LED strip V2

Product information

M-Elec's next generation of LED strip offers up to 25% brighter output with 33% less power consumption. The V2 Strip range now caters for an even wider range of applications where premium quality strip lighting is required. Now with up to 200 leds per meter and up to 2410lm. V2 Strip can be optimised for high output installations where enhanced seamless illumination is required. Fully compatible with M-Elecs range of profile and strip accessories, V2 Strip is truly the next generation giving the contractor flexible lighting options which are economical and powerful.

Features and benefits

- High output, low power consumption
- Up to 200 Leds/Metre for seamless light output
- 130 to 2410lm(RGB > white) or 350 to 2410lm(only white)
- Indoor and weather protected options

7 year warranty

Technical details

Input voltage:	12V	**Beam angle:**	120 Degrees
Average life:	40,000 Hrs	**LED tests:**	LM80
Warranty:	7 years	**Dimmable:**	No
Operating temperature:	-20 to 45°C	**IP rating**	Indoor: IP20 | Outdoor: IP65
Colour temperature	3000 (WW) | 4000 (NW) | 6000 (W)*	**CRI**	82

CODE	Lumen output p/m	Efficacy	Total power consumed p/m*	CCT	LED chip	Chip qty	Min cut	Dimensions	Kit includes
ML-SMDF-4.8-WW ML-SMDF-4.8-NW ML-SMDF-4.8-W	350lm 360lm 390lm	72lm/w	4.8W	Single CCT	SMD3528	60	50mm	L: 5m | W: 8mm	1 x 5m LED strip, 5 x connectors, 1 x installation guide
ML-SMDF-4.8-WW50 ML-SMDF-4.8-NW50 ML-SMDF-4.8-W50	350lm 360lm 390lm	72lm/w	4.8W	Single CCT	SMD3528	60	50mm	L: 50m | W: 8mm	1 x 50m LED strip, 25 x connectors, 1 x installation guide
ML-SMDF-9.6-WW ML-SMDF-9.6-NW ML-SMDF-9.6-W	720lm 790lm 830lm	75lm/w	9.6W	Single CCT	SMD2216	120	25mm	L: 5m | W: 8mm	1 x 5m LED strip, 5 x connectors, 1 x installation guide
ML-SMDF-9.6-WW50 ML-SMDF-9.6-NW50 ML-SMDF-9.6-W50	720lm 790lm 830lm	75lm/w	9.6W	Single CCT	SMD2216	120	25mm	L: 50m | W: 8mm	1 x 50m LED strip, 25 x connectors, 1 x installation guide
ML-SMDF-11.5-WW ML-SMDF-11.5-NW ML-SMDF-11.5-W	1470lm 1590lm 1610lm	130lm/w	11.5W	Single CCT	SMD3014	128	31.2mm	L: 5m | W: 10mm	1 x 5m LED strip, 5 x connectors, 1 x installation guide
ML-SMDF-11.5-WW50 ML-SMDF-11.5-NW50 ML-SMDF-11.5-W50	1470lm 1590lm 1610lm	130lm/w	11.5W	Single CCT	SMD3014	128	31.2mm	L: 50m | W: 10mm	1 x 50m LED strip, 25 x connectors, 1 x installation guide
ML-SMDF-17.2-WW ML-SMDF-17.2-NW ML-SMDF-17.2-W	2200lm 2370lm 2410lm	130lm/w	17.2W	Single CCT	SMD3014	192	20mm	L: 3m | W: 10mm	1 x 3m LED strip, 3 x connectors, 1 x installation guide
ML-SMDF-17.2-WW50 ML-SMDF-17.2-NW50 ML-SMDF-17.2-W50	2200lm 2370lm 2410lm	130lm/w	17.2W	Single CCT	SMD3014	192	20mm	L: 50m | W: 10mm	1 x 50m LED strip, 25 x connectors, 1 x installation guide
ML-SMDF-14.4-CRI97-WW ML-SMDF-14.4-CRI97-NW ML-SMDF-14.4-CRI97-W	880lm 980lm 1010lm	61lm/w 68lm/w 69lm/w	14.4W	Single CCT	SMD2835	60	50mm	L: 5m | W: 8mm	1 x 5m LED strip, 5 x connectors, 1 x installation guide
ML-SMDF-7.2-RGB	130lm	NA	7.2W	RGB	SMD5050	30	100mm	L: 5m | W: 10mm	1 x 5m LED strip, 5 x connectors, 1 x installation guide
ML-SMDF-14.4-RGB	260lm	NA	14.4W	RGB	SMD5050	60	50mm	L: 5m | W: 10mm	1 x 5m LED strip, 5 x connectors, 1 x installation guide
ML-SMDF-28.8-RGBHY	1500lm	NA	28.8W	RGB+2CCT	SMD3528	60	50mm	L: 3m | : 12mm	1 x 5m LED strip, 5 x connectors, 1 x installation guide
ML-SMDF-9.6-HY	450lm W 420lm WW	62lm/w	9.6W	3000-6000	SMD3528	60	50mm	L: 5m | W: 10mm	1 x 5m LED strip, 5 x connectors, 1 x installation guide
ML-SMDF-7.2-RGB50	130lm	18lm/w	7.2W	RGB	SMD5050	30	100mm	L: 5m | W: 10mm	1 x 50m LED strip, 25 x connectors, 1 x installation guide
ML-SMDF-14.4-RGB50	260lm	18lm/w	14.4W	RGB	SMD5050	60	50mm	L: 5m | W: 10mm	1 x 50m LED strip, 25 x connectors, 1 x installation guide
ML-SMDF-28.8-RGBHY50	1500lm	NA	28.8W	RGB+2CCT	SMD3528	60	50mm	L: 50m | W: 12mm	1 x 50m LED strip, 25 x connectors, 1 x installation guide
ML-WPSMO-4.8-WW ML-WPSMO-4.8-NW ML-WPSMO-4.8-W	330lm 340lm 370lm	68lm/w	4.9W	Single CCT	SMD3528	60	50mm	L: 5m | W: 10.5mm	1 x 5m LED strip, 20 x saddles, 4 x end-caps, 4 x connector with cable, 1 x end connector seal, 1 x installation guide
ML-WPSMO-9.6-WW ML-WPSMO-9.6-NW ML-WPSMO-9.6-W	660lm 730lm 770lm	68lm/w	9.6W	Single CCT	SMD2216	120	25mm	L: 5m | W: 10.5mm	1 x 5m LED strip, 20 x saddles, 4 x end-caps, 4 x connector with cable, 1 x end connector seal, 1 x installation guide
ML-WPSMO-11.5-WW ML-WPSMO-11.5-NW ML-WPSMO-11.5-W	1370lm 1490lm 1510lm	120lm/w	11.5W	Single CCT	SMD3014	128	31.2mm	L: 5m | W: 12.5mm	1 x 5m LED strip, 20 x saddles, 4 x end-caps, 4 x connector with cable, 1 x end connector seal, 1 x installation guide
ML-WPSMO-7.2-RGB	130lm	18lm/w	7.2W	RGB	SMD5050	30	100mm	L: 5m | W: 12.5mm	1 x 5m LED strip, 20 x saddles, 4 x end-caps, 4 x connector with cable, 1 x end connector seal, 1 x installation guide
ML-WPSMO-14.4-RGB	260lm	18lm/w	14.4W	RGB	SMD5050	60	50mm	L: 5m | W: 12.5mm	1 x 5m LED strip, 20 x saddles, 4 x end-caps, 4 x connector with cable, 1 x end connector seal, 1 x installation guide
ML-WPSMO-9.6-HY	430lm W 400lm WW	41lm/w	9.6W	2 CCT	SMD3528	60	50mm	L: 5m | W: 12.5mm	1 x 5m LED strip, 20 x saddles, 4 x end-caps, 4 x connector with cable, 1 x end connector seal, 1 x installation guide

*Outputs can vary from batch to batch

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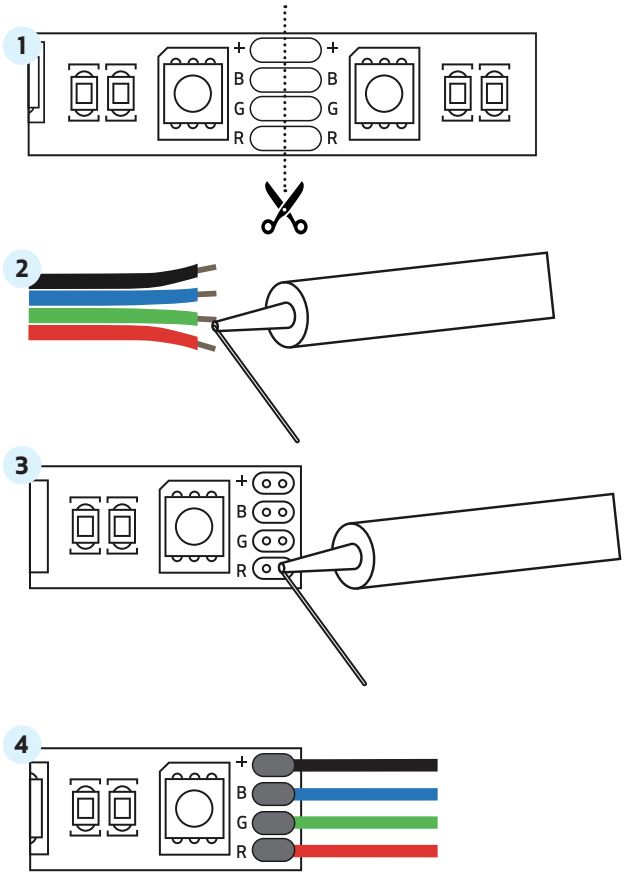
Direct solder connection installation instructions

PLEASE NOTE: There are several ways to install and connect LED strip. We strongly suggest using the 'Direct solder' version whenever possible for the best connection method and long-term reliability.

1. Measure the exact length required for your LED strip (please note any cuts necessary are only available on various lengths of the strip. Allow some space for this and your connection. Both items will take up space).
2. Measure and cut your LED strip on the appropriate cut locations (Pic 1). DO NOT cut on any other position or you will destroy components and the strip will not operate. Use scissors or a sharp, straight edged device. Do not use pliers or side cutters.
3. To prepare for soldering the tail/cable onto the strip secure it using a piece of masking tape to a suitable surface.
4. Pre-strip approximately 2-5mm your cable ends and twist them.
5. Tin your tail/cable in preparation for soldering directly onto the strip by putting a small amount of solder onto the end of your hot soldering iron and then touching the end of your cable ends. You should only have enough solder on the end of the cable to cover the strands, not large 'drips'. Pic 2
6. Tin the copper dots on the LED Strip by getting small amounts of solder on your hot solder iron tip and then touch the copper pad. Be sure not to apply so much that the solder is overlapping or bulged, this will cause problems on your strip and/or controllers. Pic 3
7. Ensuring you have the right colours to the right pads, hold each colour cable onto the pad and touch the soldering iron onto the cable/pad until the solder melts and bonds the pad to the cable. Do not over heat the strip by leaving the iron into place for long periods of time. Do not move either the strip or cable until the solder has cooled. Pic 4
8. Check the connections and ensure there is no overlapping or loose pieces of solder or cable. Also ensure that there are no dry/cold solder points which will cause arcing, high temperatures and cross connections. All joints should be strong, secure and clear from debris of any sort. If you are installing the strip into or onto any conductive material (such as M-Elec aluminium profiles) that any joints are protected or insulated.
9. Using either a 9V battery or a power supply, test the strip to ensure its fully operational on all colours. If multi-coloured we suggest only applying power to one colour at a time to ensure each cable does not power up a different colour or more then one colour at a time. Any variations to one colour, one cable are signs of cross connections.
10. Now go to the 'WP (weather protected) strip installation' or 'Indoor LED strip installation' guide

PLEASE NOTE: All strips can use these instructions no matter if they are multi-coloured or single

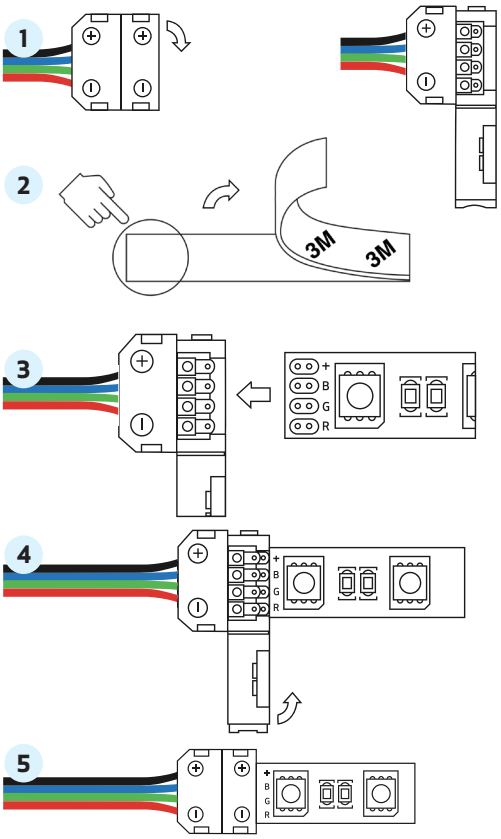


Clamping clip connections (White clamp style connectors)

The below connection methods are to be used for all colour variations. Please ensure strong secure connections take place as M-Elec takes no responsibility for failed connections due to incorrect installation techniques. Please direct solder whenever possible.

1. Please check to see if there are any defects in the product before cutting or installing. Lay out the lights and connect them to the appropriate power unit. Check to ensure that all the LED's are in working order.
2. Solderless connectors and LED strips are fragile items, please be gentle - both strips and connectors are fragile. The solderless connectors have a plastic housing with connecting pins inside. Open the half of the plastic housing that is on the opposite side of the attached wires by unclipping it from the clasp and rotating it open. Pic 1
3. On every M-Elec strip, there are indicators along each cut line for + (positive) and – (negative or colours such as RGB). The solderless connectors have coloured cables to keep a connection method for each of these connection points.
4. Once the strip is cut to its desired length and the solderless connector is open, remove a small amount (5-10mm) of the double-sided tape's cover and then insert the bare strip UNDERNEATH the connectors. DO NOT pull up on the silver connector tabs (the double-sided tape can help keep the connector strongly in place). Pic 2-3
5. Please carefully note the connector and strip direction- rotating the strip over can cause connections to be missed due to the double-sided tape.
6. Close the connector until you hear a snap. Pic 4-5
7. Using either a 9V battery or a power supply, power up the strip. For multiple colour outputs M-Elec suggest only powering one colour up at a time to ensure there are no cross connections and checking colour codes are correct.
8. IMPORTANT NOTE: The wires do not have to match up by their colours. If you turn the strip upside down, then the reverse order will take place when trying to light up the strip. e.g. + could be the red wire, blue could be the green wire, green the blue wire, and red the black wire. Just pay attention to where the leads on the STRIP are connecting to. While M-Elec does not suggest this method it can assist making connections easier in some circumstances.

PLEASE NOTE: All strips can use these instructions no matter if they are multi-coloured or single



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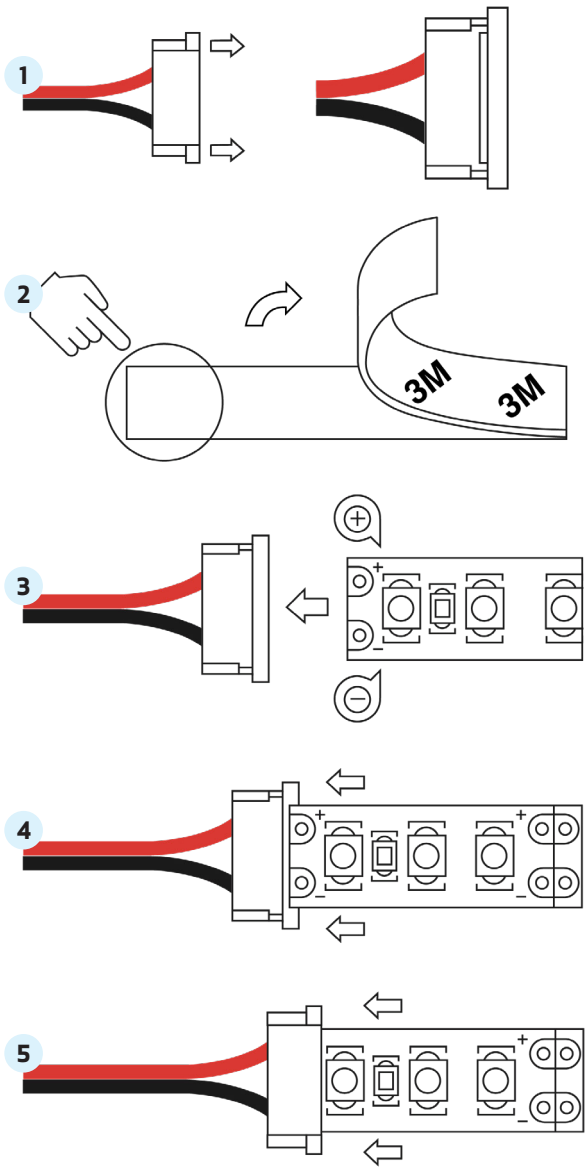
Slide clip connections (black slide style connectors)

1. Solderless connectors are fragile, please follow the instructions and whenever possible use direct solder methods (see other instructions). The solderless connectors have a plastic housing with a small black tray on the underside. Pull the black plastic tray out until the trays stops. NOTE: The tray will only pull out approximately 2-3mm. Trying to pull it out beyond this will result in poor connections or breakages. Pic 1
2. On every M-Elec strip, there are indicators along each cut line for + (positive) and – (negative or colours such as RGB). The solderless connectors have coloured cables to keep a connection method for each of these connection points.
3. Once the strip is cut to its desired length and the solderless connector is open, remove a small amount (5-10mm) of the double-sided tape's cover and then insert the bare strip UNDERNEATH the connectors (the double-sided tape can help keep the connector strongly in place). Pic 2/3
4. Once the LED strip is inserted into the solderless connector, close the black tray underneath by pinching the wings on the side of the connector (inward, toward the connector's housing). The LED strip should be snug inside the connector, and the black tray should be back in its original closed position. Pic 4-5
5. Please carefully note the connector and strip direction- rotating the strip over can cause connections to be missed due to the double-sided tape.
6. Using either a 9V battery or a power supply, power up the strip. For multiple colour outputs M-Elec suggest only powering one colour up at a time to ensure there are no cross connections and checking colour codes are correct.
7. IMPORTANT NOTE: The wires do not have to match up by their colours. If you turn the strip upside down, then the reverse order will take place when trying to light up the strip. e.g. + could be the red wire, blue could be the green wire, green the blue wire, and red the black wire. Just pay attention to where the leads on the STRIP are connecting to. While M-Elec does not suggest this method it can assist making connections easier in some circumstances.



Installing the strip

WP (WEATHER PROTECTED) STRIP INSTALLATION

1. Ensure that you have re-installed or sealed the WP strips using suitable sealant and end caps.
2. If you are using an M-Elec LED profile, follow the included instructions. For installation of WP strip into other locations you can use adhesives (such as silicone or Sikaflex) or use the included saddles. Please ensure you select the most appropriate method for your installation. M-Elec suggest the use of their Aluminium profiles for fast, safe and easy installation.
3. When using the saddles or an adhesive please ensure you do not pierce or cut the WP sheath protecting the LED strip. Any cuts or holes in the WP sheath break the strips IP rating.

INDOOR LED STRIP INSTALLATION

1. Always start by ensuring the surface you are about to stick to LED strip to is clean from any debris, oil or any other type of item that would prevent long term adhesion.
2. If you are using an M-Elec LED profile, follow the included instructions included. M-Elec suggest the use of their Aluminium profiles for fast, safe and easy installation.
3. Start the process by peeling off a small amount (approximately 300mm) of the double-sided tape. Stick this portion to the surface starting at the end of the strip and working to the opposite end. Only push down on the strip, never push along the components as this could break them.
4. Stick only portions down ensuring that its straight and the double-sided tape is getting even adhesion to the surface
5. Never turn corners greater then 30 degree's over 1meter to prevent any components becoming disconnected from the PCB.
6. Extra tip: For 90-degree corners, use a curve connector or 2 of the included strip to power connectors soldered together. Simply make a hole and push up any excess cable not required on the corner to get the strip as close together as possible.

Warranty disclaimer

M-ELEC TRANSFORMERS/DRIVERS

M-Elec provides warranty against defects of **M-Elec drivers** on the following terms and conditions. Please refer to the M-Elec website (below) for information on the warranty period of each product.

The driver must be properly installed by a qualified electrician and in accordance with our installation guidelines and any relevant codes and standards.

The warranty does not apply to M-Elec drivers that fail as a result of neglect, mistake, misuse, alteration, exposure to the elements, or that is improperly installed and implemented. This includes but is not limited to: improper wiring, installation under improper and non-approved operating environments such as temperature, humidity, corrosion or voltage conditions; improper installation using components that are not approved or are not M-Elec manufactured products.

It is the responsibility of the purchaser to obtain all necessary approvals and to understand the products intended use and all relevant instructions, recommendations and guidelines for the proper installation and use of any M-Elec driver product and related 'manufactured products' used in conjunction with same.

M-Elec is not liable for the accuracy and completeness of any statements, technical information and recommendations in any form of product literature or instructions are not guaranteed and are not part of this warranty and does not in any way constitute a warranty. The purchaser is solely responsible for determining suitability of the M-Elec drivers for installation and full implementation must determine potential applications and installations independently.

To make a claim on this warranty, you must do so within the warranty period (from place of purchase) please read our returns policy for further information (https://melec.com.au/returns-policy/) and deliver the driver to M-Elec (at your cost) at the address listed on website. We will assess the warranty claim and if we grant the warranty claim, we will replace the product or refund your money, at our election.

M-Elec is not responsible or liable for any injuries, damages, or death caused by the use, misuse or failure of products purchased from us. This warranty is in addition to any other rights the consumer may have under the Australian Consumer Law.

M-ELEC LED PRODUCTS - OTHER

Please refer to the M-Elec website (melec.com.au) for information on the warranty period of each product. Each of our LED product warranties is separate and subject to the following terms and conditions:

M-Elec products must be properly installed by a qualified electrician and in accordance with any relevant guidelines, codes and standards. This includes wiring and connection to proper approved components and product working environments.

This warranty is void and does not apply to products that fail as a result of neglect, mistake misuse, alteration, or that is improperly installed and implemented. This includes but is not limited to: improper wiring, installation under improper and non-approved operating environments such as temperature, humidity, corrosion or voltage conditions; improper installation using components that are not approved or are not M-Elec manufactured products.

It is the responsibility of the purchaser to obtain all necessary approvals and to understand the products intended use and all relevant instructions, recommendations and guidelines for the proper installation and use of any M-Elec products and related 'manufactured products' used in conjunction with same.

M-Elec is not liable for the accuracy and completeness of any statements, technical information and recommendations in any form of product literature or instructions are not guaranteed and are not part of this warranty and does not in any way constitute a warranty. The purchaser is solely responsible for determining suitability of the M-Elec LED products for installation and full implementation must determine potential applications and installations independently.

The LED product warranties do not cover LEDs that continue to light, but exhibit varying/differing forward voltage drops, light output, or colour/wavelength.

Warranty is void if LEDs are cut in any way (outside of LED strip instructions) or damaged by neglect.

Warranty is void if products have been altered, opened/modified in any way that is outside the bounds of normal electrical work. **Please note:** This does not include removing or hard wiring downlight drivers or the hard wiring of a flex on an M-Elec flood light.

To make a claim on any of M-Elec's products, you must do so within the warranty period (from place of purchase) please read our returns policy for further information (https://melec.com.au/returns-policy/) and deliver the product to M-Elec (at your cost) at the address listed online. M-Elec will assess the warranty claim by conducting electrical tests, making sure the contacts still exist on the LED and visual and microscopic inspection to make sure there is no visible physical damage. If M-Elec grants the warranty claim, we will replace the product or refund your money, at our election.

M-Elec is not responsible or liable for any injuries, damages, or death caused by the use, misuse or failure of products purchased from us. This warranty is in addition to any other rights the consumer may have under the Australian Consumer Law.

To the fullest extent permitted by law, no warranties other than those described above are given in respect of M-Elec products. M-Elec's liability is limited, to the fullest extent permitted by law, to the refund or replacement of the M-Elec products. We expressly do not warrant that an M-Elec product will last any particular length of time nor guarantee is made as to fitness to a particular application, since we have no control of the electrical supply or circuits you are using to drive the LEDs.

M-Elec goods come with guarantees that cannot be excluded under the Australian Consumer Law.

Please read our returns policy procedure for further information on M-Elec website melec.com.au or request it via phone 1300 222 445 from our customer care consultants.

Due to our policy of continuous product improvement, we reserve the right to discontinue or update product specifications or designs at any time without notice. Please visit www.melec.com.au for the latest information on our products