Manuals+ — User Manuals Simplified.

MAGNUM FIRST Mz-ESRP1-2 Self Powered Wireless Switch Owner's Manual

Contents

Mz-ESRP1-2 Self Powered Wireless Switch

Product Information

The Mz-ESRP1/2 and EDRP1/2 (ZigBee) are self-powered wireless switches with dimming capabilities. These switches are proudly made in America and are simple to install. The switches come in two versions: single rocker pad (MZ-ESRP) and double rocker pad (MZ-EDRP). The product specifications are as follows:

- Part Number: ESRP=Single Rocker, EDRP=Double Rocker
- Power Supply: Self-powered
- Inputs/Outputs: Wireless
- Transmission Range: RF Transmission
- Dimensions: N/A
- Weight: N/A
- Mounting: N/A
- Environment: N/A
- Agency Listing: N/A

The switches can be commissioned for a system compatible with the switch. The ZigBee channels and corresponding radio frequencies (in MHz) are listed below.

Product Usage Instructions

1. To activate commissioning (or linking) mode for a system compatible with the switch, consult the manual for the compatible system or contact the manufacturer for assistance.
2. Cycle through the sixteen channels listed in the ZigBee channels chart until the switch is successfully linked to the system.

Self-powered wireless controls are simple to install.
Magnum Single and Double Rocker Pads use radio frequency technology to communicate wirelessly with other Magnum devices and provide convenient control of lighting, temperature and miscellaneous electric loads. The rocker pads are self-powered and never require batteries because the simple act of pressing the rocker generates enough energy to send a signal to other Magnum devices. Use them in conjunction with Magnum sensors and controls to maximize efficiency and provide a level of comfort and convenience you cannot achieve with traditional switches. Magnum products feature clean contemporary styling, making them an attractive addition that's sure to compliment any décor.

Features & Benefits

- Communicates wirelessly with other Magnum devices using a Zigbee radio modules
- Wireless – no additional wire to run so installation is fast and easy. Install them where you want them and then move them anytime.
- Self-powered – no batteries to replace and no on-going maintenance.
- Decorator style rocker pads capable of performing switching and dimming functions.

SPECIFICATIONS

- Part Number:
- (ESRP=Single Rocker): MZ-ESRP
- (EDRP=Double Rocker): MZ-EDRP
- Power Supply: Electrodynamic harvesting
- Inputs / Outputs:
    - 1 or 2 button rocker switch options
    - Radio Frequency (RF) transmitter
- Transmission Range: typ. 328 ft (100 m) free field / 32.8 ft (10 m) indoor
- RF Transmission: On press and release of rocker button
- Dimensions:

  Single: 3.8" H x 3.4" W x .85" D

  Double: 3.8" H x 3.5" W x 85" D
- Weight: Single: 3.5oz.
- Mounting:

  Surface mounted on wall (using included mounting screws) Can also be flush mounted by optional use of electrical wall box or low-voltage ring
- Environment:
    - Indoor use only
    - 32° to 131° F (0° to 55° C)
    - 5% to 95% relative humidity (non-condensing)
- Agency Listing: FCC, I.C.

Commissioning

Part 1
Activate commissioning (or linking) mode for a system compatible with the switch.
If you don't know how to do this, consult the manual for the compatible system or contact the manufacturer for assistance.

Part 2
Put the switch into commissioning mode.
To enter commissioning mode, start by selecting one button on the switch. (Use the same button for the entire sequence. Pressing any other button will exit the commissioning mode.)

Next, execute the following long-short-long sequence:

1. Press and hold the selected button for more than 7 seconds before releasing it
2. Press the selected button quickly (hold for less than 2 seconds)
3. Press and hold the selected button again for more than 7 seconds before releasing it The switch has now entered commissioning mode.

Part 3
Linking the switch to the compatible system.
A radio signal needs to be sent from the switch to the compatible system on the correct ZigBee channel. The system uses one of sixteen possible channels, automatically set by the system. Using the switch, a signal will be sent on each channel until the channel used by the compatible system is found. Upon entering commissioning mode, the switch sends a signal on the currently selected channel. The signal is sent on the default channel 11, unless the switch had been put on another channel previously. (This allows linking additional devices without changing the currently used radio channel.)

Here is a chart of the ZigBee channels and the corresponding radio frequencies (in MHz).

Channel ID	Lower Frequency	Center Frequency	Upper Frequency
11	2404	2405	2406
12	2409	2410	2411
13	2414	2415	2516
14	2419	2420	2421
15	2424	2425	2426
16	2429	2430	2431
17	2434	2435	2436
18	2439	2440	2441
19	2444	2445	2446
20	2449	2450	2451
21	2454	2455	2456
22	2459	2460	2461
23	2464	2465	2466
24	2469	2479	2471
25	2474	2475	2476
26	2479	2480	2481

Cycle through the sixteen channels
To change the switch's channel, short press the selected switch button (less than 7 seconds) once after entering com-missioning mode. This will reset the channel used by the switch to channel 11.
If the switch was already operating on channel 11 (default condition) then the radio channel will remain unchanged. This ensures that the switch will always use channel 11 as the starting point for the channel adjustment.

Short press the selected button (less than 7 seconds) again to move to the next channel. For each such button press, the switch transmits on the next channel. If channel 26 has been reached then channel 11 will be used next.

When the switch is on the correct channel, the compatible system will provide a link confirmation indication. Consult the instructions for the compatible system for details of the link confirmation indication. There should be a visible or audible exchange indicated on the system, and the switch will be linked to the system.

Exit linking mode on the switch by pressing any other button on the switch.
For problems with the compatible system, please contact the system provider.

Magnum First – 1 Seneca Street, 29th Floor, M55 – Buffalo, NY 14203 – phone 716-293-1588
– **www.magnumfirst.com** – **info@magnumfirst.com**

Documents / Resources

MAGNUM FIRST Mz-ESRP1-2 Self Powered Wireless Switch [pdf] Owner's Manual
Mz-ESRP1-2, EDRP1-2, Mz-ESRP1-2 Self Powered Wireless Switch, Mz-ESRP1-2, Self Powered Wireless Switch, Powered Wireless Switch, Wireless Switch, Switch

References

- ⊕ **BMS | Building Management Systems | Magnum First**

Manuals+,