Gleamer

Manuel utilisateur

Software Version 1.0
issue A

Gleamer

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Update record

Issue	Change
A	Software version V1.0

Usage precautions

General condition

- Each device has been fully tested and checked before being shipped. Please check carefully whether the equipment has been damaged during transit. If the dimmer appears faulty, do not turn it on.

Electrical safety

- The Gleamer is a Class 1 device and must be connected to a protective ground in compliance with local regulations.

- The outputs from this "low voltage" dimmer <u>are not isolated</u>, and are connected to the mains. Mains voltage is continually present on the outputs. Disconnect the device or position the switch/circuit breaker to "O" (Off) to isolate the outputs.

- This dimmer can supply a high output current. Electrical cables of the required gauge must be used depending on the loads to be controlled and according to local regulations.

- The outputs are electronically protected against short-circuits and overloads. In the event of a malfunction, the outputs go into protected mode until the fault is fixed. Warning: the outputs are not disabled and mains voltage remains present. The Gleamer must be disconnected or turned off to electrically isolate the outputs.

- The Gleamer delivers a semi-AC voltage. Connect only resistive loads on output

Usage precautions

- Before starting the Gleamer each time:
  - check the general condition of the device
  - check the supply voltage
  - check that the cables connected to the dimmer and associated connectors are in good condition
  - check that the device is grounded correctly
  - check that the air vents are not blocked

- IMPORTANT: before connecting the DMX signal and lamps to the Gleamer, CARRY OUT A THOROUGH CHECK on the configuration of each of the output channels (max. voltage, power rating). An incorrect setting of the output parameters could destroy any lamps connected to the dimmer.

- To rig this dimmer above ground, use the optional yoke accessory (GL201) and secure it using a compliant safety cable.

- To avoid any risk of electric shock, do not open the cover or any other part of the unit.
- This device may only be maintained by a qualified and trained technician.
- It is essential to disconnect the power to the device before carrying out any maintenance operations. Turn the device off [switch SW1] before disconnecting the power connector [K1].

- Read the usage precautions and user manual before using the equipment.
- Equipment intended for professional use only and not suitable for domestic use.
- This device is designed for interior use and must not be exposed to rain, dampness or excessive temperatures.
- Do not block the air vents.
- Connect to the mains directly. Do not connect to an "electronic" output (dimmer, solid-state relay, etc.)

Gleamer

1. Description

The Gleamer is a low-voltage dimmer intended for controlling lamps with an operating voltage of between 6 and 28V. It has 9 outputs, each of which can deliver 12A.

The outputs are electronically protected against short-circuits and overloads. In the event of a malfunction, the outputs go into protected mode until the fault is fixed, and are reactivated automatically.

In the event of a major fault, the device's general circuit breaker cuts the power supply to the Gleamer. The circuit breaker must be reset manually after the problem has been analysed and corrected.

The Gleamer is controlled by a DMX512 signal over 9 channels, 1 DMX channel per output.

2. Specifications

Supply	200 - 240V AC, 50-60Hz, 3000W, 13A
Outputs	9 circuits, from 6 to 28V 12A max. per circuit, resistive load only
Chassis	Aluminium casing, black epoxy finish.
Dimensions	3U, 19" half-width rack - 216 x 131.6 x 410 mm (LxHxD) - Weight: 7.7Kg
Connectors	Powercon 20A DMX input (XLR5), DMX output (XLR5) Output to Socapex (type 419) or terminal block
Control	DMX, 9 circuits
Environment	Usage temperature: 0°.. 35°C Storage temperature: 20° .. +70°C
Options	GL201: Yoke for rigging to bridge GL202: Racking kit (for 2 Gleamers)

3. Description
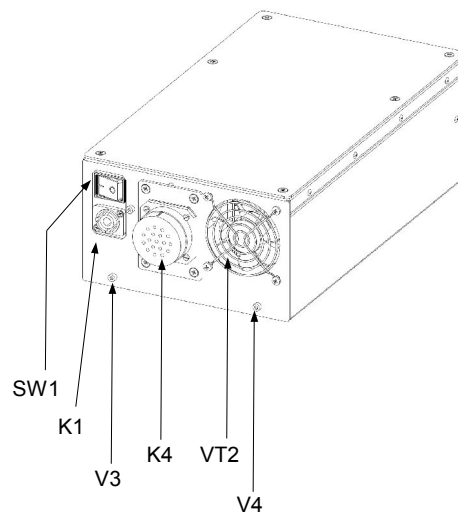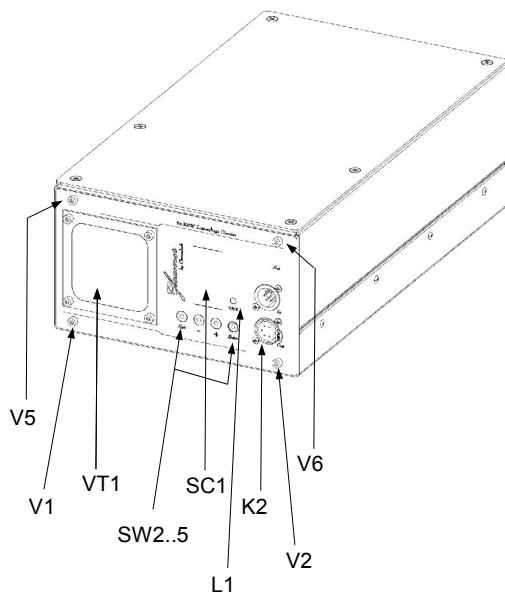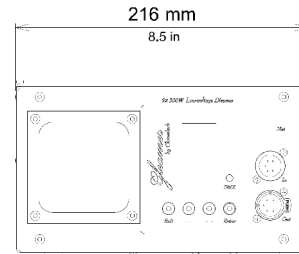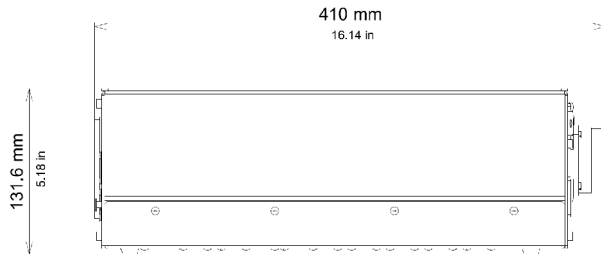
K1	Power connector
SW1	Circuit breaker/Main breaker
SW2, SW3, SW4, SW5	User interface/4-key keyboard
SC1	User interface/LCD screen
L1	DMX activity LED
K2, K3	DMX interface
K4	Outputs (Socapex option)
K5, K6	Outputs (terminal block option)
VT1	Front air vent
VT2	Rear air vent
V1, V2, V3, V4	Fixing screws for the support yoke and the rack mounting kit
V5, V6	Fixing screws for the rack mounting kit

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4. Usage

1 - Power supply
- Connect the Gleamer to a 200-230V / 16A power source via the Powercon connector [K1]
- Turn the Gleamer on [SW1]

2 - Configuration
- Check the configuration of the Gleamer
- If necessary, adjust the settings
  - nominal output voltage for each channel
  - nominal output power for each channel
  - DMX address

3 - Outputs
- Connect the lamps to be controlled to the output connector [K4, or K5 and K6]

4 - DMX Interface
- Connect the Gleamer to a DMX signal source [K2, K3]

5. Configuration

To ensure the system operates correctly, it is essential to configure the device each time it is installed. Failure to do so may cause the lamps or arrays connected to the outputs of the device to be destroyed.

The settings to be configured are, in particular:

- The nominal operating voltage of each load connected on output
  The voltage may be adjusted from 6V to 36V.
  The output voltage may be adjusted to a higher value than the nominal voltage of the load (up to 36V) to compensate for any voltage losses due to long cabling lengths.

- The power rating of each load connected on output
  The power may be adjusted up to 300W, and within the limit of a maximum output current of 12A.

These settings are adjusted via the Config/Output menu. It is possible to adjust these values for all channels simultaneously (menu option Config/Output/OutAll), or independently for each channel (menu option Config/Output/Out1..9). N.B.: adjusting all channels simultaneously cancels any individual channel settings.

- The DMX base address of the device (output no. 1)
  As the Gleamer uses 9 DMX channels, the base address may be adjusted from 1 to 504.

The DMX address is adjusted via the Config/DMX menu option

6. User interface

Keys SW2 to SW5 are used to navigate through the configuration menus.

Code	Legend	Menu function		Setting function	
SW2	*Exit*	Return to previous menu	←	Cancel setting	X
SW3	–	Previous row	↑	Decrement value	–
SW4	+	Next row	↓	Increment value	+
SW5	*Enter*	Enter menu	→	Confirm setting	OK

Depending on the context, these keys also have an alternative function
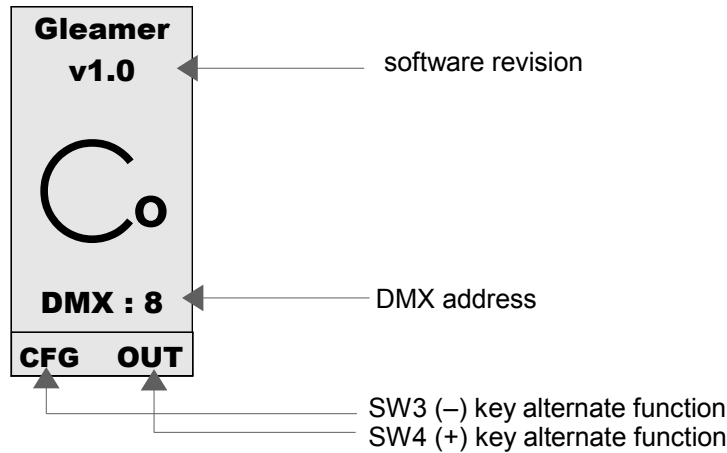
Code	Legend	Homepage	Menu	Adjust value
SW3	–	Shortcut to configuration view		
SW4	+	Shortcut to output status view		
SW3 & SW5	– & +		Return to the screen	Return to the MIN value

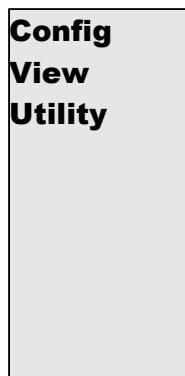LED L1 shows the status of the DMX signal and whether any protective devices have been activated on the device

LED	DMX status / device
off	off
red	on, no DMX signal
flashing red	on, no DMX signal, protective device(s) activated
green	on, DMX signal OK / orange flashes if DMX error
flashing green	on, DMX signal OK, protective device(s) activated orange flashes if DMX errors

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A number of screens allow the status of the device to be configured and viewed.

Home screen

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v1.0 — software revision

Co

DMX : 8 — DMX address

CFG   OUT

SW3 (−) key alternate function
SW4 (+) key alternate function

Main menu

Config
View
Utility

The setting menu contains the following options:

Config	↔ DMX		Set address
↓	Output	↔ Out1..9	Set output channels, channel by channel
		OutAll	Set output channels, all channels
	RstAll		Zeroise all settings (safe mode)
↑			
View	↔ Alert		Display current alerts (protective devices active)
↓	Config		View the device configuration
	Output		View the activation states of the outputs
↑			
Utility	↔ Backlig		Screen adjustment (backlighting)
	Contras		Screen adjustment (contrast)

7. Output interface

Two types of interface are available for connecting lamps on output from the device:

- GL109/S
  Socapex type 419 connector with 19 female contacts [K4]

- GL109/T
  Terminal for wire to wire connections, type Wago ref 231-309 and 231-311 female [K5, K6]

The electrical cables used for connecting the outputs must be able to withstand a voltage of 250V AC, be suitable for the current required by the load, and comply with local and national standards in force at the point of installation.

In order to limit electrical losses in the cabling, the lengths of cables between the device and the loads it controls should be minimised. It is recommended that the device be installed as near as possible to the lamps. A long cable length may be compensated for by increasing the output voltage of the channels.

Socapex pinouts

1 : Channel 1 (+) 2 : Channel 1 (-) 3 : Channel 2 (+) 4 : Channel 2 (-) 5 : Channel 3 (+) 6 : Channel 3 (-)	7 : Channel 4 (+) 8 : Channel 4 (-) 9 : Channel 5 (+) 10 : Channel 5 (-) 11 : Channel 6 (+) 12 : Channel 6 (-)	13 : Channel 7 (+) 14 : Channel 7 (-) 15 : Channel 8 (+) 16 : Channel 8 (-) 17 : Channel 9 (+) 18 : Channel 9 (-) 19 : Protective ground

8. DMX interface

DMX connection

	DMX IN [K2]	**DMX OUT** [K3]
Function	DMX 512 input	DMX 512 output
Type	XLR male 5 pin	XLR female 5 pin
Pinout	1 : Earth 2 : DMX – 3 : DMX + 4 : Not connected 5 : Not connected	

Assignment of DMX channels

DMX channel 1 to 9	**Output levels 1 to 9**
0 % to 100%	0% 100% of the programmed voltage

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9. Protective devices

The Gleamer has several types of internal protective device (electronic protective devices):

- Output current
  Too high an output current (overload, short-circuit) puts the output into protected mode.
  The channel must be reset manually from the user interface.

- Output voltage
  An overrun of the programmed output voltage caused, for example, by an unexpected disconnection of a load in operation, or a cabling fault, puts the output into protected mode.
  The channel must be reset manually from the user interface.

- Overheating
  If the internal components of the device reach too high a temperature (air vents blocked for example), all the outputs are put into protected mode.
  Return to normal operation occurs automatically when the internal temperature reduces.

- Input current
  Too high a current consumed on input may put the device into protected mode (and requires manual reset via the user interface), or operate the device's power switch/circuit breaker [SW1] which can be reset when the fault is corrected.

When a protective device is activated within the device, the LCD screen displays an "ALERT" message. Pressing [SW3] (–) or [SW4] (+) displays the protection device management menu. This menu may also be displayed (if errors are active) via the *View/Alert* menu.

It allows the user to scroll through any protective devices which have been activated (select *Next* to browse through them), and to cancel them (select *Clear*) after fixing the fault, thus setting the device or channel back into operation.
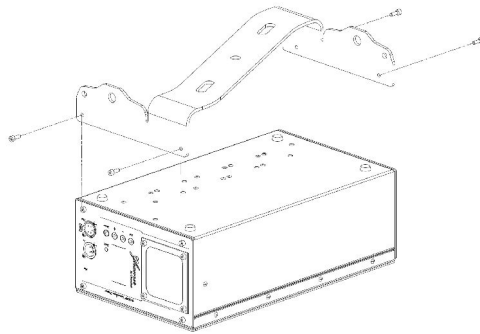
When the device is installed above ground or remotely, it is possible to reset it by turning its main power supply off then on again.

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11. Warranty

Scope of the warranty

Equipment is guaranteed against faulty materials and manufacturing faults for 1 (one) year from the date of delivery subject to written notification that a fault has occurred being sent to CHROMLECH within 15 (fifteen) days.

If the equipment is repaired, the repairs will be carried out by CHROMLECH or one of its subcontractors. Only CHROMLECH has the authority to appoint the repairer.
If CHROMLECH carries out repairs and/or replaces a part or the equipment during the guarantee period, the original guarantee period is not extended.

CHROMLECH has sole authority for deciding what action should be taken under the terms of this guarantee, in particular:

- whether the equipment should be repaired on the customer's site or
- whether the equipment should be returned by the customer to CHROMLECH so that it can be repaired.

Under the terms of the warranty, the customer is liable for any risks and transport costs and may not claim for any losses due to the equipment being unavailable while under guarantee.

Exclusions

This warranty does not apply to visible faults.

The warranty is not valid in the following circumstances:

- failure to comply with the recommendations for using and maintaining the equipment
- abnormal use of the equipment
- errors in operating the equipment
- failure to maintain the equipment
- repairs carried out by a third party without authorisation from CHROMLECH

This warranty also excludes:

- components with a life-time in normal use that is less than the warranty period
- replacement of consumables
- replacement of glass parts
- wear parts (in particular lamps, filters, gobos, flight case)
- faults and their consequences resulting from external causes

Limitation of liability

If a claim is made under the above warranty, CHROMLECH's obligation to repair the equipment will be limited to replacing the equipment free of charge or repairing the equipment or the components recognised as being faulty, whichever it sees fit, to the exclusion of carrying out any other repairs of whatever sort.

CHROMLECH is in no circumstances liable for indirect losses caused to the customer or a third party, such as in particular operating losses or other business losses (including loss of orders, loss of revenue or profits, loss of data or inability to make planned savings or profits) or immaterial losses (including loss of reputation or image).