

# Smart Boost Timer Switch User Manual

(Version 1.9)

The Aeotec Smart Boost Timer Switch is a Z-Wave Plus<sup>™</sup> enabled device and can be included/operated in any Z-Wave<sup>™</sup> network with other Z-Wave<sup>™</sup> certified devices from other manufacturers and/or other applications. All non-battery operated nodes within the network will act as repeaters regardless of vendor to increase reliability of the network.

The Aeotec Smart Boost Time Switch supports consumption meter function. When the device has been included in the network, it will report the consumption power periodically. It is also a high output countdown timer that can be used to control immersion heater elements or other electrical appliances rated up to 16A. On the product, four simple white LEDs are used to show the user how much time is left to run. Pressing the switch whilst the unit is operating allows the user to cancel the timing program, and the memory function of the timer will remember the last period selected.

## I. Product Overview



## **Product Dimensions**







BOTTOM VIEW

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BACK VIEW

## II. Installation

WARNING: Be sure to switch off power source before installing or maintenance.

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- a. For the incoming power supply:
  - 1. connect live to L IN terminal;
  - 2. connect neutral to N IN terminal;
  - 3. connect earth to Earth In  $\bigoplus$  terminal.
- b. For the load:
  - 1. connect live to L OUT terminal;
  - 2. connect neutral to N OUT terminal;
  - 3. connect earth to Earth Out Germinals.

## III. Adding to Z-Wave<sup>™</sup> Network

When power is applied for the first time, the Power LED will flash blue on and off repeatedly, it indicates that the switch has not been added to the Z-Wave Network. User can scan the QR code on the product to add the switch to the Z-Wave Network simply.

#### **Auto Inclusion**

This device is a security enabled Z-Wave Plus product that is able to use encrypted Z-Wave Plus messages to communicate to other security enabled Z-Wave Plus products.

Use the SmartStart function you can add the device into Z-Wave network simply. On the bottom of the product you can find a QR code. Use the gateway's APP to scan the QR code or enter the DSK code, then it will be added into the Z-Wave Network automatically.

Example:



#### Add to Z-Wave Network

- 1. Power on the device, the power led will blink blue slowly.
- 2. Let the Primary Controller into inclusion mode (If you don't know how to do this, refer to its manual)
- 3. Press the action button one time, when the yellow led on release the button. It indicates the device has enter learn mode.
- 4. If added successful, the power led will keep green color for 2 seconds, then turn off.

#### **Remove from Z-Wave Network**

- 1. Power on the device.
- 2. Let the Primary Controller into exclusion mode (If you don't know how to do this refer to its manual)
- 3. Press the action button one time, when the purple led on release the button. It indicates the device has enter learn mode.
- If removed successful, the blue led will blink slowly.

#### **Factory Reset**

- 1. Make sure the device has been powered.
- 2. Press and hold the button for 15 seconds. When the red led on, release the button. Then, the device will enter factory reset mode. If reset successful, the blue led will blink slowly.

You can use the set procedure only when the primary controller is missing or inoperable.

#### **Boost Mode**

- 1. Power on the device.
  - a) Press and hold the button about 1 second, when the power led turns white release the button. Then the 1<sup>st</sup> boost time led will turn on. It indicates that the device enter boost mode. The switch will turn on immediately and will turn off after 30 minutes (This time can be changed through Configuration Parameter 5).
  - b) Press and hold the button about 1 second after doing a), when the power led turns white release the button. The 1<sup>st</sup>, 2<sup>nd</sup> boost time leds will turn on. This means the switch will turn off after 60 minutes.
  - c) Press and hold the button about 1 second after doing b), when the power led turns white release the button. The 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> boost time leds will turn on. This means the switch will turn off after 90 minutes.
  - d) Press and hold the button about 1 second after doing c), when the power led turns white release the button. The 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, 4<sup>th</sup> boost time leds will turn on. This means the switch will turn off after 120 minutes.

- e) Press and hold the button about1 second after doing d), when the power led turn off release the button. Then all of the boost time leds will turn off. It indicates that we have exit boost mode.
- 2. Press and hold the button about 5 seconds.
  - a) When the power led turns green release the button, the device will enter a override schedule state<sup>3</sup>. At this state, the schedule task doesn't work. The switch can only be turn on or off from the gateway.
  - b) When the power led turns red release the button, the device will exit the override schedule state.

## **IV. Command Class**

This switch supports the following command class:

- COMMAND\_CLASS\_ZWAVEPLUS\_INFO
- COMMAND\_CLASS\_SWITCH\_BINARY
- COMMAND\_CLASS\_ASSOCIATION\_V2
- COMMAND\_CLASS\_ASSOCIATION\_GRP\_INFO
- COMMAND\_CLASS\_TRANSPORT\_SERVICE\_V2
- COMMAND\_CLASS\_SUPERVISION
- COMMAND\_CLASS\_METER\_V5
- COMMAND\_CLASS\_VERSION\_V3
- COMMAND\_CLASS\_MANUFACTURER\_SPECIFIC
- COMMAND\_CLASS\_DEVICE\_RESET\_LOCALLY
- COMMAND\_CLASS\_CONFIGURATION
- COMMAND\_CLASS\_SCHEDULE
- COMMAND\_CLASS\_CLOCK
- COMMAND\_CLASS\_POWERLEVEL
- COMMAND\_CLASS\_SECURITY
- COMMAND\_CLASS\_SECURITY\_2
- COMMAND\_CLASS\_FIRMWARE\_UPDATE\_MD\_V4

## V. Association Groups

The device supports 2 association group and supports max 5 associated nodes.

Group 1 is lifeline group, all nodes which associated in this group will receive the messages sent by device through lifeline.

Group 2 is a basic group, all nodes which associated in this group will receive a basic set command sent by this group. When the device is on, a basic set command with 0xFF value will be sent. When the device is off, a basic set command with 0x00 value will be sent.

The Command Class supported by each association group is shown in the table below:

Group	Max	Command Class	Command
1	5	COMMAND_CLASS_SWITCH_BINARY	SWITCH_BINARY_REPORT
(Lifeline)		COMMAND_CLASS_METER_V5	METER_REPORT_V5
		COMMAND_CLASS_CLOCK	CLOCK_REPORT
		COMMAND_CLASS_SENSOR_MULTILEVEL_V11	SENSOR_MULTILEVEL_REPORT_V11
		COMMAND_CLASS_SCHEDULE	SCHEDULE_STATE_REPORT
		COMMAND_CLASS_DEVICE_RESET_LOCALLY	DEVICE_RESET_LOCALLY_NOTIFICATION

2	5	COMMAND_CLASS_BASIC	BASIC_SET
(On/Off)			

## **VI.** Configuration

User can change the default settings by the below configuration parameters. After device reset, all these parameters will be set to their default values.

#### 1) (Param 1) Power out action

Action in case of power out. This parameter is used to configure the device state after power on.

Parameter Number	Size(Byte)	Available Settings	Default value
0x01	1	0/1/2/3	3

- 0 keep the last state when re-power on
- 1 power on
- 2 power off
- 3 return to standard schedule (see schedule command class) so this would either be on or off depending on schedule and the time.

#### 2) (Param 2) LED status

Configure LED (except boost) to be off irrespective of switch status.

Parameter Number	Size(Byte)	Available Settings	Default value
0x02	1	0/1/2	1

0 - disable all LED except for boost

1 - enable all LED indication

2 - Momentary mode (LED turns on for 5 seconds, then turn off LED)

#### 3) (Param 3) Auto off timer

#### Timer acts as auto off after specified minutes, setting is set in seconds.

Parameter Number	Size(Byte)	Available Settings	Default value
0x03	4	0 ~ 86400	0

0 - no auto off with timer

1 ~ 86400 auto off after this specified time, unit second.

#### 4) (Param 4) Current overload protection

Current and overload protection

Parameter Number	Size(Byte)	Available Settings	Default value
0x04	1	0/1	1

0 - disable current and overload protection

1 - enable current and overload protection

#### 5) (Param 5) Boost time

Configure boost time interval, unit minute.

Parameter Number	Size(Byte)	Available Settings	Default value
0x05	2	1~255	30

When user press the boost button one time, the boost time will increase 30 (the value can be

changed) minutes.

#### 6) (Param 7) LED threshold setting

This parameter is used to configure the power led threshold, unit W. When the load <= 100W, the power led will indicate yellow. When the load > 100W, the power led will indicate orange. When no load, the power led will indicate white.

Parameter Number	Size (Byte)	Available Settings	Default value
0x07	2	0~3000	100

0~3000 W, threshold enabled.

#### 7) (Param 20) kWh threshold setting

Threshold settings for energy kWh. When the energy above the threshold, it will send a meter report command to gateway.

Parameter Number	Size(Byte)	Available Settings	Default value
0x14	2	0~10000	100

0 - disable report

1 ~ 10000 - enable report

#### 8) (Param 21) Watt threshold setting

Threshold settings for Watt automatic report, unit W. When Watt above the threshold, it will send a meter report command to gateway.

Parameter Number	Size(Byte)	Available Settings	Default value
0x15	2	0 ~ 2500	100

0 - disable

1 ~ 2500 - enable

#### 9) (Param 22) Current threshold setting

Threshold settings for Current automatic report, unit 0.1A. When current above the threshold, it will send a meter report command to gateway.

Parameter Number	Size(Byte)	Available Settings	Default value
0x16	2	0~130	0

0 - disable

1 ~ 130 - enable

#### 10) (Param 23) Watt report interval

Watt automatic report interval, unit second.

Parameter Number	Size(Byte)	Available Settings	Default value
0x17	4	0, 30 ~ 65535	600

0 - disable

30 ~ 65535 - enable

#### 11) (Param 24) kWh report interval

kWh automatic report interval, unit second.

Parameter Number	Size(Byte)	Available Settings	Default value
0x18	4	0, 30 ~ 65535	600

0 - disable

30 ~ 65535 - enable

#### 12) (Param 25) Voltage report interval

Voltage automatic report interval, unit second.

Parameter Number	Size(Byte)	Available Settings	Default value
0x19	4	0, 30 ~ 65535	600

0 - disable

30 ~ 65535 - enable

#### 13) (Param 26) Current report interval

Current automatic report interval, unit second.

0x10 0 30 ~ 65535	Parameter Number Size(Byte) Available Settings D	Default value
	0x1A 4 0, 30~65535 60	600

0 - disable

30 ~ 65535 - enable

## **VII. Specifications**

Model Name	ZWA006-C
Power Supply	AC 80~250V
Maximum load Current	16A
Maximum load Power	3.68kW@Resistive load
Current Overload Protection	16A
Voltage Overload Protection	250V AC
Backup Battery	CR2032 DC3V
Power LED	RGB LED
Boost Timer LED	White LED X 4
Remote Control LED	White LED
Boost Button	Push Button
Work Current(RFTX)	Up to36mA
Communication Frequency	868.40MHz, 869.85MHz(EU)
Communication Range	Up to 100m indoors (depending on the building structure), and 80m for outdoor open fields.
Safety Certification	CE TUV
Communication Certification	Z-Wave Plus with Smart Start
Operational Temperature	-20~ 85℃

#### Get help & learn more.

Should you encounter any problem with Smart Boost Timer Switch visit support.aeotec.com or contact our support team via service@aeotec.com You can also learn more about Smart Boost Timer Switch's features, configuration options, and technical specifications at the link.

This device was manufactured for the importer by Aeotec Limited who can be reached via post at #704, Bright Way Tower, 33 Mong Kok Rd, Mong Kok, Hong Kong, via the web at aeotec.com/contact, or via the forwarding

address of Aeon Labs LTD, 20 Wenlock Rd, N1 7GU, UK within the EU. The importer and or distributor of this device can both be reached separately as indicated on provided documentation with the company from whom you have purchased this device from responsible for warranty, technical support, and compliance related queries

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