



# KLCM412P

Plug-in supply (Integrated emergency test, RJ45 Link)

# KLCM413W

Wire-in supply (Integrated emergency test, RJ45 Link)

### KLCM423WIET

Wire-in supply, emergency test (Standard emergency test, supply disconnect)

For KLCM how-to guides please see hager.co.uk or our YouTube channel youtube.com/user/hageruktv.

Search 'Hager Klik LCM' for our video quick start guide.

Sales Service Centre: 01952 675 675

Technical Service Centre: 01952 675 689

Hager Ltd.

Hortonwood 50 Telford Shropshire TF1 7FT

# Search KlikLink in the iPad app store.

<b>Technical Characteristics</b>
Number of channels

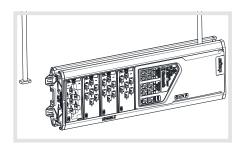
Number of channels	4				
Number of outputs per channel	3 (hard wired LCM has 4 outputs on channel A)				
Number of sensor inputs	4 (KLCM-OS range)				
Number of switch inputs	4				
Supply Voltage	230V AC 50Hz				
Maximum Number of Devices	64 DALI, 16 per output.				
Rated current	10A (total load)				
Rated current each connector	10A				
Complies with	BS 5733:2010, F <sub>p</sub> EN60669-2-5 BS EN 61535:2009 - (Excluding clauses 10.1 and 10.3 due to Aluminium enclosure)				
IP protection	IP20				
Connection for commissioning	Bluetooth Smart (Bluetooth 4) (only available for apple iPad)				
Dimensions	Height	Width	Depth	Weight	
	145mm	440mm	58mm	1.9kg	

Hager hereby declares that this KLCM\*\*\*\* is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.

A copy of the original declaration of conformity may be obtained from technical@hager.co.uk.

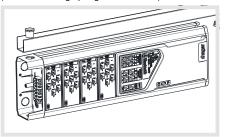
## **Mounting Options**

### **Drop Rods**

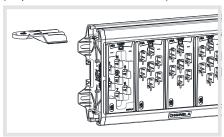




(Use slider along spring channel nuts.)

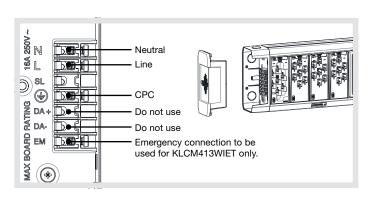


Direct: e.g. nail gun or screw fixing (not possible for hard-wire KLCM413W)

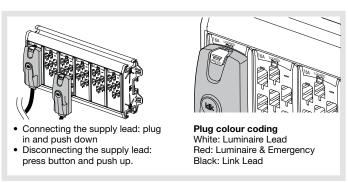


### **Supply Connection**

Hard wired - KLCM413W & WIET

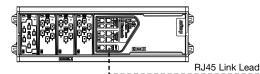


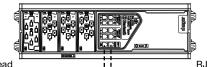
Pluggable - KLCM412P Plug in supply & Klik 7 Lead Connection

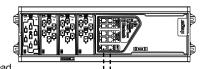




### Klik LCM Control Connection







KLCM-OS 1 Head Sensor (inc 10m RJ11)

KLCM-3OS 3 Head Sensor (corridor sensor, inc 10m RJ11) KLCM-50S 5 Head Sensor (wide area sensor, inc 10m RJ11)

KLO\*RJ45G RJ45 Switch Drop (plug-to-plug), Grey KLO\*RJ45R RJ45 Link lead (plug-to-plug), Red **KLORJ45CON** RJ45 Splitter

\*5, 10, 15, 20, 30, 40, 50

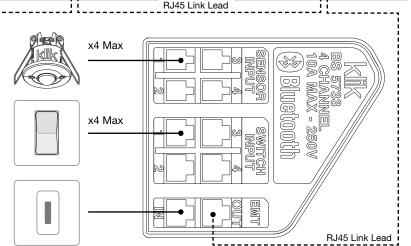


Hager strongly recommends the use of Hager supplied RJ54 cables for all installations. All Hager leads are tested prior to shipment. If other manufacturers RJ45 cables are used we recommend that each lead is tested with a dedicated RJ45 tester prior to installation. Should Hager be called to site to support the

installation and a fault is found with the RJ45 cables, then a charge for site support will be incurred.

### Partition switching

For partition switching please use switch input 1 only.



### Sollysta Wiring Accessories for use with Klik

WMGS13R 2 way & centre off retractive switch module, on/off, dim up/down

WMGS12 20A, 2 way, single pole switch

WMGKS 20A, double pole keyswitch for emergency override

WMGP\*(1, 2, 3, 4, 6, 8) White moulded, grid switch cover plates WMGP\*(1, 2, 3, 4, 6, 8)G

Grey moulded (Part M), grid switch cover plates Grid frames, 1, 2 and 3/4 gang WMGF\*(1, 2 & 34)

Decorative finishes also available for grid products, see Hager catalogue.

Scene control plates, brushed steel, are available on request, 4 scenes, on/dim up, off/dim down.

### Standard Switch Drop

Switch inputs - 1 to 4 on KLCM

Brown/White On Blue/White Off Brown 0V (Common)

WMGS13R - 20A, 2 way, centre off retractive grid switch - white

Emergency test, override, corridor hold, in & out. (KLCM413WIET, emergency test not applicable)

Orange/White Override - All Outputs On Orange Green/White Override - All Outputs Off Corridor Hold Line Emergency Test (Timer 1) Blue/White Emergency Test (Timer 2) Green Emergency Test (Timer 3) Brown Common Brown/White Not Used

## Default operation on power up (pre-commissioning)

The default settings on power up of the LCM is Presence with a 20 minute time out. Therefore any lights connected will not come on (to prevent a building being lit 24/7).

To enable any light plugged in to the LCM to come on prior to final commissioning (i.e. during other building works) we recommend temporarily connecting a KLCM-OS. This will enable all lights to come on for 20 minutes when the sensor is triggered, this also reduces the requirement to power off LCM at night and could also aid building security during construction or renovation works.

For the latest range information or assistance call our sales service centre on 01952 675 675 or technical service centre on 01952 675 689 or hager.co.uk

# :hager





### **KLCM Sensing Options**

**Hager Ltd.** Hortonwood 50 Telford Shropshire TF1 7FT

Sales Service Centre: 01952 675 675 Technical Service Centre: 01952 675 689

### Sensor Control (Standard, Corridor, Large Area)

Using one of the KLCM range of sensors allows maximum energy savings to be achieved whilst retaining the required amount of lighting when occupation is detected. Connect to the LCM using the RJ11 lead supplied

### KLCM-OS

Single head SELV Sensor, these can be used for all applications and come with a 10m RJ11 Lead. If used for a corridor application ensure sensors are spaced equally and cover all doors on to the corridor

### KLCM-30S

3 Head SELV Sensors for use in corridors or narrow rooms, sensor heads should be orientated along the corridor.

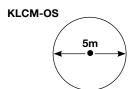
### KLCM-509

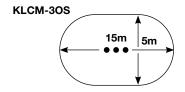
5 Head SELV Sensors give more wide area coverage of approx 15m<sup>2</sup>.

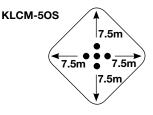
Other Hager Sensors are available for both special applications or for part of a standard Klik or other lighting control installation. Please see the latest catalogue on www.hager.co.uk



To configure in the App, Select "Channel" then "Absence/presence" and "Input Mapping" to allocate to a Channel.







### **Daylight Dimming including Sensor Offset**

This configuration will provide a constant regulated light level which is monitored by the digital lux sensor integrated within the KLCM-OS range of sensors.

The sensor should be positioned within the area to be controlled mid-way between lights for best performance. Connect into a sensor input using the RJ11 lead supplied.

This technique can also be used to regulate lights when natural light does not exist to allow for over lighting when new and under lighting as lamps age. This can be of particular use where LED lights are installed that may be prone to light output degradation.



To configure in the App, Select "Input Mapping" to allocate the sensor followed by "Sync". A sensor can be mapped to multiple outputs and also to different levels.



Do not activate "Daylight Dimming" during this process. Once desired level is achieved, switch on "Daylight Dimming" and "Sync".

### Absence & Presence

The most common scenarios we see our customers use are based on Presence Detection (People entering an area and moving around switches lights on) or Absence Detection (Manual switch on and then switches off when no movement detected). Connecting switches and occupancy sensors to the LCM will be the same be it is absence or presence. (Please see schematic on page 2).



To configure in the App, Select the required channel i.e. channel A and select the PIR function as required, here you can also set the required time-out and staged time-out to dim level.

Input Mapping is used to associate the required Sensors and Switches to the outputs.

(GB)

### Hager RJ45 Pin Out

- 1. White Orange
- 2. Orange
- 3. White Green
- 4. Blue
- 5. White Blue
- 6. Green
- 7. White Brown
- 8. Brown

### **KLCM Switching Options**

Hager Ltd. Hortonwood 50 Telford Shropshire Sales Service Centre: 01952 675 675 Technical Service Centre: 01952 675 689

### **Partition Switching**

Partition Switch functionality provides the facility to accommodate a removable partition switch and remap the light switches accordingly. This is achieved using Profiles 1 & 2.

Wire the partition switch as below and plug in to Switch Input 1 ONLY. When switch is open, Profile 1 is active, switch closed, Profile 2 Active.



To configure in the app, select 'global settings' and then 'Partition Switch

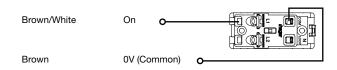
### Scene Setting

Scene setting allows for up to four scenes which can utilise all four outputs. Scenes are created in the Kliklink App. Standard volt free connections are available at the switch inputs allowing any suitable volt free switch to be used.

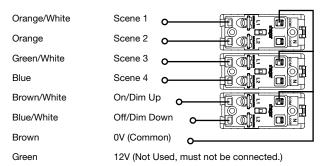
All four of the switch inputs can be used for Scene switch inputs. They are all connected in Parallel internally. An On/Off switch will be required to switch off in this instance as time out function will be inoperative. Please see the Sollysta Wiring Accessory Range, White, Decorative and Part M available for use with Klik. A dedicated scene plate is also available, please call for further information.



To configure the app, select 'Scene Setting'.



WMGS12 - 20A, 2 way grid switch - white



WMGS13R - 20A, 2 way, centre off, retractive grid switch - white

### Classroom Control

Classrooms tend to have specific requirements where lights are controlled by absence detection and also daylight dimming along window rows. Override switches are often used for whiteboard and screens.

The Absence Switch and Board/Screen switches are wired the same using separate switch inputs. The switches have to be wired as shown above and connected to the Switch inputs configured in the Kliklink App. Switches must be two way retractive.



input used (1-4) on the channel required (A-D), then "Sync"

To configure in the App, Select "Input Mapping" and then select the switch

Brown/White On Blue/White Off Brown 0V (Common)

WMGS13R - 20A, 2 way, centre off retractive grid switch - white

KLO\*RJ45G RJ45 Switch Drop (plug-to-plug), Grey KLO\*RJ45R RJ45 Link lead (plug-to-plug), Red **KLORJ45CON** RJ45 Splitter

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### Hager Pre-Installed Scenarios - KlikLink for iPad

The above are a selection of scenarios that typical of those used by our customers. To make things even easier we have already saved a number of scenarios in the App. These may be perfect for your installation or act as a starting point that you can modify to suit and then save and call your own.