by Cybernetic Solutions

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MaskMatrix

Universal - for all Pinspotters and Pinsetters

tenpintec.com

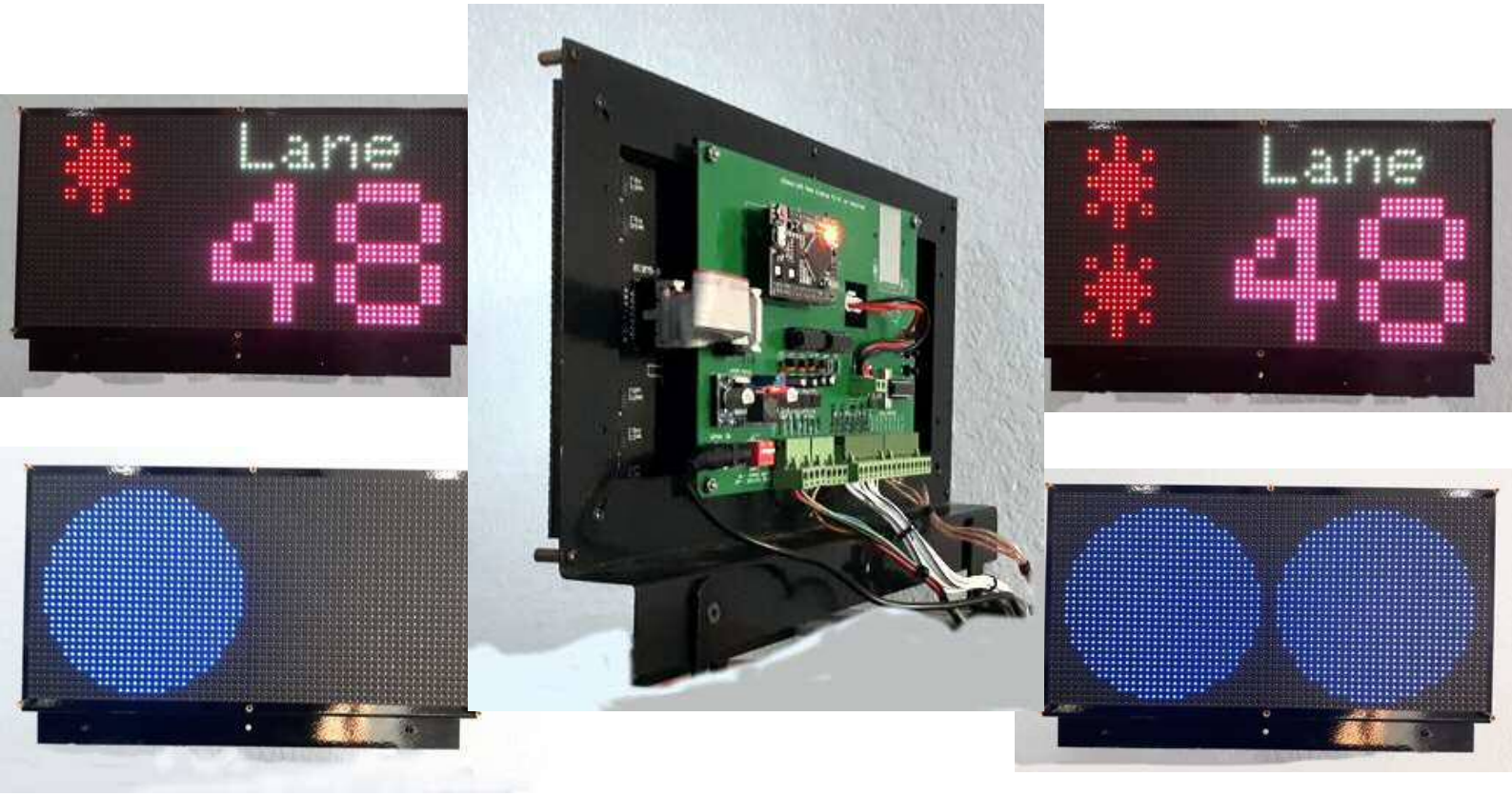
Document rev 02 - 15 DEC 2022

MaskMatrix RGB LED Display for Mask Unit

Capable of displaying:

- Lane Number
- 1st Ball
- 2nd Ball
- Strike
- Foul
- STOP

in multiple menu selectable colours and formats
(if the Pinspotter or Pinsetter has the correct outputs available)



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Product Features

* Works on all Pinspotter and Pinsetter models
* Display lane number while machine is OFF
  (if optional plug pack is used)
* Use menu buttons on rear to set:
  lane number
  lane number colour for “machine OFF”
  lane number colour for “machine ON”
  set 1st and 2nd Ball indicator format and colour
  set STRIKE format and colour
* Dedicated inputs for:
  machine power
  2nd Ball
  Strike
  Foul
  STOP
* 3 factory programmable inputs (dry relay contact)
* 4 factory programmable outputs (5Vdc)
*

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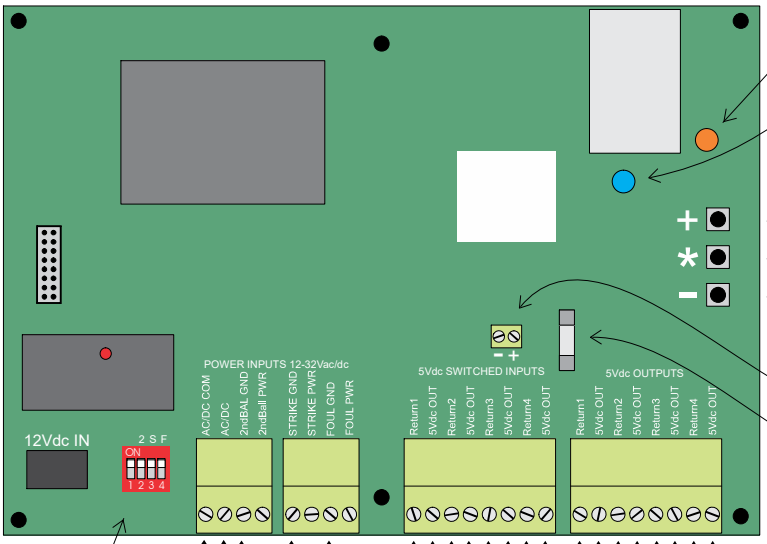
AMF 82-70



LED Radio AUX (if fitted)

LED Radio Rx (if fitted)

Press * to enter menu mode

Menu + button

Menu Select button

Menu - button

To exit menu, keep pressing * until you see the standard display

5Vdc for LED matrix

Fuse 1A fast

Connector to LED Panel

Power in from 12VDC 3A plug pack power supply

Circuit Isolate Switch

Switch ON (up) where
2nd Ball and/or Strike and/or Foul
use the same power supply as the main Ball Light Power (most machines)
(circuits switch to GND)

Switch OFF (down) where
2nd Ball and/or Strike and/or Foul
are separate two-wire circuits

Chassis PM Plug type

	ELCO	CPC
Ground	to chassis frame	33
12Vdc (unfiltered)	E29	29
2nd Ball	E25	25
Strike	E26	26
Foul	E27	27

Note: 1st ball PM terminal E24 is not used.

GROUND SWITCHED

GROUND SWITCHED

GROUND SWITCHED

Very important - this wire must be connected to chassis ground. On CPC chassis, it may be possible to use a spare terminal for ground - for example, 33.

5Vdc Output 4 +
Factory customisable
5Vdc Output 4 -
5Vdc RELAY COIL

5Vdc Output 3 +
Factory customisable
5Vdc Output 3 -
5Vdc RELAY COIL

5Vdc Output 2 +
Factory customisable
5Vdc Output 2 -
5Vdc RELAY COIL

5Vdc Output 1 +
Factory customisable
5Vdc Output 1 -
5Vdc RELAY COIL

Switched Input 4 +
Factory customisable
Switched Input 4 -
RELAY NO

Switched Input 3 +
Factory customisable
Switched Input 3 -
RELAY NO

Switched Input 2 +
Factory customisble
Switched Input 2 -
RELAY NO

Switched Input 1 +
STOP Trouble Call/Pit Signal
Switched Input 1 -
RELAY NO

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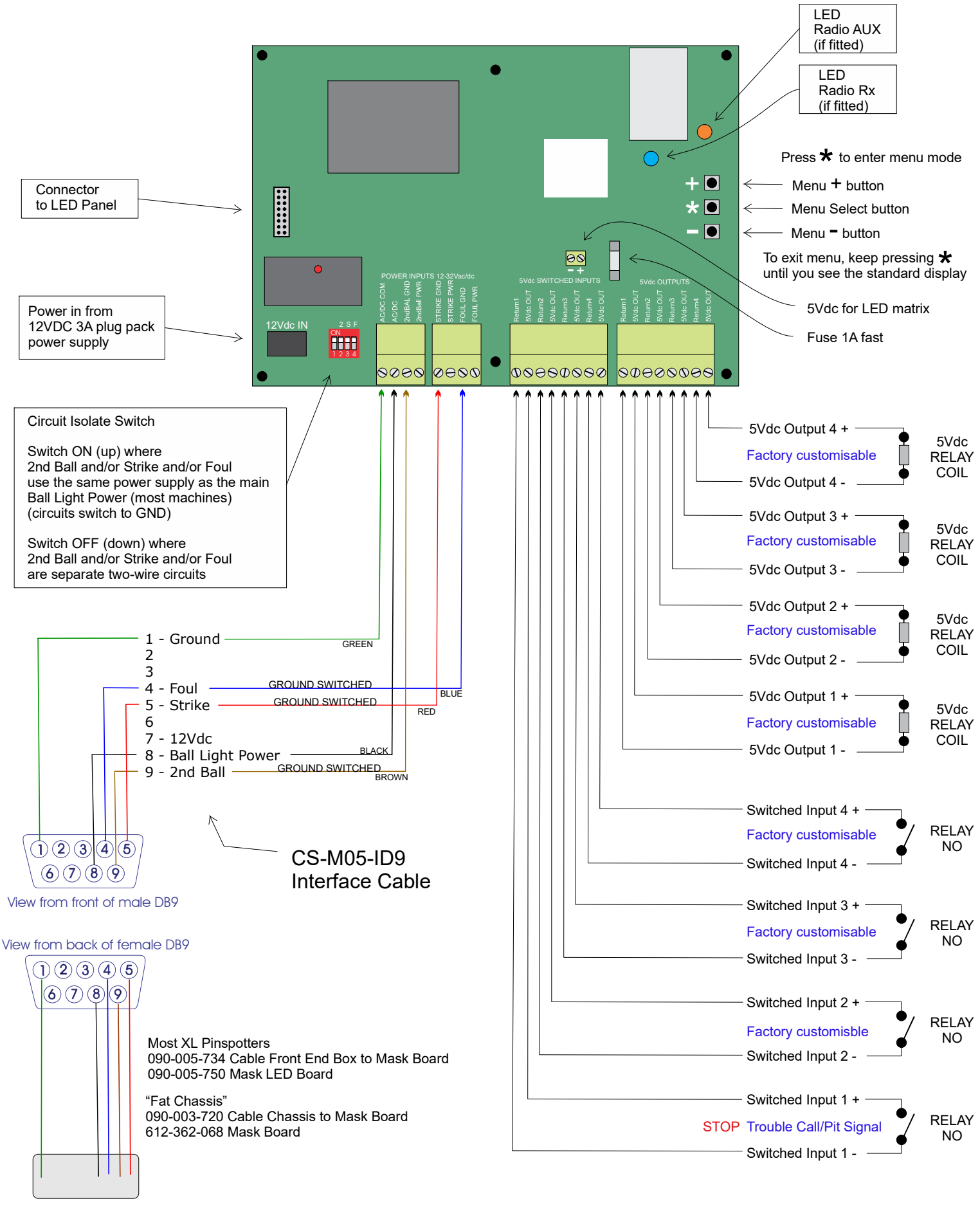
AMF 82-90XL



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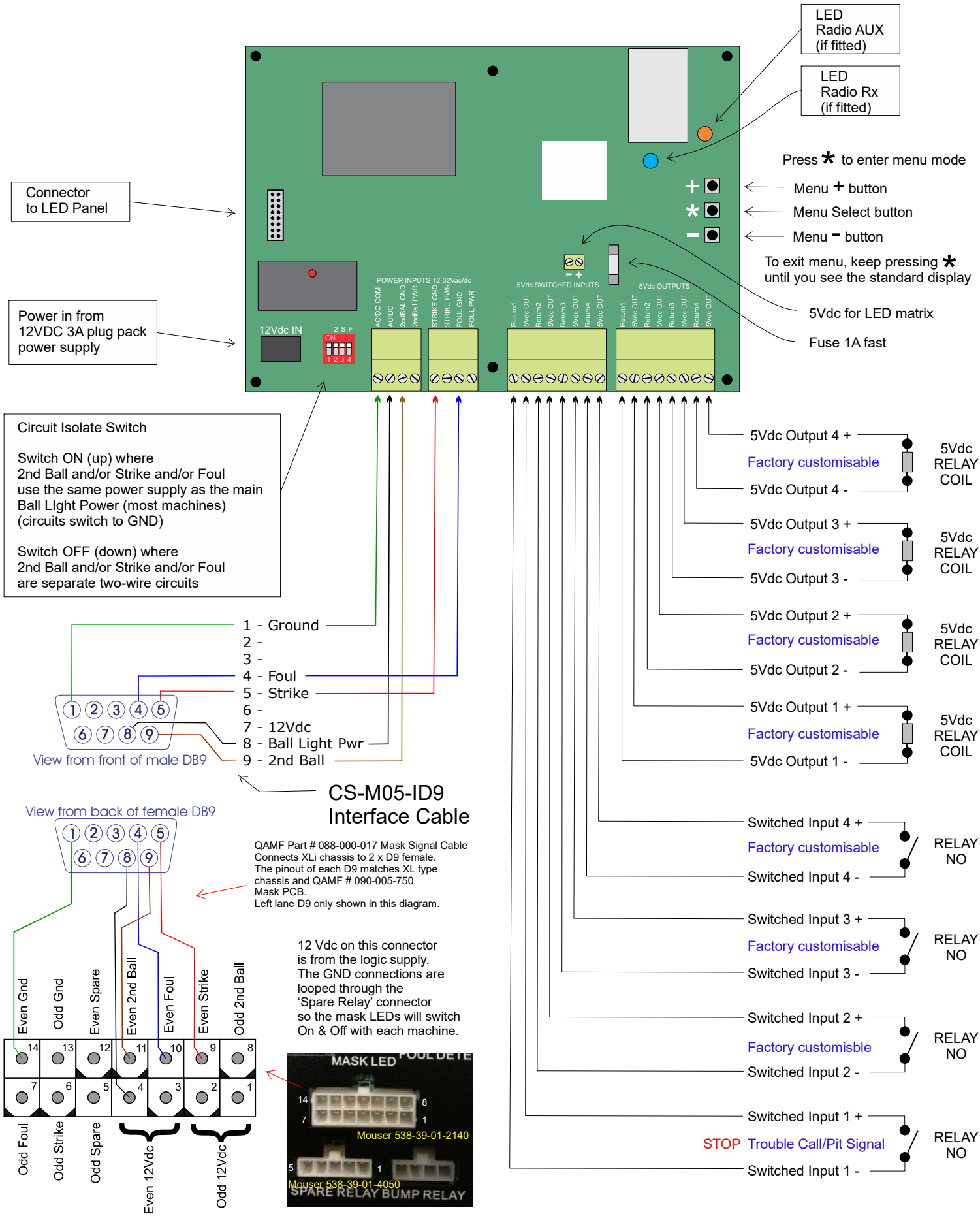
AMF 82-90XLi



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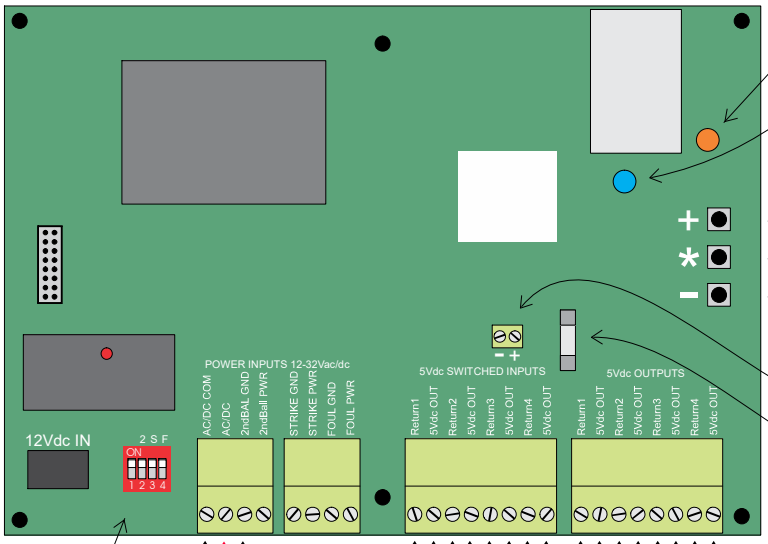
QubicaAMF TMS and Edge Pinspotters

(String and Freefall machines)



LED
Radio AUX
(if fitted)

LED
Radio Rx
(if fitted)

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Menu + button

Menu Select button

Menu - button

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5Vdc for LED matrix

Fuse 1A fast

Connector
to LED Panel

Power in from
12VDC 3A plug pack
power supply

Circuit Isolate Switch

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(circuits switch to GND)

Switch OFF (down) where
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are separate two-wire circuits

Odd Lane
Mask

5Vdc Output 4 +
Factory customisable
5Vdc Output 4 -
5Vdc RELAY COIL

5Vdc Output 3 +
Factory customisable
5Vdc Output 3 -
5Vdc RELAY COIL

5Vdc Output 2 +
Factory customisable
5Vdc Output 2 -
5Vdc RELAY COIL

5Vdc Output 1 +
Factory customisable
5Vdc Output 1 -
5Vdc RELAY COIL

Cable 088-000-197
XLi Mask Signal Cable

1 - Odd lane 12Vdc
2 - Even lane 1st Ball
3 - Even lane 12Vdc
4 -
5 - Odd lane 1st Ball
6 -
7 -
8 - Odd lane 2nd Ball
9 -
10 -
11 - Even lane 2nd Ball
12 -
13 -
14 -

Switched Input 4 +
Factory customisable
Switched Input 4 -
RELAY NO

Switched Input 3 +
Factory customisable
Switched Input 3 -
RELAY NO

Switched Input 2 +
Factory customisble
Switched Input 2 -
RELAY NO

Switched Input 1 +
STOP Trouble Call/Pit Signal
Switched Input 1 -
RELAY NO

Even Lane
Mask

(Original Masq 1-2 Ball Light Assy 260-001-157)

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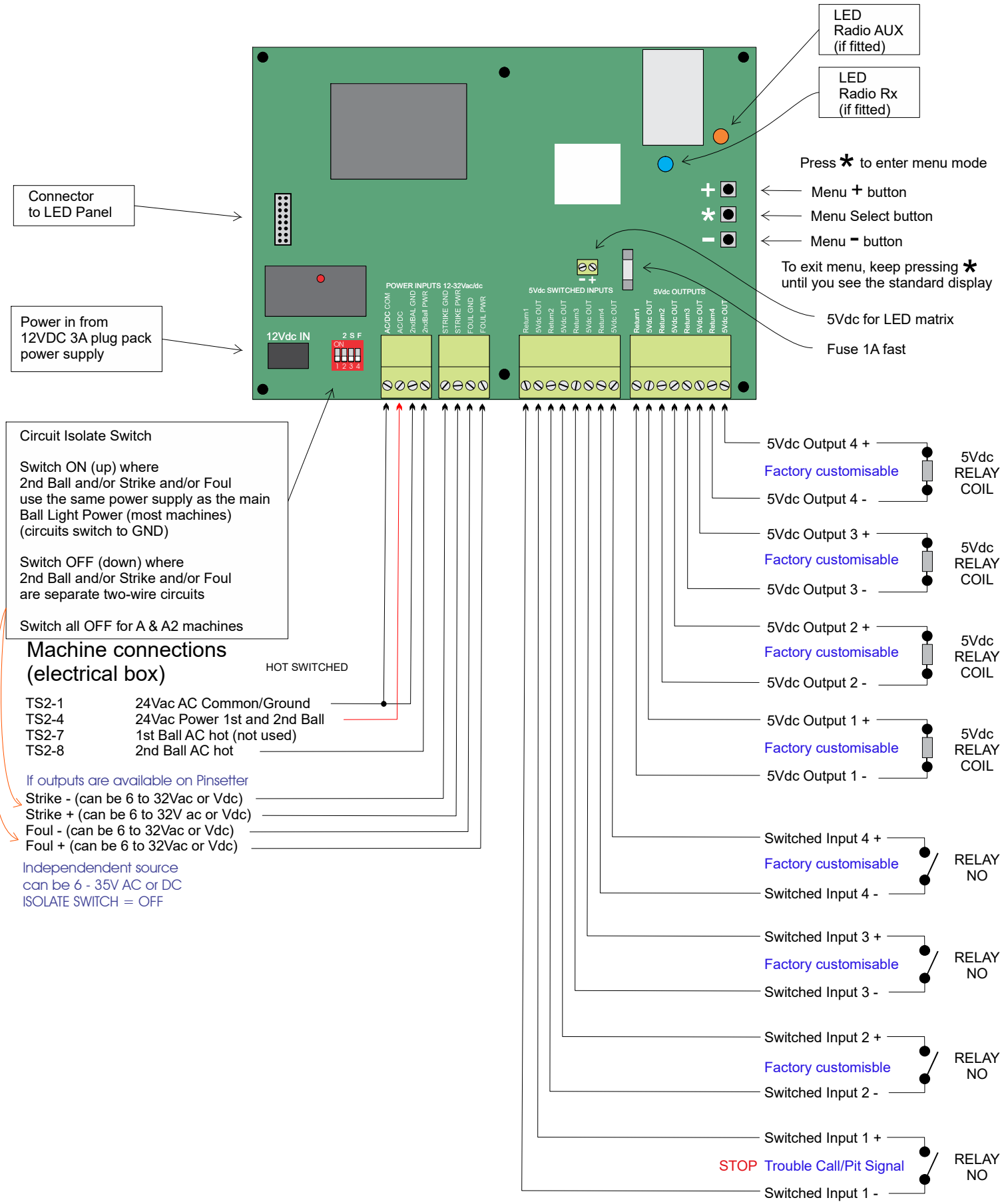
Brunswick A/A2



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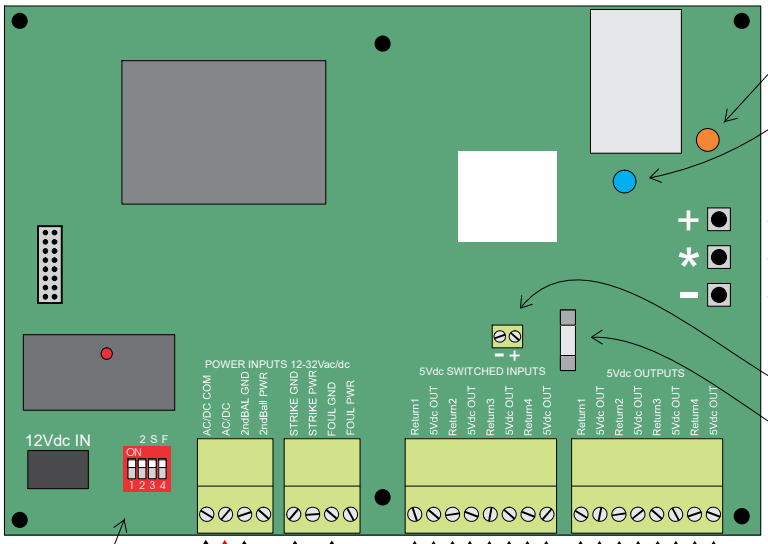
Brunswick GS



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LED Radio Rx (if fitted)

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Menu Select button

Menu - button

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5Vdc for LED matrix

Fuse 1A fast

Connector to LED Panel

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Switch OFF (down) where
2nd Ball and/or Strike and/or Foul
are separate two-wire circuits

?

Mask Unit Connector

Consolidated (9way)	Nexgen (4way)	
P4-3 *	P2-2	Left Ground *assumes ball lights are ground switched)
P4-6 *	P2-1	Left Ball Light Power
P4-4 *	P2-3	Left 2nd Ball
P4-5 *		Left 1st Ball
P4-1 *		Left Strike
P29-		Left Foul +
P29-		Left Foul -
P33-3 *	P22-2	Right Ground *assumes ball lights are ground switched
P33-6 *	P22-1	Right Ball Light Power
P33-4 *	P22-3	Right 2nd Ball
P33-5 *		Right 1st Ball
P33-1 *		Right Strike
P29-		Right Foul +
P29-		Right Foul -

5Vdc Output 4 +
Factory customisable
5Vdc Output 4 -
5Vdc RELAY COIL

5Vdc Output 3 +
Factory customisable
5Vdc Output 3 -
5Vdc RELAY COIL

5Vdc Output 2 +
Factory customisable
5Vdc Output 2 -
5Vdc RELAY COIL

5Vdc Output 1 +
Factory customisable
5Vdc Output 1 -
5Vdc RELAY COIL

Switched Input 4 +
Factory customisable
Switched Input 4 -
RELAY NO

Switched Input 3 +
Factory customisable
Switched Input 3 -
RELAY NO

Switched Input 2 +
Factory customisble
Switched Input 2 -
RELAY NO

Switched Input 1 +
STOP Trouble Call/Pit Signal
Switched Input 1 -
RELAY NO

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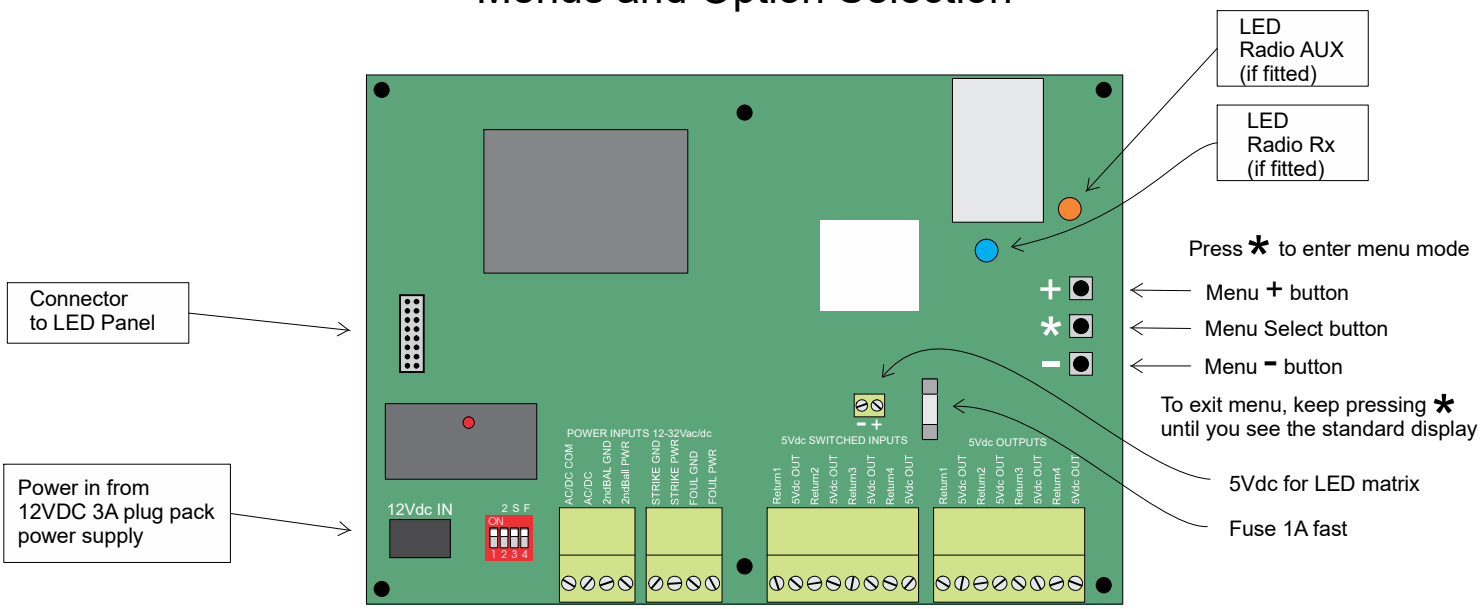
Menus and Option Selection



Press + to display software version information

Press * to enter Menu Level 1

Menu Level 1 - Set Lane Number
- Press + to increase Lane Number
- Press - to decrease Lane Number

Press * to enter Menu Level 2 (saves selected Lane Number)

Menu Level 2 - Set Lane Off Lane Number Colour
- Press + to cycle up through available options
- Press - to cycle down through available options

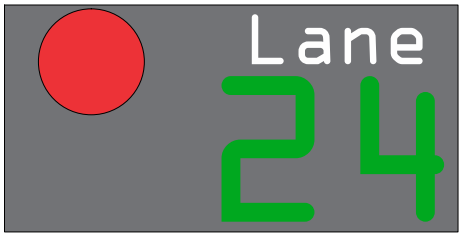
Press * to enter Menu Level 3 (saves Lane Off Lane Number Colour)

Menu Level 3 - Set Lane On Lane Number Colour
- Press + to cycle up through available options
- Press - to cycle down through available options

Press * to enter Menu Level 4 (saves Lane On Lane Number Colour)

Menu Level 4 - Set 1st & 2nd Ball Display
- Press + to cycle up through available options
- Press - to cycle down through available options

Press * to enter Menu Level 5 (saves 1st & 2nd Ball Display)

Menu Level 5 - Set Strike Display
- Press + to cycle up through available options
- Press - to cycle down through available options

Press * to exit Menu