

Remotec

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ZRC-90 (Scene Master)

SKU: REMEZRC90



Quickstart

This is a **Remote Control for Europe**. To run this device please insert fresh **2 * AAA LR3** batteries. Please make sure the internal battery is fully charged. Press "L+R" buttons simultaneously until LED light up to add the device into ZRC-90 Z-Wave network.

What is Z-Wave?

Z-Wave is the international wireless protocol for communication in the Smart Home. This device is suited for use in the region mentioned in the Quickstart section.

Z-Wave ensures a reliable communication by reconfirming every message (**two-way communication**) and every mains powered node can act as a repeater for other nodes (**meshed network**) in case the receiver is not in direct wireless range of the transmitter.

This device and every other certified Z-Wave device can be **used together with any other certified Z-Wave device regardless of brand and origin** as long as both are suited for the same frequency range.

If a device supports **secure communication** it will communicate with other devices secure as long as this device provides the same or a higher level of security. Otherwise it will automatically turn into a lower level of security to maintain backward compatibility.

For more information about Z-Wave technology, devices, white papers etc. please refer to www.z-wave.info.



Product Description

The ZRC-90 Scene Master is a Z-Wave Central Scene Controller. When one of the buttons on the ZRC-90 is pushed, your Z-Wave central controller will receive a signal which it can use to trigger unlimited control possibilities. With 8 buttons, each supporting a long-press capability, you can control 16 different actions in your central controller. The ZRC-90 is a great solution for triggering events more quickly than taking out your smart-phone and running a home control app. The Scene Master is ideal for kids, elderly and guests who may not have full access to your smart home's mobile application and hence may not have the rights to switch on various lighting, heating, air conditioning and other home appliance. With a convenient snap-in wall mount, the ZRC-90 can also be removed to keep it handy while you go about your home for the ultimate in simple convenience.

Prepare for Installation / Reset

Please read the user manual before installing the product.

In order to include (add) a Z-Wave device to a network it **must be in factory default state**. Please make sure to reset the device into factory default. You can do this by performing an Exclusion operation as described below in the manual. Every Z-Wave controller is able to perform this operation however it is recommended to use the primary controller of the previous network to make sure the very device is excluded properly from this network.

Reset to factory default

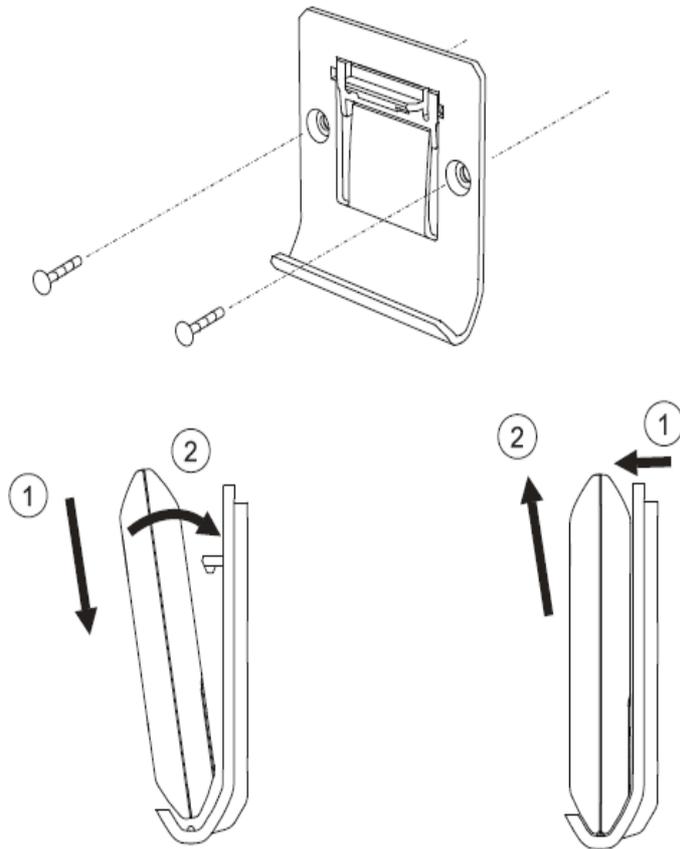
This device also allows to be reset without any involvement of a Z-Wave controller. This procedure should only be used when the primary controller is inoperable.

Press and keep holding "R" button not less than 10 seconds. Release "R" button then triple click on "R" button within 2 seconds.

Safety Warning for Batteries

The product contains batteries. Please remove the batteries when the device is not used. Do not mix batteries of different charging level or different brands.

Installation



Inclusion/Exclusion

On factory default the device does not belong to any Z-Wave network. The device needs to be **added to an existing wireless network** to communicate with the devices of this network. This process is called **Inclusion**.

Devices can also be removed from a network. This process is called **Exclusion**. Both processes are initiated by the primary controller of the Z-Wave network. This controller is turned into exclusion respective inclusion mode. Inclusion and Exclusion is then performed doing a special manual action right on the device.

Inclusion

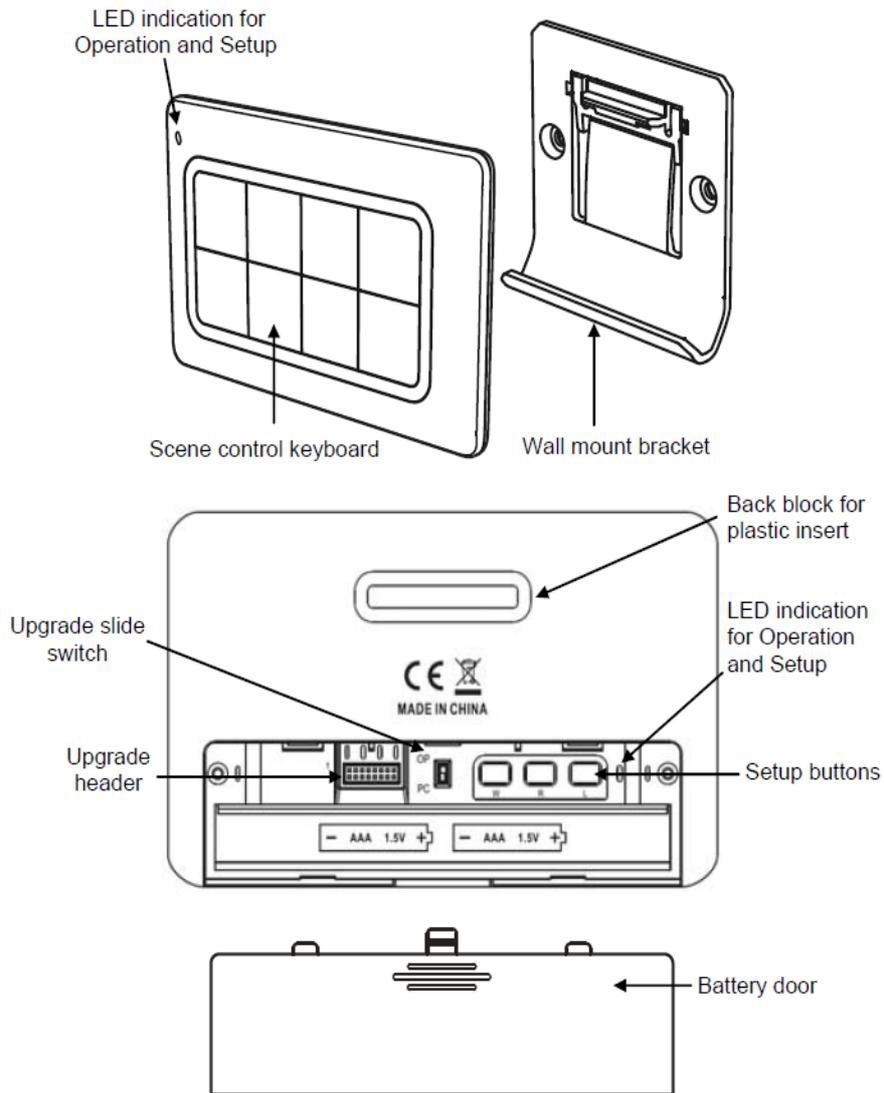
When prompted by your primary controller (gateway), click once on the "L" button. (The primary controller should indicate the action was successful. If the controller indicates the action was unsuccessful, please repeat above procedure.) - LED will flash slowly until complete the step of inclusion /exclusion.

Exclusion

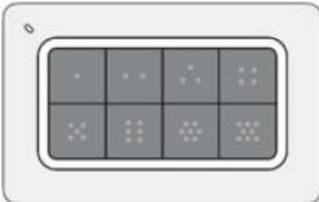
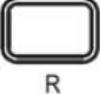
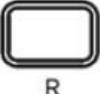
When prompted by your primary controller (gateway), click once on the "L" button. (The primary controller should indicate the action was successful. If the controller indicates the action was unsuccessful, please repeat above procedure.) - LED will flash slowly until complete the step of inclusion /exclusion.

Product Usage

Product Overview



Beschreibung der Tasten

| Keys | Functions |
|---|---|
|  | Scene control buttons |
|  | Learn mode (Click once) |
|  | Wake up (Click once) |
|  | Remove device (Click once) |
|  | Add device (Press the keys until LED light up) |
|  | Create Primary (Press the keys until LED light up) |
|  | Create Secondary (Press the keys until LED light up) |
|  | Reset to factory default (Press and keep holding 10 seconds then triple click) |
|  | Slide switch OP = Normal operation (default) PC = PC firmware upgrade mode (The slide switch is designed for firmware upgrade by supplier, please switch to "OP" direction for normal operation.) |

Primary Controller

(Transferring Only Network Information to a New Primary Controller) You can just transfer network information to another controller so that it will act as a new primary controller and ZRC?90 will act as a secondary controller. This primary shift is done by following the steps below.

1. Place the two controllers close to each other.
2. Press "W+L" buttons simultaneously until LED light up. -> LED will keep flashes slowly
3. Please make sure the target primary controller is setup to receive information mode. (e.g. target primary controller should enter the "Learn mode" if this is a another ZRC?90. Please refer to the target controller user manual for more information)
 - => Target primary controller will act as a primary controller after this action.
 - => Original ZRC?90 primary controller will act as a secondary controller after this action.

LED will flashes slowly until complete the step of "Create a Primary Controller"

Secondary Controller

1. Place the two controllers close to each other.
2. Press "W+R" buttons simultaneously until LED light up. -> LED will keep flashes slowly
3. Please make sure the target secondary controller is setup to receive information mode. (e.g. target secondary controller should enter the "Learn mode" if this is a another ZRC?90. Please refer to the target controller user manual for more information)
 - => Target secondary controller will act as a secondary controller after this action.
 - => Original ZRC?90 primary controller will still keep in a primary controller after this action.

LED will flashes slowly until complete the step of "Create a Primary Controller"

Communication to a Sleeping device (Wakeup)

This device is battery operated and turned into deep sleep state most of the time to save battery life time. Communication with the device is limited. In order to

commands that can not be received during deep sleep state. Without such a controller, communication may become impossible and/or the battery life time is significantly decreased.

This device will wakeup regularly and announce the wakeup state by sending out a so called Wakeup Notification. The controller can then empty the mailbox. Therefore, the device needs to be configured with the desired wakeup interval and the node ID of the controller. If the device was included by a static controller this controller will usually perform all necessary configurations. The wakeup interval is a tradeoff between maximal battery life time and the desired responses of the device. To wakeup the device please perform the following action: Enter to the Listening mode (Wake up) by click once on "W" button.

Quick trouble shooting

Here are a few hints for network installation if things dont work as expected.

1. Make sure a device is in factory reset state before including. In doubt exclude before include.
2. If inclusion still fails, check if both devices use the same frequency.
3. Remove all dead devices from associations. Otherwise you will see severe delays.
4. Never use sleeping battery devices without a central controller.
5. Dont poll FLIRS devices.
6. Make sure to have enough mains powered device to benefit from the meshing

Association - one device controls an other device

Z-Wave devices control other Z-Wave devices. The relationship between one device controlling another device is called association. In order to control a different device, the controlling device needs to maintain a list of devices that will receive controlling commands. These lists are called association groups and they are always related to certain events (e.g. button pressed, sensor triggers, ...). In case the event happens all devices stored in the respective association group will receive the same wireless command wireless command, typically a 'Basic Set' Command.

Association Groups:

| Group Number | Maximum Nodes | Description |
|--------------|---------------|--|
| 1 | 1 | Z-Wave Plus Lifeline: Association Group-1 will be a default status report channel in ZWave+ lifeline requirement. Only one node can be assigned to this association group. |

Special Operations as Z-Wave Controller

As long as this device is not included into a Z-Wave network of a different controller it is able to manage its own Z-Wave network as primary controller. As a primary controller the device can include and exclude other devices in its own network, manage associations, and reorganize the network in case of problems. The following controller functions are supported:

Inclusion of other devices

Communication between two Z-Wave devices only works if both belong to the same wireless network. Joining a network is called inclusion and is initiated by a controller. The controller needs to be turned into the inclusion mode. Once in this inclusion mode the other device needs to confirm the inclusion - typically by pressing a button.

If current primary controller in your network is in special SIS mode this and any other secondary controller can also include and exclude devices.

To become primary a controller have to be resetted and then include a device.

1. Press "L+R" buttons simultaneously until LED light up to add the device into ZRC?90 Z?Wave network. - LED will keep flashes slowly
2. Press the program button on the target device. - LED flash once then stay off if the device is included into the network or LED flashes 6 times rapidly then stay off if the operation is invalid.

Exclusion of other devices

The primary controller can exclude devices from the Z-Wave network. During exclusion the relationship between the device and the network of this controller is terminated. No communication between the device and other devices still in the network can happen after a successful exclusion. The controller needs to be turned into the exclusion mode. Once in this exclusion mode the other device needs to confirm the exclusion - typically by pressing a button.

Attention: Removing a device from the network means that it is turned back into factory default status. This process can also exclude devices from it's previous network.

1. Click once on the "R" button to remove the device from ZRC?90 ZWave network. - LED will keep flashes slowly
2. Press the program button on the target device. - LED flash once then stay off if the device is included into the network or LED flashes 6 times rapidly then stay off if the operation is invalid.

Technical Data

| | |
|-------------------|-------------------------|
| Dimensions | 110x70x13,5 mm |
| Weight | 92 gr |
| Hardware Platform | ZM5202 |
| EAN | 4896628185108 |
| Battery Type | 2 * AAA LR3 |
| Device Type | Remote Control - Simple |
| Network Operation | Portable Controller |
| Z-Wave Version | 6.51.06 |
| Certification ID | ZC10-15120001 |

Supported Command Classes

- Association
- Association Group Information
- Battery
- Central Scene
- Controller Replication
- Device Reset Locally
- Manufacturer Specific
- Powerlevel
- Version
- Wake Up
- Zwaveplus Info

Controlled Command Classes

- Central Scene
- Wake Up

Explanation of Z-Wave specific terms

- **Controller** — is a Z-Wave device with capabilities to manage the network. Controllers are typically Gateways, Remote Controls or battery operated wall controllers.
- **Slave** — is a Z-Wave device without capabilities to manage the network. Slaves can be sensors, actuators and even remote controls.
- **Primary Controller** — is the central organizer of the network. It must be a controller. There can be only one primary controller in a Z-Wave network.
- **Inclusion** — is the process of adding new Z-Wave devices into a network.
- **Exclusion** — is the process of removing Z-Wave devices from the network.
- **Association** — is a control relationship between a controlling device and a controlled device.
- **WakeUp Notification** — is a special wireless message issued by a Z-Wave device to announce that it is able to communicate.
- **Node Information Frame** — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.