Installation and Operating Instructions CGLine+ Web-Controller

Target group: Electrical specialists





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1 Introduction / Foreword

The CGLine+ Web-Controller allows for comfortable and full control and monitoring for up to max. 800 CGLine+ self-contained luminaires or modules. Many useful features are implemented.

The luminaires are connected via a 2 core bipolar buscable, subdivided on 4 or 2 lines (max. 200 luminaires on 4 lines or 400 luminaires on 2 lines).

An integrated webserver allows an easy monitoring of all luminaires over an existing computer network, via a standard web browser, e.g. firefox. Thus a special software is not required and location independent monitoring is possible

An optional CGLine+ PC-Software allows an comfotable configuration of the CGLine+ Web-Controller via an USBcable connection.

The following features are available:

- Housing for DIN rail mounting in a standard distribution cabinet
- Up to 4 lines with max. 200 luminaires each, in total max. 800 luminaires
- Integrated webserver for a comfortable monitoring via standard webbrowser
- Integrated mail client for up to 10 recipients, mail events freely selectable Encrypted format: SSL
- Blocking input with differential loop monitoring

(1 kOhm)

- Two free programmable digital inputs
- Two free programmable relay outputs (changeover contacts)
- Automatic luminaire search function (no manual addressing required)
- Automatic function / duration test of all luminaires, assigned into 8 test groups
- Luminaires with maintained light can be switched off, ٠ free selectable (in non-maintained light)
- 2 x USB ports,1 x for Backup via USB-stick, 1 x for easy configuration via CGLine+ PC-software
- Intergrated building layout programming with max. 30 layouts (external software as option)
- Downloadable logbooks
- CGVision fully configuration and monitoring software for max. 32 ĆGLine+ Web-Controller available (as option)

IMPORTANT ∕₽

The CGLine+ Web-Controller is compatible with the older CGLine self-contained system. If one or more CGLine luminaire is connected, the controller switches automtically to CGLine compatibility modus. Some CGLine+ features are not available then.

For setting up the Adaptive Evacuation mode, please read the AE manual.

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NOTE

CGLine+Web-Controller: With integrated memory for storing the configuration and logbook



Up to 32 controllers with 800 luminaires each (only

with homogeneous installation of CGLine+ luminaires)

CGVision software: Configuration and full visualisation of 32 x 800 luminaires

Network PC or CGLine+Wireless Monitoring Set (optional): Access to the integrated web interface

USB stick: For convenient loabook analysis at the PC

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Fig. 1. Application example

2 Safety notes

- The CGLine+ Web-Controller interface must be operated in an undamaged and functional state.
- This equipment is intended for use in restricted area, and must be installed within 2 meters high.
- When carrying out maintenance work to the device the device must be switched off.
- When carrying out device maintenance, observe national safety and accident prevention regulations and the safety notes in the operating instructions below designated with <u>()</u>.

3 Conformity to standards

Compliant with: EN 60950-1. Developed, manufactured and tested according to DIN EN ISO 9001.

CYBERSECURITY

This chapter provides guidelines to securely deploy the CGLine+ Web-Controller and minimize the cybersecurity risk to the installer system.

- Asset identification and inventory: Ensure that the CGLine+ Web-Controller is labelled and inventoried using the Part num¬ber and Mac address printed on the product label, and also the IP address configured during the installation of the material and actual firmware version.
- Restrict Physical access: Ensure that physical access to the CGLine+ Web-Controller is restricted only to authorized user(s). CGLine+ Web-Controller supports the physical access ports RJ-45, USB that can be used to tamper the device. Access to these ports should be restricted to authorized personnel only. Secure the facility and equipment rooms or closets with access control mechanisms such as locks, entry card readers, guards, man traps, CCTV, etc. as appropriate. Monitor and log the access at all times. Before connecting any portable device through a USB port or SD card slot, scan the device to prevent unauthorized access.
- Restrict Logical access: Access to 'Admin' & 'Service' user accounts should be restricted to authorized personnel only as system configuration can be tampered by abusing these accounts. Ensure password length, complexity and expiration requirements are appropriately set, particularly for all administrative accounts (e.g., minimum 10 characters, mix of upper- and lower-case and special characters, and expire every 90 days, or otherwise in accordance with your organization's policies).

- **Restrict Network Access:** Ideally, CGLine+ Web-Controller should be installed on a segregated network. However, when the CGLine+ Web-Controller is connected to a wider network, make sure that the IP address and MAC address are filtered at the router side, or using a firewall. In addition to this, open only the ports used by the CGLine+ Web-Controller (SMTP as configured, 587 for SMTPS, 443 for HTTPS, and 5000 for OPC communication).
- Logging and event management: Make sure you log all relevant system and application events, including all administrative and maintenance activities. Logs should be protected from tampering and other risks to their integrity (for example, by restricting permissions to access and modify logs, transmitting logs to a security information and event management system, etc.). Ensure that logs are retained for a reasonable and appropriate length of time. Review the logs regularly. The frequency of review should be reasonable, taking into account the sensitivity and criticality of the CGline+ Web-Controller and any data it processes. The details how to export the logs are defined in chapter 7.14.
- Secure maintenance: In case the firmware of the device needs to be updated, you will be contacted by your Eaton local support.
- Business continuity / cybersecurity disaster recovery: Eaton recommends incorporating CGLine+Web-Controller into the organization's business continuity and disaster recovery plans. Organizations should establish a Business Continuity Plan and a Disaster Recovery Plan and should periodically review and, where possible, exercise these plans. As part of the plan, important device data should be backed up and securely stored, including the current configuration and documentation of the current permissions / access controls, if not backed up as part of the configuration. The CGLine+ PC can be used to save the configuration of a CGLine+Web-Controller using the "save file" button in the main page.
- **Decommissioning:** It is a best practice to purge data before disposing of any device containing data. Guidelines for decommissioning are provided in NIST SP 800-88. To ensure data is unrecoverable, CGLine+Web-Controller must be securely destroyed. Method of destruction include disintegration, Incineration, Pulverization, or Melting of the electronic inside the CGLine+Web-Controller.

4 Technical data

Table 1. Technical data

Power supply (typ.)	220-240V, 50/60 Hz
Power consumption	< 4 Watt standby, < 21 W full load (RMS)
Connection terminals	max. 2.5mm ² flexible
Permissible ambient temperature	-10°C +55°C
Storage temperature	-20°C+70°C
Protection rating	IP 20
Housing type	DIN rail 12 TE
Dimensions	214 x 109,8 x 60,1 mm



Fig. 2. Dimensional drawing CEAG CGLine+ Web-Controller

4.1 Description / application area

For the central visualisation and control of CGLine+ selfcontained luminaires with CGVision software or via the integrated web interface with a standard web browser (e.g. Internet Explorer):

- Complete control and monitoring of up to 800 CGLine+ self-contained luminaires on CGVision (optionally available). In CGLine mode max. 400 CGLine luminaires.
- Integrated web server for simple visualisation via standard web browser
- Internal logbook on SD memory card
- Two zero-potential signal contacts, freely programmable
- Blocking input with differential loop supervision
- E-mail program integrated in Web server
- Two option inputs, freely programmable

5 Installation

Please comply with safety regulations and device safety legislation, as well as valid technical regulations when setting up and operating electrical operating equipment.

5.1 Assembly

Observe impermissible temperatures at the installation location during mounting. The permissible ambient temperature must not exceed +35°C. The interface is mounted on a DIN rail (12 TE).

5.2 Electrical connections, push buttons and LED displays

5.2.1 LED displays

9 coloured LED displays are located on the front plate and 2 LED displays on the ethernet connection with the following functions:

- Line 1 to Line 4:
 - Signalling of sending or receiving data between the CGLine+ Web-Controller and the CGLine+ self-contained luminaires. A green LED signals the receipt of data at the Web-Controller, and a yellow, flashing LED the sending of data to the luminaires.
- 2 Power LED:
 - Lights up green when the controller is connected to the supply voltage 230V/AC.
- **2** Test LED:
 - Flashes green rapidly when the function test for at least 1 luminaire runs
 - Flashes green slowly when a duration test for at least 1 luminaire runs
 - Flashes during lamp search (number of flashes increase as per search progress).
- 2 Failure LED:
 - Lights up red when at least 1 random fault is pending, e.g. luminaire battery defective
 - Flashes during lamp search
- LED USB1: 4
 - Flash yellow during data transmission between the Web-Controller and a USB device.
 - Off when no data transmission in progress.
- LED USB2: 5
 - Flash yellow and green during data transmission.
 - Solid green when connected but no traffic in progress.
- LED display on the LAN (ethernet connection): 9
 - Green = flashes with traffic
 - Yellow = link or network connection

5.2.2 Push button functions

The CGLine+ Web-Controller has 3 push buttons on the front plate:

Service button 3

The service pin enables a luminaire search for subsequently installed luminaires, thus saved luminaires will not be deleted. Also possible via the service pin to start a function test for luminaires on all lines.

Functional method:

- Press the service pin > 1 sec. but < 3 sec.: function test started for all luminaires
- Press the service pin > 6 sec.: "only new luminaires" search started

Fig. 4. Electrical connections, push buttons and LED displays



System button 3

The system button enables the CGLine+ Web-Controller to be connected to a PC. If pressed for ~ 3 seconds, the green USB2 LED turns on and an external storage from Windows will be detected. An access via PC software will be possible now. To remove the controller the following steps are required:

- 1. Remove external hard drive via windows
- Press system button for 3 seconds, green USB2 LED will turn off



Fig. 3. Connecting the controller to a laptop with CGLine+ PC-Software via USB A-B

Reset button 3

The reset button resets the CGLine+ Web-Controller (not factory default). For this purpose, the button must be pressed and held for >1 second.

5.2.3 Connections

230 V/AC 🛈

Connection terminals for power supply 230 V/ AC with 50/60 Hz.

To avoid any risk of ignition the conductors must be tightened in the terminal with a minimum torque of 40cNm.

CGLine+ Bus: 🕖

The Web-Controller is compatible to the old CGLine technlogy. If one or more CGLine luminaires are connected, the CGLine compatible mode is active. Following luminaires can be connected:

Table 2.	Max.	number	of	luminaires	to	be	connected
----------	------	--------	----	------------	----	----	-----------

Line No.		CGLine	CGL	ine+
			4 lines	2 lines
1		100	200	400
2		100	200	400
3		100	200	-
4		100	200	-
	Total	400	800	800

Polarity D1/D2 to the luminaires must not be observed. Cable routing for CGLine bus: 2-core bus line, unshielded, free bus topology possible.

Table 3. Cable length/line

Cross-section	Length	Total lines	
0.5 qmm	260 m	660 m	
1.0 qmm	520 m	1320 m	
1.5 qmm	800 m	2000 m	

Table 4. Electrical data/line

Power supply bus	25 V
Max. permissible voltage drop	6 V
Bus current	4 lines: 150 mA
	2 lines: 300 mA

NOTE

In case of a communication failure with a luminaire please check the following:

- 1. Check the proper connection of the bus line at the luminaire's connector
- 2. Check the correct bus voltage at the luminaire (see table 4.)
- 3. In case the voltage is correct and the communication failure still exists: Check the bus line resistance which shouldn't exceed 32 Ohm. For that please disconnect the relevant line from the web-controller, apply a short cut between the bus contacts at the affected luminaire and measure the resistance at the other end of the line.

RS485 8

No function. Only for french market.

LAN connection 9

Ethernet connection via RJ45 socket. A LAN patch cable must be used for direct connection of a PC/notebook.

Blocking input (S1/S2):

All connected luminaires can be blocked via the blocking input, meaning the luminaires are switched off and the emergency light function deactivated, for example for idle operating times.

Connection is via a key switch or relay (e.g. alarm system). To guarantee reliable operation from short-circuit or interruption of the blocking line, this input is equipped with differential loop monitoring (static current), meaning a 1kOhm resistance must be integrated for blocking that defines the static current.

Connection example:

With closer contact



Resistor must be connected next to the switch.

With opener contact



Resistor must be connected next to the switch

Option inputs (ln1/ln2):

Programmable digital inputs. The inputs are activated by bridging of both contacts of In1 or In2.

The following functions can be freely assigned to the digital inputs:

- Rest order
- Maintained Light ON/OFF per Line
- Start function test
- Stop test
- External failure

Relay outputs:

The CGLine+ Web-Controller also has 2 freely programmable relay outputs each with a change-over contact.

Programmable functions:

- At least one luminaire failure
- Three consecutive luminaire failure
- Communication failure
- Battery operation •
- Function test active
- Duration test active
- Charging failure
- Test failure

Assignment:

Relay 1:



The contacts of Relays 1 and 2 must be used within the voltage limit of ES1 (Udc<60Vdc / Uac<30Vac) and power limit of PS1 (P<15W).

USB connections:

The CGLine+Web-Controller has 2 USB connections: 1 x USB A host and 1 x USB B device.

USB1 (Type A host):

A standard USB storage stick can be connected to this USB port to save the current configuration and the logbook to the USB stick.

USB2 (Type B device):

This USB connection enables connection of the CGLine+ Web-Controller to a standard PC. Controller functions can be programmed via the PC and a configuration software,

e.g. luminaire configurations. The PC configuration software is available optionally.

6 First commissioning and modifying network settings

The network settings of the CGLine+ Web-Controller can be modified by the CGLine+ PC software or via web browser. The following procedure describes the setup via web browser.

NOTE

For correct perform of the duration test and function test the date and the time must be adjusted (see chapter 6.5).

6.1 Factory default nework settings

The CGLine+ Web-Controller is supplied as standard with the fixed IP address 192.168.1.200. Operation via DHCP (dynamic IP address assignment) is possible but not factory-activated.

Because typical company networks only permit ownassigned IP addresses, we recommend configuring network settings via direct connection to a PC, e.g. a notebook.

6.2 Preparing the PC for configuration

It is mandatory to observe the following:

- For direct connection from the CGLine+ Web-Controller to a PC, a crossover cable is required.
- The devices must be in the same subnet, meaning the network card of the PC must be set to 192.168.1.xxx (not equal to 200), e.g. 192.168.1.50 (subnet to 255.255.255.0).
- Settings for gateway and DNS must not be taken into account with a direct connection.

Connection example for direct connection:



PC network setting:

To modify the network settings of the PC open the system control

- → Network and release centre
- → Modifier adapter settings
- → Right mouse click on "LAN connection"

→ Properties.

The following screen is displayed:

₽ Et	hernet0 Propertie	S	×						
Networking									
Connect using:									
Intel(R) 82574L	Gigabit Network Connec	ction							
		Configure							
This connection uses t	he following items:								
🗹 🚚 QoS Packet S	Scheduler	1							
A Microsoft Net	work Adapter Multiplexo	r Protocol							
Microsoft LLD	P Protocol Driver								
🗹 🔺 Link-Laver To	pology Discovery Mapp	er I/O Driver							
🗹 🔺 Link-Laver To	pology Discovery Resp	onder							
Internet Proto	col Version 6 (TCP/IPv6	5)							
Internet Proto	col Version 4 (TCP/IPv4	j O							
<		>							
			2						
Install	Uninstall	Properties							
Description									
Transmission Control	Protocol/Internet Proto	col The default							
wide area network p	wide area network protocol that provides communication								
across diverse interconnected networks.									
			- 1						
	Oł	K Cance	<u>+</u>						

The following screen is displayed:

Mark the entry Internet protocol version 4 (1), then continue with "Properties" (2).

Internet Protocol Version	4 (TCP/IPv4) Properties
General	
You can get IP settings assigned autor this capability. Otherwise, you need to for the appropriate IP settings.	natically if your network supports o ask your network administrator
Obtain an IP address automatical	ly
• Use the following IP address:	
IP address:	192.168.1.50
Subnet mask:	255 . 255 . 255 . 0
Default gateway:	· · ·
Obtain DNS server address auton	natically
Use the following DNS server add	resses:
Preferred DNS server:	
Alternative DNS server:	
Ualidate settings upon exit	Advanced
	OK Cancel

Usually the network card is on DHCP, i.e. "Automatically reference IP address"

Modify the entry to "Use the following IP address" and specify the following values for the IP address and the subnet mask (displayed automatically):

IP address: 192.168.1.50.

Subnet mask: 255.255.255.0.

Clicking on OK assumes the settings so that the web page of the CGLine+ Web-Controller can now be opened via any web browser, e.g. Firefox.

6.3 First access to the CGLine+ webserver

GUine+ Web-Controller ×						- 0 ×
← → C 🗋 192.168.1.20	00/index.cgi					@, 54 ☆ =
	Login					
E T . V	User Password	Login				
		- 4				00-04 21/08/2014
A Hama	Number : 1					CGLine compatibility mode
(B) Home		10				
· · · · · · · · · · · · · · · · · · ·	System status			Luminaires statu	s	
- Overview all	Operation	Line 1: 2 Luminaires 0 Faults				
Web-Controller	Blocked +	Zone	1	2	3	4
	Rest Mode +	S →				
	Battery operation +					
💮 Manual	Delay after mains return +	Line 2: 0 Luminaires 0 Faults				
	Function test +	Zone	1	2	3	4
	Duration test +	(d ->				
	Postponed duration test +					
	Postponed function test +	Line 3: 1 Luminaires 0 Faults				
	Failure duration test +	Zone	1	2	3	4
	Failure function test +	2 A				
	Battery failure +		•	-	-	-
	Lamp failure +					
	Communication failure +	Zone	1	2	3	4
	External failure .	E N				
	Lamp search •	<u>2</u> 3 7	•		•	
	Inputs 1 2 S1/S2	No failure		At least 1 failure	3 consecutive failures • No	luminaire installed
	Outputs 1 2					
	Disabled Enabled Not configured					

Open a web browser and enter the IP address "192.168.1.200" into the address bar. The start screen of the CGLine+ Web Controller opens.

The screen shows an overview of the installed CGLine + system with sum status information.

To have access to the submenus, a login **1** is required.

🚹 important

A certificate error message can be displayed during the first connection to the controller website. Confirm by clicking on Continue to reach the login page. For installing the certificate, click on CA certificate on the left. The certificate can now be imported via your browser. The steps to follow can be different according the browser you use. The function of the website is also given without certificate, but it will alway require the confirmation of this security notice.



NOTE

The encryption can slow down the access to the website. Few seconds can be necessary for the first connection.

6.4 Login to the CGLine+ webserver

To setup the networks settings to the IT pretendings, it is necessary to log in as "Admin" with factory default password "EATON" see above. After loggin in, the following screen appears:



The submenus appear. In the submenu "configuration" (). It is possible to change the network settings.

6.5 Modifying of the language, date and time

-	The Real Property lies	State of the local division of the local div			States and States and States			- 🔍 × To
(+)	E http://192.168.1.20	0/index.cgi		Q-0	EL Management ×			n*≊ to
	ALCN.	Access Administrator	2					"C
		ID Test IIO G	oneral Network 🔪 I	Email				reg
0	Home			3	V English Francais Deutsch Select			lar no
	Command				Password change			se
20	Configuration		Access type to edi	Administrator 🗸]	Old password		to
	Logbook		New passwore	i 📃		Confirm New password		co
-							Save	un
- 😣	Multisite							
8	Plans	Panel tir	ne (hh:mm) 11:02		Panel date (mm/dd/yyyy)	01/27/2000	Day Saturday 🗸	To an
۲	Manual (4)							reg
								the
								SV
								SS
								In

To change the language to English please click on "Configuration" 1 in the register "General" 2 The language "English" can now be selected in the top selection field 3. **Note:** It is recommended to change passwords after commissioning to prevent unauthorized use. To change the date and time, go to "Configuration" 1 in the register "General" 2. In

system clock time (format SS:MM) **4**. In the "Date" field please enter the Date (format MM/DD/YYYY) **5**.

"Time" field, enter the

6 First commissioning and modifying network settings

6.6 Modifying of the network settings



The network settings of the CGLine+ Web-Controller can be modified on the network tab 2 in the configuration menu 1. Operation via DHCP (dynamic address assignment) and DNS (addressing via the names) is possible.

The CGLine+ Web-Controller is supplied with a factory-set static IP address of 192.168.1.200 3. Operation via DHCP is possible but in this case it is recommended to select static DHCP address assignment or to work with DNS and a fixed host name.

The new network settings are adopted via "Save" and following rebooting the controller can then be accessed via its new settings.

The CGLine+Web-Controller can now be integrated in the customer's intranet. The access from any PC workstation in the intranet via a standard webbrowser is possible now.

7.1 "Home" start screen



After entering the new IP address into the address bar of a web browser, the Home start screen is displayed with complete status display of the single battery system and the sum status of the zones. A login **1** with password is required to navigate on the webpages.

2 Logins are prepared in factory default as follows:

User: Admin Password: EATON User: User Password: GUEST

The Admin-Account allows full access to the CGLine+ Web-Controller, e.g. start function test. The User account allows only access for monitoring the status of the controller and connected luminaires. It is recommended to change the passwords for security reasons. This is described in chapter 7.11 General device settings.

Note: In case of inactivity the system will automatically logout after 15 minutes. A new login will be necessary. It is recommended to share the password only to people that need it, and to restrict the use of the Admin password. Periodic update of passwords is also recommended for security reasons.

7.2 Start screen after registration



2: Common status display of complete system, e.g. function test = min. 1 luminaire is in function test

3: Status display of two inputs and relay outputs



- Lines 1 and 2 with status display for each zone 4 to 16
- Lines 1 to 4 with status display for each zone 2 to 8.

Status display zone:

- Green = all luminaires in normal operation
- Yellow = min. 1 luminaire faulty
- Red = min. 3 luminaires faulty, e.g. lamp failure

After the login the navigation menu appears on the left side 1

- Home: The start screen is accessed via Home at any time following registration
- Overview: Enables a view of all installed and faulty luminaires (all/according to zone)
- Commands: This menu enables commands to be sent to the luminaires, e.g. FT start
- **Configuration:** General settings for the CGLine+ Web-Controller, e.g. IP settings
- Logbook: Displays the last 100 events of the inspection book on the SD card
 Building layouts: Displays luminaires in layouts for each zone
- Overview all Web-Controllers: Displays further installed CGLine+ Web-Controllers in an overview

7.3 Overview of all faulty luminaires (complete overview)



The menu "Oveview" **1** and the tab "Overview luminaire failure" **2** display all luminaires with a fault **3**:

- L = line no. 1-4
- Z = zone 2-16
- B = luminaire address 1-400
- ID = 6-digit hex address for the luminaire, e.g. FE18AC
- Category = category of the luminaire type (SL = Safety luminaire, RZ = Exit sign
 Type = luminaire type, e.g. Guideled SL
- Information = additional text for information which is entered in the CGVision or CGLine+ PC software
- 4: Absent = communication fault to the luminaire
 - Safety Bulb = lamp error
 - Battery = battery or charge error
 - White clock = FT failure
 - Blue clock = DT failure
 - i = luminaire operation mode
- **5**: Discover Date = date when the luminaire was detected by the Web-Controller
 - Previous test = previous automatic FT or DT
 - Luminaire position = target designation of luminaire

Example shows one luminaire failure with following information:

- Luminaire in Line 1
- Luminaire in Zone 1
- Luminaire address 1 (Lum1 in Zone)
- Category
- Type: CGline+ LED
- Information text (max. 20 chara.)
- DT failure
- Luminaire in operation
- Luminaire was added in the Web-Controller at this date
- Previous FT or DT was on 11/02/2021 at 3:14 p.m.
- With click on the magnifying glass, it is possible to enter to the building layout picture, if it is prepared

- 7 Common operation of the web screens
- 7.4 Overview of all faulty luminaires for each zone

CGLine+ Web-Controller ×	Colorest Colorest						-					- 0
← → C □ 192.168.1.20	0/index.cgi											Q, 5a (
F:T•N	Access Administrator											
	Overview luminaire failure Zone	Overview luminairee	i 🔨 Information 🔜		Zone over	liew						
Home			Line	1. <u> </u>	one 1 ·			Send	1			
Qverview									- C			
Commands	Print											
Configuration	O Communication failur	4	- Lamp failure	Battery failure		Failure	function to	est	🐴 Fa	ure duration test	0	uminaire state
A Logbook			*	3		9			-		-	
	L Z B ID Category	Type		Information	e 1 Davide in ave	0	¥ I	10	<u> </u>	Attached at	Next fest	Luminaire position
Building	01 01 01 (001) ABC063 BAES	EB-LED CGLine-G	GuideLed 10811	1-8 h/D CGLine+ EXIT PR	2			<	MAINTAINED	LIGHT 27/05/14 10:0	01/01/15 18:00	Q
layouts												
Overview all												
Web-Controller												
Anual Manual												
			_									

All luminaires with a fault in a zone are displayed in the "Overview" menu **1** and the "Zone" tab **2**.

Via the drop down menus the desired line and zone are selected.

The luminaire list is updated via "Send"

The menu "Overview" **1** and register "Overview luminaires" **2** shows all installed luminaires on the CGLine+ Web-Controller.

7.6 Information (information text of the luminaires)

7.5 Overview of all luminaires



This screen shows the name with max. 20 characters and information text with max. 200 characters (e.g. destination text) of each luminaire.

These text can be edited by:

- CGLine+ PC software
- CGVision
- With click on the text on this screen
- Import of an text-file (see 1)

7.7 Configuration change of luminaires addresses

For changing the configuration of luminaires addresses, please follow the steps below:

	Access Administrator		
E T I • M	Logout		
	Overview luminaire failure	one Overview luminaires Information Luminaires	
			*
	Lino 2 . Calant	Update manually	- 1
The second secon	Lille 3 · Select	(click on the line you want to edit)	- 1
C Overview			- 8
	Line Zone Luminaire ID	e Information	- 1
🕞 Commands	3 01 01(001) BA00D8	MAIN ENTRANCE	- 1
	3 01 02(002)		- 8
මල) Configuration	3 01 03(003)		- 8
<u>.</u>	3 01 04(004)		- 1
Logbook	3 01 05(005)		- 8
	3 01 07(007)		- 5
	3 01 08(008)		
	3 01 09(009)		
Building	3 01 10(010)		
ayouts	3 01 11(011)		
	3 01 12(012)		
	3 01 13(013)		
Overview all	3 01 14(014)		
R Web-	3 01 15(015)		
Controller	3 01 10(010)		
	3 01 18(018)		
	3 01 19(019)		
	3 01 20(020)		
Anual Manual	3 01 21(021)		
	3 01 22(022)		

1. Click on the tab **Luminaires**. The table with all the luminaires installed appears.

2. Click on the line you want to modify and choose the new configurations.

3. Click on Save for taking into account the changes.

F.T.N	Access Customer service/Factory	
	Overview luminaire failure Zone Overview luminaires Information 1	Lominaires
Home	L Z B ID Test Category Name	Information
Overview	1 V 1 V 2 V BB74EE [1 V] BAES V	
Commands		1 Save Delete
- 3		

4. Click on Save for finalizing the modifications(2)

FAT-N	Access Administrator		
	Overview luminaire failure 🔨 Zone 🔪 Overview lu	uminaires 🔪 Information 🍐 Luminaires	
Home	Line 3 • Select	Update manually (click on the line you want to edit)	2 Save
Overview			
Commands	3 01 01(001) BA00D8	MAIN ENTRANCE	
Configuration	3 01 02(002) 3 01 03(003) 3 01 04(004)		
🖄 Logbook	3 01 05(005) 3 01 06(005)		
	3 01 07(007) 3 01 08(008)		
Building	3 01 09(009) 3 01 10(010)		
ayouts a	3 01 11(011) 3 01 12(012)		
	3 01 13(013) 3 01 14(014)		
Web-	3 01 15(015) 3 01 16(016)		
	3 01 17(017) 3 01 18(018)		
	3 01 19(019) 3 01 20(020) 3 01 31(011)		
Manual	3 01 22(022)		

Note: Comparison Comparison

In the menu "Commands" all commands can be sent to CGLine+ single luminaires. It is possible to send the commands to all luminaires or to one line, zone or even to a single luminaire.

2: Status display of the total system and the pot.-free IN/OUT puts.

5: Lamp search progress display when the search is on going.

The following commands 3 can be set:

7.8 Switching command screen

- **Block:** Emergency light function and maintained mode are deactivated, e.g. during idle operating times
- **Rest mode:** During a mains failure (luminaires are in emergency mode), the rest mode will switch OFF the luminaires. If mains return, the luminaires will go back in normal mode. To the next mains failure, the luminaires switch again to emergency mode.
- **Release / Relight:** Release of the blocking or rest mode function
- Start functional test: Specified luminaires start a function test
- Start duration test: Specified luminaires start a battery duration test
- Stop FT / DT: Function tests or duration tests are aborted
- Switch maintained mode ON / OFF: Luminaires in maintained mode (L' applied) can be switched ON or OFF (if luminaire supports this function)
- **Start identification:** Luminaires with the identification function start blinking
- **Stop identification:** Luminaires with the identification function stop blinking
- **Update luminaire status:** Actualisiation of the luminaire status of all luminaires
- Update luminaire type: Actualisation of luminaire type information
- Search all lamp: Completely new luminaire search. (Can be started only if luminaire database is empty. Use **Delete all lamps** to clear the database).

Caution: old configurations are overwritten.
 All luminaires will be addressed with a logical address from 1 up to 200 or 1 up to 400.

- Search new lamp: Starts a luminaire search and only adds newly found luminaires. All new luminaires will be addressed with a logical address from last existing luminaire up to 200 or up to 400.
- Delete all lamps: Remove all lamps from database.
- Activate IA: Products with IA functionality blink in case of an emergency evacuation
- **Desactivate IA:** Stop products with IA functionality blink in case of an emergency evacuation

Selection of luminaires to be controlled 4:

- Line: Selection of luminaire lines 1 to 4
- Zone: Selection of luminaire zone 2 to 16
- Luminaire: Selection of single luminaires in the line and zone
- If "All" is selected: Command applies to all luminaires

7.9 Device information screen

ļ	CGLine+ Web-Controller ×					= 0 ×
	← ⇒ C □ 192.168.1.20	00/index.cgi				Q 58 ☆ ≡
	F-T-N	Access Administrator				
1		ID Test NO General Network Email				
	<i>6</i>					
	Home		Version in	nformation	2	
	0verview		Name	CGI ine+ Web-Controller	Device 1	
	Commands		Vertion Cortex	71000 =20		
U	Configuration		Veraion Contex	21000.820		
	Logbook		Version xMega	21005.a29		
			Manufacturing date	255/255/255		
	Building		MAC	00 - 0c - c1 - 06 - 00 - 01		
	@ layouts			Save		
	Overview all Web-Controller					
	<i>(</i>)					
	Manual					

The device information screen in the configuration menu ① displays information about the CGLine+ Web-Controller, such as device name (freely configurable), software version etc.

It is also possible with several CGLine+Web-Controllers in the network to assign a logical address to each from 1 to 32 **2**.

7.10 Configuration screen test times

Come web-contorer ×	
	C 00 12 -
ID Test NO General Network Email	
Home FT/DT configuration	
Overview Test group 1	
Commands Next functional test : 18:00 01/01/2015 Test period : 7 days	
Configuration	
Logbook	
Save	
Puilting	
9 layouts	
Overview all	
P web-controller	
Manual	

On the "Test" tab 2 in the configuration menu (1), it is possible to determine start times for a function test and duration test for up to 8 groups.

It is also possible to set a test interval via which tests are cyclically repeated. Possible test frequencies:

- Function test: 1-30 days
- Duration test: 30-365 days

The CGLine+ self-contained luminaires of the corresponding test groups then carry out an automatic function test of the lamps or a duration test of the batteries according to these set times.

NOTE

If the period of mains failure is greater than 21 days, the complete system should be re-commissioned. Especially the date and time must be reconfigured to assure proper sequencing of the test.

7.11 "Digital input/output" configuration screen



In the configuration menu of the two digital inputs **1**, **2** the inputs can be assigned specific commands and the two relays can be assigned conditions when the relay's state changes.

Configuration of the two digital inputs 3:

- Not configured: no function
- **Rest order:** During a mains failure (luminaires are in emergency mode), the rest mode will switch OFF the luminaires. If mains return, the luminaires will go back in normal mode. To the next mains failure, the luminaires switch again to emergency mode.
- Activate IA mode: Activate the Increase Affordance mode in line 1, 2, 3 and/or 4.
- Maintained mode OFF per line: Switches off the maintained mode luminaires of the line as long as the input is active
- Start function test: With positive pulse, starts the function test with all luminaires
- Stop FT/DT: Interrupts a duration test or function test with all luminaires
- External failure

Configuration of the two relay outputs (4):

- Not configured: no function
- One luminaire fault: Common fault for at least one luminaire
- Three consecutive luminaires failure: At least 3 consecutive luminaires in a zone are faulty
- Communication fault: At least 1 luminaire has a communication fault
- Battery operation: At least 1 luminaire is in battery mode, e.g. with mains failure
- Function test: At least 1 luminaire is in a function test
- Duration test: At least 1 luminaire is in a duration test
- Charging failure: At least 1 luminaire has a battery or charge fault
- **Test failure:** At least 1 luminaire has an FT or DT fault, e.g. nominal operating time not reached

7.12 General device settings



On the General tab 2 in the configuration menu 1 the desired country language can be set via the drop down menu 3.

It is also possible to modify or define the password for 2 access accounts to set the date and time settings of the CGLine+ Web-Controller **5**.

To modify the passwords the corresponding account is selected. Firstly the old password must be set. The new password is then saved via "Save" after it has been input a second time.

For tests to be implemented at the correct times and to ensure that the inspection book entries are chronologically correct, it is necessary after the commissioning to correctly set the date and time in the CGLine+ Web-Controller here **5**.

Image: Control of Con

In the network configuration page **()** it is possible to configure all necessary network settings. The basic IP settings are already described in the manual for first commissioning.

IMPORTANT

Reset the controller after modifying the IP configuration to save the changes.

Follwing settings are possible:

7.13 Network (settings)

- **DHCP**: (Dynamic Host Control Protocol) if a DHCP is in the network available, it is possible to activate DHCP. During booting the device will get an IP-address from the DHCP server. Please note: The assigned IP address must be known, to open the website of the CGLine+ Web-Controller!
- Local host name: Any identification name of the Controller
- **IP address:** IP address in IPV4 format xxx.xxx.xxx, normally provide by the IT-department, factory default is 192.168.1.200
- Subnet mask: Normally provide by the IT-department, factory default is 255.255.255.0 (Class C)

- **Gateway:** Gateway address to communicate to other subnets, normally provide by the IT-department, factory default is 192.168.1.1
- **Primary DNS (Domain Name System):** Normally provide by the IT-department. DNS provides a name resolution for network devices.
- Secondary DNS: Second DNS
- MAC-address of the CGLine+ Web-Controller: Fixed identification no. of the web-controller in a network.

7.14 Configuration of E-mail



NOTE

For cybersecurity reasons, the login and password must be re-entered each time the configuration is changed. Otherwise, the account name and password will be saved as "empty" and e-mails will not be sent because the authentification is not possible.

NOTE

Mail encryption only supports TLS. The port number is set to 587 in this case.

NOTE

When the communication is established with the server, the text "Server Valid" turns green. If not, please check network and configuration.

The communication established with the SMTP client does not imply that emails can be sent properly (firewall setting, etc. can prevent emission).

The CGLine+ Web-Controller contains an integrated e-mail client ① that with configurable events enables e-mails to be sent to up to 10 persons.

Account settings 2: Please enter IP-address of the mail server, name of the mail sender (head of email) and port. Login credentials and TLS encryption can be set as an option.

Recipients email 3: Setup for up to 10 recipients. 2 groups with 5 recipients each.

Send mail (4): Configuration on which event the recipients will receive an email, e.g. after a function test

🖄 Important

The SMTP mail configuration depends on the SMTP server and network configuration. Some servers may not be supported or be compatible with the webcontroller client. Please contact your local IT support and EATON product support if you have difficulty for configuring the client.

7.15 Logbook

→ C 192.168.1.200/index.cgi			- 0
			Q, 5s
FIT-N AD Administra	no.		
Logout			
DownloadLast eve			
Download monthly lo	gbook in .txt, or global logbook in .dat		
Overview	Name LOCROOK DAT	Size 7 240 022	Serial
Commands	14.04.1.CGLine+ Web-Controller LOGBOOK bt	7.340.032	21
Configuration	14_05_1_CGLine+_Web-Controller_LOGBOOK.txt	13.343	12
	14_06_1_CGLIne+_Web-Controller_LOGBOOK.txt	7.880	17
Logbook	14_07_1_CGLine+_Web-Controller_LOGBOOK.txt	2.901	25
Manual			

The CGLine+ Web-Controller produces a monthly logbook, which is available for download **2** in the menu logbook **1**. The name of the logbook contains the date of the month, e.g. 14_06_01_ CGLine+ Web-Controller_ logbook.txt is in format year_month_day, so in this example the logbook is for June 2014.

A complete logbook is downloadable via logbook.dat. This file is only usable with the CGLine+ PC-software! (see manual CGLine+ PC-software)

7.16 Last events



The controller provides a list of approx. 30 of the last events with date and time stamp in the folder "Last events" **1**.

7.17 Menu "Building layouts"



The CGLine+ Web Controller provides a building layout visualisation which allows a graphic status display of the luminaires on layouts of the building or areas. It is possible to import up to 30 building layout plans, with max. 200 luminaires each. The colour of the luminaire shows the status, e.g. red = luminaire failure.

To use this function, building plans must be provided in an AutoCAD format. For the building layout function, a special format of drawings incl. positioning of luminaires are required to generate usable plans with placed luminaires.

External programs are required, which are described in the manual for the building layout programming (available on request).

7.18 Building layout - Add a layout



7.19 Building layout - lift of building layouts







The import of the external generated building layouts is possible in the folder "Add a building layout" 2 in the menu "Building layout" 1.

The size must be less than 1 Mbyte / picture. Maximum 30 picture are possible.

To import, please click on "add layout" 3, and select the picture in .xml format on the source drive.

To load the picture to the CGLine+Web-Controller, please click "add" 4.

The building layouts can displayed now by the folder "List of building layouts" **1**. With click on the name of the layout, which is displayed as hyperlink with .xml extension **2**, the layout can load from the controller. A new task will open. See example of a building layout below. A click on the hyperlink (blue) opens the building layout picure 3.

After click on the link, the embedded layout picture appears. The status of the luminaires will be displayed with colours:

- green = normal opera-• tion
- yellow = FT or DT active
- red = failure

Via menu "Building layouts" it is possible to go back to the building layout menu.



7.21 Layout programming – searching for a device

For locating luminaires in a line and zone in a layout plan, there is a search function **1**, **2**. This enables quickly finding any defective luminaires in a building.

To find a luminaire in the layout plan, the line, the zone and the luminaire to address can be selected. The corresponding luminaire in the layout is highlighted via "Search" **3**.

7.22 Layout programming – deleting a layout



In the menu "Delete layout" **1** any graphics created can be deleted again from the web server.

Selected plans are removed again via "Delete layout".

7.23 Multi-site configuration



7.24 Overview all Web-Controller

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sian Dirig Coupe	D Visioner D B	n 🖩 Grayte 🗅 B	HE .								7													
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With several installed CGLine+ web controllers in the network, all devices can be displayed clearly with status display in a list **①**. For this purpose the devices must be registered and entered a single time, see above.

Status display of zones, inputs and outputs of all CGLine+ web controllers installed in the network. CGLine+ web controllers installed in the network

NOTES

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