baseCON simple room display 210002 Manual

Contents

1 baseCON
2 simple room display
2.1 SKU: 210002
2.2 Quickstart
2.3 Important safety information
2.4 What is Z-Wave?
2.5 Product Description
2.6 Prepare for Installation / Reset
2.6.1 Reset to factory default
2.6.2 Safety Warning for Mains Powered Devices
2.7 Inclusion/Exclusion
2.7.1 Inclusion
2.7.2 Exclusion
2.8 Quick trouble shooting
2.9 Association – one device controls an other device
2.9.1 Association Groups:
2.10 Configuration Parameters
2.10.1 Parameter 1: VOLUME_STANDARD
2.10.2 Parameter 10: COLORS_TABLE [5]
2.10.3 Parameter 11: COLORS_TABLE [6]
2.10.4 Parameter 12: COLORS_TABLE [7]
2.10.5 Parameter 14: COLORS_TABLE [9]
2.10.6 Parameter 15: COLORS_TABLE [10]
2.10.7 Parameter 16: COLORS_TABLE [11]
2.10.8 Parameter 17: COLORS_TABLE [12]
2.10.9 Parameter 18: COLORS_TABLE [13]
2.10.10 Parameter 19: COLORS_TABLE [14]
2.10.11 Parameter 2: VOLUME_ALARM
2.10.12 Parameter 20: COLORS_TABLE [15]
2.10.13 Parameter 21: COLORS_TABLE [16]
2.10.14 Parameter 22: COLORS_TABLE [17]
2.10.15 Parameter 23: COLORS_TABLE [18]
2.10.16 Parameter 24: COLORS_TABLE [19]
2.10.17 Parameter 25: SEND_MV_PERIOD
2.10.18 Parameter 26: ALARM_SOUND
2.10.19 Parameter 3: TEMP_ADJ_SLOPE
2.10.20 Parameter 4: TEMP_ADJ_OFFSET
2.10.21 Parameter 5: COLORS_TABLE [0]
2.10.22 Parameter 6: COLORS_TABLE [1]
2.10.23 Parameter 7: COLORS_TABLE [2]
2.10.24 Parameter 8: COLORS_TABLE [3]
2.10.25 Parameter 9: COLORS_TABLE [4]
2.11 Technical Data
2.12 Supported Command Classes
2.13 Explanation of Z-Wave specific terms
2.14 Related Posts

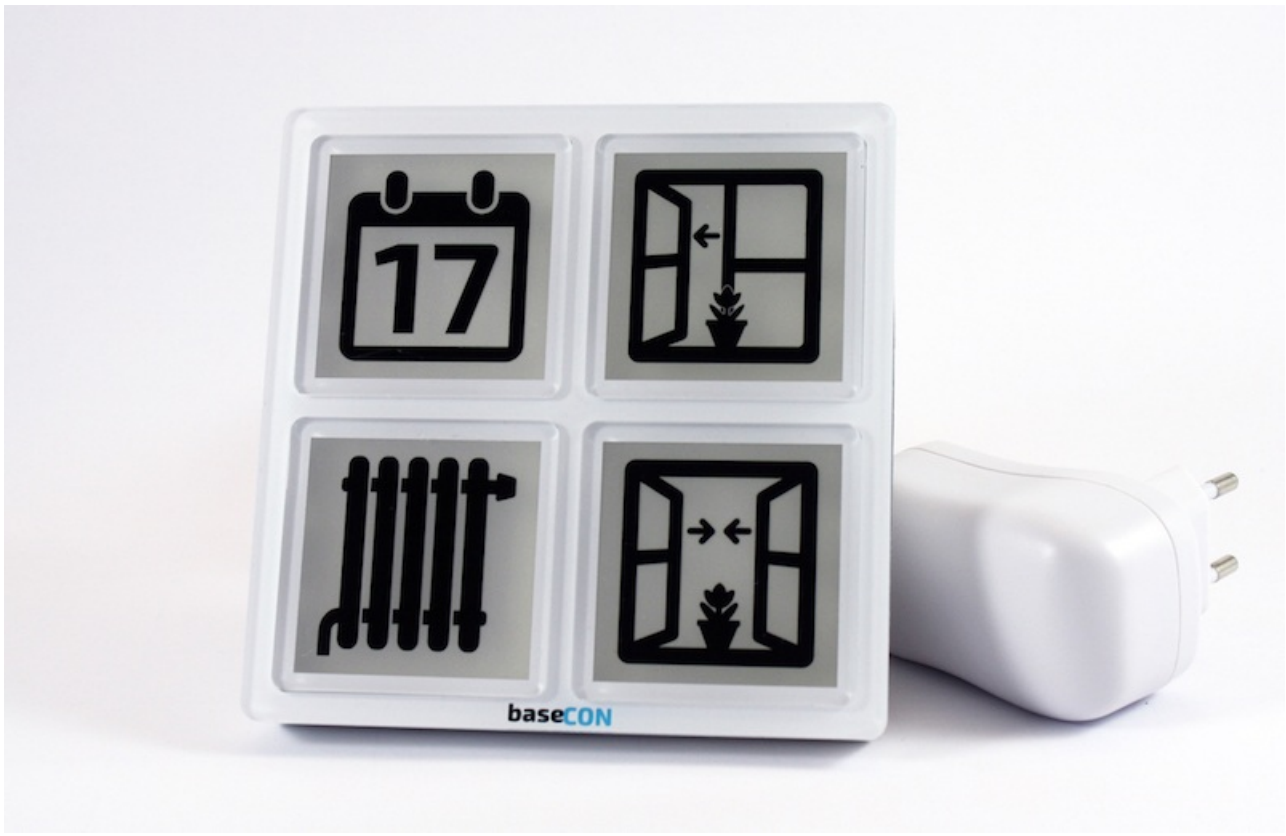
---

baseCON

---

simple room display

SKU: 210002



Quickstart

This is a
secure
Wall Controller
for
CEPT (Europe).

To run this device please connect it to your mains power supply.

To add this device to your network execute the following action:
Inclusion After power up the device (not included), the ex-/inclusion button lights permanently in color red. To start the inclusion mode the ex-/inclusion button on Room Display must be pressed for at least 1.5 seconds.If the time of 1.5 seconds is reached the segment starts to blink red.During inclusion ex-/inclusion button lit white. Segment3 switched of and device sounds dingdong if device is completely entered the network.

Please refer to the
Manufacturers Manual for more information.

Important safety information

Please read this manual carefully. Failure to follow the recommendations in this manual may be dangerous or may violate the law.
The manufacturer, importer, distributor and seller shall not be liable for any loss or damage resulting from failure to comply with the instructions in this manual or any other material.
Use this equipment only for its intended purpose. Follow the disposal instructions.

Do not dispose of electronic equipment or batteries in a fire or near open heat sources.

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 room display is a four-way button with integrated RGB LED lighting and MP3 player for switching (e.g. socket module …) and displaying states of Z-Wave network components or system functions. When a key is pressed, a notification message frame is sent with the information – key number, number of actuations. The LED RGB illumination of the buttons can be controlled via the Z-Wave controller. Currently, in the standard version of the room display three sounds are stored in the MP3 player and can be activated via the controller. In addition, the room display includes a temperature and humidity sensor. The measured values can be queried directly or / and transmitted cyclically (configurable from 1 minute to 254 minutes). The function of the individual keys is indicated by an exchangeable symbol (foil). The product is available as wall or table version. The room display is powered by a fixed power supply. It is a wide-range power supply (primary 100V-240V AC / secondary 12V / 1A DC). For wall mounting, it can be installed via a separate flush-mounted power supply unit. When installing via the flush-mounted power supply, the installation must be carried out by a specialist.The room display can be used for various use cases. For example, an alarm function (window / door monitoring) can be realized via the room display. The buttons on the room display can be used to activate and deactivate the alarm function. In case of a triggered alarm, the room display can show the alarm with a visual and acoustic signal. It should be noted that the

room display does not have its own intelligence, so the functionality must be realized via the Z-Wave controller. Other use cases are e.g. activate and deactivate scenarios, switch on and off a power module, reminder of appointments, medication,… .

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.

Factory default ResetThe Room Display can be removed from the network. This can only be done within the first minute after plugging in the power plug. The function cannot be activated later.1. For Device Reset unplug the device for 10 seconds. 2. Device plug in3. Press button1 1x, button2 2x, button3 3x and button4 4x => segment4 is flashing in color magenta.4. Press button4 1xThe device restarts now, sets all settings (brightness, volume,) to default and flashing all 4 segments for 1 second with color white.Please use this procedure only when the network primary controller is missing or otherwise inoperable.

Safety Warning for Mains Powered Devices

ATTENTION: only authorized technicians under consideration of the country-specific installation guidelines/norms may do works with mains power. Prior to the assembly of the product, the voltage network has to be switched off and ensured against re-switching.

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

Inclusion After power up the device (not included), the ex-/inclusion button lights permanently in color red. To start the inclusion mode the ex-/inclusion button on Room Display must be pressed for at least 1.5 seconds.If the time of 1.5 seconds is reached the segment starts to blink red.During inclusion ex-/inclusion button lit white. Segment3 switched of and device sounds dingdong if device is completely entered the network.

Exclusion

Exclusion The Room Display can be removed from the network with pressing the ex-/inclusion button.The ex-/inclusion button on Room Display must be pressed for at least 5 seconds. If 5 seconds are reached the ex-/inclusion button starts to flash yellow. Release button to start exclusion. After successful removing the device reboots (flashing all 4 segments for 1 second in color white)

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 NumberMaximum NodesDescription

1	1	Support one association group with one node.Support grouping identifier: 1 (lifeline)All triggering reports will be sent to the associated node:COMMAND_CLASS_DEVICE_RESET_LOCALLYDEVICE_RESET_LOCALLY_NOTIFICATIONCOMMAND_CLASS_CENTRAL_SCENECENTRAL_SCENE_NOTIFICATIONCOMMAND_CLASS_SENSOR_MULTILEVEL_V9SENSOR_MULTILEVEL_REPORT_V9

Configuration Parameters

Z-Wave products are supposed to work out of the box after inclusion, however certain configuration can adapt the function better to user needs or unlock further enhanced features.

IMPORTANT: Controllers may only allow configuring signed values. In order to set values in the range 128 … 255 the value sent in the application shall be the desired value minus 256. For example: To set a parameter to 200â€ˆit may be needed to set a value of 200 minus 256 = minus 56. In case of a two byte value the same logic applies: Values greater than 32768 may needed to be given as negative values too.

Parameter 1: VOLUME_STANDARD

Standard volume setting
Size: 1 Byte, Default Value: 25

SettingDescription

0 – 30	volume sound

Parameter 10: COLORS_TABLE [5]

Definition of the color value (RGB) – Color table row 5Command class color switch
Size: 4 Byte, Default Value: 38400

SettingDescription

0 – 16777215	RGB Value Color table row 5

Parameter 11: COLORS_TABLE [6]

Definition of the color value (RGB) – Color table row 6Command class color switch
Size: 4 Byte, Default Value: 25625

SettingDescription

0 – 16777215	RGB Value Color table row 6

Parameter 12: COLORS_TABLE [7]

Definition of the color value (RGB) – Color table row 7Command class color switch
Size: 4 Byte, Default Value: 255

SettingDescription

0 – 16777215	RGB Value Color table row 7

Parameter 14: COLORS_TABLE [9]

Definition of the color value (RGB) – Color table row 9Command class color switch
Size: 4 Byte, Default Value: 8192255

SettingDescription

0 – 16777215	RGB Value Color table row 9

Parameter 15: COLORS_TABLE [10]

Definition of the color value (RGB) – Color table row 10Command class color switch
Size: 4 Byte, Default Value: 16711805

SettingDescription

0 – 16777215	RGB Value Color table row 10

Parameter 16: COLORS_TABLE [11]

Definition of the color value (RGB) – Color table row 11Command class color switch
Size: 4 Byte, Default Value: 16743830

SettingDescription

0 – 16777215	RGB Value Color table row 11

Parameter 17: COLORS_TABLE [12]

Definition of the color value (RGB) – Color table row 12Command class color switch
Size: 4 Byte, Default Value: 16777215

SettingDescription

0 – 16777215	RGB Value Color table row 12

Parameter 18: COLORS_TABLE [13]

Definition of the color value (RGB) – Color table row 13Command class color switch
Size: 4 Byte, Default Value: 16777215

SettingDescription

0 – 16777215	RGB Value Color table row 13

Parameter 19: COLORS_TABLE [14]

Definition of the color value (RGB) – Color table row 14Command class color switch
Size: 4 Byte, Default Value: 16777215

SettingDescription

0 – 16777215	RGB Value Color table row 8
0 – 16777215	RGB Value Color table row 14

Parameter 2: VOLUME_ALARM

Volume settingfor Alarm sound
Size: 1 Byte, Default Value: 27

SettingDescription

0 – 30	Alarm Volume

Parameter 20: COLORS_TABLE [15]

Definition of the color value (RGB) – Color table row 15Command class color switch
Size: 4 Byte, Default Value: 16777215

SettingDescription

0 – 16777215	RGB Value Color table row 15

Parameter 21: COLORS_TABLE [16]

Definition of the color value (RGB) – Color table row 16Command class color switch
Size: 4 Byte, Default Value: 16777215

SettingDescription

0 – 16777215	RGB Value Color table row 16

Parameter 22: COLORS_TABLE [17]

Definition of the color value (RGB) – Color table row 17Command class color switch
Size: 4 Byte, Default Value: 16777215

SettingDescription

0 – 16777215	RGB Value Color table row 17

Parameter 23: COLORS_TABLE [18]

Definition of the color value (RGB) – Color table row 18Command class color switch
Size: 4 Byte, Default Value: 16777215

SettingDescription

0 – 16777215	RGB Value Color table row 18

Parameter 24: COLORS_TABLE [19]

Definition of the color value (RGB) – Color table row 19Command class color switch
Size: 4 Byte, Default Value: 16777215

SettingDescription

0 – 16777215	RGB Value Color table row 19

Parameter 25: SEND_MV_PERIOD

Send cycle for measured value [min] for Temperature ans Humidity
Size: 1 Byte, Default Value: 0

SettingDescription

0 – 127	Send cycle for measured value [min] for Temperature ans Humidity

Parameter 26: ALARM_SOUND

Define alarm sound number.This sound is played endless with VOLUME_ALARM.
Size: 1 Byte, Default Value: 3

SettingDescription

1 – 3	Define alarm sound number

Parameter 3: TEMP_ADJ_SLOPE

Correction value temperature measurement (slope)Slope = Value / 10000
Size: 1 Byte, Default Value: 1

SettingDescription

100 – 32767	Slope = Value/10000

Parameter 4: TEMP_ADJ_OFFSET

Correction value Temperature measurement (Offset)Temperature Offset [0.1C]
Size: 1 Byte, Default Value: 0

SettingDescription

-128 – 128	Temperature Offset [0.1C]

Parameter 5: COLORS_TABLE [0]

Definition of the color value (RGB) – Color table row 0Command class color switch
Size: 4 Byte, Default Value: 0

SettingDescription

0 – 16777215	RGB Value Color table row 0

Parameter 6: COLORS_TABLE [1]

Definition of the color value (RGB) – Color table row 1Command class color switch
Size: 4 Byte, Default Value: 16711680

SettingDescription

0 – 16777215	RGB Value Color table row 1

Parameter 7: COLORS_TABLE [2]

Definition of the color value (RGB) – Color table row 2Command class color switch
Size: 4 Byte, Default Value: 16730880

SettingDescription

0 – 16777215	RGB Value Color table row 2

Parameter 8: COLORS_TABLE [3]

Definition of the color value (RGB) – Color table row 3Command class color switch
Size: 4 Byte, Default Value: 16762880

SettingDescription

0 – 16777215	RGB Value Color table row 3

Parameter 9: COLORS_TABLE [4]

Definition of the color value (RGB) – Color table row 4Command class color switch
Size: 4 Byte, Default Value: 3302400

SettingDescription

0 – 16777215	RGB Value Color table row 4

Technical Data

Hardware Platform	ZM5202
Device Type	Wall Controller
Network Operation	Always On Slave
Firmware Version	HW: 1 FW: 1.01:01.01
Z-Wave Version	6.71.01
Certification ID	ZC10-18036050
Z-Wave Product Id	0x0348.0x0002.0x0002
Firmware Updatable	Updatable by Manufacturer
Communications Protocol	Z-Wave Serial API
Switch Type	Push Button Illuminated
Sensors	Air TemperatureHumidity
Color	White
Z-Wave Scene Type	Central Scene
Security V2	S2_UNAUTHENTICATED
Frequency	XXfrequency
Maximum transmission power	XXantenna

Supported Command Classes

- Association Grp Info
- Association V2
- Basic
- Central Scene V3
- Configuration
- Device Reset Locally
- Indicator V2
- Manufacturer Specific V2
- Multi Channel V4
- Powerlevel
- Security 2
- Sensor Multilevel V9
- Supervision
- Switch Color
- Switch Multilevel V2
- Transport Service V2
- Version V2
- Zwaveplus Info V2

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 announces that is able to communicate.
- **Node Information Frame** — is a special wireless message issued by a Z-Wave device to announce its capabilities and functions.