



# SET-MB9D - 9 WAY PLUGGABLE LIGHTING CONTROL MODULE WITH DIMMING THROUGHPUT

## INSTALLATION INSTRUCTIONS

**WARNING.** This product works at mains potential. Be sure to take care when working with electricity. This product should only be installed by a qualified electrician in accordance with the latest edition of the IET wiring regulations and this instruction leaflet.

Mount the SET-MB9D Lighting Control Module in a suitable location, preferably central to area of distribution/control. Please note that the module may need to be accessed easily after installation for commissioning/setup purposes and future maintenance.

#### STFP 1

Drill the required fixing holes in the material which the SET-MB9D will be fixed to. Fix the SET-MB9D to the material using the appropriate fixings for the material, using the series of holes provided in the lugs on either side of the housing. If necessary use drop rods to bring the mounting height of the unit down to something more suitable for future access. (See 'Dimensions & Mountino Diagram' below).

#### STEP 2

Wire the bare end of each output lead either directly into each light fitting or via an appropriate ceiling rose. (See 'Connection Diagram' on page 3).

#### STEP 3

Plug the required output leads for each light fitting into the 6 Pole output connectors. (See 'Connection Diagram' on page 3).

#### STEP 4

Wire the mains supply to the 4 pole 'SUPPLY' connector. Plug the connector into the 'SUPPLY' input.

(See 'Connection Diagram' on page 3).

# STEP 5.

If required, connect an external dimming source into the RJ12 input port labelled 'IN' by using a suitably prepared lead. (See the 'Connection Diagram' on page 2' for further details). Observe the maximum amount of dimmable ballasts which can be controlled at any one time (Refer to the manufacturers literature for further details).

If it is a requirement to distribute this dimming signal to other SET-MB9D units, then connect from the RJ12 output port labelled 'OUT' to the input port labelled 'IN' on another SET-MB9D unit, then from the 'OUT' port on this unit to the 'IN' port on the next unit as required.

Please note: If a movement sensor is not to be fitted to the SET-MB9D, please leave the 6 pole plug which is plugged into the 'SENSOR' input connector fitted.

### STEP 6.

Once you are satisfied that all the required connections have been made, power on the SET-MB9D and observe that the 'MONITOR' LED is illuminated green. If the LED is not illuminated green on powering up, check the supply is healthy.

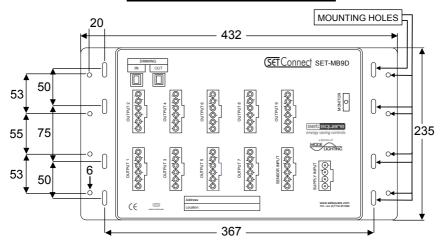
The 'Monitor LED Status' table below shows the various LED states and their meaning.

### MONITOR LED STATUS

MONITOR	STATUS
-)-(-ON	NORMAL OPERATION
● OFF	POWER FAILURE or SENSOR INPUT PLUG REMOVED/NOT FITTED PROPERLY
- <u>`</u> -ON	ON POWER UP, SENSOR STABILISING
-)	MOVEMENT DETECTED BY SENSOR

Once satisfied that everything is working correctly, secure all cables.

# **DIMENSIONS & MOUNTING DIAGRAM.**



All dimensions are in millimetres.

# **CONNECTION DETAILS.**

## SUPPLY

# Mains input connector (Supply).

Supply to controller. L (Line) = Brown, N (Neutral) = Blue, Emergency Live (Permanent) = Black and Earth = Green/Yellow. Please ensure that the correct circuit protection is provided at the point of distribution.

## **DIMMING INPUTS/OUTPUTS**

RJ12 Connectors 'In' & 'Out'.

The SET-MB9D has the ability to allow a dimming signal from an external source to be 'fed' into the unit and then 'out' to the lighting via 6 pole industry standard lighting output connectors. A dimming signal which is fed into the 'IN' port can also be output to other 'SetConnect' compatible units if required from the 'OUT' port. The SET-MB9D has a single dimming input and output. The dimming signal on the 'IN' port is 'fed' to all output connectors. The dimming output port 'OUT' connector can then be used to 'feed' the dimming signal to other SET-MB9D units if required. Connect a dimming signal to and from These inputs/outputs as required.

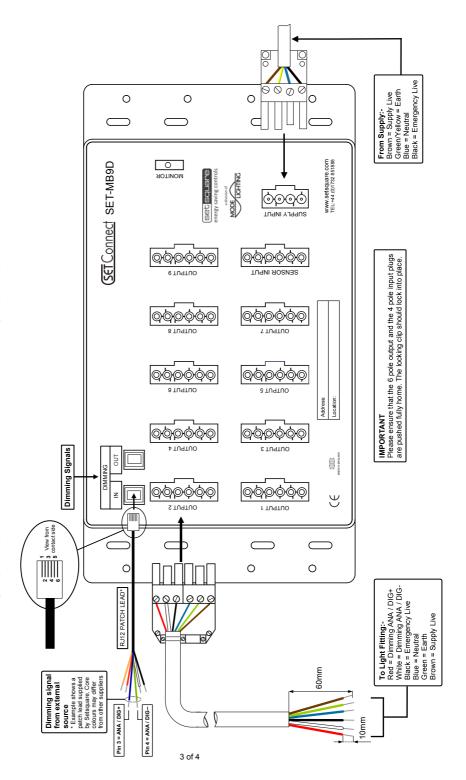
# LIGHTING OUTPUTS

Outputs 1 to 9 (6 Pole Industry Standard Connectors).

Connect the light fittings to each of these output connectors as required.

# CONNECTION DIAGRAM.

through three control protocols (DALI, DSI and 1-10v Analogue). 6 pole, 5 core output cables are used for dimming control without emergency supply, 4 core Please note: the diagram below shows a 6 pole, 6 core output connector and cable. This type of connector and cable is for a system based on dimming for power distribution with emergency supply and 3 core for power distribution without emergency supply.



Technical Data.

Supply Voltage: 110 to 230v A.C. 50hz/60hz.

Total Power consumption: 2.5 Watts (SET-MB9D Box Only).

**Dimming Inputs/Outputs:** 1 x dimming signal input (RJ12) and 1 x dimming signal output (RJ12).

Supply Input Connector: 4 Pole 'Industry Standard' GST18i4. Maximum cable capacity = 1 x 2.5mm<sup>2</sup> per

terminal.

Lighting Output Connectors: 9 x 6 x Pole 'Industry Standard' GST18i6. Two poles are assigned for dimming

signal. Maximum cable capacity =  $1 \times 2.5 \text{mm}^2 \text{ per terminal}$ .

Dimensions: L=432mm x W=235mm x D=54mm.

Material: Off White Flame Retardant ABS.

Weight: 1.3 kilograms.

Operating Temperature: 0-40°C.

## WARNING

This product contains electronic devices.

Do not perform any high voltage tests on this product or to any equipment connected to it. Mains connections can be high voltage tested in accordance with BS 7671:2008, IET Wiring Regulations 17th Edition section 612.3.3.

The SetConnect SET-MB9D is part of a range of energy conservation products available from Setsquare. This apparatus maybe turned on by high powered RF interference and should not be installed near pager aerials or Inductive loop equipment. It will recover when the RF ceases.





# **WEEE Directive.**

Electrical and electronic equipment should never be disposed of with general domestic or commercial waste but collected for their proper treatment and recovery. The crossed out wheely bin symbol is to remind you of the need to dispose of this product at the end of its life in a way that will assist in the recovery, recycling and reuse of many of the materials used in this product. Where possible also recycle the packaging.



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