



Thank you for considering Mathis Electronics for your electronic needs.
We welcome the opportunity to be of service to you.

GENERAL INFORMATION

ORDERING

By phone at 800-782-4449
By fax at 828-274-5928
By E-mail mathis@mathiselectronics.com

PAYMENT OPTIONS

Master Card, Discover or Visa
Net 30 days for approved customers
Telegraphic transfer for overseas customers

WARRANTY

We are the only company of our kind to offer a **LIFETIME WARRANTY** on all our new products.

CONTRACT MANUFACTURING

Contract assembly of printed circuit boards. Through-hole and/or surface mount.
Single-sided to multi-layer. Complete dynamic testing.

OTHER SERVICES

Printed circuit board engineering, layout, programming, and prototyping.

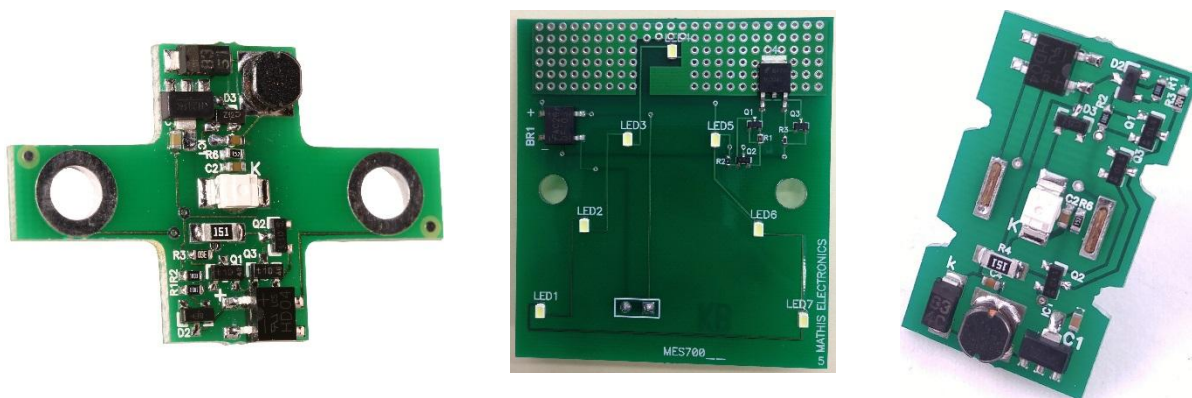
Light Years Ahead!

102A Caribou Road~Asheville NC 28803 Phone: 828-274-5925~800-782-4449 Fax: 828-274-5928

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mathis@mathiselectronics.com

Glo-Rite™ Perfect LED Lamp



Benefits:

- ✓ **No Glow or Flicker Guarantee**- Never glows or flickers in the “off” mode
- ✓ **Cool Operating Temperature**- Never burns out, changes colors, or gets dim
- ✓ **Multi-Volt 12- 120V AC/DC**- Works with any controller in the industry
- ✓ **Green/ Energy Efficient**- Lowers maintenance and operational costs
- ✓ **Lifetime Lamp Warranty**- Free replacement, if ever needed
- ✓ **LED Emitting Color Options**- White, Red, Green, Blue and Yellow

Tested and approved by MCE Engineering

Fits:

- | | |
|----------------------------------|---------------------------------|
| ✓ Adams Survivor | ✓ Innovation Industries |
| ✓ DMG | ✓ PTL- <i>Call PTL to order</i> |
| ✓ EPCO | ✓ SCS |
| ✓ ERM – <i>Call ERM to order</i> | |

Can be modified to fit your push button

Call Today 800-782-4449

Light Years Ahead!

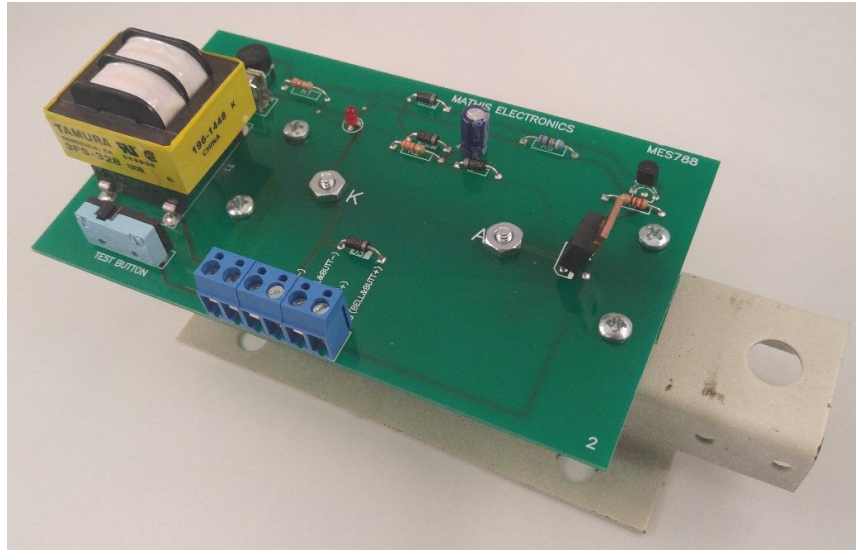
Emergency Light

Mathis Electronics

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Dover Emergency Light Replacement

An Emergency Light that is reliable, affordable, durable, economical and **shines bright** when you need it most



MES788M CSA approved

See page 15

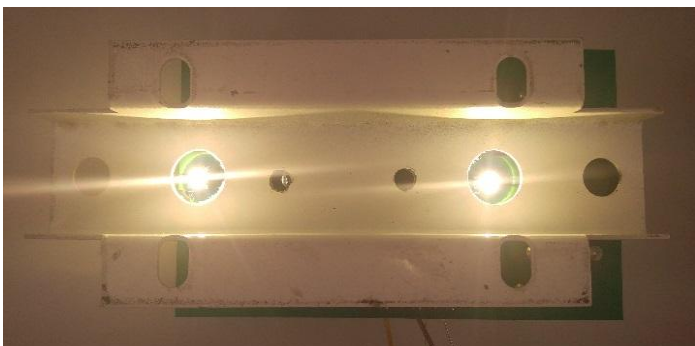
The MES788M is much brighter and shines much longer on a battery charge than the Dover emergency light.



Replaces Dover Part Numbers:

- ✓ 9818420
- ✓ 110938
- ✓ 110941
- ✓ 118412

Same pin out, easy to replace!



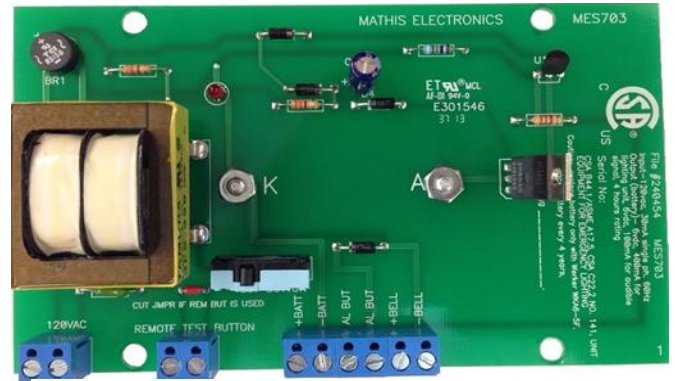
Never bought one from us? Call for your E-Light today! (800) 782-4449

6V Emergency Light



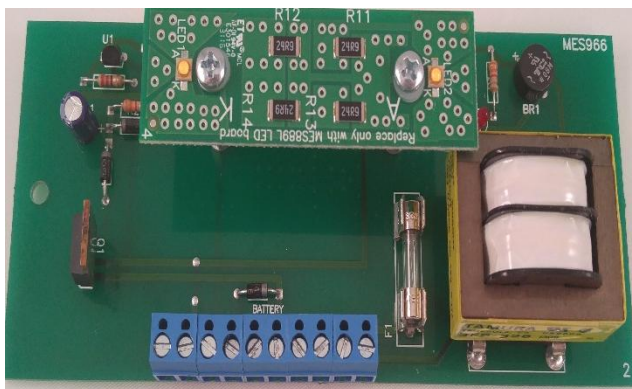
MES773

Same as MES 703 but with lithium batteries included on board



MES703

Replacement for MES924 uses 6 volt battery. See page 15



MES966

Quality Elevator Emergency Light Replacement. See page 15

As always: Lifetime Warranty

Light Years Ahead!

- ✓ Approximately 10 times brighter
- ✓ Twice the battery life
- ✓ Save about half on battery cost



Have You Seen What's Lighting Up Modern Escalators?

Under-Step Demarcation Light



**Available in
24v, 115v and
multi-volt**



Extended Life – Depending on conditions, our LED demarcation light can provide up to 50,000 hours of continuous service without significant dimming. We give a **Lifetime Warranty** on every unit. That results in **Greater Safety** for your passengers and **Lower Liability** for you.

Inexpensive – As far as we are aware, our MES970 is the most economical LED demarcation available.

Water Resistant – The MES970 demarcation light is poured in epoxy, making it almost impossible for water to get into it.

Practicality – Unlike fluorescent units which light up the entire machine area, the MES970 emits bright points of green light directed toward the passenger's eyes, signaling him or her that he/she is approaching a danger point. The overall light output of our LED demarcation light is less than that of a fluorescent unit, but it is only directed where it is needed, and is much brighter at the LEDs than at any point on a fluorescent tube (see data sheet).

Does it meet the code? Yes, it does! If your inspector is questioning whether or not LED demarcation lights meet the code for elevators/escalators, please contact us for more information.

Lower Power Consumption – Our MES970 demarcation light is a **GREEN** product (no pun intended). It consumes 1 watt of power, compared to the approximately 35w consumed by a typical fluorescent unit. The unit can pay for itself in energy savings in a year or two.



MES798 (24-115v)	\$145.62	1-29 pieces
	\$87.49	30+ pieces
MES970S (24vac)	\$115.35	1-29 pieces
	\$67.68	ea 30+ pieces
MES891 (115v)	\$129.47	1-29 pieces
	\$72.05	30+ pieces

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CROSS REFERENCE for DOVER Hydro & Traction Replacement Boards

DOVER #	MES #	DESCRIPTION	PAGE
68177	102	POWER, 4-Slot Hydro (Replaces 3-Slot)	Page 10
68178	116	DOOR, 4-Slot Hydro (Replaces 3-Slot)	Page 10
68179	115	CAR, 4-Slot Hydro (Replaces 3-Slot)	Page 10
68180	114	LOGIC, 3-Slot Hydro	Page 10
68187	123	OPTICAL LEVELING CONTROL BOARD	Page 10
68431	101	TOP & BOTTOM, 4-Slot Hydro (Replaces 3-Slot)	Page 10
68432	106	INTERMEDIATE, 4-Slot Hydro (Replaces 3-Slot)	Page 10
68433	113	DUPLEX, 3-Slot Hydro	Page 10
68525	112	OPTION, 3-Slot Hydro	Page 10
105248	102	POWER, 4-Slot Hydro (Replaces 3-Slot)	Page 10
105251	101	TOP & BOTTOM, 4-Slot Hydro (Replaces 3-Slot)	Page 10
105252	106	INTERMEDIATE, 4-Slot (Replaces 3-Slot)	Page 10
105254	105	OPTION, 4/5/6 Slot Hydro	Page 10
123948	115	CAR, 4-Slot Hydro (Replaces 3-Slot)	Page 10
124519	116	DOOR, 4-Slot Hydro (Replaces 3-Slot)	Page 10
126125	123	OPTICAL LEVELING CONTROL BOARD	Page 10
145557	123	OPTICAL LEVELING CONTROL BOARD	Page 10
9706446	106	INTERMEDIATE, 4-Slot Hydro (Replaces 3-Slot)	Page 10
9706458	105	OPTION, 4/5/6 Slot Hydro	Page 10
9753217	105	OPTION, 4/5/6 Slot Hydro	Page 10
9781808	114	LOGIC, 3-Slot Hydro	Page 10
9805254	105	OPTION, 4/5/6 Slot Hydro	Page 10
9811266	123	OPTICAL LEVELING CONTROL BOARD	Page 10
9855221	115	CAR, 4-Slot Hydro (Replaces 3-Slot)	Page 10
9855233	116	DOOR, 4-Slot Hydro (Replaces 3-Slot)	Page 10
9855245	102	POWER, 4-Slot Hydro (Replaces 3-Slot)	Page 10
9855257	101	TOP & BOTTOM, 4-Slot Hydro (Replaces 3-Slot)	Page 10
9855269	106	INTERMEDIATE, 4-Slot Hydro (Replaces 3-Slot)	Page 10
9880008	101	TOP & BOTTOM, 4-Slot Hydro (Replaces 3-Slot)	Page 10
9881785	116	DOOR, 4-Slot Hydro (Replaces 3-Slot)	Page 10
9881797	115	CAR, 4-Slot Hydro (Replaces 3-Slot)	Page 10
9884336	113	DUPLEX, 3-Slot Hydro	Page 10

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CROSS REFERENCE for DOVER Timer Replacement Boards

DOVER #	MES #	DESCRIPTION	PAGE
65278	157	UNIVERSAL TIMER, 20-60 VDC 0.1 - 260 Seconds, Programmable	Page 11
65280	173	UNIVERSAL TIMER, 110 VAC/DC 0.1 - 260 Seconds, Programmable	Page 11
68536	157	UNIVERSAL TIMER, 20-60 VDC 0.1 - 260 Seconds, Programmable	Page 11
101528	157	UNIVERSAL TIMER, 20-60 VDC 0.1 - 260 Seconds, Programmable	Page 11
101529	157	UNIVERSAL TIMER, 20-60 VDC 0.1 - 260 Seconds, Programmable	Page 11
105198	173	UNIVERSAL TIMER, 110 VAC/DC 0.1 - 260 Seconds, Programmable	Page 11
105201	173	UNIVERSAL TIMER, 110VAC/DC 0.1 - 260 Seconds, Programmable	Page 11
105238	157	UNIVERSAL TIMER, 20-60 VDC 0.1 - 260 Seconds, Programmable	Page 11
105242	157	UNIVERSAL TIMER, 20-60 VDC 0.1 - 260 Seconds, Programmable	Page 11
124561	157	UNIVERSAL TIMER, 20-60 VDC 0.1 - 260 Seconds, Programmable	Page 11
124566	173	UNIVERSAL TIMER, 110VAC/DC 0.1 - 260 Seconds, Programmable	Page 11
9852037	173	UNIVERSAL TIMER, 110VAC/DC 0.1 - 260 Seconds, Programmable	Page 11
9852049	173	UNIVERSAL TIMER, 110VAC/DC 0.1 - 260 Seconds, Programmable	Page 11
NOTE: OUR MES 157 & 173 REPLACE AT LEAST 13 DOVER TIMER BOARDS. CALL IF YOU DO NOT SEE YOUR TIMER NUMBER LISTED ABOVE.			

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CROSS REFERENCE for DOVER MISCELLANEOUS Replacement Boards

DOVER #	MES #	DESCRIPTION	PAGE
67968	181	RECTIFIER BOARD, 1PH, 3A, 600VDC	Page 11
68187	130	REVERSE PHASE RELAY	Page 11
106365	128	Mounting Bracket for Emitter-Detector	Page 10
110938	788	Dover LED Emergency Light	Page 15
110941	788	Dover LED Emergency Light	Page 15
115298	184	RECTIFIER BOARD, 3PH, 6A, 1000VDC	Page 11
118412	788	Dover LED Emergency Light	Page 15
149355	788	Dover LED Emergency Light	Page 15
9715289, OTHERS	184	RECTIFIER BOARD, 3PH, 6A, 1000VDC	Page 11
9818420	788	Dover LED Emergency Light	Page 15
9879675	186	RECTIFIER BOARD, 3PH, 3A, 600VDC	Page 11
9892989	181	RECTIFIER BOARD, 1PH, 3A, 600VDC	Page 11

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CROSS REFERENCE for MAC Door Operator Replacement Boards

MAC #	MES #	DESCRIPTION	PAGE
A-46222	314	SPEED CONTROL BOARD	Page 12
A46224	328	MOTHER BOARD	Page 12
B-47134	314	SPEED CONTROL BOARD	Page 12
B-47136	328	MOTHER BOARD - Without Relays	Page 12
B-49710	314	SPEED CONTROL BOARD	Page 12
P-15675	314	SPEED CONTROL BOARD	Page 12
P-15764	314	SPEED CONTROL BOARD	Page 12
P-15766	328	MOTHER BOARD	Page 12
P-15807	326	CABLE ASSEMBLY (For Mother Board Conversion)	Page 12
P-16363	314	SPEED CONTROL BOARD	Page 12
P-16365	328	MOTHER BOARD	Page 12
P-24170	314	SPEED CONTROL BOARD	Page 12
P-24561	314	SPEED CONTROL BOARD	Page 12
P-24783	330	DOOR OPERATOR CONTROL BOARD	Page 12
3-014-020	331	ESCO to MAC adapter	Page 12
90527-022	326	CABLE ASSEMBLY (For Mother Board Conversion)	Page 12

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CROSS REFERENCE for Mathis OEM Replacement Boards

MES #	OEM Part #	DESCRIPTION	PAGE
715		Battery 6V for Emergency Lights CSA Approved	Page 15
944		Battery 12V for Emergency Lights	Page 15
986		Battery 12V for Emergency Light CSA Approved	Page 15
703		6V Emergency Light CSA Approved	Page 15
924		12V Emergency Light CSA Approved	Page 15
788M	110938, 110941, 118412, 149355, 9818420	Dover LED 6v replacement Emergency Light	Page 15
966	21EL012-A	Quality Elevator Emergency Light	Page 15
748		Innovation Industries III #5941S3 pushbutton pcb	Page 13
748L		Innovation Industries II #5941S1 pushbutton pcb	Page 13
750		Innovation Industries III #59413188 pushbutton pcb	Page 13
760		Pushbutton replacement for Adams Survivor and EPCO <i>Requires removing screws (and wiper contact if applicable)</i>	Page 13
766		SCS Elevator switch and lamp pushbutton pcb	Page 13
767		PSB lamp in pushbutton replacement <i>Easy install—just pull out the PSB lamp and slide in ours</i>	Page 13
775		DMG switch and lamp pushbutton pcb	Page 13
719		Escalator comb-plate light for ThyssenKrupp	Page 14
970S		Under-Step LED Demarcation Light 24V	Page 14
891		Under-Step LED Demarcation Light 115V	Page 14
798		Under-Step LED Demarcation Light 24V-115V	Page 14

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CROSS REFERENCE for MONTGOMERY Miprom Replacement Boards

MONT #	MES #	DESCRIPTION	
B-47109	350	MIPROM INPUT	Page 15
P-15730	350	MIPROM UNIVERSAL INPUT BOARD	Page 15
P-15731	350	MIPROM INPUT	Page 15
P-15758	381A	MIPROM TIMER 4X	Page 15
P-15759	381B	MIPROM TIMER 8X	Page 15
P-15760	381	MIPROM TIMER 14X	Page 15
P-15761	350	MIPROM UNIVERSAL INPUT BOARD	Page 15
P-15762	350	MIPROM INPUT	Page 15
P-16779	381A	MIPROM TIMER 4X	Page 15
P-16785	350	MIPROM UNIVERSAL INPUT BOARD	Page 15
P-16786	350	MIPROM UNIVERSAL INPUT BOARD	Page 15

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CROSS REFERENCE for OTIS Replacement Boards

OTIS #	MES #	DESCRIPTION	PAGE
1-A8119AK1	230	FIRE SERVICE RELAY BOARD (Universal Design)	Page 18
1-A8119AK2	230	FIRE SERVICE RELAY BOARD (Universal Design)	Page 18
7088AS1	254	Replacement Board	Page 18
7088AR1	256	Replacement Board	Page 18
8200KA1, 2, 3, 4	915	Car/Hall LED pushbutton	Page 18

CROSS REFERENCE for US Replacement Boards

U. S. #	MES #	DESCRIPTION	PAGE
144-0035-001	410 or 416	UNIVERSAL TIMERS	Page 19
144-0039-001	410 or 416	UNIVERSAL TIMERS	Page 19
144-00041-001	416	UNIVERSAL TIMER	Page 19
144-00067-001	416	UNIVERSAL TIMER	Page 19
145-05064-301	410 or 416	UNIVERSAL TIMERS	Page 19
145-05064-302	410 or 416	UNIVERSAL TIMERS	Page 19
145-05064-303	416	UNIVERSAL TIMER	Page 19
145-05064-304	416	UNIVERSAL TIMER	Page 19
445-05064-200	416	UNIVERSAL TIMER	Page 19
445-06064-200	416	UNIVERSAL TIMER	Page 19

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CROSS REFERENCE for WESTINGHOUSE Replacement Boards

WEST #	MES #	DESCRIPTION	PAGE
195C500H01, G01, G02	520	TIMER, 1 Min./2 Min.	Page 19
195C502H01, G01	522	TIMER, MG Shutdown, 5 min.	Page 19
195C503H01, G01-G03	523	TIMER, 10 Sec./2 Min./4 Min.	Page 19
196C628H01	510	ERL AMPLIFIER	Page 19
477C977H03	510	ERL AMPLIFIER	Page 19
478C315G01	540A	Y-DELTA TIMER	Page 19
1187C91H01	540A	Y-DELTA TIMER	Page 19

CROSS REFERENCE for SCHUMACHER Replacement Boards

OEM #	MES #	DESCRIPTION	PAGE
PC-821135-2 Rev. D	710	SCHUMACHER I/O BOARD	Page 19

EXCLUSIVE LIFETIME WARRANTY ON ALL NEW BOARDS!

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*******MES REPLACEMENT BOARDS*******

WHY SHOULD YOU BUY MES REPLACEMENT BOARDS?

- PRICE -** Most MES replacement boards are PRICED BELOW ORIGINAL MANUFACTURER'S COST and are competitively priced with other after-market manufacturers' assemblies.
- QUALITY -** Our vast experience exclusively directed at the repair of electronic elevator equipment has enabled us to IDENTIFY THE WEAK POINTS in OEM equipment designs and manufacturing procedures. By using this knowledge in the design of our replacement boards, we are able to ELIMINATE THE MOST COMMON CAUSES OF FAILURE to improve board performance and extend life expectancy.
Because of our IMPROVED DESIGNS, HIGHEST QUALITY COMPONENTS, AND MODERN MANUFACTURING TECHNIQUES, we are confident that NO OTHER MANUFACTURER CAN MEET OR EXCEED THE QUALITY OF MES BOARDS.
- WARRANTY -** MES boards carry the STRONGEST WARRANTY IN THE INDUSTRY. Manufacturers know the quality of their product and express it by the time the guarantee their product's performance. ONLY MES BOARDS ARE BACKED BY A WARRANTY which is valid unless a board is damaged beyond repair through external means.
- SERVICE -** All MES replacement boards are stocked for immediate shipment. Warranty retests or repairs are handled on a priority basis - usually on a same-day basis.
We automatically check date of purchase by serial number on all MES boards returned for repair, eliminating the need for our customers to maintain costly records.

EXCLUSIVE LIFETIME WARRANTY!

EACH BOARD IS SERIALIZED WITH DATE OF PURCHASE.
WE AUTOMATICALLY HONOR WARRANTY REPAIRS,
ELIMINATING THE NEED FOR TIME-CONSUMING RECORD KEEPING
BY OUR CUSTOMERS.

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*******DOVER REPLACEMENT BOARDS*******

MES#	DESCRIPTION	OEM PART #	PRICE
101	TOP & BOTTOM, 4-Slot Hydro (Replaces 3-Slot)	105251, 9855257, 9880008, 68431F For quantity 1-9 For quantity 10-24 For quantity 25-49 For quantity 50+	\$95.79 \$83.30 \$72.43 \$62.98
102	POWER, 4-Slot Hydro (Replaces 3-Slot)	105248, 9855245, 68177	\$152.21
105	OPTION, 4/5/6 Slot Hydro	105254, 9706458, 9805254, 9753217	\$88.04
106	INTERMEDIATE, 4-Slot Hydro (Replaces 3-Slot)	105252, 9706446, 9855269, 68432	\$105.81
112	OPTION, 3-Slot Hydro (OBSOLETE- USE MES 105)	68525	See MES 105
113	DUPLEX, 3-Slot Hydro	68433, 9884336	\$138.10
114	LOGIC, 3-Slot	68180, 9781808	\$143.11
115	CAR, 4-Slot Hydro (Replaces 3-Slot)	123948, 9855221, 9881797, 68179	\$88.60
116	DOOR, 4-Slot Hydro (Replaces 3-Slot)	124519, 9855233, 9881785, 68178	\$100.90
123	OPTICAL LEVELING CONTROL BOARD	68187, 126125, 145557, 9811266	\$81.43
128	MOUNTING BRACKET FOR EMITTER- DETECTOR	106365	\$8.66

ALL BOARDS MANUFACTURED IN THE U.S.A. !

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*******DOVER REPLACEMENT BOARDS*******

MES#	DESCRIPTION	OEM PART #			PRICE
130	REVERSE PHASE RELAY	68187			\$59.32
157	UNIVERSAL TIMER, 20 - 60 VDC, 0.1 - 260 Sec., Programmable	65278 68536 101528	101529 105238 105242	124561 9852049 Others	\$45.86
173	UNIVERSAL TIMER, 110 VAC/DC. 0.1 - 260 Sec., Programmable	65280 105201	124566 9852037	105198	
		For quantity 1-9			\$50.46
		For quantity 10-24			\$43.88
		For quantity 25-49			\$38.16
		For quantity 50+			\$35.19
181	RECTIFIER BOARD, 1PH, 3A, 600VDC	67968 76824	67981 9892989	72109	\$32.35
184	RECTIFIER BOARD, 3PH, 6A, 1000VDC	115298	9715289 as well as others listed for MES 180 and MES 186		
		For quantity 1-9			\$43.26
		For quantity 10+			\$34.60
186	RECTIFIER BOARD, 3PH, 3A, 600VDC (OBSOLETE – use MES 184)	9879675			Obsolete use MES 184

OUR UNIVERSAL TIMERS AND RECTIFIER BOARDS REPLACE
 A VARIETY OF DOVER BOARDS.
 CALL FOR DETAILS.

EXCLUSIVE LIFETIME WARRANTY ON ALL BOARDS!

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*******MAC REPLACEMENT BOARDS*******

MES#	DESCRIPTION	OEM PART #			PRICE
314	SPEED CONTROL BOARD Replaces high performance version	A-46222 B-47134 B-49710	P-15675 P-15764 P-16363	P-24170 P-24561	\$71.21
326	CABLE ASSEMBLY for Mother Board Conversion	P-15807	90527-022		\$21.03
328	MOTHER BOARD, Without Relays	B-47136 P-16365	P-15766 A-46224		\$202.68
328R	MOTHER BOARD, With Relays	SAME AS ABOVE			\$216.28
330R	DOOR CONTROLLER BOARD Replaces Speed, Power, and Motherboards. All relays included.	P-24783-001, 2	(MAC 104) 1-9 pieces 10-24 pieces 25+		\$202.36 \$175.96 \$153.01
330RH	DOOR CONTROLLER BOARD Same as above, but includes cable assembly	P-24783-001, 2	(MAC 104) , plus P-15807		\$223.38
331	ESCO to MAC ADAPTER Facilitates replacement of ESCO's door pcb (#3-014-020) with MAC 104 or MES 330				\$30.90

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*******Glo-RITE Perfect LED Lamps *******

MES#	DESCRIPTION	PRICE
748	Innovation Industries II #5941S1 pushbutton pcb	For quantity 1-9 \$29.23 For quantity 10-49 \$26.58 For quantity 50-99 \$24.16 For quantity 100+ \$21.97
748L	Innovation Industries II #5941S3 pushbutton pcb <i>without switches</i>	For quantity 1-9 \$23.78 For quantity 10-49 \$20.59 For quantity 50-99 \$18.70 For quantity 100+ \$16.50
750	Innovation Industries III #59413188 pushbutton pcb	For quantity 1-9 \$29.23 For quantity 10-49 \$26.58 For quantity 50-99 \$24.16
760	Adams Survivor and EPCO pushbutton pcb <i>Requires removing screws (and wiper contact if applicable)</i>	For quantity 1-9 \$9.11 For quantity 10-99 \$7.96 For quantity 100-499 \$7.31
766	SCS switch and lamp pushbutton pcb	For quantity 1-9 \$23.41 For quantity 10-99 \$20.36 For quantity 100-499 \$17.71
767	PSB lamp in pushbutton replacement <i>Easy install—just pull out the PSB lamp and slide ours</i>	For quantity 1-9 \$14.79 For quantity 10-49 \$12.85 For quantity 50-99 \$11.18
775	DMG switch and lamp pushbutton pcb	Call

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******* Hall Lanterns and Escalator Lights *******

MES#	DESCRIPTION	PRICE
768G	Hall Lantern, Omni-Volt. Green <i>Operates from 24V to 115V. No switches</i>	For quantity 1-9 \$25.00 For quantity 10-49 \$22.05 For quantity 50-99 \$19.19
768R	Hall Lantern, Omni-Volt. Red <i>Operates from 24V to 115V. No switches</i>	For quantity 1-9 \$24.43 For quantity 10-49 \$21.23 For quantity 50-99 \$18.74
768W	Hall Lantern, Omni-Volt. White <i>Operates from 24V to 115V. No switches</i>	For quantity 1-9 \$24.51 For quantity 10-49 \$21.31 For quantity 50-99 \$19.19
719	Escalator comb-plate light for ThyssenKrupp. 15.75" 24VAC	For quantity 1-29 \$115.35 For quantity 30+ \$67.68
798	Under-Step LED Demarcation Light Multi-volt 24V-115V	For quantity 1-29 \$145.62 For quantity 30+ \$87.49
891	Under-Step LED Demarcation Light 115V	For quantity 1-29 \$129.47 For quantity 30+ \$77.09
970S	Under-Step LED Demarcation Light 24V	For quantity 1-29 \$115.35 For quantity 30+ \$67.68

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*******MATHIS EMERGENCY LIGHT BOARDS *******

MES#	DESCRIPTION	PRICE
703	6V LED Emergency light without oscillating bell. Available w/white LEDs. CSA Approved	For quantity 1-9 \$72.31 For quantity 10-49 \$60.84 For quantity 50+ \$55.27
788M	Dover replacement 6V LED Emergency light. White LEDs. 110938, 110941, 118412, 149355, 9818420	For quantity 1-9 \$58.70 For quantity 10-24 \$51.04 For quantity 25-49 \$44.38 For quantity 50+ \$38.59
924	LED Emergency light <u>with oscillating bell</u> . 12V or 6V bell will work with this reliable unit. Available w/white LEDs. CSA Approved	For quantity 1-9 \$77.48 For quantity 10-49 \$67.68 For quantity 50-499 \$59.16
924X	LED Emergency light <u>without oscillating bell</u> . 12V or 6V bell will work with this reliable unit. Available w/white LEDs. CSA Approved	For quantity 1-9 \$72.31 For quantity 10-49 \$63.19 For quantity 50-499 \$55.27
966	Quality Elevator LED Emergency.	For quantity 1-99 \$49.95 For quantity 100+ \$37.66
715	Battery 6V 5Ah for Emergency Light CSA Approved	\$10.21
944	Battery 12V 1.3Ah for Emergency Light	\$15.15
986	Battery 12V 2.3Ah Emergency Light CSA Approved	\$17.46

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*******Mathis Wedge Base LED Lamps*******

MES#	DESCRIPTION	PRICE
M85	LED M85 replaces incandescent 85 bulb. 28V. 2700K warm white. Sold in pack of 10	For quantity 1-9 \$24.20 For quantity 10-49 \$22.40 For quantity 50+ \$19.00
M161	LED M161 replaces incandescent 161 bulb. 14V. 2700K warm white. Sold in pack of 10	For quantity 1-9 \$25.50 For quantity 10-49 \$22.40 For quantity 50+ \$19.00
M656	LED M656 replaces incandescent 656 bulb. 28V. 2700K warm white. Sold in pack of 10	For quantity 1-9 \$25.50 For quantity 10-49 \$22.40 For quantity 50+ \$19.00
M657	LED M656 replaces incandescent 657 bulb. 28V. 2700K warm white. Sold in pack of 10	For quantity 1-9 \$25.50 For quantity 10-49 \$22.40 For quantity 50+ \$19.00

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*******MONTGOMERY REPLACEMENT BOARDS*******

MES#	DESCRIPTION	OEM PART #	PRICE
350	MIPROM UNIVERSAL Input II , With Screw Terminals & Molex Connector	B-47109, P-15730, P-15731, P-15761, P-15762, P-15785, P-16786 For quantity 1-9 For quantity 10-24 For quantity 25-49 For quantity 50+	\$143.03 \$124.38 \$108.16 \$94.04
381	MIPROM TIMER 14X	P-15760 For quantity 1-9 For quantity 10-24 For quantity 25-49 For quantity 50+	\$215.88 \$187.72 \$163.24 \$141.95
381A	MIPROM TIMER 4X	P-15758, P-16779	\$155.72
381B	MIPROM TIMER 8X	P-15759	\$201.45

EXCLUSIVE LIFETIME WARRANTY ON ALL BOARDS!

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*******OTIS REPLACEMENT BOARDS*******

MES#	DESCRIPTION	OEM PART #	PRICE
230	FIRE SERVICE RELAY BOARD Universal Design	1A8119AK1 and 1A8119AK2 Universal Design For quantity 1-9 For quantity 10-24 For quantity 25-49 For quantity 50+	 \$177.95 \$154.74 \$134.55 \$117.00
254	Call Car Position Board	7088AS1 For quantity 1-9 For quantity 10-24 For quantity 25-49 For quantity 50+	 \$177.75 \$154.56 \$134.41 \$116.88
256	Relay Interface Board	7088AR1 For quantity 1-9 For quantity 10-24 For quantity 25-49 For quantity 50+	 \$140.31 \$122.01 \$106.09 \$92.26
915	Car/Hall LED Pushbutton Amber, blue, green, red or white	8200KA1, 8200KA2, 8200KA3, 8200KA4 For quantity 1-9 For quantity 10-99 For quantity 100+	 \$41.20 \$35.31 \$23.54

ALL BOARDS IN STOCK FOR IMMEDIATE SHIPMENT!

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*******US REPLACEMENT BOARDS*******

MES#	DESCRIPTION	OEM PART #	PRICE
410	UNIVERSAL TIMER, Edge Card, Programmable to either 0.5 - 5 or 0.5 - 60 Sec. (without relay)	145-05064-301, 144-0035-001 145-05064-302, 144-0039-001 445-05064-200, Others	\$41.66
416	UNIVERSAL TIMER, Edge Card, Programmable to either 0.5 - 5 or 0.5 - 60 Sec., with relay, NO or NC Contacts	ALL OF ABOVE, PLUS: 145-05064-303, 144-00041-001 145-05064-304, 144-00067-001 445-06064-200, Others	\$44.84

*******WESTINGHOUSE REPLACEMENT BOARDS*******

MES#	DESCRIPTION	OEM PART #	PRICE
510	ERL AMPLIFIER	196C628H01, 477C977H03, Others	\$86.57
520	TIMER, 1 Min./2Min.	195C500H01, G01, G02	\$49.83
522	TIMER, MG Shutdown, 5 Min.	195C502H01, G01	\$49.57
523	TIMER, 10 Sec./2 Min./4 Min.	195C503H01, G01, G02, G03	\$51.27
540A	TIMER, Y-Delta	478C315G01, 1187C91H01	\$50.12

*******SCHUMACHER REPLACEMENT BOARDS*******

MES#	DESCRIPTION	OEM PART #	PRICE
710	SCHUMACHER I/O BOARD	PC-821135-2 Rev. D	\$482.16

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*******LED Lamps*******

MES#	DESCRIPTION	INFORMATION	PRICE
905	EPCO Singapor Arrow pushbutton SPR-S, SPR-SPC. 24v, 115v Amber , Red, White	For quantity 1-9 For quantity 10+	\$29.85 \$23.88
906	LED lamp, any color, replaces incandescent lamp in Adams, EPCO,GAL, Innovation Industries, Monitor, PTL, and Northern pushbuttons	For quantity 1-9 For quantity 10-99 For quantity 100+	\$7.10 \$6.82 \$6.18
909A/C	LED lamp, amber, replaces incandescent lamp in Dover V7 pushbutton. A=50vdc, C=24vdc	For quantity 1-99 For quantity 100-499 For quantity 500+	\$6.82 \$6.18 \$5.51
909B/D	LED lamp, white, replaces incandescent lamp in Dover V7 pushbutton. B=50vdc, D=24vdc	For quantity 1-99 For quantity 100-499 For quantity 500+	\$8.75 \$8.11 \$7.46
913A/B	LED lamp, red, A=50v, B=24v, replaces both incandescent lamps in Dover position indicator (the one that looks like an LED dot matrix display, but has two 85 lamps).	For quantity 1-99 For quantity 100-499 For quantity 500+	\$7.07 \$6.43 \$5.77
916A-D	LED lamp for US Diplomat pushbuttons and position indicators. A=60v red, B=24v red, C=60v amber, D=24v amber.	For quantity 1-99 For quantity 100-499 For quantity 500+	\$6.82 \$6.18 \$5.51
917A/B	LED lamp for older Dover PBs 657 lamp (Dover #9780774, 9884063) and position indicators. A=50vdc, B=24vdc.	For quantity 1-99 For quantity 100+	\$6.82 \$5.51

EXCLUSIVE LIFETIME WARRANTY ON ALL BOARDS!



Mathis Electronics Mission Statement

Mathis Electronics is a company which exists to bring continual honor and glory to God by providing Manufacturing and Service Excellence to the worldwide Elevator and Electronics printed circuit board arena as well as to the LED Light business and consumer worlds! Doing so is a by-product of our integrity, structure, and the superb execution of our unique business plan which allows:

- ▶ Customers to experience outstanding customer service along with its corresponding high level of customer satisfaction.
- ▶ Employees a challenging and rewarding vocational opportunity with healthy compensation; while also creating and nurturing an atmosphere within which Personal Growth and Life Fulfillment are realized!
- ▶ The owners to receive a healthy and secure financial return on their investments so that they are better able to meet their own vocational needs, along with their families' physical, financial, spiritual, mental-emotional, family, and social needs.

Light Years Ahead!

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MATHIS ELECTRONICS *Printed Board Specialists*

Light Years Ahead!

Since 1980 Mathis Electronics has focused on printed circuit boards (PCBs). In the early days, we were an electronic repair shop to a few elevator companies. Over the years we have repaired, re-designed and supported the entire elevator industry all across the United States.



Today, in addition to servicing the elevator industry, Mathis Electronics is a custom printed board designer and manufacturer to other industries throughout United States and around the world. With over thirty years experience, we are uniquely qualified to assemble and test PCBs with full confidence. Mathis Electronics has the experience, know-how and the equipment to build and test a great variety of PCBs. Every board is fully and dynamically tested by our in-house technicians. Plus, we now provide an unprecedented **Lifetime Warranty** on all parts and workmanship for every board we assemble--with the exception of ROHS boards which have a three year warranty! We also can provide you single, limited run prototypes or higher volume production boards. Configuration options include double-sided, multi-layer, surface mount or through-hole.

Our Services Include:

- Board Design & Redesign
- Sourcing of Components
- In-House Assembly
- Full Dynamic Testing
- Led Emergency Lights
- Led Demarcation Lights
- Glo-Rite™ Led Lights
- Superb Personalized Service
- **Lifetime Warranty**

Light Years Ahead!

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