

Notes:

1. Use at least AWG 12 (4 mm²) or AWG 10 (6 mm²) cable for main 0V return line. Keep the power supply lines reasonably short.
2. Use separate AWG 12 lines to connect each card individually to the main 0V return line. Ensure all connections on the 0V lines are clean and secure.
3. Use AWG 12 cable for the +24V supply line.
4. Split as shown to provide separate +24V fused feeds to each card.

5. Wiring to a single motor is shown for illustration – tie the motor phase cable shield to the 0V return. However keep the hall sensor and encoder cable shields away from motor phase cable shield.

6. Tie the motor cases / supporting structure direct to power supply 0V using AWG 12 cable or similar. If the motors are on electrically separate structures then tie each to 0V separately. If the structures are already grounded to main earth then do not make this connection to PSU 0V also.

7. Use shielded low voltage cable (eg USB or similar) for the serial data daisy chain. Do not connect shield to 0V. Keep the length of the daisy chain wiring short (typically less than 200mm).

