

## Integrated Batten with Emergency and Microwave Sensor Options

Please read these instructions thoroughly before use and retain for future reference.

### Safety Information

- Before commencing installation or any maintenance, turn off and isolate the circuit to be worked on by removing the fuse or switching the circuit breaker off at the distribution board.
- Installation must be carried out in accordance with national building and wiring regulations. If you are in any doubt about installing this product, please consult a qualified electrician.
- This product is suitable for connection to a 220-240Vac 50/60Hz supply.
- This product is a **Class I** luminaire requiring an Earth connection.
- This product is **IP65** rated for outdoor use.
- If connecting the luminaire to independent sensors or time switches, ensure that the control device does not leak a voltage across the luminaire in the off state. Leaked voltages may accumulate and cause intermittent flashes in the off state.
- When drilling holes take care not to damage existing wiring or pipework.

#### Products Covered:

AVO4FS18-W40 (I/S/E/ES)  
 AVO5FS30-W40 (I/S/E/ES)  
 AVO6FS53-W40 (I/S/E/ES)  
 AVO4FT36-W40 (I/S/E/ES)  
 AVO5FT60-W40 (I/S/E/ES)

### Installation Information (refer to subsequent sections for emergency module)

- Decide on the location of the luminaire and fix the mounting brackets (A) to the mounting surface using suitable fixings.
- Remove the diffuser clips (B) and the diffuser (C), then unclip the gear tray (E) from the clips (D) which can be suspended by the cords provided.
- The luminaire has knock-out cable entries at each end which can be removed to allow through wiring.
- Feed the supply cable through the cable gland (F) and connect it to the terminals (G) as follows, depending on whether it is an emergency version or not:

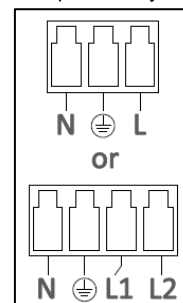
**Brown – Switched Live (L or L1) for Normal Switching Operation**

**Brown – Un-switched Live (L2) for Permanent Emergency Module Supply on Emergency Version**

**Blue – Neutral (N)**

**Green/Yellow – Earth** (⊕)

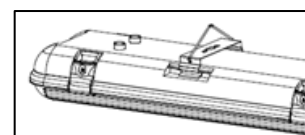
For the emergency version, **L2** must connect to a permanent live wire, or it can not work normally as a maintained luminaire.



- Ensure that all electrical connections are secure with no loose strands and that the wiring is connected as shown in the diagrams.
- To set the colour temperature and power follow the additional instructions below before continuing.
- For the optional emergency module and/or sensor version follow the additional instructions below before continuing.
- Taking care not to trap any wires, refit the gear tray (E) and the diffuser (C) then close the clips.
- The cover can be further secured by installing the supplied screws through the holes in some of the clips.
- Reconnect the power supply.

### Suspension Mounting

- The battens are supplied with clips for use with suspension systems.



### Setting the Power

- The luminaire may be run at four different power settings.
- Refer to table 1 below for the luminaire being installed and note the driver output current for the wattage required.
- Use the DIP switches on the driver (O) to set the driver current output required according to table 2.

Table 1

AVO4FS18	AVO5FS30	AVO6FS53	AVO4FT36	AVO5FT60
10 W – 200mA	18 W – 200mA	32 W – 200mA	20 W – 200mA	34 W – 200mA
13 W – 250mA	23 W – 250mA	39 W – 250mA	26 W – 250mA	44 W – 250mA
16 W – 300mA	26 W – 300mA	46 W – 300mA	32 W – 300mA	52 W – 300mA
18 W – 350mA	30 W – 350mA	53 W – 350mA	36 W – 350mA	60 W – 350mA

Table 2

DIP Switch 1	DIP Switch 2	Current
OFF	OFF	200mA
OFF	ON	250mA
ON	OFF	300mA
ON	ON	350mA

### Optional Emergency Module

- The optional emergency module (I) provides power in the event of a cut in the supply and is wired to the un-switched permanent supply through the un-switched Live terminal (L2).
- Write the commissioning date on the battery label (J).
- Connect the battery pack cable (M) to the emergency module (I).
- Stick the Maintained or Non-Maintained emergency luminaire label on the luminaire as appropriate.
- The battery leaves the factory in a charged state but may take up to 24 hours to fully charge for a 3-hour test. Charge for 5 minutes before performing a functional test to ensure there is some charge in the battery.
- The indicator (L) will show that the battery is connected and charging.

## Replacing the Battery Pack

- Before connecting or replacing the emergency module battery, turn off and isolate the luminaire by removing the fuse or switching the circuit breaker off at the distribution board.
- Open the luminaire as described in the installation instructions above to remove the diffuser (C) and the gear tray (E).
- Disconnect the battery pack cable (M) from the emergency module (I).
- Write the commissioning date on the new battery label.
- Unscrew the old battery pack mountings and replace with the new battery.
- Reconnect the battery pack cable (M) to the emergency module (I).
- Taking care not to trap any wires, refit the gear tray (E) and the diffuser (C) then close the clips.
- Reconnect the power supply.
- The battery leaves the factory in a charged state but may take up to 24 hours to fully charge for a 3-hour test. Charge for 5 minutes before performing a functional test to ensure there is some charge in the battery.
- The indicator (L) will show that the battery is connected and charging.

## Optional Microwave Sensor


The optional microwave sensor (K) will sense movement and switch the batten on, depending on the daylight sensor setting, and keep it on for the hold time once movement has ceased. The DIP switches are accessible on the gear tray with the diffuser removed.

### Sensor Override Function

Turning the power off/on 3 times in swift succession will override the sensor function and the lights will stay on all the time. Turning the power off/on again will put the sensor back in normal detection mode.


#### Detection Area

DIP switches 1 and 2 control the microwave detection sensitivity. On the highest setting the sensor will detect movement from up to 7m when mounted 3m high and 3.5m when mounted 4m high.

	<b>1</b>	<b>2</b>	
	ON	ON	100%
	-	ON	75%
	ON	-	50%
	-	-	25%


#### Hold Time

DIP switches 3, 4 and 5 control the time the luminaire can be set to stay on after motion is no longer detected. It is recommended that the shortest time setting be applied for adjusting the detection area.

	<b>3</b>	<b>4</b>	<b>5</b>	
	ON	ON	ON	5 Sec
	-	ON	ON	30 Sec
	ON	-	ON	90 Sec
	-	-	ON	5 Min
	ON	ON	-	20 Min
	-	-	-	30 Min

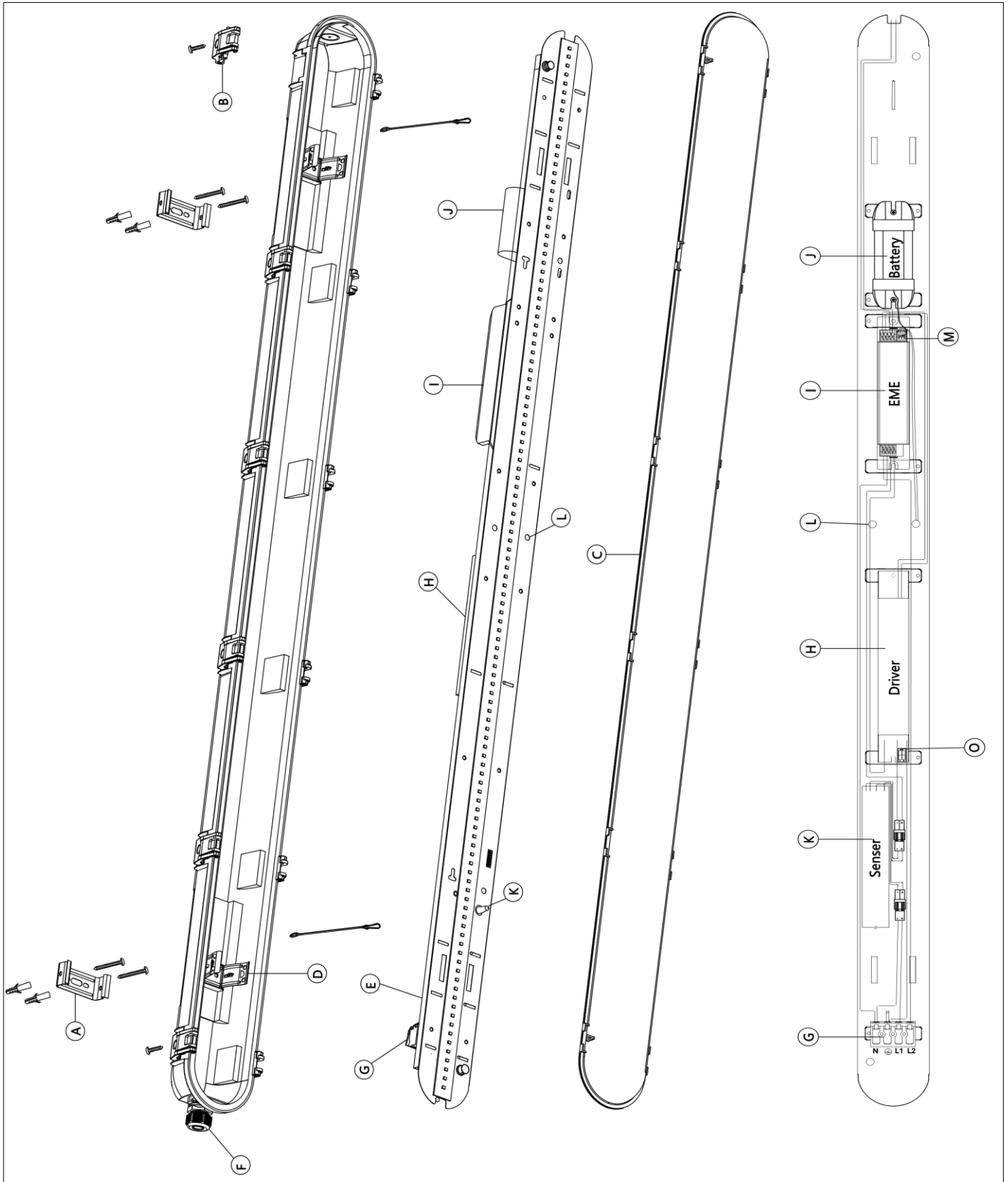
#### Daylight Sensor

DIP switches 6, 7 and 8 control the daylight threshold. If the ambient light level is above this threshold the sensor will not switch the luminaire on. 5 lux is dark while 25 lux is twilight and 50 lux is overcast. If set to disabled, the luminaire will switch on whatever the light level.

	<b>6</b>	<b>7</b>	<b>8</b>	
	ON	ON	ON	2 Lux
	ON	ON	-	10 Lux
	-	ON	-	30 Lux
	ON	-	-	50 Lux
	-	-	-	Disabled

We hereby declare that this product meets the requirements of the **EU Radio Equipment Directive 2014/53/EU & UK Radio Equipment Regulations 2017**. Declaration is issued under the sole responsibility of the manufacturer. Conforms to:

EN 300 440	Short Range Devices (SRD); Radio equipment to be used in the 1 GHz to 40 GHz frequency range; Harmonised Standard covering the essential requirements of article 3.2 of Directive 2014/53/EU
EN 301 489-1	Electromagnetic compatibility and Radio Spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 1: Common technical requirements
EN 301 489-3	Electromagnetic compatibility and Radio Spectrum Matters (ERM); Electromagnetic Compatibility (EMC) standard for radio equipment and services; Part 3: Specific conditions for Short-Range Devices (SRD) operating on frequencies between 9 kHz and 40 GHz
EN 55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
EN 61547	Equipment for general lighting purposes. EMC immunity requirements
EN 61000-3-2	Electromagnetic compatibility (EMC). Limits. Limits for harmonic current emissions (equipment input current = 16 A per phase)
EN 61000-3-3	Electromagnetic compatibility (EMC). Limits. Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems, for equipment with rated current = 16 A per phase and not subject to conditional connection
EN 62479	Assessment of the compliance of low power electronic and electrical equipment with the basic restrictions related to human exposure to electromagnetic fields (10 MHz to 300 GHz)



The Waste Electrical & Electronic Equipment Regulations (WEEE) require that products bearing this symbol must not be disposed of with household waste as they may contain substances harmful to the environment. The Local Authority can provide advice on recycling.