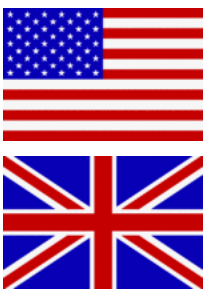
Emergency Lighting

OPERATING INSTRUCTION

centralized supply system

decentralized supply system



English

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Software version: 1.31.1.31

Table of contents

Information of the operating instruction

Important instructions

According to EN 50110-1:2004-11 any work on the installation has to be executed by qualified electricians only.

Other activities described in this operating instruction have to be executed only by persons who:

- have been instructed by qualified persons.
- have fully understood their tasks and the functions of the installation.
- are under observation and being checked regularly by qualified persons.

Please observe the local rules and regulations.

Symbol explanation

The following symbols must be observed.

Attention:
Indicates hazards that may be the cause for damage to human, plant or environment as well as very important instructions.

Note:
Provides information and advice for navigating within the described plant, components or functions.

Manufacturer

Beghelli PRÄZISA GmbH

Internet: www.beghelli.de
E-mail: kontakt@beghelli.de

Further documents

Catalogues
SICURO

The catalogue contents are also available over the internet – www.beghelli.de.

CD-ROM
Catalogue CD

Type codes

Designation:	Station type:	Mains monitoring:	Mains supply:	Battery supply:	Mains output voltage:	Battery output voltage:
SICURO-230Z	main station	3~	400 V AC 50/60 Hz 3~	216 V DC	230 V AC 50/60 Hz 1~	216 V DC
SICURO-230Z	sub station	1~	230 V AC 50/60 Hz 1~	216 V DC from main station	230 V AC 50/60 Hz 1~	216 V DC
SICURO-230Z	sub station	3~	400 V AC 50/60 Hz 3~	216 V DC from main station	230 V AC 50/60 Hz 1~	216 V DC
SICURO-24Z	sub station	1~	230 V AC 50/60 Hz 1~ from main station, combined with battery supply	216 V DC from main station, combined with mains supply	24 V DC	24 V DC
SICURO-24G	main station	1~	230 V AC 50/60 Hz 1~	24 V DC	24 V DC	24 V DC

Attention: **The specified mains and battery output voltages are only valid if output cards of the types AK 1/2/4x32 EÜ/SÜ resp. AK24 4x32 EÜ are used.**

Mains output voltage:

> The mains output voltage designates the voltage with which the output circuits of an emergency light station can be operated if no supply failure is present.

> The mains output voltage designates the voltage with which the output circuits of an emergency light station are operated if a partial supply failure is present.

Battery output voltage:

> The battery output voltage designates the voltage with which the output circuits of an emergency light station are operated if a general supply failure is present.

> The battery output voltage designates the voltage with which the output circuits of an emergency light station are operated if a function test, a duration test, an insulation test or a read-in is executed.

Preface

This operating instruction describes the input and output of data using the internal EVA unit of an emergency light station. Furthermore device functions and device parameters are documented. The provided information conforms to the functional scope of mentioned software versions. Additional information can be requested from the above mentioned address.

The technical content of this operating instruction is correct at time of print.
Subject to change without prior notification.

General operating of the device – EVA units

EVA unit (white, RAL9003) B292700001:

EVA unit for input, process and output purposes of SICURO-24Z and SICURO-24G systems. The colour of the cover is white (RAL9003).

"1": cover (white, RAL9003)

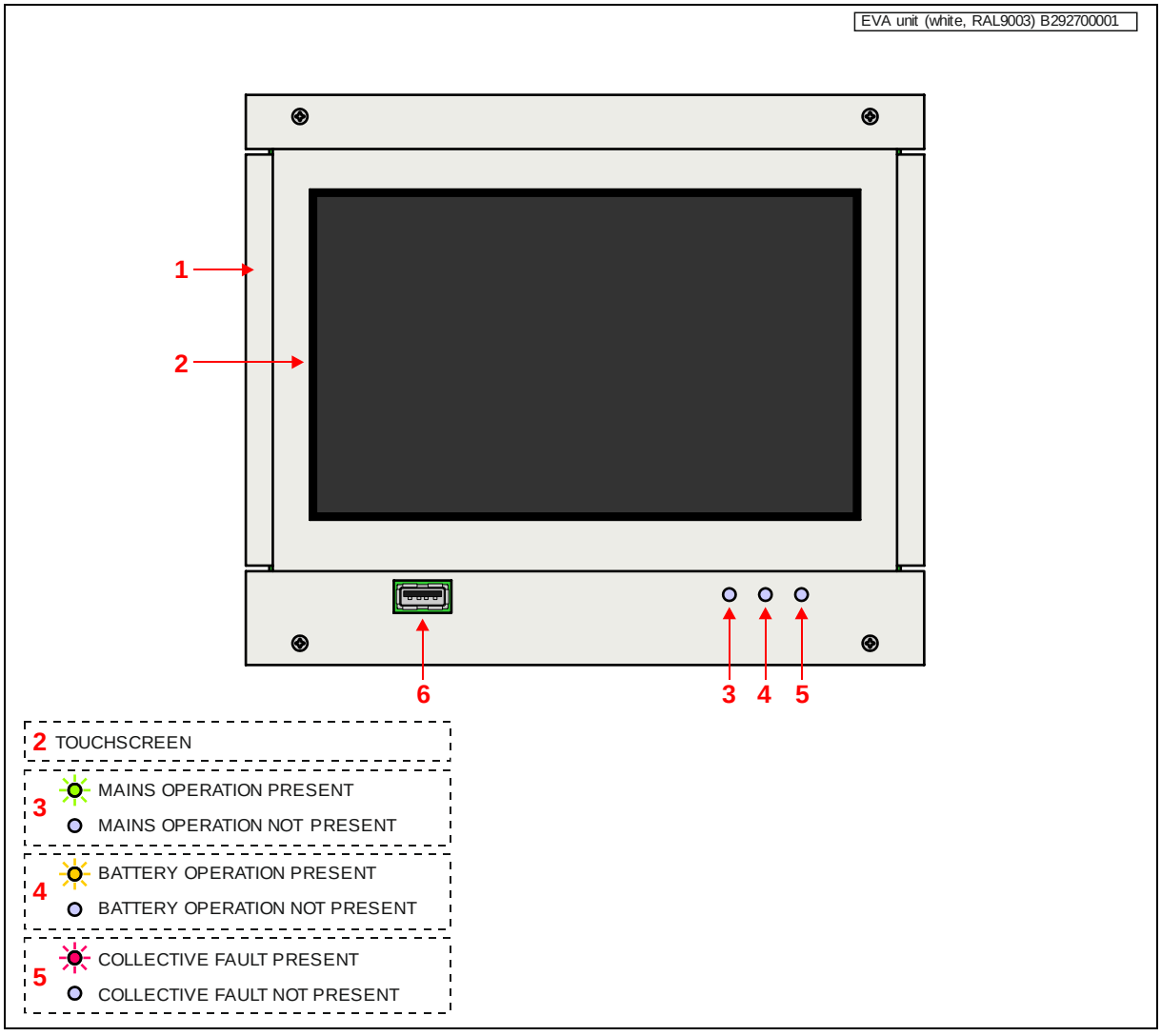
"2": touchscreen

"3": optical indication for mains operation (green)
indication on – green: mains operation present
indication off: mains operation not present

"4": optical indication for battery operation (orange)
indication on – orange: battery operation present
indication off: battery operation not present

"5": optical indication for collective fault (red)
indication on – red: collective fault present
indication off: collective fault not present

"6": USB port (type: A)



EVA unit (grey, RAL7016) B292700002:

EVA unit for input, process and output purposes of SICURO-24Z and SICURO-24G systems. The colour of the cover is grey (RAL7016).

"1": cover (grey, RAL7016)

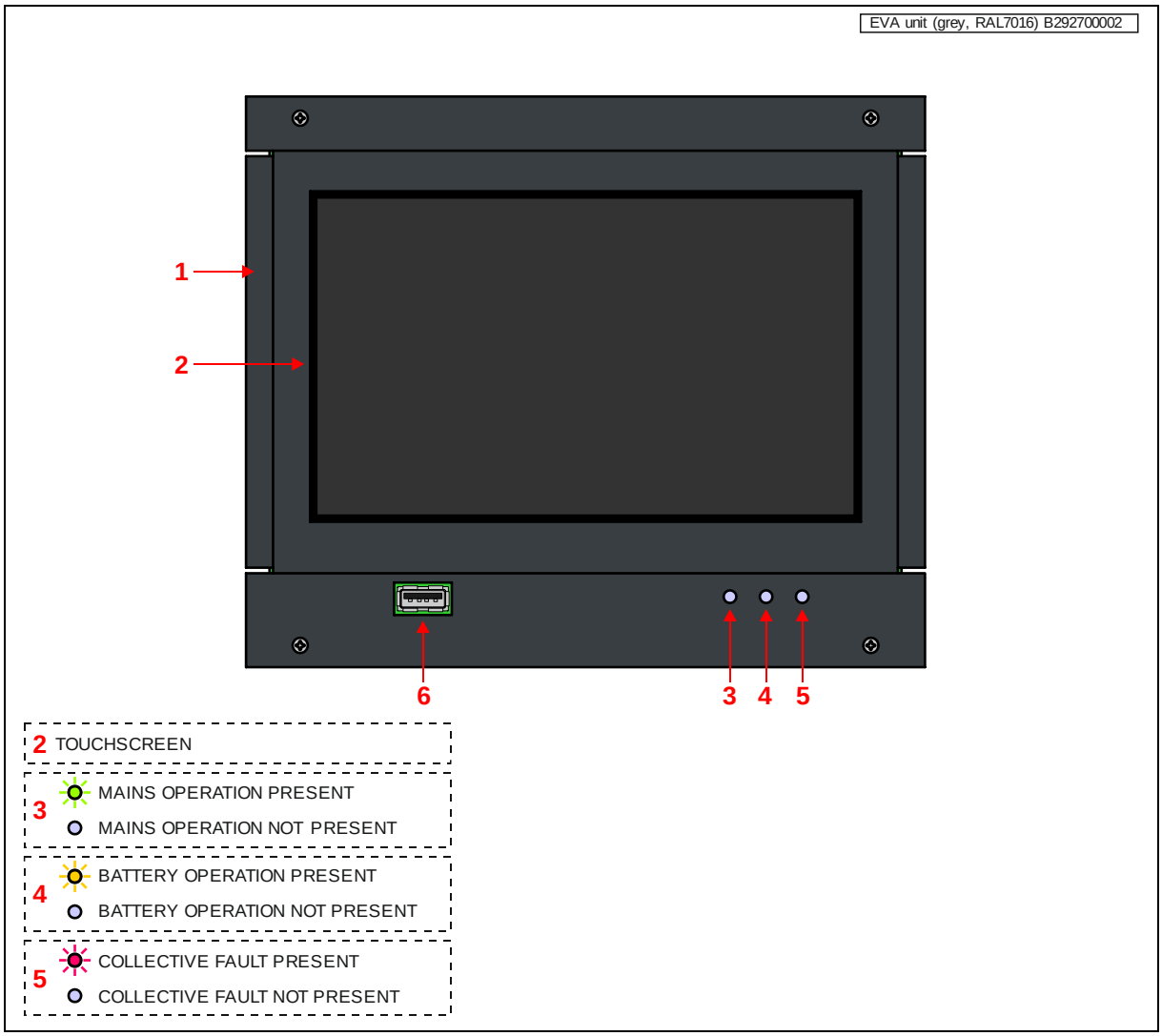
"2": touchscreen

"3": optical indication for mains operation (green)
indication on – green: mains operation present
indication off: mains operation not present

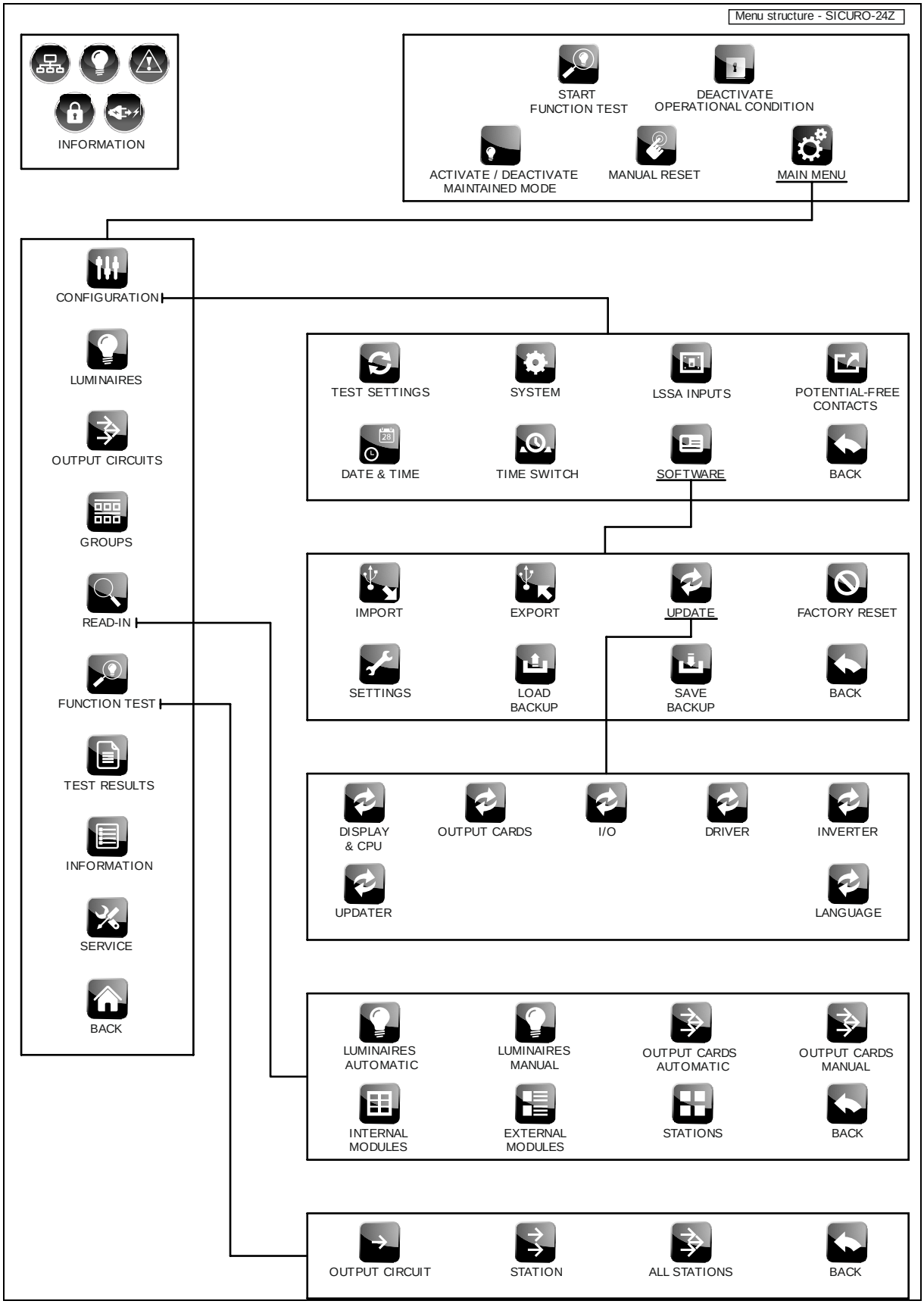
"4": optical indication for battery operation (orange)
indication on – orange: battery operation present
indication off: battery operation not present

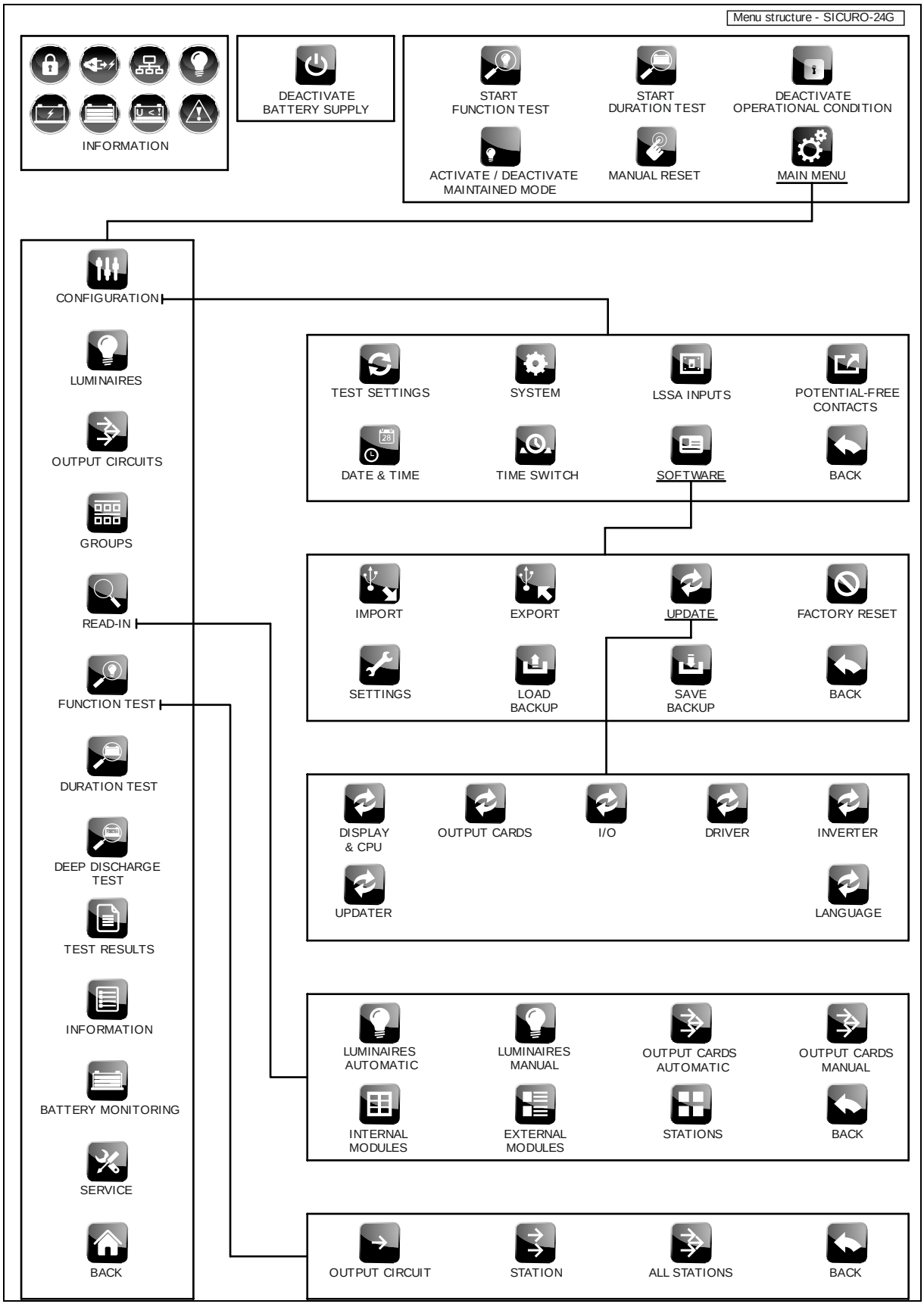
"5": optical indication for collective fault (red)
indication on – red: collective fault present
indication off: collective fault not present

"6": USB port (type: A)



Menu structures





Cold start / warm start

Cold start:

The cold start is executed during the final inspection of the emergency light station at Beghelli PRÄZISA. The operating system switches into the automatic operation after the cold start. At a cold start the factory settings apply for all data (see factory settings). Afterwards a pre-programming of the software according to the individual switchboard configuration is carried out by Beghelli PRÄZISA.

Attention: **During a cold or warm start no interruption of the mains or battery supply may be done, because this can lead otherwise to data loss.**

During the execution of a saving procedure no simultaneous interruption of the mains and battery supply may be done, because this can lead otherwise to data loss.

Note: **After a new cold start we recommend a following commissioning by our service technicians to ensure the correct function of the operating system.**

Warm start:

In case of interruption of mains and battery supply the emergency light station executes a warm start if at least one of the two supplies recurs. Furthermore a warm start can be executed by commands over the operating system as well. Already programmed data are being retained. The operating system switches into the automatic operation after the warm start.

Note: **A cold start as well as a warm start can take up to 5 minutes. During this time it can happen that the EVA unit indicates no messages.**

Operating modes of the emergency light station, deep discharge protection

The operating system supports three operating modes – automatic operation, manual operation and emergency operation.

Automatic operation:

In automatic operation current information of the emergency light station are indicated. Device functions can be initiated over the touchscreen of the EVA unit or executed automatically. Furthermore bus connections as well as in- and outputs for control resp. monitoring purposes of the emergency light station are available. After expiration of a selectable time in automatic operation without an actuation of the touchscreen the operating system can indicate a screensaver provided this device function is activated. During the indication of the screensaver the automatic operation is still active. By an actuation on any position of the touchscreen the automatic operation will be visible again.

Manual operation:

By the actuation of certain button fields the operating system switches into the manual operation. Within the menu structure settings can be changed and device functions can be executed. Two minutes after the touchscreen was lastly actuated the operating system leaves automatically the respective menu level and returns to the previous menu level until the operating menu is reached. However, this does not apply for menus which contain in- and output functions for special programming.

Emergency operation:

If a general supply failure is detected on the mains supply of an emergency light station (mains failure on phase conductor or neutral conductor) the operating system switches into the emergency operation with battery supply (battery operation – DC). Independently of the respective programming of the operating mode all output circuits resp. luminaire modules of the affected emergency light station will be switched on. The access to the menus of the operating system will be restricted.

If a partial supply failure is detected on the critical circuit or on an accordingly programmed LSSA switch input of an emergency light station (mains failure on sub-distribution monitoring), the operating system switches into the emergency operation with mains supply (mains operation – AC). Depending on the respective programming of the operating mode the output circuits resp. luminaire modules of the affected emergency light station will be switched on. The access to the menus of the operating system will be restricted.

All supply failures are indicated and protocolled on the touchscreen. If no supply failure is detected during an emergency operation the emergency light station returns into the automatic operation. Depending on the programming a manual reset of the operating modes for output circuits resp. luminaire modules can be necessary after this on the emergency light station.

Note: **Detailed information regarding the mains and battery supply as well as the mains and battery output voltage of the SICURO systems are to be found at the type codes (see type codes).**

Deep discharge protection:

All emergency light stations are capable of a deep discharge protection for the battery supply. If the voltage of the battery supply has reached the switch-on value for the deep discharge protection then the deep discharge protection is activated by the operating system whereby a deactivation of the emergency operation with battery supply (battery operation – DC) takes place. This will be indicated over the optical indication for collective fault (red) as well as over the button field "INFORMATION" (collective fault and deep discharge red) on the EVA unit. In the operating menu text fields for additional information are indicating further details.

If the voltage of the battery supply has reached the switch-off value for the deep discharge protection then the deep discharge protection stays activated with respective indications but without deactivation of the emergency operation with battery supply (battery operation – DC). An actuation of the button field "MAIN MENU" calls up an input prompt to execute a manual reset where the operating system deactivates the deep discharge protection.

Attention: **At activated deep discharge protection the emergency light stations can not switch into the emergency operation with battery supply (battery operation – DC) as long as the switch-off value for the deep discharge protection is not reached.**

Button fields

Button fields - general - view 1 of 2


SAVE INPUT AND LEAVE MENU


DO NOT SAVE INPUT AND LEAVE MENU

ABORT PROCEDURE

CLOSE TEXT FIELD


LEAVE MENU


SAVE DATA OVER USB PORT


CALL UP TIME INPUT FOR CYCLE TIME


INCREASE INPUT VALUE

ADDING OF DEVICE PARAMETERS


DECREASE INPUT VALUE

REMOVAL OF DEVICE PARAMETERS


APPLY INPUT FOR ALL EQUIPMENT


DELETE SELECTION


CALL UP DATE INPUT


CALL UP TIME INPUT FOR FIXED TIME

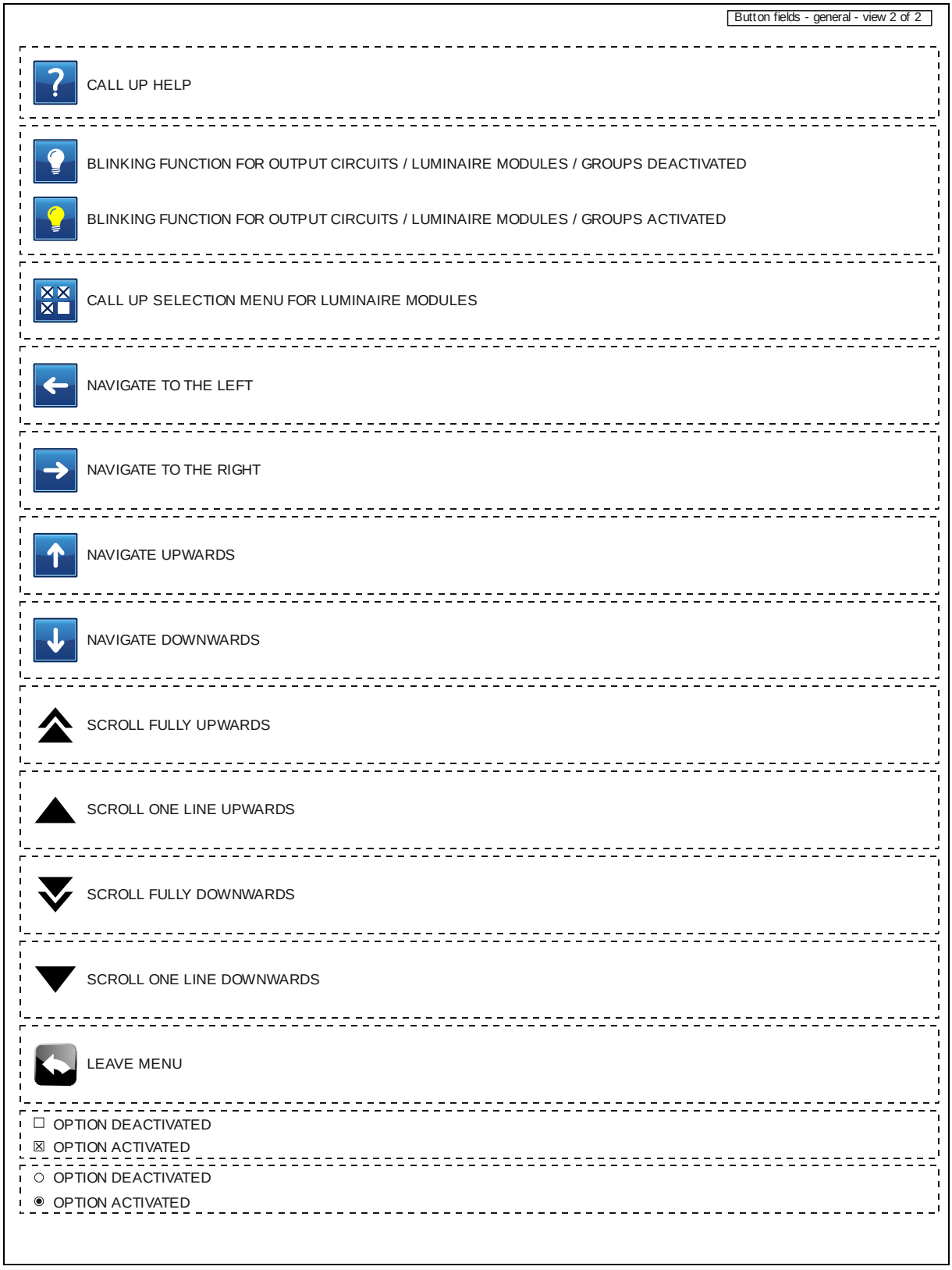

CALL UP TIME INPUT FOR INTERVAL TIME


CALL UP TEXT INPUT


CALL UP GENERAL DATA INPUT


CALL UP DETAILS / REPORT

Button fields - general - view 2 of 2



Note: **Greyed out button fields can <u>not</u> be actuated regarding the current system settings.**

0 "OPERATING MENU"

In the operating menu the current operating mode and the operational condition of the respective emergency light station as well as general data regarding the installation are indicated. Furthermore various device functions can be executed directly from the operating menu and a call-up of the menus "MAIN MENU" and "INFORMATION" can be done.

SICURO-24Z:

"1": text field – operating mode of the emergency light station,
indicated operating modes: automatic operation, emergency operation with duration, follow-up time

"2": text field with optical indication – mains supply on emergency light station

"3": text field with optical indication – mains supply on sub-distribution

"4": text field with optical indication – output card with card address and total current (cyclical measured)

"5": text field with optical indication – current for output circuit 1 (measured at last function test / duration test)

"6": text field with optical indication – current for output circuit 2 (measured at last function test / duration test)

"7": text field with optical indication – current for output circuit 3 (measured at last function test / duration test)

"8": text field with optical indication – current for output circuit 4 (measured at last function test / duration test)

"9": text field – station type and station address

"10": text field – date and time of the operating system

"11": text field – date and time of the last function test / duration test

"12": text field – date and time of the next automatic function test / duration test

"13": text field – additional information

"14": text field – additional information

"15": button field with optical indication – password protection for operating menu / main menu,
actuation of the button field before expiration of the access time: reset access time prematurely

"16": button field with optical indication – network connection,
actuation of the button field: indication of the IP address of the respective emergency light station

"17": optical indication – USB connection

"18": button field with 5 optical indications –
indication of various information regarding the respective emergency light station,
actuation of the button field:
call-up of the menu "INFORMATION"

"19": button field with optical indication – execution of a manual function test

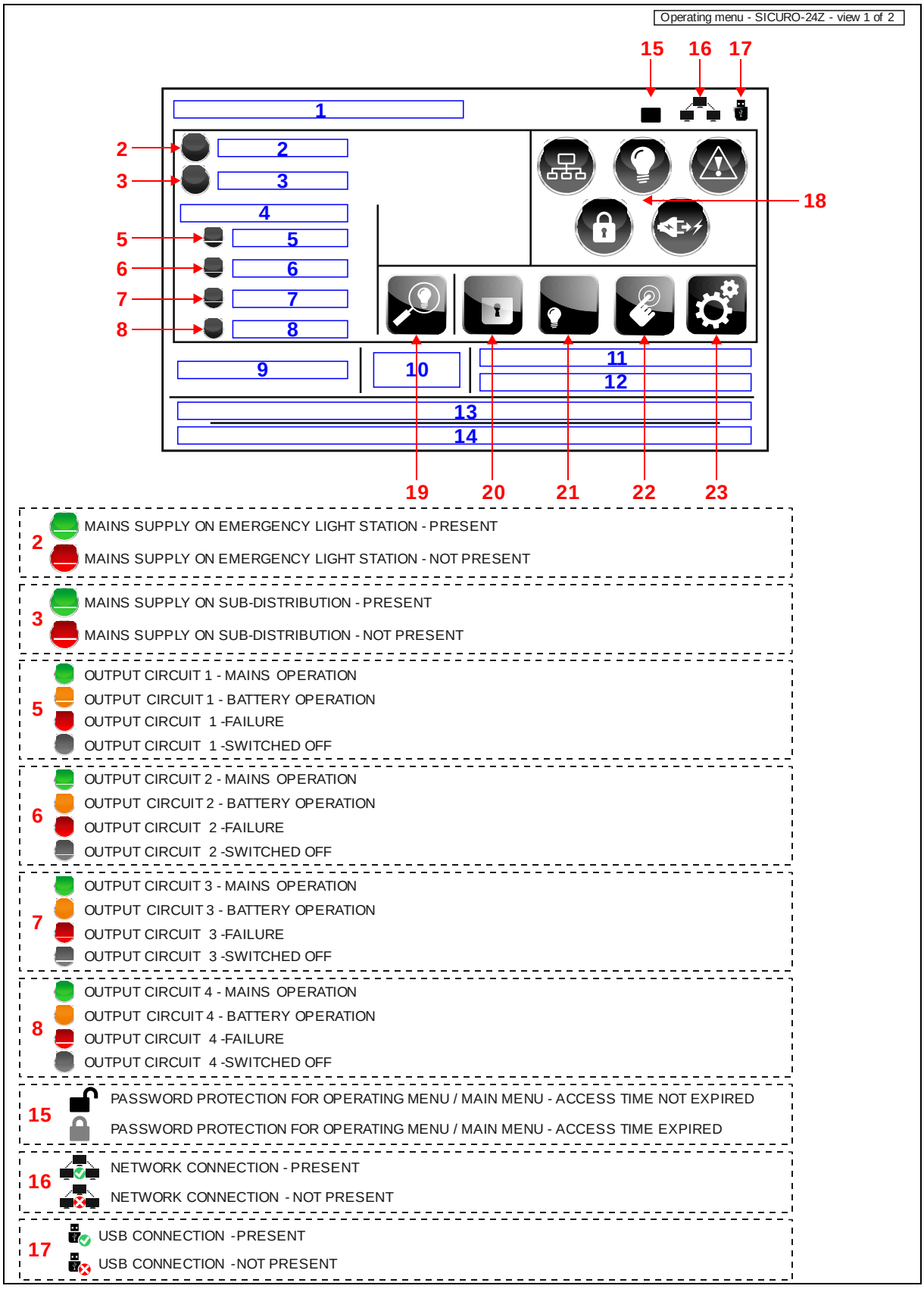
"20": button field with optical indication – deactivation of the operational condition for the respective emergency light station

"21": button field with optical indication – activation / deactivation of the maintained mode for the respective emergency light station together with all connected sub stations where appropriate

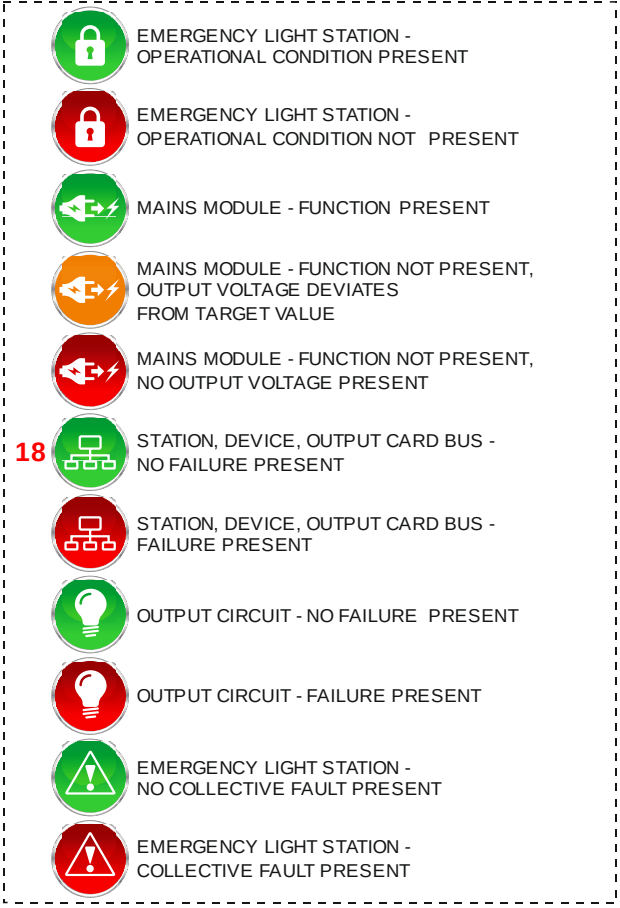
"22": button field with optical indication – execution of the manual reset for operating modes of the output circuits resp. luminaire modules

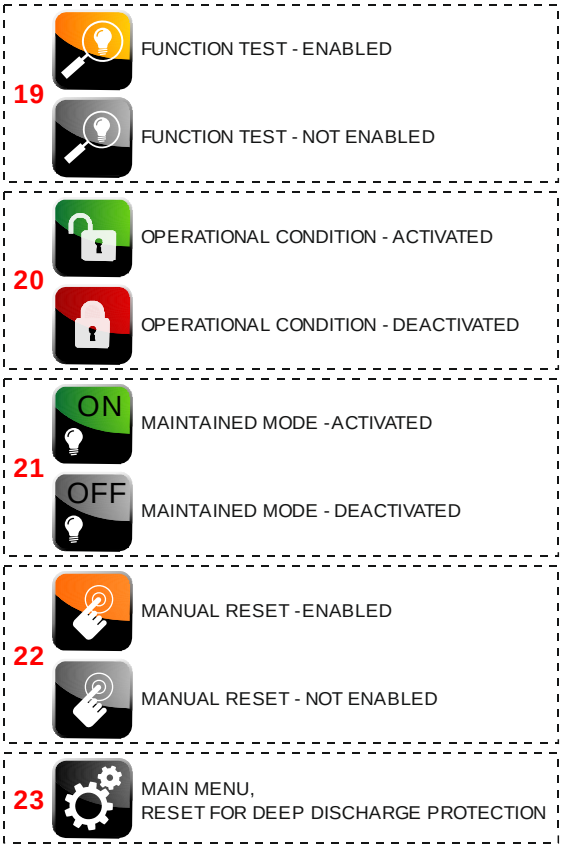
"23": button field – call-up of the menu "MAIN MENU",
execution of the manual reset for the deep discharge protection (if deep discharge protection is activated)

During the activated operational condition the operating menu is indicated in automatic and emergency operation as follows.



Operating menu - SICURO-24Z - view 2 of 2





SICURO-24G:

"1": text field – operating mode of the emergency light station, indicated operating modes:
automatic operation, emergency operation with duration, follow-up time

"2": text field with optical indication – mains supply on emergency light station

"3": text field with optical indication – mains supply on sub-distribution

"4": text field with optical indication – output card with card address and total current (cyclical measured)

"5": text field with optical indication – current for output circuit 1 (measured at last function test / duration test)

"6": text field with optical indication – current for output circuit 2 (measured at last function test / duration test)

"7": text field with optical indication – current for output circuit 3 (measured at last function test / duration test)

"8": text field with optical indication – current for output circuit 4 (measured at last function test / duration test)

"9": text field – station type and station address

"10": text field – date and time of the operating system

"11": text field – voltage of the battery supply

"12": text field – charge current / discharge current of the battery supply

"13": text field – date and time of the last function test / duration test

"14": text field – date and time of the next automatic function test / duration test

"15": text field – additional information

"16": text field – additional information

"17": button field with optical indication – password protection for operating menu / main menu,
actuation of the button field before expiration of the access time: reset access time prematurely

"18": button field with optical indication – network connection, actuation of the button field:
indication of the IP address of the respective emergency light station

"19": optical indication – USB connection

"20": button field with 8 optical indications –
indication of various information regarding the respective emergency light station,
actuation of the button field:
call-up of the menu "INFORMATION"

"21": button field with optical indication – execution of a manual function test

"22": button field with optical indication – execution of a manual duration test

"23": button field with optical indication – deactivation of the operational condition for the respective emergency light station

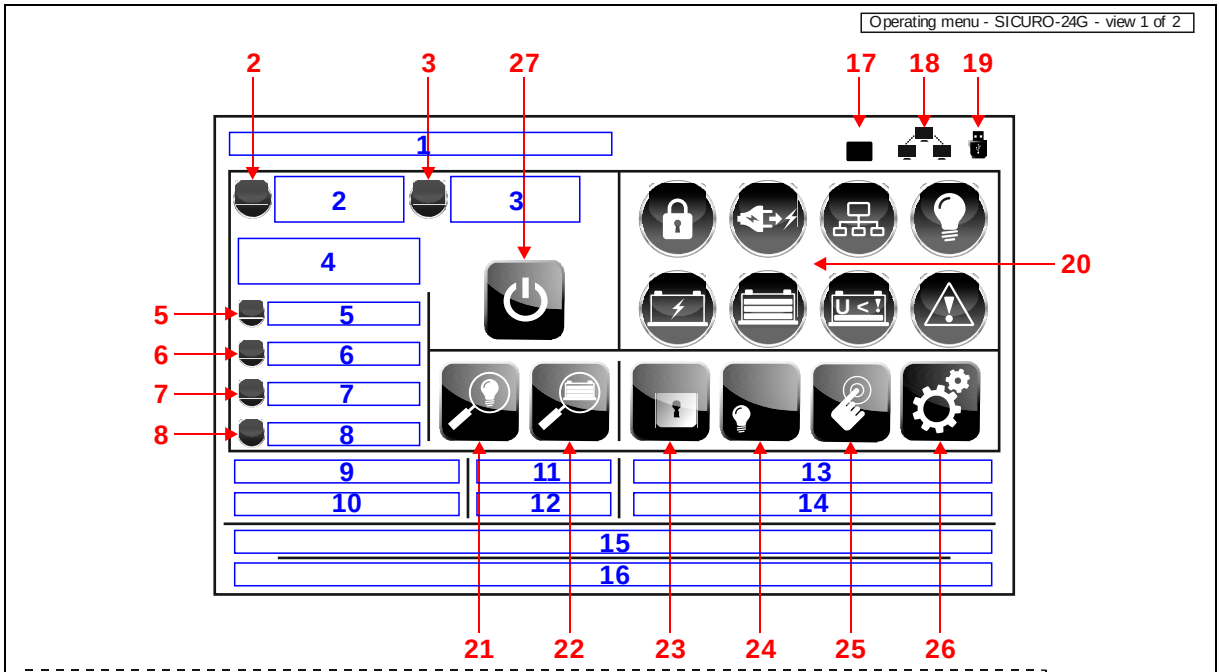
"24": button field with optical indication – activation / deactivation of the maintained mode for the respective emergency light station together with all connected sub stations where appropriate

"25": button field with optical indication – execution of the manual reset for operating modes
of the output circuits resp. luminaire modules

"26": button field – call-up of the menu "MAIN MENU",
execution of the manual reset for the deep discharge protection (if deep discharge protection is activated)

"27": button field during emergency operation with battery supply –
deactivation of the battery supply for the respective emergency light station

During the activated operational condition the operating menu is indicated in automatic and emergency operation as follows.



2
MAINS SUPPLY ON EMERGENCY LIGHT STATION - PRESENT
MAINS SUPPLY ON EMERGENCY LIGHT STATION - NOT PRESENT

3
MAINS SUPPLY ON SUB-DISTRIBUTION - PRESENT
MAINS SUPPLY ON SUB-DISTRIBUTION - NOT PRESENT

5
OUTPUT CIRCUIT 1 - MAINS OPERATION
OUTPUT CIRCUIT 1 - BATTERY OPERATION
OUTPUT CIRCUIT 1 -FAILURE
OUTPUT CIRCUIT 1 -SWITCHED OFF

6
OUTPUT CIRCUIT 2 - MAINS OPERATION
OUTPUT CIRCUIT 2 - BATTERY OPERATION
OUTPUT CIRCUIT 2 -FAILURE
OUTPUT CIRCUIT 2 -SWITCHED OFF

7
OUTPUT CIRCUIT 3 - MAINS OPERATION
OUTPUT CIRCUIT 3 - BATTERY OPERATION
OUTPUT CIRCUIT 3 -FAILURE
OUTPUT CIRCUIT 3 -SWITCHED OFF

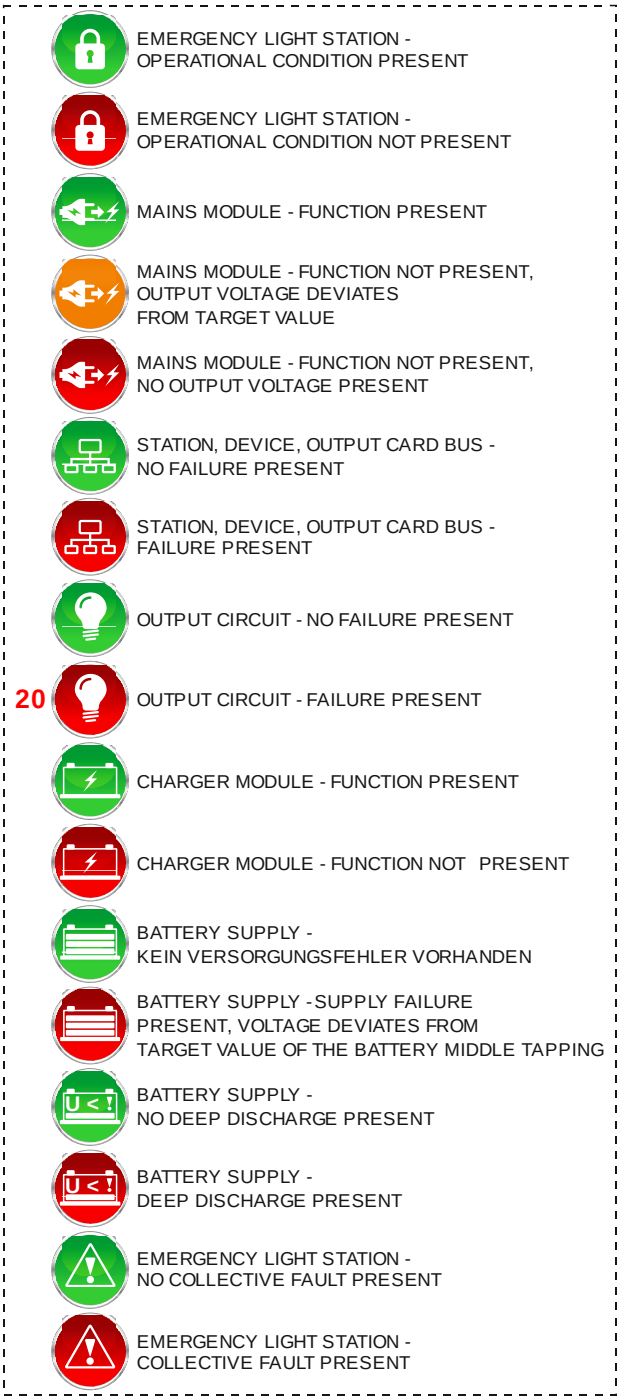
8
OUTPUT CIRCUIT 4 - MAINS OPERATION
OUTPUT CIRCUIT 4 - BATTERY OPERATION
OUTPUT CIRCUIT 4 -FAILURE
OUTPUT CIRCUIT 4 -SWITCHED OFF

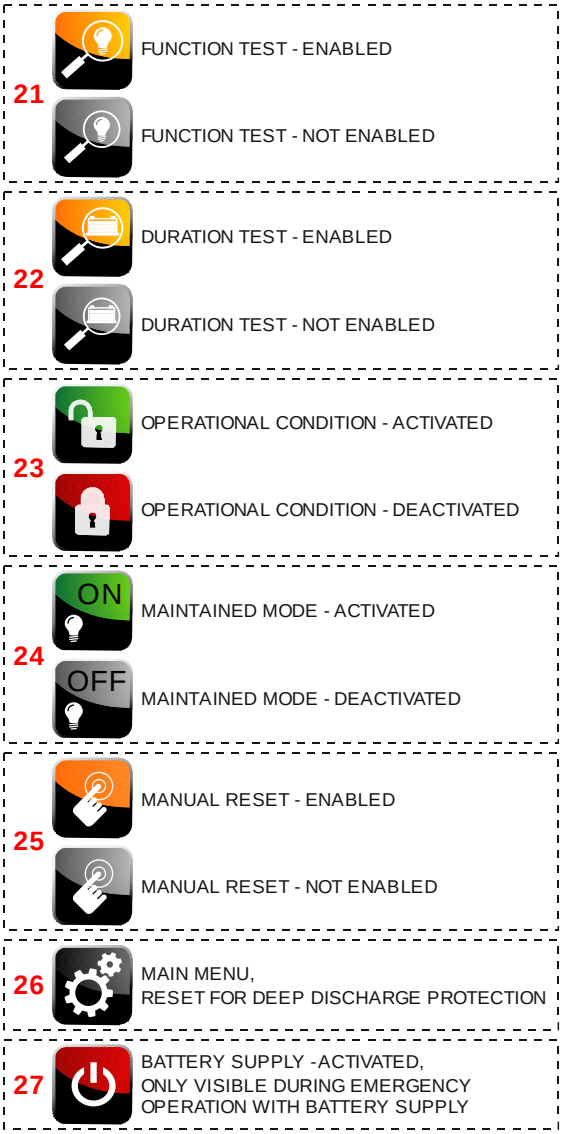
17
PASSWORD PROTECTION FOR OPERATING MENU / MAIN MENU - ACCESS TIME NOT EXPIRED
PASSWORD PROTECTION FOR OPERATING MENU / MAIN MENU - ACCESS TIME EXPIRED

18
NETWORK CONNECTION - PRESENT
NETWORK CONNECTION - NOT PRESENT

19
USB CONNECTION -PRESENT
USB CONNECTION -NOT PRESENT

Operating menu - SICURO-24G - view 2 of 2





Button field "INFORMATION"

An actuation of the button field "INFORMATION" calls up the sub menu "INFORMATION" (see sub menu 1-10).

Button field "START FUNCTION TEST"

Main station:

An actuation of the button field "START FUNCTION TEST" executes a manual function test on the respective main station together with all connected sub stations where appropriate (see sub menu 1-6).

Sub station:

An actuation of the button field "START FUNCTION TEST" executes a manual function test on the respective sub station (see sub menu 1-6).

Button field "START DURATION TEST"

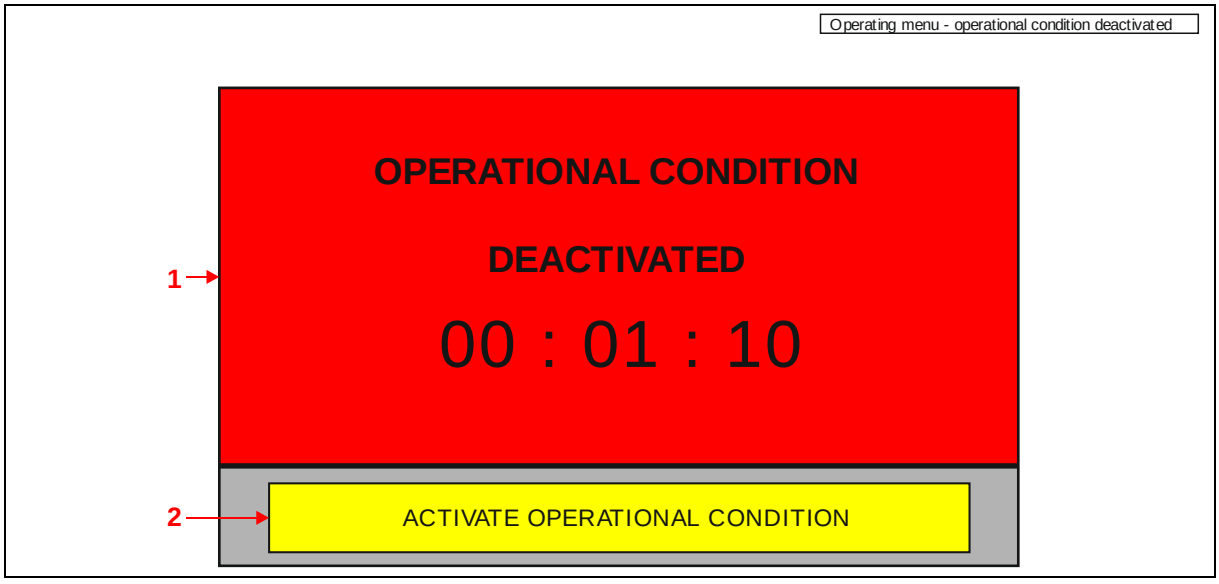
An actuation of the button field "START DURATION TEST" executes a manual duration test on the respective main station together with all connected sub stations where appropriate (see sub menu 1-7).

Button field "DEACTIVATE OPERATIONAL CONDITION"

"1": text field – warning message with duration of the deactivated operational condition

"2": button field – activation of the operational condition of the respective emergency light station

During the deactivated operational condition the operating menu is indicated as follows.



Attention: **During the deactivated operational condition the operating system of the respective emergency light station switches not into the emergency operation at occurring supply failures. This does apply in case of a general supply failure as well as in case of a partial supply failure. During a present supply failure a deactivation of the operational condition ends the emergency operation of the respective emergency light station prematurely. This does apply in case of a general supply failure as well as in case of a partial supply failure.**

Main station:

An actuation of the button field "DEACTIVATE OPERATIONAL CONDITION" deactivates the operational condition and all operating modes of the output circuits on the respective main station. At deactivated operational condition the main station can not switch into the emergency operation with mains supply (mains operation – AC) or the emergency operation with battery supply (battery operation – DC). By the deactivation of all operating modes the output circuits are switched off as well if no general or partial supply failure is present.

Sub station:

An actuation of the button field "DEACTIVATE OPERATIONAL CONDITION" deactivates the operational condition and all operating modes of the output circuits on the respective sub station. At deactivated operational condition the sub station can not switch into the emergency operation with mains supply (mains operation – AC) or the emergency operation with battery supply (battery operation – DC). By the deactivation of all operating modes the output circuits are switched off as well if no general or partial supply failure is present.

Button field "ACTIVATE / DEACTIVATE MAINTAINED MODE"

Main station – factory setting:

An actuation of the button field "ACTIVATE / DEACTIVATE MAINTAINED MODE" activates / deactivates the operating mode "Maintained mode" of the output circuits on the respective main station together with all connected sub stations where appropriate. At deactivated maintained mode the output circuits are operated in the operating mode "Non-maintained mode". The operating modes "Time switch", "Stairway pushbutton" and "Switchable" of the output circuits will not be deactivated.

Sub station – factory setting:

An actuation of the button field "ACTIVATE / DEACTIVATE MAINTAINED MODE" activates / deactivates the operating mode "Maintained mode" of the output circuits on the respective sub station. At deactivated maintained mode the output circuits are operated in the operating mode "Non-maintained mode". The operating modes "Time switch", "Stairway pushbutton" and "Switchable" of the output circuits will not be deactivated.

Button field "MANUAL RESET"

An actuation of the button field "MANUAL RESET" or a command initiation over the switch input "user definition" executes the manual reset of operating modes for output circuits resp. luminaire modules (see sub menu 1-1-2). The reset can not be used selective and is related to all output circuits resp. all connected luminaire modules of the respective emergency light station.

Note:

For execution of a manual reset over the button field "MANUAL RESET" or over the switch input "user definition" the manual reset in the sub menu "SYSTEM 1/6" must be activated (see sub menu 1-1-2).

For execution of a manual reset over the switch input "user definition" the query function "Manual reset" in the sub menu "LSSA inputs" must be used further on (see sub menu 1-1-3).

If the operating mode "Switchable" was selected for an output circuit resp. a group with an added luminaire module and the associated query function "Manual reset" is in use, then the manual reset of the respective equipment over the button field "MANUAL RESET" and over the switch input "user definition" is deactivated.

Button field "MAIN MENU"

An actuation of the button field "MAIN MENU" calls up the main menu "MAIN MENU" (see main menu 1).

At activated deep discharge protection:

An actuation of the button field "MAIN MENU" calls up an input prompt to execute a manual reset where the operating system deactivates the deep discharge protection.

Button field "DEACTIVATE BATTERY SUPPLY"

SICURO-24Z:

The device function "DEACTIVATE BATTERY SUPPLY" is not available at SICURO-24Z systems.

SICURO-24G:

An actuation of the button field "DEACTIVATE BATTERY SUPPLY" deactivates the battery supply on the respective main station during a general supply failure. At deactivated battery supply the executed emergency operation (battery operation – DC) is ended and with this the operating system is switched off. After a return of the mains supply the operating system activates the battery supply and executes a warm start.

Note:

The device function "DEACTIVATE BATTERY SUPPLY" is only available during an emergency operation with battery supply (battery operation – DC).

1 "MAIN MENU"

The main menu consists of the following sub menus:

- 1-1 "CONFIGURATION"
- 1-2 "LUMINAIRES"
- 1-3 "OUTPUT CIRCUITS"
- 1-4 "GROUPS"
- 1-5 "READ-IN"
- 1-6 "FUNCTION TEST"
- 1-7 "DURATION TEST"
- 1-8 "DEEP DISCHARGE TEST"
- 1-9 "TEST RESULTS"
- 1-10 "INFORMATION"
- 1-11 "BATTERY MONITORING"
- 1-12 "SERVICE"

1-1 "CONFIGURATION"

The sub menu consists of the following sub menus:

- 1-1-1 "TEST SETTINGS"
- 1-1-2 "SYSTEM"
- 1-1-3 "LSSA INPUTS"
- 1-1-4 "POTENTIAL-FREE CONTACTS"
- 1-1-5 "DATE & TIME"
- 1-1-6 "TIME SWITCH"
- 1-1-7 "SOFTWARE"

1-1-1 "TEST SETTINGS"

In the sub menu "TEST SETTINGS" the device functions and device parameters for function tests, duration tests and maintenances are configured.

Attention: **Function tests and duration tests are defined by country-specific norms. Within Europe the harmonised norm EN 50171/50172 has to be observed. The device functions and device parameters have to be set in accordance with the respective norms.**

View – 1 of 2:

► "Function test:" ► "Automatic test:" ► "Activated" / "Deactivated":
button fields – activation / deactivation of the automatic function tests

► "Function test:" ► "Next test:":
button fields – activation of the date and the time for the next automatic function test

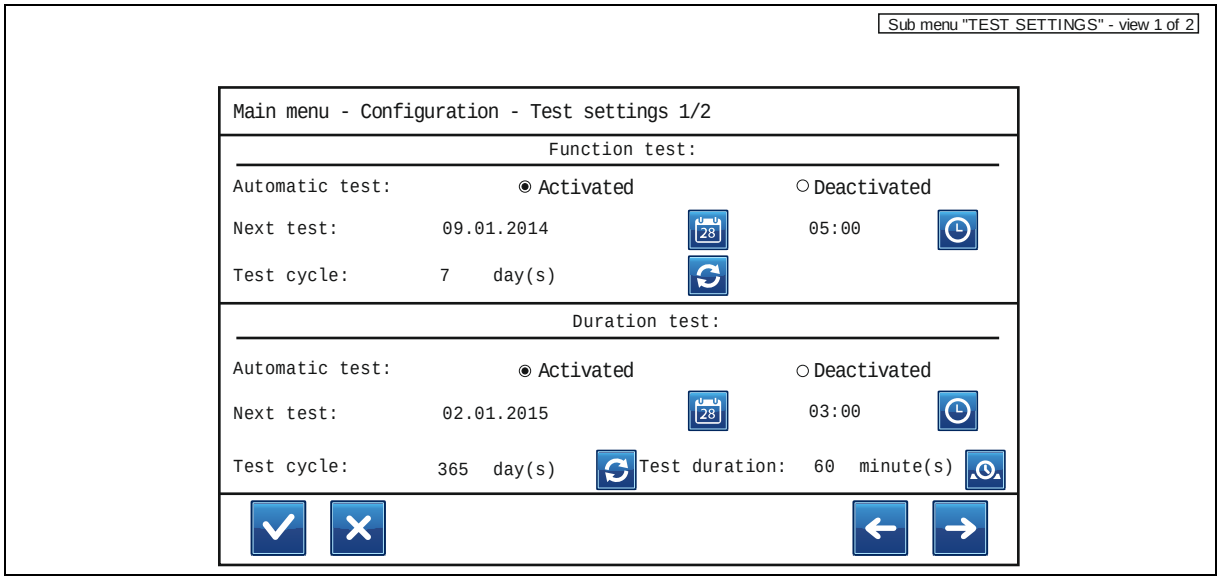
► "Function test:" ► "Test cycle:":
button field – input of the cycle for the automatic function tests (1 - 31 days)

► "Duration test:" ► "Automatic test:" ► "Activated" / "Deactivated":
button fields – activation / deactivation of the automatic duration tests

► "Duration test:" ► "Next test:":
button fields – input of the date and the time for the next automatic duration test

► "Duration test:" ► "Test cycle:":
button field – input of the cycle for the automatic duration tests (1 - 365 days)

► "Duration test:" ► "Test duration:":
button field – input of the duration for the duration tests (1 - 600 minutes)



An actuation of the button field calls up the following view in the sub menu "TEST SETTINGS 1/2".

View – 2 of 2:

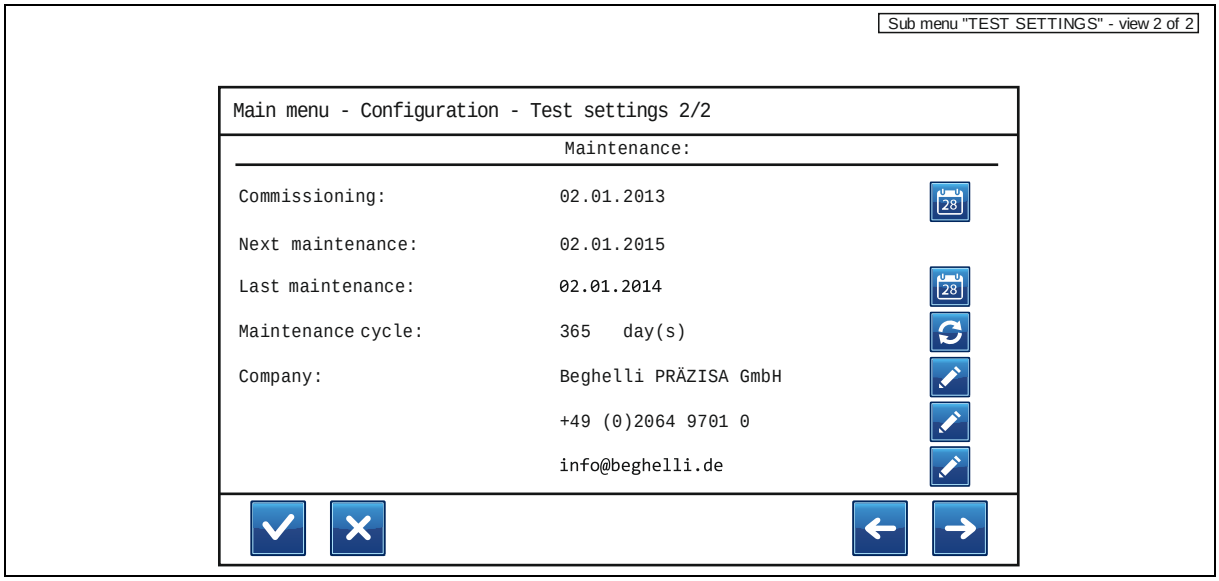
► "Maintenance:" ► "Commissioning:":
button field – input of the date for the performed commissioning

► "Maintenance:" ► "Next maintenance:":
text field – indication of the date for the next scheduled maintenance

► "Maintenance:" ► "Last maintenance:":
button field – input of the date for the last performed maintenance

► "Maintenance:" ► "maintenance cycle:":
button field – input of the cycle for the scheduled maintenances (1 - 365 days)

► "Maintenance:" ► "Company:":
button fields – free input of contact data for the concerned company (3 x 0 - 32 signs)



1-1-2 "SYSTEM"

In the sub menu "SYSTEM" the system settings for the operating system are configured.

View – 1 of 7:

► "Station:" ► "Type:":
text field – indication of the station type for the respective emergency light station

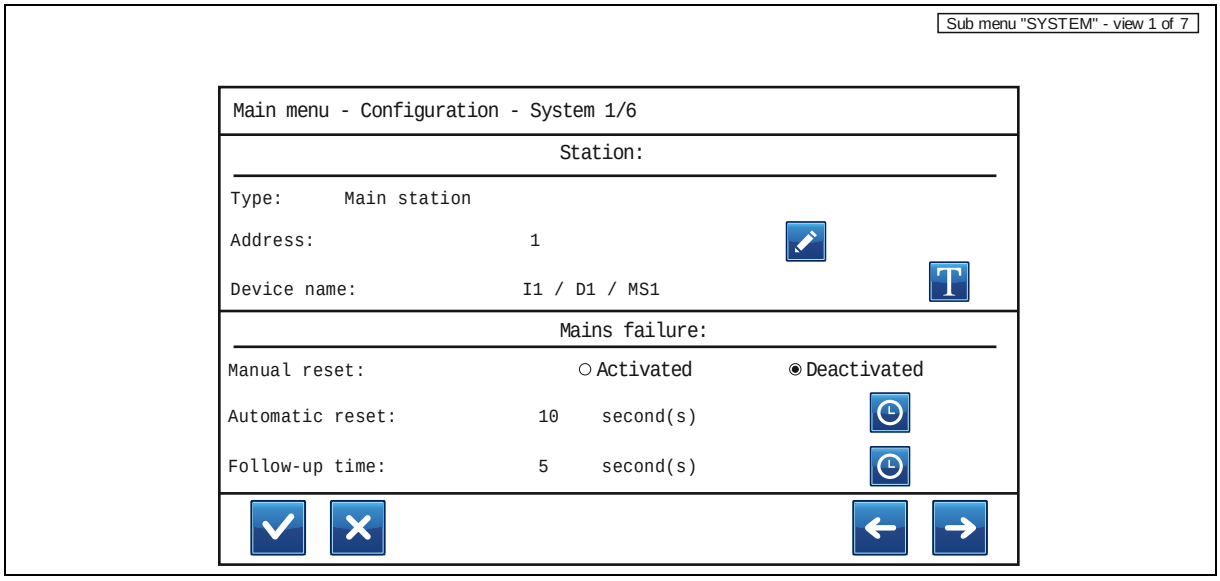
► "Station:" ► "Address:":
button field – input of the station address (1 - 63)

► "Station:" ► "Device name:":
button field – free input of the device name (0 - 32 signs)

► "Mains failure:" ► "Manual reset:" ► "Activated" / "Deactivated":
button fields – activation / deactivation of the manual reset

► "Mains failure:" ► "Automatic reset:":
button field – input of the duration for the automatic reset (1 - 300 seconds)

► "Mains failure:" ► "Follow-up time:":
button field – input of the duration for the follow-up time (1 - 300 seconds)



Manual reset –
manual reset of operating modes for output circuits resp. luminaire modules:

The operating modes of the output circuits resp. luminaire modules can be either reset by the deactivation of the manual reset automatically after a set time or by the activation of the manual reset manually. The reset can not be used selective and is related to all output circuits resp. all connected luminaire modules of the respective emergency light station.

Note: **The manual reset is performed by an actuation of the button field "MANUAL RESET" in the operating menu or by a command initiation over the switch input "user definition". The possibility for manual reset is indicated optically by the button field "MANUAL RESET".**

For execution of a manual reset over the switch input "user definition" the query function "Manual reset" in the sub menu "LSSA inputs" must be used further on (see sub menu 1-1-3).

If the operating mode "Switchable" was selected for an output circuit resp. a group with an added luminaire module and the associated query function "Manual reset" is in use, then the manual reset of the respective equipment over the button field "MANUAL RESET" and over the switch input "user definition" is deactivated.

Automatic reset –
automatic, delayed reset of operating modes for output circuits resp. luminaire modules:

After a general supply failure or a partial supply failure on the critical circuit followed by a return of the mains supply the output circuits resp. luminaire modules of the respective emergency light station stay switched on for the set time and will be reset to the respective operating mode after this. This delay function is only executed if the supply failure was present on the mains supply or on the critical circuit of the emergency light station. This does not apply if the supply failure was detected by a LSSA switch input with the query function "Sub-distribution". The reset can not be used selective and is related to all output circuits resp. all connected luminaire modules of the respective emergency light station.

Note: **An actuation of the button field "MANUAL RESET" in the operating menu or a command initiation over the switch input "user definition" ends the procedure of the automatic reset prematurely. The possibility for manual reset is indicated optically by the button field "MANUAL RESET".**

Follow-up time –
delayed switchback from battery supply to mains supply:

After a general supply failure followed by a return of the mains supply the respective emergency light station stays on battery supply for the set time and switches back to mains supply after this. This delay function is only executed if the supply failure was present on the mains supply of the emergency light station. This does not apply if the supply failure was detected by the critical circuit or a LSSA switch input with the query function "Sub-distribution".

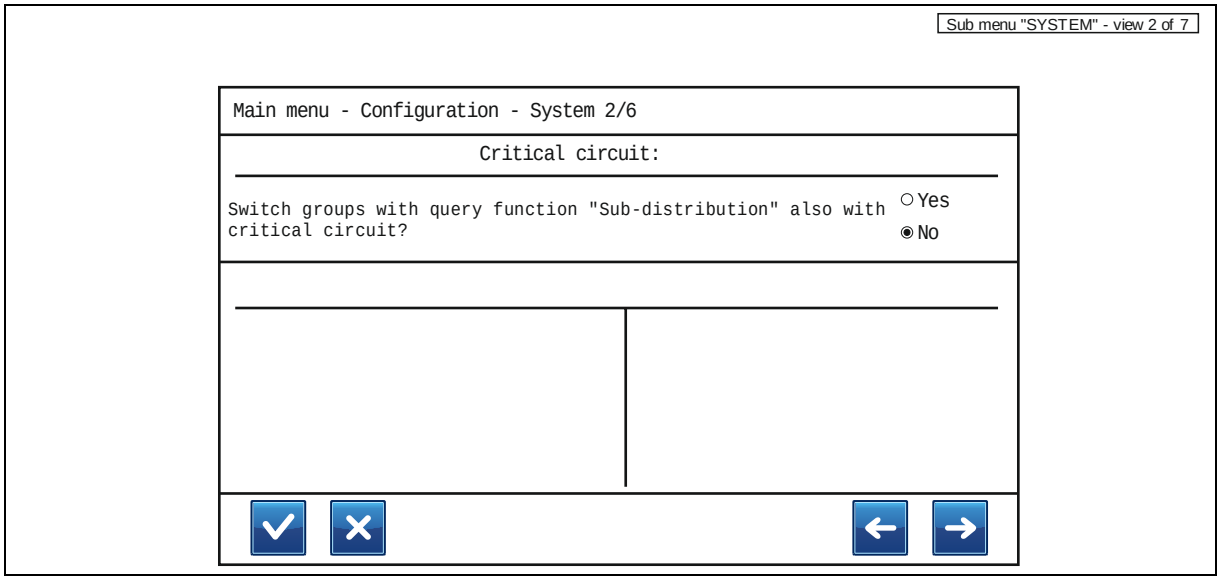
Automatic reset and follow-up time – collaboration:

The follow-up time is executed whereas a smaller time of the automatic reset compared to the follow-up time has no effect. A larger time of the automatic reset compared to the follow-up time takes effect with the time-wise difference in which the emergency light station switches back to the mains supply however the output circuits and luminaire modules are still switched on for the rest of the time of the automatic reset.

An actuation of the button field ➔ calls up the following view in the sub menu "SYSTEM 1/6".

View – 2 of 7:

► "Critical circuit:"
► "Switch groups with query function "Sub-distribution" also with critical circuit?"
► "Yes" / "No":
button fields – activation / deactivation of the device function to switch groups with the query function "Sub-distribution" with the 2critical circuit during a partial supply failure



An actuation of the button field ➔ calls up the following view in the sub menu "SYSTEM 2/6".

View – 3 of 7:

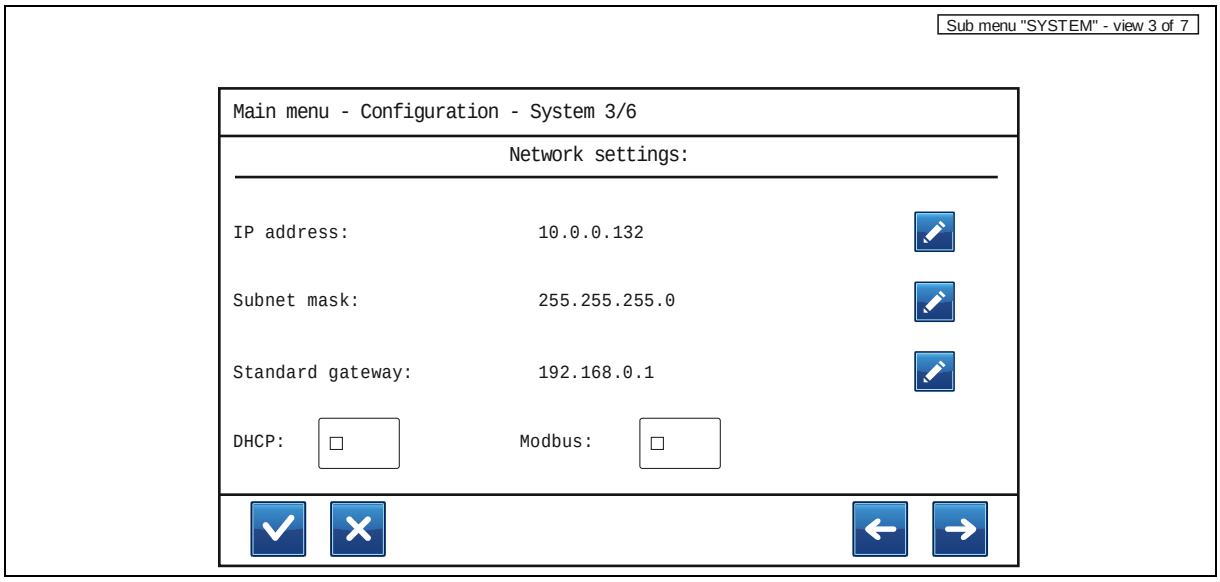
► "Network settings:" ► "IP address:":
button field – input of the IP address for the respective emergency light station

► "Network settings:" ► "Subnet mask:":
button field – input of the subnet mask for the respective emergency light station

► "Network settings:" ► "Standard gateway:":
button field – input of the standard gateway for the respective emergency light station

► "Network settings:" ► "DHCP:":
button field – activation / deactivation of the network communication protocol DHCP for the respective emergency light station

► "Network settings:" ► "Modbus:":
button field – activation / deactivation of the Modbus for the respective emergency light station,
activation: use of the main station bus as Modbus interface (RTU),
deactivation: use of the main station bus as company-specific interface



Note:

The manual inputs regarding the IP address, the subnet mask and the standard gateway are not possible when the network communication protocol DHCP is activated.

The automatic allocation of the network configuration is only executed once after the network communication protocol DHCP was activated and this change is subsequently saved as well as after a cold start or a warm start of the emergency light station where the network communication protocol DHCP was activated previously.

For an automatic allocation of the network configuration a permanent network connection must be present. After an interruption of the network connection no automatic allocation of the network configuration is executed.

An actuation of the button field ➡ calls up the following view in the sub menu "SYSTEM 3/6".

View – 4 of 7:

"1": button field – test of the e-mail function by sending of a test e-mail

"2": text field with optical indication – entered password with covert signs for the e-mail communication

"3": button field – call-up of the view for the sending options of the e-mail function

► "E-mail settings:" ► "SSL" / "TLS" / "Non-encrypted":
button fields – selection of the encryption method SSL or TLS resp. selection of a non-encrypted transfer for the e-mail communication

► "E-mail settings:" ► "E-mail function:" ► "Activated" / "Deactivated ":
button fields – activation / deactivation of the e-mail function

► "E-mail settings:" ► "Acceptor:":
button field – input of the e-mail address for the acceptor (max. 32 signs total)

► "E-mail settings:" ► "Sender:":
button field – input of the e-mail address for the sender (max. 32 signs total)

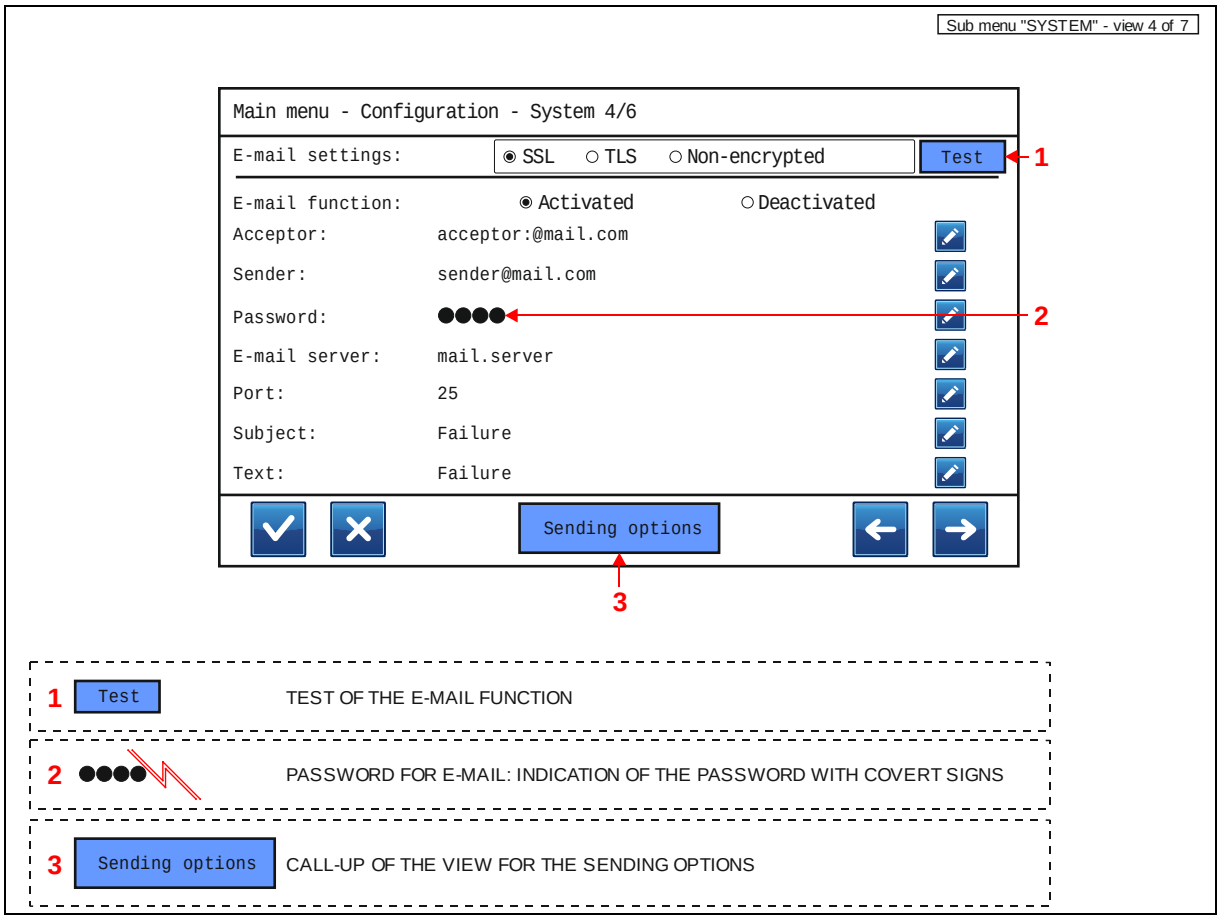
► "E-mail settings:" ► "Password:":
button field – input of the password

► "E-mail settings:" ► "E-mail server:":
button field – input of the e-mail server (max. 32 signs total)

► "E-mail settings:" ► "Port:":
button field – input of the port

► "E-mail settings:" ► "Subject:":
button field – free input of the subject for the e-mail (0 - 32 signs)

► "E-mail settings:" ► "Text:":
button field – free input of the text for the e-mail (0 - 32 signs)



E-mail function:

Every emergency light station can automatically send e-mails at the occurrence of selectable events.

An actuation of the button field "3" calls up the following view in the sub menu "SYSTEM 4/6".

View – 5 of 7:

"1": button field – test of the e-mail function by sending of a test e-mail

"2": button field – call-up of the view for the sending options of the e-mail function

► "E-mail settings:" ► "SSL" / "TLS" / "Non-encrypted":
button fields – selection of the encryption method SSL or TLS resp. selection of a non-encrypted transfer for the e-mail communication

► "E-mail settings:" ► "E-mail function:" ► "Activated" / "Deactivated ":
button fields – activation / deactivation of the e-mail function

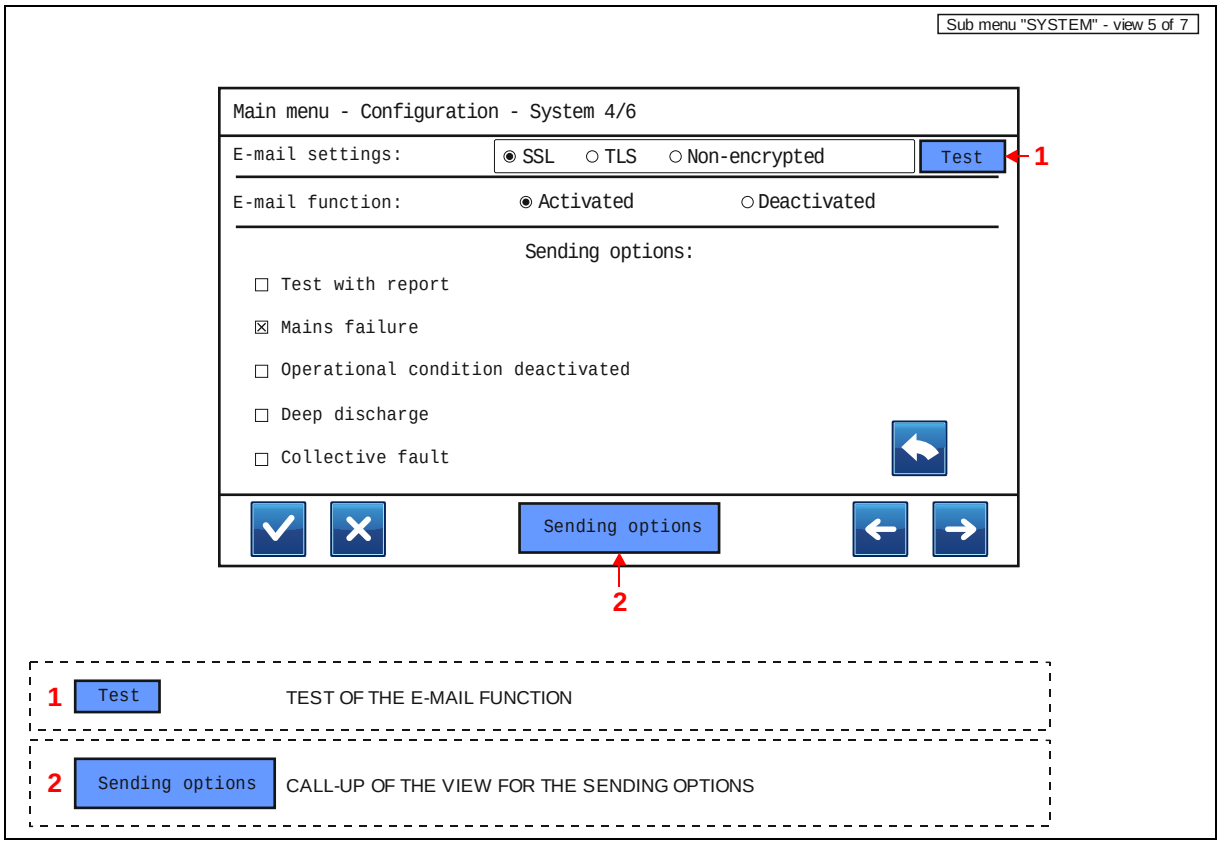
► "E-mail settings:" ► "Sending options:" ► "Test with report":
button field – activation / deactivation of the sending for an e-mail with report after a function test / duration test

► "E-mail settings:" ► "Sending options:" ► "Mains failure":
button field – activation / deactivation of the sending for an e-mail at a mains failure

► "E-mail settings:" ► "Sending options:" ► "Operational condition deactivated":
button field – activation / deactivation of the sending for an e-mail at deactivated operational condition

► "E-mail settings:" ► "Sending options:" ► "Deep discharge":
button field – activation / deactivation of the sending for an e-mail at deep discharge of the battery supply

► "E-mail settings:" ► "Sending options:" ► "Collective fault":
button field – activation / deactivation of the sending for an e-mail at a collective fault



An actuation of the button field calls up the following view in the sub menu "SYSTEM 4/6".

View – 6 of 7:

"1": text field with optical indication – entered password with covert signs for access to the operating menu

"2": text field with optical indication – entered password with covert signs for access to the main menu

► "Password protection operating menu:" ► "Protection:" ► "Activated" / "Deactivated":
button fields – activation / deactivation of the password protection

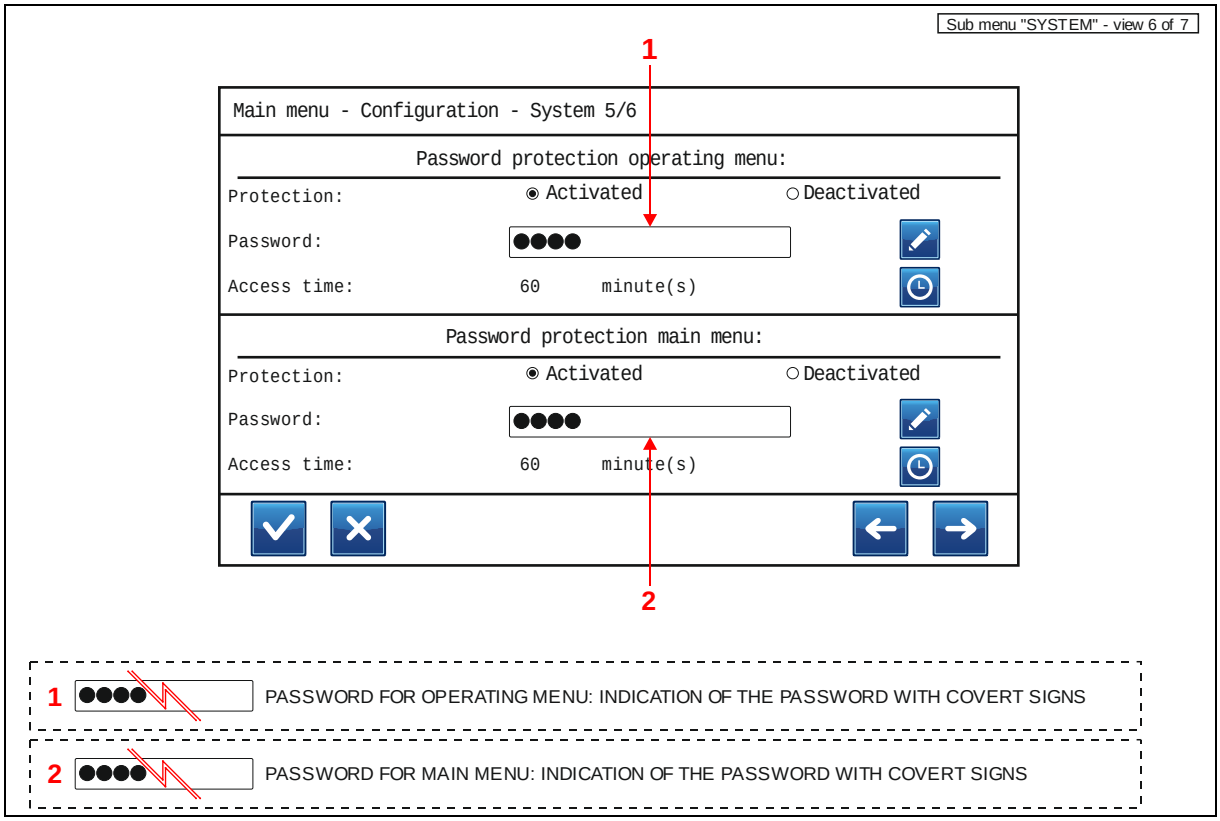
► "Password protection operating menu:" ► "Password:":
button field – input of the password (2 - 8 signs)

► "Password protection operating menu:" ► "Access time:":
button field – input of the access time up to the password query (1 - 60 minutes)

► "Password protection main menu:" ► "Protection:" ► "Activated" / "Deactivated":
button fields – activation / deactivation of the password protection

► "Password protection main menu:" ► "Password:":
button field – input of the password (2 - 8 signs)

► "Password protection main menu:" ► "Access time:":
button field – input of the access time up to the password query (1 - 60 minutes)



Note: **The password protection regarding the operating menu and the main menu is not related to the password query of the sub menu "SERVICE".**

An actuation of the button field ➔ calls up the following view in the sub menu "SYSTEM 5/6".

View – 7 of 7:

"1": button field with multiple selection – selection of the brightness for the touchscreen, slider bar: move to the right for increase, move to the left for decrease

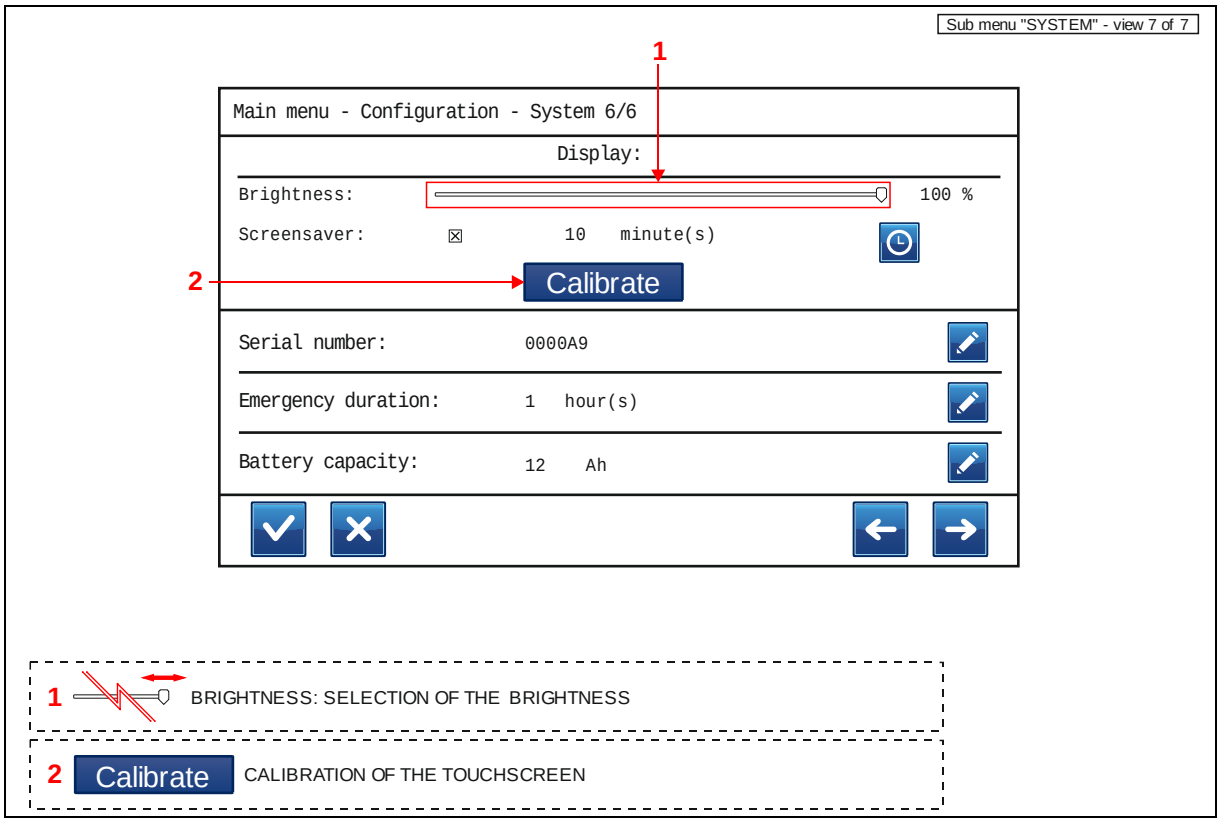
"2": button field – calibration of the touchscreen

► "Display:" ► "Screensaver:":
button fields – activation / deactivation of the screensaver, input of the duration up to the execution of the screensaver (1 - 20 minutes)

► "Serial number:":
button field – input of the serial number for the respective emergency light station (0 - 32 signs)

► "Emergency duration:":
button field – input of the emergency duration for the respective emergency light station (0 - 24 hours)

► "Battery capacity:":
button field – input of the battery capacity for the respective emergency light station
(0 - 99999 ampere hours)



Note: **The serial number and the emergency duration are designated on the type plate of the respective emergency light station. The battery capacity is only designated on the type plates of main stations. At sub stations the battery capacity of the respective main station must be entered.**

1-1-3 "LSSA INPUTS"

In the sub menu "LSSA INPUTS" the query functions for the LSSA switch inputs (of query modules and the I/O card) as well as for the switch input "user definition" (I/O card) of the respective emergency light station are configured. These inputs are used for the selective switching resp. resetting of output circuits, groups and luminaire modules. Furthermore text designations for LSSA switch inputs, switch inputs, query modules and the I/O card can be entered free.

> All SICURO-24Z and SICURO-24G systems are equipped with four LSSA switch inputs, which are located on the I/O card.

> All SICURO-24Z and SICURO-24G systems are equipped with two switch inputs, which are located on the I/O card.

> A maximum of 96 additional query modules can be connected over the device bus (RS485) on the interface card (component of the EVA unit) of an emergency light station.

> A maximum of one query function with one logic address can be assigned per LSSA switch input / switch input.

> A maximum of 772 logic addresses can be assigned per query function.

> Equal logic addresses can be assigned multiple on different LSSA switch inputs / switch inputs with the same query function.

> Equal logic addresses can be assigned multiple on different LSSA switch inputs / switch inputs with different query functions.

> The command initiation of all LSSA switch inputs (on the I/O card / on query modules) is software controlled and can be influenced by a programming.

Switch voltage resp. short circuit PRESENT and switch function "Negated" DEACTIVATED:
The command initiation of the selected query function is active (signal status: "On").

Switch voltage resp. short circuit NOT PRESENT and switch function "Negated" DEACTIVATED:
The command initiation of the selected query function is inactive (signal status: "Off").

Switch voltage resp. short circuit PRESENT and switch function "Negated" ACTIVATED:
The command initiation of the selected query function is inactive (signal status: "Off").

Switch voltage resp. short circuit NOT PRESENT and switch function "Negated" ACTIVATED:
The command initiation of the selected query function is active (signal status: "On").

> The command initiation for the switch input "maintained mode on/off" (on the I/O card) is software controlled and can not be influenced by a programming.

> The command initiation for the switch input "user definition" (I/O card) is software controlled and can be influenced by a programming.

Short circuit PRESENT and switch function "Negated" DEACTIVATED:
The command initiation of the selected query function is active (signal status: "On").

Short circuit NOT PRESENT and switch function "Negated" DEACTIVATED:
The command initiation of the selected query function is inactive (signal status: "Off").

Short circuit PRESENT and switch function "Negated" ACTIVATED:
The command initiation of the selected query function is inactive (signal status: "Off").

Short circuit NOT PRESENT and switch function "Negated" ACTIVATED:
The command initiation of the selected query function is active (signal status: "On").

The following query functions can be assigned to the LSSA switch inputs / switch inputs:

"Light switch":	light switch position-query
"Sub-distribution":	sub-distribution monitoring
"Dynamic light":	switch position-query for dynamic control
"Stairway pushbutton":	light pushbutton position-query for stairways
"Manual reset":	pushbutton query for manual reset of operating modes for output circuits resp. luminaires modules
"No function":	no query function assigned

> The query function "Light switch" can only be selected at the operating mode "Switchable" for output circuits or groups.

> The query function "Sub-distribution" can only be selected at the operating mode "Switchable" for output circuits or groups.

> The query function "Dynamic light" can only be selected at the operating mode "Switchable" for output circuits or groups.

> The query function "Stairway pushbutton" can only be selected at the operating mode "Stairway pushbutton" for output circuits or groups.

> The query function "Manual reset" can only be selected at the operating mode "Switchable" for output circuits or groups.

View – 1 of 2:

"1-8": button fields with multiple selection – selection of the query function for the respective LSSA switch input,
3 grey areas: combined query function "Sub-distribution" selected

"9": button fields – input of the logic address (1 - 772) for the respective query function

"10": text fields – entered logic address of the respective query function

"11": button fields – free input of the input name (0 - 32 signs) for the respective LSSA switch input

"12": text fields – entered input name of the respective LSSA switch input

"13": text fields – signal status ("On" / "Off") on the respective LSSA switch input

"14": text field – availability of the selected query module

"15": text field – type of the selected query module

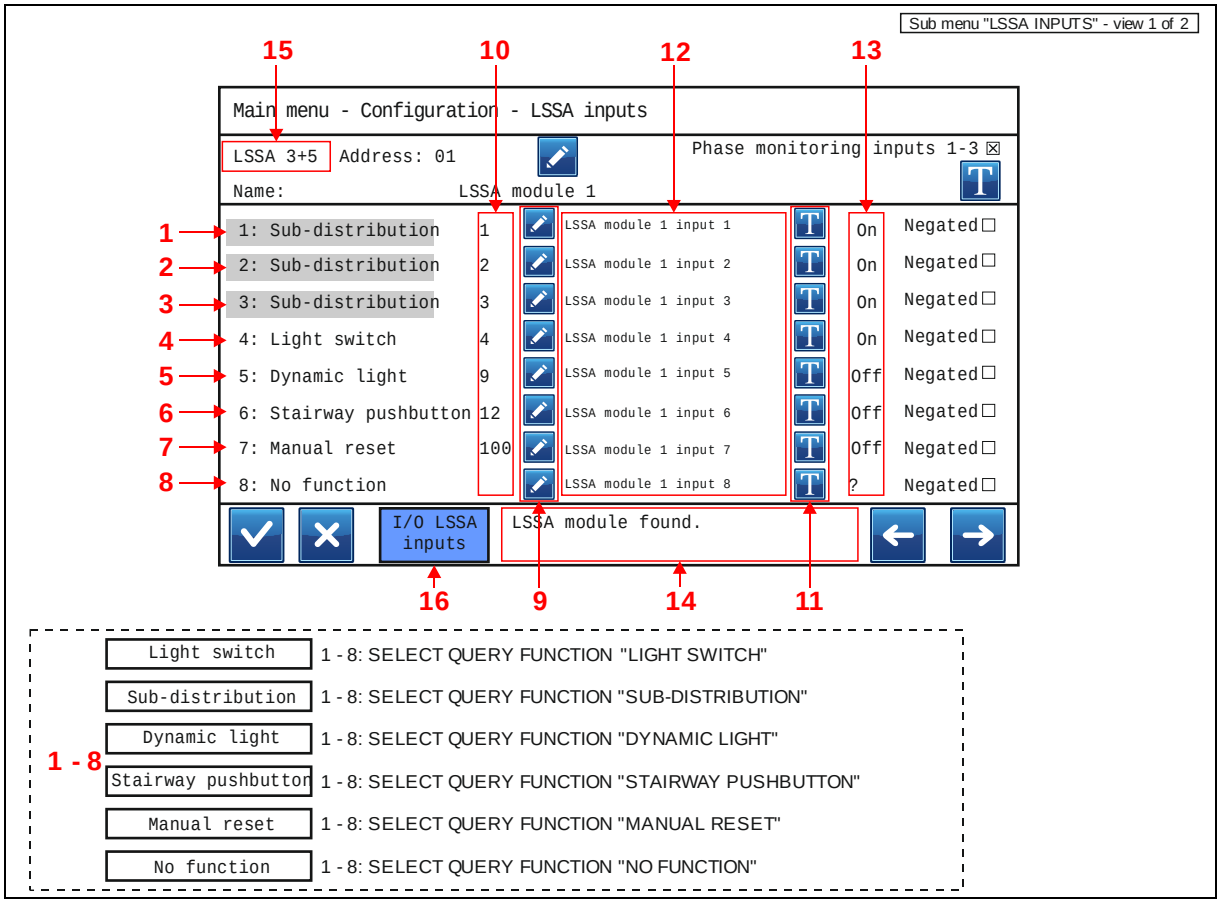
"16": button field – call-up of the view for the LSSA switch inputs and the switch input "user definition" (I/O card)

► "Address:":
button field – input of the module address (1 - 96) for selection of the query module

► "Name:":
button field – free input of the module name (0 - 32 signs)

► "Phase monitoring inputs 1 - 3":
button field – activation / deactivation of the combined query function "Sub-distribution" for the LSSA switch inputs 1 to 3 of query modules with integrated sub-distribution monitoring (3-phase)

► "Negated:":
button field – activation / deactivation of the negated switch function for the respective LSSA switch input



Note: **After a call-up of the sub menu "LSSA INPUTS":**
By an actuation of the button fields ←, → and ⤢ the selection of a query module can be done, if query modules are present. An actuation of the button field "16" calls up the view for the LSSA switch inputs and the switch input "user definition" of the I/O card.

Attention: **The query function "Sub-distribution" may only be used, if a monitoring module (standardly DS3-UV), which is capable of a sub-distribution monitoring (3-phase), is connected to the respective LSSA switch input of the query module. The sub-distribution monitoring must be able to monitor the presence and the value of the mains voltage.**

The device function "Phase monitoring inputs 1 - 3" may only be used, if the LSSA switch inputs 1 to 3 of the query module are capable of an integrated sub-distribution monitoring (3-phase). The integrated sub-distribution monitoring must be able to monitor the presence and the value of the mains voltage.

An actuation of the button field "16" calls up the following view in the sub menu "LSSA INPUTS".

View – 2 of 2:

"1-5": button fields with multiple selection – selection of the query function for the respective LSSA switch input / switch input

"6": button fields – input of the logic address (1 - 772) for the respective query function

"7": text fields – entered logic address of the respective query function

"8": button fields – free input of the input name (0 - 32 signs) for the respective LSSA switch input / switch input

"9": text fields – entered input name of the respective LSSA switch input / switch input

"10": text fields – signal status ("On" / "Off") on the LSSA switch input / switch input (I/O card)

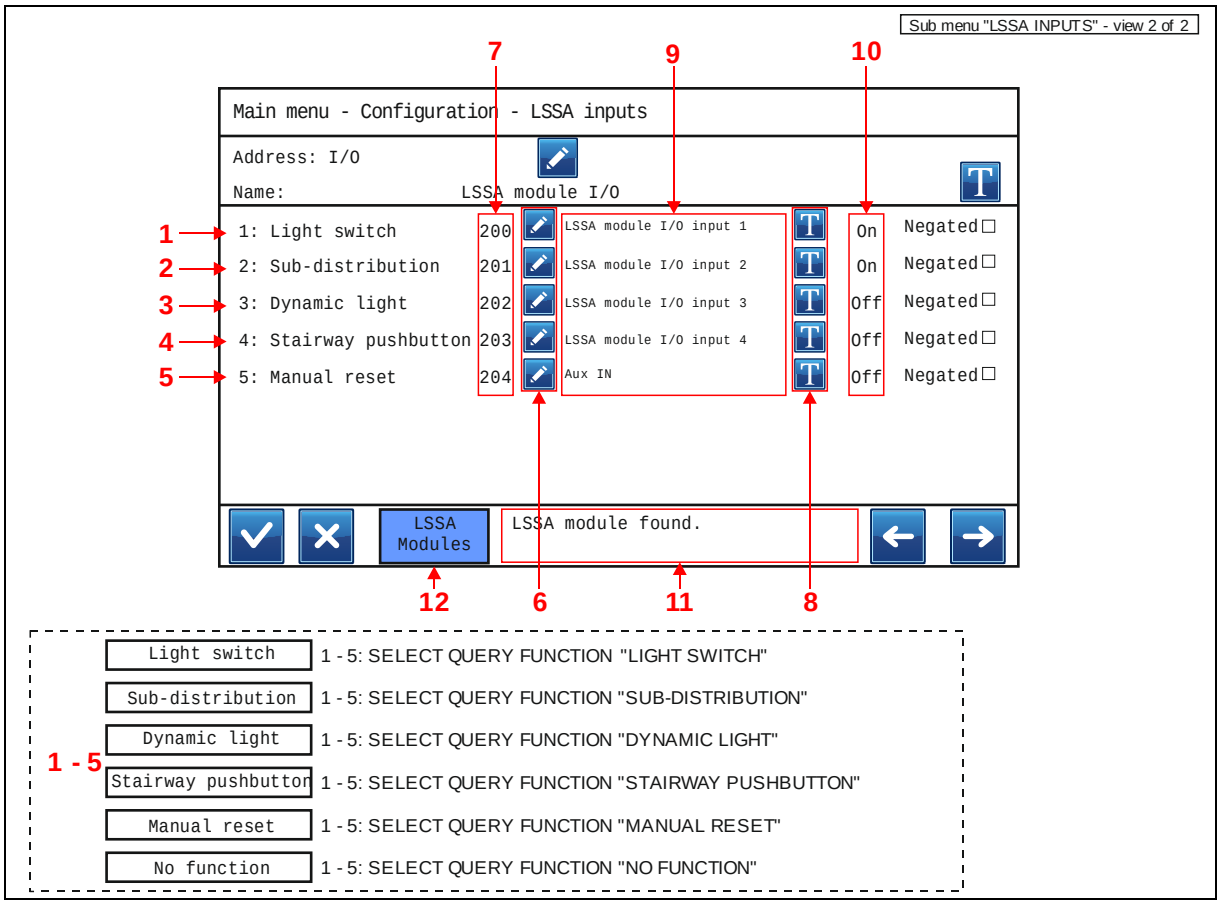
"11": text field – availability of the I/O card

"12": button field – call-up of the view for the LSSA switch inputs of the query modules

► "Address:":
button field – input of the module address (1 - 96) for selection of the query module,
after input: call-up of the view for the LSSA switch inputs of the query modules

► "Name:":
button field – free input of the card name (0 - 32 signs)

► "Negated:":
button field – activation / deactivation of the negated switch function for the respective LSSA switch input / switch input



Note: **An actuation of the button field "12" calls up the view for the LSSA switch inputs of the query modules.**

Attention: **The query function "Sub-distribution" may <u>only</u> be used, if a monitoring module (standardly DS3-UV), which is capable of a sub-distribution monitoring (3-phase), is connected to the respective LSSA switch input / switch input of the emergency light station. The sub-distribution monitoring must be able to monitor the <u>presence</u> and the <u>value</u> of the mains voltage.**

1-1-4 "POTENTIAL-FREE CONTACTS"

In the sub menu "POTENTIAL-FREE CONTACTS" the switching conditions for the auxiliary contacts "auxiliary contact 1", "auxiliary contact 2" and "auxiliary contact 3" as well as the command mode for the switch input "user definition" (I/O card) of the respective emergency light station are configured. The auxiliary contacts and the switch input can be used for control and monitoring purposes.

Conjunctions:

"OR": if one or several of the activated installation conditions are present, the respective auxiliary contact will be actuated by the operating system

"AND": if all activated installation conditions are present, the respective auxiliary contact will be actuated by the operating system

View – 1 of 4:

► "Aux Out 1:" ► "Mains failure":
button field – activation / deactivation of the switching condition during a mains failure by a general or partial supply failure for the auxiliary contact "auxiliary contact 1" of the I/O card

► "Aux Out 1:" ► "Battery operation":
button field – activation / deactivation of the switching condition during a battery operation for the auxiliary contact "auxiliary contact 1" of the I/O card

► "Aux Out 1:" ► "Deep discharge":
button field – activation / deactivation of the switching condition during a deep discharge for the auxiliary contact "auxiliary contact 1" of the I/O card

► "Aux Out 1:" ► "Operational condition deactivated":
button field – activation / deactivation of the switching condition during a deactivated operational condition for the auxiliary contact "auxiliary contact 1" of the I/O card

► "Aux Out 1:" ► "Battery failure":
button field – activation / deactivation of the switching condition during a failure regarding the battery supply for the auxiliary contact "auxiliary contact 1" of the I/O card

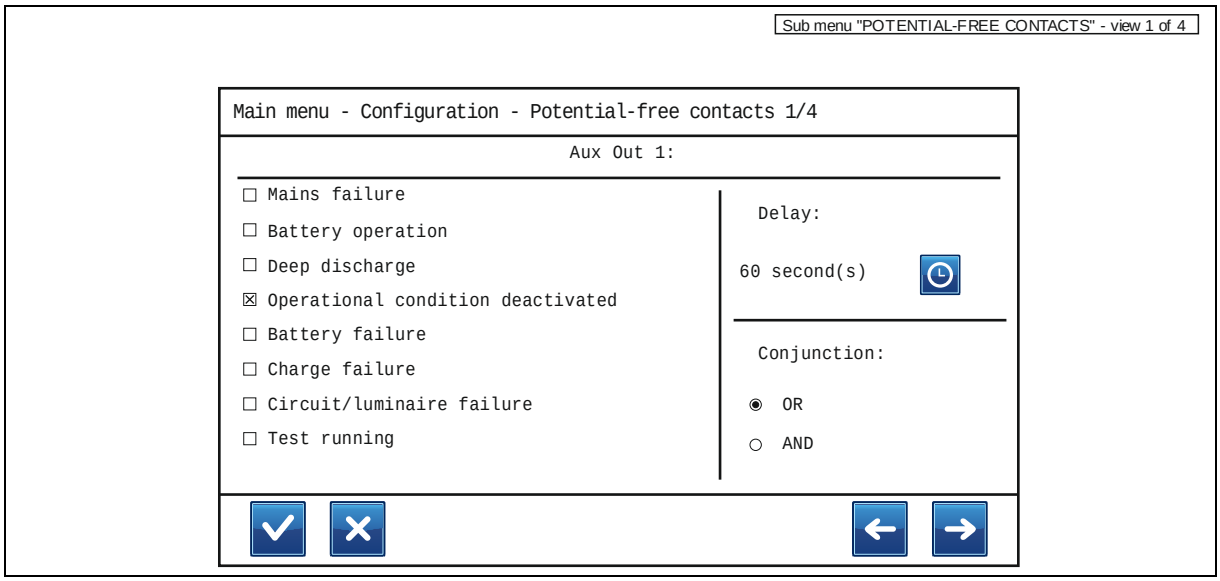
► "Aux Out 1:" ► "Charge failure":
button field – activation / deactivation of the switching condition during a failure regarding the charger module for the auxiliary contact "auxiliary contact 1" of the I/O card

► "Aux Out 1:" ► "Circuit/luminaire failure":
button field – activation / deactivation of the switching condition during a failure regarding the output circuits resp. luminaire modules for the auxiliary contact "auxiliary contact 1" of the I/O card

► "Aux Out 1:" ► "Test running":
button field – activation / deactivation of the switching condition during a test for the auxiliary contact "auxiliary contact 1" of the I/O card

► "Aux Out 1:" ► "Delay:":
button field – input of the delay time for the auxiliary contact "auxiliary contact 1" of the I/O card
(0 - 60 seconds)

► "Aux Out 1:" ► "Conjunction:" ► "OR" / "AND":
button fields – activation of the common conjunction with the function "OR" / "AND" regarding the activated installation conditions for the auxiliary contact "auxiliary contact 1" of the I/O card



An actuation of the button field ➔ calls up the following view in the sub menu "POTENTIAL-FREE CONTACTS 1/4".

View – 2 of 4:

► "Aux Out 2:" ► "Mains failure":
button field – activation / deactivation of the switching condition during a mains failure by a general or partial supply failure for the auxiliary contact "auxiliary contact 2" of the I/O card

► "Aux Out 2:" ► "Battery operation":
button field – activation / deactivation of the switching condition during a battery operation for the auxiliary contact "auxiliary contact 2" of the I/O card

► "Aux Out 2:" ► "Deep discharge":
button field – activation / deactivation of the switching condition during a deep discharge for the auxiliary contact "auxiliary contact 2" of the I/O card

► "Aux Out 2:" ► "Operational condition deactivated":
button field – activation / deactivation of the switching condition during a deactivated operational condition for the auxiliary contact "auxiliary contact 2" of the I/O card

► "Aux Out 2:" ► "Battery failure":
button field – activation / deactivation of the switching condition during a failure regarding the battery supply for the auxiliary contact "auxiliary contact 2" of the I/O card

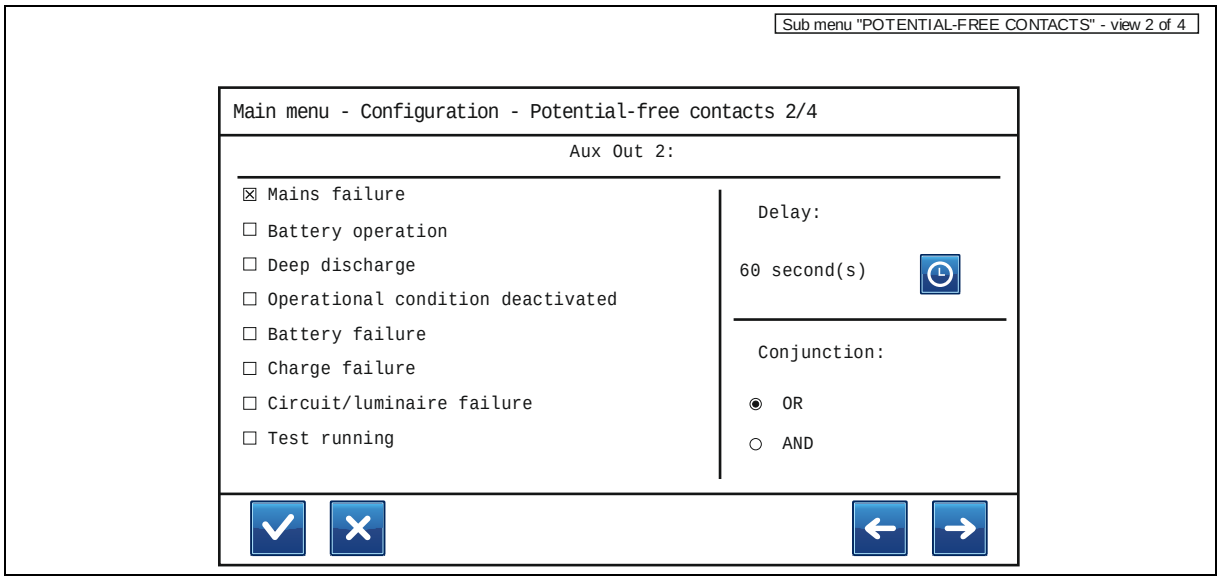
► "Aux Out 2:" ► "Charge failure":
button field – activation / deactivation of the switching condition during a failure regarding the charger module for the auxiliary contact "auxiliary contact 2" of the I/O card

► "Aux Out 2:" ► "Circuit/luminaire failure":
button field – activation / deactivation of the switching condition during a failure regarding the output circuits resp. luminaire modules for the auxiliary contact "auxiliary contact 2" of the I/O card

► "Aux Out 2:" ► "Test running":
button field – activation / deactivation of the switching condition during a test for the auxiliary contact "auxiliary contact 2" of the I/O card

► "Aux Out 2:" ► "Delay:":
button field – input of the delay time for the auxiliary contact "auxiliary contact 2" of the I/O card
(0 - 60 seconds)

► "Aux Out 2:" ► "Conjunction:" ► "OR" / "AND":
button fields – activation of the common conjunction with the function "OR" / "AND" regarding the activated installation conditions for the auxiliary contact "auxiliary contact 2" of the I/O card



An actuation of the button field calls up the following view in the sub menu "POTENTIAL-FREE CONTACTS 2/4".

View – 3 of 4:

► "Aux Out 3:" ► "Mains failure":
button field – activation / deactivation of the switching condition during a mains failure by a general or partial supply failure for the auxiliary contact "auxiliary contact 3" of the I/O card

► "Aux Out 3:" ► "Battery operation":
button field – activation / deactivation of the switching condition during a battery operation for the auxiliary contact "auxiliary contact 3" of the I/O card

► "Aux Out 3:" ► "Deep discharge":
button field – activation / deactivation of the switching condition during a deep discharge for the auxiliary contact "auxiliary contact 3" of the I/O card

► "Aux Out 3:" ► "Operational condition deactivated":
button field – activation / deactivation of the switching condition during a deactivated operational condition for the auxiliary contact "auxiliary contact 3" of the I/O card

► "Aux Out 3:" ► "Battery failure":
button field – activation / deactivation of the switching condition during a failure regarding the battery supply for the auxiliary contact "auxiliary contact 3" of the I/O card

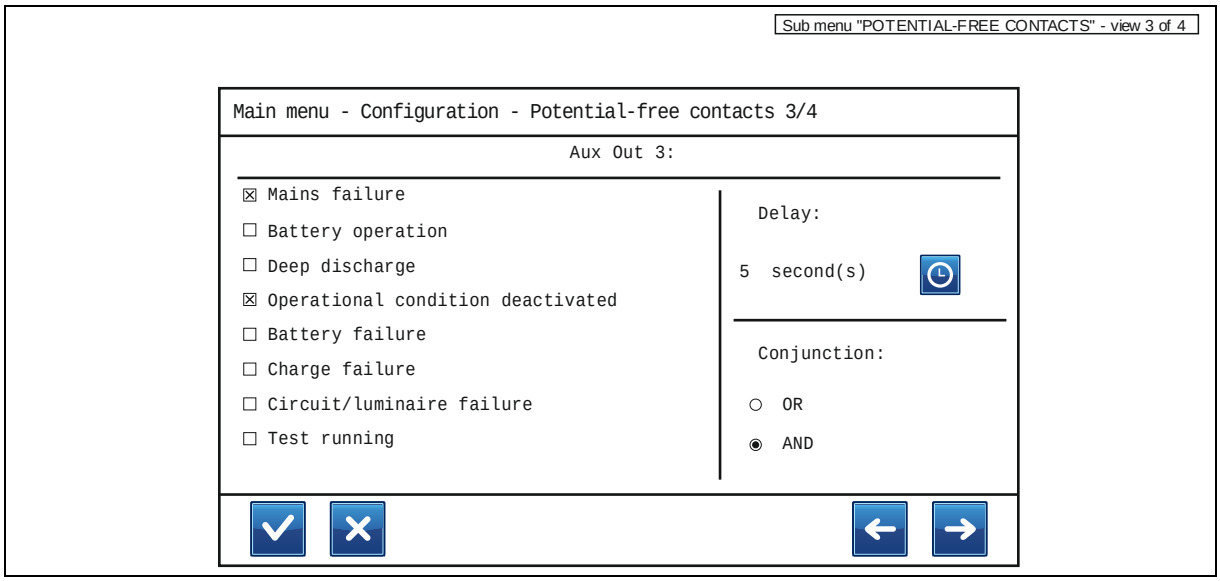
► "Aux Out 3:" ► "Charge failure":
button field – activation / deactivation of the switching condition during a failure regarding the charger module for the auxiliary contact "auxiliary contact 3" of the I/O card

► "Aux Out 3:" ► "Circuit/luminaire failure":
button field – activation / deactivation of the switching condition during a failure regarding the output circuits resp. luminaire modules for the auxiliary contact "auxiliary contact 3" of the I/O card

► "Aux Out 3:" ► "Test running":
button field – activation / deactivation of the switching condition during a test for the auxiliary contact "auxiliary contact 3" of the I/O card

► "Aux Out 3:" ► "Delay:":
button field – input of the delay time for the auxiliary contact "auxiliary contact 3" of the I/O card
(0 - 60 seconds)

► "Aux Out 3:" ► "Conjunction:" ► "OR" / "AND":
button fields – activation of the common conjunction with the function "OR" / "AND" regarding the activated installation conditions for the auxiliary contact "auxiliary contact 3" of the I/O card



An actuation of the button field calls up the following view in the sub menu "POTENTIAL-FREE CONTACTS 3/4".

View – 4 of 4:

"1": button field – selection of the command mode "Start function test" for execution of a function test on the respective emergency light station

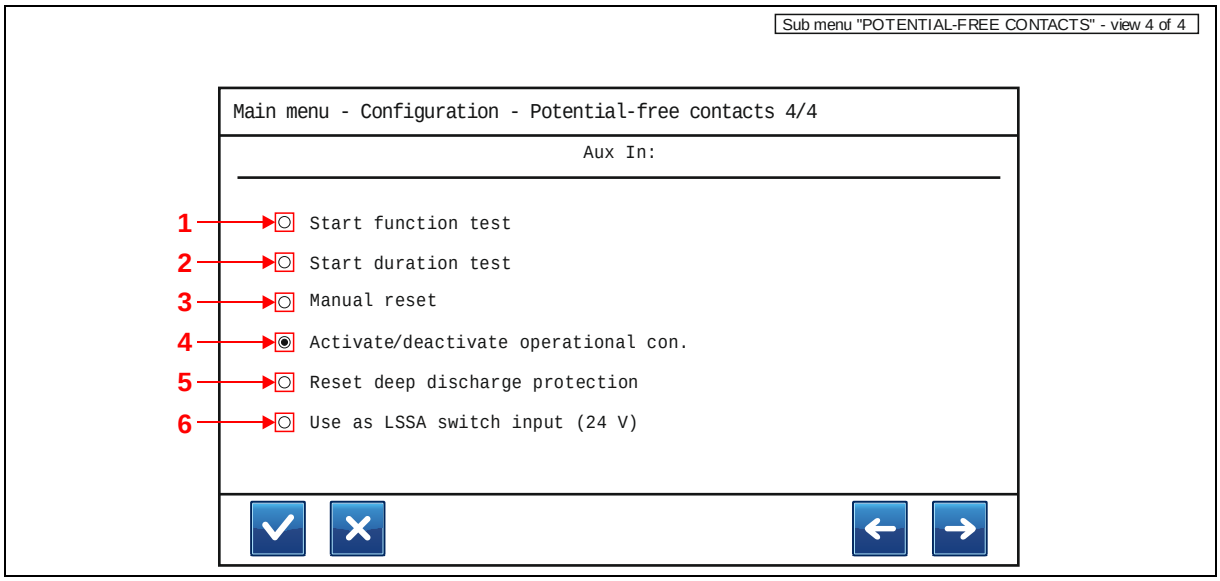
"2": button field – selection of the command mode "Start duration test" for execution of a duration test on the respective main station and the associated sub stations

"3": button field – selection of the command mode "Manual reset" for execution of a reset of operating modes regarding all output circuits resp. luminaire modules on the respective emergency light station

"4": button field – selection of the command mode "Activate / deactivate operational condition" for activation / deactivation of the operational condition for the respective emergency light station

"5": button field – selection of the command mode "Reset deep discharge protection" for deactivation of the deep discharge protection on the respective main station and the associated sub stations

"6": button field – selection of the command mode "Use as LSSA switch input (24 V)" for use of the switch input as LSSA switch input



1-1-5 "DATE & TIME"

In the sub menu "DATE & TIME" the date and the time of the respective emergency light station are configured. These inputs are used for the execution of automatic function and duration tests as well as for the time function "Time switch", the test results and the daily events.

Note: **To prevent data inconsistency it is necessary to synchronise the date and the time on all emergency light stations of the installation.**

"1": button field with multiple selection – selection of a month

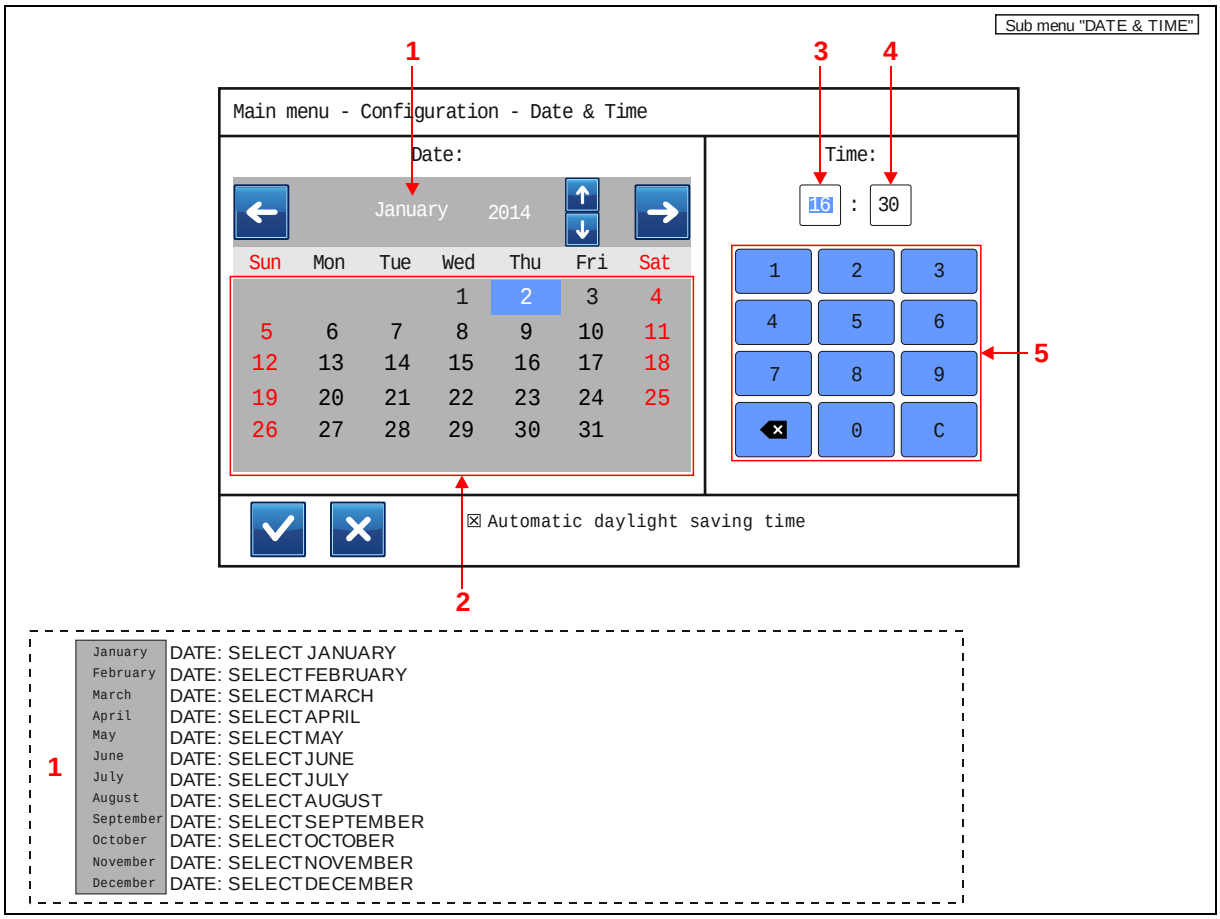
"2": button fields – selection of a day,
blue area: selected day

"3": button field – selection for hour,
blue area: hour selected

"4": button field – selection for minute,
blue area: minute selected

"5": button fields – input for hour / minute

► "Automatic daylight saving time":
button field – activation / deactivation of the device function for automatic shift of the daylight saving time



1-1-6 "TIME SWITCH"

In the sub menu "TIME SWITCH" the time function "Time switch" for the operating mode "Time switch" of output circuits and the operating mode "Groups" of luminaire modules of the respective emergency light station is configured. These inputs are used for the selective switching of output circuits, groups and luminaire modules.

> The time function "Time switch" can be configured three times.

> The time function "Time switch" can only be selected at the operating mode "Time switch" for output circuits or groups.

> If no input was made for the switch-on time or the interval time the command initiation of the time function "Time switch" is inactive.

View – 1 of 3:

► "Time switch 1:" ► "Monday":
button field – activation / deactivation of the time function "Time switch 1" for the day Monday

► "Time switch 1:" ► "Tuesday":
button field – activation / deactivation of the time function "Time switch 1" for the day Tuesday

► "Time switch 1:" ► "Wednesday":
button field – activation / deactivation of the time function "Time switch 1" for the day Wednesday

► "Time switch 1:" ► "Thursday":
button field – activation / deactivation of the time function "Time switch 1" for the day Thursday

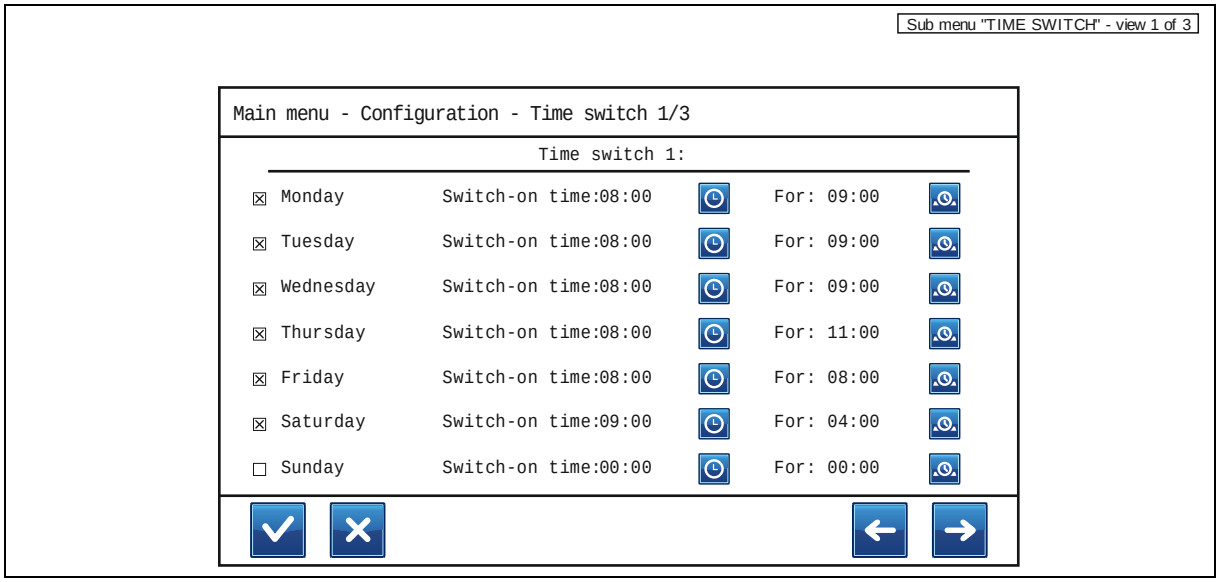
► "Time switch 1:" ► "Friday":
button field – activation / deactivation of the time function "Time switch 1" for the day Friday

► "Time switch 1:" ► "Saturday":
button field – activation / deactivation of the time function "Time switch 1" for the day Saturday

► "Time switch 1:" ► "Sunday":
button field – activation / deactivation of the time function "Time switch 1" for the day Sunday

► "Time switch 1:" ► "Switch-on time:":
button fields – input of the switch-on time for the time function "Time switch 1" of the selected day (00:00 – 23:59)

► "Time switch 1:" ► "For:":
button fields – input of the interval time for the time function "Time switch 1" of the selected day (00:00 – 23:59)



An actuation of the button field ➔ calls up the following view in the sub menu "TIME SWITCH 1/3".

View – 2 of 3:

► "Time switch 2:" ► "Monday":
button field – activation / deactivation of the time function "Time switch 2" for the day Monday

► "Time switch 2:" ► "Tuesday":
button field – activation / deactivation of the time function "Time switch 2" for the day Tuesday

► "Time switch 2:" ► "Wednesday":
button field – activation / deactivation of the time function "Time switch 2" for the day Wednesday

► "Time switch 2:" ► "Thursday":
button field – activation / deactivation of the time function "Time switch 2" for the day Thursday

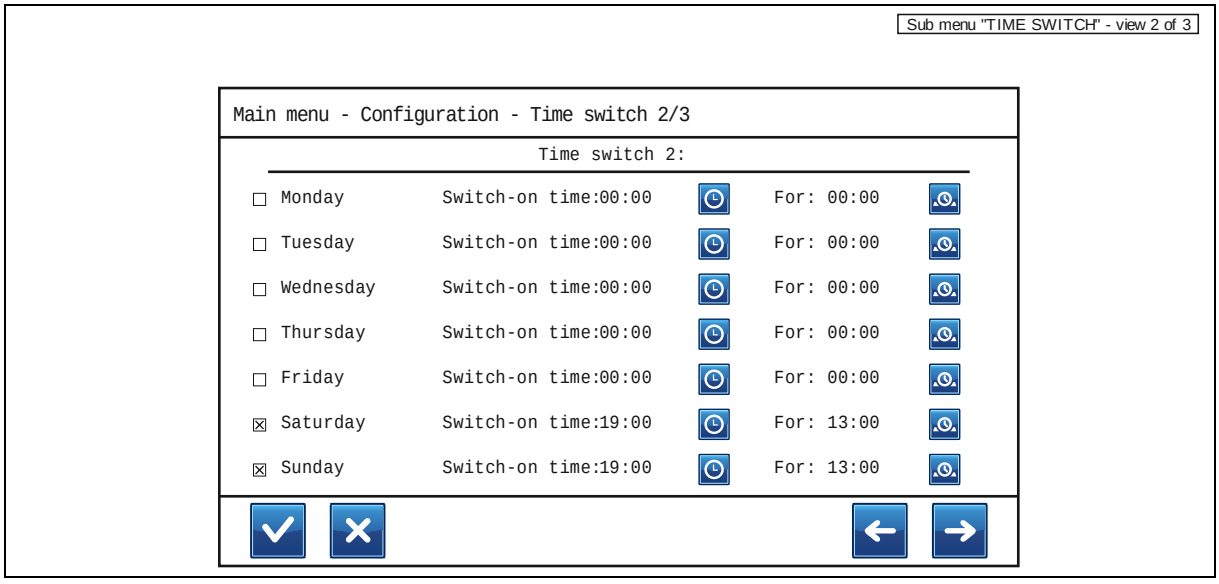
► "Time switch 2:" ► "Friday":
button field – activation / deactivation of the time function "Time switch 2" for the day Friday

► "Time switch 2:" ► "Saturday":
button field – activation / deactivation of the time function "Time switch 2" for the day Saturday

► "Time switch 2:" ► "Sunday":
button field – activation / deactivation of the time function "Time switch 2" for the day Sunday

► "Time switch 2:" ► "Switch-on time:":
button fields – input of the switch-on time for the time function "Time switch 2" of the selected day (00:00 – 23:59)

► "Time switch 2:" ► "For:":
button fields – input of the interval time for the time function "Time switch 2" of the selected day (00:00 – 23:59)



An actuation of the button field calls up the following view in the sub menu "TIME SWITCH 2/3".

View – 3 of 3:

► "Time switch 3:" ► "Monday":
button field – activation / deactivation of the time function "Time switch 3" for the day Monday

► "Time switch 3:" ► "Tuesday":
button field – activation / deactivation of the time function "Time switch 3" for the day Tuesday

► "Time switch 3:" ► "Wednesday":
button field – activation / deactivation of the time function "Time switch 3" for the day Wednesday

► "Time switch 3:" ► "Thursday":
button field – activation / deactivation of the time function "Time switch 3" for the day Thursday

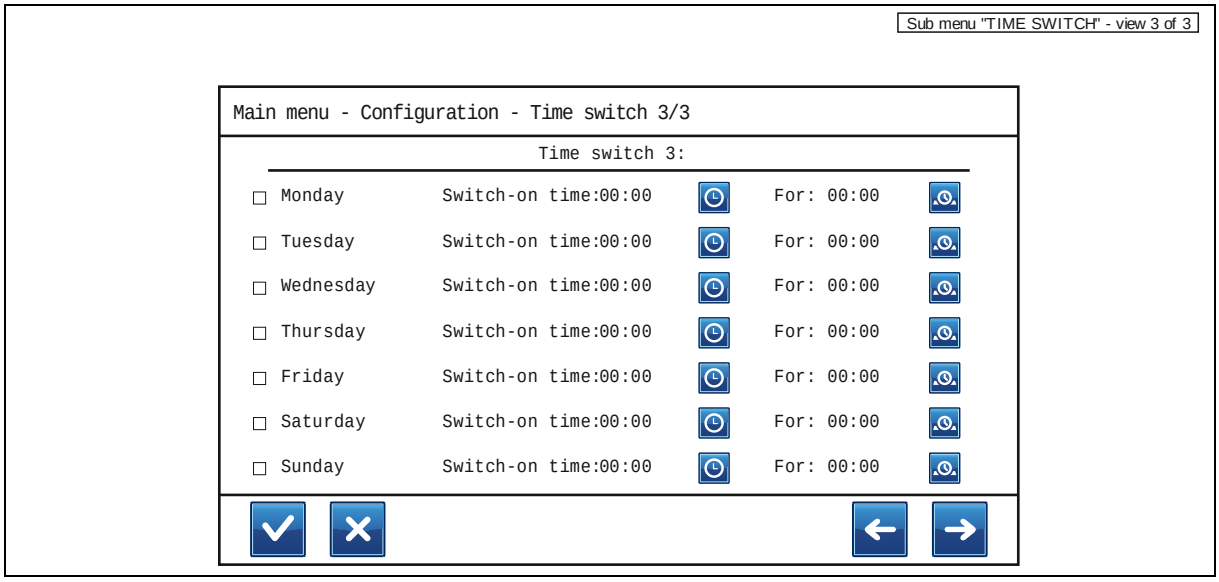
► "Time switch 3:" ► "Friday":
button field – activation / deactivation of the time function "Time switch 3" for the day Friday

► "Time switch 3:" ► "Saturday":
button field – activation / deactivation of the time function "Time switch 3" for the day Saturday

► "Time switch 3:" ► "Sunday":
button field – activation / deactivation of the time function "Time switch 3" for the day Sunday

► "Time switch 3:" ► "Switch-on time:":
button fields – input of the switch-on time for the time function "Time switch 3" of the selected day (00:00 – 23:59)

► "Time switch 3:" ► "For:":
button fields – input of the interval time for the time function "Time switch 3" of the selected day (00:00 – 23:59)



1-1-7 "SOFTWARE"

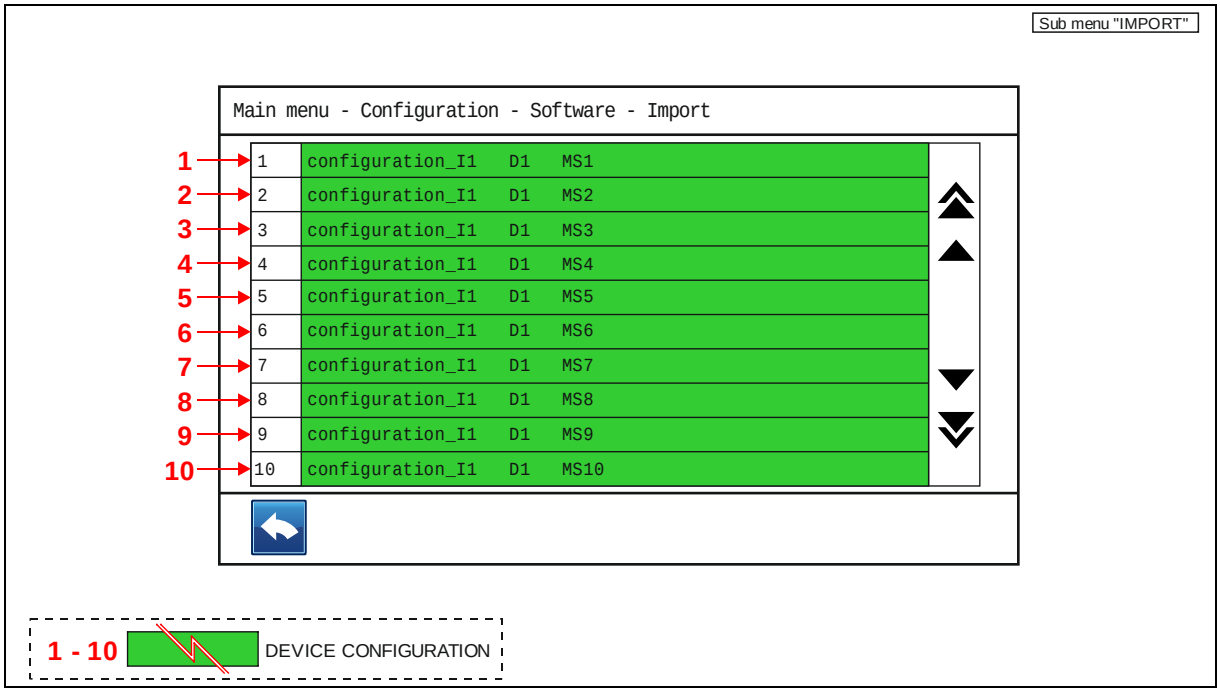
The sub menu consists of the following sub menus:

- 1-1-7-1 "IMPORT"
- 1-1-7-2 "EXPORT"
- 1-1-7-3 "UPDATE"
- 1-1-7-4 "FACTORY RESET"
- 1-1-7-5 "SETTINGS"
- 1-1-7-6 "LOAD BACKUP"
- 1-1-7-7 "SAVE BACKUP"

1-1-7-1 "IMPORT"

In the sub menu "IMPORT" previously exported device configurations are managed manually. Exported device configurations can only be saved on USB sticks. All indicated device configurations can be imported.

"1-10": button fields – actuation of the green area: import of a device configuration



An actuation of the green area regarding the button field of a device configuration executes the manual import of a device configuration. At this procedure the operating system imports a previously exported device configuration on the respective emergency light station. For the import function commercial USB sticks can be used which must be inserted in the respective USB port on the EVA unit. USB sticks must be formatted in the file format FAT32.

> The previously exported device configuration must have the file name "start_file".

> The previously exported device configuration can include further files with various file names. These files belong to the file "start_file".

> The previously exported device configuration must be saved in the directory ":\export\configuration_XXX\". Instead of "XXX" the directory must include the device name of the respective emergency light station.

Note: **The import and export of the device configuration are suitable for a change of the EVA unit resp. the CPU card of an emergency light station.**

Attention: **All folders and files of the device configuration may not be renamed, moved or deleted. Except of the folders and files of the device configuration no further folders and files may be saved on the USB stick.**

1-1-7-2 "EXPORT"

An actuation of the button field "EXPORT" executes a manual export of the device configuration. At this procedure the operating system exports the current device configuration of the respective emergency light station. For the export function commercial USB sticks can be used which must be inserted in the respective USB port on the EVA unit. USB sticks must be formatted in the file format FAT32.

> The exported device configuration has the file name "start_file".

> The exported device configuration can include further files with various file names. These files belong to the file "start_file".

> The exported device configuration is saved in the directory ":\export\configuration_XXX\". Instead of "XXX" the directory includes the device name of the respective emergency light station.

> Only one device configuration can be exported per emergency light station (device name is part of the directory). A repeated Exporting of the device configuration regarding the same emergency light station overwrites the already present device configuration.

Note: **The export and import of the device configuration are suitable for a change of the EVA unit resp. the CPU card of an emergency light station.**

Attention: **All folders and files of the device configuration may not be renamed, moved or deleted. Except of the folders and files of the device configuration no further folders and files may be saved on the USB stick.**

1-1-7-3 "UPDATE"

The sub menu consists of the following sub menus:

- 1-1-7-3-1 "DISPLAY & CPU"
- 1-1-7-3-2 "OUTPUT CARDS"
- 1-1-7-3-3 "I/O"
- 1-1-7-3-4 "DRIVER"
- 1-1-7-3-5 "INVERTER"
- 1-1-7-3-6 "UPDATER"
- 1-1-7-3-7 "LANGUAGE"

1-1-7-3-1 "DISPLAY & CPU"

An actuation of the button field "DISPLAY & CPU" executes a manual update of the operating system. At this procedure the operating system applies a previously prepared update on the display card resp. CPU card of the respective emergency light station. For the update function commercial USB sticks can be used which must be inserted in the respective USB port on the EVA unit. USB sticks must be formatted in the file format FAT32.

> The previously prepared update for the CPU card (component of the EVA unit) must have the file name "porting".

> The previously prepared update for the display card (component of the EVA unit) must have the file name "interfaccia".

> Previously prepared updates include an additional file with the file name "update.mi". This file belongs to the files "porting" and "interfaccia".

> Extended update:
Previously prepared (extended) updates can include further files. These files belong to the files "porting" and "interfaccia" and enable an update of further equipment resp. software components.

> The files "porting" and "interfaccia" of the previously prepared update as well as all files regarding an extended update must be saved in the directory ":\updatesw\".

> The file "update.mi" of the previously prepared update must be saved in the directory ":\".

Note: **Prior to the execution of this device function we recommend to export the device configuration of the emergency light station on a USB stick (see sub menu 1-1-7-2). The current software version of the emergency light station is indicated in the sub menu "INFORMATION" (see sub menu 1-10).**

Attention: **All folders and files of the update may not be renamed, moved or deleted. Except of the folders and files of the update no further folders and files may be saved on the USB stick.**

1-1-7-3-2 "OUTPUT CARDS"

In the sub menu "OUTPUT CARDS" updates of the output cards are managed manually. All indicated updates can be applied.

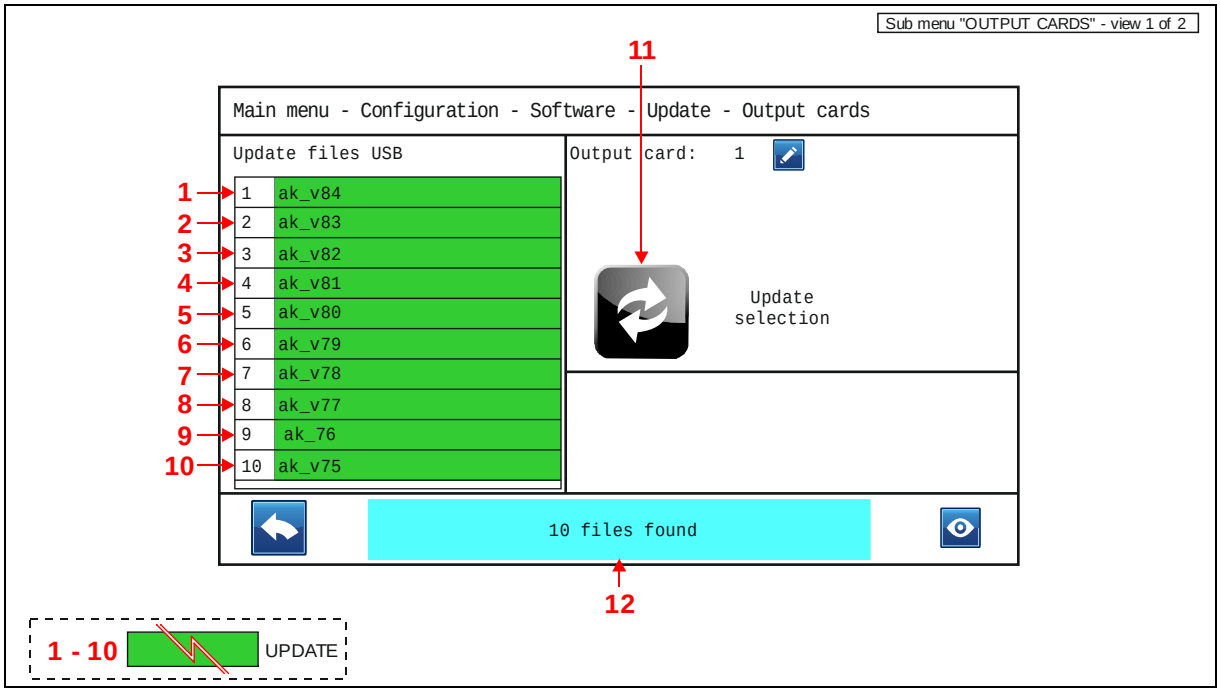
View – 1 of 2:

"1-10": button fields – actuation of the numbered area: selection / deselection of an update, actuation of the green area: selection / deselection of an update

"11": button field – applying of the selected update on the selected output card

"12": text field – additional information

► "Output card:":
button field – input of the card address (1 - 96) for selection of the output card



An actuation of the button field "11" executes a manual update of the selected output card. At this procedure the operating system applies a previously prepared update on the selected output card of the respective emergency light station. For the update function commercial USB sticks can be used which must be inserted in the respective USB port on the EVA unit. USB sticks must be formatted in the file format FAT32.

> The previously prepared update for the output card must have the file name "ak_vXX.bin". Instead of "XX" the file name must include the respective version number of the software version.

> Previously prepared updates include an additional file with the file name "update.mi". This file belongs to the file "ak_vXX.bin".

> The file "ak_vXX.bin" of the previously prepared update must be saved in the directory ":\updatesw\".

> The file "update.mi" of the previously prepared update must be saved in the directory ":\".

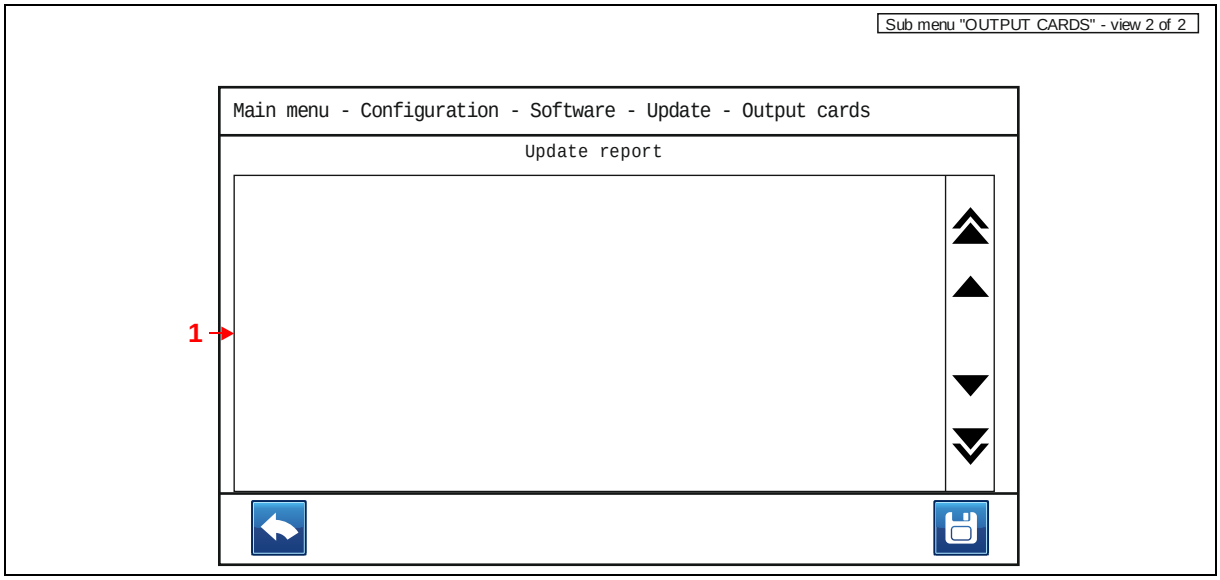
Note: **Prior to the execution of this device function we recommend to export the device configuration of the emergency light station on a USB stick (see sub menu 1-1-7-2). The current software version of the emergency light station is indicated in the sub menu "INFORMATION" (see sub menu 1-10).**

Attention: **All folders and files of the update may not be renamed, moved or deleted. Except of the folders and files of the update no further folders and files may be saved on the USB stick.**

An actuation of the button field calls up the following view in the sub menu "OUTPUT CARDS".

View – 2 of 2:

"1": text field – update report



1-1-7-3-3 "I/O"

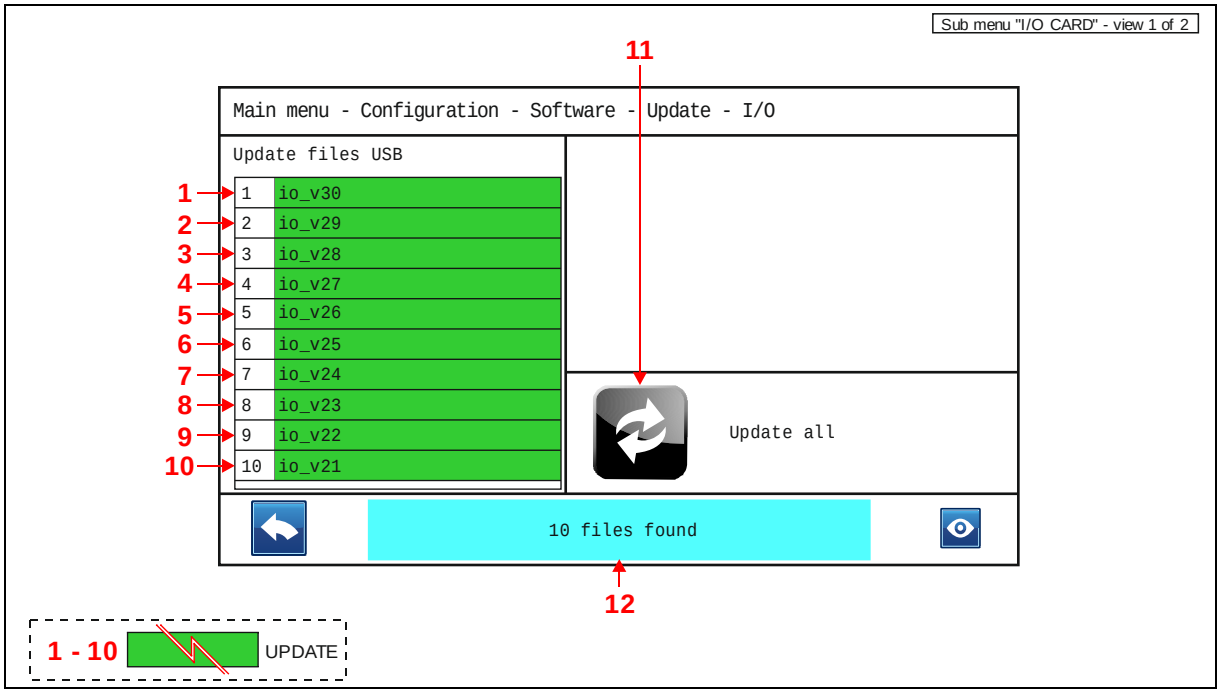
In the sub menu "I/O" updates of the I/O card are managed manually. All indicated updates can be applied.

View – 1 of 2:

"1-10": button fields – actuation of the numbered area: selection / deselection of an update, actuation of the green area: selection / deselection of an update

"11": button field – applying of the selected update on the I/O card

"12": text field – additional information



An actuation of the button field "11" executes a manual update of the I/O card. At this procedure the operating system applies a previously prepared update on the I/O card of the respective emergency light station. For the update function commercial USB sticks can be used which must be inserted in the respective USB port on the EVA unit. USB sticks must be formatted in the file format FAT32.

> The previously prepared update for the I/O card must have the file name "io_vXX.bin". Instead of "XX" the file name must include the respective version number of the software version.

> Previously prepared updates include an additional file with the file name "update.mi". This file belongs to the file "io_vXX.bin".

> The file "io_vXX.bin" of the previously prepared update must be saved in the directory ":\updatesw\".

> The file "update.mi" of the previously prepared update must be saved in the directory ":\".

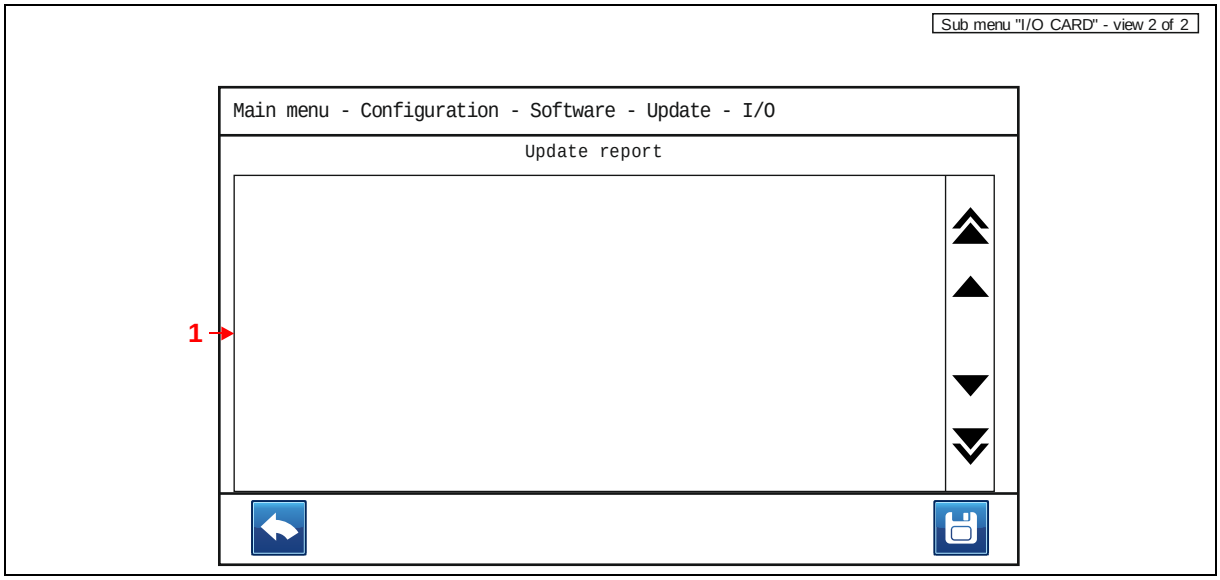
Note: **Prior to the execution of this device function we recommend to export the device configuration of the emergency light station on a USB stick (see sub menu 1-1-7-2). The current software version of the emergency light station is indicated in the sub menu "INFORMATION" (see sub menu 1-10).**

Attention: **All folders and files of the update may not be renamed, moved or deleted. Except of the folders and files of the update no further folders and files may be saved on the USB stick.**

An actuation of the button field calls up the following view in the sub menu "I/O".

View – 2 of 2:

"1": text field – update report



1-1-7-3-4 "DRIVER"

In the sub menu "DRIVER" updates of the luminaire modules with driver function are managed manually. All indicated updates can be applied.

View – 1 of 2:

"1-10": button fields – actuation of the numbered area: selection / deselection of an update, actuation of the green area: selection / deselection of an update

"11": button field with multiple selection – selection of the output circuit

"12": button field – applying of the selected update on the selected luminaire module with driver function

"13": button field – applying of the selected update on all luminaire modules with driver function of the selected output circuit

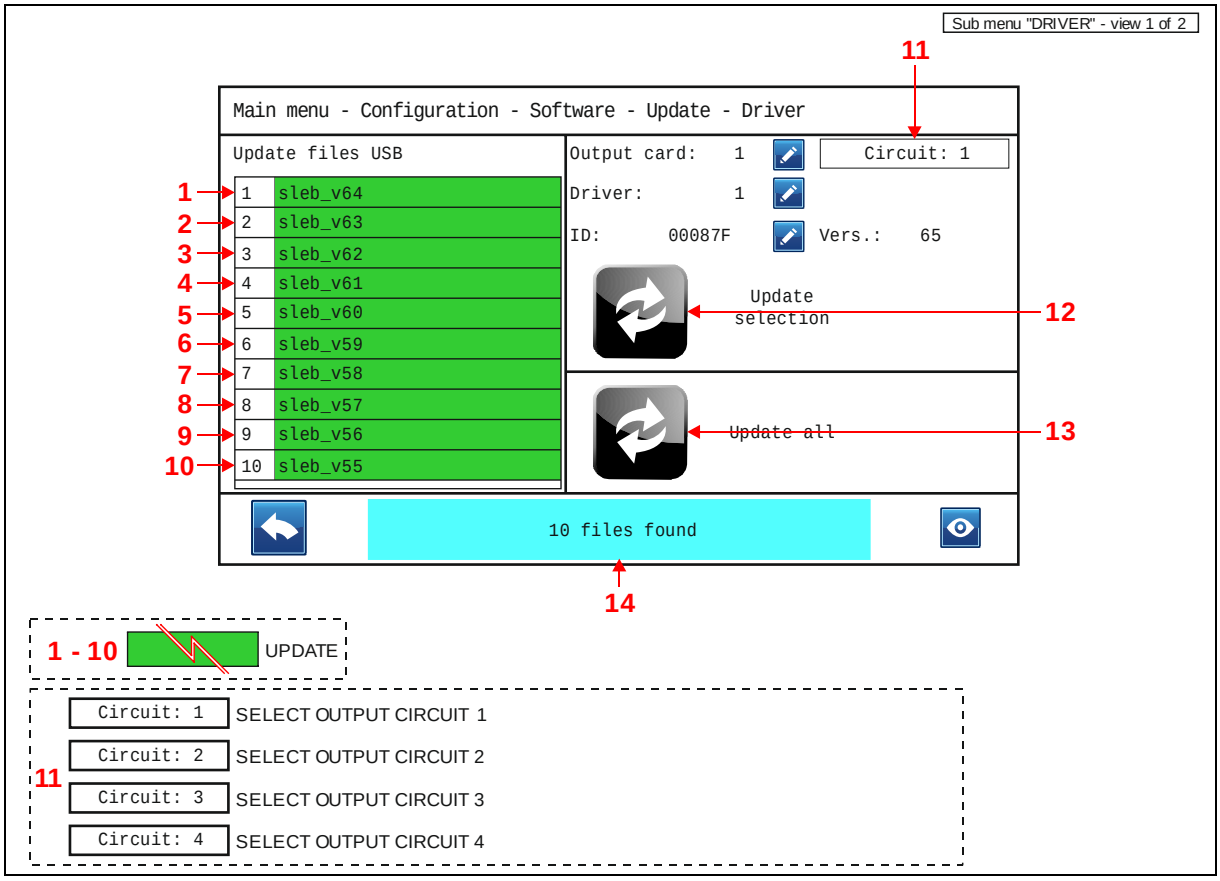
"14": text field – additional information

► "Output card:":
button field – input of the card address (1 - 96) for selection of the output card

► "Driver:":
button field – input of the module address (1 - 32) for selection of the luminaire module with driver function

► "ID:":
button field – input of the ID number for selection of the luminaire module with driver function

► "Vers.:":
text field – indication of the software version of the respective luminaire module with driver function



An actuation of the button field "12" executes a manual update of the selected luminaire module with driver function. At this procedure the operating system applies a previously prepared update on the selected luminaire module with driver function of the respective emergency light station. An actuation of the button field "13" executes a manual update of all luminaire modules with driver function. At this procedure the operating system applies a previously prepared update on all luminaire modules with driver function regarding the selected output circuit of the respective emergency light station. For the update function commercial USB sticks can be used which must be inserted in the respective USB port on the EVA unit. USB sticks must be formatted in the file format FAT32.

> The previously prepared update for the luminaire module with driver function must have the file name "sleb_vXX.bin". Instead of "XX" the file name must include the respective version number of the software version.

> Previously prepared updates include an additional file with the file name "update.mi". This file belongs to the file "sleb_vXX.bin".

> The file "sleb_vXX.bin" of the previously prepared update must be saved in the directory ":\updatesw\".

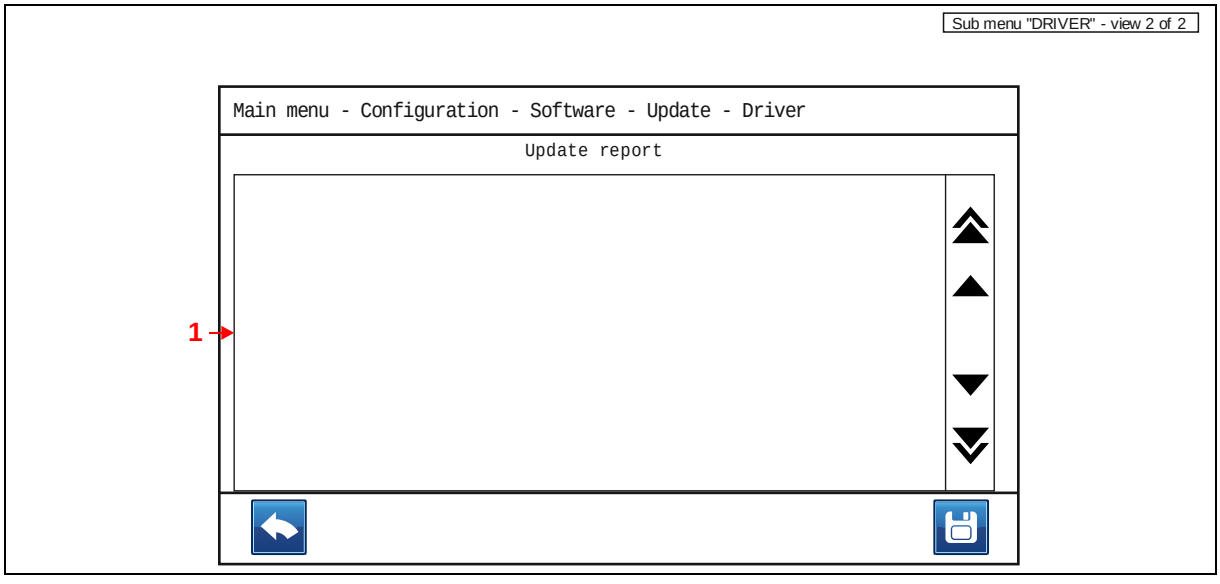
> The file "update.mi" of the previously prepared update must be saved in the directory ":\".

Attention: **All folders and files of the update may not be renamed, moved or deleted. Except of the folders and files of the update no further folders and files may be saved on the USB stick.**

An actuation of the button field calls up the following view in the sub menu "DRIVER".

View – 2 of 2:

"1": text field – update report



1-1-7-3-5 "INVERTER"

In the sub menu "INVERTER" updates of the luminaire modules with inverter function are managed manually. All indicated updates can be applied.

View – 1 of 2:

"1-10": button fields – actuation of the numbered area: selection / deselection of an update, actuation of the green area: selection / deselection of an update

"11": button field with multiple selection – selection of the output circuit

"12": button field – applying of the selected update on the selected luminaire module with inverter function

"13": button field – applying of the selected update on all luminaire modules with inverter function of the selected output circuit

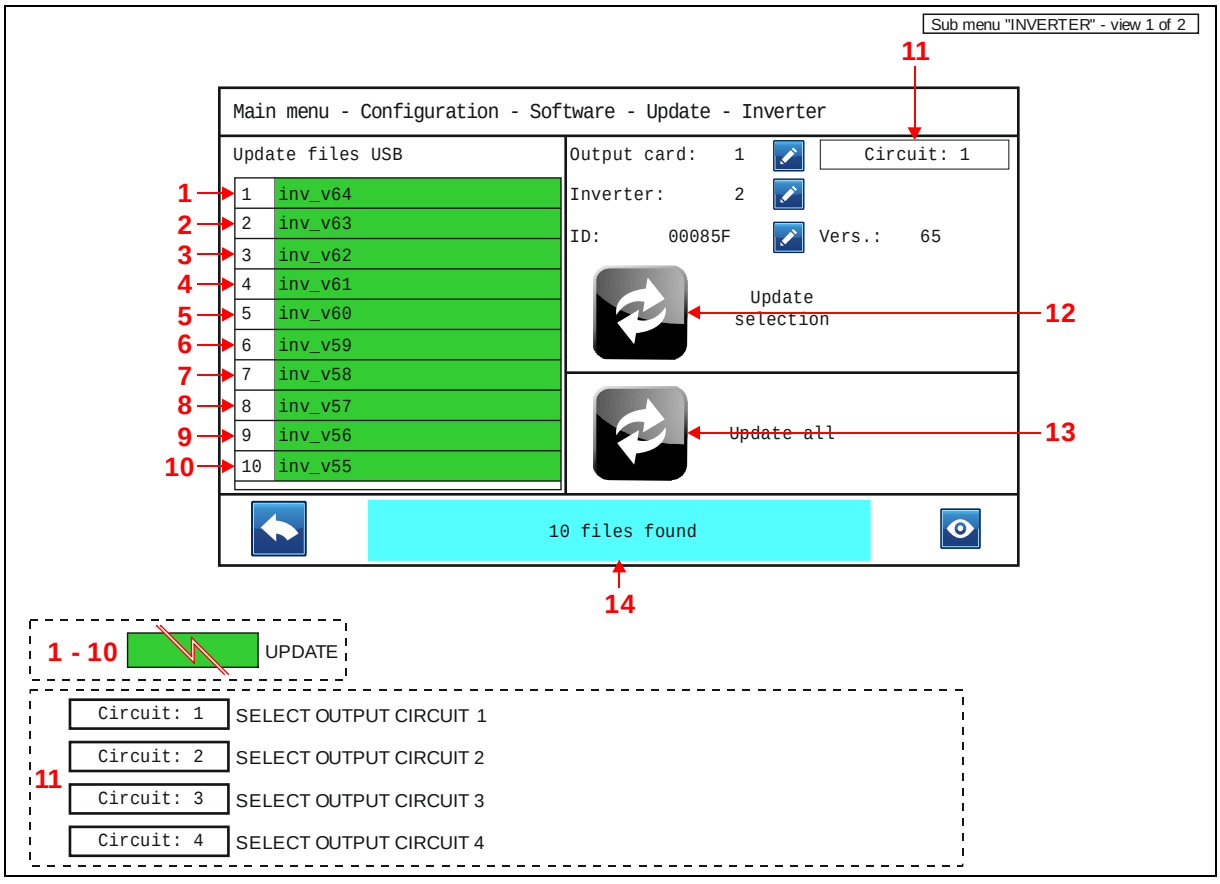
"14": text field – additional information

► "Output card:":
button field – input of the card address (1 - 96) for selection of the output card

► "Inverter:":
button field – input of the module address (1 - 32) for selection of the luminaire module with inverter function

► "ID:":
button field – input of the ID number for selection of the luminaire module with inverter function

► "Vers.:":
text field – indication of the software version of the respective luminaire module with inverter function



An actuation of the button field "12" executes a manual update of the selected luminaire module with inverter function. At this procedure the operating system applies a previously prepared update on the selected luminaire module with inverter function of the respective emergency light station. An actuation of the button field "13" executes a manual update of all luminaire modules with inverter function. At this procedure the operating system applies a previously prepared update on all luminaire modules with inverter function regarding the selected output circuit of the respective emergency light station. For the update function commercial USB sticks can be used which must be inserted in the respective USB port on the EVA unit. USB sticks must be formatted in the file format FAT32.

> The previously prepared update for the luminaire module with inverter function must have the file name "inv_vXX.bin". Instead of "XX" the file name must include the respective version number of the software version.

> Previously prepared updates include an additional file with the file name "update.mi". This file belongs to the file "inv_vXX.bin".

> The file "inv_vXX.bin" of the previously prepared update must be saved in the directory ":\updatesw\".

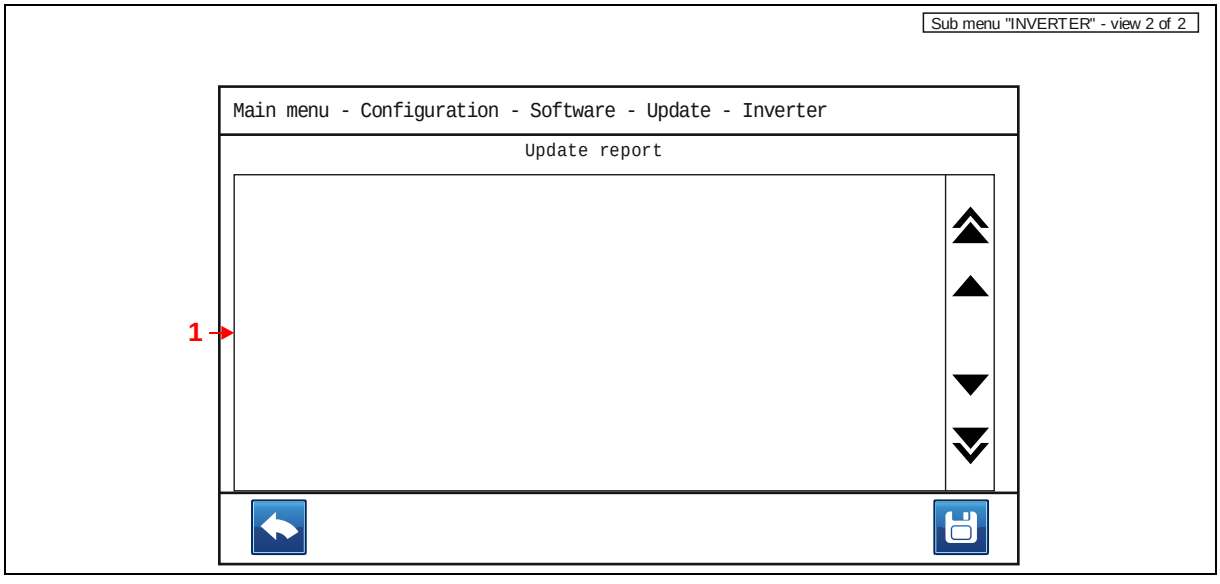
> The file "update.mi" of the previously prepared update must be saved in the directory ":\".

Attention: **All folders and files of the update may not be renamed, moved or deleted. Except of the folders and files of the update no further folders and files may be saved on the USB stick.**

An actuation of the button field calls up the following view in the sub menu "INVERTER".

View – 2 of 2:

"1": text field – update report



1-1-7-3-6 "UPDATER"

An actuation of the button field "UPDATER" executes a manual update of the system updater (software component of the operating system). At this procedure the operating system applies a previously prepared update on the CPU card of the respective emergency light station. For the update function commercial USB sticks can be used which must be inserted in the respective USB port on the EVA unit. USB sticks must be formatted in the file format FAT32.

> The previously prepared update for the system updater (software component of the operating system) must have the file name "update_prazisa".

> Previously prepared updates include an additional file with the file name "update.mi". This file belongs to the file "update_prazisa".

> The file "update_prazisa" of the previously prepared update must be saved in the directory ":\updatesw\".

> The file "update.mi" of the previously prepared update must be saved in the directory ":\".

Note: **Prior to the execution of this device function we recommend to export the device configuration of the emergency light station on a USB stick (see sub menu 1-1-7-2). The current software version of the emergency light station is indicated in the sub menu "INFORMATION" (see sub menu 1-10).**

Attention: **All folders and files of the update may not be renamed, moved or deleted. Except of the folders and files of the update no further folders and files may be saved on the USB stick.**

1-1-7-3-7 "LANGUAGE"

An actuation of the button field "LANGUAGE" executes a manual update of system languages. At this procedure the operating system applies a previously prepared update on the CPU card of the respective emergency light station. For the update function commercial USB sticks can be used which must be inserted in the respective USB port on the EVA unit. USB sticks must be formatted in the file format FAT32.

> The previously prepared update for the system language must have the file name "translate_XXX". Instead of "XXX" the file name must include the respective language abbreviation.

> Previously prepared updates include an additional file with the file name "update.mi". This file belongs to the file "translate_XXX".

> The file "translate_XXX" of the previously prepared update must be saved in the directory ":\updatesw\".

> The file "update.mi" of the previously prepared update must be saved in the directory ":\".

Note: **Prior to the execution of this device function we recommend to export the device configuration of the emergency light station on a USB stick (see sub menu 1-1-7-2). The current software version of the emergency light station is indicated in the sub menu "INFORMATION" (see sub menu 1-10).**

After the execution of this device function the desired system language must be selected again in the sub menu "SETTINGS" (see sub menu 1-1-7-5).

Attention: **All folders and files of the update may not be renamed, moved or deleted. Except of the folders and files of the update no further folders and files may be saved on the USB stick.**

1-1-7-4 "FACTORY RESET"

An actuation of the button field "FACTORY RESET" executes a manual reset of the device configuration. At this procedure the operating system resets the current device configuration of the respective emergency light station to the factory settings.

Note: **Prior to the execution of this device function we recommend to export the device configuration of the emergency light station on a USB stick (see sub menu 1-1-7-2).**

Attention: **This procedure can not be reversed.**

1-1-7-5 "SETTINGS"

In the sub menu "SETTINGS" the language, automatic backups and the device type of the emergency light station are configured.

View – 1 of 2:

"1": button field – execution of the operating system in language: Italian

"2": button field – execution of the operating system in language: German

"3": button field – execution of the operating system in language: English

"4": button field – execution of the operating system in language: Dutch

"5": button field – execution of the operating system in language: Slovenian

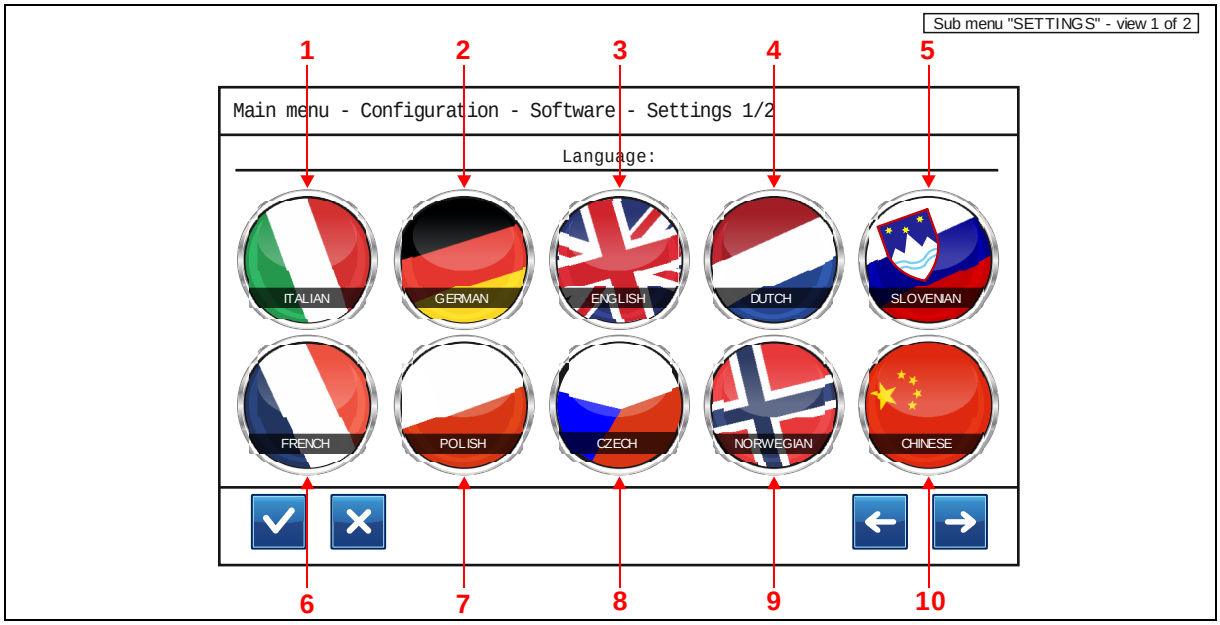
"6": button field – execution of the operating system in language: French

"7": button field – execution of the operating system in language: Polish

"8": button field – execution of the operating system in language: Czech

"9": button field – execution of the operating system in language: Norwegian

"10": button field – execution of the operating system in language: Chinese



An actuation of the button fields "1" to "10" executes the operating system in the respective language.

An actuation of the button field ➡ calls up the following view in the sub menu "SETTINGS 1/2".

View – 2 of 2:

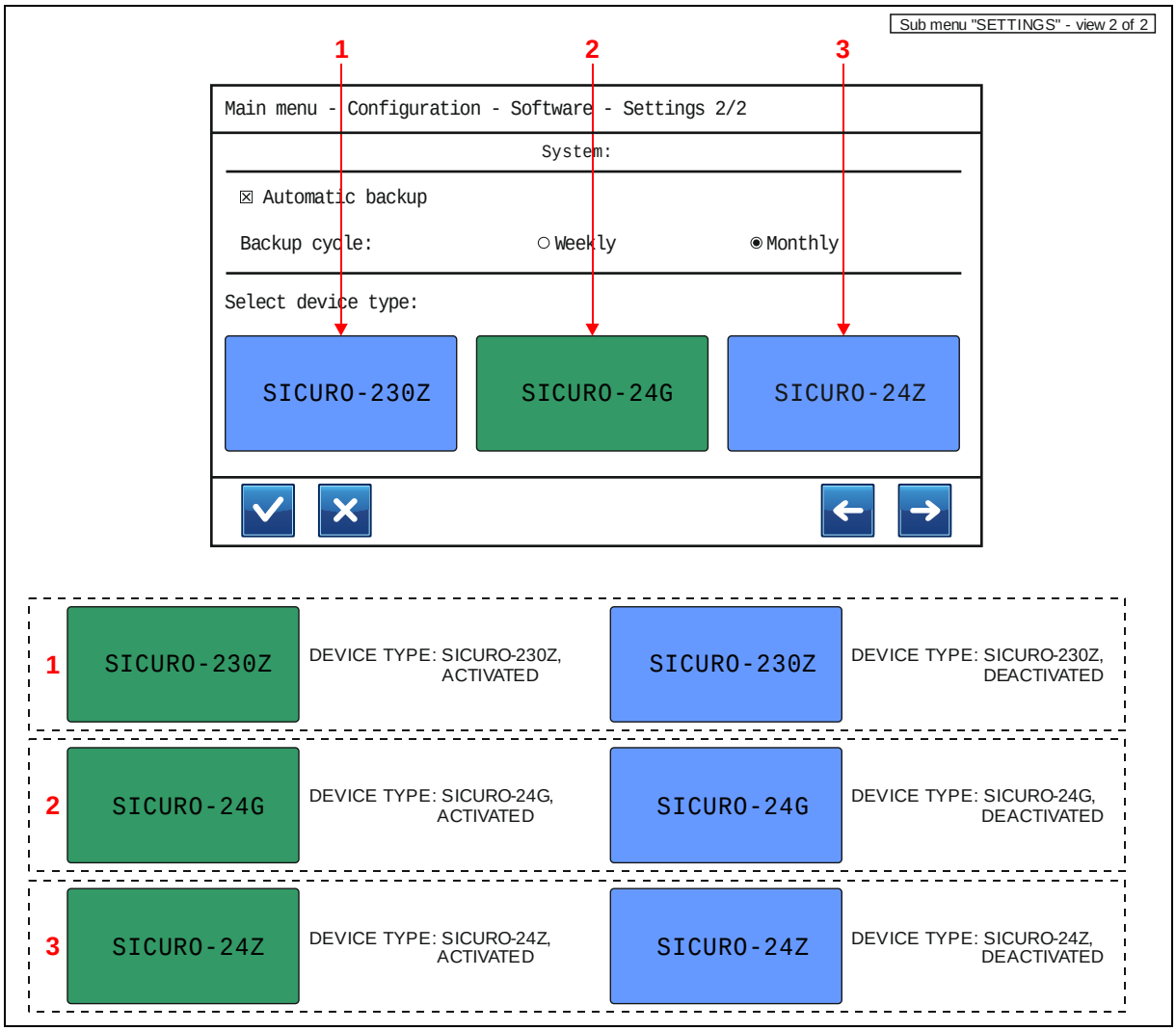
"1": button field – execution of the operating system for device type: SICURO-230Z

"2": button field – execution of the operating system for device type: SICURO-24G

"3": button field – execution of the operating system for device type: SICURO-24Z

► "System:" ► "Automatic backup":
button field – activation / deactivation of the automatic backup

► "System:" ► "Backup cycle:" ► "Weekly:" / "Monthly:":
button fields – activation of the weekly / monthly backup cycle



Automatic backup:

If this device function is activated the operating system executes weekly or monthly the automatic saving of a backup. At this procedure the operating system saves the current device configuration of the respective emergency light station on the CPU card. In the sub menu "SAVE BACKUP" (see sub menu 1-1-7-7) a manual saving of a backup can be executed.

> A maximum of 10 backups can be saved. The automatic saving of a further backup overwrites the already present backup with the youngest date. A manual saving of a further backup can not be executed. To be still able to execute the manual saving of a backup saved backups must be deleted at first.

> Only one backup can be saved per day. A repeated saving on one day overwrites the already present backup with the youngest date if the saving procedure was executed automatically. A repeated saving on one day overwrites the already present backup with the youngest date if the saving procedure was executed manually and the maximum quantity of 10 saved backups is not reached.

Note: **A backup is suitable for the recovery of the device configuration regarding an emergency light station.**

Device type:

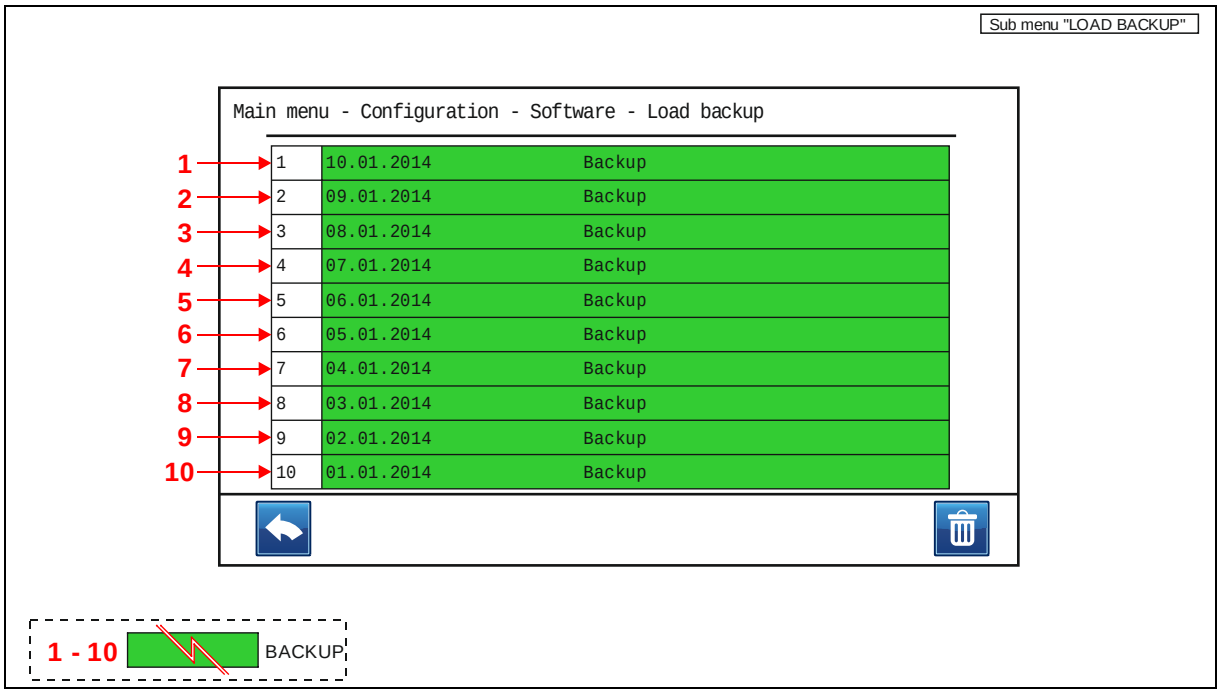
An actuation of the button fields "1" to "3" executes the operating system for the respective device type.

Attention: **The selected device type must always correspond with the actual device type of the respective emergency light station. Otherwise safety-relevant malfunctions can occur. The device type is designated on the type plate of the respective emergency light station. After a selection resp. change of the device type the operating system executes a warm start.**

1-1-7-6 "LOAD BACKUP"

In the sub menu "LOAD BACKUP" internal backups of the device configuration are managed manually. Internal backups can only be saved on the CPU card. All indicated backups can be loaded and deleted. In the sub menu "SETTINGS" (see sub menu 1-1-7-5) an automatic backup can be configured.

"1-10": button fields – actuation of the numbered area: selection / deselection of a backup, actuation of the green area: loading of a backup



An actuation of the green area regarding the button field of a backup executes the manual loading of a backup. At this procedure the operating system loads a previously saved device configuration from the CPU card on the respective emergency light station.

> A maximum of 10 backups can be saved. The automatic saving of a further backup overwrites the already present backup with the youngest date. A manual saving of a further backup can not be executed. To be still able to execute the manual saving of a backup saved backups must be deleted at first.

> Only one backup can be saved per day. A repeated saving on one day overwrites the already present backup with the youngest date if the saving procedure was executed automatically. A repeated saving on one day overwrites the already present backup with the youngest date if the saving procedure was executed manually and the maximum quantity of 10 saved backups is not reached.

Note: **A backup is suitable for the recovery of the device configuration regarding an emergency light station.**

Attention: **The settings regarding the automatic backup in the sub menu "SETTINGS 2/2" (see sub menu 1-1-7-5) must be observed.**

1-1-7-7 "SAVE BACKUP"

An actuation of the button field "SAVE BACKUP" executes the manual saving of a backup. At this procedure the operating system saves the current device configuration of the respective emergency light station on the CPU card. In the sub menu "SETTINGS 2/2" (see sub menu 1-1-7-5) an automatic backup can be configured.

> A maximum of 10 backups can be saved. The automatic saving of a further backup overwrites the already present backup with the youngest date. A manual saving of a further backup can not be executed. To be still able to execute the manual saving of a backup saved backups must be deleted at first.

> Only one backup can be saved per day. A repeated saving on one day overwrites the already present backup with the youngest date if the saving procedure was executed automatically. A repeated saving on one day overwrites the already present backup with the youngest date if the saving procedure was executed manually and the maximum quantity of 10 saved backups is not reached.

Note: **A backup is suitable for the recovery of the device configuration regarding an emergency light station.**

Attention: **The settings regarding the automatic backup in the sub menu "SETTINGS 2/2" (see sub menu 1-1-7-5) must be observed.**

1-2 "LUMINAIRES"

In the sub menu "LUMINAIRES" the operating modes for the luminaire modules of the respective emergency light station are configured. Every luminaire module with driver function can be programmed with an individual dimming value. Furthermore the luminaire modules can be added / removed to / from previously configured groups and text designations for luminaire modules can be entered free.

> A luminaire module can be added to a maximum of 4 previously configured groups.

> A luminaire module can only be added to several groups if not the same time or query functions are configured in these groups.

An actuation of the button field "7" regarding the view 1 of 4 calls up the following view in the sub menu "LUMINAIRES", if a luminaire module with driver function was selected.

View – 1 of 4:

"1": button field with multiple selection – selection of the output circuit

"2": text field – indication of the ID number for the respective output card

"3": button field – free input of the module name (0 - 32 signs) for the respective luminaire module

"4": text field – entered module name of the respective luminaire module

"5": button field – selection of the operating mode "Maintained mode" for the respective luminaire module, not possible at luminaire modules with inverter function

"6": button field – selection of the operating mode "Non-maintained mode" for the respective luminaire module

"7": button field – selection of the operating mode "Groups" for the respective luminaire module, not possible at luminaire modules with inverter function

"8": button field – adding of the respective luminaire module to the previously configured groups (1 - 64, max. 4 groups)

"9": button field – removal of the respective luminaire module from the previously configured groups (1 - 64, max. 4 groups)

"10": button fields – selection of the dimming value (10, 20, 30, 40, 50, 60, 70, 80, 90, 100 percent) for the respective luminaire module

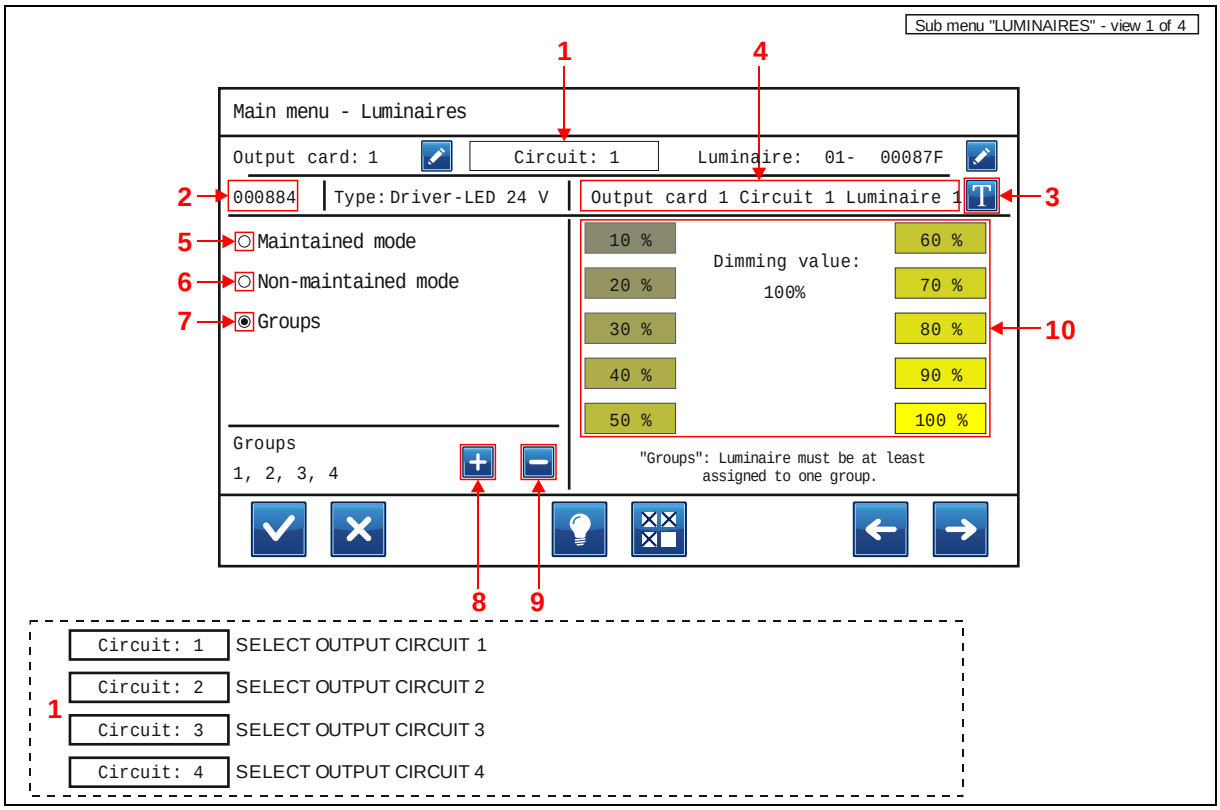
► "Output card:":
button field – input of the card address (1 - 96) for selection of the output card

► "Luminaire:":
button field – call-up of the view for selection of the module address

► "Type:":
text field – indication of the module type for the respective luminaire module

► "Dimming value:":
text field – selected dimming value of the respective luminaire module

► "Groups":
text field – indication of the groups to which the respective luminaire module is added



An actuation of the button field "6" regarding the view 1 of 4 calls up the following view in the sub menu "LUMINAIRES", if a luminaire module with inverter function was selected.

View – 2 of 4:

"1": button field with multiple selection – selection of the output circuit

"2": text field – indication of the ID number for the respective output card

"3": button field – free input of the module name (0 - 32 signs) for the respective luminaire module

"4": text field – entered module name of the respective luminaire module

"5": button field – selection of the operating mode "Maintained mode" for the respective luminaire module, not possible at luminaire modules with inverter function

"6": button field – selection of the operating mode "Non-maintained mode" for the respective luminaire module

"7": button field – selection of the operating mode "Groups" for the respective luminaire module, not possible at luminaire modules with inverter function

"8": button field – adding of the respective luminaire module to the previously configured groups (1 - 64, max. 4 groups)

"9": button field – removal of the respective luminaire module from the previously configured groups (1 - 64, max. 4 groups)

► "Output card:":
button field – input of the card address (1 - 96) for selection of the output card

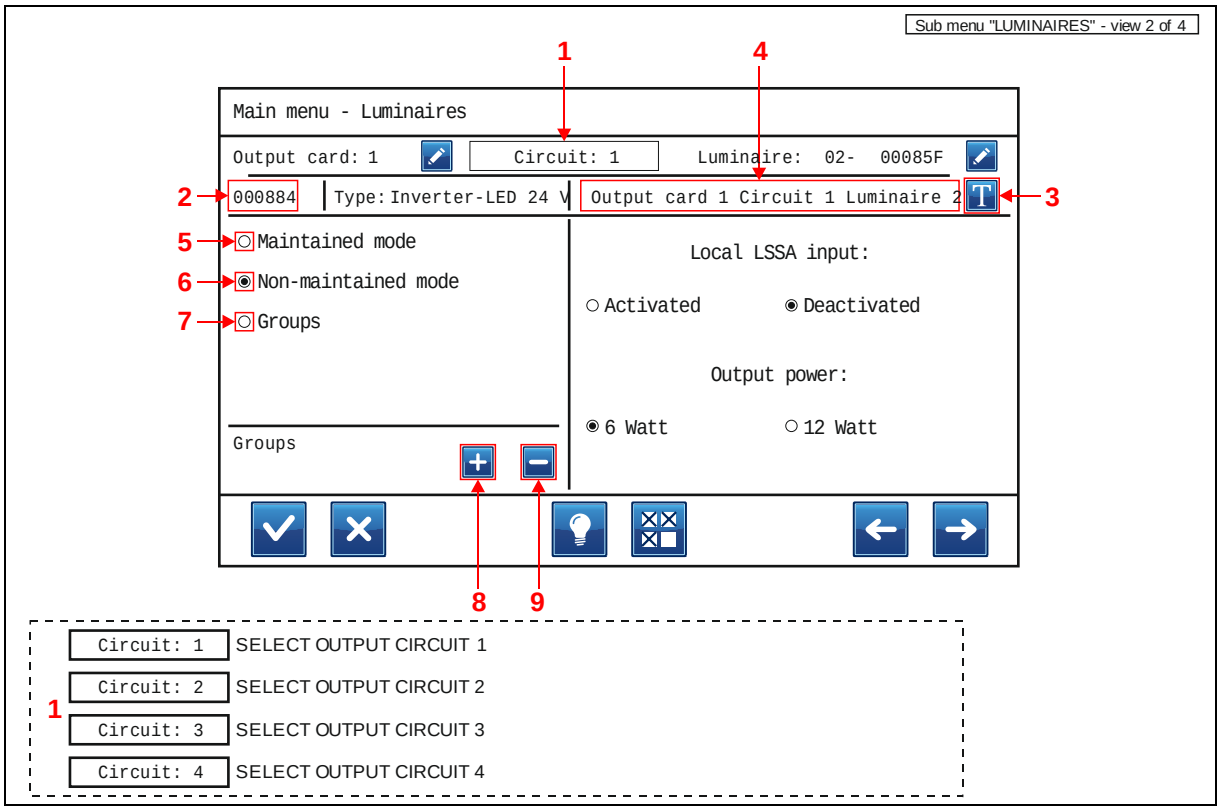
► "Luminaire:":
button field – call-up of the view for selection of the module address

► "Type:":
text field – indication of the module type for the respective luminaire module

► "Local LSSA input:" ► "Activated" / "Deactivated":
button fields – activation / deactivation of the local LSSA switch input for the respective luminaire module with inverter function

► "Output power:" ► "6 Watt" / "12 Watt":
button fields – selection of the output power for the respective luminaire module with inverter function

► "Groups":
text field – indication of the groups to which the respective luminaire module is added

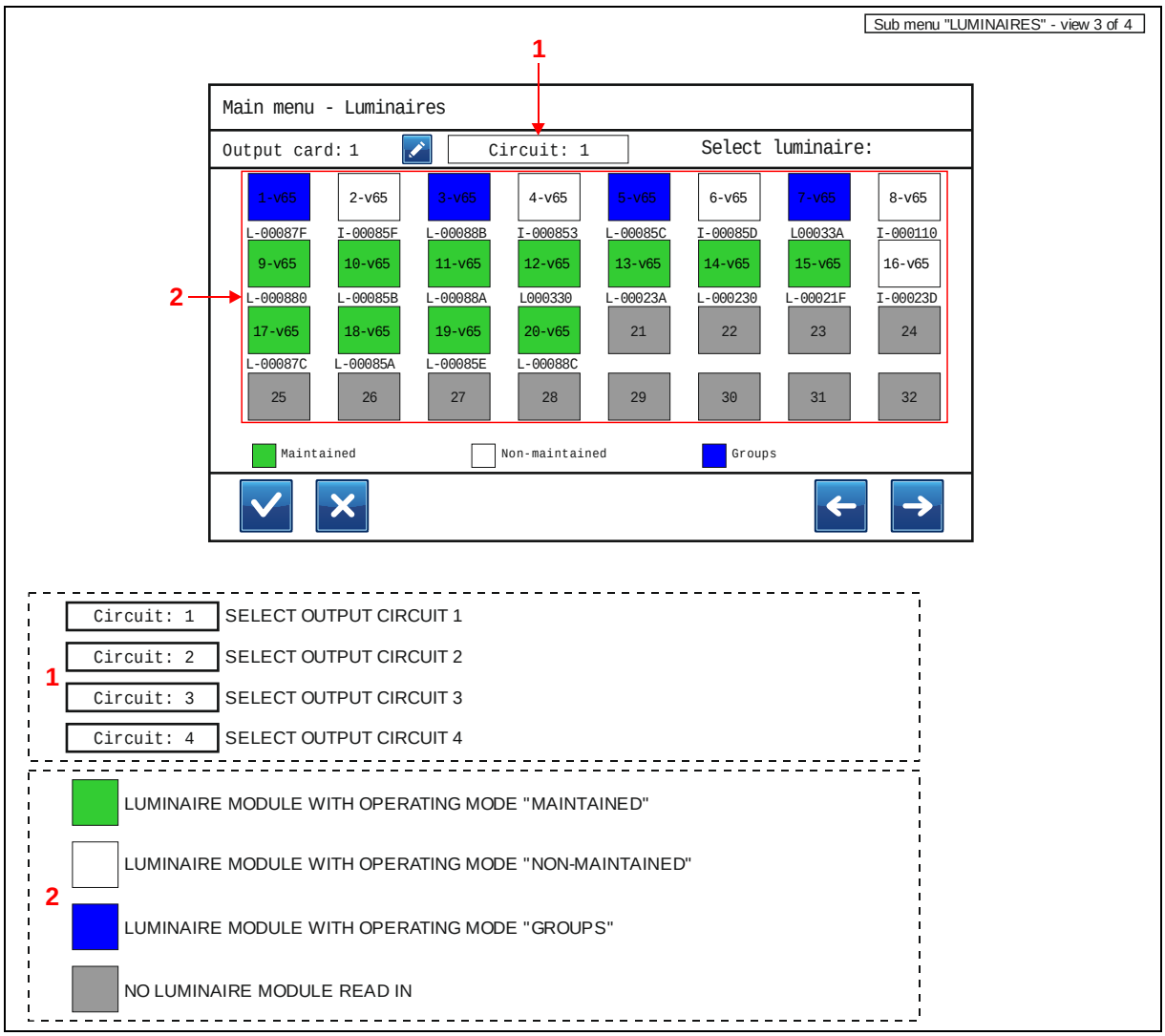


An actuation of the button field regarding the designation "Luminaire:" calls up the following view in the sub menu "LUMINAIRES".

View – 3 of 4:

"1": button field with multiple selection – selection of the output circuit

"2": button fields with optical indications – indication of module address, software version, assignment sign and ID number of the respective luminaire module as well as the groups to which the respective luminaire module is added,
actuation of a button field:
selection of a module address



An actuation of the button field calls up the following view in the sub menu "LUMINAIRES".

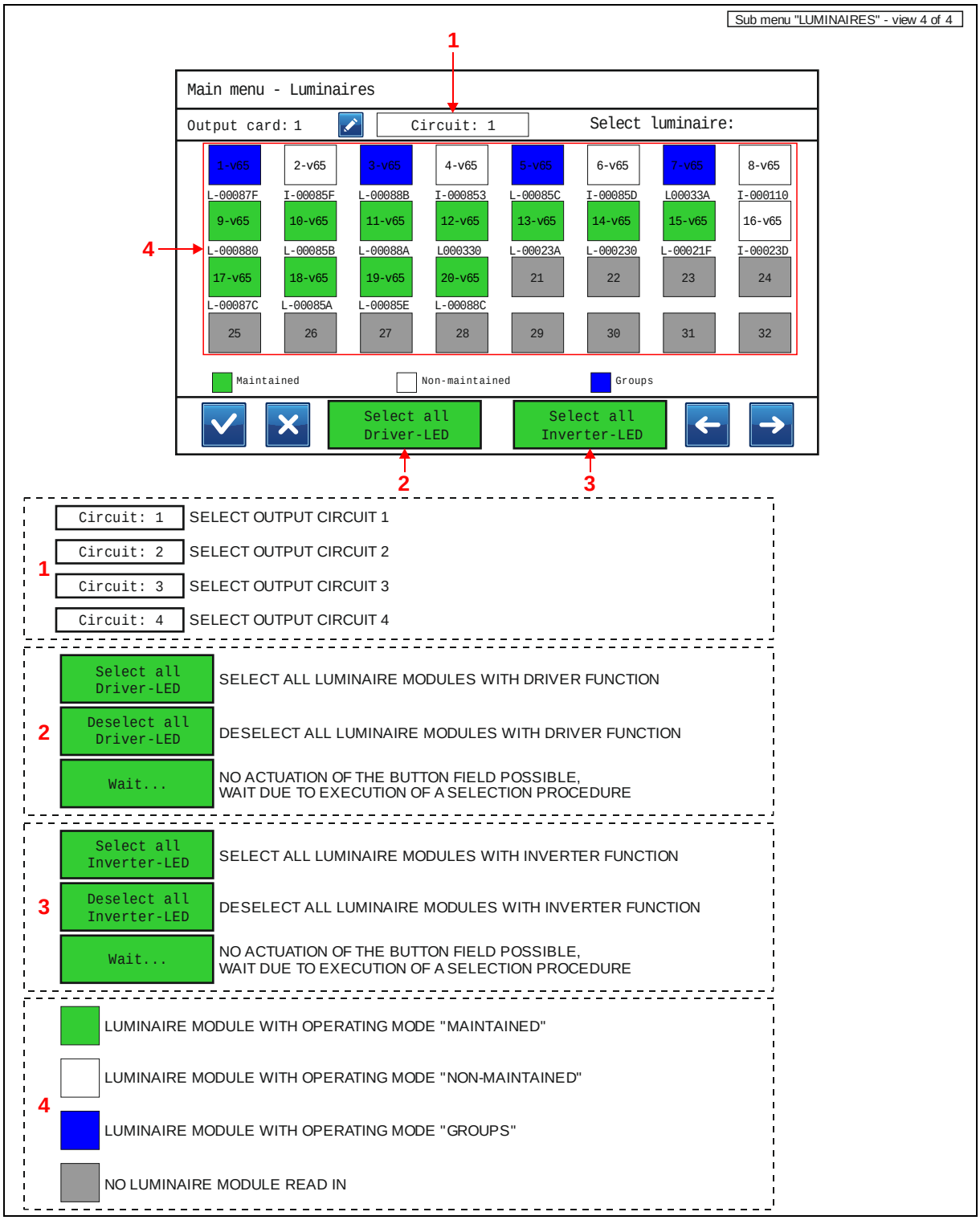
View – 4 of 4:

"1": button field with multiple selection – selection of the output circuit

"2": button field – selection / deselection of all luminaire modules with driver function of the selected output circuit

"3": button field – selection / deselection of all luminaire modules with inverter function of the selected output circuit

"4": button fields with optical indications – indication of module address, software version, assignment sign and ID number of the respective luminaire module as well as the groups to which the respective luminaire module is added,
actuation of a button field / several button fields:
selection of a module address / several module addresses



1-3 "OUTPUT CIRCUITS"

In the sub menu "OUTPUT CIRCUITS" the operating modes for the output circuits of the respective emergency light station are configured. Every output circuit can be programmed with an individual operating time. At output circuits of the monitoring type EÜ the monitoring type SÜ can be selected. Furthermore every output circuit can be deactivated and text designations for output circuits can be entered free.

Operating time –
premature switch-off for output circuits at emergency operation with battery supply:

Every output circuit can be individually programmed with an operating time. At this device function the respective output circuits are being switched off prematurely by the operating system after expiration of the set operating times if a general supply failure (emergency operation with battery supply) is present. The respective output circuits are not being switched off prematurely by the operating system after expiration of the set operating times if a partial supply failure (emergency operation with mains supply) is present.

Attention: **The operating time takes effect on the emergency operation with battery supply. In most of the rules resp. regulations it is not allowed to limit the operating time and with this the emergency duration of an installation. This means that according to most of the rules resp. regulations an installation must be operated with the required emergency duration until the voltage of the battery supply drops down to the switch-off value. This corresponds to a switch-off of all output circuits by activation of the deep discharge protection.**

An actuation of the button field "8" regarding the view 1 of 3 calls up the following view in the sub menu "OUTPUT CIRCUITS".

View – 1 of 3:

"1": button field with multiple selection – selection of the output circuit

"2": button field with multiple selection – selection of the monitoring type for the respective output circuit

"3": text field – indication of the ID number for the respective output card

"4": button field – free input of the output circuit name (0 - 32 signs) for the respective output circuit

"5": text field – entered output circuit name of the respective output circuit

"6": button field – selection of the operating mode "Maintained mode" for the respective output circuit

"7": button field – selection of the operating mode "Non-maintained mode" for the respective output circuit

"8": button field – selection of the operating mode "Time switch" for the respective output circuit

"9": button field – selection of the operating mode "Stairway pushbutton" for the respective output circuit

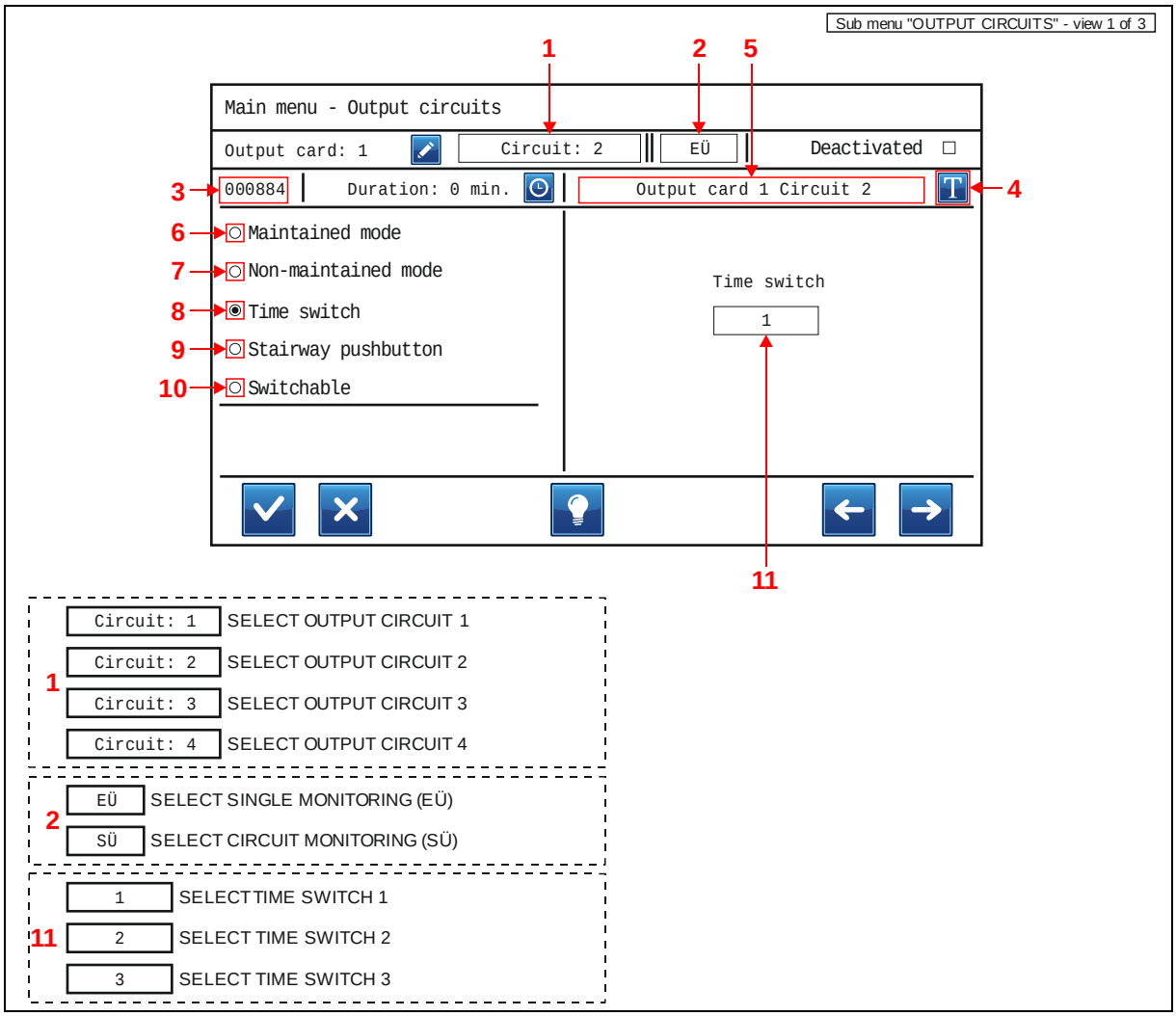
"10": button field – selection of the operating mode "Switchable" for the respective output circuit

"11": button field with multiple selection – selection of the previously configured time function "Time switch" ("1 - 3") at the operating mode "Time switch" of the respective output circuit

► "Output card:":
button field – input of the card address (1 - 96) for selection of the output card

► "Deactivated":
button field – activation / deactivation of the respective output circuit

► "Duration:":
button field – input of the operating time for the respective output circuit at emergency operation with battery supply,
0 = unlimited duration up to activation of the deep discharge protection (0 - 600 minutes)



An actuation of the button field "9" calls up the following view in the sub menu "OUTPUT CIRCUITS".

View – 2 of 3:

"1": button field with multiple selection – selection of the output circuit

"2": button field with multiple selection – selection of the monitoring type for the respective output circuit

"3": text field – indication of the ID number for the respective output card

"4": button field – free input of the output circuit name (0 - 32 signs) for the respective output circuit

"5": text field – entered output circuit name of the respective output circuit

"6": button field – selection of the operating mode "Maintained mode" for the respective output circuit

"7": button field – selection of the operating mode "Non-maintained mode" for the respective output circuit

"8": button field – selection of the operating mode "Time switch" for the respective output circuit

"9": button field – selection of the operating mode "Stairway pushbutton" for the respective output circuit

"10": button field – selection of the operating mode "Switchable" for the respective output circuit

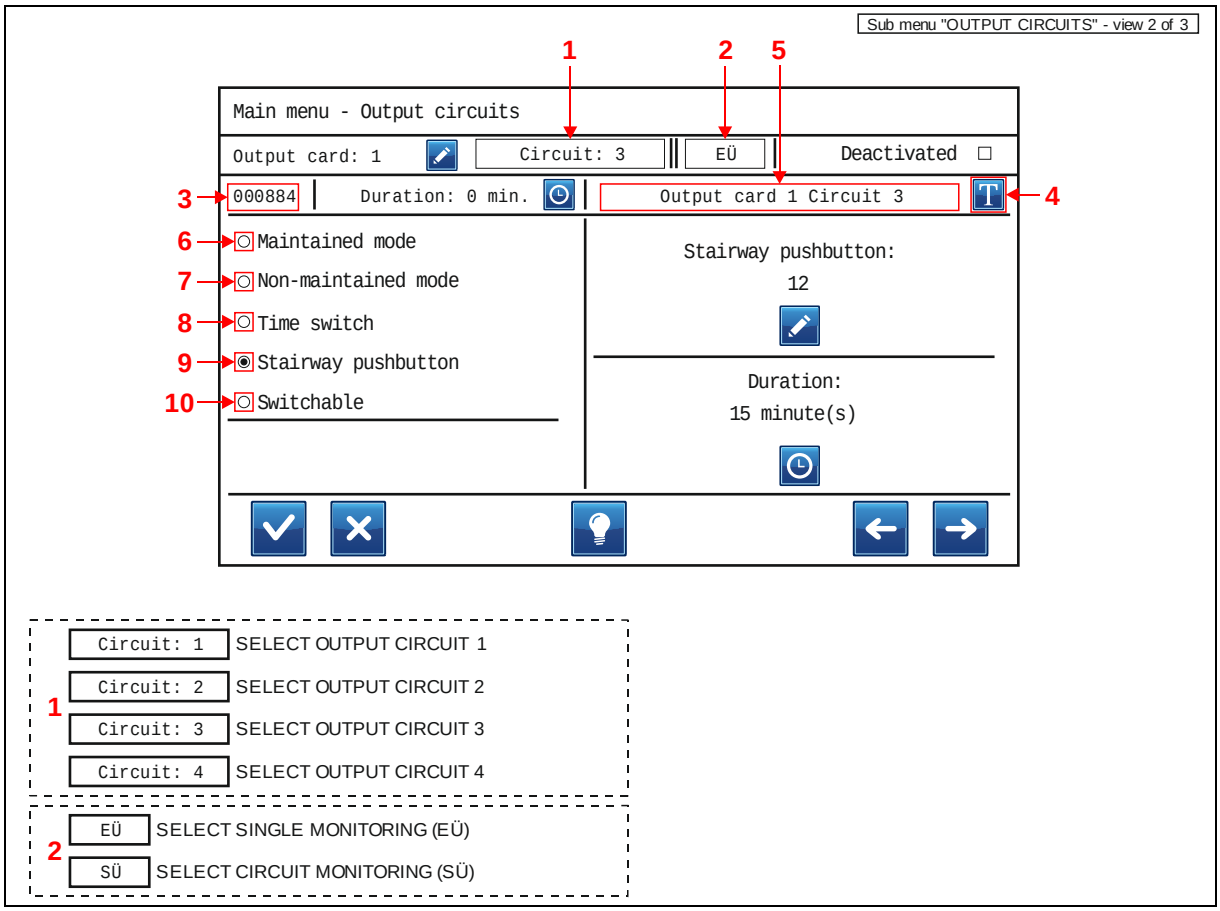
► "Output card:":
button field – input of the card address (1 - 96) for selection of the output card

► "Deactivated":
button field – activation / deactivation of the respective output circuit

► "Duration:":
button field – input of the operating time for the respective output circuit at emergency operation with battery supply,
0 = unlimited duration up to activation of the deep discharge protection (0 - 600 minutes)

► "Stairway pushbutton:":
button field – adding / removal of the previously assigned logic address (1 - 772) regarding the query function "Stairway pushbutton" at the operating mode "Stairway pushbutton" to / from the respective output circuit

► "Duration:":
button field – input of the switch-on time in automatic, manual and emergency operation
(1 - 480 minutes) for the query function "Stairway pushbutton" at the operating mode "Stairway pushbutton" of the respective output circuit



An actuation of the button field "10" calls up the following view in the sub menu "OUTPUT CIRCUITS".

View – 3 of 3:

"1": button field with multiple selection – selection of the output circuit

"2": button field with multiple selection – selection of the monitoring type for the respective output circuit

"3": text field – indication of the ID number for the respective output card

"4": button field – free input of the output circuit name (0 - 32 signs) for the respective output circuit

"5": text field – entered output circuit name of the respective output circuit

"6": button field – selection of the operating mode "Maintained mode" for the respective output circuit

"7": button field – selection of the operating mode "Non-maintained mode" for the respective output circuit

"8": button field – selection of the operating mode "Time switch" for the respective output circuit

"9": button field – selection of the operating mode "Stairway pushbutton" for the respective output circuit

"10": button field – selection of the operating mode "Switchable" for the respective output circuit

"11": button field – adding of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Light switch" at the operating mode "Switchable" to the respective output circuit

"12": button field – removal of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Light switch" at the operating mode "Switchable" from the respective output circuit

"13": button field – adding of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Sub-distribution" at the operating mode "Switchable" to the respective output circuit

"14": button field – removal of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Sub-distribution" at the operating mode "Switchable" from the respective output circuit

"15": button field – adding of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Dynamic light" at the operating mode "Switchable" to the respective output circuit

"16": button field – removal of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Dynamic light" at the operating mode "Switchable" from the respective output circuit

"17": button field – adding of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Manual reset" at the operating mode "Switchable" to the respective output circuit

"18": button field – removal of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Manual reset" at the operating mode "Switchable" from the respective output circuit

► "Output card:":
button field – input of the card address (1 - 96) for selection of the output card

► "Deactivated":
button field – activation / deactivation of the respective output circuit

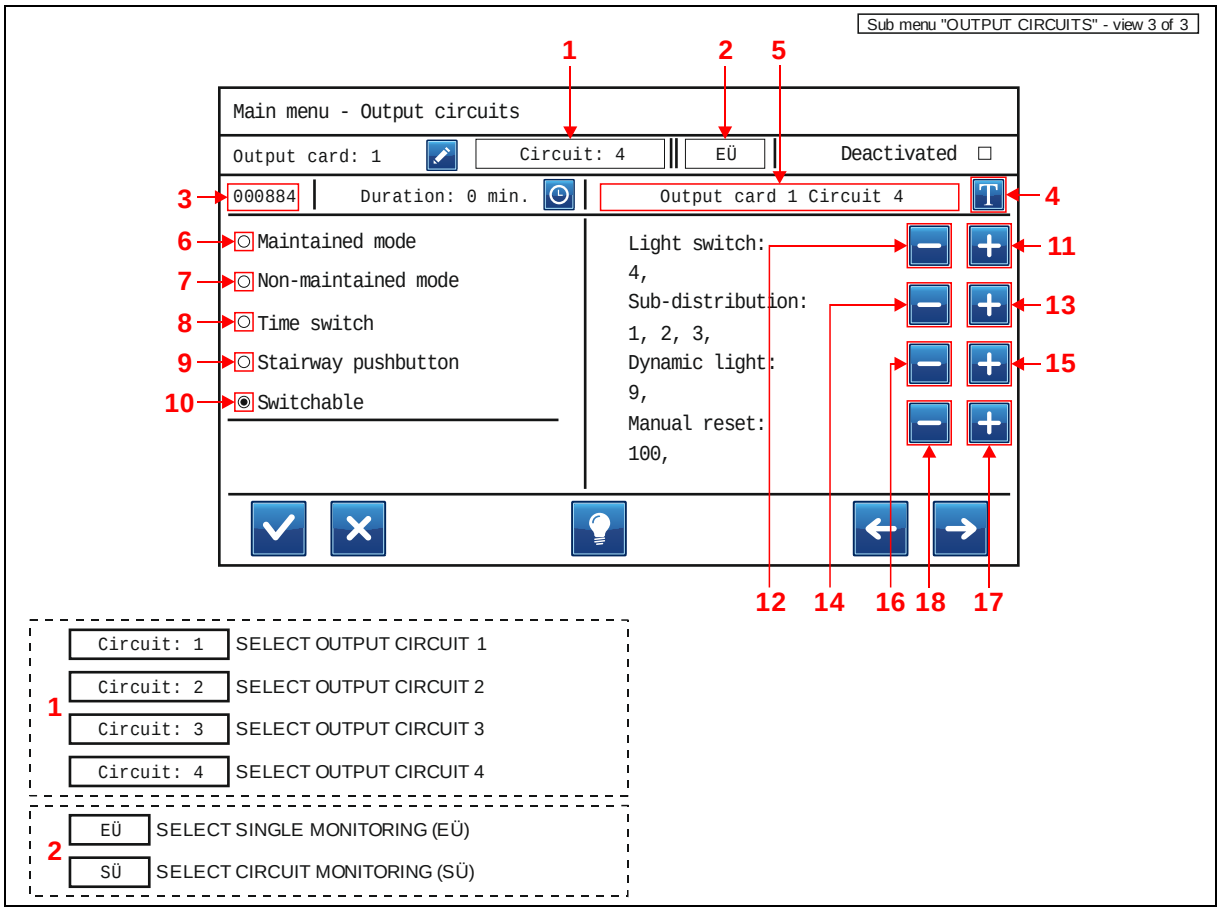
► "Duration:":
button field – input of the operating time for the respective output circuit at emergency operation with battery supply,
0 = unlimited duration up to activation of the deep discharge protection (0 - 600 minutes)

► "Light switch:":
text field – selected logic addresses (max. 4 logic addresses) regarding the query function "Light switch" at the operating mode "Switchable" of the respective output circuit,
no logic address added: query function is not processed

► "Sub-distribution:":
text field – selected logic addresses (max. 4 logic addresses) regarding the query function "Sub-distribution" at the operating mode "Switchable" of the respective output circuit,
no logic address added: query function is not processed

► "Dynamic light:":
text field – selected logic addresses (max. 4 logic addresses) regarding the query function "Dynamic light" at the operating mode "Switchable" of the respective output circuit,
no logic address added: query function is not processed

► "Manual reset:":
text field – selected logic addresses (max. 4 logic addresses) regarding the query function "Manual reset" at the operating mode "Switchable" of the respective output circuit,
no logic address added: query function is not processed



1-4 "GROUPS"

In the sub menu "GROUPS" the operating modes for the groups of the respective emergency light station are configured. Furthermore the luminaire modules can be added / removed to / from previously configured groups and text designations for groups can be entered free.

> A maximum of 64 groups can be configured.

> A group is available if an operating mode was selected for the group. The selected operating mode should be configured appropriate.

> A luminaire module can be added to a maximum of 4 previously configured groups.

An actuation of the button field "4" regarding the view 1 of 5 calls up the following view in the sub menu "GROUPS".

View – 1 of 5:

"1": button field – free input of the group name (0 - 32 signs) for the respective group

"2": text field – entered group name of the respective group

"3": button field – selection of no operating mode for the respective group

"4": button field – selection of the operating mode "Time switch" for the respective group

"5": button field – selection of the operating mode "Stairway pushbutton" for the respective group

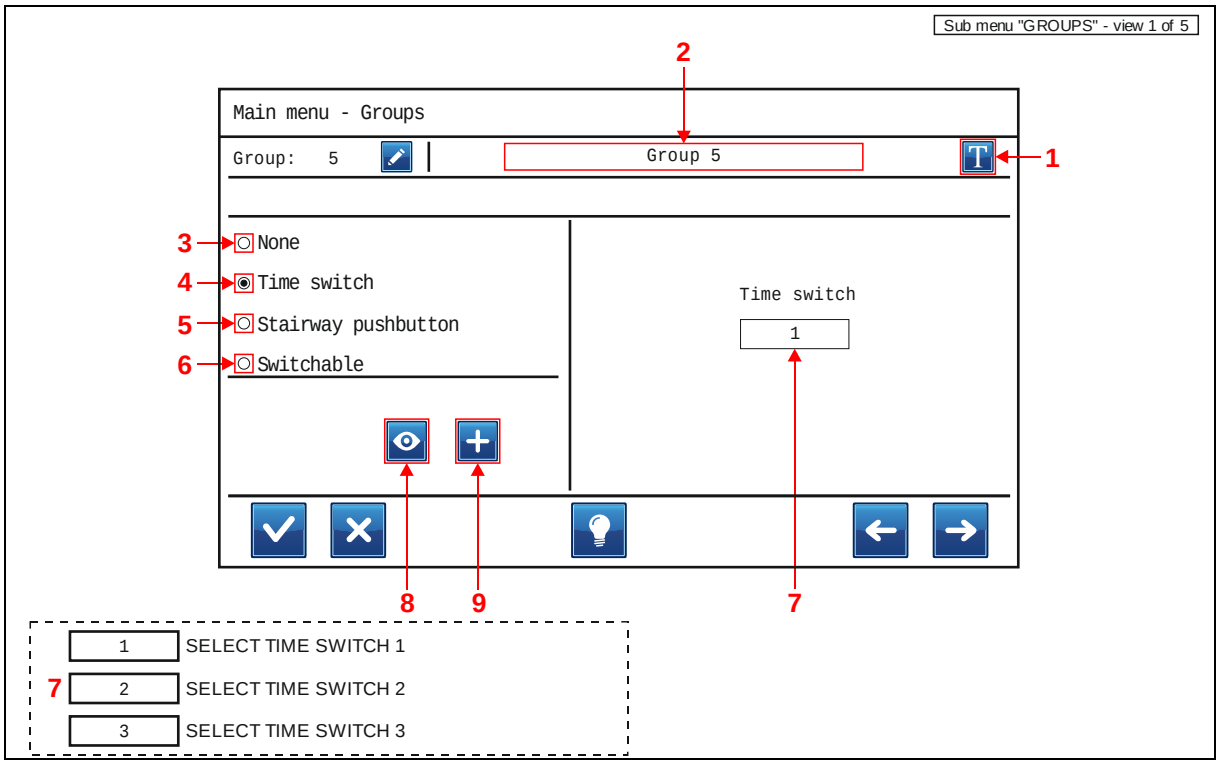
"6": button field – selection of the operating mode "Switchable" for the respective group

"7": button with multiple selection – selection of the previously configured time function "Time switch" ("1 - 3") at the operating mode "Time switch" of the respective group

"8": button field – indication of the luminaire modules which are added to the respective group

"9": button field – adding / removal of the luminaire modules to / from the respective group

► "Group:":
button field – input for selection of the group (1 - 64)



An actuation of the button field "5" calls up the following view in the sub menu "GROUPS".

View – 2 of 5:

"1": button field – free input of the group name (0 - 32 signs) for the respective group

"2": text field – entered group name of the respective group

"3": button field – selection of no operating mode for the respective group

"4": button field – selection of the operating mode "Time switch" for the respective group

"5": button field – selection of the operating mode "Stairway pushbutton" for the respective group

"6": button field – selection of the operating mode "Switchable" for the respective group

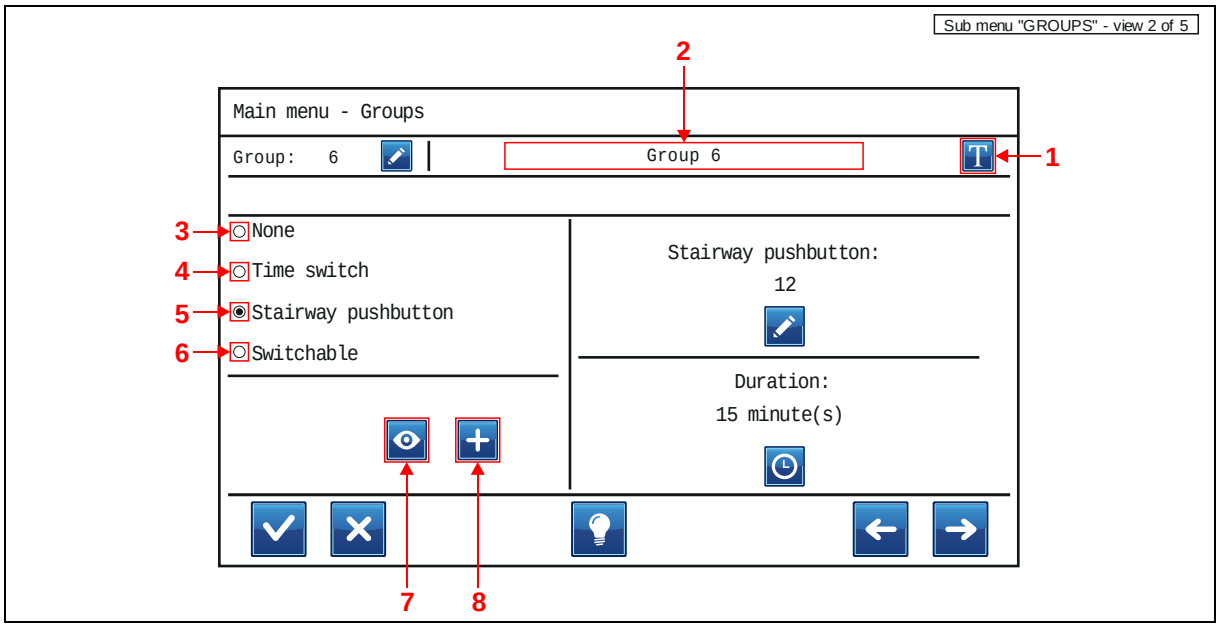
"7": button field – indication of the luminaire modules which are added to the respective group

"8": button field – adding / removal of the luminaire modules to / from the respective group

► "Group:":
button field – input for selection of the group (1 - 64)

► "Stairway pushbutton:":
button field – adding / removal of the previously assigned logic address (1 - 772) regarding the query function "Stairway pushbutton" at the operating mode "Stairway pushbutton" to / from the respective group

► "Duration:":
button field – input of the switch-on time in automatic, manual and emergency operation
(1 - 480 minutes) for the query function "Stairway pushbutton" at the operating mode "Stairway pushbutton" of the respective group



An actuation of the button field "6" calls up the following view in the sub menu "GROUPS".

View – 3 of 5:

"1": button field – free input of the group name (0 - 32 signs) for the respective group

"2": text field – entered group name of the respective group

"3": button field – selection of no operating mode for the respective group

"4": button field – selection of the operating mode "Time switch" for the respective group

"5": button field – selection of the operating mode "Stairway pushbutton" for the respective group

"6": button field – selection of the operating mode "Switchable" for the respective group

"7": button field – indication of the luminaire modules which are added to the respective group

"8": button field – adding / removal of the luminaire modules to / from the respective group

"9": button field – adding of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Light switch" at the operating mode "Switchable" to the respective group

"10": button field – removal of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Light switch" at the operating mode "Switchable" from the respective group

"11": button field – adding of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Sub-distribution" at the operating mode "Switchable" to the respective group

"12": button field – removal of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Sub-distribution" at the operating mode "Switchable" from the respective group

"13": button field – adding of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Dynamic light" at the operating mode "Switchable" to the respective group

"14": button field – removal of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Dynamic light" at the operating mode "Switchable" from the respective group

"15": button field – adding of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Manual reset" at the operating mode "Switchable" to the respective group

"16": button field – removal of the previously assigned logic addresses (1 - 772, max. 4 logic addresses) regarding the query function "Manual reset" at the operating mode "Switchable" from the respective group

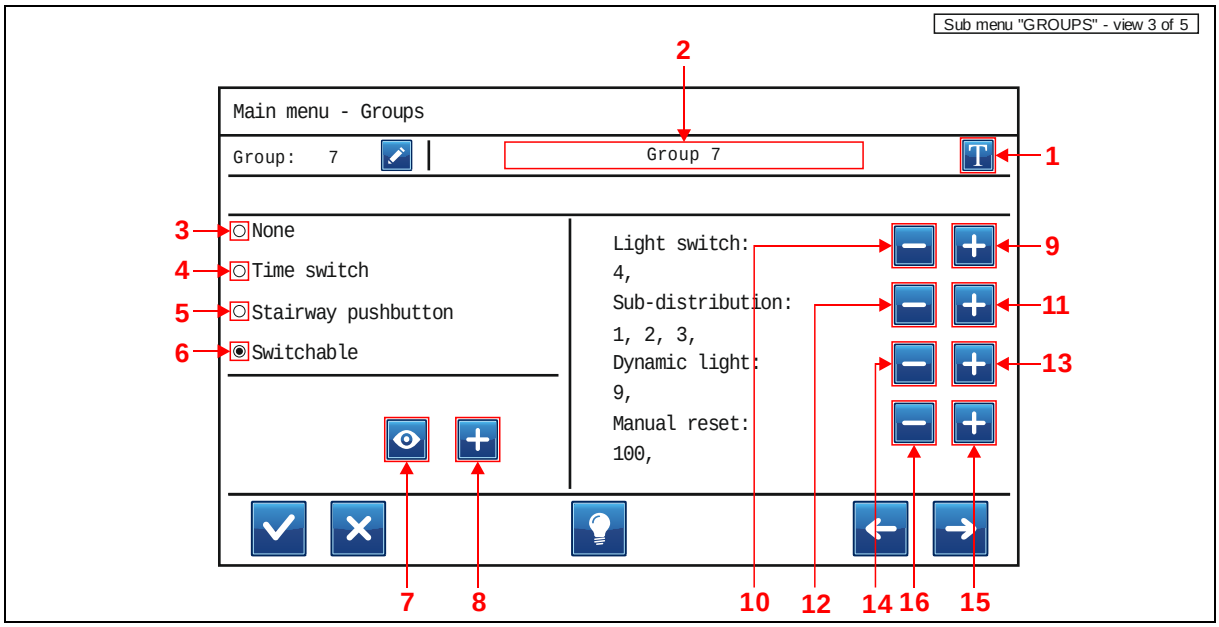
► "Group:":
button field – input for selection of the group (1 - 64)

► "Light switch:":
text field – selected logic addresses (max. 4 logic addresses) regarding the query function "Light switch" at the operating mode "Switchable" of the respective group,
no logic address added: query function is not processed

► "Sub-distribution:":
text field – selected logic addresses (max. 4 logic addresses) regarding the query function "Sub-distribution" at the operating mode "Switchable" of the respective group,
no logic address added: query function is not processed

► "Dynamic light:":
text field – selected logic addresses (max. 4 logic addresses) regarding the query function "Dynamic light" at the operating mode "Switchable" of the respective group,
no logic address added: query function is not processed

► "Manual reset:":
text field – selected logic addresses (max. 4 logic addresses) regarding the query function "Manual reset" at the operating mode "Switchable" of the respective group,
no logic address added: query function is not processed

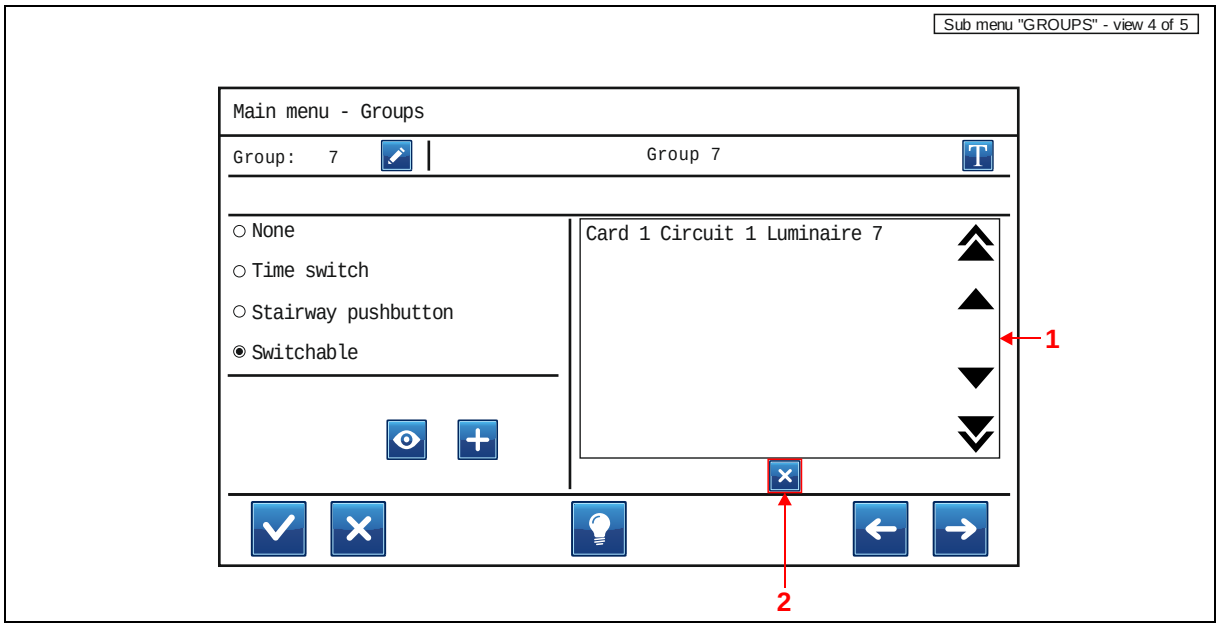


An actuation of the button field "7" ( ) calls up the following view in the sub menu "GROUPS".

View – 4 of 5:

"1": text field – indication of the luminaire modules which are added to the respective group

"2": button field – closing of the text field "1"



Note: **An actuation of the button field "2" ( ) closes the text field "1".**

An actuation of the button field ⊞ calls up the following view in the sub menu "GROUPS".

View – 5 of 5:

"1": button field – free input of the group name (0 - 32 signs) for the respective group

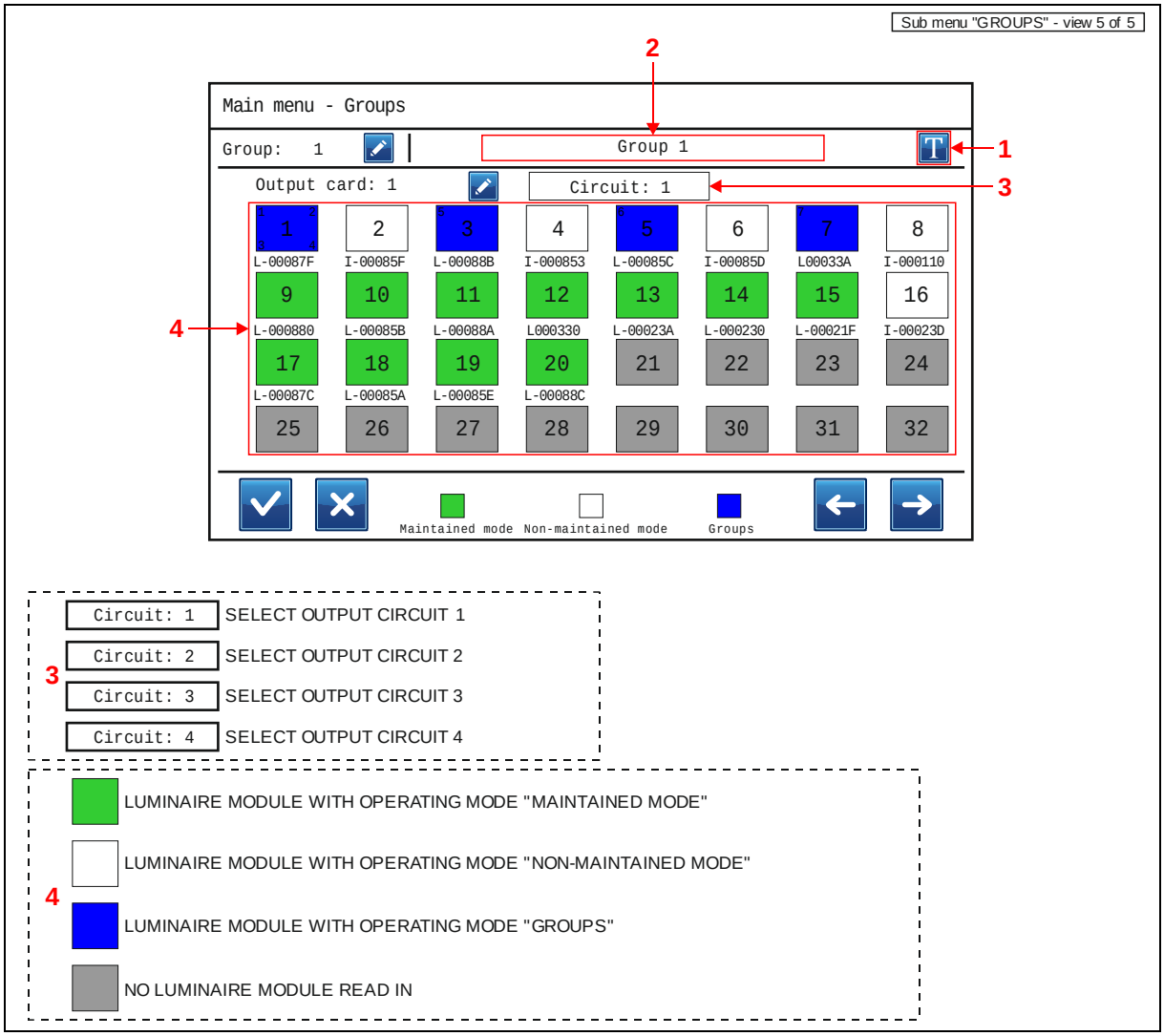
"2": text field – entered group name of the respective group

"3": button field with multiple selection – selection of the output circuit

"4": button fields with optical indications – indication of module address, assignment sign and ID number of the respective luminaire module as well as the groups to which the respective luminaire module is added,
actuation of a button field:
adding / removal of the luminaire module to / from the respective group (1 - 64, max. 4 groups)

► "Group:":
button field – input for selection of the group (1 - 64)

► "Output card:":
button field – input of the card address (1 - 96) for selection of the output card



1-5 "READ-IN"

The sub menu consists of the following sub menus:

- 1-5-1 "LUMINAIRES AUTOMATIC"
- 1-5-2 " LUMINAIRES MANUAL"
- 1-5-3 "OUTPUT CARDS AUTOMATIC"
- 1-5-4 "OUTPUT CARDS MANUAL"
- 1-5-5 "INTERNAL MODULES"
- 1-5-6 "EXTERNAL MODULES "
- 1-5-7 "STATIONS"

The following equipment can be read in by a read-in:

- luminaire modules on output circuits of the monitoring type EÜ
- output cards of the monitoring type EÜ
- internal modules
- external modules
- emergency light stations over station buses (RS485)
- emergency light stations over network (LAN)

Over the sub menus a read-in for different equipment can be executed. All details regarding a read-in result are indicated directly. At already read in luminaire modules the luminaire positions can be changed manually. Furthermore the failure status of single luminaire modules can be indicated if a failure is present.

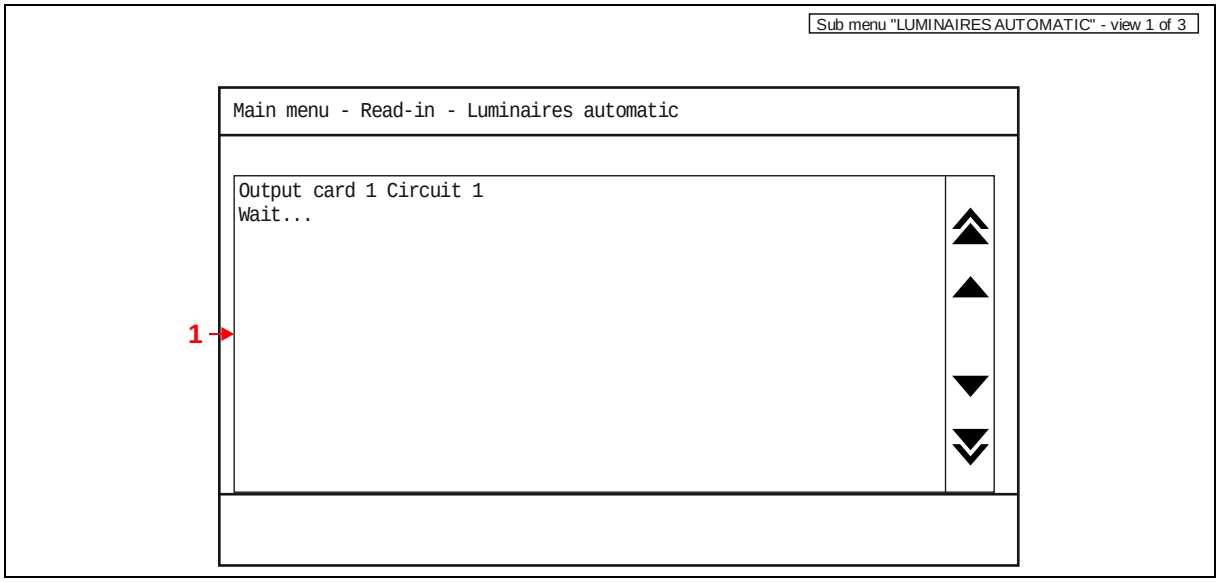
1-5-1 "LUMINAIRES AUTOMATIC"

An actuation of the button field "LUMINAIRES AUTOMATIC" executes an automatic read-in of all connected luminaire modules regarding the respective emergency light station. At this procedure the operating system switches on the output circuits sequentially with the respective battery output voltage and saves the read in data in the device configuration. After the automatic read-in of the luminaire modules is ended the luminaire positions can be changed manually.

Note: **The automatic read in of the luminaire modules can not be ended prematurely.**

View – 1 of 3:

"1": text field – quantity of the read in luminaire modules per output circuit, various messages



After the read-in procedure in the sub menu "LUMINAIRES AUTOMATIC" is ended the following view is called up automatically.

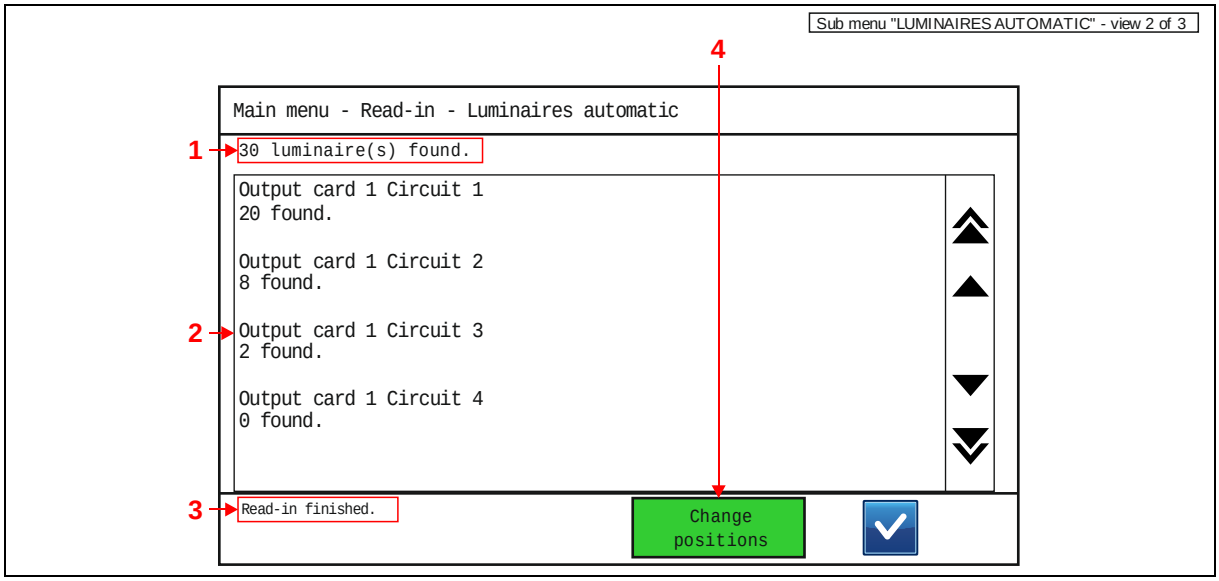
View – 2 of 3:

"1": text field – quantity of the read in luminaire modules on the respective emergency light station

"2": text field – quantity of the read in luminaire modules per output circuit, various messages

"3": text field – status of the read-in procedure

"4": button field – call-up of the view for changing of the luminaire positions



An actuation of the button field "4" calls up the following view in the sub menu "LUMINAIRES AUTOMATIC".

View – 3 of 3:

"1": button fields with optical indications – indication of module address, assignment sign and ID number of the respective luminaire module,
actuation of a button field:
indication of the failure status for the respective luminaire module,
hold actuation of a button field:
selection of the first luminaire module with the luminaire position that has to be changed,
drag actuation of a button field and drop on another button field:
selection of the second luminaire module with the luminaire position that has to be changed

1-5-2 "LUMINAIRES MANUAL"

In the sub menu "LUMINAIRES MANUAL" a manual read-in of all connected luminaire modules regarding the respective output circuit can be executed. At this procedure the operating system switches on the output circuit with the respective battery output voltage and saves the read in data in the device configuration. At already read in luminaire modules the luminaire positions can be changed manually.

"1": button field with multiple selection – selection of the output circuit

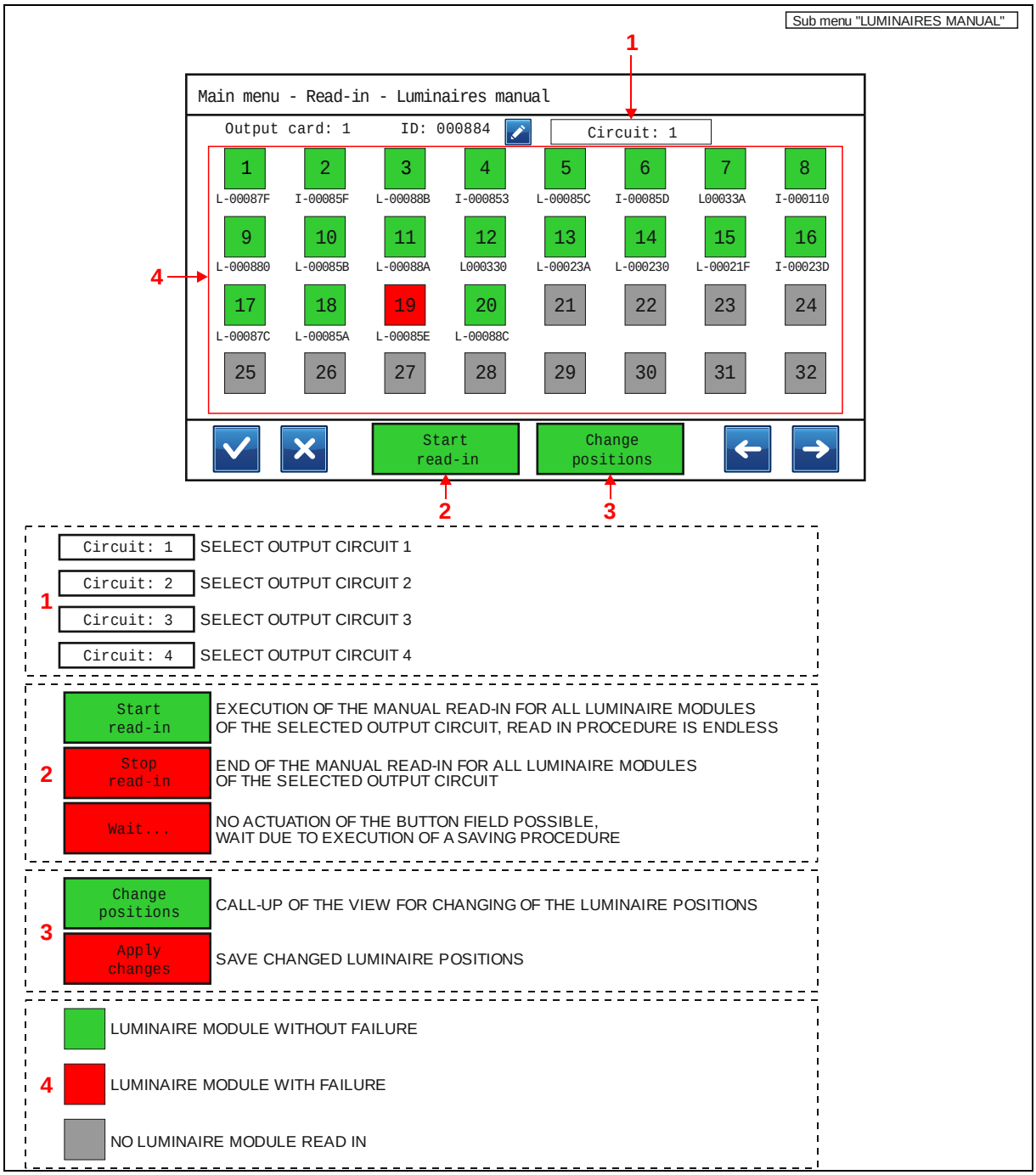
"2": button field with optical indication – execution of the manual read-in for all luminaire modules on the selected output circuit,
actuation of the green area: execute read-in,
actuation of the red area: end read-in

"3": button field with optical indication – call-up of the view for changing of the luminaire positions,
actuation of the green area: activate view for changing of the luminaire positions,
actuation of the red area: deactivate view for changing of the luminaire positions

"4": button fields with optical indications – indication of module address, assignment sign and ID number of the respective luminaire module,
actuation of a button field:
indication of the failure status for the respective luminaire module,
hold actuation of a button field:
selection of the first luminaire module with the luminaire position that has to be changed,
drag actuation of a button field and drop on another button field:
selection of the second luminaire module with the luminaire position that has to be changed

► "Output card:":
button field – input of the card address (1 - 96) for selection of the output card

► "ID:":
text field – indication of the ID number for the respective output card



Note: **The button fields regarding "4" can only be actuated in the view for changing of the luminaire positions.**

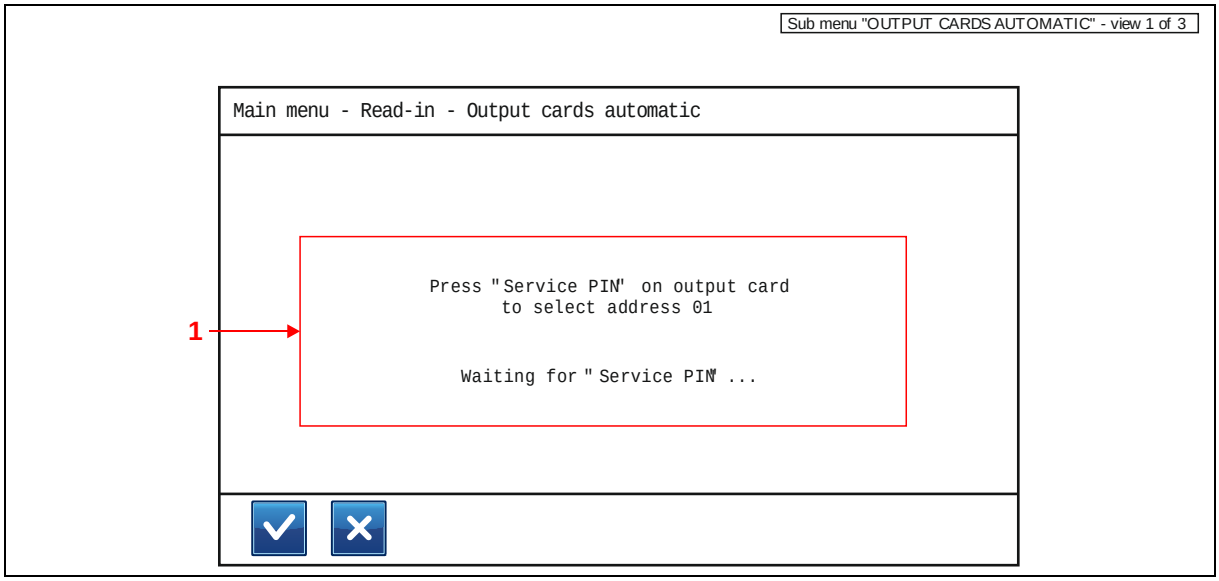
The manual read in of all luminaire modules is executed endlessly. Only an actuation of the button field "2" ends the manual read-in of all luminaire modules.

1-5-3 "OUTPUT CARDS AUTOMATIC"

An actuation of the button field "OUTPUT CARDS AUTOMATIC" executes a partly automatic read-in of all connected output cards regarding the respective emergency light station. At this procedure the operating system activates the output cards sequentially by a manual actuation of the button "Service PIN" on the respective output card and saves the read in data in the device configuration.

View – 1 of 3:

"1": text field – input prompt for actuation of the button "Service PIN" on the output card which should be read in with the card address 1

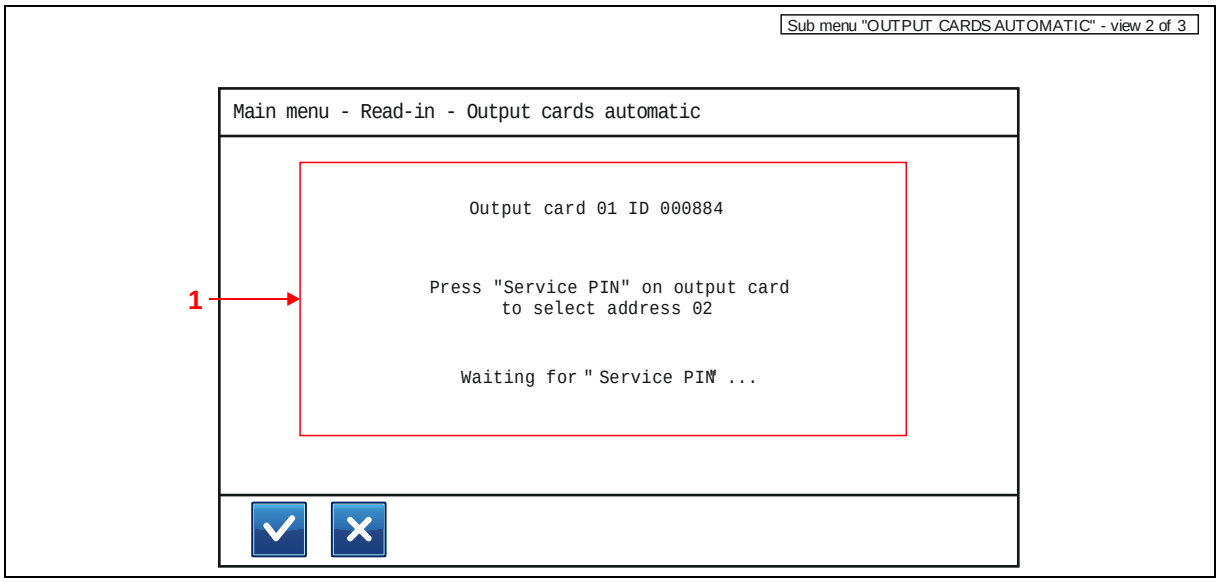


Note: **An actuation of the button field ends the read-in prematurely.**

An actuation of the button "Service PIN" on the output card, which should be read in with the card address 1, calls up the following view in the sub menu "OUTPUT CARDS AUTOMATIC".

View – 2 of 3:

"1": text field – indication of the previously read in output card
with card address and ID number,
input prompt for actuation of the button "Service PIN" on the output card which should be read in with the card address 2



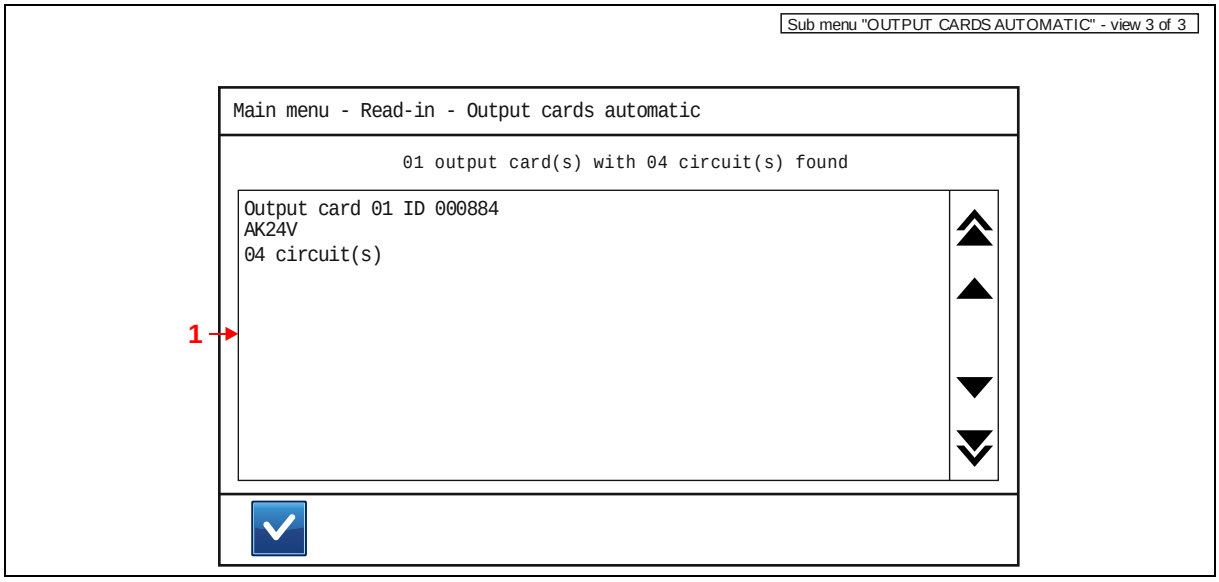
Note: An actuation of the button field ☒ ends the read-in prematurely.

After the last output card was read in with the respective card address the button field ☑ must be actuated to continue with the read in procedure.

An actuation of the button field ☑ calls up the following view in the sub menu "OUTPUT CARDS AUTOMATIC".

View – 3 of 3:

"1": text field – indication of the read in output cards
with card address, ID number and the respective quantity of the output circuits



1-5-4 "OUTPUT CARDS MANUAL"

The sub menu "OUTPUT CARDS MANUAL" is not available in the software version 1.31.1.31.

1-5-5 "INTERNAL MODULES"

The sub menu "INTERNAL MODULES" is not available in the software version 1.31.1.31.

1-5-6 "EXTERNAL MODULES"

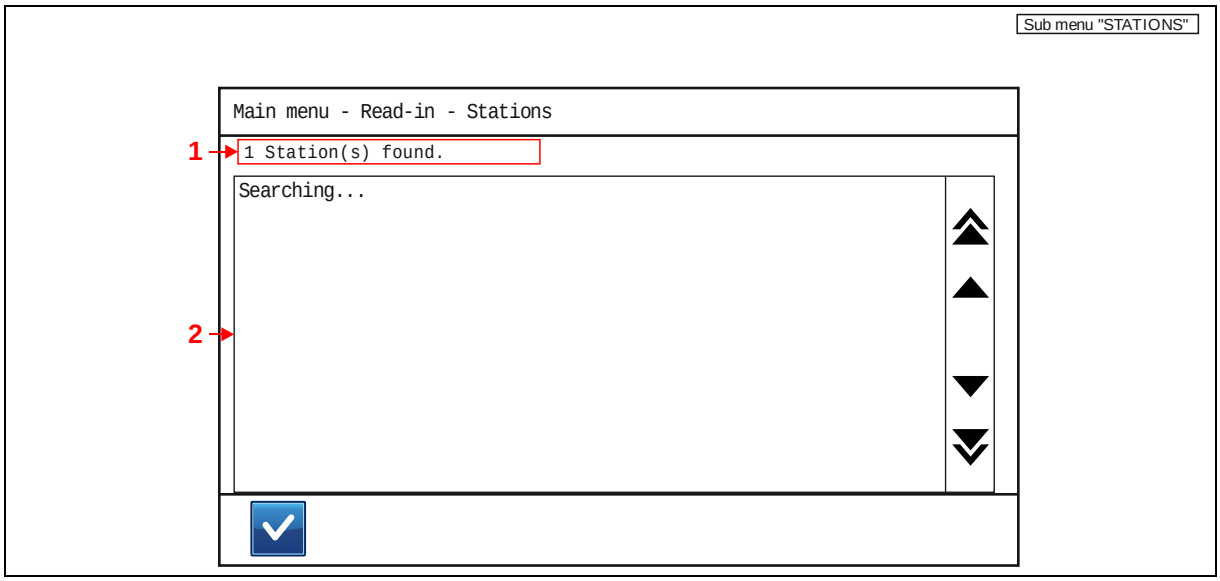
The sub menu "EXTERNAL MODULES" is not available in the software version 1.31.1.31.

1-5-7 "STATIONS"

An actuation of the button field "STATIONS" executes an automatic read-in of all connected emergency light stations regarding the respective emergency light station. At this procedure the operating system validates connections over the station buses (RS485) as well as over the network (LAN) and saves the read in data in the device configuration.

"1": text field – quantity of the read in emergency light stations

"2": text field – single read-in phases, read-in results, various messages



1-6 "FUNCTION TEST"

The sub menu consists of the following sub menus:

- 1-6-1 "OUTPUT CIRCUIT"
- 1-6-2 "STATION"
- 1-6-3 "ALL STATIONS"

Over the sub menus a function test can be executed on various equipment. All details regarding a test result are protocolled and can be indicated over the sub menu "TEST RESULTS" (see sub menu 1-9). If a test result was failure-prone, then this will be indicated over the optical indication for collective fault (red) as well as over the button field "INFORMATION" (collective fault red) on the EVA unit. In the operating menu text fields for additional information are indicating further details.

The functions of the following equipment are tested by a function test:

- luminaire modules on output circuits of the monitoring type EÜ
- emergency light stations

Note: **An actuation of the button field ends the function test prematurely. Through this the test result is rated as failure-prone. The subsequent failure messages on the EVA unit can only be reset with a failure-free function test.**

1-6-1 "OUTPUT CIRCUIT"

The sub menu "OUTPUT CIRCUIT" is not available in the software version 1.31.1.31.

1-6-2 "STATION"

An actuation of the button field "STATION" executes a manual function test. At this test the operating system switches on all output circuits of the respective emergency light station with the respective battery output voltage and compares the collected data with the device configuration. Failure messages on the EVA unit are indicating discrepancies.

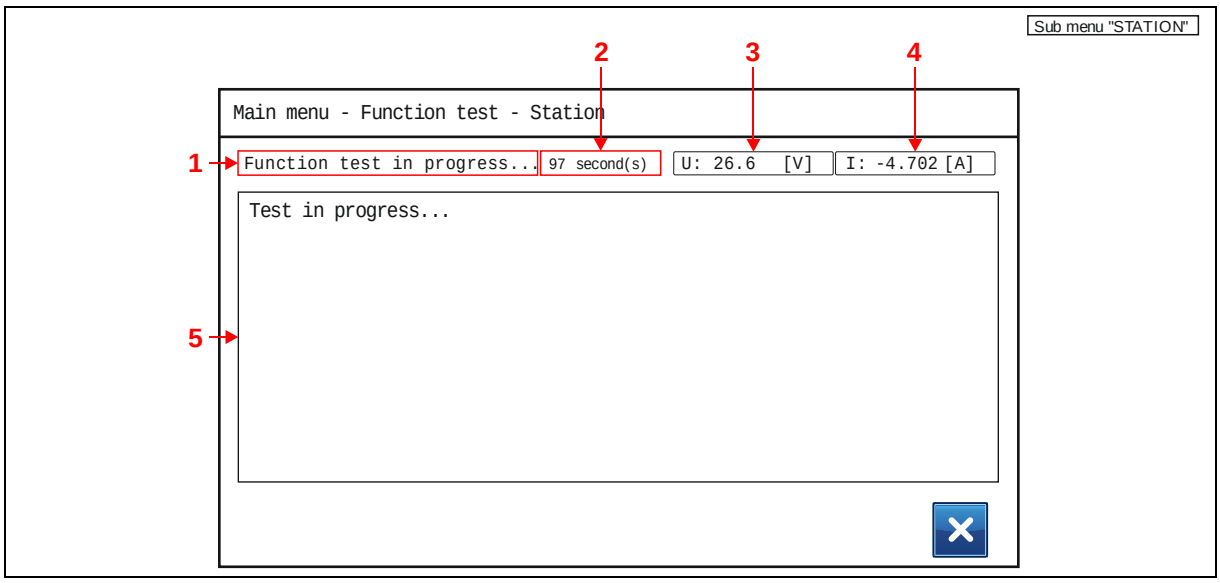
"1": text field – status of the test procedure

"2": text field – elapsed test time

"3": text field – voltage of the battery supply

"4": text field – discharge current of the battery supply

"5": text field – single test phases, test results, various messages



1-6-3 "ALL STATIONS"

The sub menu "ALL STATIONS" is not available in the software version 1.31.1.31.

1-7 "DURATION TEST"

This device function is only available on a main station.

Over the sub menu "DURATION TEST" a duration test of the battery supply regarding the emergency duration can be executed. All details regarding a test result are protocolled and can be indicated over the sub menu "TEST RESULTS" (see sub menu 1-9). If a test result was failure-prone, then this will be indicated over the optical indication for collective fault (red) as well as over the button field "INFORMATION" (collective fault red) on the EVA unit. In the operating menu text fields for additional information are indicating further details.

Attention: **Every executed duration test includes a function test in advance. Defective luminaires are affecting the test result of the duration test regarding the emergency duration.**

Note: **An actuation of the button field ✕ ends the duration test prematurely. Through this the test result is rated as failure-prone. The subsequent failure messages on the EVA unit can only be reset with a failure-free duration test.**

An actuation of the button field "DURATION TEST" executes a manual duration test. At this test the operating system switches on all output circuits of the respective main station and the associated sub stations with the respective battery output voltage and compares the collected data with the device configuration. Failure messages on the EVA unit are indicating discrepancies.

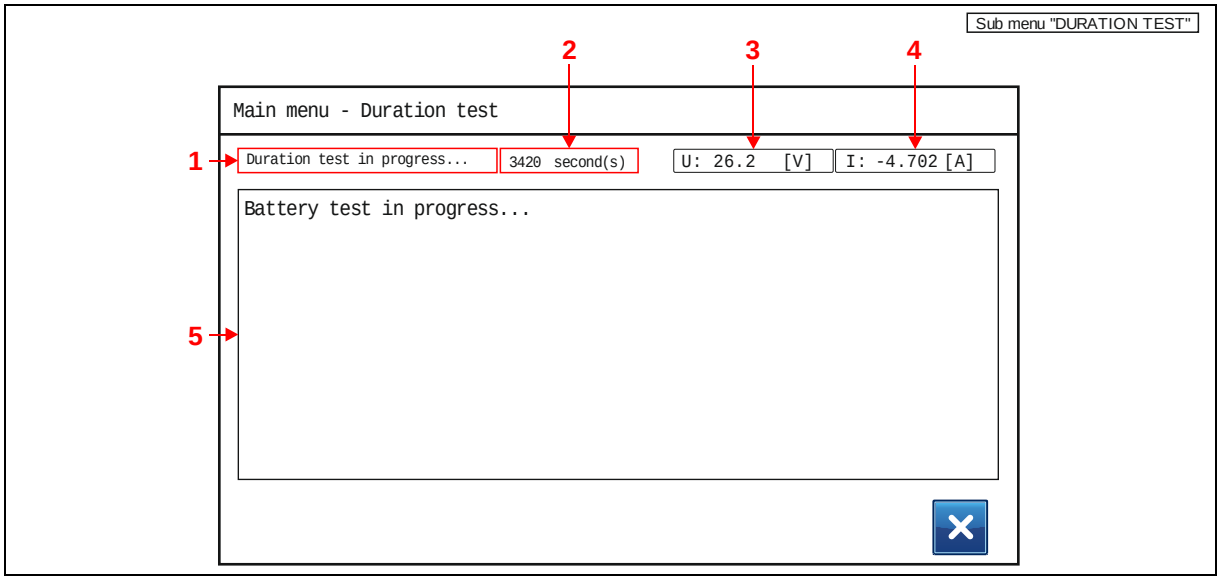
"1": text field – status of the test procedure

"2": text field – remaining test time

"3": text field – voltage of the battery supply

"4": text field – discharge current of the battery supply

"5": text field – single test phases, test results, various messages



1-8 "DEEP DISCHARGE TEST"

This device function is only available on a main station.

Over the sub menu "DEEP DISCHARGE TEST" a deep discharge test of the battery supply regarding the function of the deep discharge protection can be executed. The test result is not protocolled. If a test result was rated with "deep discharge protection activated", then the simulated deep discharge protection is currently activated and with that the function over the operating system is present. This will be indicated over the optical indication for collective fault (red) as well as over the button field "INFORMATION" (collective fault and deep discharge red) on the EVA unit. In the operating menu text fields for additional information are indicating further details.

Note: The deep discharge test can not be ended prematurely.

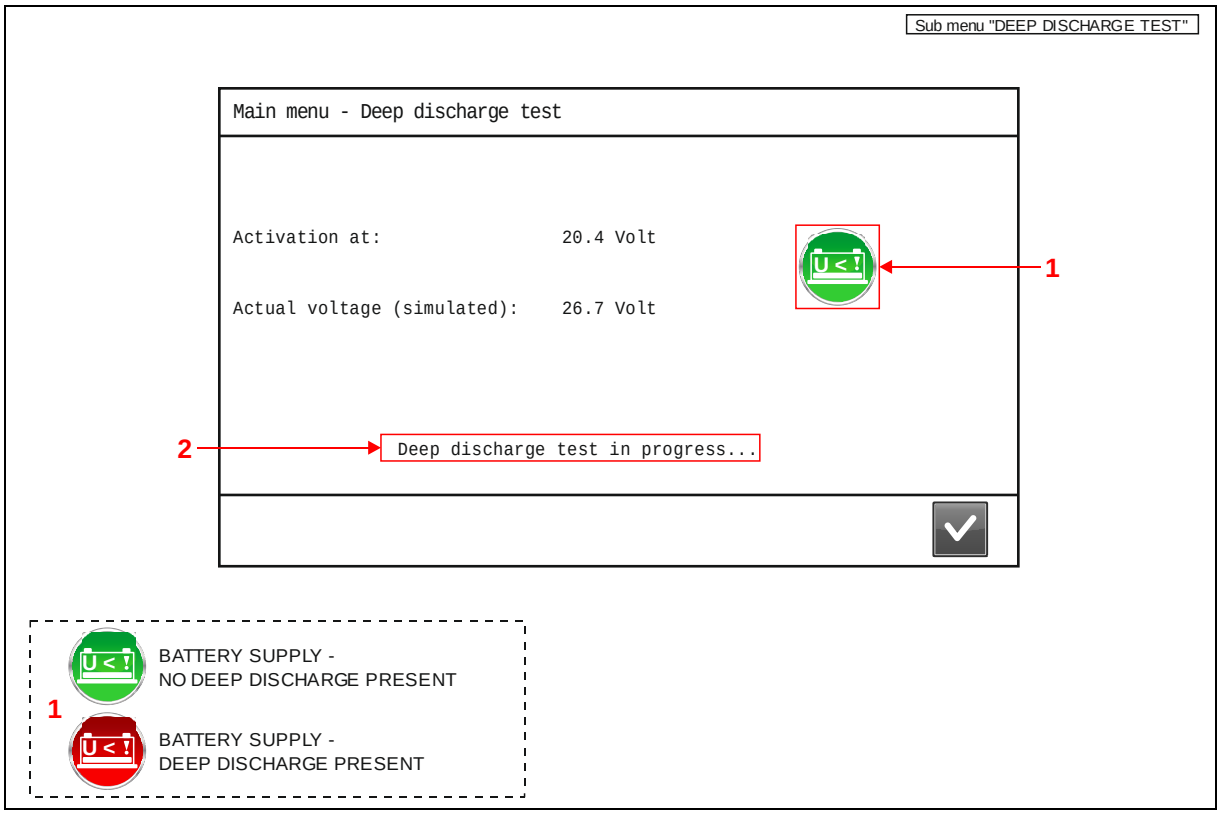
An actuation of the button field "DEEP DISCHARGE TEST" executes a manual deep discharge test. At this test the operating system switches on all output circuits of the respective main station and the associated sub stations with the respective battery output voltage and simulates a decreasing battery voltage which begins at the currently measured value of the battery voltage and ends at the switch-on value for the simulated deep discharge protection. At reached switch-on value for the simulated deep discharge protection only respective indications regarding the activation take place but no deactivation of the emergency operation with battery supply (battery operation – DC). After an ended deep discharge test the simulated deep discharge protection stays activated on the respective main station with all connected sub stations where appropriate. An actuation of the button field "MAIN MENU" calls up an input prompt to execute a manual reset where the operating system deactivates the simulated deep discharge protection.

"1": optical indication – deep discharge

"2": text field – single test phases and test result

► "Activation at:":
text field – indication of the switch-on value for the deep discharge protection

► "Actual voltage (simulated):":
text field – indication of the simulated battery voltage (battery supply)



1-9 "TEST RESULTS"

In the sub menu "TEST RESULTS" the detailed results of the manual and automatic function and duration tests as well as the daily events are managed. All data can be indicated, deleted and saved. For the save function commercial USB sticks can be used which must be inserted in the respective USB port on the EVA unit. USB sticks must be formatted in the file format FAT32.

View – 1 of 2:

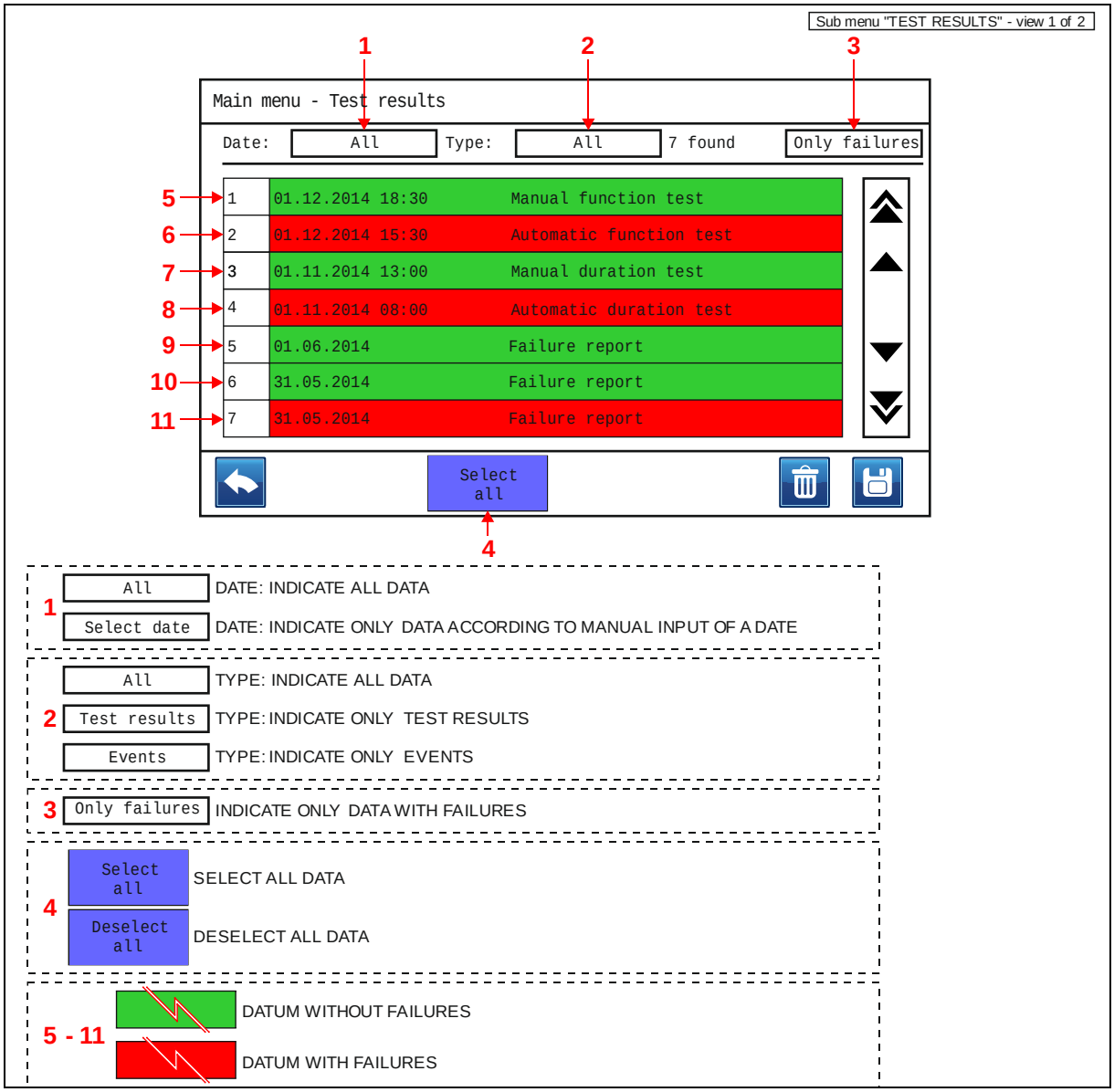
"1": button field with multiple selection – filtering by input of a date

"2": button field with multiple selection – filtering by selection of a data type

"3": button field – filtering by selection of data with failures

"4": button field – selection / deselection of all data

"5-11": button fields – actuation of the numbered area: selection / deselection of a datum, actuation of the green / red area: opening of a datum

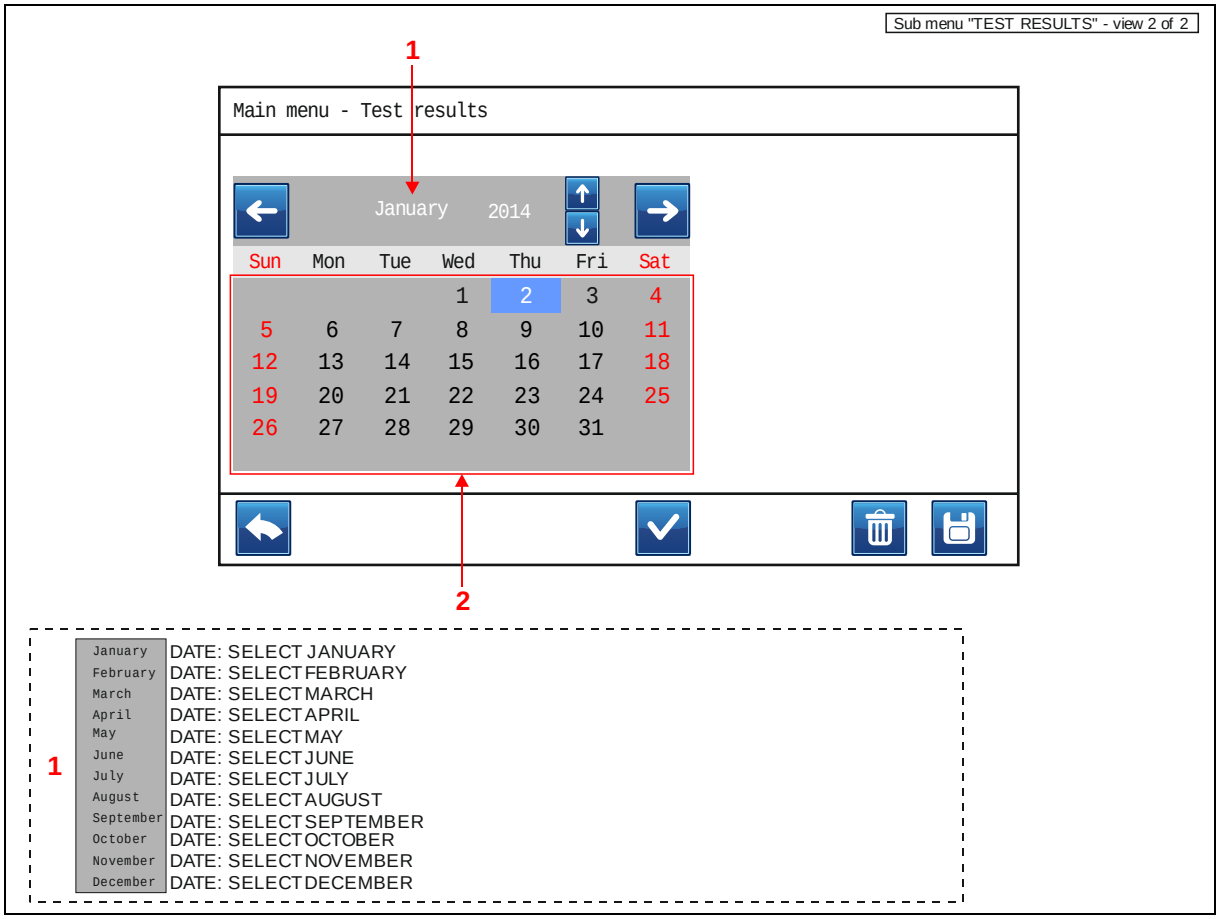


An actuation of the button field "1" regarding the selection "Select date" calls up the following view in the sub menu "TEST RESULTS".

View – 2 of 2:

"1": button field with multiple selection – selection of a month

"2": button fields – selection of a day,
blue area: selected day



Note: **To prevent data inconsistency it is necessary to delete also the respective data of the associated emergency light stations if test results or events of a single emergency light station were deleted.**

1-10 "INFORMATION"

In the sub menu "INFORMATION" general data regarding the respective emergency light station are indicated.

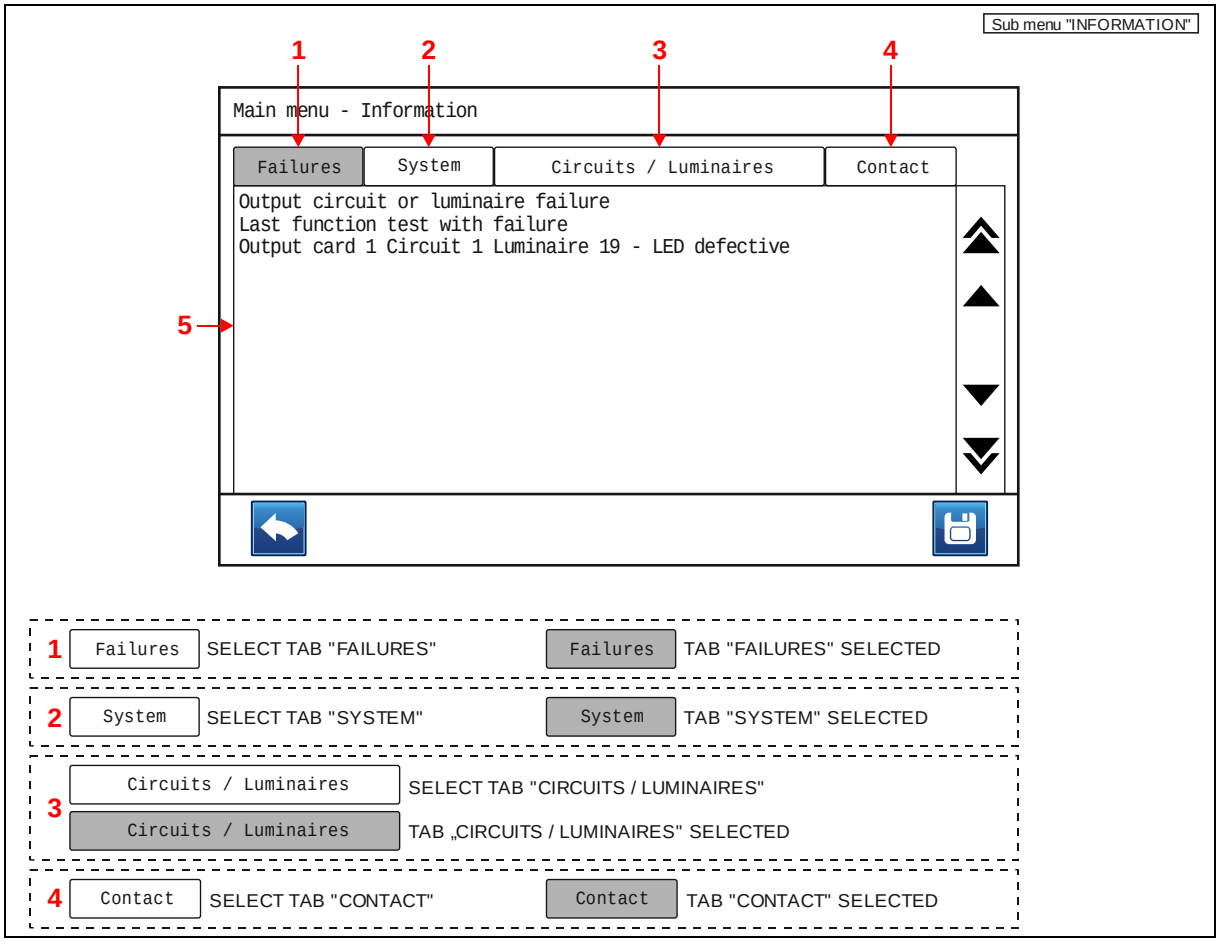
"1": button field with optical indication – selection of the tab "Failures"

"2": button field with optical indication – selection of the tab "System"

"3": button field with optical indication – selection of the tab "Circuits / Luminaires"

"4": button field with optical indication – selection of the tab "Contact"

"5": text field –
tab "Failures" selected:
indication of a summary of all current failures and necessary maintenances,
tab "System" selected:
indication of a summary of the system and test settings as well as software version of the operating system,
tab "Circuits / Luminaires" selected:
indication of a summary of the read in output cards and luminaires modules,
tab "Contact" selected:
indication of the entered contact data regarding the responsible service department resp. the service technician



1-11 "BATTERY MONITORING"

SICURO-24Z:

The sub menu "BATTERY MONITORING" is not available at SICURO-24Z systems.

SICURO-24G:

In the sub menu "BATTERY MONITORING" data regarding the battery supply of the emergency light station are indicated.

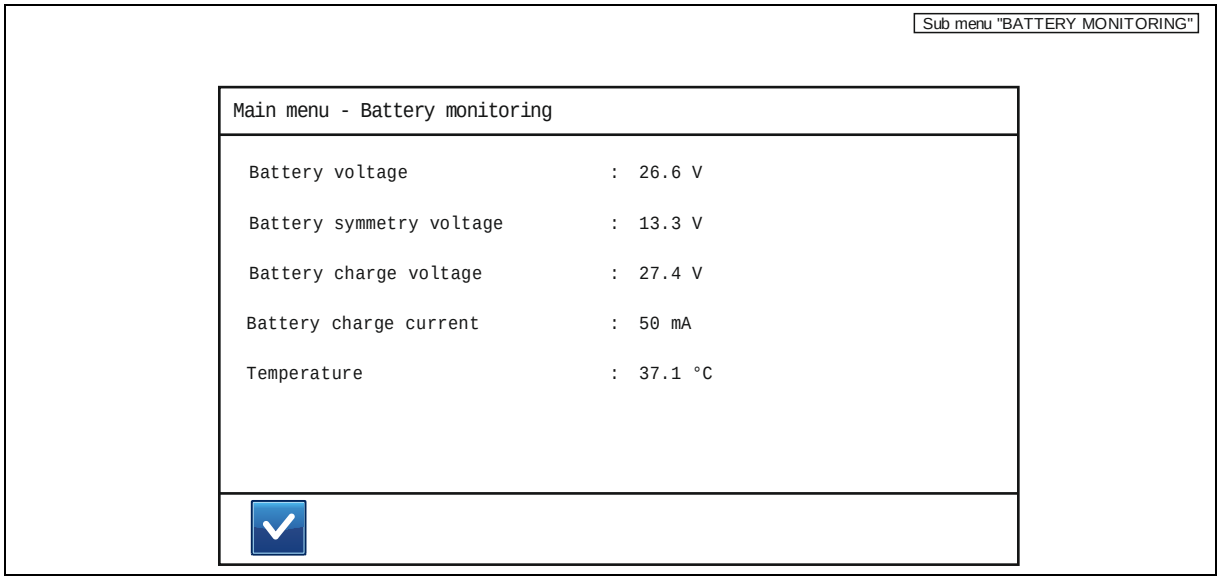
► "Battery voltage:":
text field – indication of the battery voltage (battery supply)

► "Battery symmetry voltage:":
text field – indication of the battery symmetry voltage (battery middle tapping of the battery supply)

► "Battery charge voltage:":
text field – indication of the battery charge voltage

► "Battery charge current:":
text field – indication of the battery charge current

► "Temperature:":
text field – indication of the ambient temperature (temperature sensor of the battery supply)



1-12 "SERVICE"

The sub menu "SERVICE" is password-protected and only used for service purposes by Beghelli PRÄZISA.

Note: **This password query is <u>not</u> related to the password protection of the sub menu "SYSTEM 5/6" regarding the operating menu and the main menu.**

Luminaire positions, assignment signs, language abbreviations

Luminaire positions:

The luminaire positions from 1 to 32 correspond to the module addresses from 1 to 32. At the read in of connected luminaire modules the module addresses are assigned communication-related by the operating system.

> A respective assignment of the module addresses regarding the physical connection sequence is not possible at an automatic read in on an output circuit which is wired in a row.

> An always identical assignment of the module addresses regarding steady connected luminaire modules is ensured at multiple read in.

> An always identical assignment of the module addresses regarding changes at the connected luminaire modules (adding, removal or exchange) is not ensured at multiple read in.

At already read in luminaire modules the luminaire positions can be changed manually to establish an adaption to the documentation of the installation.

Assignment signs – SICURO-24 systems:

The operating system is using assignment signs for unique assignment of equipment and their properties. The assignment signs are indicated in various menus.

"L": LED driver 24 V – luminaire module with driver function

"I": LED inverter 24 V – luminaire module with inverter function

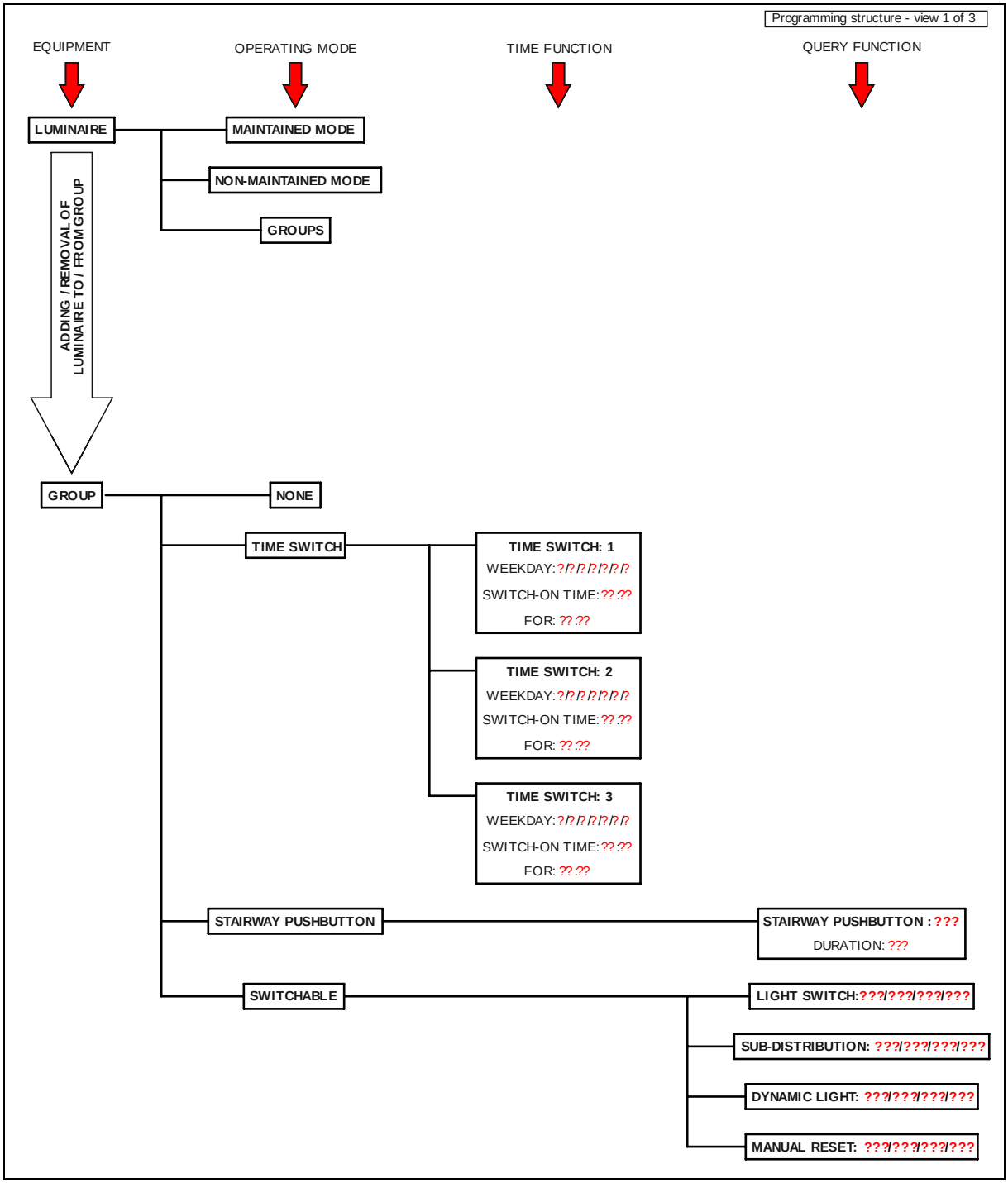
Language abbreviations:

"GER": language German
"ENG": language English
"ITA": language Italian
"FRA": language French
"POL": language Polish
"CZH": language Czech
"DUT": language Dutch
"CHI": language Chinese

Programming structure

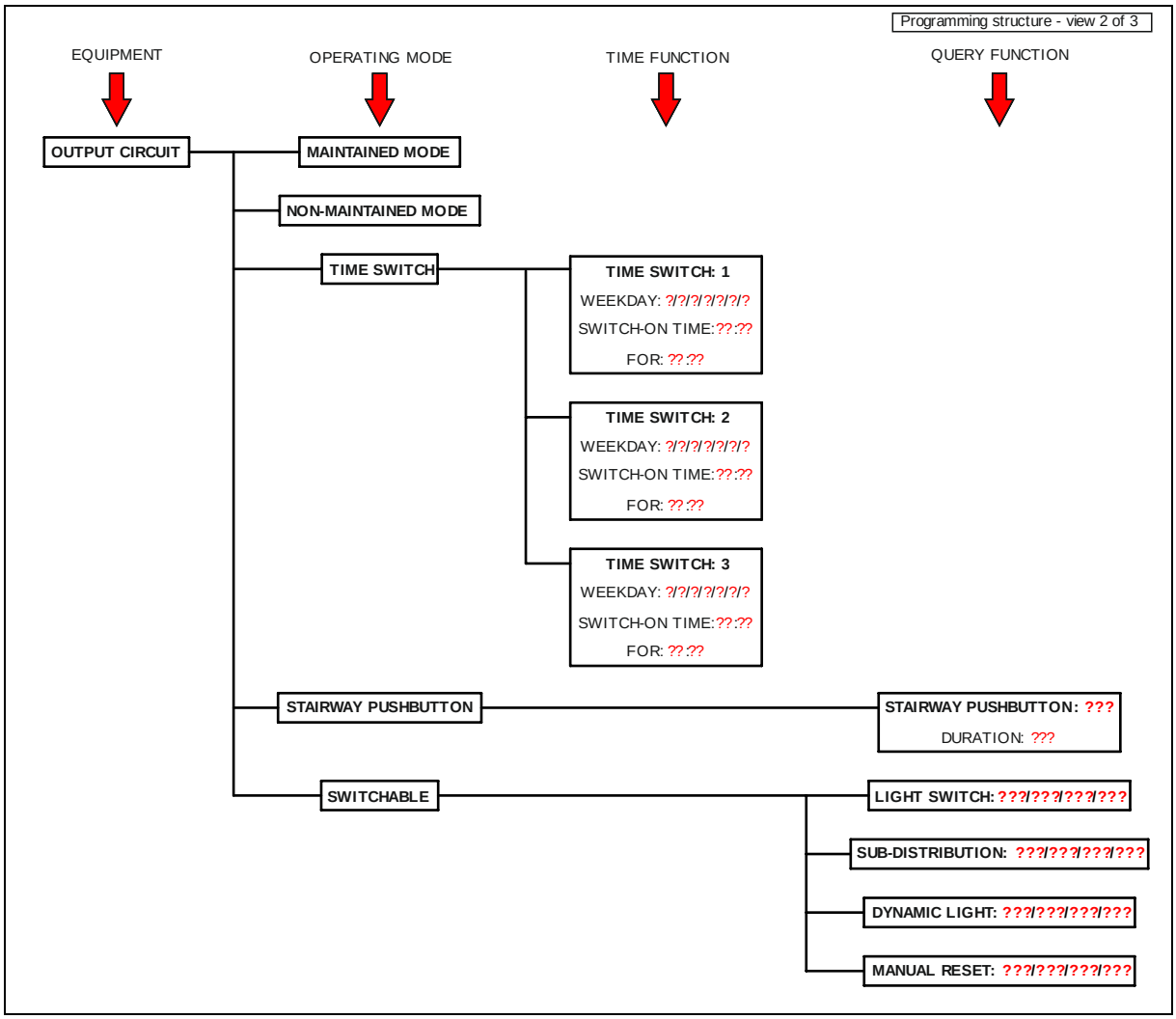
The following view indicates all operating modes, time functions and query functions which can be selected regarding the luminaire modules and groups:

View – 1 of 3:



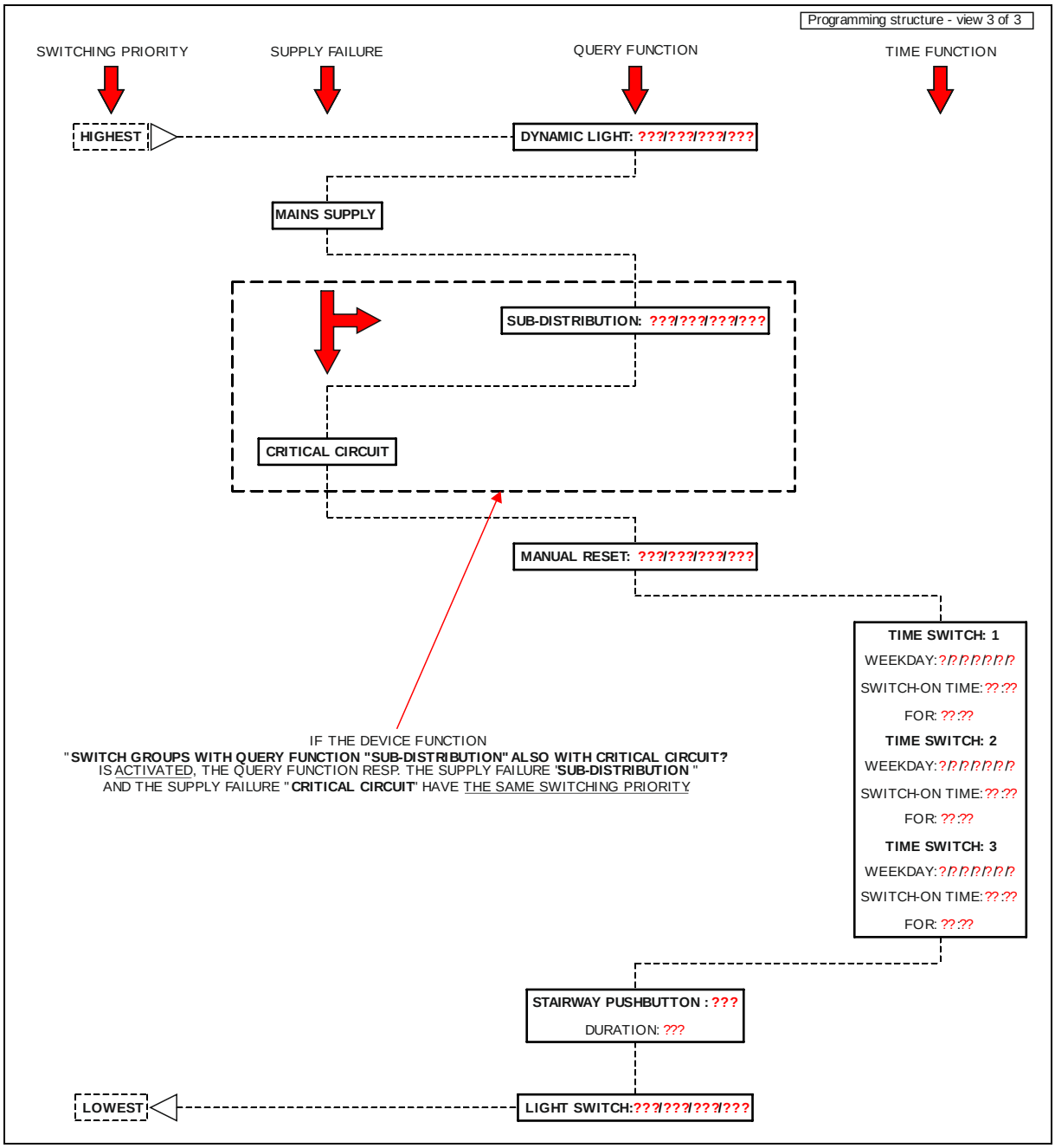
The following view indicates all operating modes, time functions and query functions which can be selected regarding the output circuits:

View – 2 of 3:



The following view indicates the switching priority regarding all supply failures, query functions and time functions:

View – 3 of 3:



Note: **The query function "Sub-distribution" is also a supply failure.**

Factory settings

SICURO-24Z

"MAIN MENU" – "CONFIGURATION" – "TEST SETTINGS":	
► "Function test:" ► "Automatic test:":	deactivated
► "Function test:" ► "Next test:":	| no input | / 00:00
► "Function test:" ► "Test cycle:":	7 days
► "Duration test:" ► "Automatic test:":	deactivated
► "Duration test:" ► "Next test:":	| no input | / 00:00
► "Duration test:" ► "Test cycle:":	365 days
► "Duration test:" ► "Test duration:":	40 minutes
► "Maintenance:" ► "Commissioning:":	Please enter date.
► "Maintenance:" ► "Last maintenance:":	No maintenance performed.
► "Maintenance:" ► "Maintenance cycle:":	365 days
► "Maintenance:" ► "Company:":	Beghelli PRÄZISA GmbH +49 (0)2064 9701 0 info@beghelli.de
"MAIN MENU" – "CONFIGURATION" – "SYSTEM":	
► "Station:" ► "Address:":	1
► "Station:" ► "Device name:":	Please enter Text.
► "Mains failure:" ► "Manual reset:":	deactivated
► "Mains failure:" ► "Automatic reset:":	10 seconds
► "Mains failure:" ► "Follow-up time:":	5 seconds
► "Critical circuit:" ►	
"Switch groups with query function "Sub-distribution" also with critical circuit?":	no
► "Network settings:" ► "IP address:":	192.168.100.140
► "Network settings:" ► "Subnet mask:":	255.255.255.0
► "Network settings:" ► "Standard gateway:":	192.168.100.1
► "Network settings:" ► "DHCP:":	activated
► "Network settings:" ► "Modbus:":	deactivated
► "E-mail settings:":	non-encrypted
► "E-mail settings:" ► "E-mail function:":	deactivated
► "E-mail settings:" ► "Acceptor:":	acceptor@mail.com
► "E-mail settings:" ► "Sender:":	sender@mail.com
► "E-mail settings:" ► "Password:":	| no input |
► "E-mail settings:" ► "E-mail server:":	mail.server
► "E-mail settings:" ► "Port:":	25
► "E-mail settings:" ► "Subject:":	Please enter text.
► "E-mail settings:" ► "Text:":	Please enter text.
► "E-mail settings:" ► "Sending options:" ► "Test with report":	deactivated
► "E-mail settings:" ► "Sending options:" ► "Mains failure":	deactivated
► "E-mail settings:" ► "Sending options:" ► "Operational condition deactivated":	deactivated
► "E-mail settings:" ► "Sending options:" ► "Deep discharge":	deactivated
► "E-mail settings:" ► "Sending options:" ► "Collective fault":	deactivated
► "Password protection operating menu:" ► "Protection:":	deactivated
► "Password protection operating menu:" ► "Password:":	| no input |
► "Password protection operating menu:" ► "Access time:":	60 minutes
► "Password protection main menu:" ► "Protection:":	deactivated
► "Password protection main menu:" ► "Password:":	| no input |
► "Password protection main menu:" ► "Access time:":	60 minutes
► "Display:" ► "Brightness:":	100 %
► "Display:" ► "Screensaver:":	activated / 10 minutes
► "Serial number:":	Please enter serial number.
► "Emergency duration:":	0 hour
► "Battery capacity:":	0 ampere hour
"MAIN MENU" – "CONFIGURATION" – "DATE & TIME":	
► "Date:":	| self-setting |
► "Time:":	| self-setting |
► "Automatic daylight saving time":	activated
"MAIN MENU" – "CONFIGURATION" – "SOFTWARE" – "SETTINGS":	
► "Language:":	English
► "System:" ► "Automatic backup:":	activated
► "System:" ► "Backup cycle:":	monthly
► "System:" ► "Select device type:":	| user-defined |

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"MAIN MENU" – "CONFIGURATION" – "TEST SETTINGS":

► "Function test:" ► "Automatic test:":	deactivated
► "Function test:" ► "Next test:":	| no input | / 00:00
► "Function test:" ► "Test cycle:":	7 days
► "Duration test:" ► "Automatic test:":	deactivated
► "Duration test:" ► "Next test:":	| no input | / 00:00
► "Duration test:" ► "Test cycle:":	365 days
► "Duration test:" ► "Test duration:":	40 minutes
► "Maintenance:" ► "Commissioning:":	Please enter date.
► "Maintenance:" ► "Last maintenance:":	No maintenance performed.
► "Maintenance:" ► "Maintenance cycle:":	365 days
► "Maintenance:" ► "Company:":	Beghelli PRÄZISA GmbH +49 (0)2064 9701 0 info@beghelli.de

"MAIN MENU" – "CONFIGURATION" – "SYSTEM":

► "Station:" ► "Address:":	1
► "Station:" ► "Device name:":	Please enter text.
► "Mains failure:" ► "Manual reset:":	deactivated
► "Mains failure:" ► "Automatic reset:":	10 seconds
► "Mains failure:" ► "Follow-up time:":	5 seconds
► "Critical circuit:" ►	
"Switch groups with query function "Sub-distribution" also with critical circuit?":	no
► "Network settings:" ► "IP address:":	192.168.100.140
► "Network settings:" ► "Subnet mask:":	255.255.255.0
► "Network settings:" ► "Standard gateway:":	192.168.100.1
► "Network settings:" ► "DHCP:":	activated
► "Network settings:" ► "Modbus:":	deactivated
► "E-mail settings:":	non-encrypted
► "E-mail settings:" ► "E-mail function:":	deactivated
► "E-mail settings:" ► "Acceptor:":	acceptor@mail.com
► "E-mail settings:" ► "Sender:":	sender@mail.com
► "E-mail settings:" ► "Password:":	| no input |
► "E-mail settings:" ► "E-mail server:":	mail.server
► "E-mail settings:" ► "Port:":	25
► "E-mail settings:" ► "Subject:":	Please enter text.
► "E-mail settings:" ► "Text:":	Please enter text.
► "E-mail settings:" ► "Sending options:" ► "Test with report":	deactivated
► "E-mail settings:" ► "Sending options:" ► "Mains failure":	deactivated
► "E-mail settings:" ► "Sending options:" ► "Operational condition deactivated":	deactivated
► "E-mail settings:" ► "Sending options:" ► "Deep discharge":	deactivated
► "E-mail settings:" ► "Sending options:" ► "Collective fault":	deactivated
► "Password protection operating menu:" ► "Protection:":	deactivated
► "Password protection operating menu:" ► "Password:":	| no input |
► "Password protection operating menu:" ► "Access time:":	60 minutes
► "Password protection main menu:" ► "Protection:":	deactivated
► "Password protection main menu:" ► "Password:":	| no input |
► "Password protection main menu:" ► "Access time:":	60 minutes
► "Display:" ► "Brightness:":	100 %
► "Display:" ► "Screensaver:":	activated / 10 minutes
► "Serial number:":	Please enter serial number.
► "Emergency duration:":	0 hour
► "Battery capacity:":	0 ampere hour

"MAIN MENU" – "CONFIGURATION" – "DATE & TIME":

► "Date:":	| self-setting |
► "Time:":	| self-setting |
► "Automatic daylight saving time":	activated

"MAIN MENU" – "CONFIGURATION" – "SOFTWARE" – "SETTINGS":

► "Language:":	English
► "System:" ► "Automatic backup:":	activated
► "System:" ► "Backup cycle:":	monthly
► "System:" ► "Select device type:":	| user-defined |

Notes

NOTES:

NOTES:

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