"To understand Merten CONNECT battery powered devices"

The reason to write this manual due to customer requests and the many questions about use of these devices together with HomeSeer software.

1. Introduction

At the present time Merten offers 3 different, battery powered units:

| Merten "Move" | Merten 1-gang | Merten 2-gang |

2. Features

To make installation and device configuration process successful, you will need this technical information:
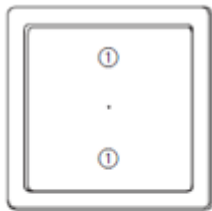

Merten "Move" 5080xx, 5081xx, 5082xx
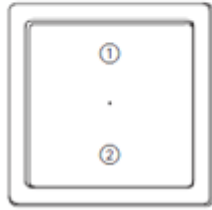Button: Association Group = 1
Parameter number = 0

(This is default and only possible configuration status after inclusion into HomeSeer software)

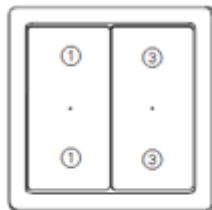**Table for the Merten "Move" 5080xx, 5081xx, 5082xx:**

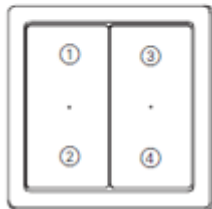| List of functions	Configuration value
Toggling/dimming/shutters single-surface	4
Retrieve/save scene	60
Doorbell function	44
Move roller shutter single-surface (direction of movement changes after each switching process)	54
LOWER roller shutter as long as button is pressed	52
RAISE roller shutter as long as button is pressed	55

Merten 5051xx, 5061xx, 5071xx
Single-surface pushbutton:
Top and Bottom button: Association Group = 1, Parameter no. = 0
(This is default configuration status after inclusion into HomeSeer software)

Merten 5051xx, 5061xx, 5071xx
Single-surface pushbutton:
Top button: Association Group = 1, Parameter no. = 0
Bottom button: Association Group = 2, Parameter no. = 1

Merten 5052xx, 5062xx, 5072xx
Dual-surface pushbutton:
Left Top and Bottom button: Association Group = 1, Parameter no. = 0
Right Top and Bottom button: Association Group = 3, Parameter no. = 2
(This is default configuration status after inclusion into HomeSeer software)

Merten 5052xx, 5062xx, 5072xx
Dual-surface pushbutton:
Left top button: Association Group = 1, Parameter no. = 0
Left bottom button: Association Group = 2, Parameter no. = 1
Right top button: Association Group = 3, Parameter no. = 2
Right bottom button: Association Group = 4, Parameter no. = 3

Table for the Merten 5051xx, 5052xx, 5061xx, 5062xx and Merten 5071xx, 5072xx:

List of functions	Configuration value
Switching/dimming/shutters dual-surface	0
Switching single-surface	4
Retrieve/save scene	60
Doorbell function	44
Move roller shutter single-surface (direction of movement changes after each switching process)	54
LOWER roller shutter as long as button is pressed	52
RAISE roller shutter as long as button is pressed	55

3. Additional information

In the default state all 3 devices are represented as **Controllers** with the possibility to be an Administrator (Master) in Z-Wave network.
The Installation procedure is not different from the installation procedure that user performs to add any standard Z-Wave device.

Merten battery powered devices uses these surface click combinations to activate respective tasks:

Learn Mode (used for integration into Z-Wave systems of other providers): Triple click on operating surface (within approximately 1.5 seconds). The LED flashes for approximately 6 seconds.

Transmit "Node info frame" (used to identify, associate and configure the device): Triple click on operating surface (within approximate 1.5 seconds). **Wait until the LED goes out.**

4. Installation

Start standard HomeSeer inclusion process: Go to **Setup** → **Interfaces** → **Manage** → **Add Node**
Now you can triple click on the Merten device operating surface (within approximate 1.5 seconds).
If the inclusion process was successful, the LOG file will not show any ERROR message. It is important to note that the "Enabling Instant Status" part of the procedure was successful in the log. You can return to **Status** window now and start configuration of the Merten device.

After inclusion into the HomeSeer software, the device will be installed as a single **"Z-Wave Remote Switch"**.
Group 1 of the Merten device will be (by default) associated to HomeSeer. So, if the user now tries to click on "Group 1" respective button, HomeSeer software (Device Status) will be updated.
This feature gives possibilities to create different types of **Events** that are based on Status change.
It is also important to say that association to "HomeSeer" can be added to any available Group on respective Merten device or removed if necessarily.

To start "Remote Switch" configuration (functions and associations) process, go to **Modify Device** window. If you don't have plans to add or change any functions on respective device, go directly to **Associations...** window. If you wish to configure new functions (virtual split buttons, doorbell function and so on) go to **Configure** window.

To make it possible for device function configuration and associations, user must use **Transmit "Node info frame"** routine. This is very important. Probably many users ignore this and still try to use **Learn Mode** routine instead. As result, both function configuration and association's tacks will fault. The **Transmit "Node info frame"** allows the device to "wake up" so that it may receive the configuration commands.

5. Comments to practical use

The Merten device functions or associations process must be started on this way: First triple click on operating surface (within approximate 1.5 seconds). **Wait until the LED goes out.** After this just click on **Set** button (for function configuration) or **ADD** button (for association) in HomeSeer.

If you have associated both dimmer and appliance units to the same Group on Merten device – the dimming feature will not work anymore for the dimmer unit. Also, if you have associated both dimmer unit and "HomeSeer" (to make possible use of "Event based on status change" feature) to the same Group on Merten device – the dimming feature will not work anymore for dimmer unit. In both cases only ON/OFF control of dimmer devices will be possible.

Merten "Z-Wave Remote Switch" shown in "HomeSeer Web Control" window in reality doesn't represent a physical device. It's just a virtual switch device that has (virtual) features of a standard Z-Wave switch. So, the represented **On** and **Off** buttons in the Control column can be used only for virtual status control. (In other words, use the button to change the state in HomeSeer without pressing the physical, real button.)

In case of use HomeSeer as your Secondary (Slave) Controller, Merten battery powered transmitters will be not recognised correctly after data transfer (**Replicate Receive**) from Z-Wave remote or another (Master) controller. After data replication to HomeSeer, user must make Rescan of installed Merten transmitters: First triple click on operating surface (within approximate 1.5 seconds). **Wait until the LED goes out.** And click on **Rescan** button.

6. Afterword's

While it is desirable in the case of the 2-gang Merten transmitter to use both transmitters with HomeSeer for the status change features, this is not possible because of the use of the Z-Wave Association Command Class with the Merten devices – the Association Command Class sends an operational (On or Off) signal to the associated device, or in this case HomeSeer, but does not include any information on which transmitter the signal was sent from. Therefore, HomeSeer cannot differentiate one transmitter's signal from the other.

Also important to say here that "Event based on status change" feature is not the same as "Scene" feature. Probably some of new beginners don't understand this difference and are thinking of using Merten transmitters as quasi Scene controllers. So here it is important to remember this potential disadvantage: "Event based on status change" feature will work only so long as the HomeSeer PC/software is operable. Thus, direct associations of nodes to the Merten device are the preferred solution because the user will not lose control from the Merten device if the HomeSeer PC/software is down.
If you have any comments or suggestions, please send us feedback - ses@tronika.no