



Z-Wave Wall Controller

DA_VINCI_Z-WAVE: Wall Controller

Firmware Version 8.5



1. General Information about Z-Wave

1.1 *Safe*

Generally, radio systems build a direct link between the transmitter and the receiver. The radio signal is attenuated by every obstacle along its path (in the household e.g. wall, furniture etc). In the worst case the radio system ceases to function. The advantage of the intelligent Z-Wave system is the so-called routing function. This product can be included and operated in any Z-Wave network with other Z-Wave 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.

1.2 *Communicative*

Z-Wave is a bidirectional radio system. This means that a signal is not just sent but also a feedback confirming the reception of the signal occurs automatically. The safety of transmission of the Z-Wave radio-bus-technology is comparable with that of a wire-linked bus system. It is likewise possible to determine the switching status by pushing a button: Has the cellar light been definitely switched off?

1.3 *Trouble—free*

Z-Wave transmits at a regulated frequency band with a frequency of 916 MHz. Every Z-Wave network has its own unique network identification. Therefore, it is possible to operate two or more independently operating networks in a room or home without any interference. Troubles that can be caused by other devices, as is the case in open, non-regulated frequencies (e.g. 433 MHz) are excluded.

1.4 *Established*

Although the Z-Wave technology is new, it has already developed to form a technical standard. Renowned manufacturers from various fields offer solutions and applications that are based on Z-Wave technology and compatible among one another. This makes the system fit for the future and promises further

upgrade phases. Further information can be found on www.z-wave.com.

1.5 *Dynamic*

Z-Wave is equipped with a dynamic network structure. Right from the start, the position of the individual Z-Wave device that is supplied with 230 Volts is monitored and automatically updated in the case of changes. As a means of which it is possible to continuously adapt the network to its individual requirements, wholly automatically without the necessity of any programming tasks.

2. Before Installation/Setup

Please read carefully the enclosed user manual before the in order to ensure an error-free functioning. The product is permitted only for proper use as specified in the user manual. Any kind of guarantee claim has to be forfeited if changes, modifications or painting are undertaken. The product must be checked for damages immediately after unpacking. In the case of damages, the product must not be operated in any case. If a danger-free operation of the equipment cannot be assured, the voltage supply has to be immediately interrupted and the equipment has to be protected from unintended operation.

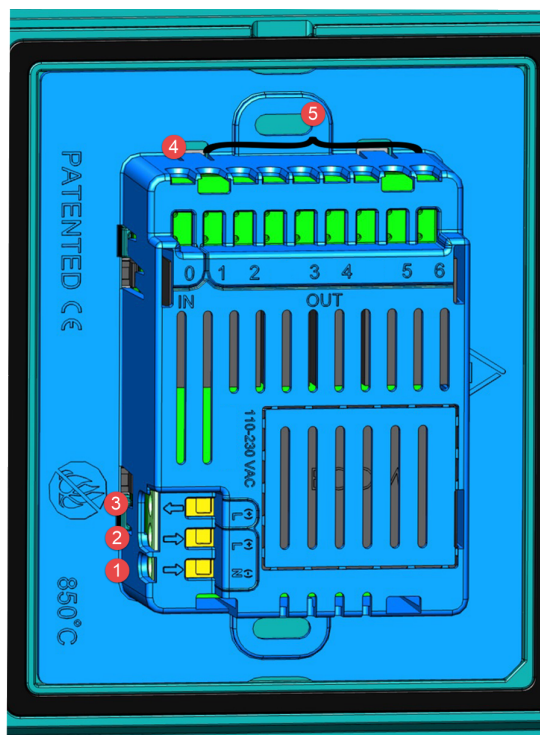
3. Product Description

The **Da Vinci** wall controller is a Multi Chanel Z-Wave device that contains up to 6 relays and up to 9 touch buttons that can be set to control either the relays or any other on/off (SWITCH_BINARY) Z-Wave device.

4. Installation

The device can be mounted into every GEWISS 3 or 4 gang.

- ① Neutral
- ② Device line: 110 - 230 VAC
- ③ Line jumper for the relays (4)
- ④ Relays Input (12 - 230 VAC)
- ⑤ Relays output (The output number is accordance to the touch button number)



5. Functions/operation

5.1 *Add / Remove from network*

Press the #1 button 3 times.

5.2 *Reset of the device*

Double Press the following buttons in the Following order 8,1,3.

5.3 *Basic command*

Basic command is same as Switch binary command.

The basic set command is used to change to status of buttons 1-9.

Values:

0x01..0x63 / 0xFF – Turn on

0x00 – Turn off

5.4 Association groups

5.4.1 Root device

Group #	Associated endpoint	Max Nodes	Execute command class
1		5	Lifeline
2	1	5	SWITCH_BINARY_SET
3	1	5	SWITCH_BINARY_REPORT
4	1	5	SWITCH_MULTILEVEL_SET
5	1	5	SWITCH_MULTILEVEL_REPORT
6	2	5	SWITCH_BINARY_SET
7	2	5	SWITCH_BINARY_REPORT
8	2	5	SWITCH_MULTILEVEL_SET
9	2	5	SWITCH_MULTILEVEL_REPORT
10	3	5	SWITCH_BINARY_SET
11	3	5	SWITCH_BINARY_REPORT
12	3	5	SWITCH_MULTILEVEL_SET
13	3	5	SWITCH_MULTILEVEL_REPORT
14	4	5	SWITCH_BINARY_SET
15	4	5	SWITCH_BINARY_REPORT
16	4	5	SWITCH_MULTILEVEL_SET
17	4	5	SWITCH_MULTILEVEL_REPORT
18	5	5	SWITCH_BINARY_SET
19	5	5	SWITCH_BINARY_REPORT
20	5	5	SWITCH_MULTILEVEL_SET
21	5	5	SWITCH_MULTILEVEL_REPORT
22	6	5	SWITCH_BINARY_SET
23	6	5	SWITCH_BINARY_REPORT
24	6	5	SWITCH_MULTILEVEL_SET
25	6	5	SWITCH_MULTILEVEL_REPORT
26	7	5	SWITCH_BINARY_SET
27	7	5	SWITCH_BINARY_REPORT
28	7	5	SWITCH_MULTILEVEL_SET
29	7	5	SWITCH_MULTILEVEL_REPORT
30	8	5	SWITCH_BINARY_SET
31	8	5	SWITCH_BINARY_REPORT
32	8	5	SWITCH_MULTILEVEL_SET
33	8	5	SWITCH_MULTILEVEL_REPORT
34	9	5	SWITCH_BINARY_SET
35	9	5	SWITCH_BINARY_REPORT
36	9	5	SWITCH_MULTILEVEL_SET
37	9	5	SWITCH_MULTILEVEL_REPORT

5.4.2 Endpoints

Endpoint 1:

Group	Profile	Command class	Group name
1	Control : Button 1	CENTRAL_SCENE_NOTIFICATION	Button 1 via lifeline
2	Control : Button 1	SWITCH_BINARY_SET	On/Off control (Button 1)
3	Control : Button 1	SWITCH_BINARY_REPORT	On/Off Report (Button 1)
4	Control : Button 1	SWITCH_MULTILEVEL_SET	Multilevel control (Button 1)
5	Control : Button 1	SWITCH_MULTILEVE_REPORT	Multilevel Report (Button 1)

Endpoint 2:

Group	Profile	Command class	Group name
1	Control : Button 2	CENTRAL_SCENE_NOTIFICATION	Button 1 via lifeline
2	Control : Button 2	SWITCH_BINARY_SET	On/Off control (Button 2)
3	Control : Button 2	SWITCH_BINARY_REPORT	On/Off Report (Button 2)
4	Control : Button 2	SWITCH_MULTILEVEL_SET	Multilevel control (Button 2)
5	Control : Button 2	SWITCH_MULTILEVE_REPORT	Multilevel Report (Button 2)

Endpoint 3:

Group	Profile	Command class	Group name
1	Control : Button 3	CENTRAL_SCENE_NOTIFICATION	Button 1 via lifeline
2	Control : Button 3	SWITCH_BINARY_SET	On/Off control (Button 3)
3	Control : Button 3	SWITCH_BINARY_REPORT	On/Off Report (Button 3)
4	Control : Button 3	SWITCH_MULTILEVEL_SET	Multilevel control (Button 3)
5	Control : Button 3	SWITCH_MULTILEVE_REPORT	Multilevel Report (Button 3)

Endpoint 4:

Group	Profile	Command class	Group name
1	Control : Button 4	CENTRAL_SCENE_NOTIFICATION	Button 1 via lifeline
2	Control : Button 4	SWITCH_BINARY_SET	On/Off control (Button 4)
3	Control : Button 4	SWITCH_BINARY_REPORT	On/Off Report (Button 4)
4	Control : Button 4	SWITCH_MULTILEVEL_SET	Multilevel control (Button 4)
5	Control : Button 4	SWITCH_MULTILEVE_REPORT	Multilevel Report (Button 4)

Endpoint 5:

Group	Profile	Command class	Group name
1	Control : Button 5	CENTRAL_SCENE_NOTIFICATION	Button 5 via lifeline
2	Control : Button 5	SWITCH_BINARY_SET	On/Off control (Button 5)
3	Control : Button 5	SWITCH_BINARY_REPORT	On/Off Report (Button 5)
4	Control : Button 5	SWITCH_MULTILEVEL_SET	Multilevel control (Button 5)
5	Control : Button 5	SWITCH_MULTILEVE_REPORT	Multilevel Report (Button 5)

Endpoint 6:

Group	Profile	Command class	Group name
1	Control : Button 6	CENTRAL_SCENE_NOTIFICATION	Button 6 via lifeline
2	Control : Button 6	SWITCH_BINARY_SET	On/Off control (Button 6)
3	Control : Button 6	SWITCH_BINARY_REPORT	On/Off Report (Button 6)
4	Control : Button 6	SWITCH_MULTILEVEL_SET	Multilevel control (Button 6)

5	Control : Button 6	SWITCH_MULTILEVE_REPORT	Multilevel Report (Button 6)
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Endpoint 7:

Group	Profile	Command class	Group name
1	Control : Button 7	CENTRAL_SCENE_NOTIFICATION	Button 7 via lifeline
2	Control : Button 7	SWITCH_BINARY_SET	On/Off control (Button 7)
3	Control : Button 7	SWITCH_BINARY_REPORT	On/Off Report (Button 7)
4	Control : Button 7	SWITCH_MULTILEVEL_SET	Multilevel control (Button 7)
5	Control : Button 7	SWITCH_MULTILEVE_REPORT	Multilevel Report (Button 7)

Endpoint 8:

Group	Profile	Command class	Group name
1	Control : Button 8	CENTRAL_SCENE_NOTIFICATION	Button 8 via lifeline
2	Control : Button 8	SWITCH_BINARY_SET	On/Off control (Button 8)
3	Control : Button 8	SWITCH_BINARY_REPORT	On/Off Report (Button 8)
4	Control : Button 8	SWITCH_MULTILEVEL_SET	Multilevel control (Button 8)
5	Control : Button 8	SWITCH_MULTILEVE_REPORT	Multilevel Report (Button 8)

Endpoint 9:

Group	Profile	Command class	Group name
1	Control : Button 9	CENTRAL_SCENE_NOTIFICATION	Button 9 via lifeline
2	Control : Button 9	SWITCH_BINARY_SET	On/Off control (Button 9)
3	Control : Button 9	SWITCH_BINARY_REPORT	On/Off Report (Button 9)
4	Control : Button 9	SWITCH_MULTILEVEL_SET	Multilevel control (Button 9)
5	Control : Button 9	SWITCH_MULTILEVE_REPORT	Multilevel Report (Button 9)

5.5 Configuration

Parameter number	Parameter number(HEX)	Possible values	Default value	Description
1	1	1=on/off switch 2=blind up 3=blind down 4=switch multiway 5=blind-up multiway 6=blind-down multiway	1	EP 1 Type
2	2	1 - 9	0	EP 1 Partner Id
3	3	3 - 127	0	EP 1 Blind Duration
4	4	0 = not used 1 – 6 = Num. of output	1	EP 1 Output

5	5	Bit [0] = LED enable Bit [1] = Sound enable Bit [2] = Dry contact enable Bit [3] = Motor enable	7	EP 1 Button attribute
6	6	1=on/off switch 2=blind up 3=blind down 4=switch multiway 5=blind-up multiway 6=blind-down multiway	1	EP 2 Type
7	7	1 - 9	0	EP 2 Partner Id
8	8	3 - 127	0	EP 2 Blind Duration
9	9	0 = not used 1 – 6 = Num. of output	2	EP 2 Output
10	A	Bit [0] = LED enable Bit [1] = Sound enable Bit [2] = Dry contact enable Bit [3] = Motor enable	7	EP 2 Button attribute
11	B	1=on/off switch 2=blind up 3=blind down 4=switch multiway 5=blind-up multiway 6=blind-down multiway	1	EP 3 Type
12	C	1 - 9	0	EP 3 Partner Id
13	D	3 - 127	0	EP 3 Blind Duration

14	E	0 = not used 1 – 6 = Num. of output	3	EP 3 Output
15	F	Bit [0] = LED enable Bit [1] = Sound enable Bit [2] = Dry contact enable Bit [3] = Motor enable	7	EP 3 Button attribute
16	10	1=on/off switch 2=blind up 3=blind down 4=switch multiway 5=blind-up multiway 6=blind-down multiway	1	EP 4 Type
17	11	1 - 9	0	EP 4 Partner Id
18	12	3 - 127	0	EP 4 Blind Duration
19	13	0 = not used 1 – 6 = Num. of output	4	EP 4 Output
20	14	Bit [0] = LED enable Bit [1] = Sound enable Bit [2] = Dry contact enable Bit [3] = Motor enable	7	EP 4 Button attribute
21	15	1=on/off switch 2=blind up 3=blind down 4=switch multiway 5=blind-up multiway 6=blind-down multiway	1	EP 5 Type

22	16	1 - 9	0	EP 5 Partner Id
23	17	3 - 127	0	EP 5 Blind Duration
24	18	0 = not used 1 – 6 = Num. of output	5	EP 5 Output
25	19	Bit [0] = LED enable Bit [1] = Sound enable Bit [2] = Dry contact enable Bit [3] = Motor enable	7	EP 5 Button attribute
26	1A	1=on/off switch 2=blind up 3=blind down 4=switch multiway 5=blind-up multiway 6=blind-down multiway	1	EP 6 Type
27	1B	1 - 9	0	EP 6 Partner Id
28	1C	3 - 127	0	EP 6 Blind Duration
29	1D	0 = not used 1 – 6 = Num. of output	6	EP 6 Output
30	1E	Bit [0] = LED enable Bit [1] = Sound enable Bit [2] = Dry contact enable Bit [3] = Motor enable	7	EP 6 Button attribute
31	1F	1=on/off switch 2=blind up 3=blind down 4=switch multiway 5=blind-up multiway	1	EP 7 Type

		6=blind-down multiway		
32	20	1 - 9	0	EP 7 Partner Id
33	21	3 - 127	0	EP 7 Blind Duration
34	22	0 = not used 1 – 6 = Num. of output	0	EP 7 Output
35	23	Bit [0] = LED enable Bit [1] = Sound enable Bit [2] = Dry contact enable Bit [3] = Motor enable	7	EP 7 Button attribute
36	24	1=on/off switch 2=blind up 3=blind down 4=switch multiway 5=blind-up multiway 6=blind-down multiway	1	EP 8 Type
37	25	1 - 9	0	EP 8 Partner Id
38	26	3 - 127	0	EP 8 Blind Duration
39	27	0 = not used 1 – 6 = Num. of output	0	EP 8 Output
40	28	Bit [0] = LED enable Bit [1] = Sound enable Bit [2] = Dry contact enable Bit [3] = Motor enable	7	EP 8 Button attribute
41	29	1=on/off switch 2=blind up 3=blind down	1	EP 9 Type

		4=switch multiway 5=blind-up multiway 6=blind-down multiway		
42	2A	1 - 9	0	EP 9 Partner Id
43	2B	3 - 127	0	EP 9 Blind Duration
44	2C	0 = not used 1 – 6 = Num. of output	0	EP 9 Output
45	2D	Bit [0] = LED enable Bit [1] = Sound enable Bit [2] = Dry contact enable Bit [3] = Motor enable	7	EP 9 Button attribute
46	2E	0 - 7	7	Device Led on intensity
47	2F	0 - 7	0	Device Led off intensity
48	30	0 = Toggle 1 = Pulse	0	Device Toggle or Pulse the output
49	31	0- always Off!!!!!!!!!! 10 – 40 = seconds 255- always On!!!!!!!!!!	10	Device Round LEDs Timeout
50	32	0 – 7 0 = most sensitive 7 = least sensitive	2	Device touch sensitivity
51	33	255 = save and reset	-	Set this parameter to 255 will save the changes and reset the device.
52	34	1-250	20	Long press time in

		1=100 mili sec 250=25000 mili sec		100 mili sec
53	35	1-250 1=10 mili sec 250=2500 mili sec	2	Botton1 Short press time in 10 mili sec
54	36	1-250 1=10 mili sec 250=2500 mili sec	2	Botton2 Short press time in 10 mili sec
55	37	1-250 1=10 mili sec 250=2500 mili sec	2	Botton3 Short press time in 10 mili sec
56	38	1-250 1=10 mili sec 250=2500 mili sec	2	Botton4 Short press time in 10 mili sec
57	39	1-250 1=10 mili sec 250=2500 mili sec	2	Botton5 Short press time in 10 mili sec
58	3A	1-250 1=10 mili sec 250=2500 mili sec	2	Botton6 Short press time in 10 mili sec
59	3B	1-250 1=10 mili sec 250=2500 mili sec	2	Botton7 Short press time in 10 mili sec
60	3C	1-250 1=10 mili sec 250=2500 mili sec	2	Botton8 Short press time in 10 mili sec
61	3D	1-250 1=10 mili sec 250=2500 mili sec	2	Botton9 Short press time in 10 mili sec

Notes:

1. After set any of the parameters you shall set the parameter no. 51 to 255 to save the parameters and reset the device.

5.6 Supported Command Classes

- Association Command Class(V2)
- Association Group Information Command Class(V1)
- Basic Command Class (V1)
- Binary Switch Command Class (V1)
- Multilevel Switch Command Class (V4)
- Central Scene Command Class (V1)
- Device Reset Locally Command Class (V1)
- Manufacturer Specific Command Class (V1)
- Multi Channel Command Class (V4)
- Multi Channel Association Command Class (V3)
- Powerlevel Command Class (V1)
- Version Command Class (V2)
- Z-Wave Plus Info Command Class (V2)
- Configuration Command Class (V2)

5.7 Z-Wave Device Types

- Generic: On/Off Power Switch - Device Type
- Specific: Wall Controller

6. Technical data

- Frequency: 868.42 MHz
- Dimensions: 10 x 8 x 40 mm
- Association Groups: 19
- Operating temperature: 0°C to +75°C