

# Touch Switch

## Introduction

Touch Switch with built-in Z-Wave module. It supports basic command class, multi-channel command class and multi-channel association command class... which can control all associated devices synchronously.

*This product can be included and operated in any Z-Wave network with other Z-Wave certified devices from any other manufacturers. It will act as repeaters regardless of vendor to increase reliability of the network.*

## Specifications

- EU: 220V 50Hz input, 3A max output (each channel)
- Protocol Version 4.33
- Application Version 2.3
- Manufacturer ID 02 93
- Product Type ID 00 03
- Product ID 00 1A

## Installation Instructions

### IMPORTANT:

- A qualified electrician with the understanding of wiring diagrams and knowledge of electrical safety should complete the installation inside the main circuit box (normally outside your house)
- Read all instructions and documentation and save for future reference

### Step1 Preparing

**CAUTION:** Cut off power supply at circuit breaker or fuse before installation to avoid fire, shock or death!

### Step2 Wiring

1. Connect Hot Line to "L".
2. Connect Neutral Line to "N".
3. Connect Load wire to "1, 2, 3, 4, 5" in Connector 'I' and "1, 2, 3, 4, 5" in Connector 'II'
4. Connector I & II are dry contact Input terminals for relays. Connect to Hote Line "L" if connected load is AC load.



## Operation

### ADD the Touch Panel Switch into your network

1. Put the controller into ADD device mode. Follow the instructions provided by the controller manufacturer.
2. Touch and hold any key on the panel excess 5 seconds. All indication lights blinks blue, then release, touch panel start inclusion process.

### REMOVE the Touch Panel Switch from your network

1. Put the controller into REMOVE device mode. Follow the instructions provided by the controller manufacturer.
2. Touch and hold any key on the panel excess 10 seconds. All indication lights blinks blue, then release, touch panel start exclusion process.

#### LOCAL RESET the Touch Panel Switch

1. Touch and hold any key on the panel excess 15 seconds. All indication lights blinks blue while excess 10 seconds then blinks red while excess 15 seconds, then release, touch panel start local reset. Touch panel will erase network inclusion state after local reset.

Note : Please use this procedure only when the network primary controller is missing or otherwise inoperable

#### Turning on/off the Touch Panel Switch.

The Touch Panel Switch can be controlled by:

- Pressing any key.  
Sending commands through controller or gateway (the command classes which support this function are Binary Command Class (non-encapsulate) for root and Binary Command Class (encapsulate) for endpoint)

#### Touch Panel Switch Status Report.

- After device include to ZWave network, if Zwave controller send Association Set to association group lifeline (#1), then if any button touch is pressed the device send Switch Binary Report (non - encapsulate) to the destination node of lifeline group. If controller send Multichannel Association Set to group lifeline (#1) then device will send Switch Binary Report (Multichannel encapsulate) of the endpoint status and Switch Binary Report (non - encapsulate) of root status to the destination node.
- In instance, for example when a button is pressed, device will send state of root (send on when button that pressed is on, and send off when all button is off) and state of endpoint (encapsulate) via lifeline group.

## Command Class

The Command Class that the device supports

Command Class of root device

| No | CommandClass                               |
|----|--|
| 1  | COMMAND_CLASS_ZWAVEPLUS_INFO_V2            |
| 2  | COMMAND_CLASS_VERSION                      |
| 3  | COMMAND_CLASS_MANUFACTURER_SPECIFIC        |
| 4  | COMMAND_CLASS_DEVICE_RESET_LOCALLY         |
| 5  | COMMAND_CLASS_ASSOCIATION                  |
| 6  | COMMAND_CLASS_ASSOCIATION_GRP_INFO         |
| 7  | COMMAND_CLASS_MULTI_CHANNEL_V4             |
| 8  | COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V2 |
| 9  | COMMAND_CLASS_BASIC                        |
| 10 | COMMAND_CLASS_SWITCH_BINARY                |
| 11 | COMMAND_CLASS_FIRMWARE_UPDATE_MD_V2        |

Command Class of Endpoints

| No | CommandClass                    |
|----|---------------------------------|
| 1  | COMMAND_CLASS_ZWAVEPLUS_INFO_V2 |

|   |  |
|---|--|
| 2 | COMMAND_CLASS_ASSOCIATION                  |
| 3 | COMMAND_CLASS_ASSOCIATION_GRP_INFO         |
| 4 | COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION_V2 |
| 5 | COMMAND_CLASS_SWITCH_BINARY                |

## AGI Configuration

Table below show AGI information.

All endpoint support report status through root device lifeline group #1. Group #1 only support 1 destination node.

Endpoint 1 to 4 support control other device through root device association group #2~#9, and each group support 5 destination nodes maximum. Group #2 and #3 corresponding to endpoint 1 switch state, and Group #4 and #5 corresponding to endpoint 2 switch state, etc.

| Root    | Profile           | Commands                                   | Group Name |
|---------|-------------------|--|------------|
| Group 1 | General: Lifeline | Device Reset Locally, Switch Binary Report | "Lifeline" |
| Group 2 | Control: Key01    | Basic Set                                  | "HGT-01"   |
| Group 3 | Control: Key01    | Switch Binary Set                          | "HGT-01"   |
| Group 4 | Control: Key02    | Basic Set                                  | "HGT-02"   |
| Group 5 | Control: Key02    | Switch Binary Set                          | "HGT-02"   |
| Group 6 | Control: Key03    | Basic Set                                  | "HGT-03"   |
| Group 7 | Control: Key03    | Switch Binary Set                          | "HGT-03"   |
| Group 8 | Control: Key04    | Basic Set                                  | "HGT-04"   |
| Group 9 | Control: Key04    | Switch Binary Set                          | "HGT-04"   |

| Endpoint 1 | Profile           | Commands             | Group Name |
|------------|-------------------|----------------------|------------|
| Group 1    | General: Lifeline | Switch Binary Report | "SW-01"    |
| Group 2    | Control: Key01    | Basic Set            | "HGT-01"   |
| Group 3    | Control: Key01    | Switch Binary Set    | "HGT-01"   |

| Endpoint 2 | Profile           | Commands             | Group Name |
|------------|-------------------|----------------------|------------|
| Group 1    | General: Lifeline | Switch Binary Report | "SW-02"    |
| Group 2    | Control: Key02    | Basic Set            | "HGT-02"   |
| Group 3    | Control: Key02    | Switch Binary Set    | "HGT-02"   |

| Endpoint 3 | Profile           | Commands             | Group Name |
|------------|-------------------|----------------------|------------|
| Group 1    | General: Lifeline | Switch Binary Report | "SW-03"    |
| Group 2    | Control: Key03    | Basic Set            | "HGT-03"   |
| Group 3    | Control: Key03    | Switch Binary Set    | "HGT-03"   |

| Endpoint 4 | Profile | Commands | Group Name |
|------------|---------|----------|------------|
|------------|---------|----------|------------|

|         |                   |                      |          |
|---------|-------------------|----------------------|----------|
| Group 1 | General: Lifeline | Switch Binary Report | "SW-04"  |
| Group 2 | Control: Key04    | Basic Set            | "HGT-04" |
| Group 3 | Control: Key04    | Switch Binary Set    | "HGT-04" |

| Endpoint 5 | Profile           | Commands             | Group Name |
|------------|-------------------|----------------------|------------|
| Group 1    | General: Lifeline | Switch Binary Report | "SW-05"    |

| Endpoint 6 | Profile           | Commands             | Group Name |
|------------|-------------------|----------------------|------------|
| Group 1    | General: Lifeline | Switch Binary Report | "SW-06"    |

| Endpoint 7 | Profile           | Commands             | Group Name |
|------------|-------------------|----------------------|------------|
| Group 1    | General: Lifeline | Switch Binary Report | "SW-07"    |

| Endpoint 8 | Profile           | Commands             | Group Name |
|------------|-------------------|----------------------|------------|
| Group 1    | General: Lifeline | Switch Binary Report | "SW-08"    |

| Endpoint 9 | Profile           | Commands             | Group Name |
|------------|-------------------|----------------------|------------|
| Group 1    | General: Lifeline | Switch Binary Report | "SW-09"    |

| Endpoint 10 | Profile           | Commands             | Group Name |
|-------------|-------------------|----------------------|------------|
| Group 1     | General: Lifeline | Switch Binary Report | "SW-10"    |

Hogar's Touch Switch in 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>, 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup> and 9<sup>th</sup> group allows to control 5 regular or multichannel devices per an association group, with the exception of "Lifeline" that is reserved solely for the controller and hence only 1 node can be assigned.

It is not recommended to associate more than 10 devices in general, as the response time to control commands depends on the number of associated devices. In extreme cases, system response may be delayed.

Endpoints 1,2,3,4 supporting 3 groups as table above include status notice to group 1("lifeline group") and control devices at other groups. If a device has more than 4 endpoints (For example a 8-gang switch, a 10-gang switch), the endpoints with index bigger than 4 do not support group except group 1(mean "lifeline" group). That means endpoints with index bigger than 4 will only notice status to group 1

## Configure operation for endpoints

For endpoints (from 1 to 10) operate with group 1, a controller needs to send Association Set command (in the case endpoints only notice status via switch binary report command) or Multichannel Association Set command (in the case endpoints will notice status via switch binary report on encapsulated command and common status of root device - status of root determined is OFF in case of all endpoints off, and ON in case of at least one endpoint on)

For endpoints (from 1 to 4) operate with groups (different with "lifeline"), a controller will have to send Association Set command or Multichannel Association Set command.