

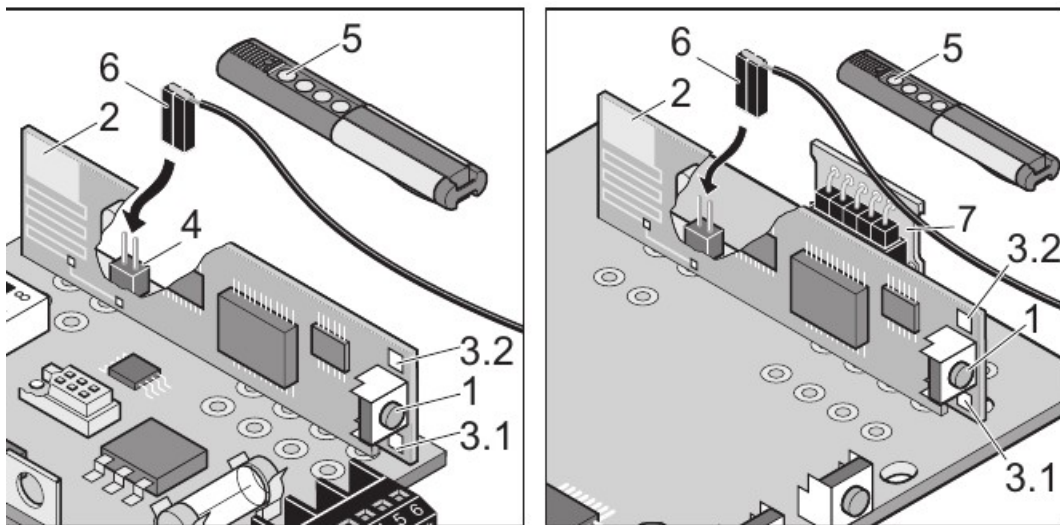
SOMMER sprint evolution

Control unit manual

Programming, radio, connections and DIP functions

Technical extract dedicated to the control unit and radio receiver. It does not include the complete mechanical installation of the operator.

Based on the original SOMMER sprint evolution manual, reference 46721V001_062017_0-DRE_Rev-G_EN (2017).

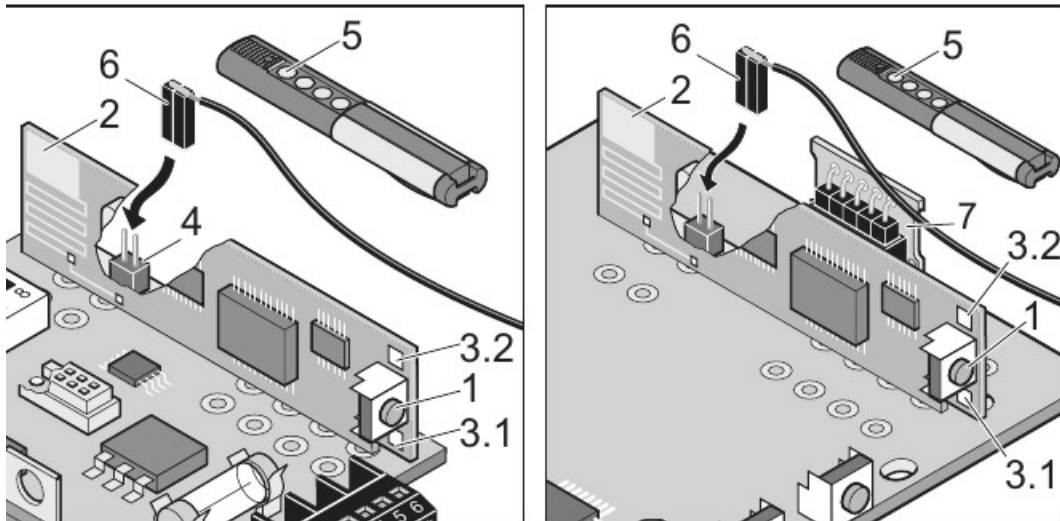


1. Safety and essential data

- Installation, electrical connection and commissioning must be carried out by qualified personnel.
- Always disconnect the operator from the power supply before working on the control unit.
- Nominal operator supply: 230 V AC / 50 Hz. Protection class: IP20. Operating temperature: -20 °C to +50 °C.
- Never apply external voltage to potential-free control contacts; this can damage or destroy the control unit.
- Recommended maximum conductor cross-section: 0.75 mm² for accessory connections and 1.5 mm² for the direct socket unit.

2. Control unit and radio receiver

Elements identified on the radio receiver:



- 1 - Programming button: learn, delete and normal mode.
- 2 - Internal aerial.
- 3.1 - Channel 1 LED.
- 3.2 - Channel 2 LED.
- 4 - External aerial connection.
- 5 - Hand-held transmitter button.
- 6 - External aerial.
- 7 - Plug-in storage module for radio codes (448).

The receiver supports up to 112 memory blocks per receiver.

3. Control learning and reset

1. After connecting mains power, the first operator movement must be OPEN. If the first movement is CLOSE, swap the wires on terminals 3 and 4.
2. Operate the control button to open to the OPEN end position and then close to the CLOSED end position.
3. Perform a control reset.
4. Carry out two complete learning cycles: open to the end position and close to the end position. The lamp flashes during learning. When all force values have been saved, the lamp stops flashing.

Control reset

5. Press and hold the control button until the lamp goes out.
6. Release the button. The lamp flashes to confirm the reset.
7. After a reset, the operator must be programmed/learned again.

4. Transmitter programming and radio memory

Programming a transmitter

8. Press the programming button once for channel 1 (LED 3.1 on) or twice for channel 2 (LED 3.2 on).
9. Press and hold the desired transmitter button until the channel LED goes out. Programming is complete.
10. Repeat for additional transmitters. If no code is received within 10 seconds, the receiver returns to normal operation.

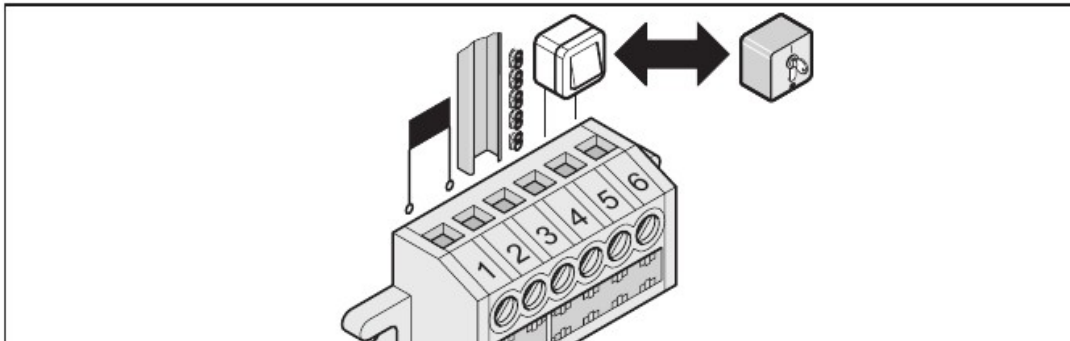
To abort programming, repeatedly press the programming button until all LEDs are off.

Deleting codes

- Delete one transmitter button: hold the programming button for 5 s, release when the LED flashes, then press the transmitter button to be deleted.
- Delete one channel: select the channel with one or two presses and keep the button pressed; after 5 s the LED flashes and after another 10 s it stays on. Release to delete the channel.
- Clear all memory: hold the programming button. After 5 s one LED flashes, after another 10 s it remains on and after a total of 25 s both LEDs are on. Release to delete all channel data.

5. Control connections

Direct socket unit



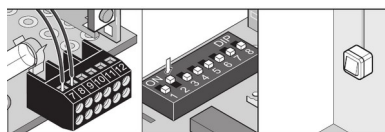
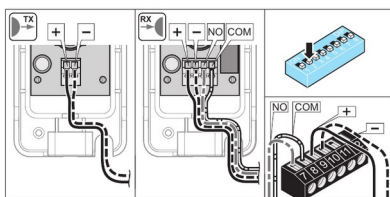
Terminal	Function
1 + 2	Transformer
3	C-rail
4	Chain
5 + 6	Push-button 1 contact

Accessory terminals

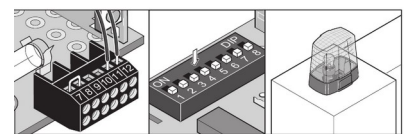
7 + 8	Safety input / light barrier with DIP 2 OFF; push-button 2 with DIP 2 ON.
9 + 10	Controlled 24 V DC, max. 0.1 A. Terminal 9 = +24 V; terminal 10 = earth.
11 + 12	Uncontrolled 24 V DC (max. 34 V), max. 1 A, for warning lamp.

Maximum cable length: 10 m on terminals 9+10 and 11+12; 30 m on terminals 5+6 and 7+8.

CAUTION: contacts 5+6 and 7+8 must only be used as potential-free control contacts according to the selected configuration. Do not apply external voltage.

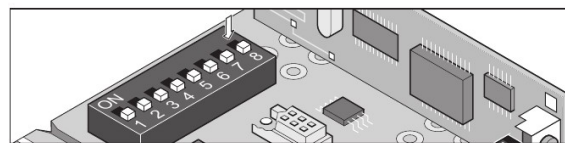
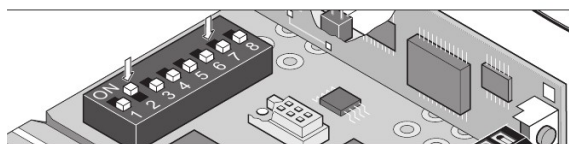


Terminal 7 + 8 Connection for push-button 2, only if DIP switch 2 ON



6. DIP switch functions

DIP 1	Obstacle during opening	OFF: no response to safety input interruption; force cut-off stops the door. ON: the operator stops the door.
DIP 2	Function of input 7+8	OFF: safety input / light barrier. ON: push-button 2 contact.
DIP 3	Behaviour during closing	OFF: stops and reverses slightly. ON: stops and opens completely.
DIP 4	Warning lamp	OFF: the control generates flashing. ON: door status indicator - on while the door is not closed and off when the door is closed.
DIP 5	Early warning	OFF: disabled. ON: internal light and warning lamp flash for 3 s before movement.
DIP 6	Backjump	OFF: disabled. ON: after reaching CLOSED, the operator briefly moves in the OPEN direction to unload the mechanics.
DIP 7	Defined opening and closing	OFF: disabled. ON: button/channel 1 opens and button/channel 2 closes. Requires DIP 8 OFF.
DIP 8	Partial opening	OFF: disabled. ON: partial opening active; DIP 7 is disabled.



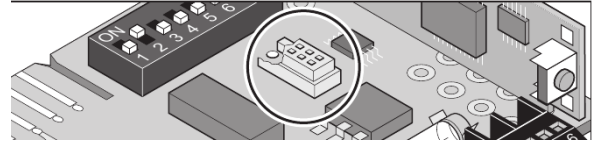
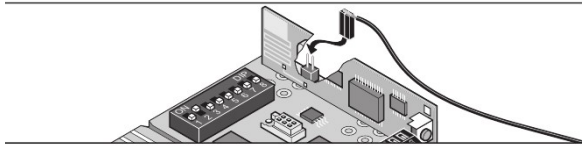
Partial opening (DIP 8)

11. Close the door and set DIP 8 to ON.
12. Press push-button 2 from the CLOSED position.
13. At the desired opening position, press push-button 2 again.
14. Close the door using push-button 2. The position is stored.
15. To delete the partial-opening position, set DIP 8 to OFF.

Important note on the original manual: the partial-opening section contains a reference to “terminals 1+2” for push-button 2, while the dedicated push-button 2 wiring diagram identifies terminals 7+8 with DIP 2 ON; in the same manual, terminals 1+2 belong to the transformer. Always confirm the control version before wiring.

7. Aerial, TorMinal and fuse

- If the internal aerial range is insufficient, an external aerial can be connected at receiver connection 4. The cable must not be mechanically loaded and should have strain relief.
- The TorMinal interface provides additional parameterisation; refer to the separate TorMinal operating instructions.
- The warning-lamp output fuse (terminals 11+12) is 1 A fast-acting.



8. Quick diagnostics

Lamp flashes	Operator not learned / no force values stored	Teach the control unit.
Operator inoperative and lamp off	No mains supply, installation fuse, control unit incorrectly installed	Check mains, fuse and control-unit seating.
Operator does not run	Light barrier interrupted, safety input active or control unit incorrectly seated	Remove interruption and check wiring/DIP settings.
Transmitter does not work	Flat battery, transmitter not learned or wrong frequency	Replace battery, program transmitter and check frequency.
Wall push-button does not work	Button not connected or defective	Check connection or replace button.
All receiver LEDs flash	Memory full (max. 112 positions)	Delete unused transmitters or install an additional receiver.
LED 3.1 or 3.2 continuously on	Permanent radio signal / transmitter button jammed or defective	Remove transmitter battery and check for external/interfering signal.

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