

Smart Home



BJC | nexus

CONECTA CON TU HOGAR

TECHNICAL CATALOGUE

www.bjcnexus.es

BJC

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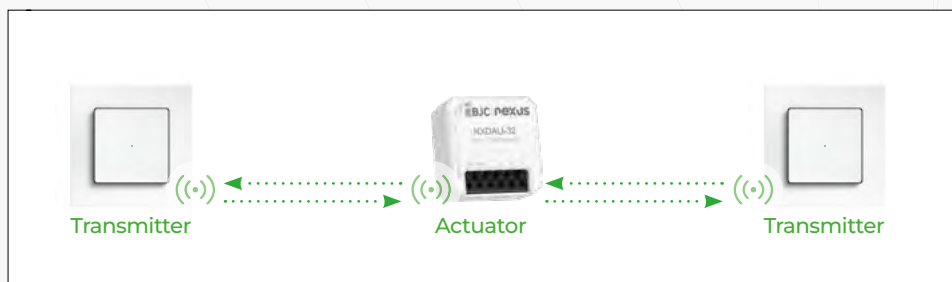


WHAT IS BJC NEXUS?

BJC Nexus is a professional smart home system that uses 868 MHz wireless technology to control lighting, blinds, security and scenes in new-build homes, refurbishments or extensions to existing properties.

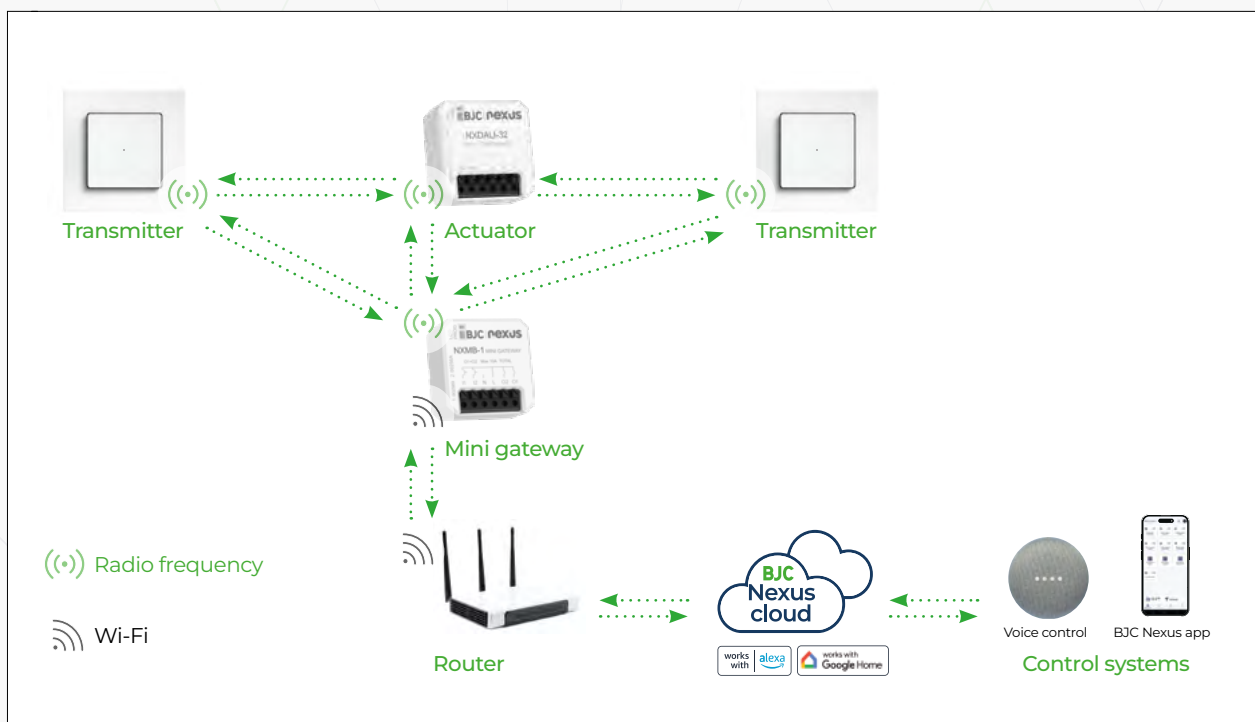
It allows the installation to be automated without the need for a bus cable, ensuring quick and flexible commissioning.

Two-way communication between powered devices ensures that commands are executed correctly and allows the real-time status of the devices to be monitored at all times.



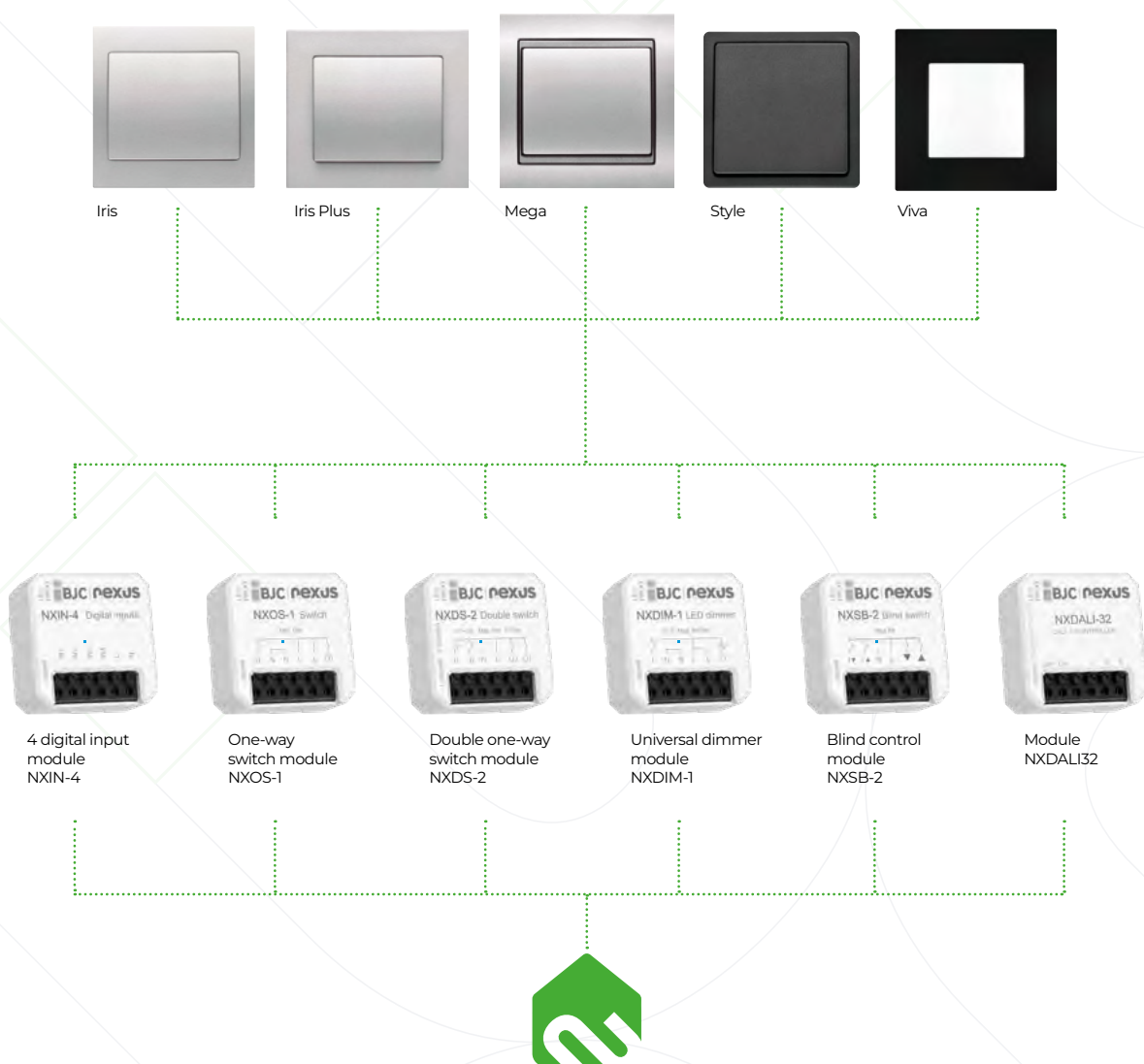
The gateway also enables remote control, scenes, timer setting and automation functions. The system continues to operate locally in the event of an internet outage, allowing it to be controlled offline.

The system can be set up easily using devices such as the BJC Nexus mini gateway, with new functions added gradually over time.



COMPATIBILITY WITH ALL BJC SERIES

Combine the modules with any model in the BJC series to get your home connected.

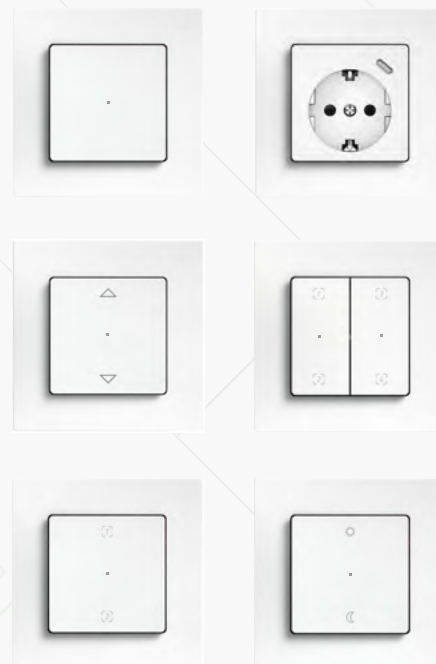


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- Wireless. Installed and extended without the need for building work.
- Control via a smartphone, tablet, the cloud, from both inside and outside the home.
- **Made in Europe** according to strict quality standards and European regulations, allowing us to provide a 5-year warranty.
- Compatible with Google Nest and Alexa voice assistants.
- Control it using the free BJC Nexus app, as well as the Google Home and Amazon Alexa apps.
- Can be integrated with Home Assistant.
- Cloud located on **servers in Europe** with European cybersecurity and data protection standards.
- You can combine the modules with any model in the BJC series to get your home connected.

Smart Home



BENEFITS FOR THE USER



Wireless system

Easy to install and convert existing systems without the need for wiring thanks to its wireless system.



Lower consumption

BJC Nexus is an intelligent system designed for protection and energy efficiency.



Versatile look

Based on the Miro range with clean lines and refined surfaces, you'll have numerous styling options.



FULL CONTROL

With BJC Nexus you can easily and efficiently control lights, blinds and sockets.



FROM ANYWHERE

Control your home with the app, whether you are at home or anywhere else in the world.



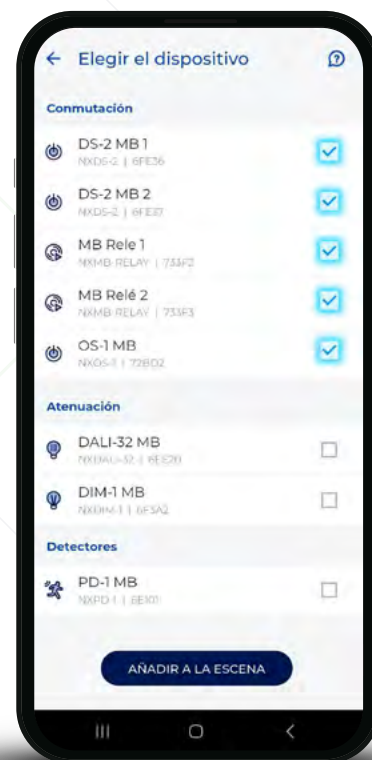
NO NEED FOR BUILDING WORK

Wireless push-buttons allow you to add a new light source control point that is already connected to BJC Nexus, without the need for any building work.



Remote control via app (with gateway)

This allows you to add advanced features such as remote control via an app, scenes, timer setting and automation functions when the project so requires.



BENEFITS FOR THE INSTALLER



Installation without a bus cable

This allows smart functionality to be added to lighting, blinds and security systems using the electrical installation's conventional wiring, which can be extended where necessary.



Quick set-up in the workshop or on site

Devices can be easily linked directly to one another, either via manual pairing using the pairing buttons, or via a smartphone or PC, reducing the installation time required.



Local operation without an internet connection

The system maintains local control of lighting, blinds and scenes even without an internet connection.



Expandable at any time

Allows you to add new devices or functions without altering the existing system.



Integration with BJC mechanisms

Allows you to maintain the look of the system by using the BJC range of mechanisms.

SYSTEM APPLICATIONS

New-build homes

Allows lighting and blind control functions to be incorporated right from the start of the installation, without the need for specific bus cabling.



Plan and pair in your workshop



Wire up



Check that it's working, and you're all set

Home refurbishments

Allows you to add home automation functions by reusing the existing wiring and replacing or reusing conventional mechanisms.



Replace or reuse



Replace with BJC Nexus



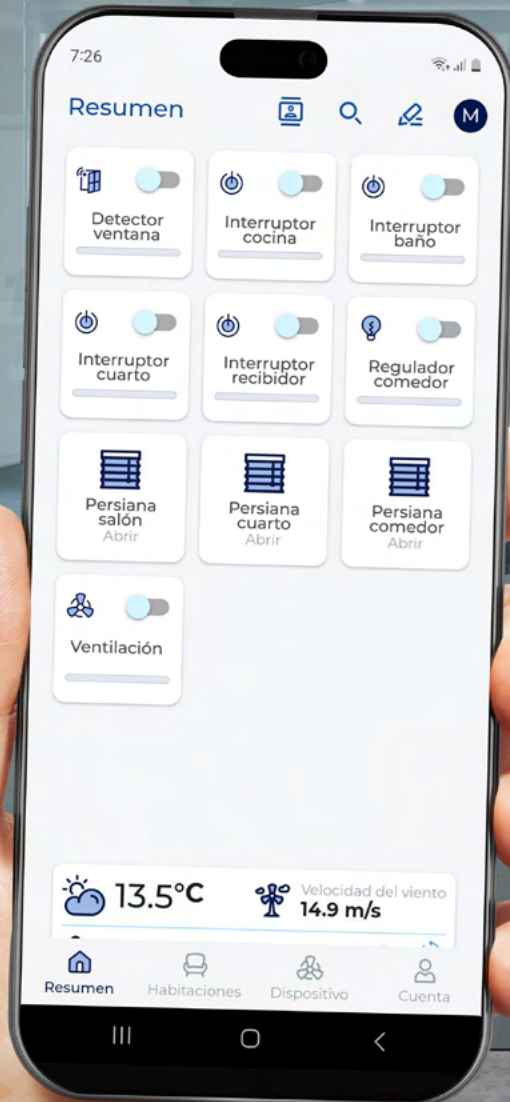
Check that it is working properly

Extending an existing installation

Allows you to add new control points or automation functions at any time without adding extra wiring to the original installation.



*Video showing
how to change
a one-way switch*



HOW DOES IT WORK?

SYSTEM ARCHITECTURE

BJC Nexus is a **wireless system** based on 868 MHz RF communication between devices.

The system allows **multiple devices within a single installation to be managed** via one or more gateways, depending on the project's requirements.

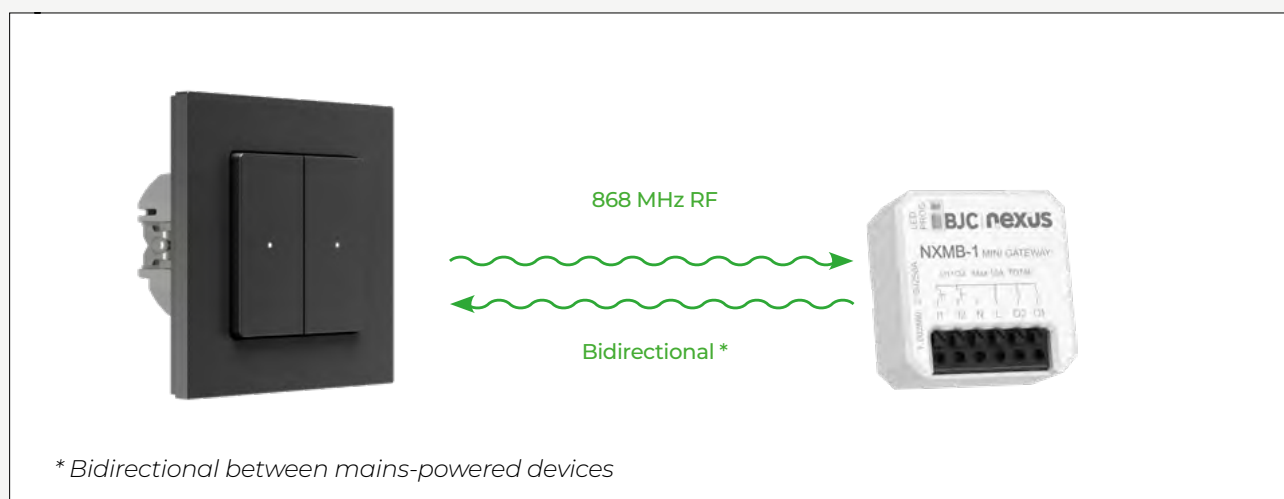
868 MHz RF technology

BJC Nexus uses **RF communication in the 868 MHz professional band**, designed to ensure stable and safe communication between devices in residential environments.

It avoids using commercial frequencies such as the 2.4 GHz Wi-Fi band or other systems, which suffer from greater congestion from high-power devices and network saturation (smart TVs, computers, smartphones, etc.) and have a shorter range.

The **868 MHz frequency's long range and ability to penetrate obstacles** mean it is highly suitable for use in the home.

Note: For detailed information on range and installation recommendations, please refer to the technical summary at the end of the catalogue.



OPERATION MODES

BJC Nexus devices can operate independently by pairing directly to one another, or be integrated into the system via the gateway to add advanced functions.

Without a gateway

Enables direct control of lighting and blinds by pairing devices to one another, even without an internet connection.

With a gateway

Allows you to add **remote control via an app or computer**, scenes, automation functions, voice assistants, or native integration with third-party services (Google Home, Alexa) as well as indirect integration (MQTT, Home Assistant).

BJC Nexus mini gateway

The BJC Nexus mini gateway makes it easy to set up a home automation system by combining control and system gateway functions in a single device. It features built-in inputs and outputs that enable the direct automation of light sources and other circuits, whilst also providing remote access via an app, as well as scenes and automation functions.



Mini gateway + double one-way switch NXMB-1



It allows you to start with a low-cost basic installation and expand it later by adding further BJC Nexus devices as and when required by the project.

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MODE 1: WITHOUT A GATEWAY

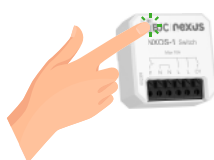
Direct pairing between devices

BJC Nexus devices can be paired directly to one another without the need for a gateway or an internet connection.

This enables quick and practical installations, even in basic set-ups, whilst providing the option to expand the system at a later date.

Application example: radio frequency (RF) pairing process.

1



Set the receiver to programming mode by pressing the PROG button for the required length of time.

2



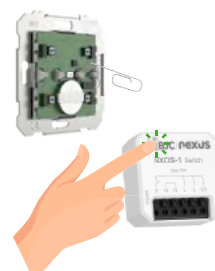
Set the transmitter to programming mode by pressing the PROG button for the required length of time. Refer to the instruction manual for the programming modes of each device.

3



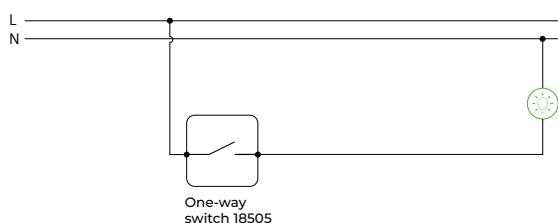
Press the switch that you wish to programme on the transmitter (refer to the manual for details of how to configure the respective function).

4

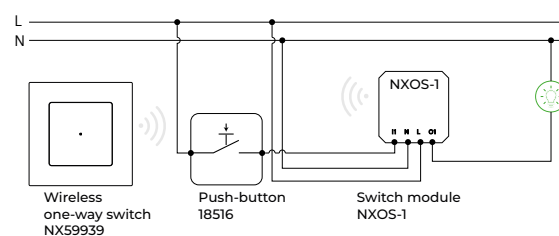


Briefly press the PROG button on both the transmitter and the receiver.

BEFORE



AFTER



A BJC Nexus wireless push-button allows you to add new control points to an existing installation without the need for chasing, by making use of the existing wiring.

MODE 2: WITH A GATEWAY

Installation via mini gateway

The BJC Nexus mini gateway allows devices in traditional electrical installations to be controlled via an app, without the need for a bus cable or any modifications to the existing installation.

This makes it easier to gradually automate the home by replacing conventional mechanisms with Nexus devices.

Application example: two existing light sources being controlled via a mini gateway.

1



Open a junction box.

2



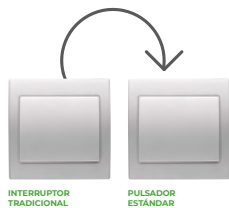
Connect the mini gateway to L and N.

3



Connect the switch wire from the traditional one-way switch to the mini gateway, and connect the mini gateway's output to the light switch.

4



Replace the traditional one-way switch with a standard push-button.

5



Connect to the mini gateway using the BJC Nexus app and set up the Wi-Fi connection.

6



You now have local control of the light (via the push-button) and via the two connected devices.



[Download the BJC Nexus user guide](#)

CONFIGURING THE SYSTEM VIA A GATEWAY

The gateway enables you to extend the functionality of the BJC Nexus system by incorporating **remote control via an app, scenes, automation functions and voice assistants.**

The gateway acts as a connection point between the system and the internet and manages certain advanced functions, without affecting the local operation of the system.

The system can be set up easily from various environments, depending on your needs:

Using the gateway's built-in web server via a web browser

This allows you to configure the gateway more quickly. Ideally suited for installers or users who are already familiar with the system. A more streamlined configuration method, allowing settings to be saved locally so they can be restored later or used to replicate installations in multi-dwelling units. No user registration is required and no power supply is needed for any components other than the gateway.

Using the BJC Nexus app

Ideal for individual installations with a limited number of devices. This is the user's point of access to the system, where they can configure their timer settings, scenes and alerts, and add new devices if they wish to expand their installation.

Using the gateway's connection to Nexus Cloud and a web browser

The most advanced configuration method, required for setting up certain advanced functions such as certain types of automation functions, email alerts or device communication between different gateways.

The gateway only needs to be connected to the internet when configuring via Nexus Cloud.

PRE-CONFIGURATION IN THE WORKSHOP

BJC Nexus allows devices to be configured before they are wired on site by pre-organising the system's devices. This makes it easier to identify the equipment during installation, reduces the time spent on site in each property and simplifies the final commissioning process.

The installation can be organised by room and function in advance, improving the efficiency of on-site work.

1

Nombre	Ref.	Direcciones RF
Interrupción cuarto	04	0FC7AB
Interrupción cocina	03	0FB4D
Interrupción recibidor	05	0FC5A
Perziana salón	04	0FC5D
Perziana cuarto	05	0FEFD

Creating a list of the devices that make up the installation: reference no., the name you want to give it (e.g. "living room light") and the RF pairing code (marked on each device).

2



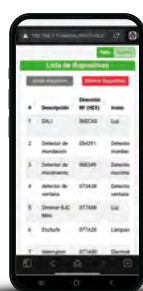
Optional but highly recommended: label each device with its name to make it easier to identify during the physical installation.

3



Power supply and access to the gateway's web server.

4



List the devices in the installation: desired name (e.g. "living room light"), serial number (marked on each device) and type (model reference no.).

5



Optionally, configuration of scenes or automation functions.

6



On-site wiring and operational testing.

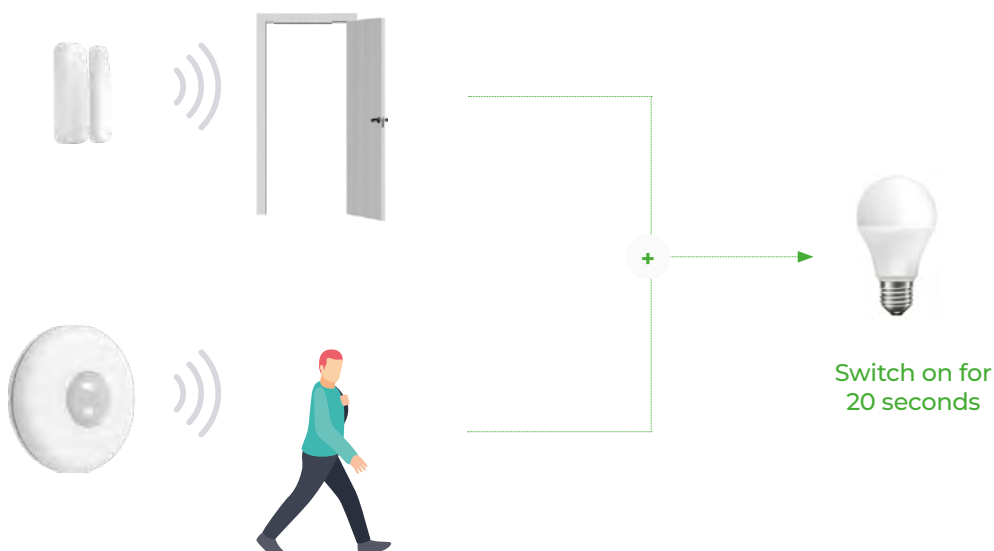
LOGIC FUNCTIONS

The BJC Nexus system's intelligent features allow you to configure smart, condition-based settings.

If the "wind speed" on my favourite weather server "exceeds 4 m/s", then retract the terrace awning.



If an opening door and movement are detected in the entrance hall, switch on the entrance hall light for 20 seconds.



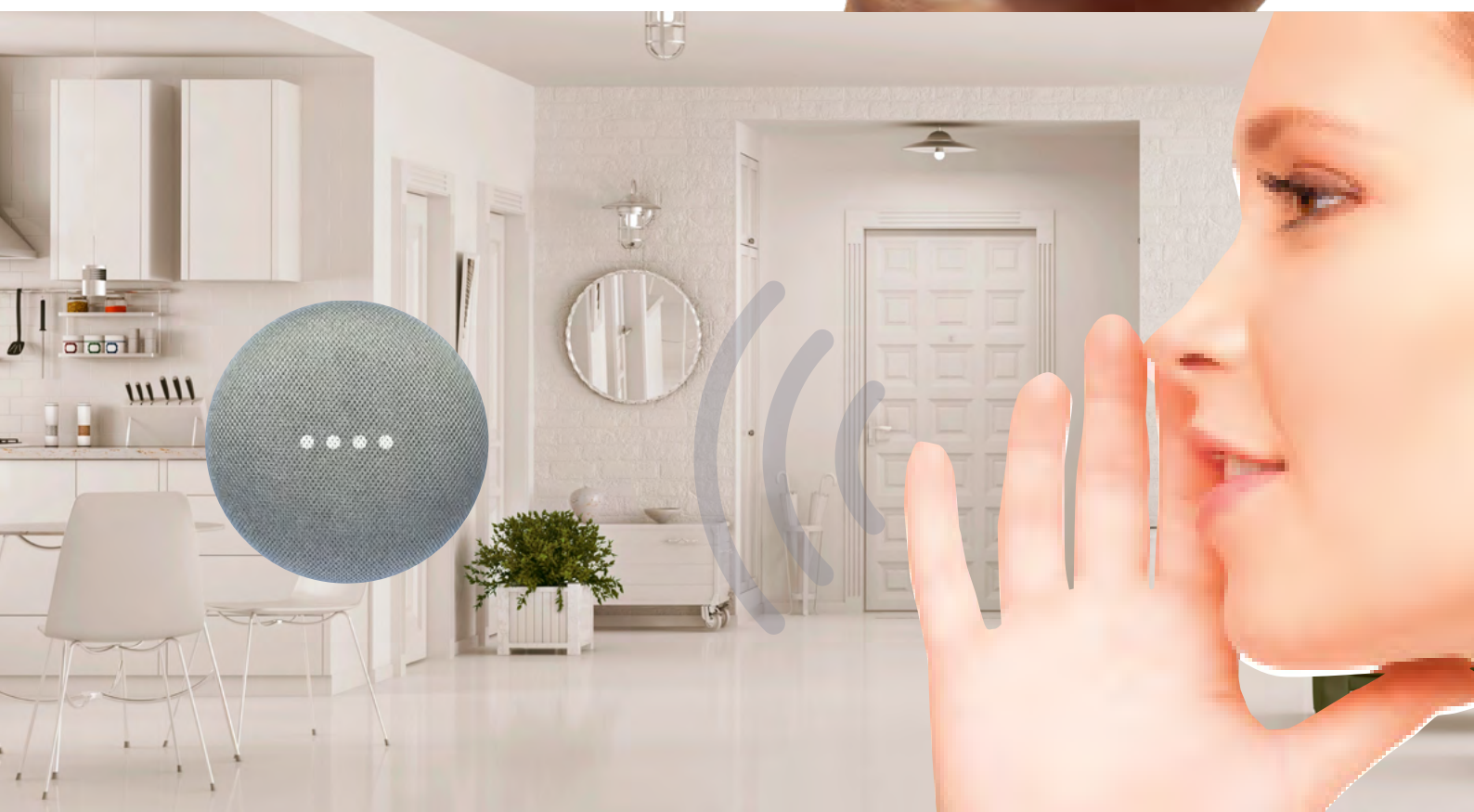
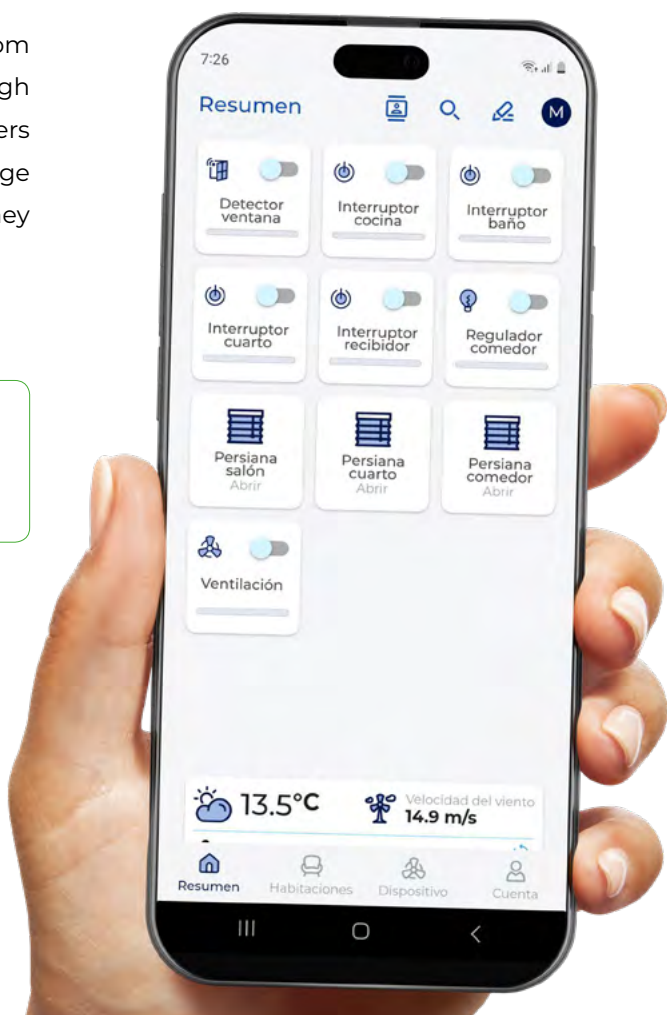
APPLICATION AND DEVICE CONTROL

The BJC Nexus system provides full, easy control of your home from your mobile device using the dedicated app, as well as through compatible voice assistants like Alexa or Google Nest. This offers users maximum comfort and flexibility, with the ability to manage lights, blinds, sockets and scenes from anywhere, even when they are not at home.



With BJC Nexus I can control my home and it's simple for my regular installer to quickly and reliably expand my system.

Download the free BJC Nexus app





BJC NEXUS APP



Synchronisation

Monitor and control your devices directly with the app, via time programming or scenarios.



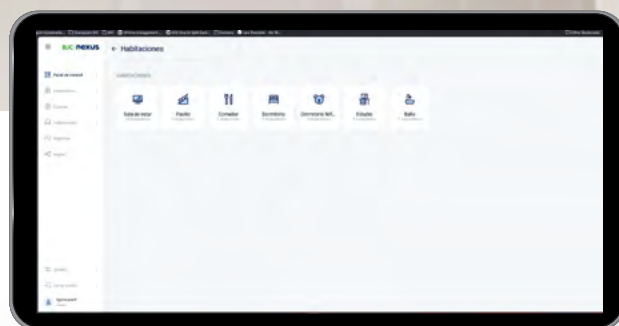
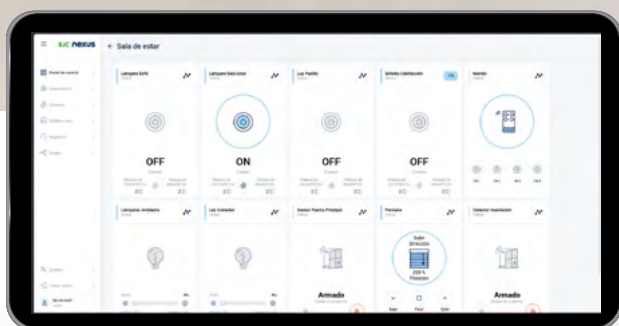
Notifications

Thanks to the notifications, you'll know exactly what's going on in your home and the status of your appliances. Wireless devices also inform you of their battery status.



Classification

It organises the elements exactly how you need them, giving you control and a customised overview.



CLOUD-BASED FEATURES



Intuitive control panel

Web application, suitable for control and monitoring on a PC or large screen.



Graphs

Simple graphs showing consumption or device performance over time.



Multi-level logic

Additional logic with conditioning for all devices and combinations of controllers and detectors.

SILENT POWER

BJC NEXUS brings elegance and convenience to your home without the need for renovations. Based on our tried-and-tested MIRO design, this fully wireless system controls lights, blinds, sockets, etc. all in a single, tidy ecosystem.

Colours available



Smart flush-mounted mechanisms (with frame and switch)



One-way switch
NX59906



Universal dimmer
NX59949



One-way switch for blinds
NX59965



Schuko socket
NX59924

Polar White mounted (available in other colours when purchasing the cover and frame separately)

Smart flush-mounted mechanisms



One-way
switch
NX18506

Blinds
NX18565

Universal LED
light dimmer
NX21545

Schuko
socket
NX18524



	Polar White	Aluminium Metallic	Carbon Metallic	Matt White	Matt Black
One-way switch	SM59705	SM59705-AM	SM59705-CM	SM59705-BM	SM59705-NM
Switch with arrows	SM59705	SM59705-AM	SM59705-CM	SM59705-BM	SM59705-NM
Dimmer switch	SM59765	SM59765-AM	SM59765-CM	SM59765-BM	SM59765-NM
Schuko cover	SM59724	SM59724-AM	SM59724-CM	SM59724-BM	SM59724-NM

Wireless sensors (battery powered)



Motion detector NXPD-1



Door/window opening
sensor NXWDC-1



Flood detector
NXSF-1



Remote control
NXKF-4



"A smart home, made simple"

Surface push-buttons (battery powered)



Single
(2 buttons)
NX59939



2-scene
switch
SM59739-1



Day/night
switch
SM59739-2



Input/output
switch
SM59739-3



Double
(4 buttons)
NX59940



4-scene
switch
SM59740-1



View of the inside of the surface-mounted push-button

Polar White mounted (available in other colours when purchasing the switch and frame separately)

Actuator modules



One-way
switch
NXOS-1



Double one-
way switch
NXDS-2



Blind
module
NXSB-2



Module
NXDALI-32



Universal
dimmer
NXDIM-1



4 digital
inputs
NXIN-4

Gateways



Mini gateway +
double one-way
switch NXMB-1



Desktop
gateway
NXLAN-204



Discover the
*advantages of BJC
Nexus in our video*



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PRODUCTS



*BJC Nexus
products*

Connected Miro (with frame and switch)



Connected one-way switch **NX59906**
230 V AC 50 Hz, 10 A
Screwed terminals
160 m range (in open space).
It can also be controlled manually with an external push-button.
Includes connected mechanism, switch and single frame in Polar White

Pack of 1

SWITCH			
			
METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59705-AM	SM59705-CM	SM59705-BM	SM59705-NM
Pack of 1	1	1	1
Switch with embellisher			
SM59705-AMC	SM59705-CMC	SM59705-BMC	SM59705-NMC
Pack of 1	1	1	1



Connected universal dimmer **NX59949**
230 V AC 50 Hz
Compatible with incandescent lamps (14-200 W AC), 230 V halogen lamps (14-150 W AC), 12 V halogen magnetic transformer (14-150 VA), 12 V halogen electronic transformer (14-150 VA), LED trailing edge RC (7-100 VA at 230 V AC), LED leading edge RL (7-20 VA at 230 V AC).
Screwed terminals.
Range: 160 m. (in open space).
It can also be controlled manually with an external push-button.
Includes connected mechanism, switch and single frame in Polar White.

Pack of 1

SWITCH			
			
METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59705-AM	SM59705-CM	SM59705-BM	SM59705-NM
Pack of 1	1	1	1
Switch with embellisher			
SM59705-AMC	SM59705-CMC	SM59705-BMC	SM59705-NMC
Pack of 1	1	1	1



Connected one-way switch for blinds **NX59965**
230 V AC 50 Hz, 4 A $\cos \varnothing = 0.6$
Screwed terminals
Range: 160 m. (in open space).
Includes connected mechanism, switch and single frame in Polar White.

Pack of 1

SWITCH			
			
METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59765-AM	SM59765-CM	SM59765-BM	SM59765-NM
Pack of 1	1	1	1
Switch with embellisher			
SM59765-AMC	SM59765-CMC	SM59765-BMC	SM59765-NMC
Pack of 1	1	1	1



Connected power socket with consumption measurement **NX59924**
230 V AC, 50 Hz, 16 A
Screwed terminals
Range: 160 m. (in open space).
Can be switched on/off manually with a control button.
Includes connected mechanism, cover and single frame in Polar White .

Pack of 1

SOCKET COVERS			
			
METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59724-AM	SM59724-CM	SM59724-BM	SM59724-NM
Pack of 1	1	1	1



Connected one-way switch

NX18506

230 V AC 50 Hz, 10 A
Screwed terminals
Range: 160 m. (in open space).
It can also be controlled manually with an external push-button.
Compatible with BJC Miro frames.

Pack of 1

Pack of

SWITCH				
				
POLAR WHITE	METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59705	SM59705-AM	SM59705-CM	SM59705-BM	SM59705-NM

1 1 1 1 1

Switch with embellisher

SM59705-C	SM59705-AMC	SM59705-CMC	SM59705-BMC	SM59705-NMC
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1 1 1 1 1



Connected universal dimmer

NX21545

230 V AC 50 Hz
Compatible with incandescent lamps (14-200 W AC), 230 V halogen lamps (14-150 W AC), 12 V halogen magnetic transformer (14-150 VA), 12 V halogen electronic transformer (14-150 VA), LED trailing edge RC (7-100 VA at 230 V AC), LED leading edge RL (7-20 VA at 230 V AC).
Screwed terminals.
Range: 160 m. (in open space).
It can also be controlled manually with an external push-button.
Compatible with BJC Miro frames.

Pack of 1

Pack of

SWITCH				
				
POLAR WHITE	METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59705	SM59705-AM	SM59705-CM	SM59705-BM	SM59705-NM

1 1 1 1 1

Switch with embellisher

SM59705-C	SM59705-AMC	SM59705-CMC	SM59705-BMC	SM59705-NMC
------------------	--------------------	--------------------	--------------------	--------------------

1 1 1 1 1



Connected one-way switch for blinds

NX18565

230 V AC 50 Hz, 4 A $\cos \varnothing = 0.6$
Screwed terminals
Range: 160 m. (in open space).
Compatible with BJC Miro frames.

Pack of 1

Pack of

SWITCH				
				
POLAR WHITE	METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59765	SM59765-AM	SM59765-CM	SM59765-BM	SM59765-NM

1 1 1 1 1

Switch with embellisher

SM59765-C	SM59765-AMC	SM59765-CMC	SM59765-BMC	SM59765-NMC
------------------	--------------------	--------------------	--------------------	--------------------

1 1 1 1 1



Connected power socket with consumption measurement

NX18524

230 V AC, 50 Hz, 16 A.
Screwed terminals.
Range: 160 m. (in open space).
Can be switched on/off manually with a control button.
Compatible with BJC Miro frames.

Pack of 1

Pack of

SOCKET COVERS				
				
POLAR WHITE	METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59724	SM59724-AM	SM59724-CM	SM59724-BM	SM59724-NM

1 1 1 1 1



Surface-mounted connected push-button **NX59939**
Powered by a 3 V battery, CR2032 (supplied)
Secured by adhesive or screws in flush-mounting box.
Range: 200 m (in open space)
Includes connected mechanism, fixing base, frame and switch in Polar White.

Pack of 1

Pack of

SURFACE-MOUNTED SMART SWITCH

POLAR WHITE	METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59739	SM59739-AM	SM59739-CM	SM59739-BM	SM59739-NM
1	1	1	1	1

SURFACE-MOUNTED SMART SWITCH WITH "1-2" SYMBOLS

Pad printing

POLAR WHITE	METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59739-1	SM59739-1AM	SM59739-1CM	SM59739-1BM	SM59739-1NM
1	1	1	1	1

Pack of

SURFACE-MOUNTED SMART SWITCH WITH "DAY/NIGHT" SYMBOLS

Pad printing

POLAR WHITE	METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59739-2	SM59739-2AM	SM59739-2CM	SM59739-2BM	SM59739-2NM
1	1	1	1	1

Pack of

SURFACE-MOUNTED SMART SWITCH WITH "INPUT/OUTPUT" SYMBOLS

Pad printing

POLAR WHITE	METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59739-3	SM59739-3AM	SM59739-3CM	SM59739-3BM	SM59739-3NM
1	1	1	1	1

Pack of



Surface-mounted connected double push-button **NX59940**
Powered by a 3 V battery, CR2032 (supplied).
Secured by adhesive or screws in flush-mounting box.
200 m range (in open space).
Includes connected mechanism, fixing base, frame and switches in Polar White.

Pack of 1

Pack of

SURFACE-MOUNTED DOUBLE SMART SWITCH

POLAR WHITE	METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59740	SM59740-AM	SM59740-CM	SM59740-BM	SM59740-NM
1	1	1	1	1

SURFACE-MOUNTED SMART DOUBLE SWITCH WITH "1-2-3-4" SYMBOLS

Pad printing

POLAR WHITE	METALLIC ALUMINIUM	CARBON METALLIC	MATT WHITE	MATT BLACK
SM59740-1	SM59740-1AM	SM59740-1CM	SM59740-1BM	SM59740-1NM
1	1	1	1	1

Pack of



One-way switch module **NXOS-1**

230 V AC 50 Hz, total load 8 A (2000 W)
1 output
Screwless terminal.
200 m range (in open space).
It can be controlled manually with an external push-button.

Pack of 1



Double one-way switch module **NXDS-2**

230 V AC 50 Hz, total load 8 A (2000 W)
2 outputs
Screwless terminal.
200 m range (in open space).
Each output can be controlled manually with 1 separate external push-button for each of them.

Pack of 1



Blind module **NXSB-2**

230 V AC 50 Hz, total load 2x8 A (2x2000 W)
2 outputs
Screwless terminal.
Range up to 200 m (in open space).
Each output can be controlled manually with 1 separate external push-button for each of them.

Pack of 1



DALI-2 controller module **NXDALI-32**

100-230 V AC 50 Hz.
DALI power supply output 16 V/100 mA. Can control up to 32 devices.
Screwless terminal.
Range up to 200 m (in open space).
It can be controlled manually with an external push-button.

Pack of 1



Universal dimmer module **NXDIM-1**

230 V AC 50 Hz
Compatible with R, L, C, LED and ESL loads
Maximum load 300 W
Screwless terminal.
200 m range (in open space).
It can be controlled manually with an external push-button.

Pack of 1



4-input module **NXIN-4**

230 V AC, 50 Hz
Screwless terminal.
Range up to 200 m (in open space).
Each of the four inputs allows the signal from a conventional push-button or switch to be sent to a BJC Nexus device.

Pack of 1

**Mini Wi-Fi gateway****NXMB-1**

230 V AC 50 Hz, total load 10 A.
 2 outputs
 Screwless terminal.
 200 m range (in open space).
 Up to 70 BJC Nexus devices can be connected.
 Each output can be controlled manually with 1 separate external push-button for each of them.

Pack of 1

**Desktop gateway****NXLAN-204**

Power supply via 230 V/5 V power adapter (supplied).
 200 m range (in open spaces).
 Allows you to connect up to 70 BJC Nexus devices.

Pack of 1

Wireless sensors (battery powered)

**Motion detector****NXPD-1**

Powered by 2 x 1.5 V AA batteries (supplied).
 105° detection angle.
 Maximum sensing distance 12 m.
 Recommended working height: 2.4 m.
 Colour: White

Pack of 1

**Door and window sensor contact****NXWDC-1**

Powered by 1 x 3 V CR2032 battery (supplied).
 Colour: White.

Pack of 1

**Flood detector****NXSF-1**

Powered by 2 x 1.5 V AAA batteries (supplied).
 160 m range (in open spaces).
 Colour: White.

Pack of 1

**Remote control****NXKF-4**

Powered by 1 x 3 V CR2032 battery (supplied)
 Each of the four buttons allows a signal to be sent to a BJC Nexus device.
 200 m range (in open spaces).
 Colour: White.

Pack of 1



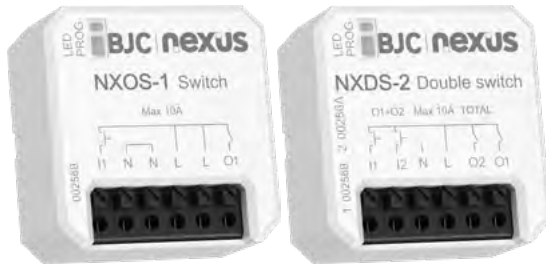
BJC | nexus

CONECTA CON TU HOGAR

DATA SHEETS



*BJC Nexus data sheets
and installation
assembly instructions*



EAN code:
NXOS-1:
NXDS-2: 8421870958048

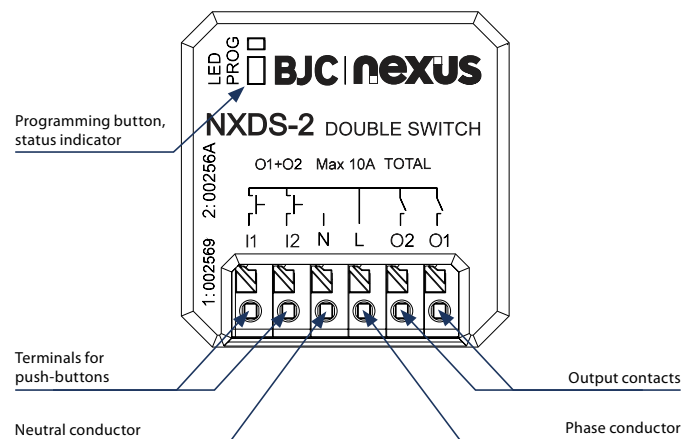
Technical information	NXOS-1		NXDS-2	
Power supply voltage:	230 V AC			
Frequency:	50-60 Hz			
Apparent power input:	7 VA / $\cos \varphi = 0.1$			
Power dissipated:	0.7 W			
Voltage tolerance:	+10 %; -15 %			
Output				
Number of contacts:	1x		2x	
Rated current:	8 A / AC1			
Switching capacity:	2000 VA / AC1			
Peak current:	I _{peak} <110 A 300 us / max. input capacitance 125 uF			
Switching voltage:	250 V AC1			
Mechanical life:	1x10 ⁷			
Electrical life (AC1):	1x10 ⁵			
Control				
Wireless:	2 x 12 channels			
Number of functions:	6			
Communication protocol:	BJC Nexus			
Frequency:	868 MHz			
Manual control:	PROG button (ON/OFF)			
External button / one-way switch:	yes			
Range:	up to 200 m in open space			
Further information				
Operating temperature:	-15 to + 50°C			
Protection:	IP40			
Overvoltage category:	III.			
Pollution degree:	2			
Connection:	screwless terminals			
Cable cross-section:	0.2-1.5 mm ² rigid/flexible			
Dimensions:	43 x 44 x 22 mm			
Weight:	31 g		45 g	
Relevant standards:	EN 60730, EN 63044, EN 300 220, EN 301 489 EN IEC 63000			

Description of the functions

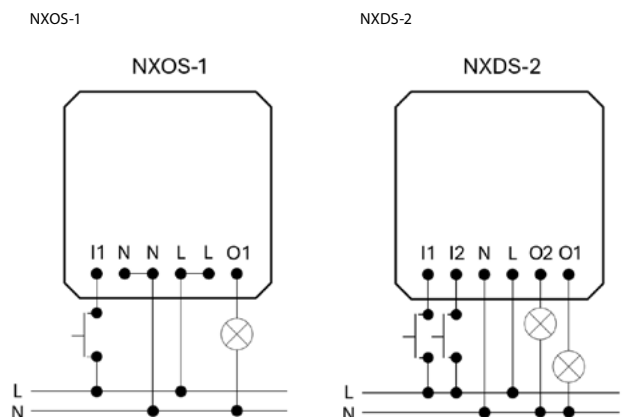
1. Push-button, latching relay and timed on-delay/off-delay functions with a time setting of 2 s–60 min. Any function can be assigned to each output relay.
2. The unit's programming button also serves as a manual input control.

- Switch modules with one or two output relays are used to control appliances and lights. One-way switches/buttons connected to the wiring can be used to control them.
- They can be combined with detectors, controllers and BJC Nexus system products.
- They allow switched loads with a total current of 8 A (2,000 W) to be connected.
- Functions: Functions: push-button, remote switch and timed on-delay/off-delay functions with a time setting of 2 s–60 min. Any function can be assigned to each output relay. The external push-button is assigned in the same way as the wireless one.
- Each of the outputs can be controlled by up to 12/12 channels (1 channel represents a button on the controller).
- The component's programming button also serves as a manual control for the outputs.
- Option to configure the output status memory if there is a power failure and the power supply is subsequently restored.
- Range up to 200 m (outdoors).
- Communication via the BJC Nexus bidirectional protocol.
- The AgSnO₂ relay contact material allows LED lights to be switched on and off.
- We recommend using bootlace ferrules when using flexible cables.

Device description



Connection



NXDIM-1 | UNIVERSAL DIMMER MODULE (LED, R, L, C, ESL)

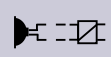


- The universal dimmer module is used to dim light sources:
 - R – incandescent bulbs.
 - L – halogen bulbs with a magnetic transformer.
 - C – halogen bulbs with an electronic transformer.
 - ESL – dimmable energy-saving bulbs.
 - LED – LED light sources (230 V).
- They can be combined with BJC detectors, modules or gateways.
- 7 functions – soft start or stop with a time setting of 2 s–30 min.
- The minimum brightness setting eliminates flickering from LED and ESL light sources.
- The universal dimmer module can be controlled via up to 25 channels.
- "I" control input to connect an existing external wired push-button.
- The device's programming button also serves as a manual output control.
- Option to configure the status memory in the event of a power failure.
- Range up to 200 m (outdoors).
- We recommend using bootlace ferrules when using flexible cables.

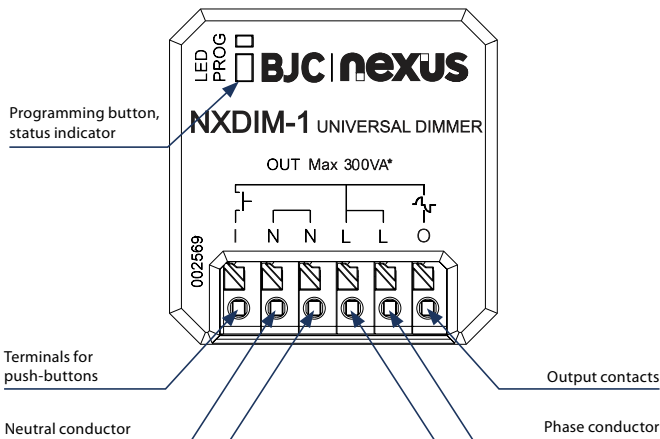
EAN code:
NXDIM-1: 8421870958062

Technical information		NXDIM-1
Power supply voltage:		230 V AC / 50 Hz
Voltage frequency:		50-60 Hz
Apparent power:		5 VA / cos φ = 0.1
Power dissipated:		0.5 W
Voltage tolerance:		+10 / -15 %
Connection:		4-wire, with "NEUTRAL"
Output		
Dimmable load:		R, L, C, LED, ESL
Switchable:		2 x MOSFET
Load capacity:*		max. 300 W*
Control		
Wireless:		up to 25 channels (push-buttons)
Communication protocol:		BJC Nexus
Frequency:		868 MHz
Range:		up to 200 m
Manual control:		PROG button (ON/OFF)
External button / one-way switch:		yes
Further information		
Operating temperature:		-15 to + 45°C
Protection:		IP40
Overvoltage category:		III.
Pollution degree:		2
Connection:		screwless terminals
Cable cross-section:		0.2-1.5 mm ² rigid/flexible
Dimensions:		43 x 44 x 22 mm
Weight:		30 g
Relevant standards:		EN 60730, EN 63044, EN 300 220, EN 301 489 EN IEC 63000

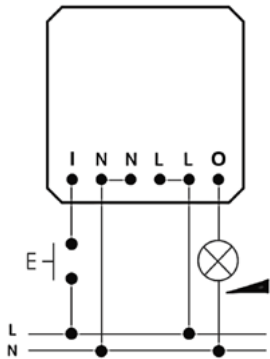
Connectable load types

 HAL 230 V	 HAL 12-24 V			
R resistive	L inductive	C capacitive	Dimmable 230 V LED light	Dimmable ESL energy-saving

Device description



Connection



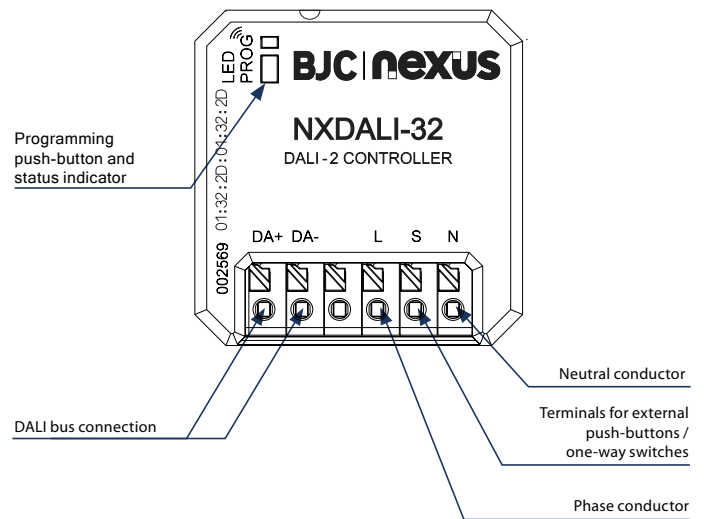


- The DALI-2 NXDALI-32 controller module is designed to control devices with a DALI interface, such as dimmers, electronic ballasts, LED drivers, etc.
- They are controlled using components from the BJC Nexus system, such as detectors, modules or other system devices.
- DALI devices are assigned and configured via a web server.
- The DALI bus is powered via the DALI controller.
- "S" control input for connecting and controlling external push-buttons.
- The PROG button on the transmitter also serves as a manual output control.
- The repeater function of the components can be configured via the web server.
- Range up to 200 m (outdoors).
- - We recommend using bootlace ferrules when using flexible cables.

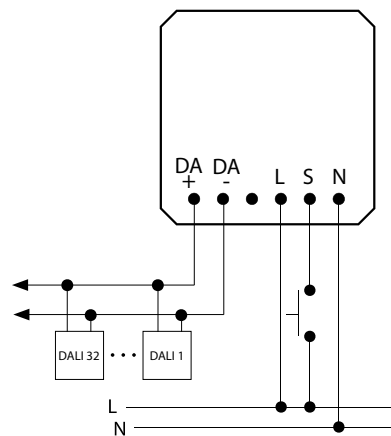
EAN code:
NXDALI-32: 8421870963899

Technical information		NXDALI-32
Power supply voltage:		100-230 V AC / 50 Hz
Voltage frequency:		50/60 Hz
Apparent power:		5 VA / $\cos \varphi = 0.1$
Power dissipated:		3 W
Voltage tolerance:		+10/ -15 %
Connection:		4-wire, L, N, DA+, DA-
DALI output		
Number of addresses:		max. 32
Power supply:		16 V/100 mA
Control		
Wireless:		32 channels
Communication protocol:		BJC Nexus
Frequency:		868 MHz
Range:		up to 200 m
Manual control:		PROG button (ON/OFF)
External button / one-way switch:		yes
Configuration		
Interface:		2.4 GHz Wi-Fi access point, web server
Application:		Internet browser
Further information		
Operating temperature:		-15 to + 50°C
Protection:		IP40
Overvoltage category:		III.
Pollution degree:		2
Connection:		screwless terminals
Cable cross-section:		0.2-1.5 mm ² rigid/flexible
Dimensions:		43 x 44 x 22 mm
Weight:		52 g
Relevant standards:		EN 60730, EN 63044, EN 300 220, EN 301 489, EN 300 328 EN IEC 63000

Device description



Connection



NXSB-2 | BLIND MODULE

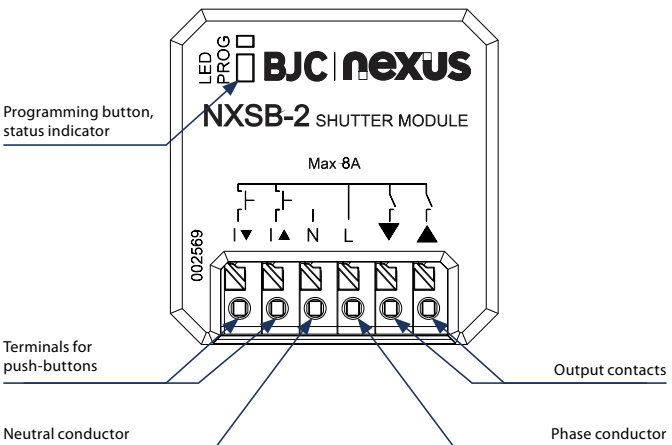


EAN code:
NXSB-2: 8421870958055

Technical information NXSB-2	
Power supply voltage:	230 V AC
Frequency:	50-60 Hz
Apparent power input:	7 VA / cos φ = 0.1
Power dissipated:	0.7 W
Voltage tolerance:	+10 %; -15 %
Output	
Number of contacts:	2 x changeover
Rated current:	8 A / AC1
Switching capacity:	2000 VA / AC1
Peak current:	10 A / <3 s
Switching voltage:	250 V AC1
Mechanical life:	1x10 ⁷
Electrical life (AC1):	1x10 ⁵
Control	
Wireless:	25 channels
Communication protocol:	BJC Nexus
Frequency:	868 MHz
Manual control:	PROG button (ON/OFF)
External button / one-way switch:	max. 100 m of cable
Range:	up to 200 m in open space
Further information	
Operating temperature:	-15 to + 50°C
Protection:	IP30
Overvoltage category:	III.
Pollution degree:	2
Cable cross-section:	0.2 - 1.5 mm ² rigid / flexible
Dimensions:	43 x 44 x 22 mm
Weight:	45 g
Relevant standards:	EN 60730, EN 63044, EN 300 220, EN 301 489 EN IEC 63000

- The blind control module has 2 output channels which are used to control garage doors, gates, blinds, awnings, etc.
- They can be combined with BJC Nexus modules or gateways.
- 2 x 8 A (2 x 2000 W) switched load connection, with the option to connect existing external wired push-buttons.
- Each component can be controlled via up to 25 channels (1 channel represents one assigned controller).
- The device's programming button also serves as a manual output control.
- Range up to 200 m (outdoors).
- The contact material is AgSnO₂.
- We recommend using bootlace ferrules when using flexible cables.

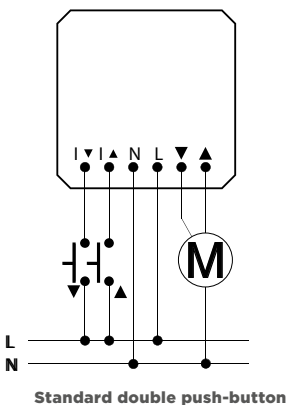
Device description



Description of operation

1. While the button on the remote control is held down for <2 s, the blinds move up (▲) or down (▼).
2. When the button is pressed for > 2 s, the blinds move up (▲) or down (▼) to their end position.

Connection



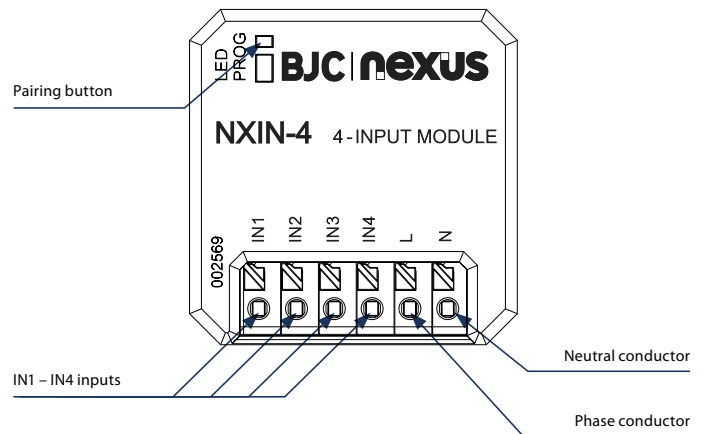


EAN code:
NXIN-4: 8421870958024

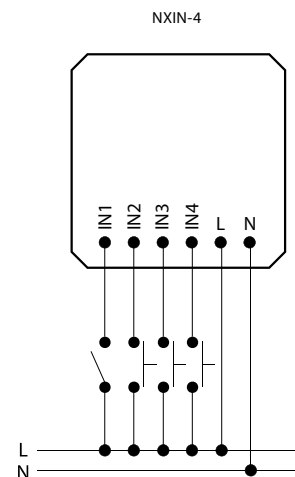
Technical information		NXIN-4
Power supply voltage:		230 V AC
Indications/transfer function:		Red LED
Number of inputs:		4
Voltage tolerance:		+10 %; -15 %
Control		
Communication protocol:		BJC Nexus
Frequency:		868 MHz
Signal transmission method:		one-way communication
Range:		up to 200 m in open space
Further information		
Operating temperature:		-10 to +50°C
Line resistance between terminals		
- for closed push-button:		< 300 Ω
- for open contact:		> 10 kΩ
Protection:		IP40
Overvoltage category:		III.
Pollution degree:		2
Connection:		screwless terminals
Cable cross-section:		0.2-1.5 mm ² rigid/flexible
Dimensions:		43 x 44 x 22 mm
Weight:		25 g
Contact voltage:		230 VA
Cable length to contact:		max. 100 m
Relevant standards:		EN 60730, EN 63044, EN 300 220, EN 301 489 EN IEC 63000

- **NXIN-4:** the 4-input module allows the signal from a conventional push-button or one-way switch to be sent to a BJC Nexus device.
- The 4 inputs allow 4 devices to be controlled independently.
- The inputs are powered by the mains supply.
- It can be used to transmit contact closure information (detector, push-buttons, technology, logic output).
- When the push-button is pressed, it sends the pre-set command (ON/OFF, dimming, off/on time).
- It is possible to configure scenes in which several BJC Nexus components are controlled with a single press.
- Range up to 200 m (outdoors).
- We recommend using bootlace ferrules when using flexible cables.

Device description



Connection



NXMB-1 | MINI GATEWAY

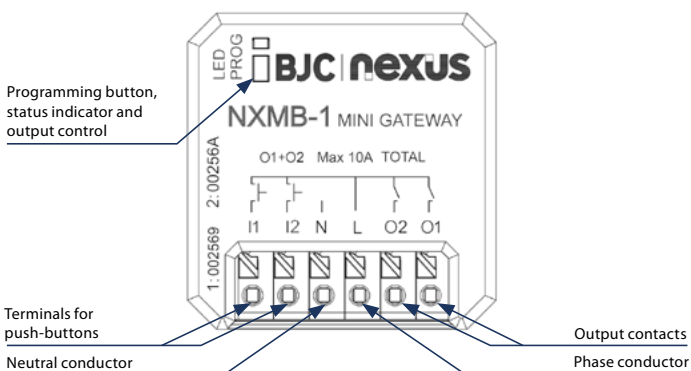


- The mini gateway allows you to control BJC Nexus components via the app (smartphones, tablets, voice assistants) and other third-party devices using MQTT communication.
- Up to 70 BJC Nexus devices can be connected, and it processes pre-set programmes for automatic control, time-based scenarios or timers.
- Thanks to two-way communication, it displays the current status of individual devices and sends notifications about their status.
- It provides a connection to the BJC Cloud to enable remote control without the need for a static IP address or advanced automation settings.
- We recommend using bootlace ferrules when using flexible cables.
- Configurable via the app or the integrated web server.

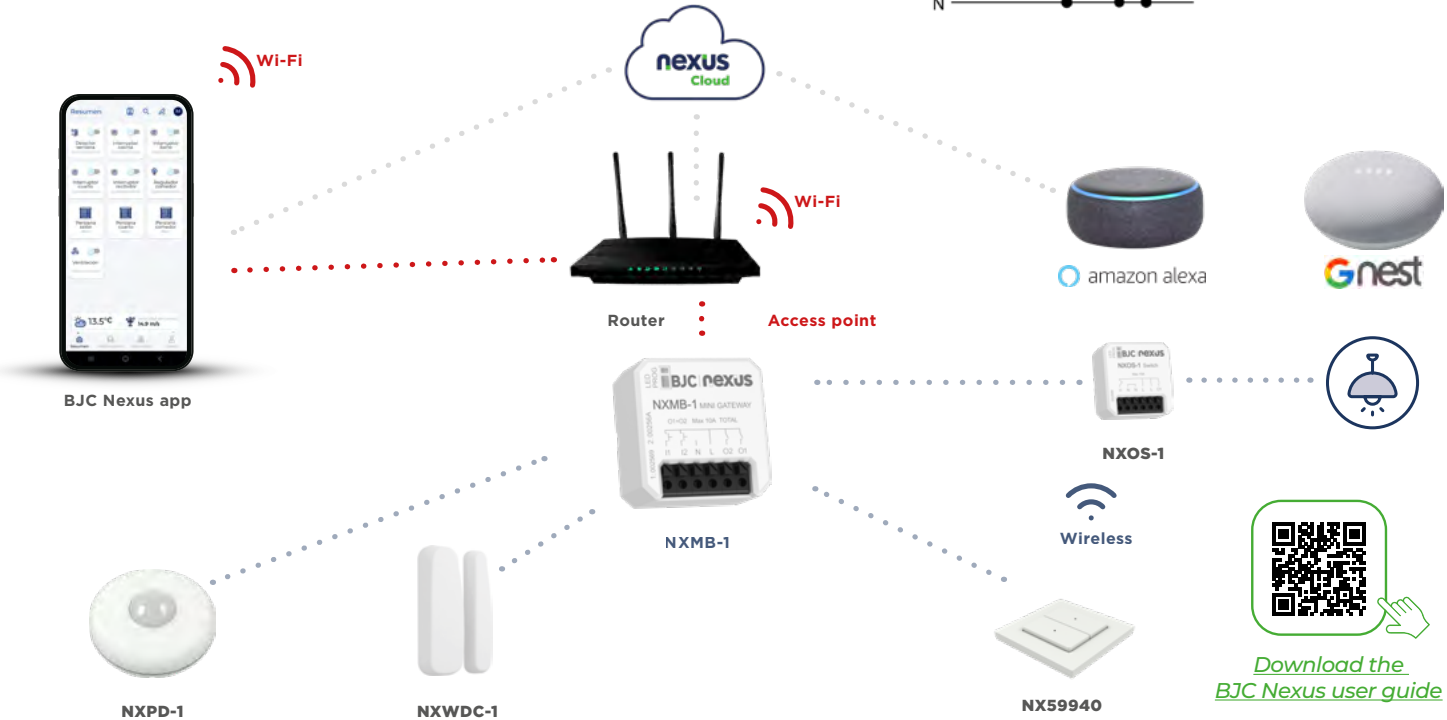
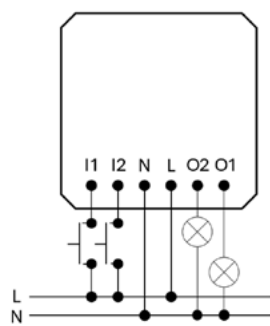
EAN code:
NXMB-1: 8421870958079

Technical information NXMB-1	
Wireless control interface	
Communication protocol:	BJC Nexus
Transmission frequency:	868 MHz
Signal transfer method:	two-way communication
Wireless antenna:	built-in
Communication and status indicators:	adjustable-colour LED
Range:	in open spaces of up to 200 m
Wi-Fi interface:	
Standard	IEEE 802.11 b/g/n/2.4 GHz
Wi-Fi security:	WEP, WPA-PSK, WPA2-PSK
Wi-Fi antenna:	built-in
Wi-Fi communication indicator:	status LED
Range:	up to 100 m
Power supply:	
Power supply voltage:	230 V AC
Frequency:	50 Hz
Further information	
Operating temperature:	-20 to +50°C
Storage temperature:	-25 to +70°C
Protection:	IP20
Pollution degree:	2
Dimensions:	ø 95 mm x 25 mm
Weight:	40 g
Relevant standards:	EN 60730, EN 63044, EN 300 220, EN 301 489 EN IEC 63000

Device description



Connection





EAN code:

NXLAN-204: 8421870958086

Technical information		NXLAN-204
Wireless control interface		
Communication protocol:	BJC Nexus	
Transmission frequency:	868 MHz	
Signal transfer method:	two-way communication	
Wireless antenna:	built-in	
Communication and status indicators:	adjustable-colour LED	
Range:	in open spaces of up to 200 m	
Wi-Fi interface:		
Standard	IEEE 802.11 b/g/n/2.4 GHz	
Wi-Fi security:	WEP, WPA-PSK, WPA2-PSK	
Wi-Fi antenna:	built-in	
Wi-Fi communication indicator:	status LED	
Range:	up to 100 m	
Power supply		
Power supply:	Plug or USB-C 5 V DC	
Power supply voltage/current:	10-27 V DC plug / USB 5 V DC 1 A	
Further information		
Operating temperature:	-20 to +50°C	
Storage temperature:	-25 to +70°C	
Protection:	IP20	
Pollution degree:	2	
Dimensions:	ø 95 mm x 25 mm	
Weight:	92 g	
Relevant standards:	EN 60730, EN 63044, EN 300 220, EN 301 489 EN IEC 63000	

- The desktop Wi-Fi gateway allows you to control BJC Nexus components via applications (smartphones, tablets, voice assistants) and other third-party devices using MQTT communication.
- Up to 70 BJC Nexus devices can be connected, and it processes pre-set programmes for automatic control, time-based scenarios or timers.
- Thanks to two-way communication, it displays the current status of individual units and sends information about their status.
- It provides a connection to the BJC Nexus Cloud to enable remote control without the need for a static IP address or advanced automation settings.
- It can be placed anywhere on a horizontal surface and, thanks to its flat surface and removable base, can also be mounted on a wall or ceiling.
- It is powered by a 5 V DC/2 A adapter with a USB-C connector (supplied).
- Configurable via the app or the integrated web server.

Device description

Top cover

Communication and status indicators

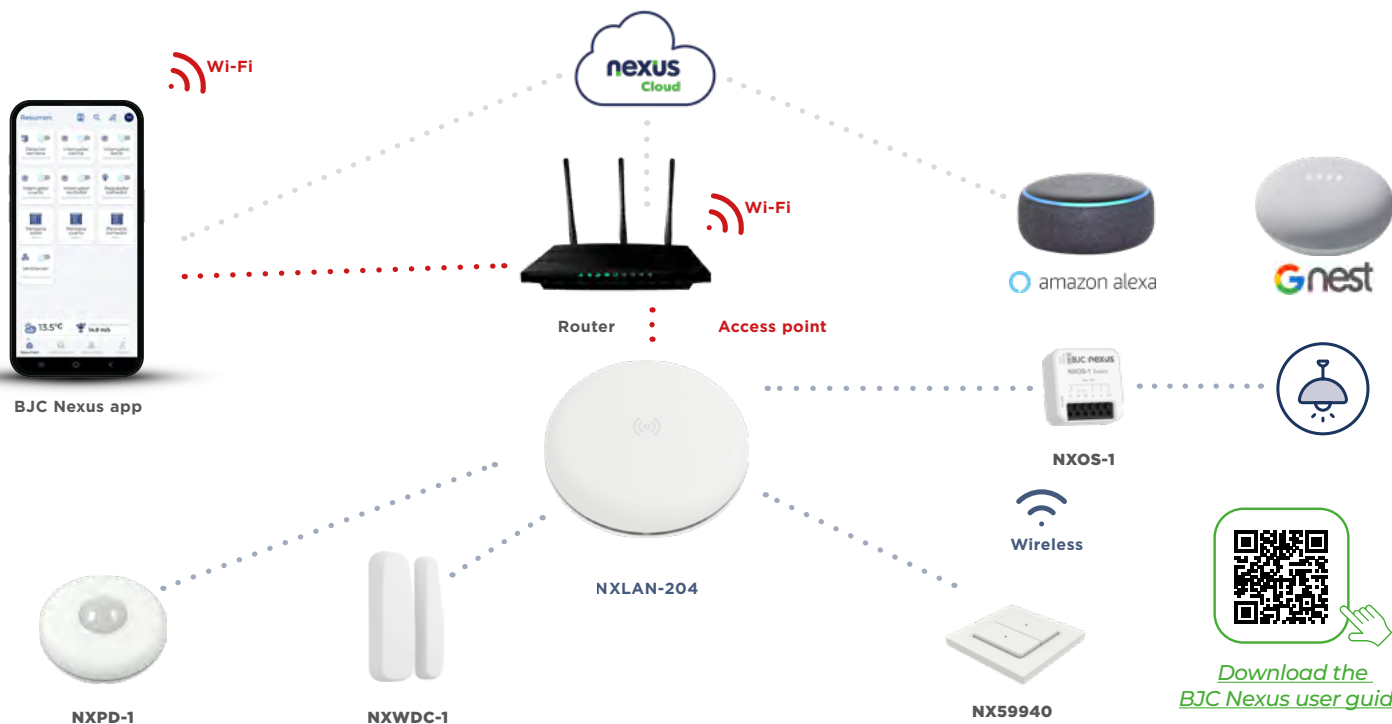
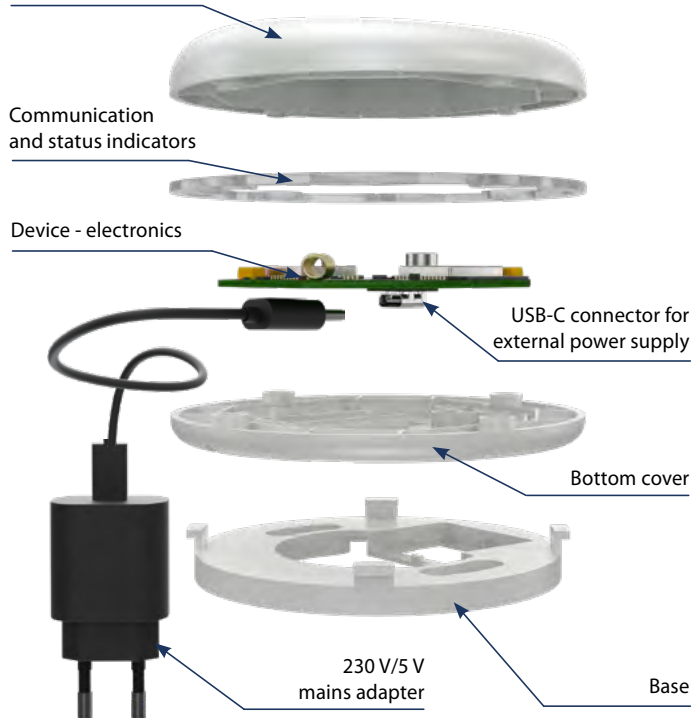
Device - electronics

USB-C connector for external power supply

Bottom cover

230 V/5 V
mains adapter

Base



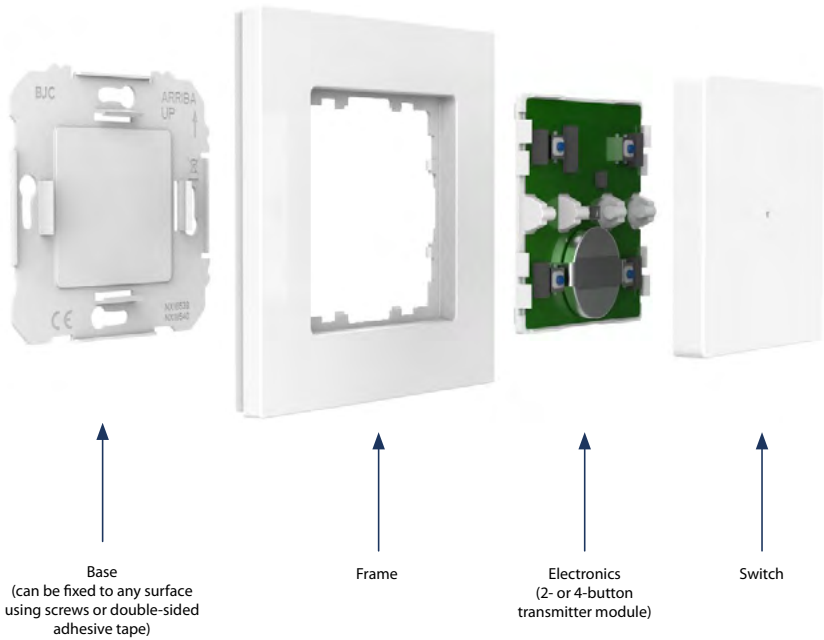
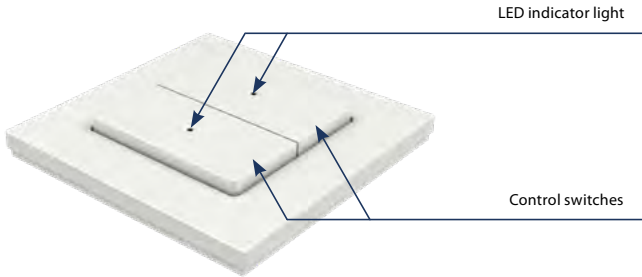


EAN code: NX59939: 8421870963677 NX59940: 8421870963684

- The Nexus surface-mounted one-way switch is used to control one-way switches for blinds, connected power sockets, dimmers and all Nexus control panels.
- **NX59939**: a two-button one-way switch (top and bottom) allows you to control two units independently.
- **NX59940**: two one-way switches, each with two buttons (top and bottom on the right and left respectively), allow you to control four units independently.
- The flat design with a levelled base makes it easy to install quickly on any surface (fixed with adhesive or screws in the installation box).
- Pressing the button sends a control signal (ON/OFF, dimming, OFF/ON timing, raising/lowering blinds, etc.).
- A red LED indicates that a command has been sent.
- Compatible with frames from the BJC Miro series (plastic, glass, wood, metal).
- It is possible to configure lighting scenes, allowing you to control several BJC Nexus units with a single press.
- Battery-powered (3 V CR 2032 battery – supplied) with a battery life of approximately 5 years, depending on frequency of use.
- Range up to 200 m (in open space).

Technical information	NX59939	NX59940
Power supply voltage:	3 V CR 2032 battery	
Battery life:	5 years, depending on frequency of use	
Transmission indicator:	Red LED	
Number of buttons:	2	4
Communication protocol:	BJC Nexus	
Frequency:	868 MHz	
Signal transmission method:	one-way communication	
Range:	up to 200 m in open space	
Further information		
Operating temperature:	-10 to +50°C	
Mounting:	adhesive/screws	
Protection:	IP20	
Pollution degree:	2	
Frame dimensions:		
-plastic:	85 x 85 x 16 mm	
-metal, glass, wood, granite:	94 x 94 x 16 mm	
Weight (plastic):*	38 g	39 g
Relevant standards:	EN 60730, EN 63044, EN 300 220, EN 301 489, EN IEC 63000	

Device description





EAN code:

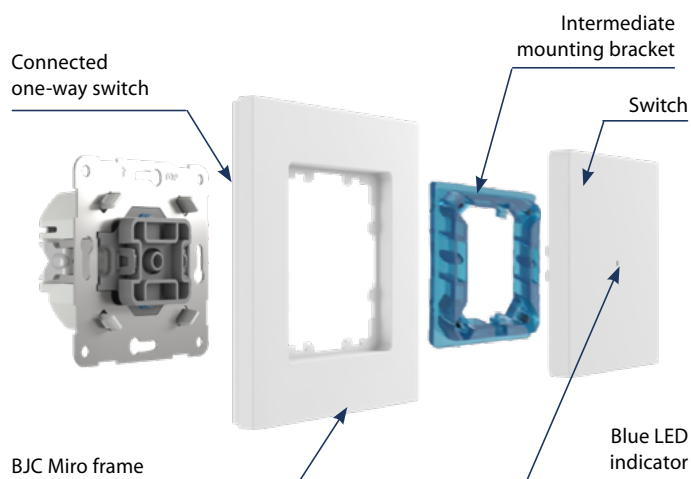
NX18506: 8421870958109

NX59906: 8421870963608

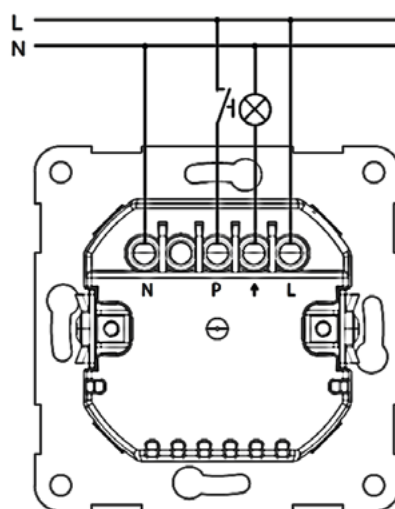
Technical information		NX18506	NX59906
Power supply voltage:	230 V AC		
Frequency:	50-60 Hz		
Apparent power:	7 VA / cos φ = 0.1		
Power dissipated:	0.7 W		
Voltage tolerance:	+10 %; -15 %		
Output			
Number of contacts:	1x		
Rated current:	10 A / AC1		
Switching capacity:	2300 VA / AC1, 200 W (LED), 1050 VA (fluorescent lamp)		
Peak current:	10 A / <3 s		
Minimum load:	5 W (LED)		
Switching voltage:	250 V AC1		
Mechanical life:	1x10 ⁷		
Electrical life (AC1):	1x10 ⁵		
Protection:	overheating		
Control			
Functions:	1 button		
Communication:	BJC Nexus		
Frequency:	868 MHz		
Manual control:	The ON/OFF state can be changed by pressing anywhere on the rocker (top or bottom)		
Range:	in open areas of up to 200 m		
External push-buttons	yes		
Further information			
Operating temperature:	-10 ... +45°C		
Storage temperature:	0 ... 45°C. 0% to 95% humidity, non-condensing. For indoor use.		
Mounting:	Compatible with European mounting boxes (EN 60670-1). Optional mounting clamps are available.		
Connection:	Screw terminals		
Cable input:	Rear mounting		
Max. cable cross-section:	2.5 mm ² (rigid and flexible cables)		
IP degree of protection:	IP20		
IK degree of protection:	IK04		
Overvoltage category:	III.		
Pollution degree:	2		
Dimensions:	70x70x41 mm	86 x 86 x 45 mm	
Weight:	97 g	120 g	
Relevant standards:	EN 60669-1, EN 60669-2-1, EN 300 220, EN 301 489, EN IEC 63000		

- The BJC Nexus connected one-way switch is used to control lights and other appliances.
- Range up to 160 m (in open space).
- Compatible with frames from the BJC Miro range.
- Communication frequency using the BJC Nexus bidirectional protocol.
- We recommend installing it with BJC flush-mounted boxes.

Device description



Connection



Versions

Order code:
EAN code:

NX18506
8421870958109

NX59906
8421870963608


NX21545, NX59949 | CONNECTED UNIVERSAL DIMMER (LED, R, L, C)

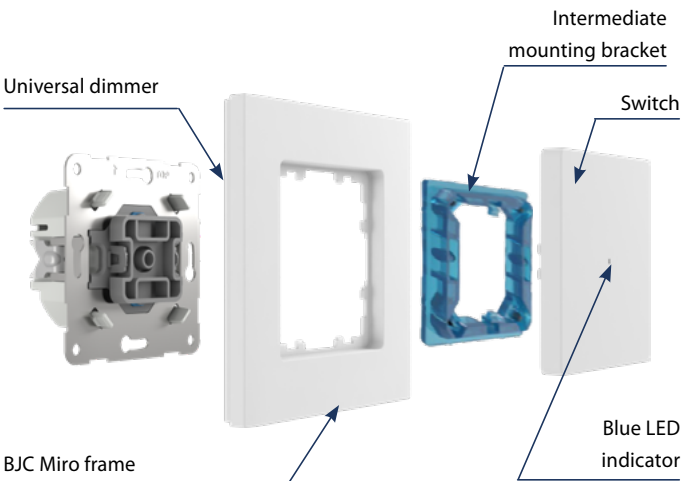


EAN code:
NX21545: 8421870958116 NX59949: 8421870963622

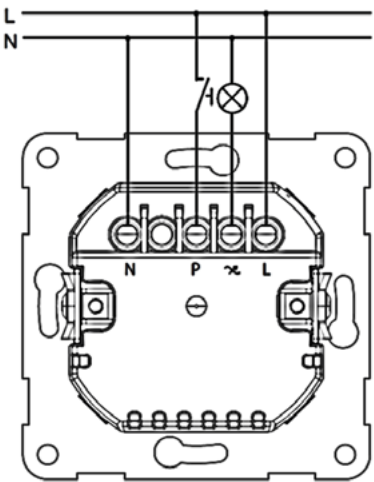
Technical information		NX21545	NX59949
Power supply voltage:	230 V AC / 50-60 Hz		
Apparent power:	1.1 VA		
Power dissipated:	0.8 W		
Voltage tolerance:	±10 %		
Dimmable load:	R, L, C, LED		
Output			
Contactless:	2 x MOSFET		
Load capacity:	Incandescent lamps (14-200 W AC), 230 V halogen lamp (14-150 W AC), 12 V halogen with magnetic transformer (14-150 VA), 12 V halogen with electronic transformer (14-150 VA), LED Trailing Edge RC (7-100 VA at 230 V AC), LED Leading Edge RL (7-20 VA at 230 V AC)		
Connection:	3-wire (the dimmer requires the neutral wire to operate)		
Rear	overheating, overvoltage, short circuit		
Control			
Wireless:	up to 25 channels (buttons)		
Communication protocol:	BJC Nexus		
Frequency:	868 MHz		
Manual control:	The ON/OFF state can be changed by pressing anywhere on the rocker (top or bottom)		
Indicator:	Blue LED		
Range:	up to 160 m in open space		
Further information			
Operating temperature:	-10 ... +45°C		
Storage temperature:	0 ... 45°C. 0% to 95% humidity, non-condensing. For indoor use		
Installation:	Compatible with European mounting boxes (EN 60670-1). Optional mounting clamps are available.		
Connection:	Screw terminals		
Cable input:	Rear mounting		
Max. cable cross-section:	2.5 mm ² (rigid and flexible cables)		
Protection:	IP20		
IK rating:	IK04		
Overvoltage category:	III.		
Pollution degree:	2		
Dimensions:	70 x 70 x 41 mm	86 x 86 x 45 mm	
Weight:	97 g	120 g	
Relevant standards:	EN 60669-1, EN 60669-2-1, EN 300 220, EN 301 489, EN IEC 63000		

- Universal dimmer in BJC Miro design:
 - R - incandescent lamps (resistive load).
 - L - halogen lamps with wound transformer (inductive load).
 - C - halogen lamps with electronic transformer (capacitive load).
 - LED - LED lamps (230 V).
- The push-button provides direct control of the built-in dimmer and other system components.
- When switched off, the set level is stored in the memory; when switched back on, it returns to the last set value.
- There is no flickering of LED light sources thanks to the minimum brightness setting.
- Range up to 160 m (in open space).
- Communication frequency using the BJC Nexus bidirectional protocol.
- Connection to the BJC Nexus app via the NXLAN-204 desktop gateway or the NXMB-1 mini gateway.
- We recommend installing it with BJC flush-mounted boxes.

Device description



Connection



Versions

Code: NX21545 NX59949
EAN code: 8421870958116 8421870963622





EAN code:

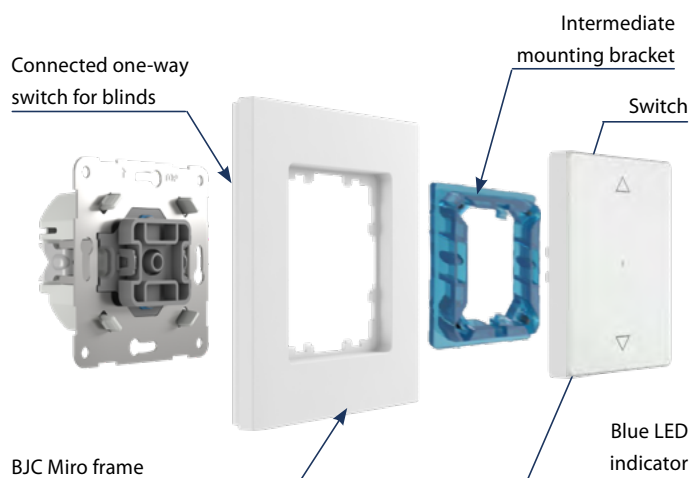
NX18565: 8421870958123

NX59965 8421870963646

Technical information		NX18565	NX59965
Power supply voltage:	230 V AC		
Voltage frequency:	50-60 Hz		
Apparent power input:	7 VA / $\cos \varphi = 0.1$		
Power dissipated:	0.7 W		
Voltage tolerance:	+10 %; -15 %		
Output			
Number of contacts:	2x		
Rated current:	8 A / AC1, 4 A $\cos \vartheta = 0.6$		
Switching capacity:	2000 VA / AC1		
Peak current:	10 A / <3 s		
Switching voltage:	250 V AC1		
Mechanical life:	1x10 ⁷		
Electrical life (AC1):	1x10 ⁵		
Protection:	overheating, overvoltage and short circuit		
Control			
Wireless:	25 channels		
Communication protocol:	BJC Nexus		
Frequency:	868 MHz		
Manual control:	A short press raises and lowers the blind whilst it is in operation. Pressing the button for more than 3 seconds raises or lowers the blind to its end position		
Range:	up to 160 m in open space		
Further information			
Operating temperature:	-10 ... +45°C		
Storage temperature:	0 ... 45°C. 0% to 95% humidity, non-condensing. For indoor use.		
Mounting:	Compatible with European mounting boxes (EN 60670-1). Optional mounting clamps are available.		
Connection	Screw terminals		
Cable input:	Rear mounting		
Max. cable cross-section:	2.5 mm ² (rigid and flexible cables)		
Pollution degree:	IP20		
IK rating:	IK04		
Overvoltage category:	III.		
Pollution degree:	2		
Dimensions:	70 x 70 x 41 mm	86 x 86 x 45 mm	
Weight:	97 g	120 g	
Relevant standards:	EN 60669-1, EN 60669-2-1, EN 300 220, EN 301 489, EN IEC 63000		

- The connected one-way switch for blinds has 2 output channels that are used to control garage doors, gates, blinds, awnings, etc.
- Switched load connection: 2 x 8 A (2 x 2000 W).
- Range up to 160 m (in open space).
- Compatible with BJC Miro frames.
- We recommend installing it with BJC flush-mounted boxes.

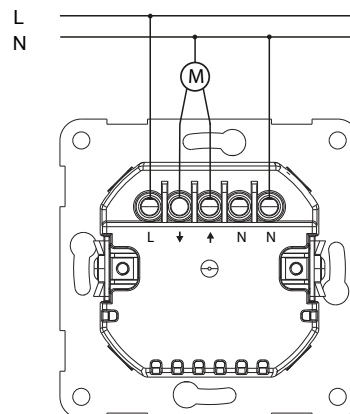
Device description



Description of operation

1. While the button on the remote control is held down for <2 s, the blinds move up (▲) or down (▼).
2. When the button is pressed for > 2 s, the blinds move up (▲) or down (▼) to their end position.

Connection


Code:
EAN code:

NX18565
8421870958123

NX59965
8421870963646


NX18524, NX59924 | CONNECTED SCHUKO POWER SOCKET

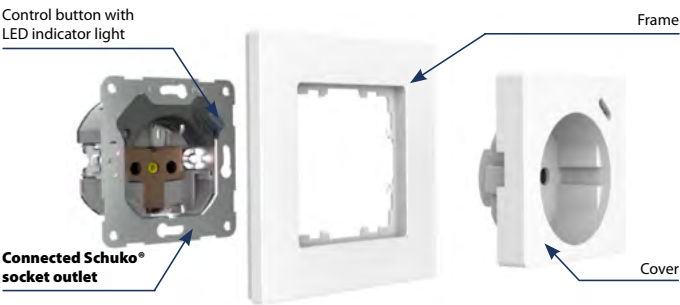


- The connected Schuko power socket is used to control fans, lamps, direct heaters and appliances that are connected via a power cable with a plug rated up to 16 A.
- Range up to 200 m (outdoors).
- Compatible with BJC Miro frames.
- Connects to the BJC Nexus app via the NXLAN-204 or NXMB-1 gateway.
- It features additional protection against indirect contact on the cover.
- We recommend installing it with BJC flush-mounted boxes.

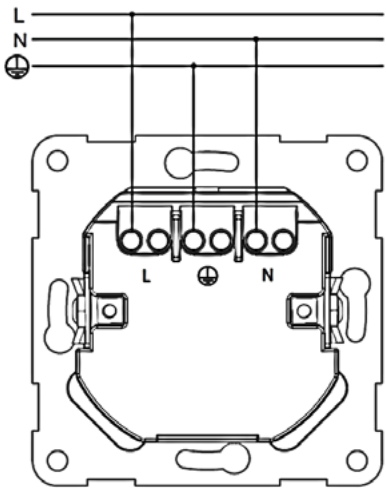
EAN code:
NX18524: 8421870958130 NX59924: 8421870963660

Technical information		NX18524 NX59924	
Power supply voltage:	230 V AC		
Voltage frequency:	50-60 Hz		
Apparent power:	7 VA / $\cos \varphi = 0.1$		
Power dissipated:	0.7 W		
Voltage tolerance:	+10 %; -15 %		
Output			
Socket type:	2-pole + earth socket		
Rated current:	16 A / AC1		
Switching capacity:	4000 VA / AC1		
Peak current:	30 A / <3 s		
Switching voltage:	250 V AC1		
Min. DC switching capacity:	500 mW		
Mechanical life:	10x10 ⁶		
Electrical life (AC1):	0.7x10 ⁵		
Protection:	overheating, overvoltage, short circuit		
Control			
Wireless:	up to 32 channels (buttons)		
Communication protocol:	BJC Nexus		
Frequency:	868 MHz		
Manual control:	yes		
Range:	up to 160 m in open space		
Further information			
Operating temperature:	-10 ... +45°C		
Storage temperature:	0 ... 45°C. 0% to 95% humidity, non-condensing. For indoor use.		
Mounting:	Compatible with European mounting boxes (EN 60670-1). Optional mounting clamps are available.		
Connection:	Screw terminals		
Cable input:	Rear mounting		
Max. cable cross-section:	2.5 mm ² (rigid and flexible cables)		
Protection:	IP20		
IK rating:	IK04		
Overvoltage category:	III.		
Pollution degree:	2		
Dimensions:	70 x 70 x 45 mm	86 x 86 x 45 mm	
Weight:	96 g	128 g	
Relevant standards:	IEC 60884-1, EN 60669-2-1, EN 300 220, EN 301 489, EN IEC 63000		

Device description



Connection



Versions

Code: NX18524 NX59924
EAN code: 8421870958130 8421870963660





EAN code:
NXPD-1: 8421870958017

Technical information		NXPD-1
Power supply:	2 x 1.5 V AA batteries	
Battery life:	up to 1 year, depending on the number of activations	
Low battery indicator:	yes	
Control		
Communication protocol:	BJC Nexus	
Frequency:	868 MHz	
Detection angle:	105°	
Detection range:	max. 12 m	
Recommended working height:	max. 2.4 m	
Further information		
Operating temperature:	-10 to +50°C	
Protection:	IP20	
Colour:	white	
Dimensions:	95Ø x 29 mm	
Weight:	57 g	
Relevant standards:	EN 60730, EN 63044, EN 301489, EN 300 220 EN IEC 63000	

- The PIR motion detector is used to detect people moving inside the building.
- Usage:
 - combined with a switching unit for automatic lighting control or to trigger an alarm.
 - via the BJC Nexus gateway, detection events can be displayed on a smartphone as notifications; alarms are stored in the history, which is displayed in the BJC Nexus app.
- PIR detector sensitivity settings to prevent unwanted triggers.
- Built-in light sensor, which allows the detector's response time to be adjusted.
- Option to enable/disable the LED indicator light on the detector cover.
- Tamper-proof function: an alarm is triggered if there is unauthorised interference with the detector.
- Power supply: 2 x 1.5 V AA batteries; the battery life is approximately 1 year.
- "Low battery" alerts are provided by the LED flashing twice or via the BJC Nexus gateways.
- The detectors are compatible with switching components that support the communication protocol and BJC Nexus gateways.



- The door/window opening sensor contact is used to detect when a door or window is opened, as the magnet and sensor move apart.
- Usage:
 - combined with the switching unit for automatic lighting control (basement, garage, etc.).
 - via the gateway, detection events can be displayed on a smartphone as notifications; alarms are stored in the history, which is displayed in the BJC Nexus app.
- Power supply: 1 x 3 V CR 2032 battery; the battery life is approximately 1 year, but by switching off the LED indicator light, this can be extended to up to 3 years.
- "Low battery" alerts in your BJC Nexus app.
- The detectors are compatible with other devices in the BJC Nexus range.

EAN code:
NXWDC-1: 8421870958000

Technical information		NXWDC-1
Power supply:	1 x 3 V CR 2032 battery	
Low battery indicator:	yes	
Control		
Communication protocol:	BJC Nexus	
Frequency:	868 MHz	
Further information		
Operating temperature:	-10 to +50°C	
Protection:	IP20	
Colour:	white	
Dimensions:	25 x 75 x 16 mm	
Magnet dimensions:	15 x 75 x 14 mm	
Relevant standards:	EN 60730, EN 63044, EN 301489, EN 300 220 EN IEC 63000	



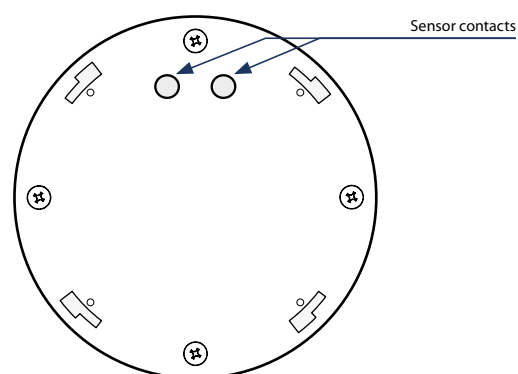


EAN code:
NXSF-1: 8421870965503

Technical information		NXSF-1
Power supply		
Battery power supply:	2 x 1.5 V AAA batteries	
Battery life based on 1 x 12-hour frequency:	3 years	
Setting		
Alarm detection:	visual and audible alarm	
Battery status display:	a low battery is indicated by 5 flashes every 15 minutes or via the display in the BJC Nexus app	
Acoustic signal:	above 45 dB/1 m	
Detection		
Sensor:	flood contacts	
Detection principle:	contact with the liquid detected by the sensor	
Response time:	2 s after connecting the sensing contacts	
Measurement accuracy:	99.8 %	
Sensitivity:	in the 0-170 kΩ range	
Control		
Communication protocol:	BJC Nexus	
Frequency:	868 MHz	
Signal transmission method:	one-way communication	
Range:	up to 160 m in open space	
Other parameters		
Operating temperature:	0 to +50°C (pay attention to the operating temperature of the batteries)	
Storage temperature:	-20 to +60°C	
Operating position:	downward-facing sensing contacts	
Protection degree:	IP62	
Dimensions:	Ø 89 x 23 mm	
Weight:	92 g	
Relevant standards:	EN 60730, EN 63044, EN 301489, EN 300 220 EN IEC 63000	

- The flood detector is used to detect water leaks – it is triggered when the contacts at the bottom of the detector become submerged.
- When it detects water, the flood detector immediately sends a signal to the switching unit, which then turns on a pump or closes a pipe valve.
- Visual and audible signals indicate that a flood has been detected.
- Range up to 160 m (in open space).

Device description



Description of operation

When the sensor's contacts detect the presence of liquid, the detector sends an alarm message to the BJC Nexus app.

Liquid conductivity

Detectable liquids		Unsuitable liquids
Type of liquid	Resistivity [Ω cm]*	
Drinking water	5-10 kΩ	Demineralised water
Well water	2-5 kΩ	Deionised water
River water	2-15 kΩ	Bourbon
Rainwater	15-25 kΩ	Petrol
Wastewater	0.5-2 kΩ	Oil
Seawater	~0.03 kΩ	Liquefied gases
Salt water	~2.2 kΩ	Paraffin
Natural/hard water	~5 kΩ	Ethylene glycol
Chlorinated water	~5 kΩ	Paints
Condensed water	~18 kΩ	Liquids with high alcohol content
Milk	~1 kΩ	
Whey	~1 kΩ	
Fruit juices	~1 kΩ	
Vegetable juices	~1 kΩ	
Broths	~1 kΩ	
Wine	~2.2 kΩ	
Beer	~2.2 kΩ	
Coffee	~2.2 kΩ	
Soap	~18 kΩ	

* Resistivity refers to the resistive properties of materials that conduct electric currents.

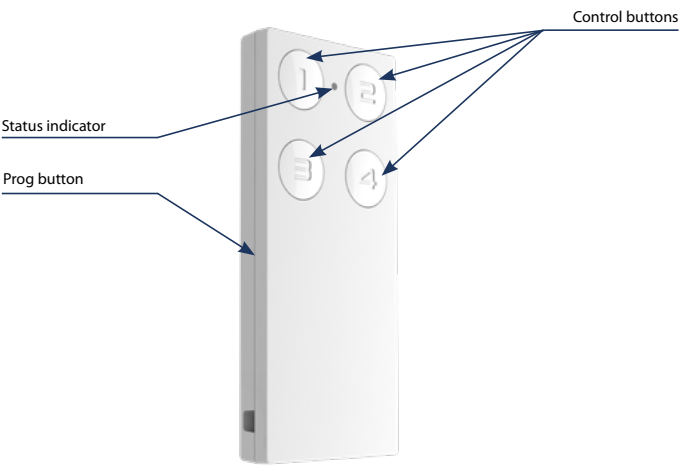


- A stylishly designed remote control.
- When the button is pressed, it sends a control signal (ON/OFF, dimming, OFF/ON timing, raising/lowering blinds, etc.).
- **NXKF-4**: four buttons allow you to control four units independently.
- Battery-powered (3 V CR 2032 battery – supplied) with a battery life of approximately 5 years, depending on frequency of use.

EAN code:
NXKF-4: 8421870958093

Technical information NXKF-4	
Power supply voltage:	3 V CR 2032 battery
Battery life:	5 years, depending on frequency of use
Transmission indicator:	Red LED
Number of buttons:	4
Communication protocol:	BJC Nexus
Transmitter frequency:	868 MHz
Signal transmission method:	one-way communication
Range:	up to 200 m in open space
Further information	
Operating temperature:	-10 to +50°C
Colour:	white
Protection:	IP20
Pollution degree:	2
Dimensions:	64 x 25 x 10 mm
Weight:	16 g
Relevant standards:	EN 60730, EN 63044, EN 300 220, EN 301 489 EN IEC 63000

Device description



Meaning			
	Electric bulbs: electric bulb, halogen light (R)		Electronic ballasts for fluorescent lamps (L)
	Dimmer with set load: R – resistive, L – inductive, C – capacitive		Inductive loads (transformers): Ferromagnetic and toroidal transformers for lights with different voltages.
	Fluorescent light: uncompensated fluorescent lights		One-way switch: one-way switch - control contact for multiple devices
	Fluorescent light: series-compensated fluorescent light		Button: control button
	Fluorescent light: parallel-compensated fluorescent light		Control module: 0–10 V analogue control module
	Fluorescent light: energy-saving fluorescent light		Motor

Category of use	Typical use
-----------------	-------------

AC alternating current, $\cos\phi = P/S$ (-)

AC-1	Non-inductive or slightly inductive load, resistance furnace. Includes all appliances supplied by an alternating current with a power factor ($\cos\phi$) ≥ 0.95 . Examples of usage: resistance furnace, industrial loads.
AC-2	Slip-ring motors, switching off.
AC-3	Motors with short-circuited armature, motor switching when in operation. This category applies to switching off motors with a short-circuited armature while in operation. While switching, the contactor regulates the current, which is 5 to 7 times the motor's rated current.
AC-5a	Switching of electric gas-discharge lamps and fluorescent lamps.
AC-5b	Switching of electric bulbs. Allows a low contact load because the resistance of the cold filament is much lower than that of the hot filament.
AC-6a	Switching of transformers.
AC-7b	Motor loads for domestic appliances.
AC-12	Switching of semiconductor loads with isolating transformers.
AC-13	Switching of semiconductor loads with isolating transformers.
AC-14	Switching of low electromagnetic loads (max. 72 VA).
AC-15	Management of alternating electromagnetic loads. This category applies to switching inductive loads with a closed electromagnetic circuit input exceeding 72 VA. Use: switching contactor coils.

Note: Category AC 15 replaces the previous category AC 11.

DC direct current, $t = L/R$ (s)

DC-1	Non-inductive or low-inductance loads, resistive furnaces.
DC-3	Shunt motors: start-up, plugging, motor reversing, resistive braking.
DC-5	Series motor: start-up, plugging, motor reversing, resistive braking.
DC-12	Control of resistive loads and fixed loads with isolation via an optoelectronic device.
DC-13	Switching of electromagnets.
DC-14	Switching of electromagnetic loads in circuits with limiting resistors.

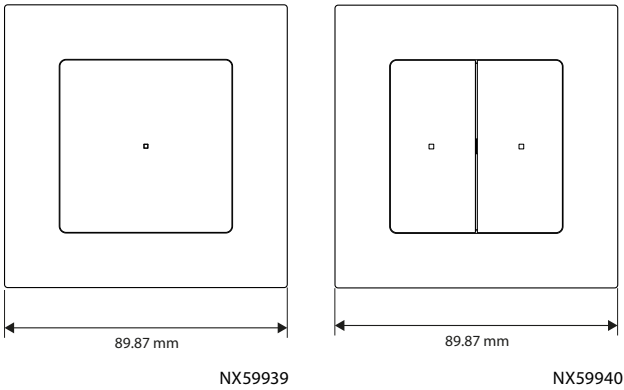
How can you tell what load our product (relay) is designed for?

Our company specifies this information on the product itself, as well as in our catalogue, instruction manual and other promotional and technical materials (website, etc.). It is important to bear in mind that it is not always possible to determine the load due to a lack of information about the device (the user cannot measure the power factor) or because the parameters of the switched device are variable. Relay manufacturers always specify guaranteed parameters under ideal conditions, which are governed by a standard (temperature, pressure, humidity, etc.), and the actual conditions may differ significantly in many cases. The category of use (classification) of a given relay is determined by the material used to manufacture its output contacts.

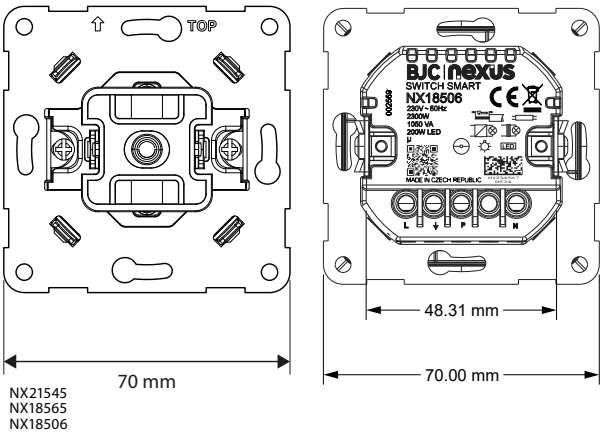
The basic types of materials used to manufacture contacts in high-performance relays are:

- AgCd: suitable for switching ohmic loads. Due to the toxicity of cadmium, this type of contact has been phased out.
- AgNi: designed for switching resistive loads; it offers good switching and conduction performance (the contact does not oxidise) for low currents and voltages. It is not recommended for overvoltages or loads with an inductive component.
- AgSn or AgSnO₂: suitable for switching loads with an inductive component. It is not suitable for switching low currents or voltages, as it offers greater resistance to overvoltages. It is suitable for switching direct currents, but less suitable for switching ohmic loads.
- Wf (tungsten): a contact that is specially designed for switching overvoltages with an inductive component.
- Gold-plated (AgNi/Au): used to improve contacts for low currents/voltages, preventing oxidation.

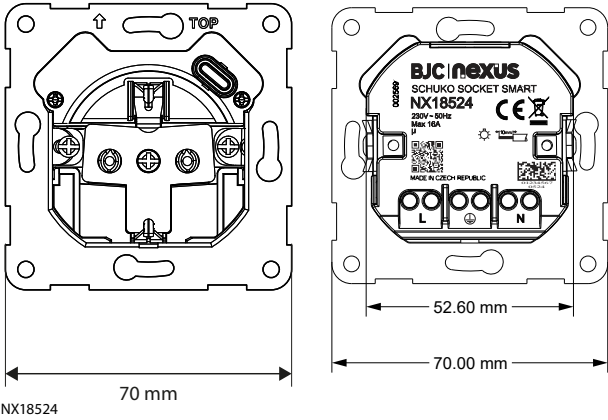
CONTROLLERS



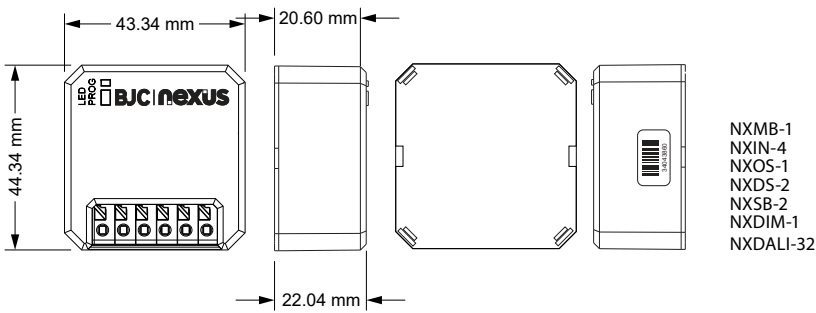
ONE-WAY SWITCHES AND DIMMER



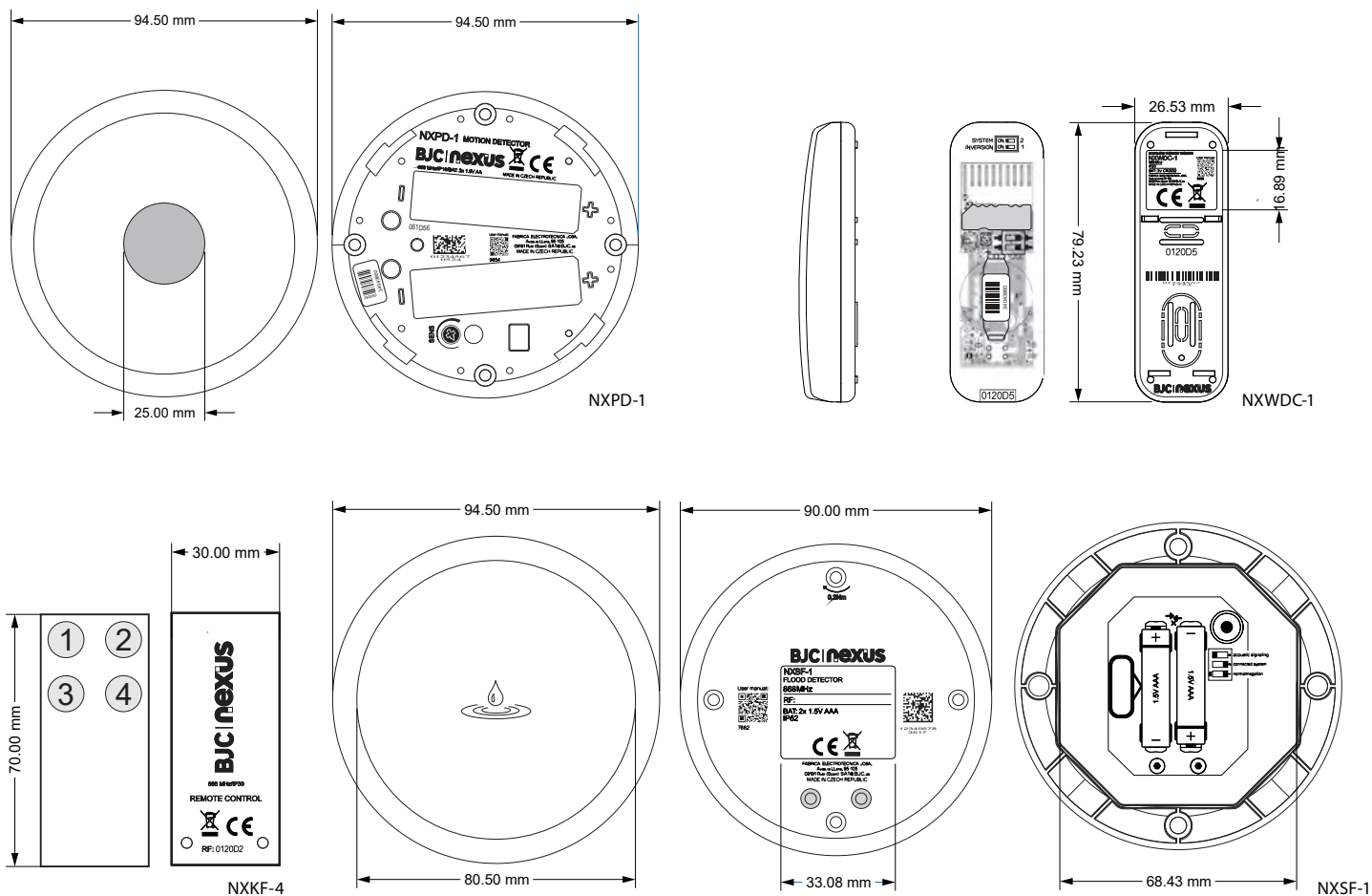
POWER SOCKET NX18524



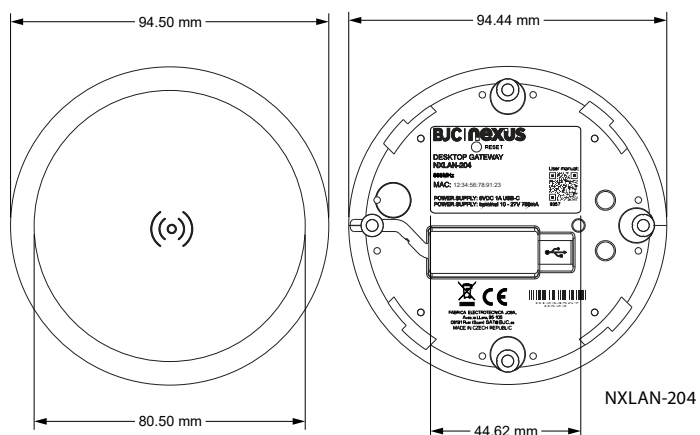
MODULES



DETECTORS

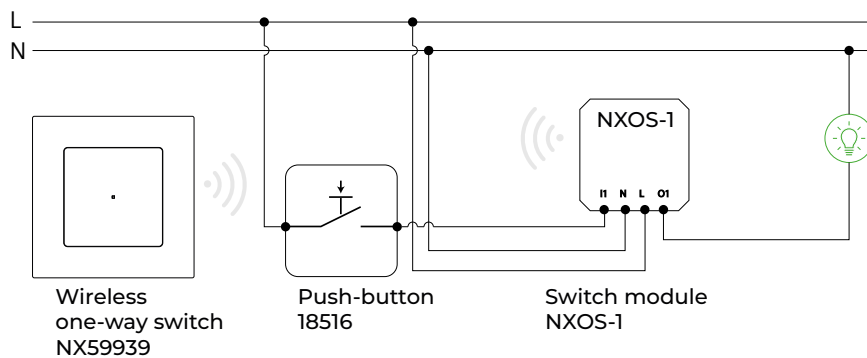


GATEWAY

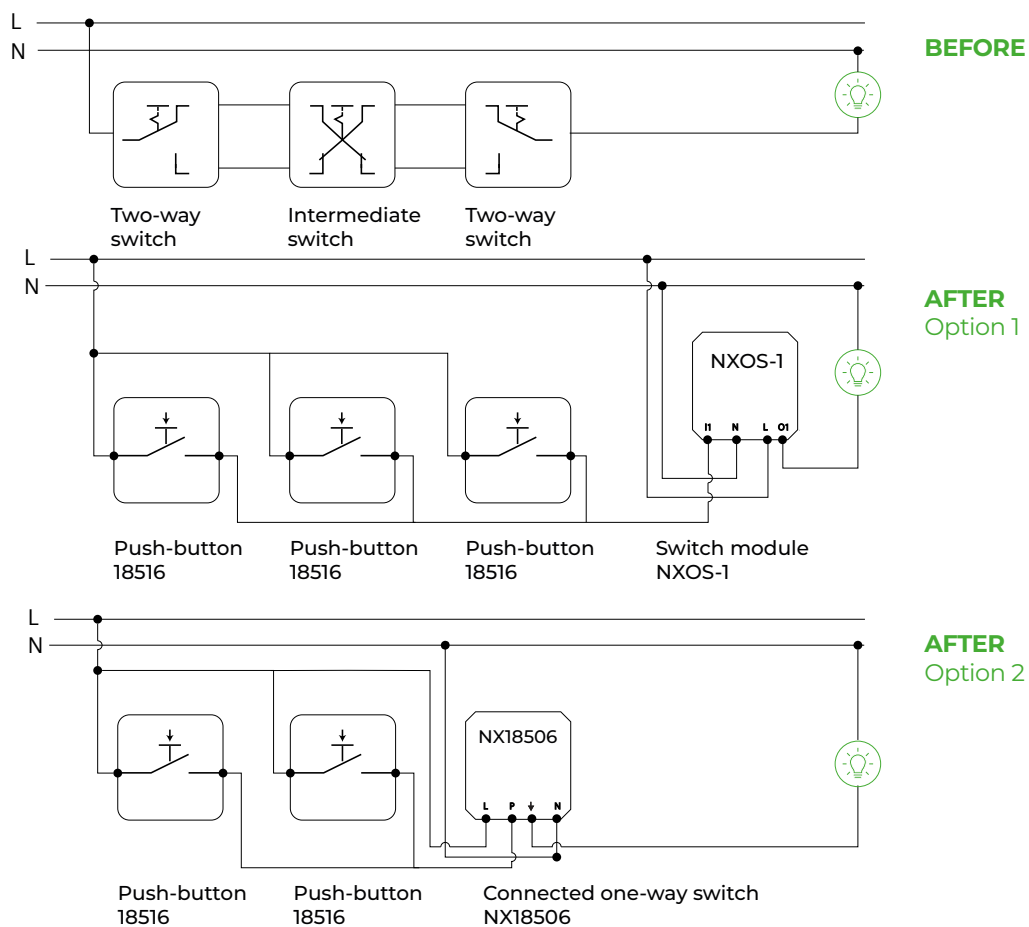


EXAMPLES OF HOME INSTALLATIONS

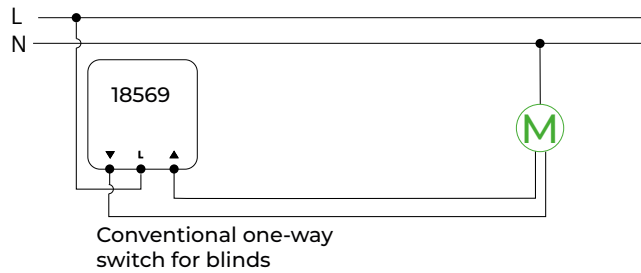
Adding a new control point without chasing



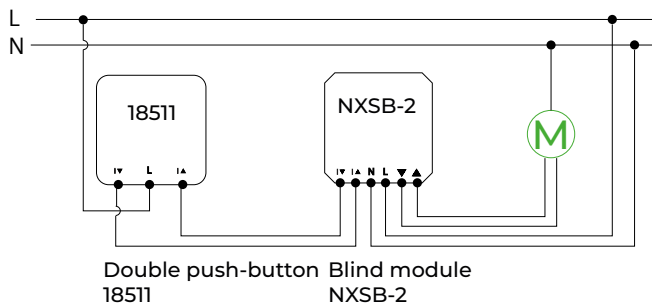
Converting a standard two-way switch into a smart switch



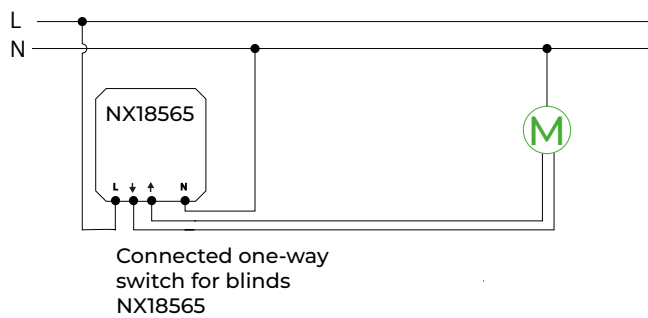
Converting standard blinds/awnings into smart ones



BEFORE

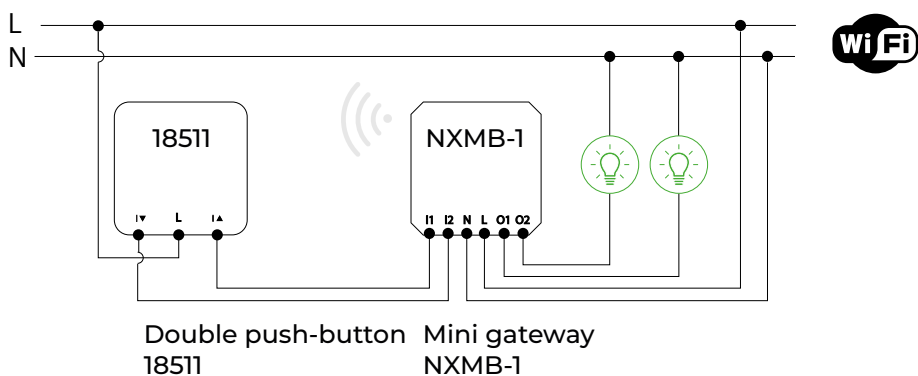


AFTER
Option 1



AFTER
Option 2

Basic control via smartphone using a mini gateway



GENERAL INFORMATION AND BEST PRACTICE

FINAL TECHNICAL SUMMARY OF THE SYSTEM

868 MHz RF range

In open field: 200 metres. Flush-mounted mechanisms 160 m.

Percentage impact on range for each wall passed through by 868 MHz signals (estimate)

Material	Metal/reflective surface	Approx. remaining range
Timber/plasterboard wall	Low	80% - 90%
Standard glass	Low	70% - 85%
Brick/block	Medium	50% - 60%
Reinforced concrete	Very high	< 20%
Metal/reflective surface	Critical	< 10% (risk of disconnection)

Note: results may vary significantly depending on the thickness of the material, moisture content and the angle of incidence of the signal.

System capacities

- Maximum of 30 input channels and 40 output channels per gateway.
- Range between the gateway and the Wi-Fi router (in metres): between 20 and 50 metres indoors.
- BJC Nexus gateways are not compatible with 5G Wi-Fi networks. Always enable and select your router's 2G network.
- Maximum number of gateways per installation: unlimited.
- Maximum number of scenes per gateway: 20.
- Maximum number of timer settings per gateway: 20.
- Maximum number of automation functions per gateway: 30.
- Maximum number of users per installation: unlimited.

Direct RF links between devices

Maximum number of pairable transmitter channels per actuator/receiver: 25 channels.

RF INSTALLATION BEST PRACTICES

- Never place devices in metal boxes.
- Position the gateway centrally between the devices in the installation.
- If necessary, use more than one gateway to improve the system's coverage and capacity. **One gateway per floor** is recommended for installations with more than one floor.
- Record the following information in the installation document:
 - › Relationship between the units, their RF numbers and the device they control (example: hall light (name) --> NXOS-1 (type) --> 07872F (RF address)).
 - › The gateway's 8-digit serial number (to obtain the gateway's Wi-Fi name) and the login credentials to link the gateway to the end user's account (e.g. NXMB1_44926801, username: admin, password: Bjc_gateway_1234 or whatever was entered during configuration).
 - › If the installation was completed using the app: the username and password for the BJC Nexus account used during installation, which is unique to each property. These credentials also provide access to Nexus Cloud.
- During installation, we recommend **physically labelling the devices** with a DYMO label maker or similar (e.g. "Hallway light"). Ensure that these labels match the names used in the installation documentation to avoid confusion during on-site wiring.
- For BJC Nexus modules with flexible cables, we recommend using **bootlace ferrules** to facilitate the connection.
- **Avoid overcrowding the boxes that house the modules** with excess cables, to prevent the cabling from shielding the RF signal.
- Use **flush-mounting boxes** with plenty of space inside for mechanisms, e.g. BJC's drywall and plasterboard boxes.

Notes

[illegible]

BJC



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BJC

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