

Mounting and Operating instructions

CG Controller CGLine 400

Target group: Skilled electricians





COOPER Safety

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1 Safety notes

- □ In accordance with specifications, the CG-Controller must be operated in an undamaged and fault-free state!
- Steps when performing tasks on the emergency lighting system, make certain that the system is disconnected from electrical power!
 - Note the various power supplies for normal and emergency mode in this regard.
- Before placing the device in service, the emergency lighting system must be tested according to the instructions listed in the "installation" section of the operating instructions!
- Please note for all tasks on the device applicable national safety and accident prevention requirements and the following safety instructions in the operating instructions that are identified by a $\Delta!$
- You must comply with the national statutes and directives governing
 - the construction and control of a system for main and emergency lighting.
 - inspection and safety tests (e. g. for function and duration tests.)

1.1 Important information about safe operation of an emergency lighting system

This system is part of the emergency and main lighting system and therefore part of the safety

equipment of a building or company. Unauthorised and unskilled work on the equipment can lead to the failure of the main and/or emergency lighting system and hence to

☐ significant hazards to persons,

- significant damage to plant and machinery,
- faults and interruptions in the production process.

Once the system has been assembled, connected up and commissioned, the following additional operations must be carried out for normal operation:

- monitoring and maintaining a record of system functions
- Safety measures during faults and shutdowns
- Carrying out the safety inspections as required by statutes and directives

The operator of the emergency lighting system is responsible for organising and supervising this work. The following information must be specified in writing and made available at all times:

- The nature and extent of the work
- Documentation of work results
 - Responsibilities and permits for carrying out the work
 - Which persons may carry out which operation?
 - Which persons are responsible for supervising the work?
 - Duties of reporting (e. g. in case of faults or function tests)

Organisational measures when working on the emergency lighting system.

This may include:

- Duties of information and reporting on the start, duration and end of the work
 - Safety measures while the work is being carried out:

e. g. standby lighting, power supply isolation and lock-out (e. g. removing the fuses, keyoperated switch, safety signage)



- Safety equipment for the personnel carrying out the work on the plant (e. g. suitable work clothing and personal protection equipment)
- Safety equipment providing protection from hazards caused by adjacent plant.

In particular, inspections and safety checks and their documentation must be carried out by specially authorised engineering personnel (in accordance with the national statutes and directives).

(i) NOTE!

For modifications to the emergency lighting system and the programming and for safety inspections, please contact your local CEAG office or experts of authorised organisations.

2 Conformity to standards

In conformity with: DIN EN 50172, DIN VDE 0100-718 und E DIN VDE 0108-100!

\triangle ATTENTION!

CEAG Notlichtsysteme GmbH cann accept no liability and/or give no warranty in respect of any defects that may occur with the supply and installation of CEAG emergency lighting systems and luminaires on the basis of other standards and regulations which are mandatory in complete installation packages in conjunction with CEAG products.

3 Technical Data

Power supply voltage:	230 V AC ± 10 % c	r 24 V DC
Power consumption (230 V):	max. 80 mA	
(24 V):	max. 450 mA	
Alarm contact:	1 x UM, 24 V	0,5 A; free programmable
Display pad:	Lighted display, alp	hanumeric 4 x 20 characters
Insulation class:	II	
Class of protection acc. to		
EN 60527:	IP 65	
Ambient temperature:	-5 °C + 40 °C	
rel. humidity:	0 - 95 %, non conc	lensing
Connection terminals:	max. 2,5 mm ²	
Weight:	ca. 1,8 kg	
Dimensions (L x B x T)/mm:	184 x 240 x 112	

Data CGLine bus

Power supply voltage bus:	22,5 V DC
Max. perm. voltage drop:	13 V
Bus current:	400 mA



3.1 Use as prescribed

The CG-Controller is designed for monitoring and controlling CEAG CGLine self contained luminaires. Up to 400 CGLine luminaires can be operated in the same simple manner on one controller. Their operation is program controlled. They must be programmed and set up by engineers with specialist knowledge of the legal and technical requirements governing the assembly and operation of lighting systems.

The system is built to the latest state of the art and according to the recognised codes of practice in safety engineering.

The number of electronic devices in use in recent years has increased sharply, as of course has radio interference, for every electronic device, machine or system emits different types of radiation. Interference can occur especially in today's highly automated industries. It can lead to malfunctions and even to the failure of entire plants. The overlaying of different types of interference increases the overall level of radiated noise, hence the need to protect all devices from electromagnetic interference (EMI). In industrial process engineering in particular, a high level of immunity is required for electrical instrumentation and control (I&C) equipment. This is why all electronic devices are subject to mandatory CE marking.

CEAG products comply with the requirements of EC Directives 89/336/EEC (EMC directive) and 73/23/EEC as amended by Directive 93/68/EEC (low voltage directive) and are entitled to carry the CE marking.

If luminaires with electronic ballast comply with the EMC directives, then the interference produced by the high frequency operation of the electronic ballast is within the legal limits. Nevertheless, electronic devices may cause interference in individual cases.

Only operate the system and parts connected to it when they are in a technically perfect condition.

The applicable work and safety regulations are set out in these assembly and operating instructions and the general and specialist technical guidelines and accident prevention regulations.

CEAG can give no warranty or accept any liability for damage or consequential damage caused as a result of

- improper use,
- failure to comply with regulations and codes of conduct for the safe operation of the system,
- unauthorised or inexpert modifications
 - to the connections and settings of the system,
 - or for programming the system,

operating proscribed or unsuitable devices or groups of devices.



4. Installation

You must observe the applicable safety requirements for setting up and operating electrical equipment as well as the Device Safety Law and all generally recognised codes of practice!

4.1 Mounting

Apply bore holes as shown in the figure. Fasten the device in place with suitable screws. Tighten the screws only to finger tightness. Or fix device on DIN rail! (dimensions in mm)



4.2 Electrical Connection Mains connection

The device is designed for operation at 230 V AC or 24 V DC. Lines must be connected as shown below.



Potential free contact

The controller provides a freely programmable circuit contact (1 - 2 - 3, figure above). Energising of the relay can be assigned to various events. See the «Relais settings» menu.





Bus cables

The 2-core bus line from the connected CEAG CGLine self contained luminaires must be connected to terminals D1, D2, D3 and D4.



5 CG-Controller in the emergency lighting system



Cable laying CGLine bus

2-core bus cable, unscreened. Free bus-topology.

Length of cable per line

Cross section	length	line in sum
0.5 qmm	450 m	1.800 m
1.0 gmm	900 m	3.600 m
1.5 qmm	1.350 m	5.400 m

Data per line	
Supply voltage bus	22,5 V DC
Max. allowed voltage drop	13 V
Bus current	400 mA



6 Definition of keys

Key	Main meaning				
Menu	 If main screen, switch to the main menu selection Switch to the menu one level higher 				
ENTER ∛	 Open menu item Exit input and accept the changes 				
	Select the menu item above				
仓	Raise value				
	Select the menu item below				
Û	Reduce value				
¢	 Back Previous cursor position, previous input field Reduce value Deactivate 				
	Forward				
⇒	 Next cursor position, next input field Raise value Activate 				



Reader for memory card



Definition of keys



7 Status display

Priority	/ L	ine 2 (main screen)				
high	1	DT runs				
т	2	FT runs				
	3	Line 1 blocked				
		Lines 1/2 blocked				
		Lines 1/2/3 blocked				
		Lines 1/2/3/4 blocked				
	4	Shared DT active				
L	5	Battery operation (mains failure)				
low	6	Operation				

If a status with a lower priority is being displayed and a status with a higher priority occurs, the newer status with the higher priority will be displayed. If this new higher status drops out again, the old, lower status will be displayed.

As soon as no more status messages are pending, "operation" is displayed. In the "Status luminaire" menu line 2 the status of a previously selected device of same priority is displayed.

7.1 Fault display

Priority	Line 3 (main screen)	
high	1 No interface card	
т	2 Communication failure	
	3 Luminaire failure	
	4 Charging failure	
	5 Test failure ⁵	
	6 Test failure ⁶	⁵ The test failure price 5 gets created at
	7 Address failure	the end of an FT, when the luminaire, due to low battery capacity, could
Т	8 Failure CG-Controller	not run the FT. ⁶ The test failure prio 6 gets created at
low	9 blank line = no failure (when shared DT runs = balance time display)	the end of an DT, when the luminaires fail. The batteries of the correspon- ding luminaires should be replaced.

In the "Status luminaire" menu line 3 the fault of a previously selected device of same priority is displayed. According to standards the failure with the highest priority is displayed.

8 Menu overview

Main menu	1. Submenu	2. Submenu
Luminaire Failure	Select line & luminaire	
Status Luminaire	Select line & luminaire	
Test Menu	Start FT all luminaires Start FT line — Start DT all luminaires Cancel shared DT ⁷⁾ Cancel DT Start DT line — Cancel DT line DT even DT uneven	Select line
Block, release ²⁾	Block all ²) Release all ²) Block line ²) Release line ²) Status ²)	Select line Select line
Setup Luminaires ²⁾	Select language ²⁾ Time and Date ²⁾ Next FT ²⁾ Next DT ²⁾ Relais settings ²⁾ Serial number ²⁾ Customer Service info ²⁾ Password ²⁾	
	Aut. search of luminaire ²⁾ Add luminaire ²⁾ Remove luminaire ²⁾ Luminaires overview ²⁾ Change luminaire name ²⁾ Luminaire versions ²⁾ Delete line ²⁾ Line names ²⁾ Address faults list ²⁾ Remove address faults ²⁾	All lines or line Select line & luminaire Select line & luminaire ²) Menu item is passwort-protected. ⁷⁾ only shown during a shared DT
Memory Card	Display log book ²⁾ Delete log book ²⁾ Configuration->SD ²⁾ Configuration<- SD ²⁾	¹⁰⁾ only shown due to present failure
CG-Controller Failure ¹⁰	CG-Controller failure Listing	 Cursor position higher ✓ Select menu item Menu One menu level higher



8.1 Main screen

Line LC-Display:

- 1 Controller CGLine 400
- 2 Status display
- 3 Fault display
- 4 13:29:17 24.05.2007

Operation: With the key Menu a change into the main menu occurs.

Line 1 = Type of CG-Controller

Line 2 = Status display (default = operation = no status)

- Line 3 = Fault display (default = blank line = no failure)
- can show a bargraph or the luminaire which is even tested
- Line 4 = Actual time and date

8.1.1 Jump back to the main screen automatically

If no key is activated in a submenu for about 3 minutes, the system automatically switches to the main screen.

8.1.2 LCD back lighting

When a key is pressed, the display is lit up for about 3 minutes.

 $\mathbf{1}$

 \downarrow

8.2 Main menu

Line Selection (Main menu)

- 1 Failure luminaires
- 2 Status luminaires
- 3 Test menu
- 4 Block, release
- 5 Setup CG-Controller
- 6 Setup luminaires

etc.

Menu Back to the main screen

= current cursor position

8.3 Fault analysis

All existing failures get displayed. If no failure exists the menu cannot be seen, means is blank.

Line Selection (Main menu)

- 1 Luminaire failure
- 2 Status luminaires
- 3 Test menu
- 4 Block, release
- 5 Setup CG-Controller
- 6 Setup luminaires
- 7 Memory card

Line Display:

- 1 Str. 1 Adr. 003 7FFFDE
- 2 "Name of luminaire"
- 3 Charging failure
- 4 Change arrows

Operation:

Operation:

- Menu One menu higher
- I previous failure
- 1 next failure
- Perhaps details are shown regarding to the selected failure



8.4 Status luminaires

Status and failures of all luminaires are displayed.



Battery is not charged

8.4.1 Status fault display

Priority

high	1	Communication failure
↑	2	Luminaire failure
	3	Charge failure
	4	Maine failuro
	4	
	5	Test ended successfully
	6	DT runs (or shared DT runs)
	7	FT runs
↓ Iow	8	Status = operation off or Status = operation on

Note: If the luminaire is blocked no DT/FT can run.



8.5 Test Menu

Line	Selection (Main menu)	Line	Display:	Operation:	
1	Luminaire failure	1	Start FT all luminaires	Menu One menu higher	
2	Status luminaires	2	Start FT line	T Cursor position lower	
3	Test menu	3	Start DT all luminaires	Cursor position higher	
4	Block, Release \checkmark	4	Cancel shared DT		
5	Setup CG-Controller	5	Cancel DT all		
6	Setup luminaires	6	Start DT line	Note: Line 4:	
7	Memory card	7	Cancel DT line	",cancel shared DT" is only	
		8	DT line even	displayed when a shared DT	
		9	DT line uneven	runs.	
8.5.1Start function test for all luminaires					

Line Selection (Submenu) Display: Operation: Line Start FT all luminaires Start FT all luminaires 1 Menu One menu higher 1 2 Start FT line I⇒ / I Selection in line 2 Start DT all luminaires 4: "No/Yes" 3 3 Cancel shared DT \downarrow Start Start test 4 4 n/v

The manual FT gets started. It gets not started during a DT runs.

↓ 4

8.5.2 Start function test for one line

Line Selection (Submenu)

Cancel DT all

Start DT line

5

6

- Start FT all luminaires
 Start FT line
- 2 Start FT line
 3 Start DT all luminaires
- 4 Cancel shared DT
- 5 Cancel DT all
- 6 Start DT line
- Line Display: 1 Start FT line 2 Line: 3

Start

Start

3

4



8.5.3 Start duration test for all luminaires

Line Selection (Submenu)

- 1 Start FT all luminaires
- 2 Start FT line
- 3 Start DT all luminaires ↑
- 4 Cancel shared DT
- 5 Cancel DT all
- 6 Start DT line

Line Display: 1 Start DT all luminaires 2

n / v

Operation: Menu One menu higher ▷/ ▷ Selection in line 4: "No/Yes" ♂ Start test

8.5.4 Cancel shared Duration test

If a shared duration test is active (you can see this by checking the main screen regarding the next DT) you can delete it with this menu item.



8.5.5 Cancel duration test for all luminaires



- BT line 6
- Cancel DT line 7



8.5.8 Duration test even

Starts a duration test for all lines on even addresses.

8.5.9 Duration test uneven

Starts a duration test for all lines on uneven addresses.



8.6 Block, release

Line Selection (Main menu)

- Luminaire failure 1 Status luminaire
- 2
- Test menu 3 4 Block, release
- Setup CG-Controller 5
- Setup luminaires 6
- Memory card 7

Display: Line

- 1 Block all
- Release all 2
- Block line 3

 \downarrow

Release line Δ

Operation: Menul One menu higher Select menu item

By means of this remote switch all luminaires or lines can be switched off from afar. Specialty:

Luminaires are not able to receive orders when a blocked line gets released during no mains exists. The luminaires stay blocked. The controller displays a "communication failure". When mains returns the controller gets the information that the line is still blocked, abolishes the "communication failure" and displays "blocked".

8.6.1 Block all



16





8.7.2.1 Changeover to summer time

Summer time can be changed over in the submenu 'Time and date' by pressing button 7. Time gets risen by 1 hour. Button 7 = PQRS, S = summer time.

8.7.2.2 Changeover to winter time

Winter time can be changed over in the submenu 'Time and date' by pressing button 9. Time gets reduced by 1 hour. Button 9 = WXYZ, W = winter time.

8.7.3 Next function test (FT)

Line Selection (Submenu)

- Select language 1
- Time and date 2
- Next FT 3
- Next DT 4
- 5 Relais settings
- Serial number 6
- Customer service info 7

Line Display:

- Next FT 1
- 14:15 13.05.2007 2
- ↓ û ⇒ ⇔ change 3
- Interval in days: 007
- $\mathbf{1}$ 4

The automatic FT gets programmed. During a DT runs the automatic FT gets not started!



Menu Acception and one menu

Acception and one menu

Operation:

higher

I ← right/left

higher

8.7.4 Next duration test (DT)

The time of the next automatic start of the battery capacity test gets defined. This test should proceed outside working hours, e. g. 01:00 am, s. IEC60234, chapter 7.2ff 'Automatic test for battery powered emergency escape lighting'.



When selection finishes with n = no = shared DT deactivated, an automatic DT for all luminaires occurs.

If the shared DT is activated only luminaires with a specific type of address (e. g. default = even addresses) start the DT at the programmed time (time = DT = DT-time). 24 hours later a DT on the other type of address occurs automatically (e. g. uneven addresses).

8.7.4.2 Main screen for shared DT = active

Line	Display:	. O
1	Controller CGLine 400	Ń
2	Shared DT runs	
3	next DT 23:56h	
4	17.02.11 05 11 2007	

Operation: Menul Menu

Cancel shared DT

While the first half of the shared DT is activated (even addresses) it can be cancelled by "Test menu -> cancel DT". However, the second half (uneven addresses) follows 24 hours later. If this test should also be cancelled, this can be done by "Test menu -> cancel shared DT". When the second half is still active (uneven addresses) cancel it by "Test menu -> cancel DT"



8.7.4.3 Main screen for DT started at the luminaire

After starting a DT at one luminaire either "DT runs" or "shared DT runs" is displayed in the main screen. This depends on how the automatic DT has been programmed, shared or not shared.

2	r	•
U	L	

Line	Display:	
1	Controller	CGLine 400
2	DT runs	
3		
4	16:34:11	04.03.2007
Line	Display:	
Line 1	Display: Controller	CGLine 400
Line 1 2	<i>Display:</i> Controller shared DT	CGLine 400 runs
Line 1 2 3	<i>Display:</i> Controller shared DT	CGLine 400 runs
Line 1 2 3 4	<i>Display:</i> Controller shared DT 13:26:17	CGLine 400 runs 18.08.2007

8.7.4.4 Automatic displacement of the next DT after mains failure

In battery operation (failure of mains supply) the "Next DT" is forwarded by 24 hours to 7 days. After recovery of the mains supply the new start of the next DT is calculated. All future DT's refer to this date. This function provides that no duration test is started when in the past 24 hours a luminaire was in battery mode. Herefore, the controller asks every luminaire if they were in battery mode during that time before emitting a DT-instruction. This event leads to a log book entry. If in the next 24 hours a new DT can not be started again this leads to a new log book entry, as well.

8.7.5 Relais settings

The relais is only activated if enough luminaires exist. Not every failure-event is available as an relaisevent (address-failure, no interface-card, no memory card (failure of CG-Controller) etc.). After selection of the menu-item "Relais" the switch status gets displayed.





8.7.5.1 Relais selection battery operation

The relais switches when one ore more luminaires get a mains failure.

8.7.5.2 Relais selection FT runs

The relais switches when one or more luminaires run a function test.

8.7.5.3 Relais selection DT runs

The relais switches when one or more luminaires run a duration test.

8.7.5.4 Relais selection com. luminaire failure

The relais switches when one or more luminaires generate a communication failure at the CG-Controller. This happens when a luminaire, addressed to the CG-Controller, formerly worked but later shows a defect. Same occurs when the CG-S interface respectively the 2-core dataline to the luminaire fails.

8.7.5.5 Relais selection luminaire failure

The lamp or the electronic module of the luminaire is defect.

8.7.5.6 Relais selection charging failure

The battery or the electronic module of the luminaire is defect.

8.7.5.7 Relais selection test failure

1. Test failure prio. 5 (failure of function, charging too low for testing)

At the end of an FT all current luminaire-statusbytes get evaluated. When Bit 1 = 'luminaire failure', a luminaire failure gets entered into the log book. When Bit 4 and 7 are set, 'log book event 0x5D' gets written (FT failure, sum).

2. Test failure prio. 6 (test failure of a luminaire, Bit 4 in statusbyte)

The test failure of a luminaire will be built as follows:

During a DT when its end can not be reached (e. g. 3 hours). At the end of an FT all current luminairestatusbytes get evaluated. When Bit 4 = test failure deleted, the end of an DT gets entered into the log book. If the Bit is set a DT test failure -> DT compl. not possible 0 x 5C (battery capacity too low, sum) gets entered into the log book.

Battery gets exchanged during the DT. When the yellow LED lights up and the red one blinks it means 'charge failure'. After the new battery is identified, a test failure exists because the DT doesn't reach the end. The luminaire shows a DT failure when the green and the yellow LED light up, the CG-Controller than shows 'test failure'.

This 'test failure' is shown in the total failure display (prio. 5 ,6). If the luminaire has a 'luminaire failure' at the same time this is shown in the total failure display (prio. 3).

The 'test failure' gets cancelled when a new DT is passed, e. g. after exchanging the battery.



8.7.5.8 Relais selection RELAIS COMPL. OFF

Sets all relais events on: Relais does not switch =

8.7.5.9 Relais selection STANDARD

When one or more of the following status messages occurs the relais switches.

No. Status message	Failure message
1 -	
2	Com. failure luminaire
3	Luminaire failure
4	Charge failure
5	Test failure

8.7.6 Serial number



The serial number of the CG-Controller is only an indication and can not be changed.

8.7.7 Customer service info

Line	Selection (Submenu)	Line	Display:		Operation:
2	Time and date	1	Z726.A	10.10.2007	Menu One menu higher
3	Next FT	2	Z716.A	10.10.2007	🖉 One menu higher
4	Next DT	N 3	Z772.0	10.10.2007	
5	Relais settings	4	Z713.A	01.10.2007	
6	Serial number				
7	Customer service info				

8 Password

The software versions are only indications and can not be exchanged! The versions Z716 (interface card), Z772 (memory card), Z713 (I/O-module) and Z712 (LON-module) get read from the sources after a reset and taken over, when not known before.

If the interface card (line 2 = Z716), the memory card (line 3 = Z772) or the module in the optional slot (line 4) get not identified correctly, the version is not available. In this case there is a failure of a corresponding component.

Line 4 shows:

empty = no module in the slot on the left near to the memory card.2 or

Z712 LON-module or

Z713 IO-module.



8.7.8 Password 8.7.8.1 Activate password



The digits get entered by the numeric keypad.

8.7.8.4 Menu password request

If the password protection is activated, some functions on the CG-Controller are not possible unless the password has been previously entered.

Zeile	Anzeige:	Bedienung:
1	Passwort Eingabe	01 19 Enti
2	6stelliger Ziffern-	🖾 Confirm
3	Code	diait co
4	Passwort: 123456	

ry of digit code

nation after entry of de

For emergency cases: If you have forgotten your password, your dealer can ask for a general password for you from the manufacturer / customer service.



8.8 Setup Luminaires

8.8.1 Automatic search of luminaires

Luminaires get searched automatically. If the luminaires still exist, they get identified as "existing" and stay in the system.



8.8.1.2 Submenu automatic search All lines

Change luminaire name

Luminaire versions

5

6

When previously "all lines" get selected, all luminaires get searched in 4 lines.

Line Display:

- Luminaire address
 automatic
 - automatic allocation ! ! !
- 3 allocation4 Start

Operation: Menu Stop search 중 Selection yes 역 Selection no

Operation:

Line Display:

Menu Stop search

n / v

- 2 Search in line 1
- 3 05%

Line Display:

1	Sear	rch resu	ilts line		
2	1	2	3	4	
3	15	0	0	0	
4	go o	n with		4	ł



8.8.2 Add luminaire



Line Display: 1 ------2 Wrong ID 3 on with menu 4 ------

Operation: Menu One menu higher

COOPER Safety

8.8.3 Remove luminaire



after return: The menu gets left. after menu:

8.8.4 Luminaires overview



8.8.4.1 Symbol in front of ID

- Battery is charged
- Battery is not charged
- * Luminaire failure
- ? Luminaire has got an address failure or a failure of deleting
- D Duration test active
- F Function test active

- Line 4: Status of luminaire and charge state
 - = Charge state 100%
- = Charge state less than
 - 100%



8.8.5 Change luminaire name



Line 4 The line names only get displayed in this menu. They get defined in the PC-Software.

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8.8.9 Address failure list

When luminaires with an address failure exist this can be seen in the main screen, line 3 'address failure' and in the menu 'Setup luminaires' the menu level 'address failure list'. All luminaires with an address failure are shown in a scroll list.



8.8.10 Delete address failure

When luminaires with an address failure exist that means that the CG-Controller found luminaires with ID's during the process of searching, but the addresses have not been overtaken successfully during address allocation by the controller. With the help of this menu level it is possible to delete the address failure, automatically. Previously, a faultless connection should exist.



The content of line 4 gets changed with approx. 1 Hz when further details exist (sum inputs after FT and DT).



ID

FA0056

BA0000

8.9.2 Display log book of sum entries

Line	Selection	(Submenu)
	Disculary	e la siste

- 1 Display log book
- 2 Display log book of sum 3
- Delete log book Configuration -> SD 4
- Configuration <- SD 5
- 6
- Û

Configuration from PC Sof. I Selection, when more than 2 entries exist. The blinking cursor in line 1 shows the selected

Display of details:

entry.

Line Display

Line Display

1

2

3

Display

1 1

1 2

Line Addr.

Details with A

Line

1

2

3

4

- Line 1 Addr. 001 FA0056 1
- Line 1 Luminaire 001 2
- Luminaire failure 3
- 4 back with d

Delete log book

Operation: Menu One menu higher Line 2: Luminaire name Line 3: Event 🖑 back

Menu One menu higher

Confirm selection

Selection ves

Menul One menu higher

Shows details of the selec-

Operation:

Operation:

Y

ted entry

8.9.3 Delete log book

- Display log book 1
- 2 Display log book of sum
- 3 Delete log book
- 4 Configuration -> SD
- Configuration <- SD 5
- Configuration from PC Sof. 6

4 n/v Selection no Note: If the log book entries get deleted without saving them on another medium before, the log book has to be kept acc. to VDE 0108 T100 in another way!





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after selection with yes:



When selection is confirmed with yes, the addresses of the luminaires will be reprogrammed. When selection is confirmed with no, a luminaire configuration is read from the memory card.

In this case there is the risk that the existing physical luminaires are not conform to the read configuration. Luminaires existing per SD-configuration get a new address, that means the old one will be deleted and the new one will be programmed. If nothing was changed to the physical constellation between saving and reading of the configuration, the answer here can be 'no'. than:



Line Display 1 **Configured Luminaire** 2 Line 3 Luminaire 032 3 Δ

8.9.6 Configuration made by the PC Software

After the input of a SD it will be checked if a new configuration of the PC software exists.

Line Selection (Submenu) Line Display Operation: Display log book 1 Menu One menu higher 1 Display log book of sum 2 2 New config. from PC Å Confirm selection Delete log book ₽ 3 transfered? Selection yes 3 Configuration -> SD 4 4 Selection no Configuration <- SD 5 Configuration from PC Sof. 6 selection with yes: Displav Line Operation: 1 Line 3: Bargraph 2 Configuration <- SD 3 Δ than: Display Line 1 Configured luminaire 2 Line 3 Luminaire 032 3 4 than: Display Operation: Line Line 3: Bargraph 1 2 write on SD 3 4

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9 LED displays

The CG-Controller communicates visible codes by means of 3 LEDs. These are definite by their position and colour.

9.1 LED displays operation, test and failure

9.1.1 Control module software (LED displays)

9.1.1.1 Operation, green LED

The control panel of the CG-Controller CGLine shows the "Operation mode" state with a green LED. \Box LED green on = The entire emergency lighting system is ready for operation.

9.1.1.2 Test, yellow LED

The control panel of the CG-Controller CGLine shows the "Test" state with a yellow LED. \Box LED yellow on = One or more luminaire are in test mode.

9.1.1.3 Failure, red LED

The "Failure" state is indicated by a red LED.

□ LED red on = one or more luminaires are reporting a failure.

LED-displays

No.:	One or more self contained luminaires	Operation LED green on	Test mode LED yellow on	Failure LED red on
1	Functiontest		Х	
2	Durationtest		Х	
3	Blocked			Х
4	Operation	Х		
5	Battery mode			Х
6	Communication failure			Х
7	Lamp defect			х
8	Charging failure			Х
9	Test failure			х
10	CG-Controller failure			Х
11	Charge state too low for testing			Х

Notes:

A battery operation is indicated as a failure, except durting a FT or DT.

☐ If a failure occurs, no "Operation" is displayed.

The yellow LED can be active together with the green or red one.



10 Memory card

The CG-Controller CGLine needs a 32 MB SD-card at least. An operation without SD-card is not possible. When the SD card is not inserted in the CG-Controller for a short time it is ensured that max. 11 log book entries are saved in the EEPROM.

Luminaire names are only saved on the SD, so when the SD card is not inserted in the CG-Controller the names will not be displayed.

10.1 SD files

The following files exist on the SD:

 TEXTE.DAT
 400 luminaire names + 4 line names + 1 project names

 ADDRESS.DAT
 Luminaire ID's

 CONFIGCG.DAT
 Configuration CG-Controller CGLine 400

 LOGBOOK.DATLog book
 Luminaire-configuration (Information can be generated from our customer service).





11 I/O-module for connecting a key-operated switch / Display-LED's (F3-remote indication)

Optional an I/O-module is available to connect an key-operated switch (F3-remote indication) to the CG-Controller CGLine 400 with the following part no.: 400 71 347 985. The I/O-module is delivered as an installed circuit board in the CG-Controller. The connection of an F3-remote indication makes it possible that all luminaires of all lines can be blocked by a key switch during shut-down times. The block input is equipped with a differential loop monitoring (short circuit, interruption reconnaissance). For blocking a 1 KOhm resistance at the F3 remote indication (key-operated switch) must be connected in parallel to S1/S2. Furthermore, the entire state is shown on the F3-remote indication by the LED's:

- Operation mode (green LED)
- Min. 1 luminaire in one line runs in battery mode or test mode (yellow LED)
- Sum failure (red LED)

Connection diagramm: Controller -> F3-remote indication



Attention: For operation of an I/O-module a CG-Controller with SD-card is required. An operation with a CG-Controller with SMC card is **not** possible!

Note: It is not allowed to connect relais instead of LEDs!









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