Guide for D2 control unit - SMES

This instruction was made for the whole version of the control unit, so probably some function cannot be found in the purchased control unit.

Series connection:

1-2	230 V mains voltage
3	mains earth connection
4	motors earth connection
5-6-7	M1 motor connection (the leaf of the gate which open earlier) 5 opening – 6 common – 7 closing
8-9-10	M2 motor connection (8 opening – 9 common – 10 closing)
11-12	Binding yellow flashing (230v max. 100 W)
13-14	Switch for gardeng lighting (independent contact, connectable capacity 230 V, max 300 W)
15-16	Connection for electric lock, which is working only during opening for 2 sec. (12 V AC max. 2 A)
16-17	24 V AC (power supply for additional devices, for example: photocell) max. 150 mA if the big 14VA transformator is on the board max. 100mA if the little 5 VA transformator is on the board
18 and COM.	M1 motor limit switch input at opening direction
19 and COM.	M1 motor -"- at closing direction in case of using
20 and COM.	M2 motor -"- at opening direction
21 and COM.	M2 motor -"- at closing direction
22 and COM.	Foto 1. safety input (working only at closing)
23 and COM.	Foto 2. safety input (working both at closing and opening)
24 and COM.	Stop input (emergency button, if it is not available connect it to COMMON)
25-26	The common point of inputs (COMMON)
27 és COM.	Start (both motors is starting)
28 és COM.	Pedestrian door start (only M1 motor)
29 és COM.	Only for opening command
30 és COM.	Only for closing command
31 és COM.	Switching of garden lighting (bistabil or timeable function)
32-33	Radio antenna (32 – shading, 33 – central line
34-35	Free relay contact max. 100mA (small relay can switched with radio, for starting other equipment)

Fuses: 1 – 5 A (230 V mains head fuse
2 – 2,5 A (fuse of electric lock)
3 – 315 mA (24 V feed fuse)
Fuses which are not suitable could cause the failure of the panel ! It would not handle as guarantee failure.

Leds: Leds above the input **sorkapcsok** are shown, if the the actual input is active.
Programming leds (8 pcs – lighting in red or green) are shown the programming procedure. The functions, which are switched on in rootposition are lighting in green.
Leds under the fuses are lighting in green, indicating that we have the actual voltage, or indicating with red lighting if the fuse is went.

Start button: Have the same function as START input (27)
Programming buttons: 3 buttons for programming (left – central – right)

Receiver connection (ont he right at the bottom). Receivers available SMES-SMVX, NICE-SMXI (has to be put from its box). Receiver panel has to be plug into the connector, that the side without spare parts has to be into the terminal block. The channels of the receiver are connected into the following inputs – start,pedestrian start-garden lighting, additional relay.

Limit switch inputs (18-19-20-21). These inputs have to be short circuit by the limit switches in order the control panel could work. Because this kind of limit switches are rarely in using, the inputs are in short circuit on the back of the panel. Its shown the 4 lighting red leds above the 4 inputs. If you would like use the inputs, you have to cut the 4 short circuits.

Connecting photocells: connect the feeding connecting of the transmitter and receiver of photocell (1 and 2), to the Nr. 16-17 terminal block (24V). Connect the open contact of the relay (3 and 4)/ to input COMMON and to one of the FOTO input (22-23). If the led is lighting above FOTO input, the connecting was well done. Led turn off by covering the photocell. In case of a short covering of the photocell motors stop and after work further again. In case of a longer covering (2 sec) motors are changing their direction. In case of opening direction is not change. If Foto input (22-23) is not in using, it has to be short circuit to the COMMON terminal block

Operation: After connecting the motors, photocells, flashing light, electrical lock, garden lighting, and other additional devices, control all connection. Switch on the main voltage. In the minute of turn on the first three programming leds are lighting in green, the last three are lighting in red, and in the two centrals both leds are lighting. All the leds under the fuses are lighting in green. All leds are lighting in red from terminal block 18 to 24, but from 27-31 yellow leds are not lighting. Push the Start button. Both motors starting to work to opening direction (M1 motor start first). Then garden lighting is lighting, buzzing the electrical lock, flashing the flashing light. If the direction of one of the motor is not good, connection has to be turn to the other direction and after a short power cut, repeat again the Start. After the leafs opened, they have to be closed by a Start again. If the gate is working by the factory programming, its doesn't need to further programming.

Programming: It has two level: first level – green, second level – red.
The coloured leds above the button are shown the processes

At GREEN LEVEL different function can be switch on, or switch off

1 led	-	automatic closing in	switch off	in factory
2 led	-	semiautomatic mode or Start button has to be pushed continuously	semiautomatic	in factory
3 led	-	gate close after covering the photocell for 5 sec., at automat. closing	switch off	in factory
4 led	-	gate can only be opened, for closing turn on automatic closing	switch off	in factory
5 led	-	slow down of motors at the end of the running time	switch off	in factory
6 led	-	garden lighting (31 – terminal block), bistabil (in-out), or monostabil (timeable)	bistabil	in factory
7 led	-	advanced flashing of flashing light before starting of gate	switch off	in factory
8 led	-	flashing light is flashing in case of opened gate	switch off	in factory

At RED LEVEL The set functions can be changed **(leds 1-2-3-4)**
and to set the running time of motors **(leds 5-6-7-8)**

1 led	-	motor power	setable in 8 level	level 4	in factory
2 led	-	automatic closing time	5s-10s-20s-30s-1m-2m-3p-4m	20 sec	in factory
3 led	-	garden lighting time (timeable)	4s-30s-1,5m-2m-3m-5m-6m-7m	1,5 min	in factory
4 led	-	opening time of pedestrian door (M1 motor)	3s-6-s9s-11s-15s-19s-24s-28s	15s	in factory
5 led	-	M1 motor running time		20 s	in factory
6 led	-	M2 motor running time		20 s	in factory
7 led	-	M1 motor slow down at closing		3 s	in factory
8 led	-	M2 motor slow down at opening		1 s	in factory

Do not keep 15sec. more time between programming operations, because system exit from programming.

This setting is valid only 1-8 GREEN LED

– Push the central button for a few second. The green leds flash for a short time.
– The first led is flashing in green, if the function is off (autom.closing) or lighting if the function is on.
– Function can be switched on-off by pressing once the central button
– Leds can changed by pressing the left or the right button
– If you would like to exit from GREEN LEVEL, press continuously the central button, till the green leds are flashing, or if you will not press anything for 15 sec. , system could exit . COMPLETED

When you exited from programming, those green leds, which you switched on, are shown, that the actual function is active.

This setting is valid only 1-2-3-4 RED LED

– Enter into RED LEVEL. Press the central button continiuously for 3 sec., then stop pressing. Then red leds flesh for a short time
– The first led is flashing in red (motor power setting)
– Leds can changed by pressing the left or the right button
– Press once the central button for a short time if you would like to set the particular led
– Then flashing as much red leds in one line, into which the time and power was set
– You can change the length of the ledline, I mean the largeness of time (power) by pressing the right or left button
– If you would like to exit from RED LEVEL, press once the central button, then the same red led will lighting, which was set now. Then press continuouly the central button again, till the red leds are flashing, or if you will not press anything for 15 sec. , system could exit . COMPLETED

This setting is valid only 5-6-7-8 RED LED

The factory setting values for running time are suit for most gates, so you don't have to change them.
If you want to set a complete motor time, better to start in the closed status of the gate.

– If you exit after the previous setting from RED LEVEL, please enter again.. Press the central button continiuously for 3 sec., then stop pressing. Then red ledlines flesh for a short time
– The first led is flashing in red. Step to the red led-5 by pressing the right button (M1 motor running time)
– Press once the central button for a short time if you want to set the running time.
– Then the red running light start to light, showing that the running time setting is active.
– Gate has to be closed. Press and keep pressed the right button. Then the gate starting its manoveure to opening direction. When the gate opened till the certain extent, stop pressing the button.
– Press once the central button for a short time. Then red led-5 is lighting again.
– Step to the led-6 by pressing the right button, and set the M2 motor running time too under the above instruction
– If you finish, press once the central button for a short time. Then led-6 is lighting again.
– Now both leafs of the gate are opened. RUNNING TIME IS COMPLETED.

After setting the running time step to led-7 by the right button (M1 motor closing delay)

– Press once the central button
– Then the red running light start to light, showing that the setting of closing delay is active
– The gate is opened. Press and keep pressed the left button. Then M2 motor starting to move to closing direction. When after a few seconds, you want the M1 motor will also start to close, stop pressing the button and wait until both leafs of the gate close.
– Press once the central button for a short time. Then led-7 is lighting again.
– Step to the led-8 by pressing the right button, and set the M2 motor opening delay too. Press and keep pressed the left button. Now M1 motor starting its opening first, then when you stop pressing the left button, M2 motor is also starting its opening and wait until both leafs of the gate open.
– Then press the central button for a short time. Then red led-8 is lighting again. DELAY COMPLETED.
– If you would like to exit from programming, keep pressed the central button, until the red ledlines flash, or do not press anything til 15 sec, because the system will exit.

Any motortime setable under the above instruction guide, independent from the others.

Reset of the factory setting (reset):

– Press the central button for a short time. Then green leds flash
– Press the right and left button at the same time.
– Stop pressing the right button first and after the left button.
– Then flash the programming leds half of them in green and half of them in red. COMPLETED.

Programming can be forbidden by taking down the jumper on the center of the panel. The control unit can be transformed into 1 motor control unit, if you change the two points besides the hole on the right side on the bottom of the panel.

ATTENTION !!!!!

The operating of the control panel should be done by technical expert.
Forbidden the changing of fuses for a larger value or shoe them.
Do not bend the panel, because it could caused damage of the small parts
Do not use contact spray for the panel
Do not touch the panel under voltage
You could connect any other unit to the control panel, but before you do it always pull off the 230 V connecting.

Burning on the panel, leak, pollution or any other damage on the panel are OUT OF GUARANTEE.