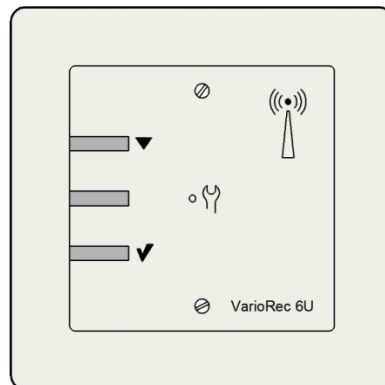


Instruction manual

VarioRec6 U

Radio receiver for surface and flush mounting



Initialisation by pen

Document Versioning/ Updating

Versioning/updating

This document will be updated in the intranet of the Lehmann Electronic GmbH.
In case of changes, there will be no automatic notification or replacement of distributed documents.
Information with regard to changes will be filed with the product life cycle.
Clients can use their accounts to view the latest version in the Lehmann intranet.
Lehmann Electronic GmbH reserves the right to change product specifications without prior notice and without justification.

Intended use



The device must only be used for the applications specified in the catalogue and the technical description and only in combination with devices of a different make and components recommended or authorised by Lehmann Electronic. The proper and secure operation of the product requires correct transport, storage, installation, and mounting as well as careful handling and maintenance.

Trade marks

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Liability exclusion

Lehmann Electronic has checked the contents of this document for agreement with the described products. However, deviations cannot be ruled out, and complete agreement cannot be guaranteed. The information in this document is regularly checked and necessary corrections will be included in reprints.

We gratefully accept suggestions for improvement.

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Safety information

This manual contains information that you should observe to ensure your own personal safety as well as to avoid personal injuries and material damage.

The notices referring to your personal safety are highlighted in the manual by a safety alert symbol (warning triangle).

Notes referring to property damage are displayed without a safety alert symbol.

Depending on the hazard level, warnings are displayed in descending order as follows:



Danger

indicates that death or severe personal injury will result if proper precautions are not taken.



Warning

indicates that death or serious injury can result if proper precautions are not taken.



Caution

with a safety alert symbol indicates that minor personal injury can result if the proper precautions are not taken.



Caution

without a safety alert symbol means that damage to property may occur if the proper precautions are not taken.



Notice

indicates that an undesirable result or state could occur if the corresponding instruction is not followed.

In the event of a number of levels of danger occurring simultaneously, the warning corresponding to the highest level of danger is always used.

A warning with a warning triangle indicating possible personal injury may also include a warning relating to property damage.

Qualified personnel

The associated device/system must only be set up and operated in accordance with this documentation. A device/system must only be commissioned and operated by **qualified personnel**.

For the purpose of the safety information in this documentation, a “qualified person” is someone who is authorized to put into operation equipment, systems, and circuits in accordance with the standard DIN/EN VDE 0834 for qualified personnel and to provide training on said equipment, systems, and circuits.

Instructed personnel

For the purpose of the safety information in this documentation, an “instructed person” is someone who is authorized to put into operation equipment and systems in accordance with the standard DIN/EN VDE 0834 for instructed personnel. Instructed personnel has a duty of supervision within the meaning of DIN/EN VDE 0834.

As a rule, instructed personnel has received an instruction/training by qualified personnel and obtained the required documentation.

Trained personnel

A “trained person” is someone who has been instructed on the usage and monitoring and who has the necessary documents at his or her disposal.

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Warning

The use of a call device does not release supervisors from the obligation to supervise the persons supported by such a device. The present product uses a radio link to transmit calls. Read this manual before operating the device and carry out the described measures.

This system is radio-based and must therefore not be used for monitoring purposes if life-threatening conditions are foreseeable.

1 Basic Variants of the Product / Scope of Supply

Product variants	Order no.
VarioRec6 U radio receiver 869.2125 MHz ^{1 2} Initialisation by pen	990.624.08
Documentation	
• VarioRec6 quick reference guide (included in delivery)	LE264
• VarioRec6 U instruction manual (homepage)	LE265

¹ The frequency can be found on the identification decal.

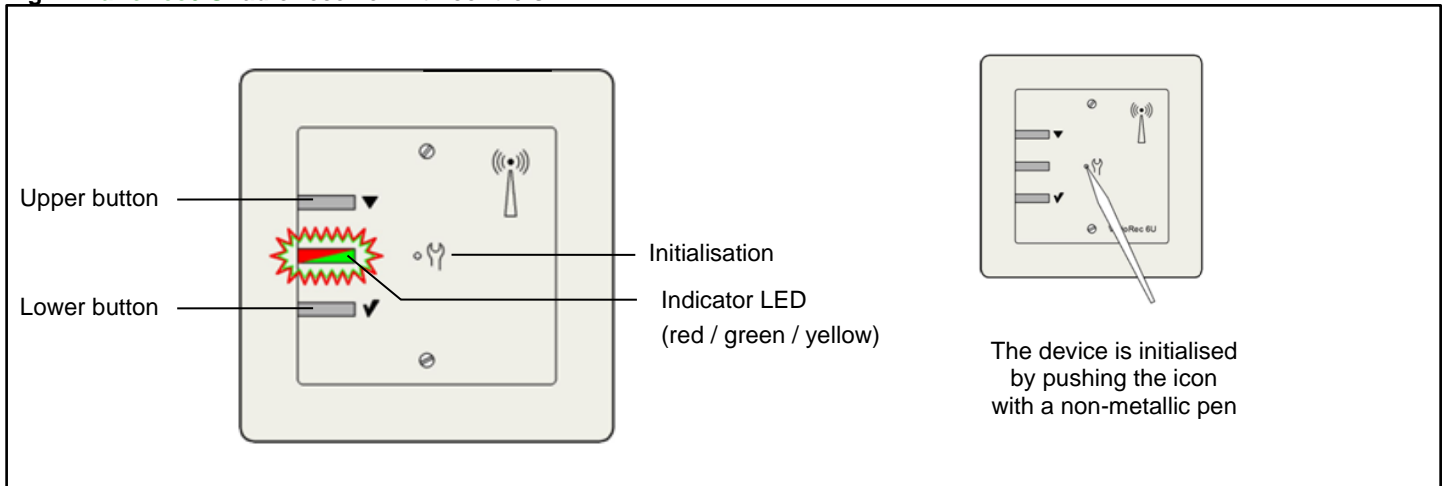
² Social alarm frequency

Note: While unpacking, each shipment should be inspected for completeness and damage.

Note: In this manual the "VarioRec6 U radio receiver" is referred to as "radio receiver" or "receiver".

2 Product Information

Fig. 1: VarioRec6 U radio receiver with controls



2.1 VarioRec6 U Radio Receiver

The VarioRec6 U radio receiver wirelessly receives calls of Vario transmitters and transmits them to the call system.

2.2 Radio Transmitters

The VarioRec6 U radio receiver will receive each Vario transmitter using the same frequency.

2.3 Call System

Check if the radio receiver variant is listed for the intended call system. This information can be found either on the radio receiver identification label or in the call system documentation.

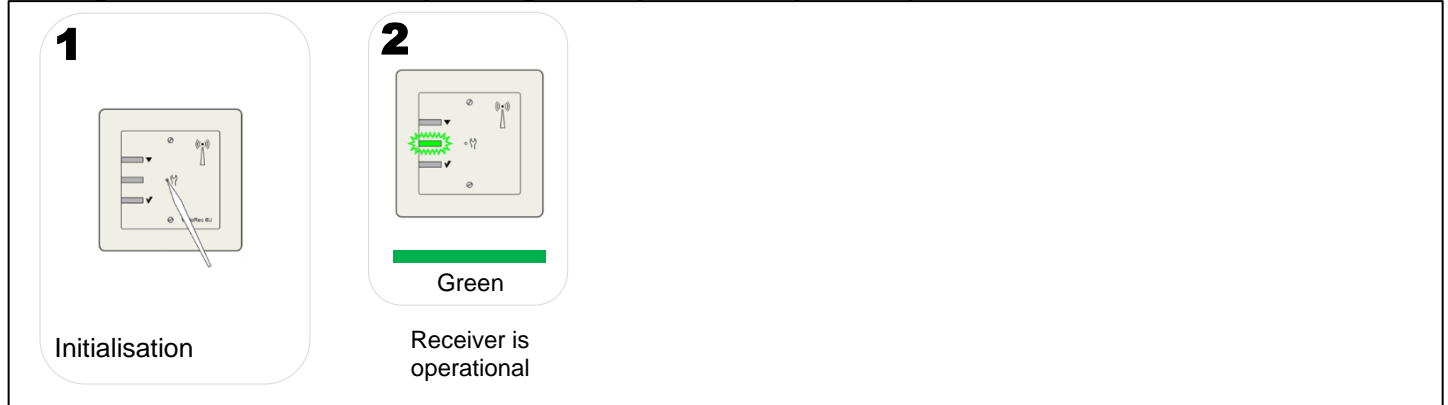
3 Operation

Note: "Operation" means that radio transmitters have already been programmed into the radio receiver.

3.1 Putting Radio Receivers into Operation

- Initialise the radio receiver
- After a self test, the LED indicator lights up in green to indicate the operational readiness. The radio receiver can receive and transmit radio calls.

Putting the radio receiver in operating mode (standard operation)



Note

The operating steps required during operation are summarised in the quick reference guide.

3.2 Range of the Radio Link



Important

After the initial putting into operation of the radio receiver, the range at the usage site must be checked at regular intervals. More information is provided in the descriptions of the matching transmitters.

4 Initial Putting into Operation

Carry out the following steps before the initial putting into operation:

- Check if the radio receiver connector type is suitable for the call system.
- Check if factory presets or customised settings will be used.
- Assign radio transmitters by programming.
- Check the range at the usage site.



4.1 Checking if the Radio Receiver Connector Type is Suitable for the Call System

Refer to the documentation of your call system and check if the **VarioRec6 U** radio receiver version has been connected correctly to the call system and parameterised as required. Also check if special settings / operating steps are required.

4.2 Setting of Desired Operating Functions

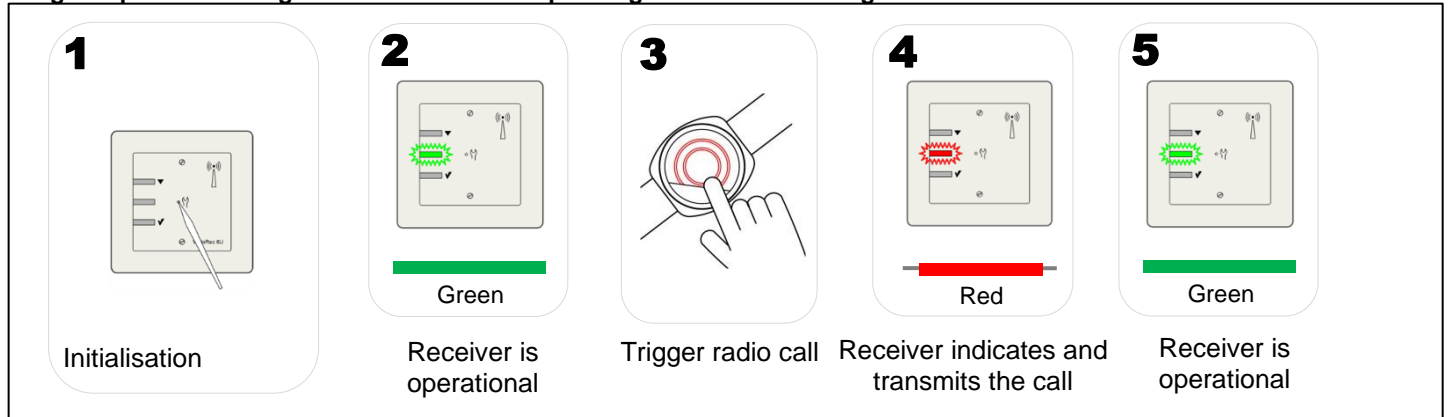
Note: The factory settings allow a troublefree operation of the radio receiver. Do not change any parameters. Continue directly with the step "6.2.1 Programming Radio Transmitters".

5 Operation of the Radio Receiver

After connection, the radio receiver automatically enters the operating mode. In this mode radio calls are received and transmitted. In addition, it is possible to activate the care mode which allows to suppress the call transmission for a preset time.

- **Functions in operating mode**
 - Reception of radio calls with call transmission to the call system.
 - Indication of fault messages.
 - Care mode activation.

Image sequence: Putting the radio receiver in operating mode and receiving radio calls



5.1 Error / Fault Messages in the Operating Mode

During the reception of transmitter signals, error or auxiliary messages can occur. All errors are indicated by the LED light. The settings and the type of call system determine if and how errors are transmitted to the call system. In systems with a separate fault channel the fault message will always be transmitted. The messages will be displayed until they are acknowledged at the receiver.

Note: Call messages continue to be received and transmitted even after receipt of a fault message.

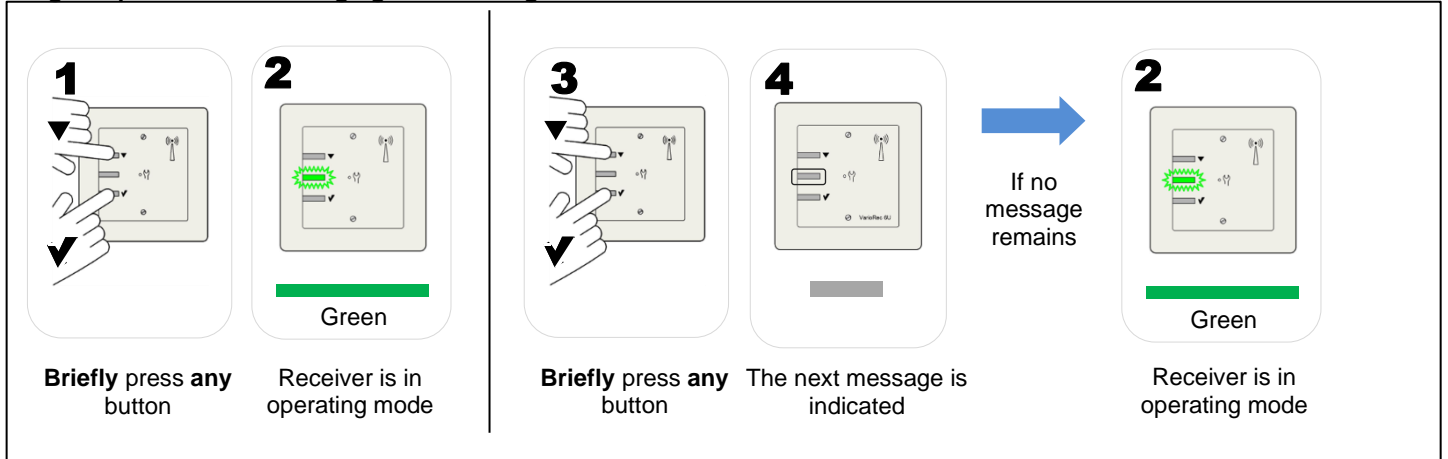
The most recent message will be indicated. After acknowledging the message, the next message, if any, is indicated. This sequence can be repeated until the fault memory is empty.

Figure: Possible LED indicator messages in the operating mode

Message	Indicator	Measure*	Message acknowledgement
Transmitter battery low	Red flashing light	Change radio transmitter battery	
No daily message	Green flashing light	Check transmitter	
No vital message	Green / orange flashing light	Determine why the message was not received	
Reception blockage (only with social alarm frequency)	Orange flashing light	Check for sources of radio interference in the vicinity	
System error	Green / red flashing light	Error in radio receiver or in the connection	
Static call	Steady red	Reset at the radio receiver	

*Please check for details of these measures in this document.

Image sequence: Acknowledging fault messages



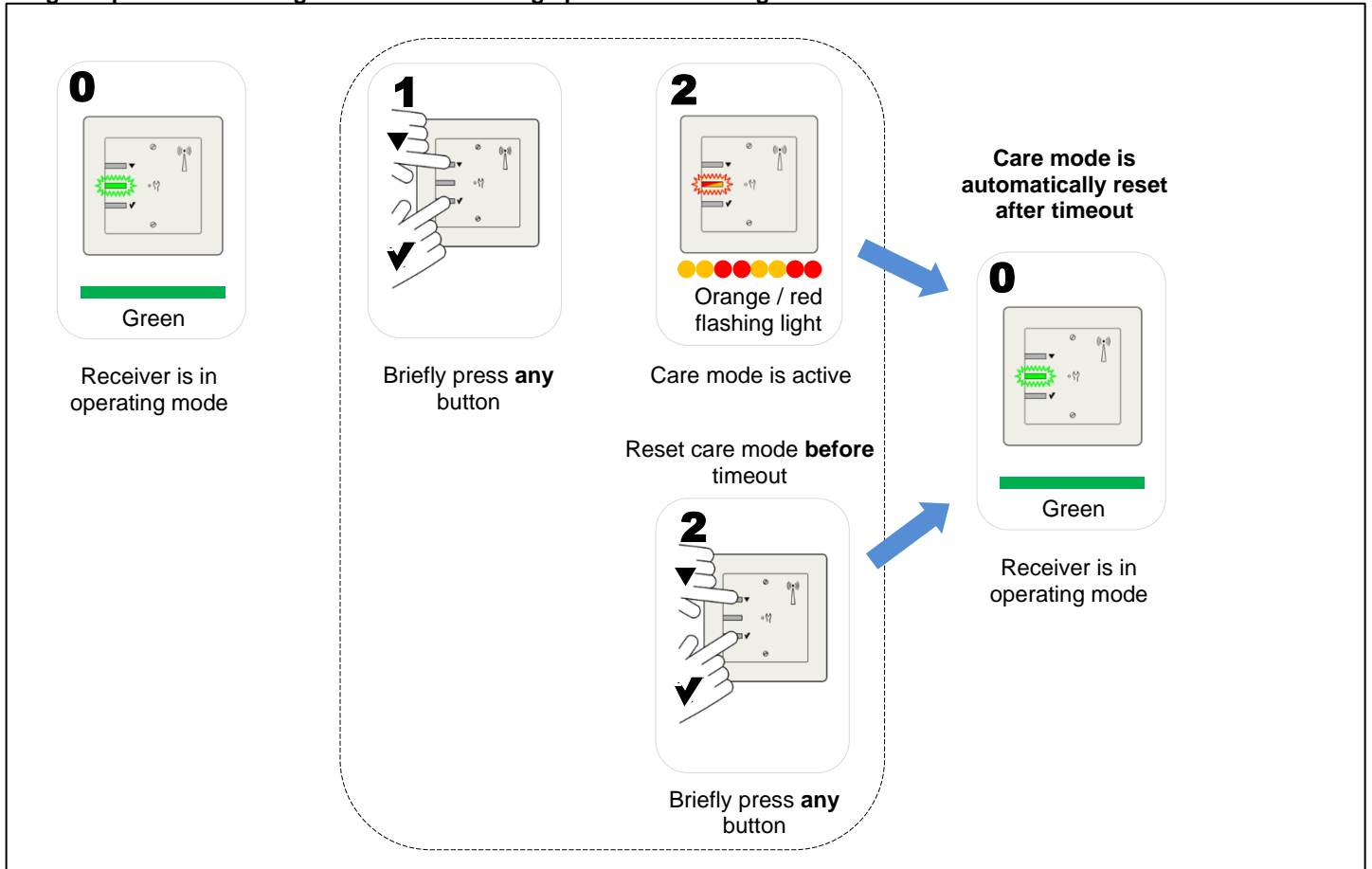
5.2 Care Mode

If this mode has been activated (see chapter 9, "setup mode"), call transmission can be suppressed for a set time, e.g., to avoid the triggering of call signals by a specific transmitter such as a contact mat during patient care activities, for example.

• **Functions in care mode**

- Activating the care mode: the radio call transmission is suppressed during timeout.
 - However, the receiver continues to indicate:
 - Calls
 - Fault messages.
- Deactivating the care mode:
 - Briefly press any button,
 - else the operating mode is automatically reset after the set timeout.

Image sequence: Activating the care mode during operation / resetting the care mode in advance



6 Programming Mode

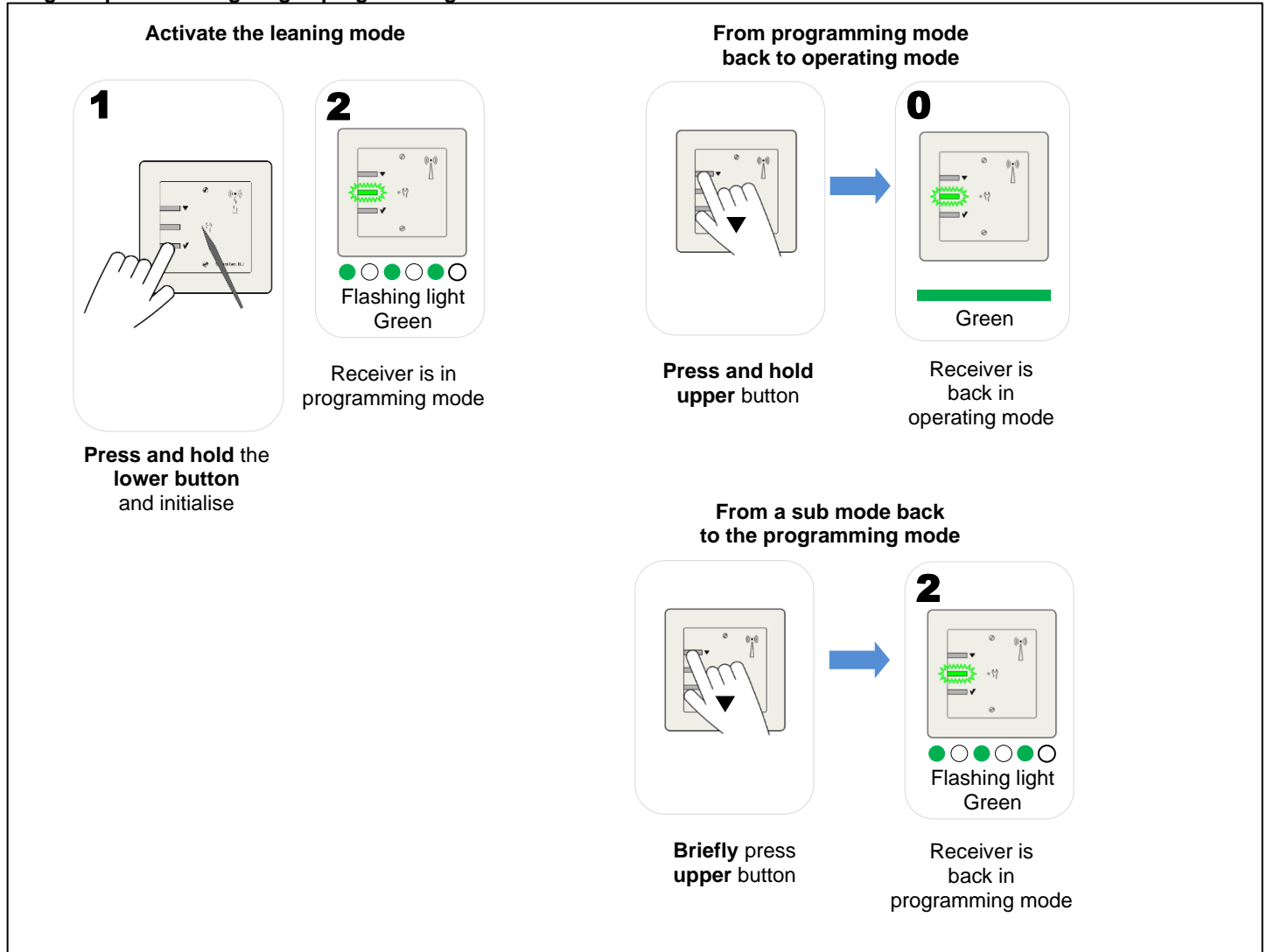
This mode is used to program (teach-in) radio transmitters into the receiver, to delete them from the receiver or to set the daily message monitoring.

- **Functions in programming mode**
 - Programming / deleting radio transmitters.
 - Activating / deactivating daily messages (only with social alarm frequency).
 - Deleting all saved radio transmitters.

6.1 Navigating in Programming Mode

Note: The radio receiver automatically reactivates the operating mode if there is no input for approx. 1 min.

Image sequence: Navigating in programming mode



6.2 Programming / Deleting Radio Transmitters

Before a radio receiver can detect a radio transmitter, the latter has to be programmed into the radio receiver. A radio transmitter that should no longer be used with this radio receiver must be deleted from the transmitter.

Note: A fault message is triggered if unidentifiable transmitters or multiple reception are/is detected during programming / deletion. In this case the step should be repeated.

6.2.1 Programming Radio Transmitters

The first image sequence shows the programming (teach-in) of current radio transmitters. The second image sequence shows the programming of radio transmitters which need to perform special functions such as, e.g., a wireless cancel push-button.

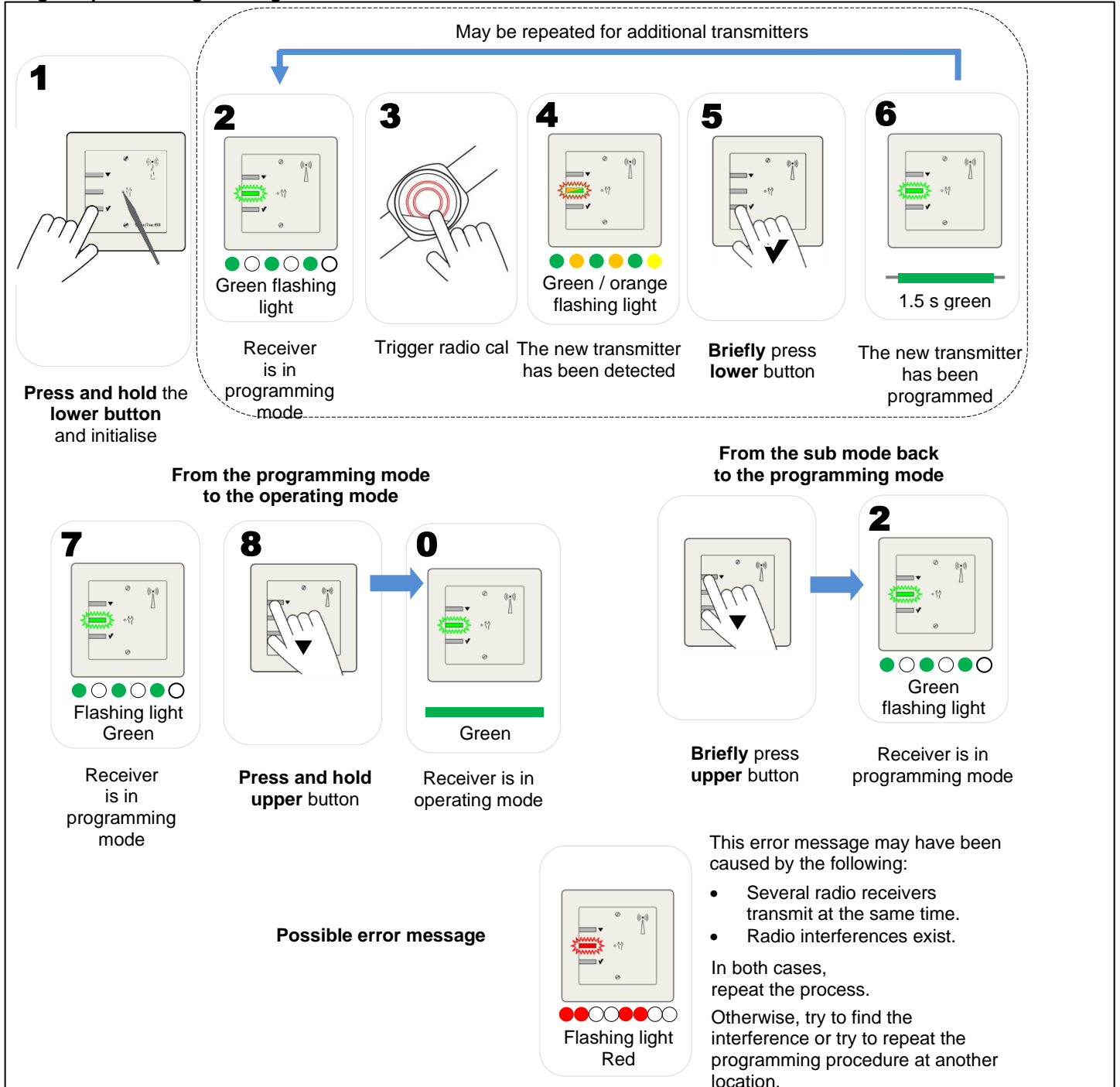
Note: Special functions are transmitted only if the call system supports their transmission by an auxiliary plug contact.



Warning

Always check the range of new transmitters after programming. The exact procedure is described in the radio transmitter manuals.

Image sequence: Programming a radio transmitter

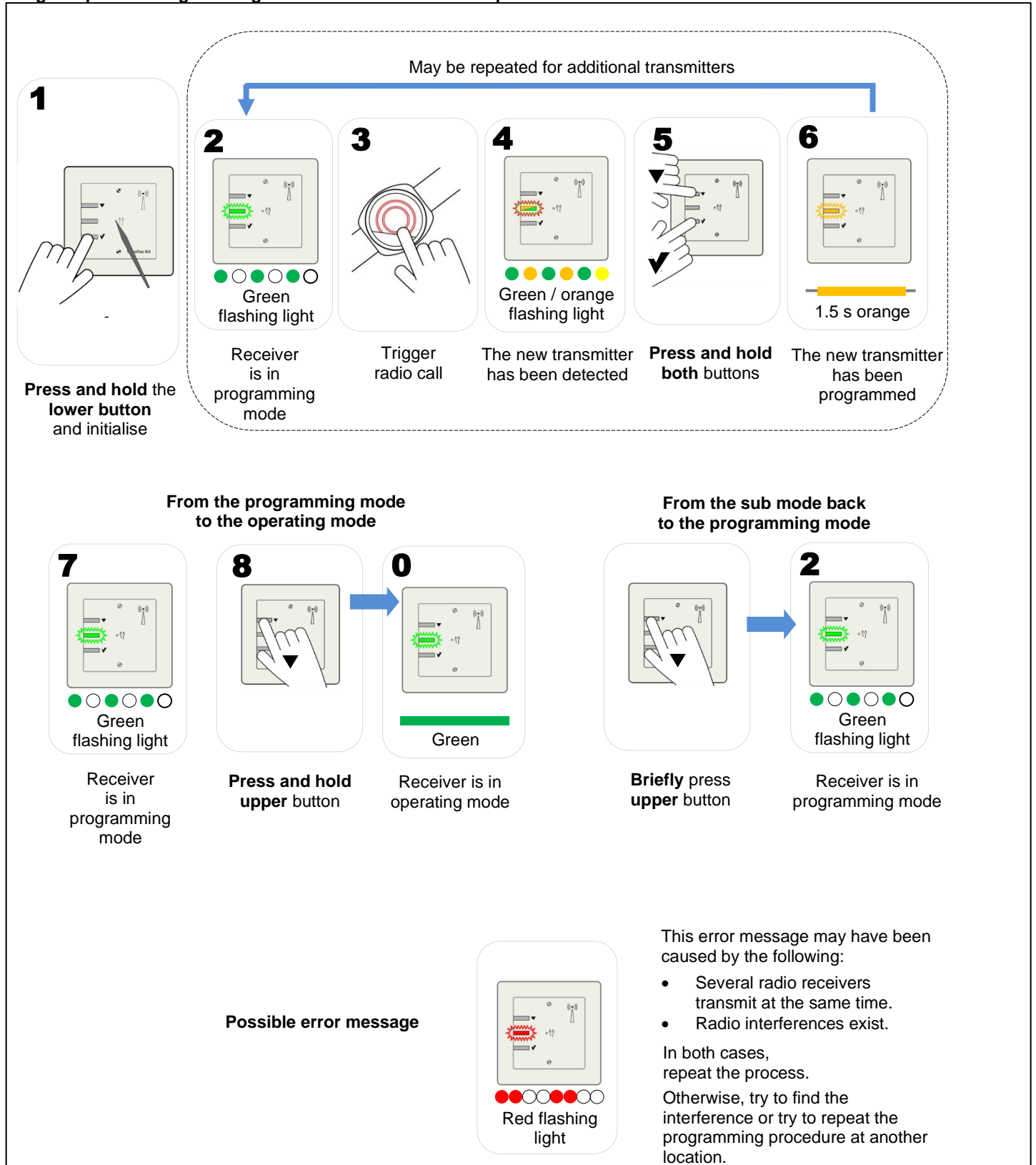


6.2.2 Programming of Radio Receivers Used for Special Functions

Examples of special functions

- Wireless Momentary Stop Switch
- Wireless light button

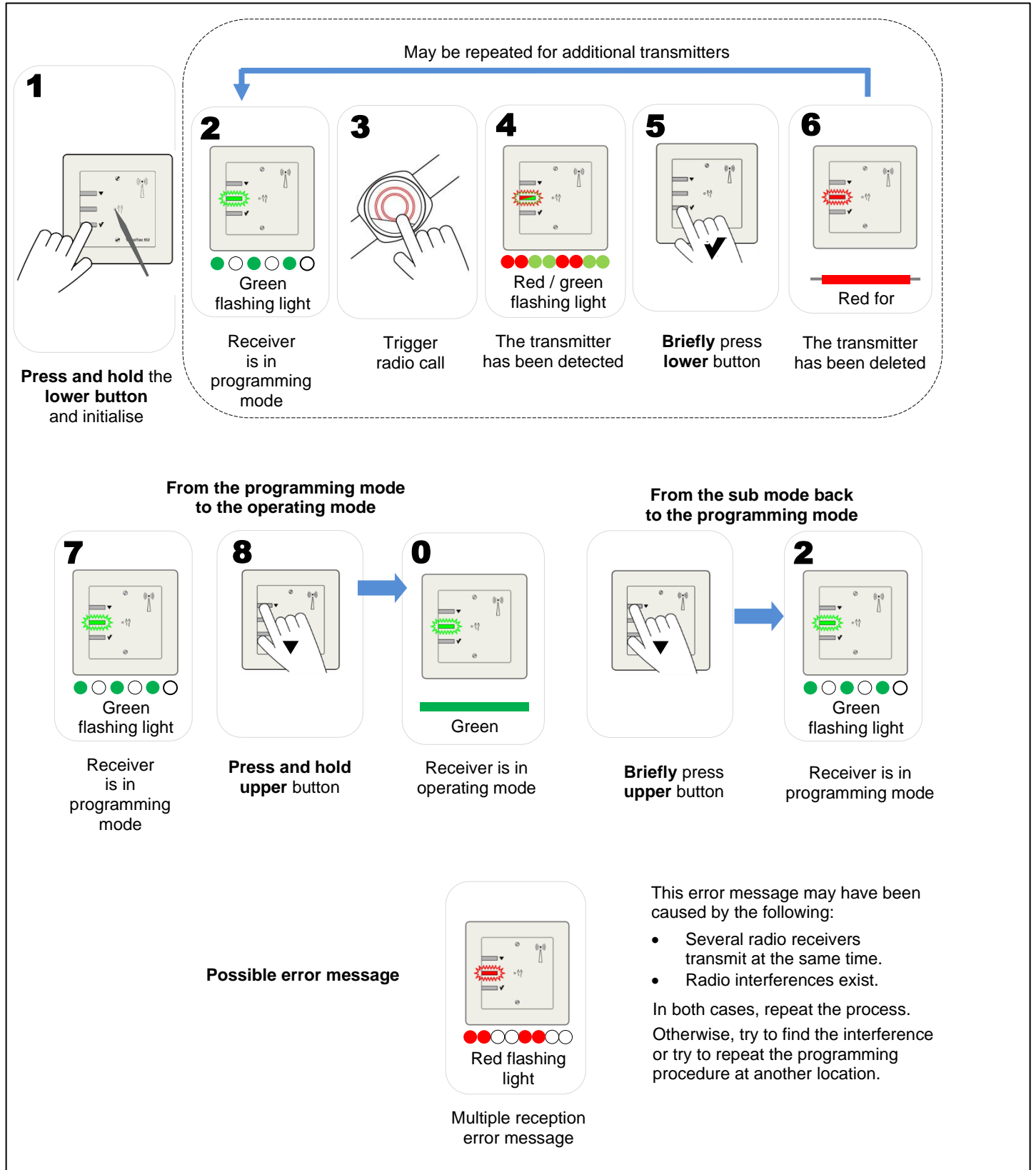
Image sequence: Programming of radio receivers used for special functions.



6.2.3 Deleting Radio Transmitters

To avoid multiple reception, always delete radio transmitters from radio receivers that should no longer receive calls from these transmitters.

Image sequence: Deleting radio transmitters



6.2.4 Activating / Deactivating Daily Message Monitoring

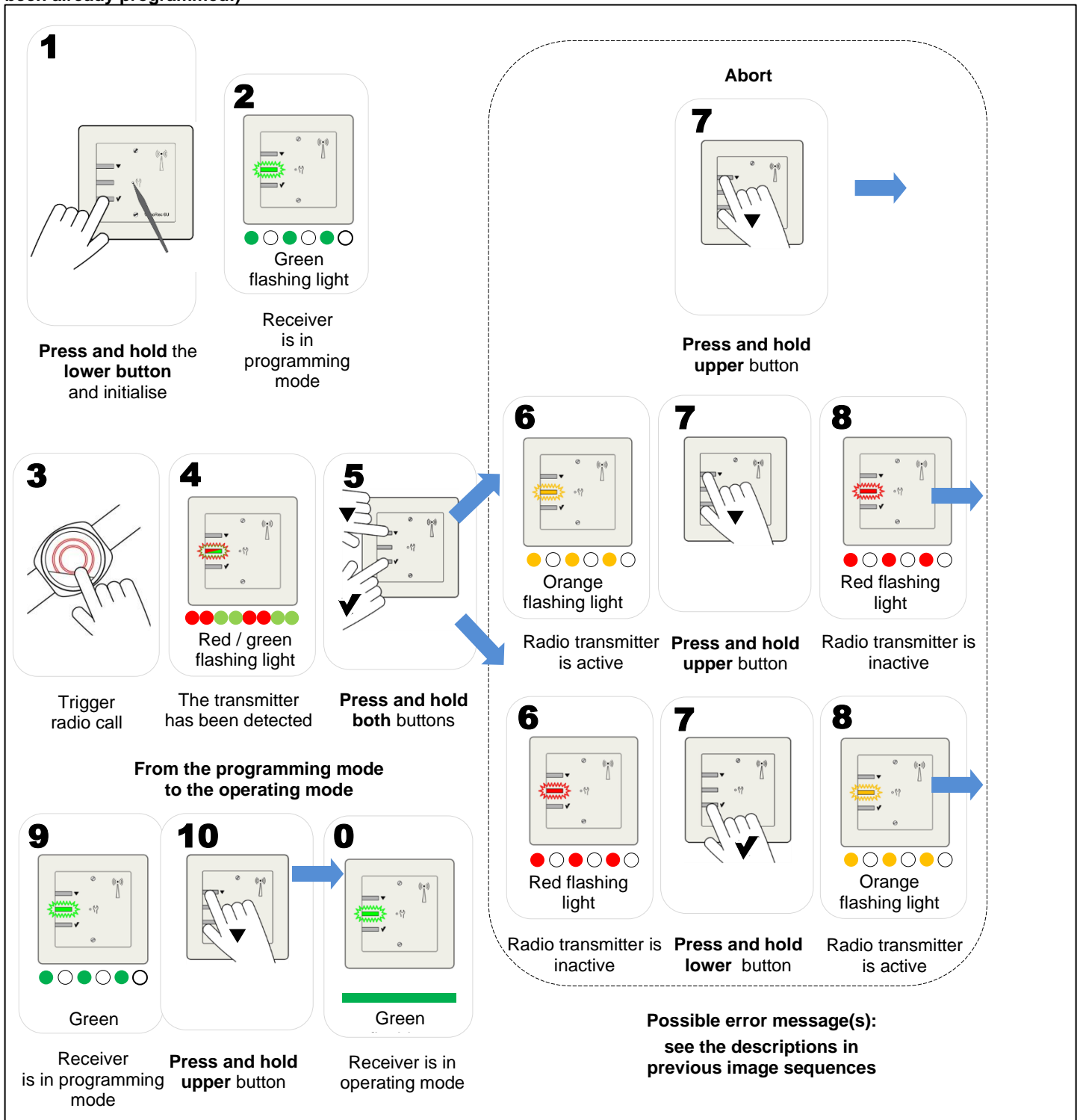
Function: If the transmission of daily messages has been activated for a radio transmitter, the radio receiver generates a message whenever the daily test signal of the transmitter is not received. This function is used for the daily functional check of permanently installed wireless push-buttons, for example. Note: Check if the radio transmitter generates the daily message check signal. Usually, only transmitters using the social alarm frequency (869 MHz) offer this function.

Note: After programming a new transmitter, its daily message monitoring is deactivated!

○ **Functions**

- Active daily message: A call / fault message is generated if a daily message is not received.
- Passive daily message: Missing daily messages are ignored (no monitoring).

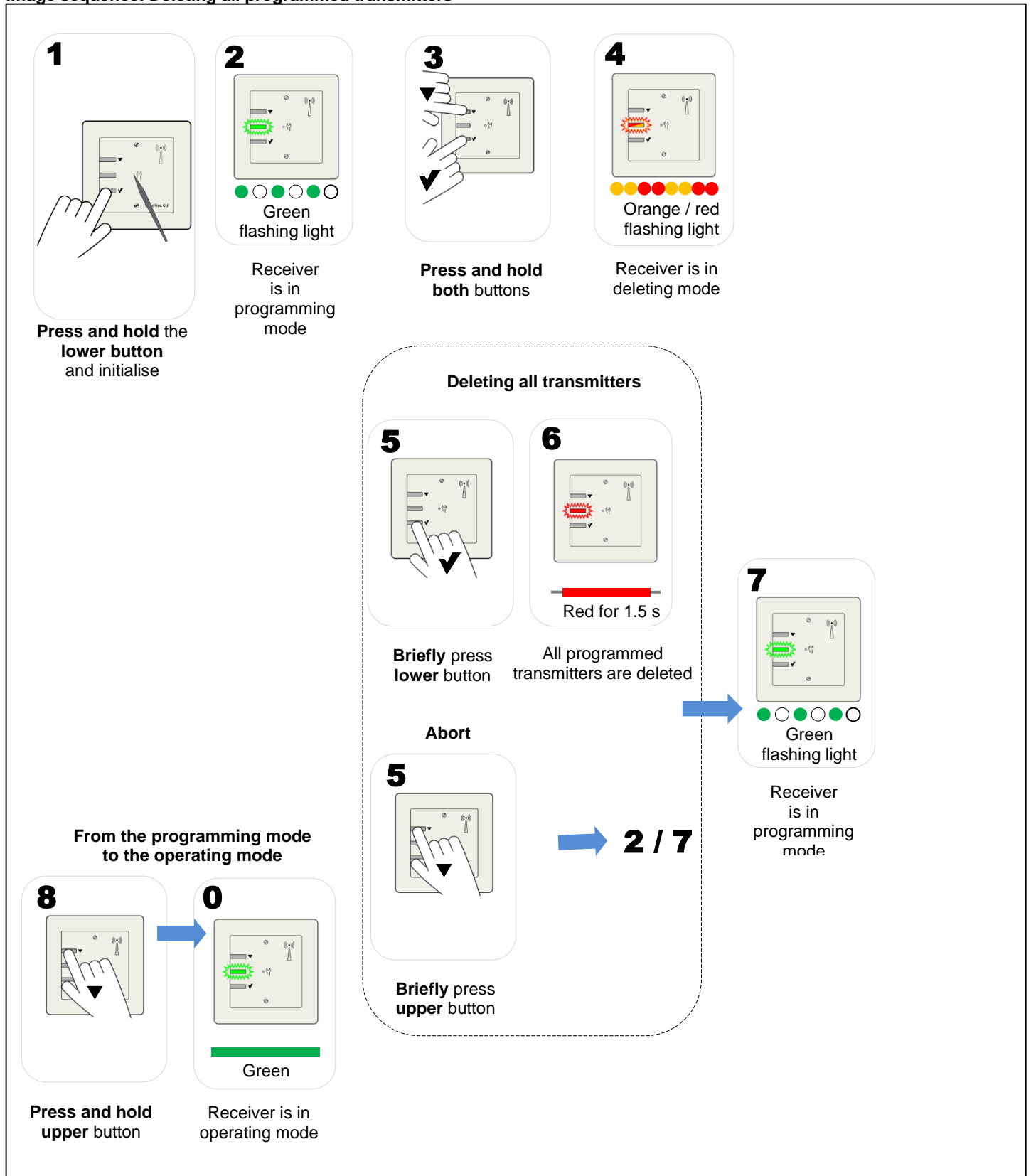
Image sequence: Activating / deactivating daily messages for a radio transmitter (important: the radio transmitter must have been already programmed!)



6.2.5 Deleting All Programmed Transmitters

All transmitters programmed in the radio receiver are deleted.

Image sequence: Deleting all programmed transmitters



7 Setup Mode

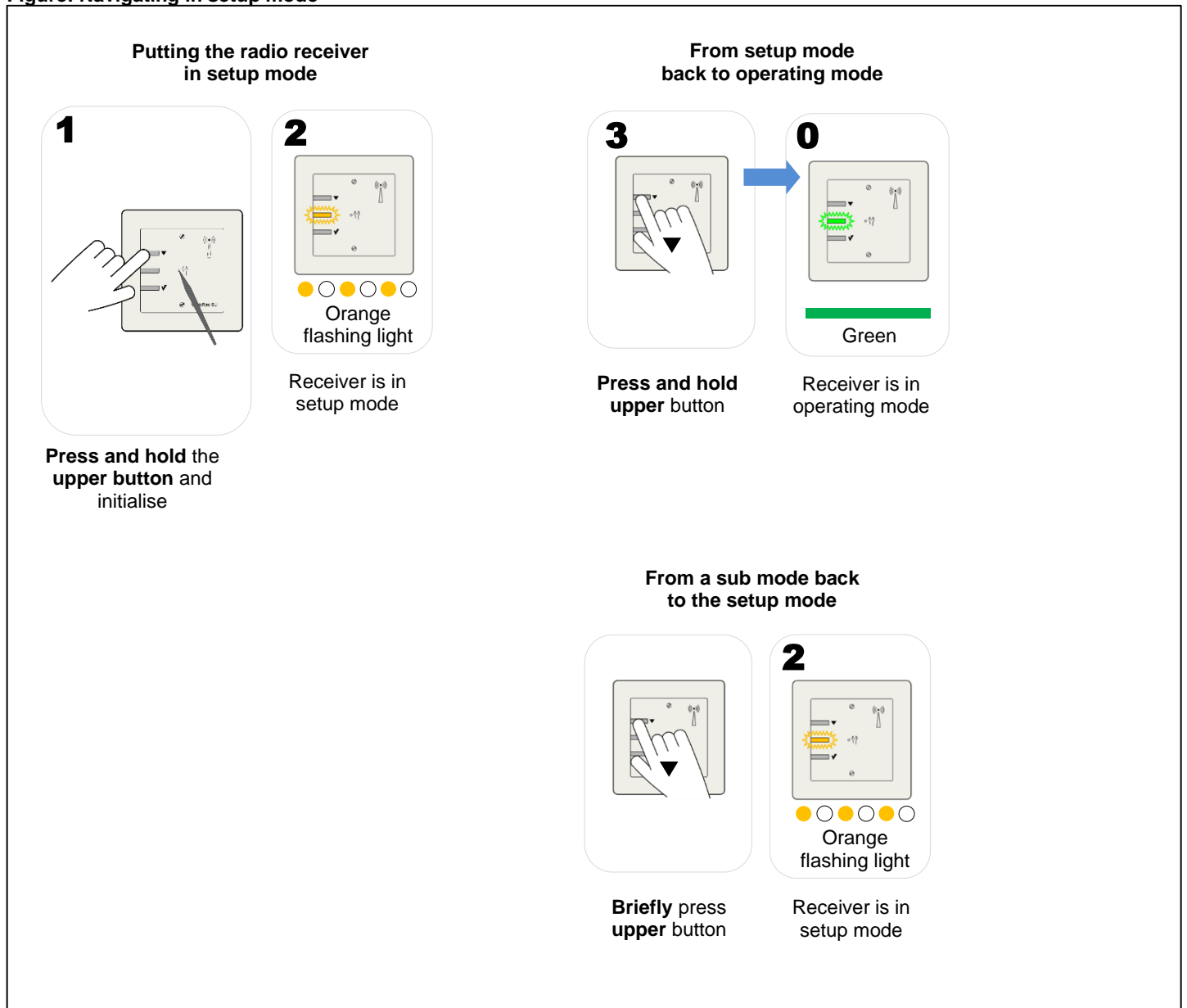
In this mode, the following parameters can be set:

- **Functions in setup mode**
 - Master mode: activating / deactivating the master mode
 - Vital function: activating / deactivating the vital function
 - Operating indicator: setting normal / inverted function
 - Care mode: activating / deactivating the care mode
 - Care mode: setting timeout

7.1 Navigating in Setup Mode

Note: The radio receiver automatically reactivates the operating mode if there is no input for approx. 1 min. Otherwise, each actuation of the upper button will access the next higher menu level until the operating mode is reached.

Figure: Navigating in setup mode



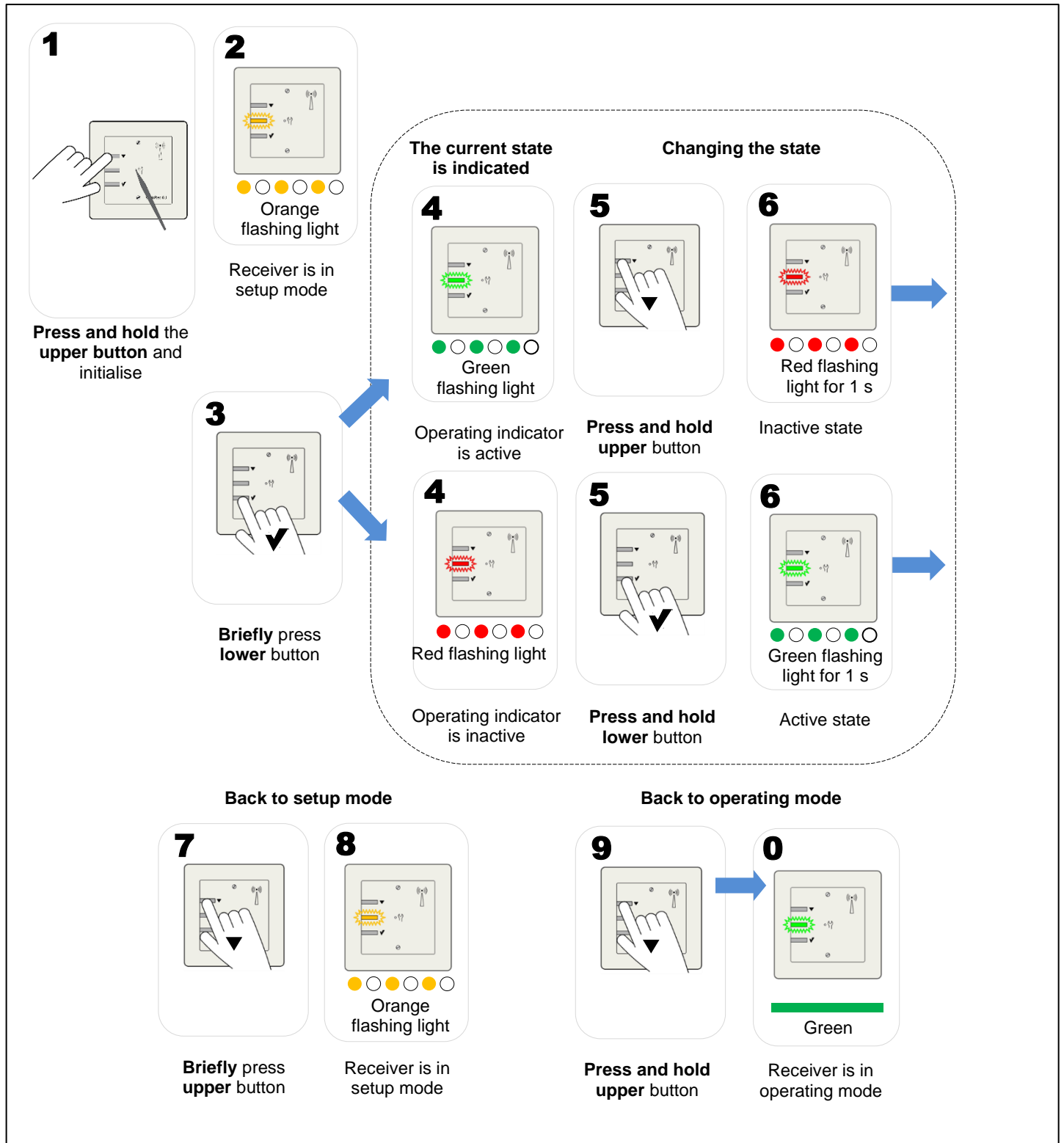
7.2 Activating / Deactivating the Operating Indicator

The operating indicator (steady green light) may be deactivated.

- Active operating indicator: A steady green light is always activated (default setting).
- Inactive operating indicator: There is no indication during operation, only during the reception of a radio call or in the case of errors the appropriate flash sequence is activated.

Image sequence: Activating / deactivating the operating indicator

Important note: All the below- and above-mentioned information pertaining to the operating mode always refers to the **activated** state of the operating indicator! This manual does not contain image sequences applicable for the deactivated operating indicator (steady green light=off).

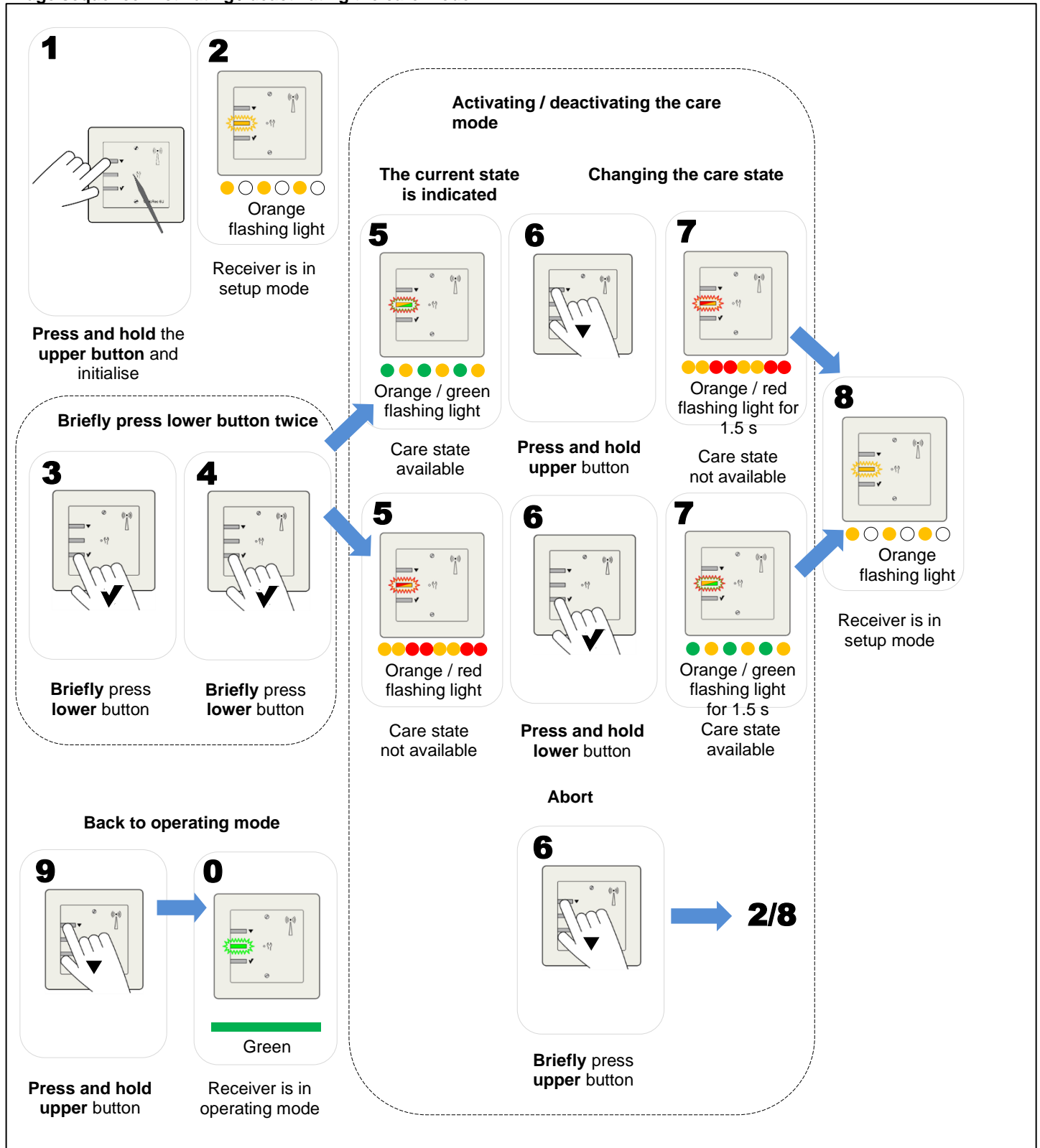


7.3 Activating / Deactivating the Care Mode

Here, the care mode (the optional deactivation of the call forwarding for a set timeout) can be permitted (active) or forbidden (inactive).

- Active care mode: During operation, the care mode may be activated by pressing the button.
- Inactive care mode: The care mode is switched off.

Image sequence: Activating / deactivating the care mode



7.3.1 Indicating and Setting of the Care Mode Timeout

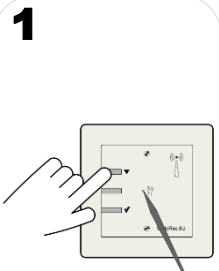
The timeout can be adjusted as long as the care mode is activated.

- Possible timeouts
 - 3, 5, 10, 20, 30 minutes (note: factory setting is 5 minutes).

Image sequence: Indicating and setting of the care mode timeout

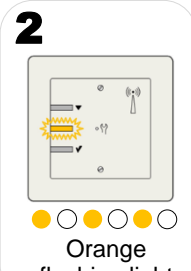
Care setup mode
Indication of care state

1



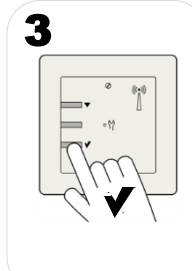
Press and hold the upper button and initialise

2



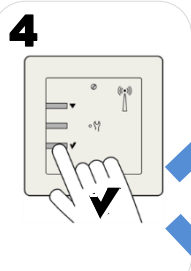
Orange flashing light
Receiver is in setup mode

3




Briefly press lower button

4




Briefly press lower button

5



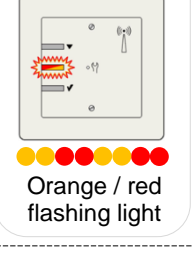
Orange / green flashing light

6



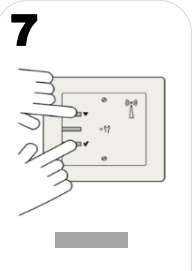
Press and hold both buttons

5



Orange / red flashing light

7

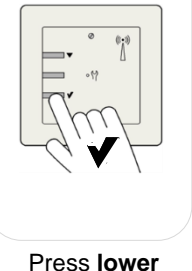


Indicator

Timeout	Indicator
3 min	 Green
5 min	 Orange
10 min	 Red
20 min	 Green flashing light
30 min	 Orange flashing light

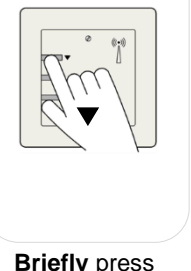
Toggle to the required timeout or Exit the menu

8



Press lower button several times

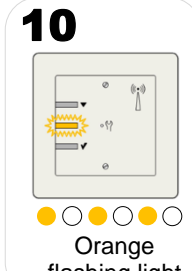
9



Briefly press upper button

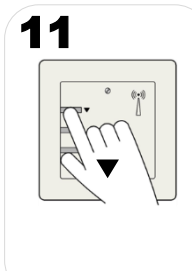
Back to the operating mode

10




Orange flashing light
Receiver is back in setup mode

11



Press and hold upper button

0



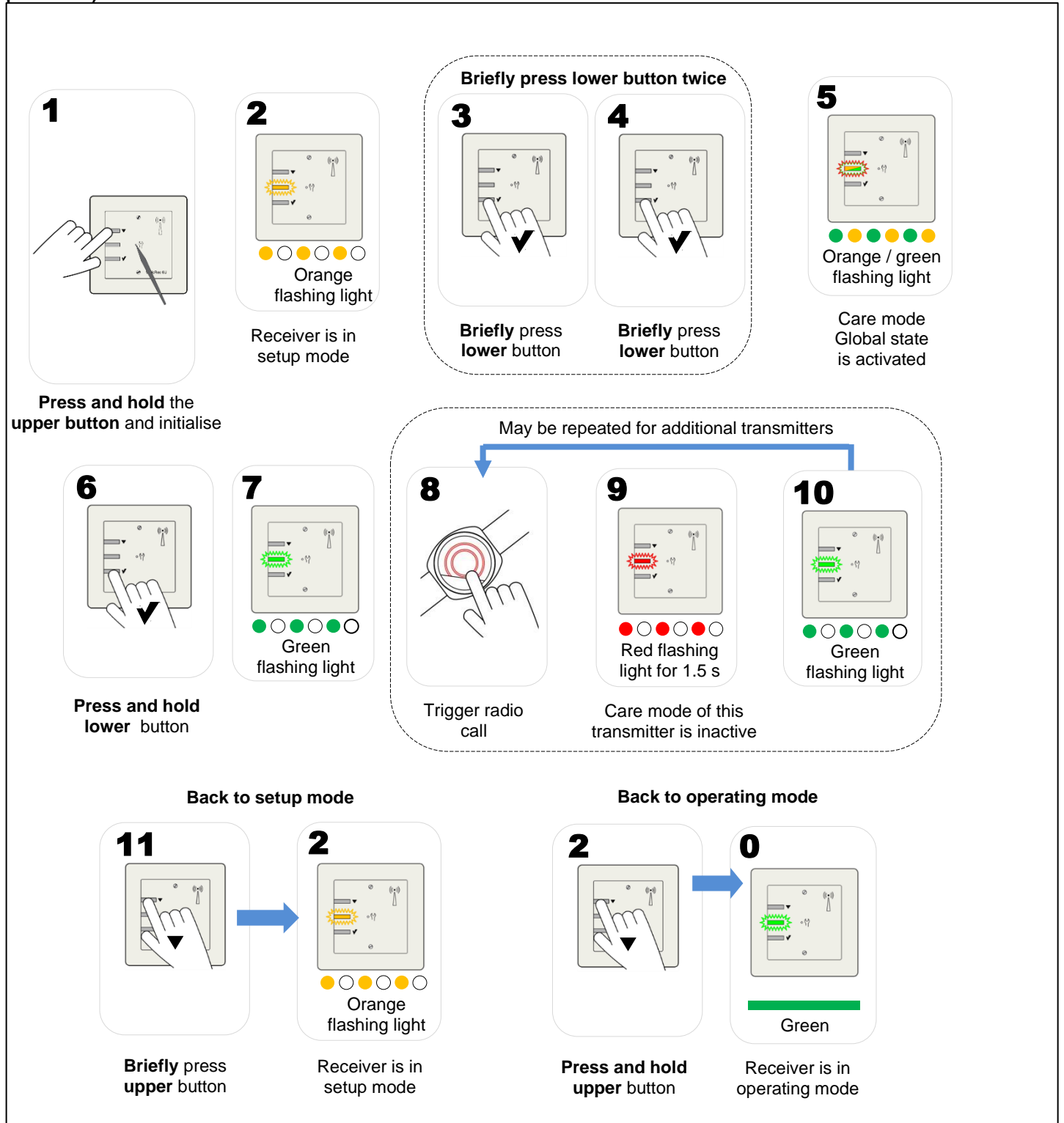
Green
Receiver is in operating mode

7.3.2 Cancelling Call Suppression in the Care Mode for Individual Transmitters

Generally, in the care mode **all** received radio calls are ignored during timeout. This configuration allows the care mode for **individual** radio transmitters to be **inactive**. These transmitters are signalled even if the care mode is activated.

- Sequence for cancelling the call suppression of individual transmitters:
 - Configure the care state parameter as active (global state),
 - then deactivate the care mode parameter for those radio transmitters that are not to be used in care mode.
- Sequence for cancelling the call suppression of all transmitters:
 - Set up the care mode as inactive. This deletes all parameters of individual transmitters.

Image sequence: Deactivating the call suppression in the care mode for individual transmitters (with activated care state parameter)

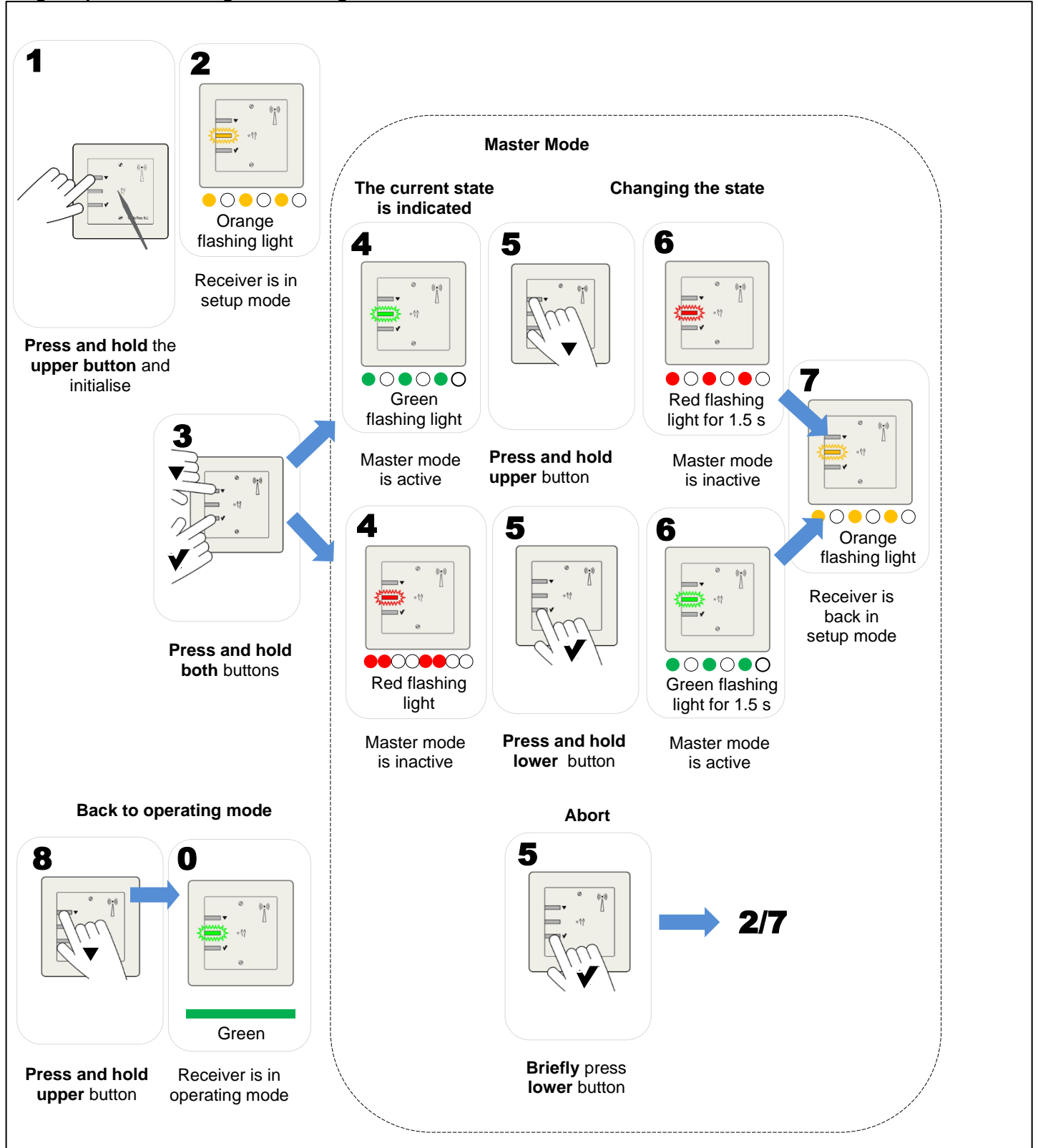


7.4 Setting the Master Mode

In the master mode the radio receiver accepts radio signals of transmitters that **have not been programmed** and indicates appropriate messages (broadcast reception). In this mode, time-dependant monitoring functions (vital functions, 24-h monitoring) are inactive.

Note: In this mode calls of programmed receivers are not accepted. If **all** radio transmitters should be received, all previously programmed transmitters must be deleted (see "6.2.5 Deleting All Programmed Transmitters").

Image sequence: Activating / deactivating the master mode



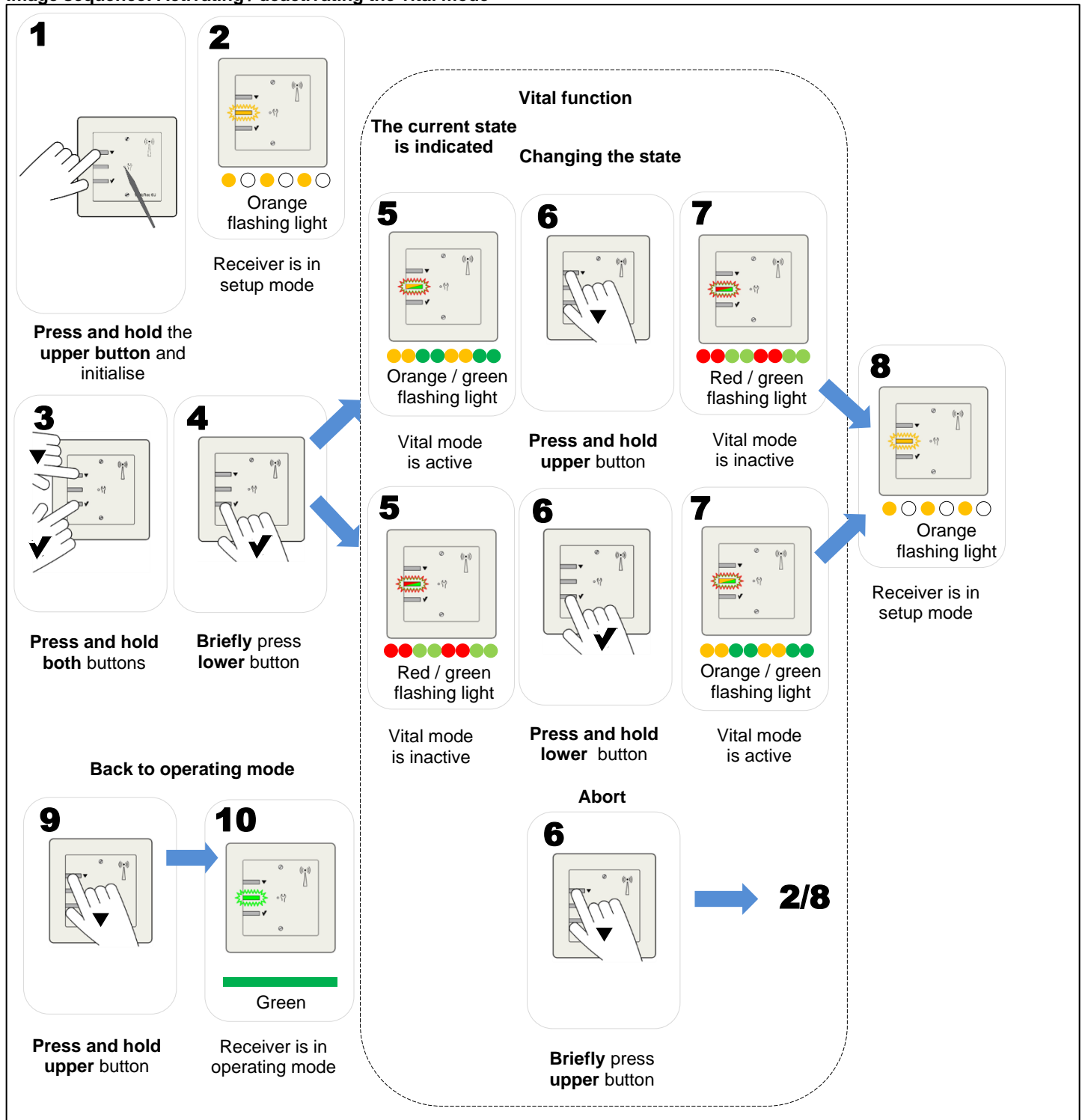
7.5 Switching On/Off the Vital Monitoring ATTENTION: Item 7.5.1 must be observed/included!

If vital monitoring is active, a call message is generated only if no radio call has been received from a matching radio transmitter within 24 hours. With each reception of a radio call the daily timer is restarted. For example, this allows to monitor if a person has triggered a vital sign by a radio call, e.g., also via wireless contact mats, motion detectors, bed detectors, etc. Note: This function cannot be combined with the master mode.

Caution: If vital monitoring is active, all previously programmed transmitters will not trigger normal calls!
For exceptions, see item "7.5.1 Ignoring Vital Monitoring of Individual Transmitters"

- Functions
 - Vital monitoring is active: A call is triggered if no vital call is received within 24 hours.
 - Vital monitoring is inactive: Vital calls are ignored (a vital message is not generated if no vital call is received).

Image sequence: Activating / deactivating the vital mode



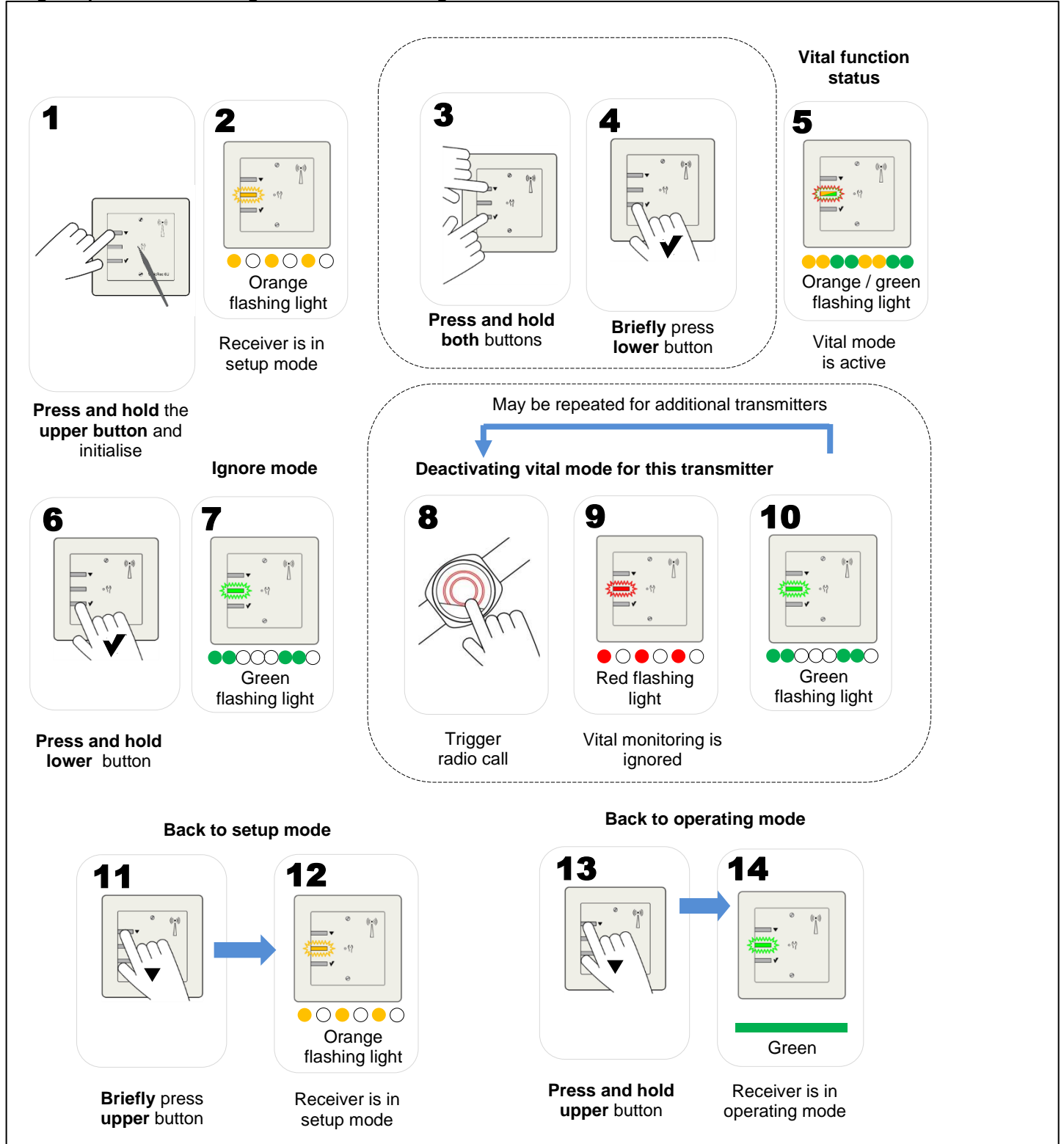
7.5.1 Ignoring Vital Monitoring of Individual Radio Transmitters

Function: Excludes individual transmitters from activated vital monitoring.

If vital monitoring is active, the radio receiver generates a call message if **no radio call** has been received from a vital monitoring radio transmitter within 24 hours.

- Functions
 - Ignore vital monitoring: Vital monitoring does **not** trigger a call if a 24 h radio message **is not received** from an “ignored” radio transmitter.

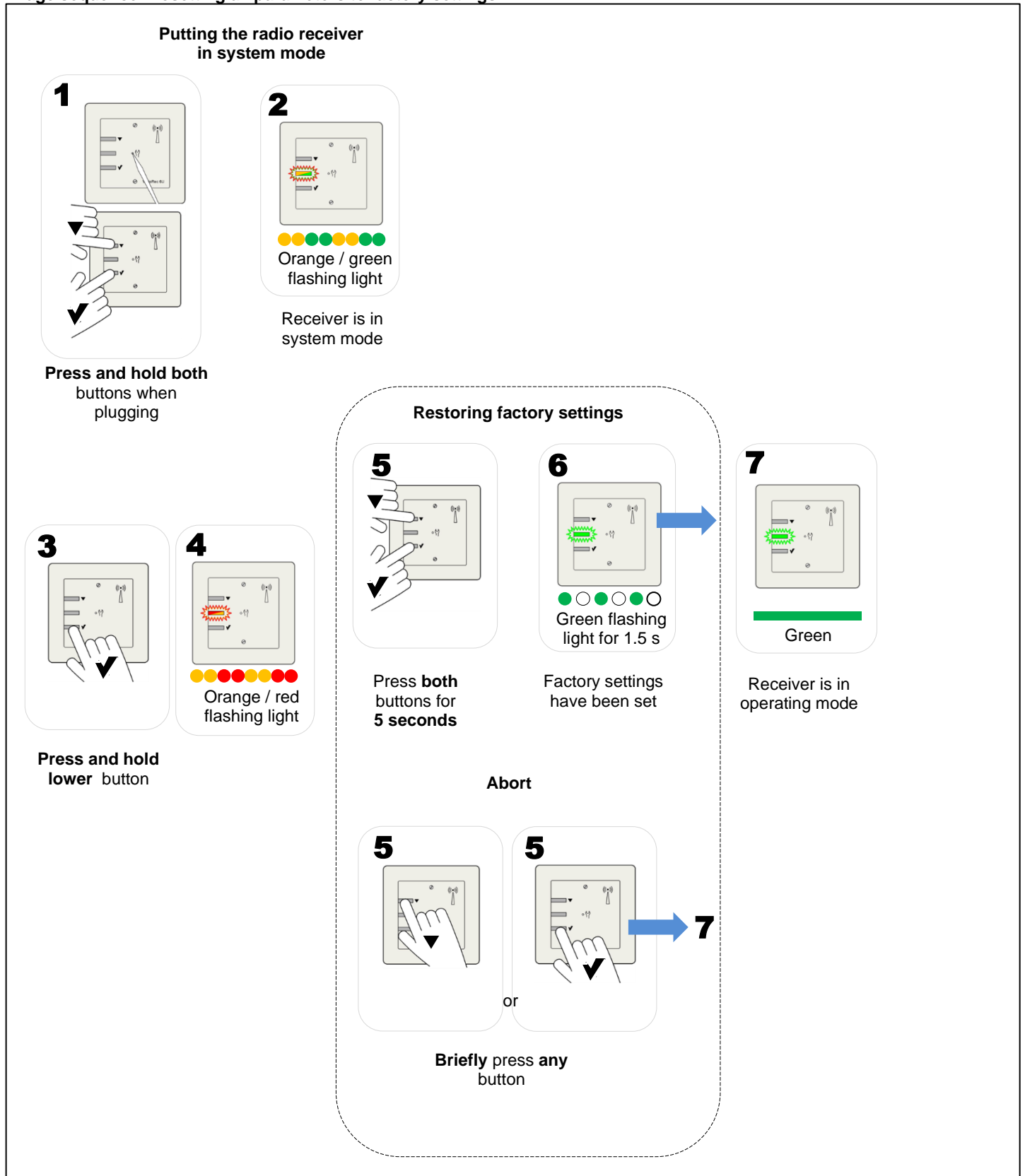
Image sequence: Deactivating vital mode monitoring for individual radio transmitters



8 System Control

8.1 Resetting All Parameters to Factory Settings

Image sequence: Resetting all parameters to factory settings



9 Regular Maintenance



Important

Carefully perform the periodic checks. Immediately replace worn / damaged parts.

A damaged system or a system not functioning properly must not be used until it has been repaired.

Measures

We suggest a weekly inspection including the reception of a test call while observing the indicator elements and the call transmission. If radio reception problems are suspected, check the range as in an initial putting into operation.

10 Specifications

Specifications

Operating frequencies:	See product variants
Range:	Within buildings typically up to 30 m
Controls:	Lower button, upper button
Indicators:	Red / green / orange indicator LED
Detector (standard):	Call indicator contact: 24 V DC / 100 mA Fault indicator contact: 24 V DC / 100 mA Light indicator contact: 24 V DC / 100 mA
Detector variants:	A pluggable connector assembly allows to realise various detector variants. Please enquire.
No. of programmable radio transmitters:	63 transmitters can be programmed
24-h monitoring:	Only for the 869 MHz model (social alarm frequency)
Blockage monitoring:	Only for the 869 MHz model (social alarm frequency)
Power supply:	24 V DC / approx. 20 mA from the call system or a separate power supply
Installation:	Surface mounting / on switch boxes
Dimensions:	55 x 55 x 10 mm (W x H x D)
Colour:	Clear white
For frame design:	PeHa 0500-981, complete cover list on request
Temperature range:	0°C to +55°C
Weight:	Approx. 50 g
Protection class:	IP 20
Conformity:	CE (RED directive, RoHS directive)

Accessory and Replacement Parts

Accessory and replacement parts can be found on the homepage of Lehmann Electronic GmbH.

11 Cleaning in Private and Hospital Sectors



Caution! Do not use abrasive cleaning agents.
Use only cleaning agents included in the VAH list.
Use only approved disinfectants according to EN 16615.

Cleaning:

Use a soft, moist, not dripping cloth. Use demineralised water. Do not spray.

12 Cleaning in the Private Sector



Caution! Do not use abrasive cleaning agents.

Cleaning:

With a soft, moist, not dipping cloth with the addition of a small amount of detergent. Do not spray.

13 Repair

The device is not intended for repair; a replacement is possible.

14 Replacement Parts (Informal)

Note: The current parts list can be found on the homepage.

15 Returns

You may help us to assess a return if you enclose a short description of the reasons and, in case of a problem, a description.

16 Staff Briefing

Staff using the **VarioRec6** radio receiver and matching radio transmitters must have the “trained personnel” status.

17 Documentation

The instructed person must be provided with at least one copy of this manual and the Quick Reference Guide for further reference.

18 Conformity

Lehmann Electronic declare that, if applicable, the product complies with the essential requirements and the other relevant provisions of the EMC Directive 2014/30/EU, the Radio Equipment Directive (RED) 2014/53/EU, and the RoHS Directive 2011/65/EU. You will find the complete declarations of conformity in the Internet under: www.lehmannweb.de.



REACH Regulation Within the meaning of the Regulation we are a downstream user. The product is exempt from the specific labelling requirements of the Regulation. Further information is available on the website.

19 Messages / Terminal Panel

In the default configuration the following messages are output via the terminal panel:

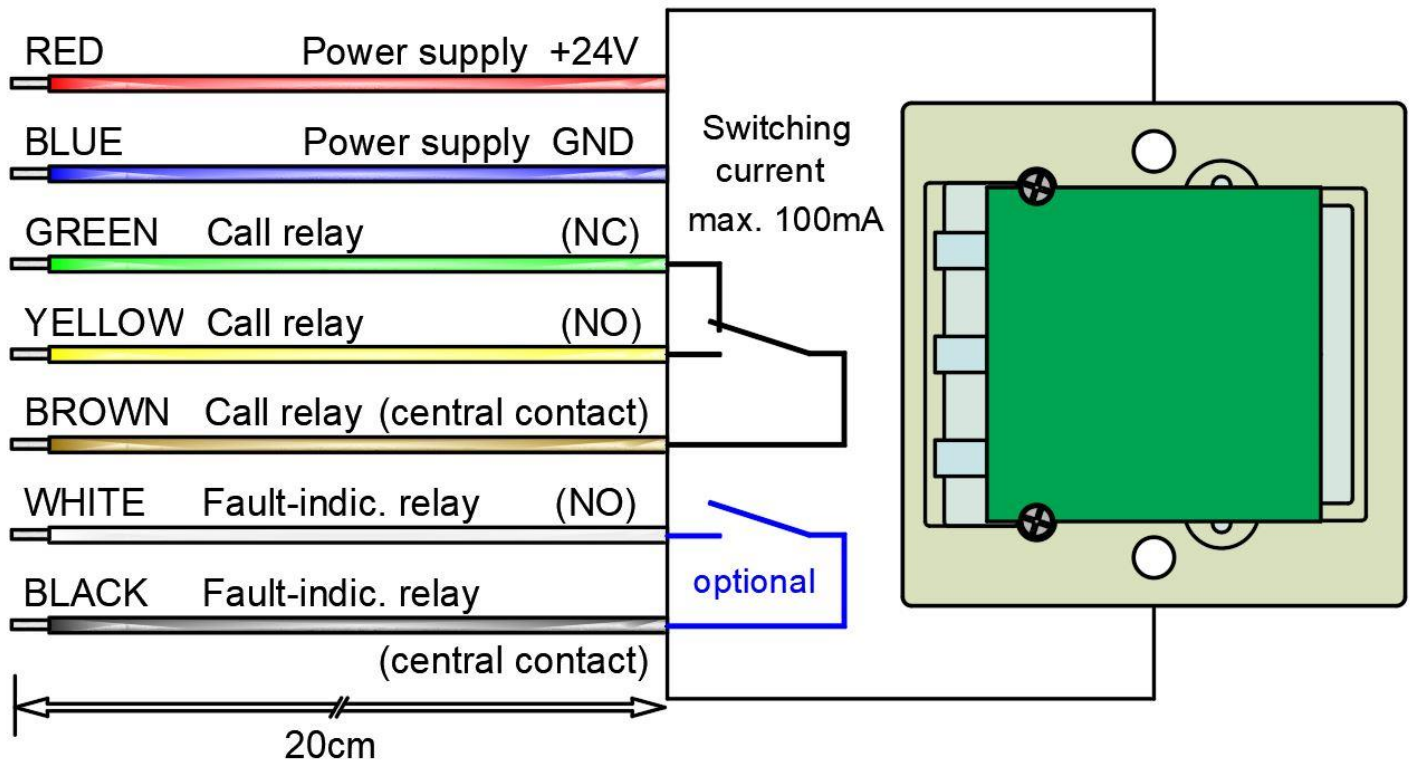
- Call
 - Call message and fault messages
- Fault
 - Fault messages
- Light contact
 - For switching a light control relay

Fault messages

Fault messages are:

- “Battery Low” message
- Reception blockage (only receivers with social alarm frequency)

20 Electrical Connection and Installation



21 Warranty

The manufacturer shall not be liable for any damage resulting from improper or inappropriate use. During the legal warranty period we shall correct, free of charge, all defects of the device attributable to material or manufacturing defects, either by repair or replacement. The warranty shall become void in the case of interference by a third party or improper use. The warranty shall not apply to wear and tear of moving parts.

22 Service Address

Please contact the supplier of your call system.

23 Disposal Instructions

Waste electrical and electronic equipment and batteries must not be disposed of together with domestic waste. Dispose of waste electrical and electronic equipment, waste batteries and packaging material according to applicable laws and disposal regulations.



The symbol on the left identifies electronic equipment that must be collected separately from domestic waste and recycled in an environmentally responsible manner. Waste electrical and electronic equipment and waste batteries may contain harmful substances that can be harmful to the environment and human health. Recycling of the raw materials contained in the equipment can make a contribution to environmental protection.

Waste electrical and electronic equipment and batteries must be disposed of separately. They must be brought to a collection point for electrical and electronic equipment or batteries or to the distributor.



Packaging material must be disposed of separately according to applicable laws and disposal regulations.

The end user is solely responsible for the deletion of personal data on the waste electrical and electronic equipment to be disposed of.