

# Zigbee® Planning Sheet & Sales Guide

## PLANNING SHEET



Use this guide to help plan TaHoma® switch/Zigbee projects.

This system is powered by the Zigbee communication standard. Features and benefits of this mesh network include control via smartphone or tablet applications, setting scenes and schedules based on individual preferences, and remote control from anywhere an internet connection is available.

Zigbee allows for a larger and more robust wireless network compared to an RTS shading system. When planning a Zigbee system certain considerations must be followed in order to maintain optimum performance. TaHoma® is a registered trademark of Somfy® Systems, Inc.



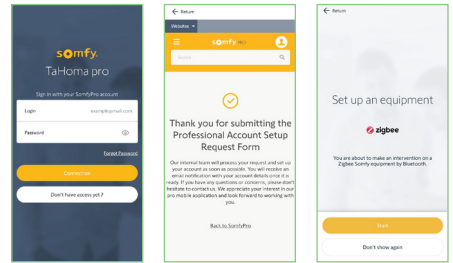
**TaHoma switch**  
C156.324

Wireless router with 2.4 Ghz support (supplied by others)  
One (1) TaHoma switch supported per Zigbee system.



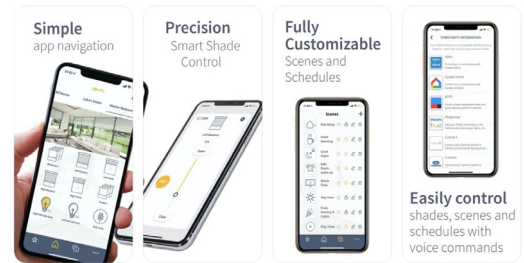
**TaHoma Pro**  
App for Installer

App on a Bluetooth enabled device for use by installer for programming shades



**TaHoma North America**  
App for End User

App on a smart device for use by the end user.



**Ethernet Adapter**  
C103.163

For hard wired internet connection.  
(Optional)



**Smart Plugs**  
C072.071

Placed every 25' from TaHoma switch to farthest motor

- Zigbee Routing Device (120 VAC)
- Control of any ON/OFF or Appliance under 1800W



**Ysia 1 Remote Controller**  
(1 Channel)  
C072.069

**Ysia 5 Remote Controller**  
(5 Channel)  
C072.070



Draper, Inc. | 411 S. Pearl St. Spiceland, IN 47385  
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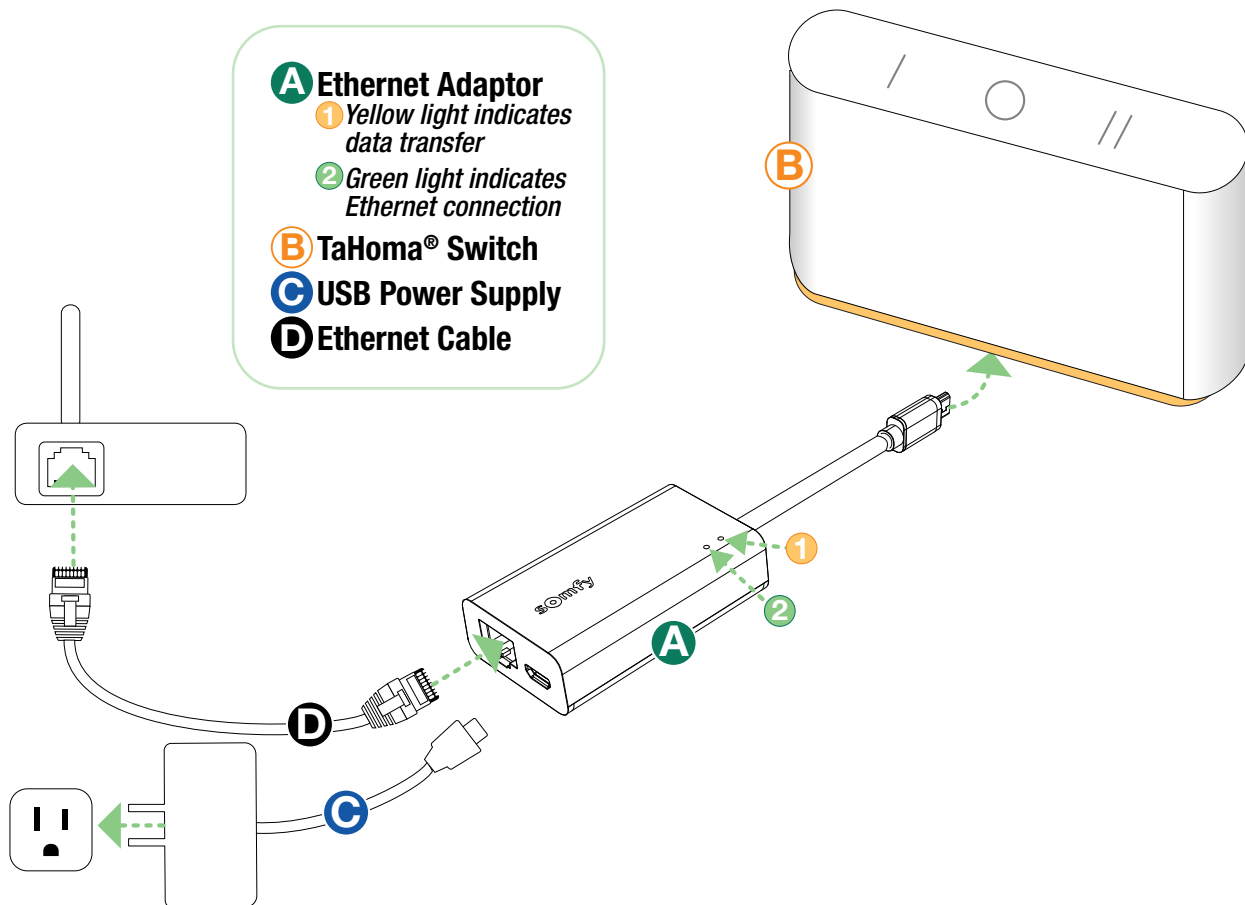
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## Product Integration

TaHoma allows Zigbee operated shades to be controlled via a number of different platforms.

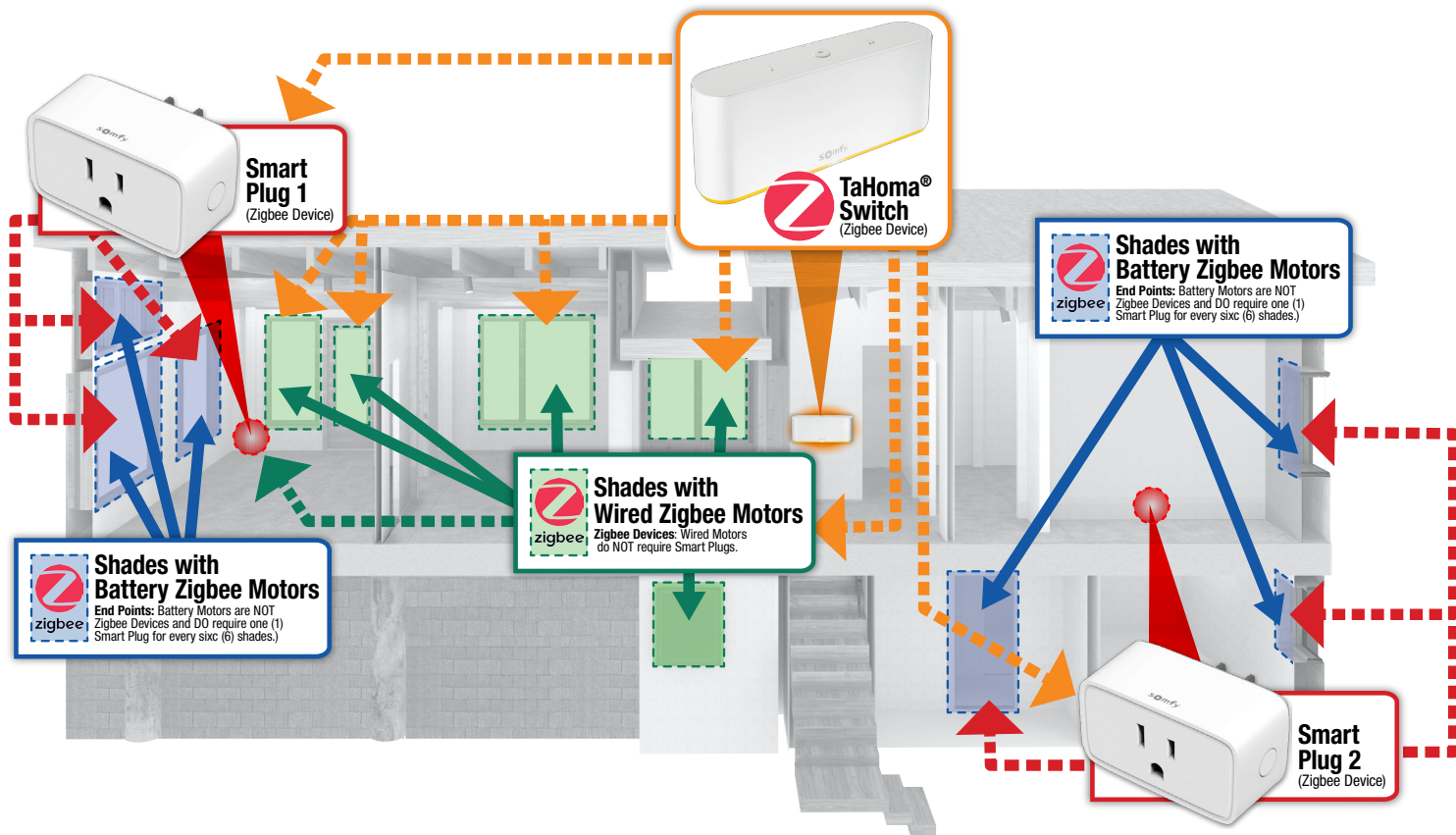


## TaHoma Switch Wiring



## Design Considerations

- One (1) TaHoma switch per network accommodates up to 50 devices.
- All shading motors need to be in range of TaHoma switch **or** a Zigbee device (Smart Plug or 120V Zigbee motor) with a line-of-sight path to the TaHoma switch.
- Multiple pathways to the TaHoma switch are encouraged. If one Zigbee device fails or loses power, then the system self-heals through the redundant pathway.
- Zigbee remotes and battery motors are **not** Zigbee devices.



## Technical Considerations

- Each TaHoma switch can control up to 50 Zigbee devices and/or end points.
  - A "device" is a Zigbee motor, Ysia remote controller, or Smart Plug.
  - A maximum of 40 of these 50 devices can be wireless motors.
  - Maximum: 21 controls.
- 20 motor groups
- 40 total scenes
  - 20 devices (*motors in a scene without cascading effect*)
- Transmitting device range is 25' to 35' (7M to 10.7M)
- Each Smart Plug can accommodate up to six (6) Battery Motors.
- 15 network hops are possible from the TaHoma switch to farthest motor. This defines the distance limit of the shade network.
 

**Example:** If 15 Smart Plugs were placed every 25' from the TaHoma device, straight line maximum communication distance is 400'.

## Alternate Installation

The Zigbee system is also available as a "hubless" system, using only Ysia remotes.

**Please Note:**

No integration is possible with this "hubless" option, and range is limited to roughly 35'.

