

FAQ: MY SUNSCREENS MUST BE OPERATED EITHER MANUALLY, OR AUTOMATICALLY THROUGH TEMPERATURE CONTROL. IN ADDITION, THE WIND SENSOR MUST HAVE ABSOLUTE PRIORITY. HOW DO I PROGRAM THIS?

1 SITUATION

A sunscreen is connected to a VMB2BLE blind module. It needs to be operated manually by two push buttons “up” and “down”. In addition, it needs to react to the indoor temperature.

Finally, the wind sensor must have absolute priority: when there’s too much wind the sunscreen must go up, regardless of the other operations.

2 SOLUTION

For a general explanation about Velbus, please consult the installation manual at www.velbus.eu.

Always use the latest version of Velbuslink. This can be downloaded for free at www.velbus.eu > Support > Downloads.

We assume the following setup:

- one VMB2BLE blind module to which a sunscreen is connected
- one VMBGPOD glass touch panel with OLED display, with the following buttons:
 - “up”
 - “down”
 - “manual” (switch from automatic to manual operation, and back)
- one VMB7IN input module with a wind sensor connected to channel 1. When there’s too much wind, the contact is closed.
- in the installation, at least one relay module needs to be present for a (virtual) relay.

Name	Addr. (hex)	Type	Build	L
sunscreen_priorities.vip				
VMGPODW	02,A2	VMGPODW	1612	0
up	☞	CH1		
down	☞	CH2		
manual	☞	CH3		
status wind sens	☞	CH4		
Button 5		CH5		
Button 6		CH6		
Button 7		CH7		
Button 8		CH8		
Temp. sensor		CH34		
Heater		CH35		
Boost		CH36		
Pump		CH37		
Cooler		CH38		
Alarm 1	☞	CH39		
Alarm 2	☞	CH40		
Alarm 3		CH41		
Alarm 4		CH42		
VMB2BLE	0A	VMB2BLE	1627	0
sunscreen	☞	CH1		
Blind 2		CH2		
VMB7IN	0B	VMB7IN	1537	0
wind sensor	☞	CH1		
Push button 2		CH2		
Push button 3		CH3		
Push button 4		CH4		
Push button 5		CH5		
Push button 6		CH6		
Push button 7		CH7		
VMB4RYLD	1C	VMB1RYN...	1422	0
Relay 1		CH1		
Relay 2		CH2		
Relay 3		CH3		
Relay 4		CH4		
Blind mode 1/2	☞	CH5		

2.1 VMB2BLE MODES

The VMB2BLE is able to work in three different modes. Push buttons or relays can be configured to perform actions for mode 1, 2 or 3, or for every mode. The active mode itself is set by push buttons or relays, with or without program steps.

Below an example of blind actions linked to modes:

Action properties

Initiator: 02_FF_FF_FF_FF_VMBGPOD_up [CH1]

Subject: 01_VMB2BLE_sunscreen [CH1]

Action:

- General (extended)
- Mode selection
 - Select mode 1 19
 - Select mode 1 at release 20
 - Select/deselect mode 1 21
 - Deselect mode 22
 - Deselect mode at release 23
 - Select mode 2 33
 - Select mode 2 at release 34
 - Select/deselect mode 2 35
 - Select mode 3 45
 - Select mode 3 at release 46
 - Select/deselect mode 3 47
- Actions in mode 1
 - Up in mode 1 10
 - Direct up in mode 1 11
 - Direct up at release in mode 1 12
 - Down in mode 1 13
 - Direct down in mode 1 14
 - Direct down at release in mode 1 15
 - Up/down in mode 1 16
 - Go to position in mode 1 17
 - Go to position at release in mode 1 18
- Actions in mode 2
 - Up in mode 2 24
 - Direct up in mode 2 25
 - Direct up at release in mode 2 26
 - Down in mode 2 27
 - Direct down in mode 2 28
 - Direct down at release in mode 2 29
 - Up/down in mode 2 30
 - Go to position in mode 2 31
 - Go to position at release in mode 2 32
- Actions in mode 3
 - Up in mode 3 36
 - Direct up in mode 3 37
 - Direct up at release in mode 3 38
 - Down in mode 3 39
 - Direct down in mode 3 40
 - Direct down at release in mode 3 41
 - Up/down in mode 3 42
 - Position in mode 3 43
 - Go to position at release in mode 3 44
- Lock/unlock

Show categories

In our example, we are going to use the modes as follows:

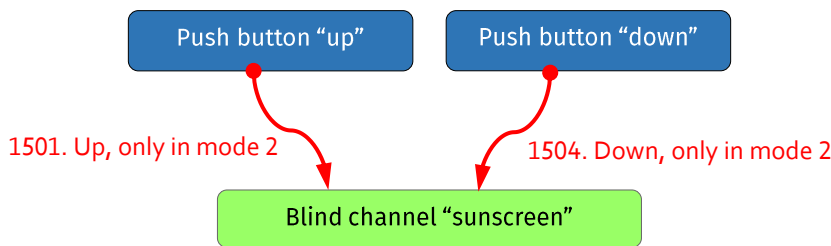
- **Mode 1: automatic** operation based on inside temperature (alarm at low temperature → sunscreen up, alarm at high temperature → sunscreen down)
- **Mode 2: manual** operation (push buttons up and down)

Standard operation of the VMB2BLE is mode 1. The sunscreen will work automatically (based on inside temperature) until we press the button “manual”. A second push on the button switches the mode back to automatic operation.

2.2 PUSH BUTTONS

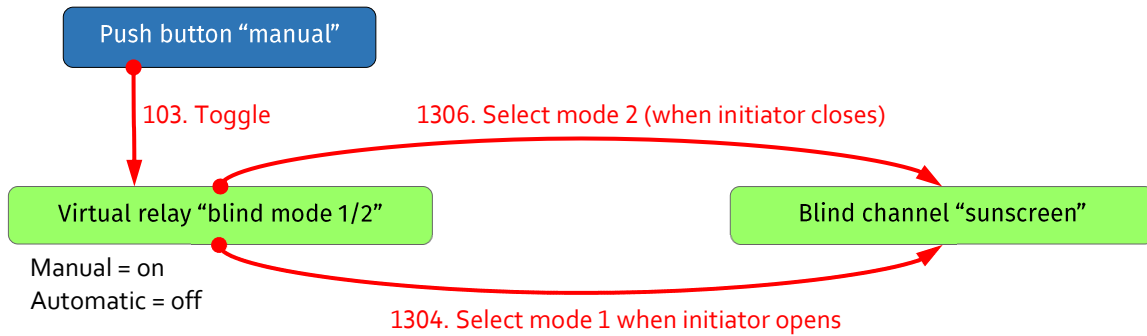
First we configure the two buttons “up” and “down”, and a third button “manual” which switches between automatic and manual operation.

We configure the following actions:



For the “manual” button we use an intermediate relay “blind mode 1/2”. This can be a physical relay (without anything connected to it), or a virtual one. In our example we use a virtual relay.

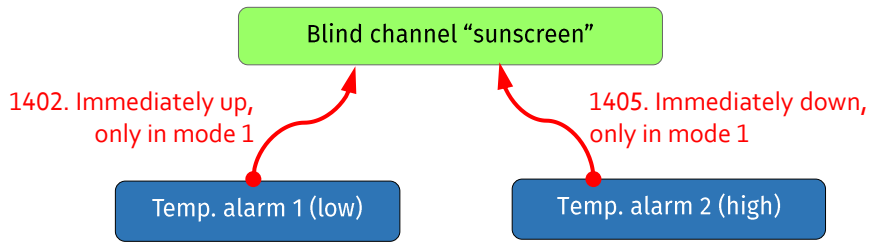
We create two actions:



2.3 TEMPERATURE CONTROL

We assume that in the VMBGPOD a low and high temperature alarm are configured (see the documentation of the VMBGPxxx modules about the details concerning alarms).

To let the sunscreen react on the alarms, we work as follows:

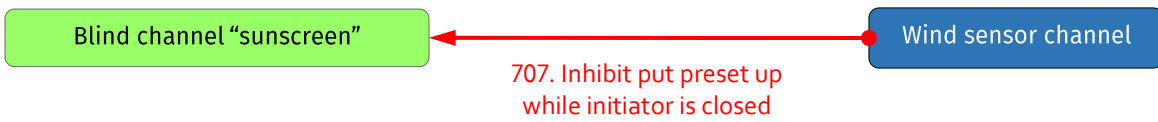


2.4 WIND SENSOR

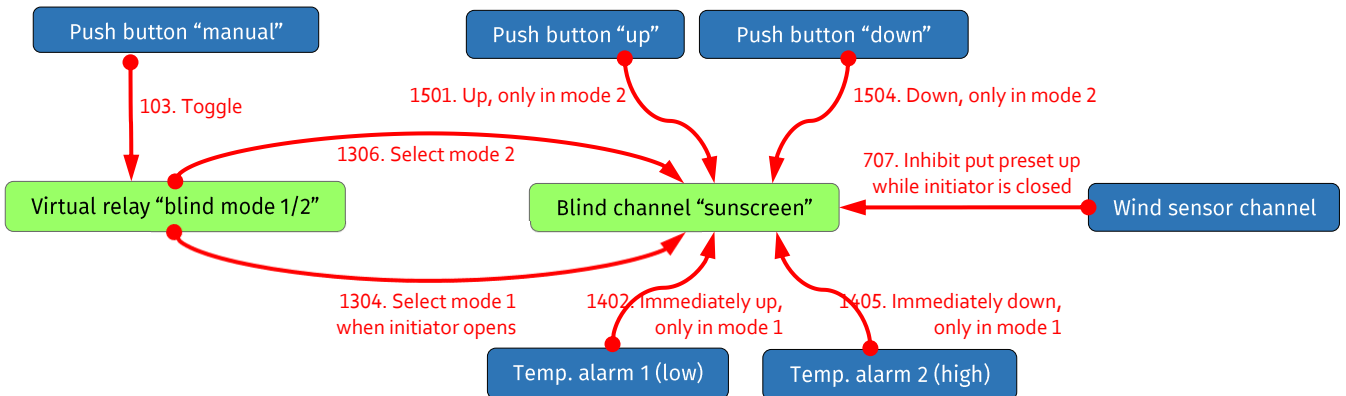
The wind sensor is connected to an input channel of the VMB7IN. When the wind speed is too high, we want:

1. the sunscreen to go up
2. the other operations (manual and according to temperature) to be disabled

This can be achieved with one action:



The complete operation looks like this:

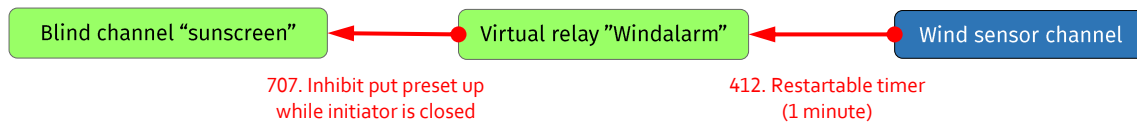


2.5 EXTRAS

2.5.1 Time delay

To optimize the operation, we can adjust the configuration as follows:

When the wind speed fluctuates around the alarm threshold, the blind will go up, then go down, then go up, ... To solve this, we can build in a delay by means of a (virtual) relay.



2.5.2 LED feedback

We can also ensure that a feedback LED shows the status of the wind sensor, via a simple status monitoring of the wind sensor channel on the VMB7IN, or of the (virtual) relay “wind alarm”. (For details concerning status monitoring, see the general installation manual on www.velbus.eu).

2.6 OTHER WAYS TO CONFIGURE PRIORITIES

Priorities can also be programmed in other ways. The “force”-actions always supersede the “inhibit”-actions, which in turn override the regular actions. In this way, many priority rules can be built in.

(Virtual) relays can also be used to configure priorities. Instead of linking an action directly to a subject, a (virtual) relay which executes the action can be turned on. By for example inhibiting/forcing this (virtual) relay in particular cases, priorities can be set.

See the other Velbus documentation for more explanation about these alternatives.