4 Momentary on switches used to momentarily supply power to isolated sections on the MIB. As diagram suggests the last isolated section is not connected. They are connected in series so that switch 1 has to be activated before switch 2 will become active and so on. This is an example only of different available switches.

The MIB is designed to suit gauges from 9mm to 16.5mm track.

The MIB's Standard Length Dimensions and Spacings
2 axle, 4 wheel steam loco. All wheels must be isolated from each other and chassis so you have 4 independant pickup points. Motor must also be isolated in away so there is no electrical contact with the rails or wheels and pickups.

8 Diodes in sets of two arranged in series to make four separate pairs or 2 full bridge rectifiers MUST be used as shown.

4 WHEEL, 2 AXLE STEAM LOCO RECTIFIER FITMENT.
3 axle, 6 wheel steam locos the wheels shall be connected as above in example (A 3 Axle). When the axle centre distance of the pair of axles connected to same rectifier, exceeds 74mm in length all six wheels shall be electrically isolated and another full bridge rectifier must be used as in example (B 3 Axle).
output to ESC on train

Fig (B 3 Axle)

add a third bridge rectifier as shown when axle centres on 3 axle 6wheel steam loco exceeds 74mm over all length as shown in example (B 3 Axle).

3 AXLE, 6 WHEEL STEAM LOCO RECTIFIER FITMENT EXAMPLE 2
output to ESC on train

forward most and rear most axle centres from 45mm to approx 222mm.

Fig (A 4 Axle)

4 AXLE STEAM LOCO RECTIFIER FITMENT EXAMPLE 1
output to ESC on train

extreme forward most and extreme rear most axle centres

these two axle centres shorter than non powered section total length.

alternative for 4 axle steam loco where a set of 3 axles most extreme axle centres do not exceed 74mm, but the extreme forward most and extreme rear most axle centres exceed 78mm.

Fig ( B 4 Axle )

4 AXLE STEAM LOCO RECTIFIER FITMENT EXAMPLE 2
Fig (C 4 Axle)

for 4 axle loco, axle centres exceeding 74mm, 4 fullbridge rectifiers must be used. Each wheel shall be insulated on the axle to prevent electrical shorting.
power will need to be applied to 3 sections in a row for 3 axle locos with equal axle centre spacing from 18mm x 18mm x 18mm to 24mm x 24mm x 24mm.

Fig 3A STEAM
power will need to be applied to 2 sections in a row for 3 axle locos with equal axle centres from 25mm x 25mm x 25mm to 31mm x 31mm x 31mm.

Fig 3 B STEAM
power will need to be applied to 1 section for 3 axle locos with equal axle centres from 32mm x 32mm x 32mm to 38mm x 38mm x 38mm.

Fig 3 C STEAM
for 3 axle steam locos with equal axle centres of 39mm x 39mm x 39mm and upto 70mm x 70mm x 70mm no sections need to be powered. If axle centre spacing on 3 axle steam loco is greater than 70mm you will have to add another 14mm section. I am only covering up to 70mm axle centres for 3 axle steam style locos.

Fig 3 D STEAM
for 16mm equal axle centres to 21mm equal axle centres on 4 axle steam locos 2 sections need to be powered.
for 22mm equal axle centres to 25mm equal axle centres on 4 axle steam locos only 1 section needs to be powered.

Fig 4 B STEAM
Fig 4 C STEAM

for 26mm equal axle centres to 37mm equal axle centres on 4 axle steam locos
no sections need to be powered.
This section is for Diesel powered and Electric powered loco's fitted with two axle bogies.
The minimum axle centres on the bogies are 15mm and the maximum is 22mm in this section.
The minimum axle centre distance of the two most inner axles is 18mm listed here.
The minimum centre pivot measurement is 33mm.
The maximum centre pivot measurement is 42mm listed here.

Only two isolated sections need to be momentarily powered to allow trains with the bogies and bogie centre pivots illustrated here.