

## ***Velbus Alarm functions implemented :***

- Delayed contacts
  - can be any potential-free contact (switch, magnetic contact, PIR ...)
  - standard 19 seconds entrance and exit delay before triggering
  - used to allow the owner to arm the alarm and to exit without triggering
  - used to allow the owner to disarm the alarm without triggering
  - typically used for the main entrance, garage, back door
- Direct contacts
  - can be any potential-free contact (switch, magnetic contact, PIR ...)
  - triggers the alarm immediately when activated
    - Siren during trigger + 2 minutes
    - Flash as from trigger until manual reset
- Activation / De-activation
  - any device used to activate / de-activate the alarm
  - exception process : enable / disable particular zones
  - if a keypad is used, then its potential-free contact is used
    - for security / tampering reasons it is best to invert this channel
  - if a glass panel button is used, then
    - it is recommended to use the OLED version
    - use the long-press feature
    - use a button on a page that needs scrolling
    - display a neutral message eg "Garden" (don't display anything that can be associated with "Alarm")
  - when rebooting / power-on the alarm should be de-activated
- Set all addresses of the Alarm modules together in a separate range
  - avoids being mixed up with the rest of the modules
  - once programmed and tested it will not be modified anymore
- Use the SDAUPSA redundant power supply with 2 PSUs and 2 VMBHBAT batteries
  - absolutely necessary to avoid unwanted activation when short power cuts occur

## ***Velbus Modules guidance :***

- Name your modules in an easy-to-recognize manner (see examples)
  - VMB7IN = Alarm trigger / PIR
    - Delay 1 = CH1
    - Delay 2 = CH2
    - Delay 3 = CH3
    - Direct 1 = CH4
    - Direct 2 = CH5
    - Direct 3 = CH6
    - Keypad = CH7
  - VMB4RYLD or VMB4RYNO = Alarm action (recommended VMB4RYLD with 12VDC feed from Alarm battery connected to SDAUPSA)
    - Buzzer = CH1 - connect a "delayed entry / exit" buzzer
    - Siren = CH2 - connect an alarm siren
    - Direct = CH3
    - Flash = CH4 - connect an alarm flashlight
    - Armed = CH5

