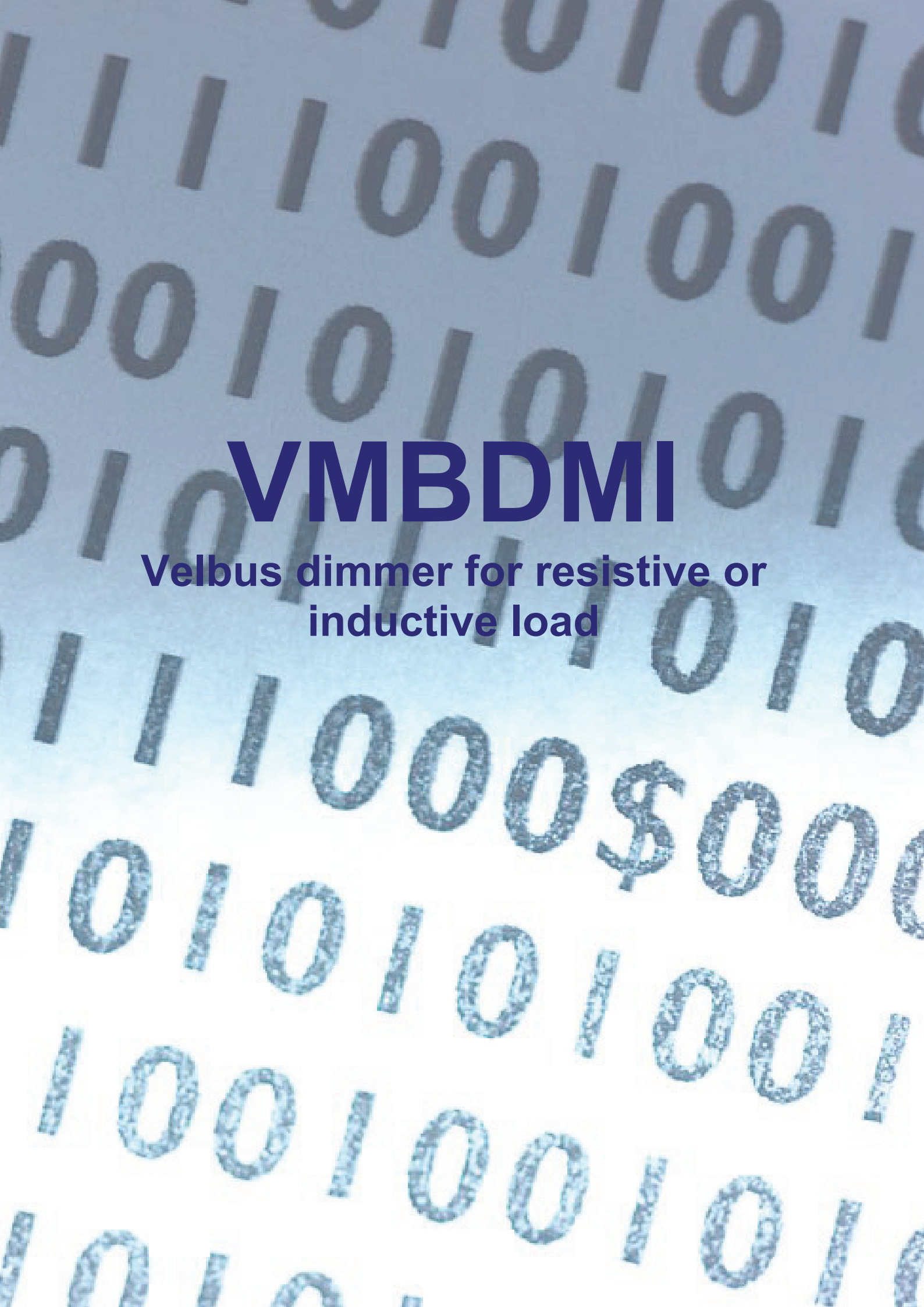

VMBDMI

Velbus dimmer for resistive or inductive load

Binairy format:

<SOF-SID10...SID0-RTR-IDE-r0-DLC3...0-DATABYTE1...DATABYTEn-CRC15...CRC1-CRCDEL-ACK-ACKDEL-EOF7...EOF1-IFS3...IFS1>

bits	***Description***
SOF	Start Of Frame (always 0)
SID10 & SID9	Priority (00: highest … 11: lowest priority)
SID8…SID1	Address
SID0	Always 0
RTR	Remote Transmit Request
IDE	Identifier Extension (always 0)
r0	reserved (always 0)
DLC3…DLC0	Data Length Code (0…8)
Databyte1	Command
Databyte2	Parameter
Databyte3	Parameter
Databyte4	Parameter
Databyte5	Parameter
Databyte6	Parameter
Databyte7	Parameter
Databyte8	Parameter
CRC15…CRC1	Cyclic Redundancy Checksum
CRCDEL	CRC Delimiter (always 1)
ACK	Acknowledge slot (transmit 1 readback 0 if received correctly)
ACKDEL	Acknowledge Delimiter (always 1)
EOF7...EOF1	End Of Frame (always 1111111)
IFS3...IFS1	InterFrame Space (always 111)

The dimmer module can transmit the following commands:

- Clears LEDs on a push button module
- Sets LEDs on a push button module
- Blinks LEDs slowly on a push button module
- Blinks LEDs fast on a push button module

The dimmer module can transmit the following messages:

- Dimmer status
- Module type
- Dimmer switch status
- Dimmer slider status
- Bus error counter status
- First, second and third part of the dimmer name
- Memory data
- Memory data block (4 bytes)

The dimmer module can receive the following messages:

- Push button status
- Slider status

The dimmer module can receive the following commands:

- Set dimmer value
- Set dimmer at last used dimvalue
- Start dimmer timer
- Stop dimming
- Forced off
- Cancel forced off
- Forced on
- Cancel forced on
- Inhibit
- Cancel inhibit
- Dimmer status request
- Clear Push button Led
- Module type request
- Bus error counter status request

- Dimmer name request
- Read memory data
- Read memory data block (4 bytes)
- Memory dump request
- Write memory data
- Write memory data block (4 bytes)

Transmits the dimmer switch status:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_PUSH_BUTTON_STATUS (H'00')
DATABYTE2 = Dimmer channel just switched on (1 = just pressed / switched on)
DATABYTE3 = Dimmer channel just switched off (1 = just released / switched off)
DATABYTE4 = 0

	Databyte2	***Databyte3***	***Databyte4***
Dimmer just switched on	B'00000001'	B'00000000'	B'00000000'
Dimmer just switched off	B'00000000'	B'00000001'	B'00000000'

Transmits dimmer slider status:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_SLIDER_STATUS (H'0F')
DATABYTE2 = Dimmer slider channel (H'01')
DATABYTE3 = Dimmer value 0...100% (slider status)
DATABYTE4 = H'00'

Transmit: Clears LEDs on a push button module:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Address of the push button module for clearing LEDs
RTR = 0
DLC3...DLC0 = 2 databytes to send
DATABYTE1 = COMMAND_CLEAR_LED (H'F5')
DATABYTE2 = LED bit numbers (1 = clear LED)

Transmit: Sets LEDs on a push button module:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Address of the push button module for setting LEDs on
RTR = 0
DLC3...DLC0 = 2 databytes to send
DATABYTE1 = COMMAND_SET_LED (H'F6')
DATABYTE2 = LED bit numbers (1 = set LED)

Transmit: Blinks LEDs slowly on a push button module:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Address of the push button module for slowly blinking LEDs
RTR = 0
DLC3...DLC0 = 2 databytes to send
DATABYTE1 = COMMAND_SLOW_BLINKING_LED (H'F7')
DATABYTE2 = LED bit numbers (1 = slow blink LED)

Transmit: Blinks LEDs fast on a push button module:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Address of the push button module for fast blinking LEDs
RTR = 0
DLC3...DLC0 = 2 databytes to send
DATABYTE1 = COMMAND_FAST_BLINKING_LED (H'F8')
DATABYTE2 = LED bit numbers (1 = fast blink LED)

Transmits the dimmer status:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 8 databytes to send
DATABYTE1 = COMMAND_DIMMERCONTROLLER_STATUS (H'B8')
DATABYTE2 = Dimmer channel (H'01')
DATABYTE3 = Dimmer status

Contents	*Status*
B'xxxxxx00'	Dimmer normal running
B'xxxxxx01'	Dimmer inhibited
B'xxxxxx10'	Dimmer forced on
B'xxxxxx11'	Dimmer disabled
B'xxxx00xx'	No errors
B'xxxx01xx'	Load not dimmable
B'xxxx10xx'	Thermal alarm
B'xxxx11xx'	Thermal protect
B'xxx0xxxx'	Dimmer for resistive load
B'xxx1xxxx'	Dimmer for inductive load
B'000xxxxx'	Dimmer temp. < 26°
B'001xxxxx'	Dimmer temp. 27°...39°
B'010xxxxx'	Dimmer temp. 40°...51°
B'011xxxxx'	Dimmer temp. 52°...64°
B'100xxxxx'	Dimmer temp. 65°...77°
B'101xxxxx'	Dimmer temp. 78°...90°
B'110xxxxx'	Dimmer temp. 90°...102°
B'111xxxxx'	Dimmer temp. > 103°

DATABYTE4 = Dimvalue (0 to 100%)
DATABYTE5 = Led status

Contents	*Mode*
B'00000000'	LED off
B'10000000'	LED on
B'01000000'	LED slow blinking
B'00100000'	LED fast blinking
B'00010000'	LED very fast blinking

DATABYTE6 = high byte of current delay time
DATABYTE7 = mid byte of current delay time
DATABYTE8 = low byte of current delay time

Remark: [DATABYTE5][DATABYTE6][DATABYTE7] contain a 24-bit time in seconds

Transmits the module type:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 7 databytes to send
DATABYTE1 = COMMAND_MODULE_TYPE (H'FF')
DATABYTE2 = VMBDMI type (H'15')
DATABYTE3 = High byte of serial number
DATABYTE4 = Low byte of serial number
DATABYTE5 = Memorymap version
DATABYTE6 = Build year
DATABYTE7 = Build week

Transmit: Bus error counter status

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_BUSERROR_COUNTER_STATUS (H'DA')
DATABYTE2 = Transmit error counter
DATABYTE3 = Receive error counter
DATABYTE4 = Bus off counter

Transmits the first part of the dimmer name:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 8 databytes to send
DATABYTE1 = COMMAND_DIMMER_NAME_PART1 (H'F0')
DATABYTE2 = Dimmer channel (H'01')
DATABYTE3 = Character 1 of the dimmer name
DATABYTE4 = Character 2 of the dimmer name
DATABYTE5 = Character 3 of the dimmer name
DATABYTE6 = Character 4 of the dimmer name
DATABYTE7 = Character 5 of the dimmer name
DATABYTE8 = Character 6 of the dimmer name

Transmits the second part of the dimmer name:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 8 databytes to send
DATABYTE1 = COMMAND_DIMMER_NAME_PART2 (H'F1')
DATABYTE2 = Dimmer channel (H'01')
DATABYTE3 = Character 7 of the dimmer name
DATABYTE4 = Character 8 of the dimmer name
DATABYTE5 = Character 9 of the dimmer name
DATABYTE6 = Character 10 of the dimmer name
DATABYTE7 = Character 11 of the dimmer name
DATABYTE8 = Character 12 of the dimmer name

Transmits the third part of the dimmer name:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 6 databytes to send
DATABYTE1 = COMMAND_DIMMER_NAME_PART3 (H'F2')
DATABYTE2 = Dimmer channel (H'01')
DATABYTE3 = Character 13 of the dimmer name
DATABYTE4 = Character 14 of the dimmer name
DATABYTE5 = Character 15 of the dimmer name
DATABYTE6 = Character 16 of the dimmer name

Remarks:
Unused characters contain H'FF'.

Transmits the memory data:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_MEMORY_DATA (H'FE')
DATABYTE2 = High memory address (H'00')
DATABYTE3 = LOW memory address (H'00'...H'FF')
DATABYTE4 = memory data

Transmits memory data block (4 bytes):

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes to send
DATABYTE1 = COMMAND_MEMORY_DATA_BLOCK (H'CC')
DATABYTE2 = High start address of memory block
DATABYTE3 = LOW start address of memory block
DATABYTE4 = memory data1
DATABYTE5 = memory data2
DATABYTE6 = memory data3
DATABYTE7 = memory data4

Remark: address range: H'0000' to H'00FC'

'Push button status' received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Address of the push button module
RTR = 0
DLC3...DLC0 = 4 databytes received
DATABYTE1 = COMMAND_PUSH_BUTTON_STATUS (H'00')
DATABYTE2 = Push buttons just pressed (1 = just pressed)
DATABYTE3 = Push buttons just released (1 = just released)
DATABYTE4 = Push buttons long pressed (1 = longer than 0.85s pressed)

'Slider status' received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Address of the slider module
RTR = 0
DLC3...DLC0 = 4 databytes received
DATABYTE1 = COMMAND_SLIDER_STATUS (H'0F')
DATABYTE2 = Slider channel
DATABYTE3 = Slider status (0...100%)
DATABYTE4 = don't care

'Clear LED' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Address of the push button module
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_CLEAR_LED (H'F5')
DATABYTE2 = LEDs to clear (a one clears the corresponding LED)

'Set dim value' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_SET_DIMVALUE (H'07')
DATABYTE2 = Dimmer channel (H'01')
DATABYTE3 = Dimvalue (0 to 100%)
DATABYTE4 = high byte of dimspeed
DATABYTE5 = low byte of dimspeed

Remark: [DATABYTE4][DATABYTE5] contains a 16-bit time in seconds needed for dimming to the desired value.

'Set at last used dimvalue' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_RESTORE_LAST_DIMVALUE (H'11')
DATABYTE2 = Dimmer channel (H'01')
DATABYTE3 = Don't care
DATABYTE4 = high byte of dimspeed
DATABYTE5 = low byte of dimspeed

Remark: [DATABYTE4][DATABYTE5] contains a 16-bit time in seconds needed for dimming to the desired value.

'Stop dimming' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_STOP_DIMMING (H'10')
DATABYTE2 = Dimmer channel (H'01')

'Start dimmer timer' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_START_DIMMER_TIMER (H'08')
DATABYTE2 = Dimmer channel (H'01')
DATABYTE3 = high byte of time-out time
DATABYTE4 = mid byte of time-out time
DATABYTE5 = low byte of time-out time

Remark: [DATABYTE3][DATABYTE4][DATABYTE5] contains a 24-bit time-out time in seconds.
If the time-out parameter contains zero then no timer starts.
If the time-out parameter contains H'FFFFFF' then the light switches permanently on (no time-out).

'Forced off' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_FORCED_OFF (H'12')
DATABYTE2 = Dimmer channel

Contents	*Dimmer channel*
B'00000001'	Channel 1

DATABYTE3 = high byte of delay time
DATABYTE4 = mid byte of delay time
DATABYTE5 = low byte of delay time

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time in seconds
The command will be skipped when the time parameter contains zero.
When the time parameter contains H'FFFFFF' then the dimmer is permanently forced off.

'Cancel forced off' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_CANCEL_FORCED_OFF (H'13')
DATABYTE2 = Dimmer channel

Contents	*Dimmer channel*
B'00000001'	Channel 1

'Forced on' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_FORCED_ON (H'14')
DATABYTE2 = Dimmer channel

Contents	*Dimmer channel*
B'00000001'	Channel 1

DATABYTE3 = high byte of delay time
DATABYTE4 = mid byte of delay time
DATABYTE5 = low byte of delay time

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time in seconds
The command will be skipped when the time parameter contains zero or the channels are already forced off.
When the time parameter contains H'FFFFFF' then the dimmer is permanently forced on.

'Cancel forced on' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_CANCEL_FORCED_ON (H'15')
DATABYTE2 = Dimmer channel

Contents	*Dimmer channel*
B'00000001'	Channel 1

'Inhibit' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 5 databytes received
DATABYTE1 = COMMAND_INHIBIT (H'16')
DATABYTE2 = Dimmer channel

Contents	*Dimmer channel*
B'00000001'	Channel 1

DATABYTE3 = high byte of delay time
DATABYTE4 = mid byte of delay time
DATABYTE5 = low byte of delay time

Remark:
[DATABYTE3][DATABYTE4][DATABYTE5] contain a 24-bit time in seconds
The command will be skipped when the time parameter contains zero or the channels are already forced off/on.
When the time parameter contains H'FFFFFF' then the dimmer is permanently inhibited.

'Cancel inhibit' command received:

SID10-SID9 = 00 (highest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_CANCEL_INHIBIT (H'17')
DATABYTE2 = Dimmer channel

Contents	*Dimmer channel*
B'00000001'	Channel 1

'Dimmer status request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_DIMMER_STATUS_REQUEST (H'FA')
DATABYTE2 = Dimmer channel (H'01')

'Module type request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 1
DLC3...DLC0 = 0 databytes received

'Bus error counter status request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 1 databytes to send
DATABYTE1 = COMMAND_BUS_ERROR_CONTER_STATUS_REQUEST (H'D9')

'Dimmer name request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 2 databytes received
DATABYTE1 = COMMAND_DIMMER_NAME_REQUEST (H'EF')
DATABYTE2 = Dimmer channel (H'01')

'Read data from memory' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 3 databytes received
DATABYTE1 = COMMAND_READ_DATA_FROM_MEMORY (H'FD')
DATABYTE2 = High memory address (H'00')
DATABYTE3 = LOW memory address (H'00'...H'FF')

'Memory dump request' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 1 databytes received
DATABYTE1 = COMMAND_MEMORY_DUMP_REQUEST (H'CB')

'Read data block from memory' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 3 databytes received
DATABYTE1 = COMMAND_READ_MEMORY_BLOCK (H'C9')
DATABYTE2 = High memory address
DATABYTE3 = LOW memory address

Remark: address range: H'0000' to H'00FC'

'Write data to memory' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 4 databytes received
DATABYTE1 = COMMAND_WRITE_DATA_TO_MEMORY (H'FC')
DATABYTE2 = High memory address (H'00')
DATABYTE3 = LOW memory address (H'00'...H'FF')
DATABYTE4 = memory data to write

Remark: Wait at least 10ms for sending a next command on the velbus.

'Write memory block' command received:

SID10-SID9 = 11 (lowest priority)
SID8...SID1 = Module address
RTR = 0
DLC3...DLC0 = 7 databytes received
DATABYTE1 = COMMAND_WRITE_MEMORY_BLOCK (H'CA')
DATABYTE2 = High memory address
DATABYTE3 = LOW memory address
DATABYTE4 = memory databyte1 to write
DATABYTE5 = memory databyte2 to write
DATABYTE6 = memory databyte3 to write
DATABYTE7 = memory databyte4 to write

Remark:
Wait for 'memory data block' feedback before sending a next command on the velbus.
Address range: H'0000' to H'00FC'

Memory map:

Address	*Contents*	*Address*	*Contents*
H'0000'	Push button 1 module address	H'0001'	Push button 1 bit number
H'0002'	Push button 1 action	H'0003'	Push button 1 first time parameter
H'0004'	Push button 1 second time parameter	H'0005'	Push button 1 third time parameter
H'0006'	Push button 2 module address	H'0007'	Push button 2 bit number
H'0008'	Push button 2 action	H'0009'	Push button 2 first time parameter
H'000A'	Push button 2 second time parameter	H'000B'	Push button 2 third time parameter
...	...	...	...
H'00D8'	Push button 37 module address	H'00D9'	Push button 37 bit number
H'00DA'	Push button 37 action	H'00DB'	Push button 37 first time parameter
H'00DC'	Push button 37 second time parameter	H'00DD'	Push button 37 third time parameter
H'00DE'	Preset 1 (25%) dimvalue	H'00DF'	Preset 2 (50%) dimvalue
H'00E0'	Preset 3 (75%) dimvalue	H'00E1'	Preset 4 (100%) dimvalue
H'00E2'	Preset 5 (75%) dimvalue	H'00E3'	Preset 6 (50%) dimvalue
H'00E4'	Preset 7 (25%) dimvalue	H'00E5'	Preset 8 (255) dimvalue
H'00E6'	Preset 9 (255) dimvalue	H'00E7'	Preset 10 (255) dimvalue
H'00E8'	Preset 11 (255) dimvalue	H'00E9'	Preset 12 (255) dimvalue
H'00EA'	Preset 13 (255) dimvalue	H'00EB'	Preset 14 (255) dimvalue
H'00EC'	Preset dimvalue terminator	H'00ED'	Dimmer for resistive or inductive load
H'00EE'	Dim start delay	H'00EF'	Dim switch off delay
H'00F0'	Dimmer name character 1	H'00F1'	Dimmer name character 2
...	...	...	...
H'00FE'	Dimmer name character 15	H'00FF'	Dimmer name character 16

Remark: Unused locations contain H'FF'
Preset dimvalues: 0…100% or 255 for end of preset table
Preset dimvalue terminator: H'FF'
Dimmer for resistive load: H'00'
Dimmer for inductive load: H'01'
Dim start delay (default 0s) & Dim switch off delay (default 0s)

Contents	*Delay*
0	0s
1	0.013s
2	0.026s
...	...
255	3.315s

Mode number	Action			
0	Momentary	-	-	-
1	Off	-	-	-
2	‘Off’ with timers disabled	-	-	-
3	‘Off’ with timers disabled at short press	-	-	-
4	‘Off’ with timers disabled at long press	-	-	-
5	Slow off	Dim down time	-	-
6	On	-	-	-
7	‘On’ with timers disabled	-	-	-
8	‘On’ with timers disabled at short press	-	-	-
9	‘On’ with timers disabled at long press	-	-	-
10	Slow on	Dim up time	-	-
11	Toggle	-	-	-
12	‘Toggle’ with timers disabled	-	-	-
13	‘Toggle’ with timers disabled at short press	-	-	-
14	‘Toggle’ with timers disabled at long press	-	-	-
15	Slow on/off	Dim up time	Dim down time	-
16	Start/stop timer	Timeout	-	-
17	Start/stop timer with slow on/off	Timeout	Dim up time	Dim down time
18	Restartable timer	Timeout	-	-
19	Restartable timer with slow on/off	Timeout	Dim up time	Dim down time
20	Non restartable timer	Timeout	-	-
21	Non restartable timer with slow on/off	Timeout	Dim up time	Dim down time
22	Slow on at press, slow off at release + timeout	Timeout	Dim up time	Dim down time
23	Dim up	Timeout	-	-
24	Dim up at long press, on at short press	Timeout	-	-
25	Dim up at long press, memory at short press	Timeout	-	-
26	Dim down	Timeout	-	-
27	Dim down at long press, off at short press	Timeout	-	-
28	Dim	Timeout	-	-
29	Dim at long press, on or off at short press	Timeout	-	-
30	Dim at long press, memory or off at short press	Timeout	-	-
31	Atmospheric dimvalue	Timeout	Dim time	Dim value
32	Slider dimmer	-	-	-
33	Multi step dimmer	Timeout	Dim time	-
34	Disable at closed switch	-	-	-
35	Disable at opened switch	-	-	-
36	Disable at pressing push button	Timeout	-	-
37	Toggle disable at pressing push button	Timeout	-	-
38	Cancel disable at pressing push button	-	-	-
39	Forced ‘On’ at closed switch	-	-	-
40	Forced ‘On’ at opened switch	-	-	-
41	Forced ‘On’ at pressing push button	Timeout	-	-
42	Toggle forced ‘On’ at pressing push button	Timeout	-	-
43	Cancel Forced ‘On’ at pressing push button	-	-	-
44	Inhibit at closed switch	-	-	-
45	Inhibit at opened switch	-	-	-
46	Inhibit at pressing push button	Timeout	-	-
47	Toggle inhibit at pressing push button	Timeout	-	-
48	Cancel inhibit at pressing push button	-	-	-

Time parameter	Time or dim time
0	No timer or fastest dim time
1	1s
2	2s
...	
119	1min59s
120	2min
121	2min15s
...	
131	4min45s
132	5min
133	5min30s
...	
181	29min30s
182	30min
183	31min
...	
211	59min
212	1h
213	1h15min
...	
227	4h45min
228	5h
229	5h30min
...	
237	9h30min
238	10h
239	11h
...	
251	23h
252	1d
253	2d
254	3d
255	infinite

The dim time is limited to one day