FAQ: USING VELBUS BUTTONS OR GLASS CONTROL MODULE AS A CODE KEYPAD

For a general explanation about Velbus, please consult the installation guide on www.velbus.eu.

Always use the latest version de Velbuslink, freely downloadable on www.velbus.eu > Support > Downloads.

1 QUESTION

I want to use a Velbus glass control module, or a combination of push buttons, as a code keypad. The user has to press the buttons in a certain order first, before an action will be executed (eg. "all off").
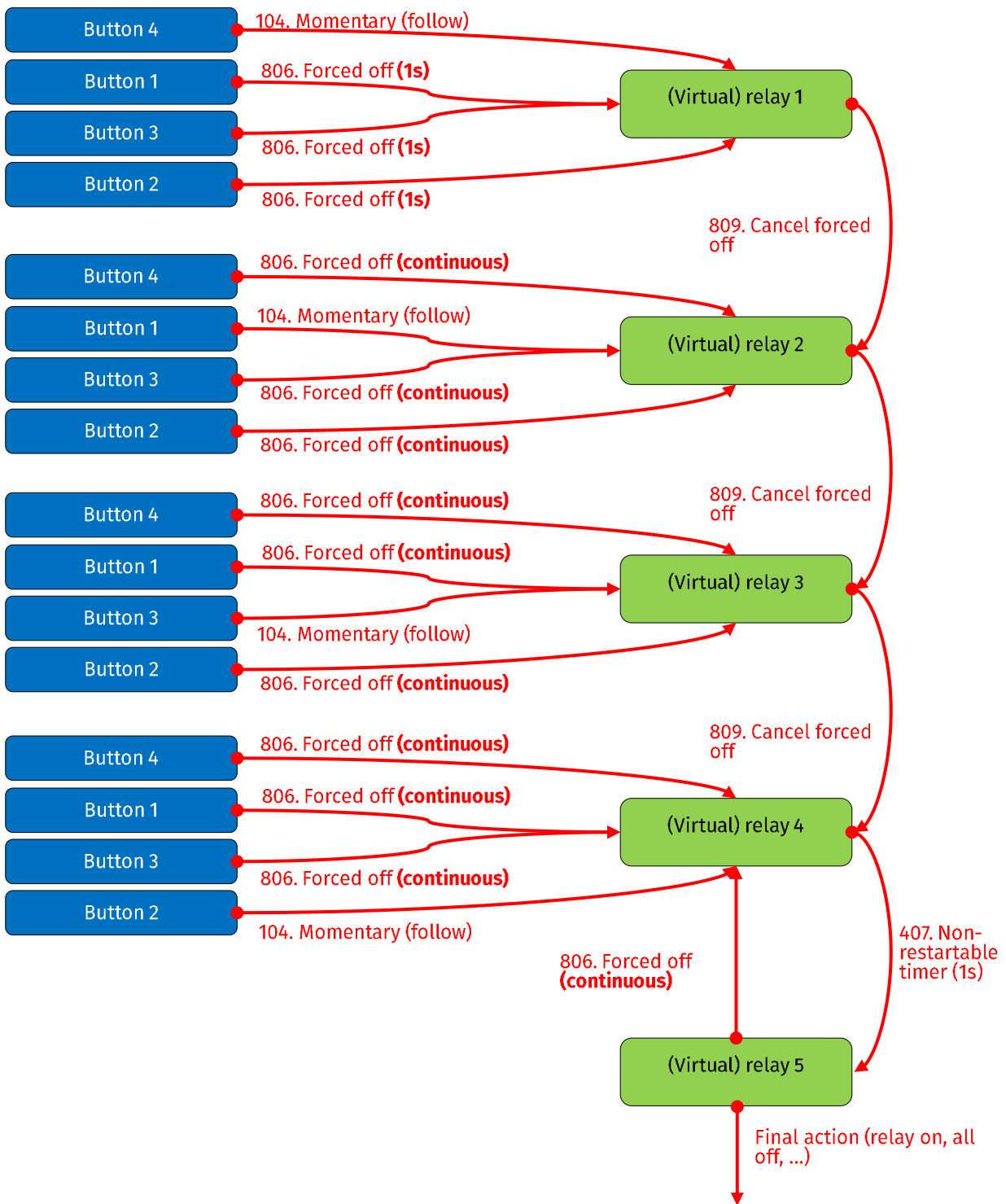
2 ANSWER

Caution: the level of security of this solution is rather low. Do not use this to protect something of high importance.

2.1 SEQUENCE 4 – 1 – 3 – 2 (ALL SHORT PRESSES)

In the example below the user has to press the sequence 4 – 1 – 3 – 2 before the action will be executed. (Meaning: first press button 4, then button 1, then button 3 and finally button 2). Other sequences can be chosen freely (see below).

There is no time limit for the input: the user has all the time to input the sequence, but will be punished for errors. Any erroneous input will reset the sequence. If he or she inputs eg. 4 – 2, or starts with the wrong button, they will have to start over again.

Further below is also explained how a combination of short and long presses can be used, in order to make it especially difficult to stumble upon the correct sequence.

Button 4 — 104. Momentary (follow)
Button 1 — 806. Forced off **(1s)**
Button 3 — 806. Forced off **(1s)**
Button 2 — 806. Forced off **(1s)**

(Virtual) relay 1

809. Cancel forced off

Button 4 — 806. Forced off **(continuous)**
Button 1 — 104. Momentary (follow)
Button 3 — 806. Forced off **(continuous)**
Button 2 — 806. Forced off **(continuous)**

(Virtual) relay 2

809. Cancel forced off

Button 4 — 806. Forced off **(continuous)**
Button 1 — 806. Forced off **(continuous)**
Button 3 — 104. Momentary (follow)
Button 2 — 806. Forced off **(continuous)**

(Virtual) relay 3

809. Cancel forced off

Button 4 — 806. Forced off **(continuous)**
Button 1 — 806. Forced off **(continuous)**
Button 3 — 806. Forced off **(continuous)**
Button 2 — 104. Momentary (follow)

(Virtual) relay 4

407. Non-restartable timer (1s)

806. Forced off **(continuous)**

(Virtual) relay 5

Final action (relay on, all off, …)

To avoid the LEDs giving away the sequence, it is advisable to set the LED feedback of the buttons to "Monitoring" (in the configuration settings of the input module, tab "LED feedback"). The monitored channel can be virtual relay 5 (in that case the LEDs on the buttons will light up for 1 sec. when the correct sequence has been completed), or no monitoring action at all can be used, in which case the LEDs will simply remain off.

2.2 SEQUENCE 1 – 3 – 2 - 4

To change the sequence to eg. 1 – 3 – 2 – 4, the order of the buttons in the schematic above can be adapted:
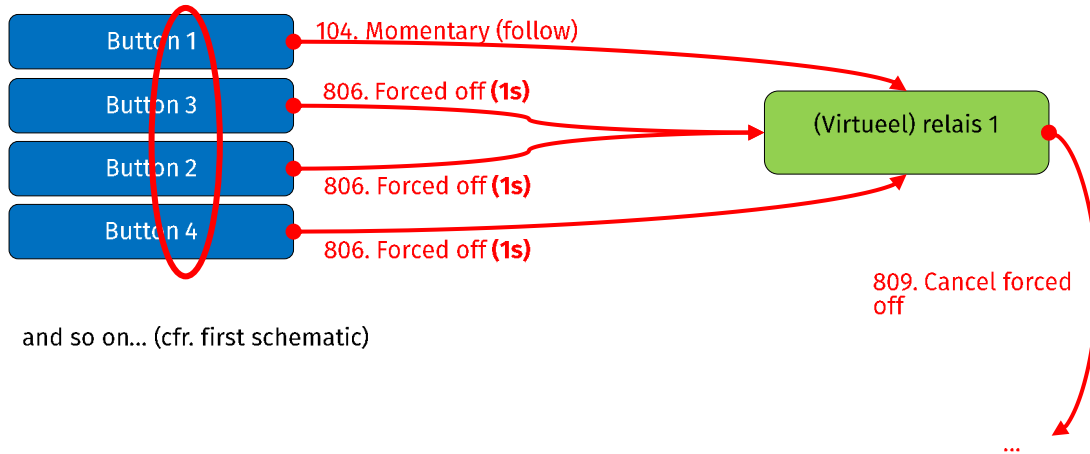
and so on... (cfr. first schematic)

2.3   LONG AND SHORT PRESSES

The sequence can be adapted so that 1 or more buttons have to be pressed during 1, 2 or 3 sec. To do so, the **reaction time** of the buttons needs to be configured (in the configuration settings of the input module).

By changing the reaction time of eg. button 3 to 1 sec., the sequence from the first example becomes:

4 (short) – 1 (short) – 3 **(long)** – 2 (short)

2.4   VARIATIONS

By adapting the examples above the sequence can be made shorter or longer, the order can be changed, and short/long presses can be chosen.

Using the same button several times (eg. **4** – 1 – **4** – 2) is something that cannot be achieved (easily).