velleman® MODULES

velleman® projects

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VELBUS

Velleman Home Automation System

Velleman Home Automation System

The Velleman building is powered by the Velbus Home Automation System.

In-house training & demonstration facility.

Finally! Here is no-nonsense home automation which is easy to install and to maintain, both for the qualified technician as for the DIY enthusiast. The system does not contain any (costly) central unit, which makes it extremely user-friendly, reliable and inexpensive. The VELBUS can be set up and controlled using the classic learning method as well as with a few clicks of the mouse through your computer. The necessary software is available for free.

www.velbus.be

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THE SYSTEM IN GENERAL:

The Velbus system is a 4 wire system, connecting all the modules. From the 4 wires 2 are power supply and 2 are data making it extremely reliable.
Each module can be placed anywhere on the bus, making it really plug and play and easily expandable.
Controlling the output modules can be done using a small 8 channel interface module or using our advanced Push button and timer panel.
There is always indication feedback of your action using LED's.
From manual controlling to automation, the Velbus is what you need.

A FEW ADVANTAGES OF THE VELBUS SYSTEM:

- The DIY enthusiast can now enjoy home automation thanks to its easy installation and competitive price.
  - Little critical wiring: star / loop / bus wiring, etc.
  - Easy learning function, PC is optional.
  - User friendly system configuration and modification.
  - The system does not contain any (costly) central unit, which makes it extremely reliable.
  - Simultaneous operation of several push buttons, unlike some competing systems.

PUSH BUTTON AND TIMER PANEL WITH LCD

VMB4PD

Available end 2007

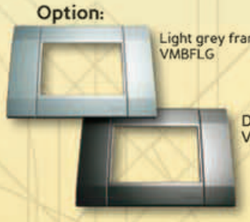
This unique panel will let you control all of the output modules on the Velbus system, no need to remember the function of each button, just read the label next to it !
The module also features programmable timing functions to automate button press actions at a certain time in the day, there are weekly or daily program steps possible. An infrared receiver is also incorporated.

LABEL EDITOR

Timer / clock overview display
This display shows that 4 buttons have timer functions enabled and 4 (2e page) have no timer.

- All 8 channels can have a custom label
- Programmable clock / timer functions, 20 weekly or daily steps (One timer step can control one button or several buttons)
- Instant access of 4 channels, 4 channels on 2e page
- Background LED illumination on the buttons
- Clock can be set as master or slave, so that only 1 clock must be set to synchronise all your panels at once.
- Settings, timers and labels can be set manual on the module or using a computer interface module (VMB1USB or VMB1RS)

Option:



Light grey frame
VMBFLG

Dark grey frame
VMBFDG

VMBBOX
Pattress Box
FOR VMB4PD ...

Characteristics:

- Display with 2 lines of 16 characters
- White LED backlight with clock automated dim setting
- Each channel can activate up to 255 modules on the bus
- Notification LED for each channel
- On board Infrared remote control receiver
- 8 channels and 255 Velbus addresses
- Dimensions: 118w x 80h x 30d mm (with frame).
- Minimum wall cut-out: 70w x 50h x 20d mm
- 12V-18Vdc / 30mA power supply
- Battery backup option for clock

IR REMOTE CONTROL STICK

VMBIRTS

- Control the VELBUS system through IR.
- Works with VMB4PD
- Can easily be used in the dark.
- Up to 8 channels.
- Channels can be discriminated.
- 16 possible addresses.

Available end 2007

Unique 1 button design.

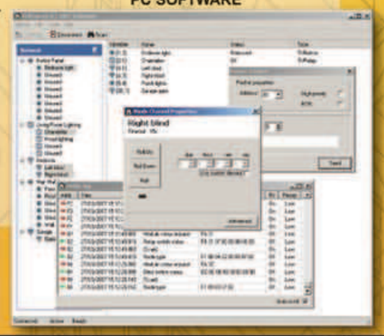
....

VELBUS PC INTERFACE TOOL

VMB1USB: USB Version / VMB1RS: RS232 Version

- Control of the VELBUS system through the computer.
- Galvanic separation between the computer and the VELBUS system.
- LED indications for: power - data communication with the computer

FREE "VELBUSLINK" PC SOFTWARE



PUSH BUTTON INTERFACE

VMB8PB

- Can be used to interface up to 8 push buttons (any type) to the VELBUS.
- Push button debounce: 65 ms.
- Possibility for each push button to react when held for 1s, 2s or 3s.
- LED indication for each push button.
- 252 possible addresses.

1-CHANNEL RELAY MODULE

VMB1RY

- 1 NO/NC relay contact: max. 10A / 230VAC (resistive load).
- Modes: • moment control • on/off • start/stop timer • staircase timer • non-retriggerable timer • switch-off delay • switch-on delay • start timer by releasing push button • timer with blinking effect • 2-way timer.
- 16 possible settings: momentary • 5s • 10s • 15s • 30s • 1 min ... • 1 day • on/off.
- 9 possible settings for timer 2: 5 min • 10 min • 15 min • 30 min • 1h • 2h • 5h • 1 day • on/off.
- Standard DIN-rail housing: 2 modules.

4-CHANNEL RELAY MODULE

VMB4RY

- 4 NO relay contacts: 10A / 230VAC (resistive load).
- Other specifications are identical to those of the VMB1RY (see above).
- Standard DIN-rail housing: 4 modules.

DIMMER MODULE

VMB1DM

- Fit for incandescent light bulbs, transformerless halogen and low-voltage halogen in combination with a conventional transformer or any dimmable electronic transformer.
- Required mains voltage: 100-125V / 60Hz or 220-240V / 50Hz.
- Max. load: 300W @ 230V or 150W @ 115V.
- Dimming from 0 to 100% in ca 4 seconds.
- Modes: • moment control • start/stop timer • staircase lighting timer • dimmer • dimmer with memory function • multi-position dimmer • slow-on dimmer • slow-off dimmer • slow on-off dimmer.
- Possible time settings: momentary • 5s • 10s • 15s • 30s • 1 min • 2 min • 5h ... • 1 day • on/off.
- Standard DIN-rail housing: 2 modules.

BLIND CONTROL MODULE

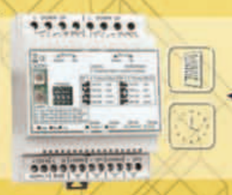
VMB1BL

- Can be used to control an electric roll-down shutter, sunblind...
- Relay contacts: max. 5A / 230VAC.
- Safety time-out:15s – 30s – 1 min – 2 min (selectable).
- Standard DIN-rail housing: 2 modules.

2-CHANNEL BLIND CONTROL MODULE

VMB2BL

- Can be used to control two electrically controlled roll-down shutters or sunblinds...
- Relay contacts: max. 5A / 230VAC.
- Safety time-out:15s – 30s – 1 min – 2 min (selectable).
- Standard DIN-rail housing: 4 modules.



6-CHANNEL INPUT MODULE

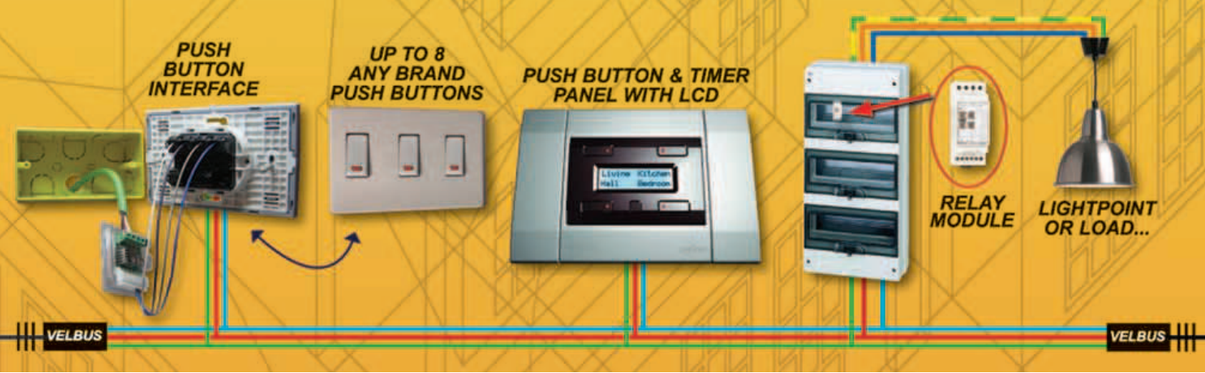
VMB6IN

- Can be used to connect push buttons, door- or window contacts, movement detector relay contacts, open collector outputs... to the VELBUS system.
- Contacts may be placed at a long distance from the module.
- Up to 6 inputs.
- Input debounce: 65 ms.
- Standard DIN-rail housing: 2 modules.

POWER SUPPLY

VMB3PS

- Three 12VDC / 1A outputs for powering VELBUS modules.
- Short-circuit protected.
- Input voltage: 12VAC / 3A.
- Standard DIN-rail housing: 2 modules.



VELBUS EXAMPLE 1

1- WHAT YOU NEED

VMB4PD:
Push button and timer panel
+ optional frame

VMB4RY:
4 channel relay module

VMB3PS:
Power supply module

VMB1DM:
Dimmer module

VMB1BL:
Blind control module

2- WHAT YOU CAN DO

Main page — Press for 2nd page — Secundary page

☑ Give each button on page 1 & 2 an identification label.
☑ Open or close the blind.
☑ Open the blind every day automatically at e.g. 8h00*
☑ Close the blind Monday to Friday automatically at e.g. 22h00*
☑ Close the blind automatically Saturday and Sunday at e.g. 23h30*
☑ Using one button, turn off all the lights, switch off the outlets and close the blind.
☑ Turn off all the lights and outlets automatically from Monday to Friday at e.g. 23h00*
☑ Check from the panel the status of the light in the kitchen, hall, garden and living.

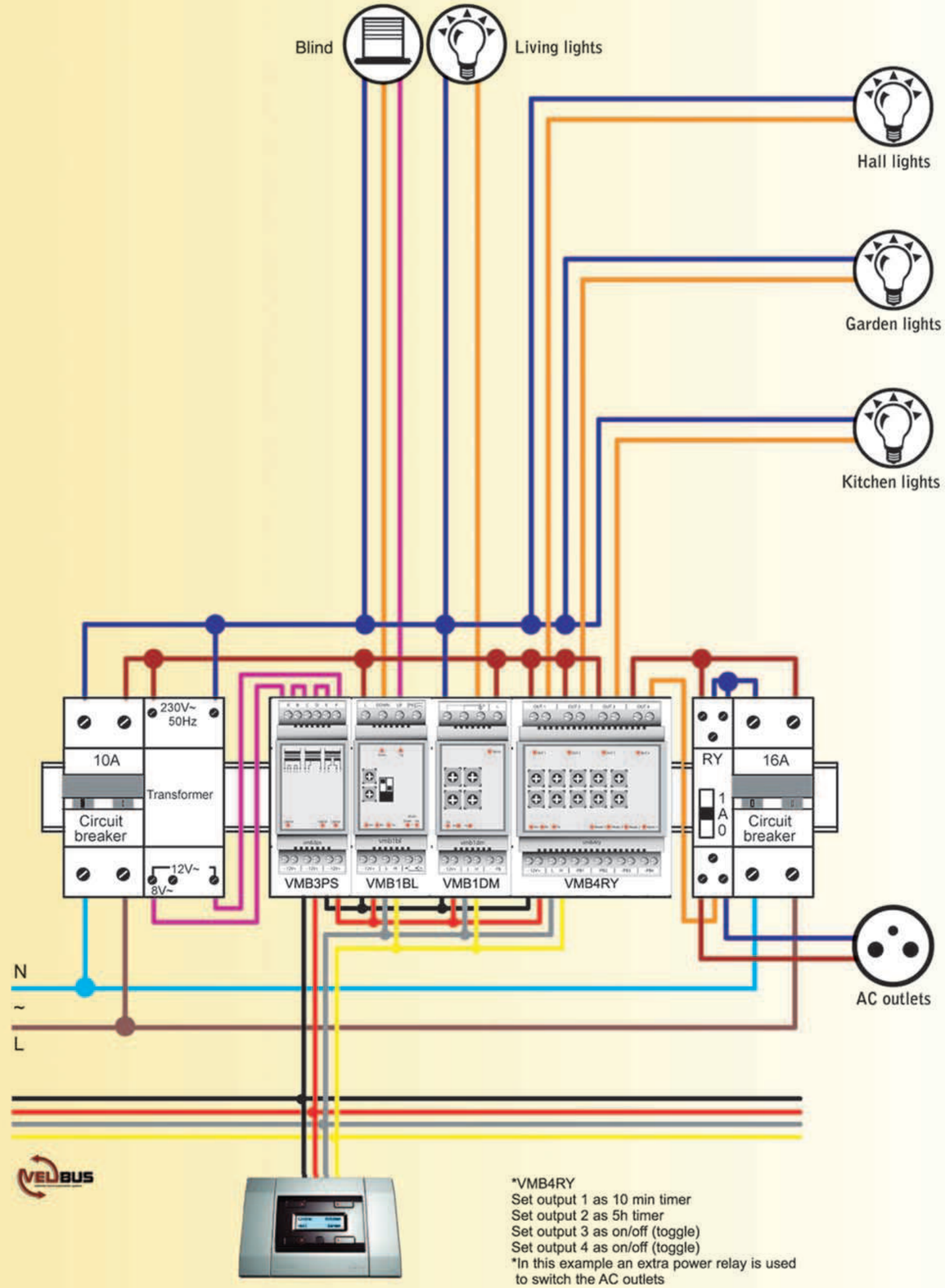
☑ See the time and day

☑ Turn on/off the lights in the kitchen.
☑ Turn on/off the lights in the living.
☑ Dim the lights in the living.
☑ Turn on/off outlets for radio or audio system.
☑ Turn on the garden lights automatically at e.g. 21h00* and they will switch off automatically after e.g. 5 hours.
☑ Turn on the lights in the hall and they will turn off automatically after e.g. 10 minutes.
☑ Automatically dim the panel backlight at e.g. 21h00.
☑ Automatically turn on the panel backlight at e.g. 7h30.
☑ See the time and day.
☑ Control all of the above using the IR remote.

VMBIRTS

* To prevent accidental push button action, a reaction time between 0 (instant) to 3 sec. can be set for each button.
* A total of 20 automated push button actions can be time controlled, any specific day of week or Monday to Friday, Monday to Saturday, Monday to Sunday, Saturday and Sunday.
* This list is not complete, more timed action combinations are possible.

HOW TO DO THE WIRING



*VMB4RY
Set output 1 as 10 min timer
Set output 2 as 5h timer
Set output 3 as on/off (toggle)
Set output 4 as on/off (toggle)
*In this example an extra power relay is used to switch the AC outlets

VELBUS EXAMPLE 2

1- WHAT YOU NEED

VMB4PD:
Push button and timer panel
+ optional frame

VMB4RY:
4 channel relay module

VMB3PS:
Power supply module

2- WHAT YOU CAN DO

Main page

Press for 2nd page

Secundary page

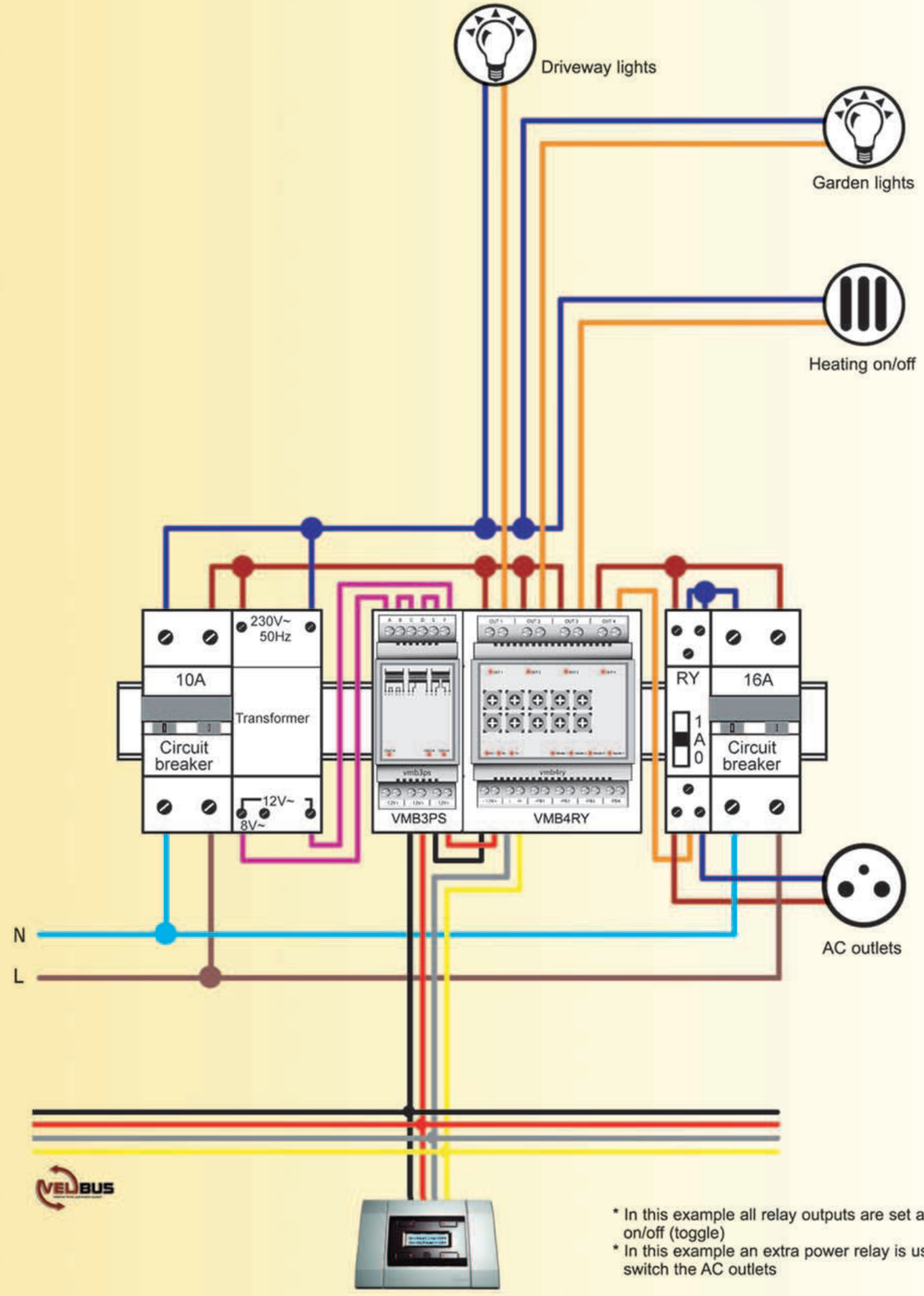
- ☑ Give each button on page 1 & 2 an identification label.
- ☑ Turn on/off the driveway lights.
- ☑ Turn on/off the garden lights.
- ☑ Turn on/off the Heating / Airco system.
- ☑ Turn on/off AC outlets for e.g. computer, kitchen, garage, hobby room...
- ☑ Turn on the driveway lights automatically every day at e.g. 20h00*
- ☑ Turn off the driveway lights automatically every day at e.g. 23h00*
- ☑ Turn on the garden lights automatically every day at 18h00*
- ☑ Turn off the garden lights automatically Monday to Friday at eg. 22h00*
- ☑ Turn off the garden lights automatically Saturday and Sunday at eg. 23h30.*
- ☑ Control all of the above using the IR remote.

- ☑ Turn on the heating and AC power outlets automatically every day at eg. 6h00.*
- ☑ Turn off the heating automatically Monday to Friday at eg. 22h00.*
- ☑ Turn off the heating automatically Saturday and Sunday at eg. 23h30.*
- ☑ Turn off the AC power outlets at eg. 23h30.* every day.
- ☑ Check from the panel if lights are still on in the driveway and garden.
- ☑ Automatically dim the panel backlight at e.g. 21h00.
- ☑ Automatically turn on the panel backlight at e.g. 7h30

- ☑ See the time and day

* A total of 20 automated push button actions can be time controlled, any specific day of week or Monday to Friday, Monday to Saturday, Monday to Sunday, Saturday and Sunday.
* This list is not complete, more timed action combinations are possible.

3- HOW TO DO THE WIRING



* In this example all relay outputs are set as on/off (toggle)
* In this example an extra power relay is used to switch the AC outlets