes close to the automatic door. This enables the forklift driver or pedestrian to open or close the door by pulling the rope, where the mechanical energy produced is transmitted as a radio message to the receiver placed in the control panel (see figure C).

This technology (radio-encoded message sent as a single pulse) cannot be used for hoisting applications (“up/down”, “right-left” movements) or safety applications (Emergency Stop push buttons). For these applications, it is recommended that Harmony XB4 and XB5 wired push buttons or the XAC range of pendant control stations be used.

## Environment

The performance features of the XB5R range conform to the following specifications:

■ International standards and approvals:

- Wireless, batteryless push buttons: EN/IEC 60947-1, EN/IEC 60947-5-1, UL 508, CSA C22-2 N° 14
- Transmitter/Receiver system: BT 2006/95/EC, CE: R&TTE 1999/5/EC, EMC 2004/108/EC

■ International certifications: UL, CSA, C-Tick, GOST, CCC

■ Radio agreements: ANATEL (Brazil), SRRC (China), FCC (USA), RSS (Canada), ICASA (South Africa), ARIB T66 (Japan)

For more technical information, please refer to our website [www.schneider-electric.com](http://www.schneider-electric.com).

(1) Typical values which can be affected by the application environment.

# Harmony™ XB5R plastic and XB4R metal

Wireless, batteryless 22 mm push buttons

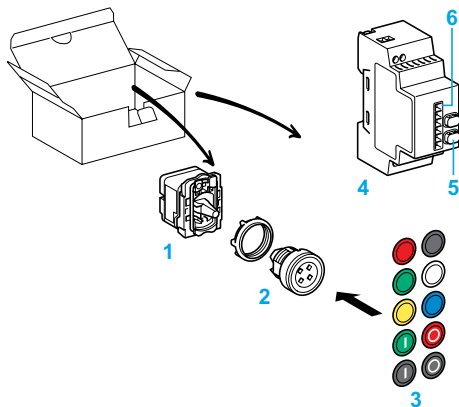


Figure D: pack with transmitter and programmable receiver

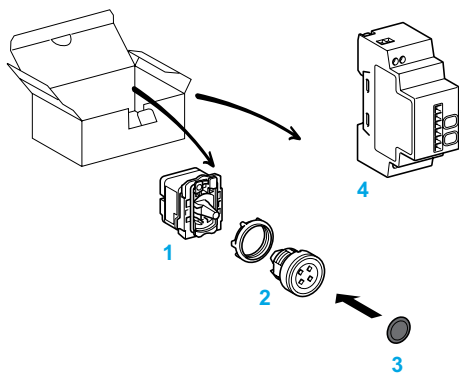


Figure E: pack with transmitter and non-programmable receiver

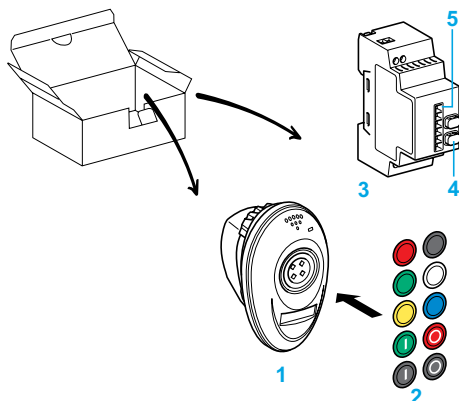


Figure F: pack with transmitter in handy box and programmable receiver

## Description of “ready-to-use packs” product ranges (1)

### Pack with Programmable receiver (see figure D)

The pack includes:

- 1 Transmitter with a mounting collar for assembly with a push button head and mounting in a Ø 22 mm hole.
- 2 Flush, spring return, plastic or metal push button head.
- 3 Set of 10 different colored caps, which can be clipped onto the push button head.
- 4 ≈ 24 to 240 V Programmable receiver, 2 relay outputs, with 2 buttons (teach and parameter setting) 5 and 6 indicating LEDs 6.

### Pack with Non-programmable receiver (see figure E) (1)

The pack includes:

- 1 Transmitter with a mounting collar for assembly with a push button head and mounting in a Ø 22 mm hole.
- 2 Flush, spring return, plastic or metal push button head.
- 3 Black cap that can be clipped onto the push button head.
- 4 ≈ 24 V Non-programmable receiver, 1 relay output, without indicating LED or button.

### Pack with handy box and Programmable receiver (see figure F)

The pack includes:

- 1 Handy box containing a wireless, batteryless push button with plastic head.
- 2 Set of 10 different colored caps, which can be clipped onto the push button head.
- 3 ≈ 24 to 240 V Programmable receiver, 2 relay outputs, with 2 buttons (teach and parameter setting) 4 and 6 indicating LEDs 5

(1) Wireless, batteryless push button and the receiver are pre-programmed.

# Harmony™

## XB5R plastic and XB4R metal

Wireless, batteryless 22 mm push buttons

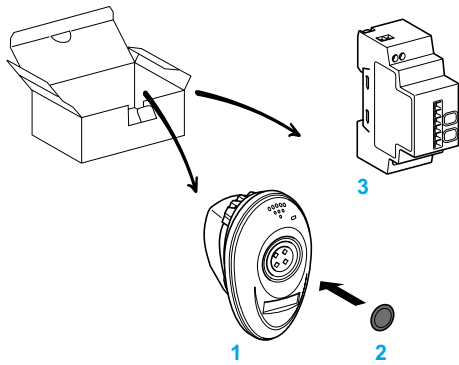


Figure G: pack with transmitter in handy box and non-programmable receiver

### Description of “ready-to-use packs” product ranges (1) (continued)

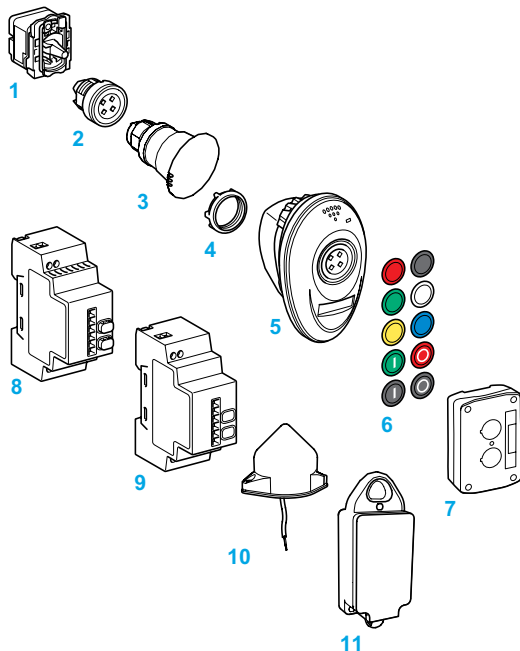
#### Pack with handy box and Non-programmable receiver (see figure G)

The pack includes:

- 1 Handy box containing a wireless, batteryless push button with plastic head.
- 2 Black cap that can be clipped onto the push button head.
- 3  $\approx$  24 V Non-programmable receiver, 1 relay output, without indicating LED or button.

### Description of the components

Components are sold separately to allow completion of existing applications or creation of specific applications:



- 1 Transmitter for assembly with push button head and mounting in a  $\varnothing$  22 mm hole
- 2 Flush, spring return, push button head, metal or plastic version
- 3 Mushroom head, plastic version
- 4 Plastic or metal mounting collar
- 5 Empty handy box
- 6 Set of 10 different colored caps or set of 10 same color caps, that can be clipped onto the push button head
- 7 Empty plastic boxes (1 or 2 cut-outs) for wall mounting or on-board applications
- 8  $\approx$  24 to 240 V Programmable receiver, 2 relay outputs, with 2 buttons (teach and parameter setting) and 6 indicating LEDs
- 9  $\approx$  24 V Programmable receiver, 4 PNP outputs, with 2 buttons (teach and parameter setting) and 6 indicating LEDs
- 10 Repeater
- 11 Rope pull switch

(1) Wireless, batteryless push button and the receiver are pre-programmed.

# Harmony™

## XB5R plastic and XB4R metal

Wireless, batteryless 22 mm push buttons



XB5RFA02



### Ready-to-use packs (1)

Description	Transmitter type	Voltage receiver V	Receiver type	Reference	Weight kg/lb
<b>Packs include:</b> - <b>1 Wireless, batteryless</b> push button assembled on mounting collar - <b>1 Receiver</b> push button and receiver are pre-programmed.	Wireless, batteryless push button + Ø 22 mm <b>plastic</b> head + 1 set of 10 different colored caps (1 cap to be selected and fitted)	~ 24 to 240	Programmable receiver ZBRRA equipped with: - choice of 3 output functions (momentary, maintained, stop/start) - 2 relay outputs type RT 3A (2), - 2 buttons (teach, parameter setting) - 6 indicating LEDs (power ON, function modes, output status, signal strength)	<b>XB5RFA02</b>	0.230/ 0.507
	Wireless, batteryless push button + Ø 22 mm <b>metallic</b> head + 1 set of 10 different colored caps (1 cap to be selected and fitted)			<b>XB4RFA02</b>	0.245/ 0.540
	Wireless, batteryless push button + Ø 22 mm <b>plastic</b> head + 1 black cap not fitted	~ 24	Non-programmable receiver equipped with momentary output function: - 1 relay output type RT 3A - without button - without indicating LED	<b>XB5RFB01</b>	0.230/ 0.507
	Wireless, batteryless push button + Ø 22 mm <b>metallic</b> head + 1 black cap not fitted			<b>XB4RFB01</b>	0.245/ 0.540
<b>Packs include:</b> - <b>1 Wireless, batteryless</b> push button assembled on mounting collar, in handy box (3) - <b>1 Receiver</b> push button and receiver are pre-programmed.	Wireless, batteryless push button + Ø 22 mm <b>plastic</b> head mounted in a handy box + 1 set of 10 different colored caps (1 cap to be selected and fitted)	~ 24 to 240	Programmable receiver ZBRRA equipped with: - choice of 3 output functions (momentary, maintained, stop/start) - 2 relay outputs type RT 3A (2), - 2 buttons (teach, parameter setting) - 6 indicating LEDs (power ON, function modes, output status, signal strength)	<b>XB5RMA04</b>	0.250/ 0.551
	Wireless, batteryless push button + Ø 22 mm <b>plastic</b> head mounted in a handy box + 1 black cap not fitted	~ 24	Non-programmable receiver equipped with momentary output function: - with 1 relay output type RT 3A - without button - without indicating LED	<b>XB5RMB03</b>	0.250/ 0.551

(1) Wireless, batteryless push button and the receiver are pre-programmed.

(2) Receivers supplied are set to momentary output function. The user can configure it to maintained and stop/start functions.

(3) Supplied with a magnet to be attached by the customer.

# Harmony™

## XB5R plastic and XB4R metal

Wireless, batteryless 22 mm push buttons



ZBRT1



ZB4RZA0



ZB5RTA4



ZB5RZC2



ZB5RTC2



ZBRP1

Transmitter components for wireless, batteryless push buttons					
Description	Type of push	Color	Reference	Weight kg/lb	
Transmitter for wireless, batteryless push button (1) (2)	–	–	ZBRT1	0.025/ 0.055	
Spring return push button heads for transmitter ZBRT1	Flush (plastic)	Without cap (3)	ZB5RZA0	0.015/ 0.033	
	Flush (metal)	Without cap (3)	ZB4RZA0	0.030/ 0.066	
Wireless, batteryless push buttons include: - Transmitter fitted with mounting collar - Spring return push button head with snap-on cap (4)	Flush (plastic)	White	ZB5RTA1	0.045/ 0.099	
		Black	ZB5RTA2	0.045/ 0.099	
		Green	ZB5RTA3	0.045/ 0.099	
		White I on green background	ZB5RTA331	0.045/ 0.099	
		Red	ZB5RTA4	0.045/ 0.099	
		White O on red background	ZB5RTA432	0.045/ 0.099	
		Yellow	ZB5RTA5	0.045/ 0.099	
		Blue	ZB5RTA6	0.045/ 0.099	
		Flush (metal)	White	ZB4RTA1	0.085/ 0.187
			Black	ZB4RTA2	0.085/ 0.187
Green	ZB4RTA3		0.085/ 0.187		
White I on green background	ZB4RTA331		0.085/ 0.187		
Red	ZB4RTA4		0.085/ 0.187		
White O on red background	ZB4RTA432		0.085/ 0.187		
Spring return mushroom head for transmitter ZBRT1	Mushroom 40 mm/ 1.58 in. (plastic)	Black	ZB5RZC2	0.025/ 0.055	
		Black	ZB5RTC2	0.055/ 0.121	

Transmitter components for wireless, batteryless rope pull switch			
Description	Application	Reference	Weight kg/lb
Rope pull switch with wireless, batteryless transmitter	For automatic doors: The rope pull switch sends a radio message to the receiver placed in the control panel to open and close the door.	ZBRP1	0.150/ 0.331

(1) Mounting collar ZB5AZ009 (plastic) or ZB4BZ009 (metal) to be ordered separately.  
 (2) Only heads ZB4RZA0 and ZB5RZA0 are mechanically compatible.  
 (3) Cap to be ordered separately. Refer to the "Accessories" table on page 15.  
 (4) This cap is fitted by Schneider Electric and cannot be removed (risk of damage).

# Harmony™

## XB5R plastic and XB4R metal

Wireless, batteryless 22 mm push buttons



ZBRRA



ZBA7235



ZBA7331



ZBA7432



ZBA79



ZBRM01



XALD02



ZBRA1

### Programmable receivers

Description	Output function	Output type	Receiver voltage V	Reference	Weight kg/lb
<b>Programmable receivers (1)</b> equipped with: - 2 buttons (teach and parameter setting) - 6 indicating LEDs (power ON, function modes, output status, signal strength)	Momentary	4 PNP outputs, 200 mA / 24 V	≈ 24	ZBRRC	0.130/0.287
	Momentary, Maintained	2 relay outputs type RT 3A (2)	≈ 24 to 240	ZBRRD	0.130/0.287
	Momentary, Maintained, Stop/Start	2 relay outputs type RT 3A (2)	≈ 24 to 240	ZBRRA	0.130/0.287

### Accessories

#### Caps for Harmony™ push button heads ZB5RZA0 and ZB4RZA0

Description	Background color	Marking	Sold in lots of	Unit reference	Weight kg/lb
<b>Sets of 10 different colored caps with identical marking (3)</b>	White	Without	10	ZBA71	0.010/0.022
		"I" (black)	10	ZBA7131	0.010/0.022
		"I" (black)	10	ZBA7134	0.010/0.022
		"+" (black)	10	ZBA7138	0.010/0.022
	Black	Without	10	ZBA72	0.010/0.022
		"O" (white)	10	ZBA7232	0.010/0.022
		"+" (white)	10	ZBA7233	0.010/0.022
		"⊕" (white)	10	ZBA7235	0.010/0.022
	Green	Without	10	ZBA73	0.010/0.022
		"I" (white)	10	ZBA7331	0.010/0.022
		"+" (white)	10	ZBA7333	0.010/0.022
		"⊕" white	10	ZBA7335	0.010/0.022
Red	Without	10	ZBA74	0.010/0.022	
	"O" (white)	10	ZBA7432	0.010/0.022	
	Without	10	ZBA75	0.010/0.022	
	Without	10	ZBA76	0.010/0.022	
<b>Set of 10 different colored caps with different markings (3)</b>	White, black, green, red, yellow, blue, white I on green background, black I on white background, white O on red background, white O on black background		1	ZBA79	0.010/0.022
<b>Set of 6 different colored caps</b>	White, black, green, red, yellow, blue		1	ZBA80	0.010/0.022

#### Boxes for wireless, batteryless push buttons

Product	Application	Description	Sold in lots of	Unit reference	Weight kg/lb
<b>Handy box, plastic, empty (4) (5)</b>	For mobile wireless, batteryless push buttons	1 cut-out	1	ZBRM01	0.040/0.088
<b>Empty plastic boxes for wireless, batteryless push buttons (6)</b>	For fixed or on-board wireless, batteryless push buttons	1 cut-out	1	XALD01	0.136/0.300
		2 cut-outs	1	XALD02	0.193/0.426

#### Accessories

<b>Repeater (7)</b>	Between transmitter and receiver Used to increase the range and/or get round obstacles	≈ 24 to 240 V - 5 m/16.4 ft cable - 1 power-ON LED - 2 LEDs reception/transmission	1	ZBRA1	0.200/0.441
<b>Mounting collar</b>	-	Plastic	10	ZB5AZ009	0.038/0.084
		Metal	10	ZB4BZ009	0.038/0.084
<b>Legend plate, 27 x 8 mm/ 1.06 x 0.32 in., for engraving</b>	For sticking onto handy box ZBRM01	Self-adhesive, blank, black background	10	ZBY0101T	0.005/0.011

(1) Each receiver can be actuated by up to 32 transmitters.

(2) Receivers supplied are set to momentary output function. The user can configure it to maintained and stop/start functions.

(3) Cap can be snapped on at 90° intervals, through 360°.

(4) Cannot be used for wired contacts (no cable gland outlet)

(5) Supplied with a magnet to be attached by the customer.

(6) Box equipped with cable gland outlets, compatible with Harmony ZB5 push button heads.

(7) Not wired to the receiver.



# Harmony™ XB5R plastic and XB4R metal Wireless, batteryless 22 mm push buttons ZBRN1 and ZBRN2 Access points

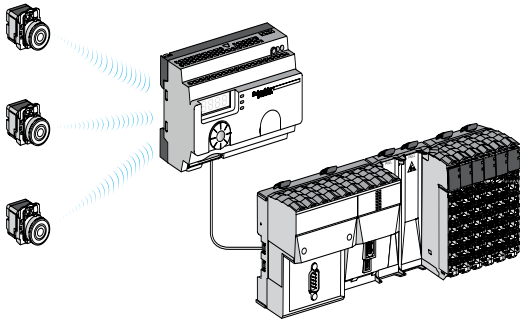


Figure A: radio transmission between 3 transmitters and 1 Access Point

## Introduction

The access point for Harmony™ wireless, batteryless push buttons provides network connectivity by operating as intermediate equipment between the transmitter and the PLC (Programmable Logic Controller). The access point receives radio signals from the transmitters and converts them to communication protocols. Based on the model, it is connected to the PLC using either RS485 Modbus Serial line or Modbus/TCP protocol.

The access point can be used with transmitters such as XB4R and XB5R wireless, batteryless push buttons, rope pull switch, mushroom head push button (1), and all PLCs that support Modbus Serial line over RS485 or Modbus/TCP protocols.

Depending on the application, an external or a relay antenna can be used to improve signal reception. An access point can support up to 60 radio transmitters.

The Access point can be configured:

- through jog dial and 7-segment display (configuration and diagnostic modes),
- through web pages for ZBRN1 (Modbus/TCP communication module),
- through SoMachine™, Unity™ Pro software, or third party FDT container using DTM (Device Type Manager) files (2) (3),
- through SD card and csv files for communication and radio configuration.

The possible distance (4) between a transmitter and an access point is approximately:

- 100 m/328 ft where there are no obstacles,
- 25 m/82 ft if the access point is installed in a metal housing or in a closed metal enclosure,
- 300 m/984 ft if a Repeater is located between the transmitter and the access point (installed in a metal housing or in a closed metal enclosure),
- 60 m/197 ft if an external antenna is connected to the access point.

## Description

### Standard access point with communication module (see figure B)

The access point ZBRN1 has an empty slot for the ZBRCETH network communication module to support Modbus™/TCP protocol. This communication module has 2 standard Ethernet RJ45 connectors that provide connectivity for daisy chain operation and daisy chain loop operation (when used with Schneider Electric ConneXium™ Ethernet switches) and thus avoids the use of an external switch or hub.

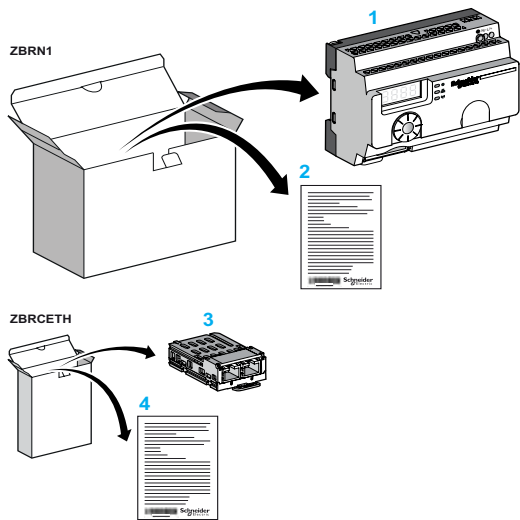


Figure B: standard access point with communication module

- 1 ZBRN1 standard access point (5)
- 2 ZBRN1 instruction sheet
- 3 ZBRCETH Modbus/TCP network communication module
- 4 ZBRCETH instruction sheet

(1) Please refer to the References table on page 14 for the compatible list of transmitters.

(2) For more information on SoMachine and Unity Pro software, please refer to our website [www.schneider-electric.com](http://www.schneider-electric.com).

(3) DTM is a software component file that enables the SoMachine or Unity Pro software to communicate with the connected system.

(4) Typical values which can be affected by the application environment.

(5) ZBRN1 must be plugged with a communication module, reference ZBRCETH for Modbus/TCP protocol.



# Harmony™ XB5R plastic and XB4R metal Wireless, batteryless 22 mm push buttons ZBRN1 and ZBRN2 Access points

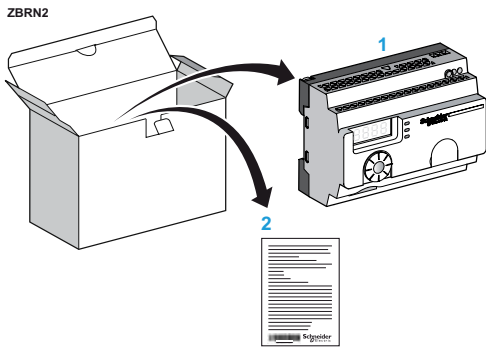


Figure C: access point for Modbus Serial line connection



ZBRN2



ZBRN1



ZBRCETH



ZBRA2

## Description

Access point for Modbus™ serial line protocol (see figure C)

The access point ZBRN2 has 2 embedded RS485 connectors that avoid the use of an external hub for RS485 Serial line connection. The supported baud rates are 1200 bps, 2400 bps, 4800 bps, 9200 bps, 9600 bps, 38,400 bps, and 115,200 bps.

- 1 ZBRN2 access point
- 2 ZBRN2 instruction sheet

## Programmable access points

Description	Data function	Output type	Receiver voltage V	Reference	Weight kg/lb
Programmable access points equipped with: - 7-segment display - jog dial - 8 indicating LEDs (power ON, functions status, signal strength) - external antenna connector and protective plug	Momentary (adjustable from 100 ms to 1 s)	2 RS485 connectors that provides connectivity for Modbus RS485 Serial line	≈ 24 to 240	<b>ZBRN2 ▲</b>	0.270/ 0.595
	Momentary (adjustable from 100 ms to 1 s)	1 slot for communication module ZBRCETH (should be ordered separately)	≈ 24 to 240	<b>ZBRN1 ▲</b>	0.263/ 0.580

## Communication module

Description	Characteristics	Communication port	Reference	Weight kg/lb
Modbus/TCP network communication module	Modbus/TCP protocol with embedded Web pages in 5 languages for configuration, monitoring and diagnostics	2 RJ45 connectors that provides connectivity for daisy chain and daisy chain loop operation	<b>ZBRCETH ▲</b>	0.044/ 0.097

## Accessories

Product	Application	Description	Reference	Weight kg/lb
External antenna	Connected to the access point (ZBRN1 or ZBRN2) Used to increase the distance of transmission	2 m/6.56 ft cable 1 RF connector	<b>ZBRA2 ▲</b>	0.040/ 0.088

**Note:** The ZBRN2 has embedded communication port for Modbus Serial Line, while the ZBRN1 must be plugged with a communication module to support different protocols.

▲ Available: 1<sup>st</sup> quarter 2013.







[www.schneider-electric.com/control](http://www.schneider-electric.com/control)

**Schneider Electric USA, Inc.**

8001 Knightdale Blvd.  
Knightdale, NC 27545

USA Customer Care Center  
Tel: 888-778-2733

**Schneider Electric Canada**

5985 McLaughlin Rd.  
Mississauga, Ontario, Canada L5R 1B8  
Canada Customer Care Center  
Tel: 800-565-6699

The information and dimensions in this catalog are provided for the convenience of our customers. While this information is believed to be accurate, Schneider Electric reserves the right to make updates and changes without prior notification and assumes no liability for any errors or omissions.

ConneXium, Harmony, MachineStruxure, Modbus, PlantStruxure, SoMachine, Untiy Pro, Schneider Electric and logo, and "Make the most of your energy" are trademarks or registered trademarks of Schneider Electric or its affiliates in the United States and other countries. Other trademarks used herein are the property of their respective owners.

Design: Schneider Electric  
Photos: Schneider Electric