Nice

IBT4ZWAVE

CE

BiDi-ZWave

EN - Addendum to the manual. Z-Wave specification

Nice

The device is a Security Enabled Z-Wave Plus product and a Security Enabled Z-Wave gateway must be used in order to fully utilize the product.

The device may be used with all devices certified with the Z-Wave Plus certificate and should be compatible with such devices produced by other manufacturers.

The device works as a Z-Wave signal repeater (all non-battery operated devices within the network will act as repeaters to increase reliability of the network).

Generic Device Type: GENERIC_TYPE_SWITCH_MULTILEVEL (0x11)
Specific Device Type: Not Used

Table 3 - Supported Command Classes		
Command Class	**Version**	**Secure**
COMMAND_CLASS_ZWAVEPLUS_INFO [0x5E]	V2	
COMMAND_CLASS_MULTILEVEL_SWITCH [0x26]	V4	YES
COMMAND_CLASS_ASSOCIATION [0x85]	V2	YES
COMMAND_CLASS_MULTI_CHANNEL_ASSOCIATION [0x8E]	V3	YES
COMMAND_CLASS_ASSOCIATION_GRP_INFO [0x59]	V3	YES
COMMAND_CLASS_DEVICE_RESET_LOCALLY [0x5A]	V1	YES
COMMAND_CLASS_FIRMWARE_UPDATE_MD [0x7A]	V5	YES
COMMAND_CLASS_INDICATOR [0x87]	V3	YES
COMMAND_CLASS_MANUFACTURER_SPECIFIC [0x72]	V2	YES
COMMAND_CLASS_POWERLEVEL [0x73]	V1	YES
COMMAND_CLASS_SECURITY [0x98]	V1	
COMMAND_CLASS_SECURITY_2 [0x9F]	V1	
COMMAND_CLASS_SUPERVISION [0x6C]	V1	
COMMAND_CLASS_TRANSPORT_SERVICE [0x55]	V2	
COMMAND_CLASS_VERSION [0x86]	V3	YES
COMMAND_CLASS_NOTIFICATION [0x71]	V8	YES
COMMAND_CLASS_APPLICATION_STATUS [0x22]	V1	
COMMAND_CLASS_PROTECTION [0x75]	V2	YES
COMMAND_CLASS_CONFIGURATION [0x70]	V4	YES
COMMAND_CLASS_BASIC [0x20]	V2	YES

Table 4 - Association Command Class				
Group	**Group Name**	**Profile**	**Max. Nodes Supported**	**Description**
1	Lifeline	General: Lifeline (0x00: 0x01)	1	Reports the device status to the Z-Wave gateway

Table 5 - Multilevel Switch Command Class / Basic Command Class mapping	
Basic Command	**Mapped Command**
Basic Set (Value)	Multilevel Switch Set (Value)
Basic Report (Current Value, Duration)	Multilevel Switch Report (Value, Duration)

Table 6 - Multilevel Switch Command Class SET			
Value	**Duration**	**Level**	**Description**
0x00	Ignore	0%	Close
0x01-0x63	Ignore	100%	Open
0x64-0xFE	Ignore	reserved	
0xFF	Ignore	100%	Open

Table 7 - Multilevel Switch Command Class Report			
State	Current Value	Target Value	Duration
Open	0x63	0x63	0x00
Opening	0xFE	0x63	0xFE
Stopped	0xFE	0xFE	0x00
Closing	0xFE	0x00	0xFE
Close	0x00	0x00	0x00

Table 8 - Notification Command Class			
Notification Type	Event	Event/State Parameter	Status
Access Control (0x06)	Event: Barrier operation (open/close) force has been exceeded (Notification CC V4) (0x41) *	–	0xFF – enable (not changeable)
Access Control (0x06)	State: Barrier safety beam obstacle (Notification CC V4) (0x48) *	–	0xFF – enable (not changeable)
Access Control (0x06)	State: Barrier associated with non Z-Wave remote control (Notification CC V4) (0x4C)	–	0xFF – enable (not changeable)
System (0x09)	State: System hardware failure (Notification CC V2) [0x03]	0x05 - External device not detected	0xFF – enable (not changeable)

* Some control units might not support this feature.

Table 9 - Protection Command Class			
Type	State	Description	Action
Local	0	Unprotected - The device is not protected, and may be operated normally via the user interface.	S1 button controls gate state
Local	2	No operation possible – S1 button cannot change outputs state, any other functionality and control via gate controler unit's buttons is available.	S1 button doesn't control gate state
RF	0	Unprotected - The device accept and respond to all RF Commands.	Z-Wave requests can change gate state
RF	1	No RF control – command class basic and switch binary are rejected, every other command class will be handled	Z-Wave requests can't change gate state

Table 10 - Indicator Command Class		
Indicator ID	Properties ID	Values and requirements
Node Identify (0x50)	Toggling On/Off Periods (0x03)	This property is used to set the duration in tenth of seconds of an On/Off period. 0x00..0xFF represent 0..25,5 seconds
Node Identify (0x50)	Toggling On/Off Cycles 0x04	This property is used to set the number of On/Off periods to run - 0x00..0xFE represent 0..254 times - 0xFF MUST indicate to run On/Off periods until stopped
Node Identify (0x50)	Toggling On time within an On/Off period (0x05)	This property is used to set the length of the On time during an On/Off period. It allows asymetic On/Off periods. - The value 0x00 MUST represent symmetric On/Off period (On time equal to Off time) - Values in the range 0x01..0xFF MUST represent 0,1..25,5 seconds e.g. 300ms ON and 500ms OFF is achieved by using : On/Off period (0x03) = 0x08 and On time within an On/Off Period (0x05) = 0x03

Table 11 - Configuration Command Class	
30. Alarm configuration - 1st slot	
Description	This parameter determines to which alarm frames and how the device should react. The parameters consist of 4 bytes, three most significant bytes are set according to the official Z-Wave protocol specification.
Parameter size	4B
Default value	[0x00, 0x00, 0x00, 0x00] (disabled)
Available values	1B [MSB] – Notification Type 2B – Notification Status 3B – Event/State Parameters 4B [LSB] – action: 0x00 – no action, 0x01 – open, 0x02 – close
31. Alarm configuration - 2nd slot	
Description	This parameter determines to which alarm frames and how the device should react. The parameters consist of 4 bytes, three most significant bytes are set according to the official Z-Wave protocol specification.
Parameter size	4B
Default value	[0x05, 0xFF, 0x00, 0x00] (Water Alarm, any notification, no action)
Available values	1B [MSB] – Notification Type 2B – Notification Status 3B – Event/State Parameters 4B [LSB] – action: 0x00 – no action, 0x01 – open, 0x02 – close
32. Alarm configuration - 3rd slot	
Description	This parameter determines to which alarm frames and how the device should react. The parameters consist of 4 bytes, three most significant bytes are set according to the official Z-Wave protocol specification.
Parameter size	4B
Default value	[0x01, 0xFF, 0x00, 0x00] (Smoke Alarm, any notification, no action)
Available values	1B [MSB] – Notification Type 2B – Notification Status 3B – Event/State Parameters 4B [LSB] – action: 0x00 – no action, 0x01 – open, 0x02 – close
33. Alarm configuration - 4th slot	
Description	This parameter determines to which alarm frames and how the device should react. The parameters consist of 4 bytes, three most significant bytes are set according to the official Z-Wave protocol specification.
Parameter size	4B
Default value	[0x02, 0xFF, 0x00, 0x00] (CO Alarm, any notification, no action)
Available values	1B [MSB] – Notification Type 2B – Notification Status 3B – Event/State Parameters 4B [LSB] – action: 0x00 – no action, 0x01 – open, 0x02 – close
34. Alarm configuration - 5th slot	
Description	This parameter determines to which alarm frames and how the device should react. The parameters consist of 4 bytes, three most significant bytes are set according to the official Z-Wave protocol specification.
Parameter size	4B
Default value	[0x04, 0xFF, 0x00, 0x00] (Heat Alarm, any notification, no action)
Available values	1B [MSB] – Notification Type 2B – Notification Status 3B – Event/State Parameters 4B [LSB] – action: 0x00 – no action, 0x01 – open, 0x02 – close

The device does not support Configuration CC Bulk commands.