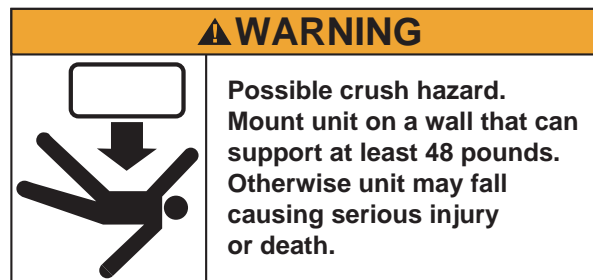


Overview

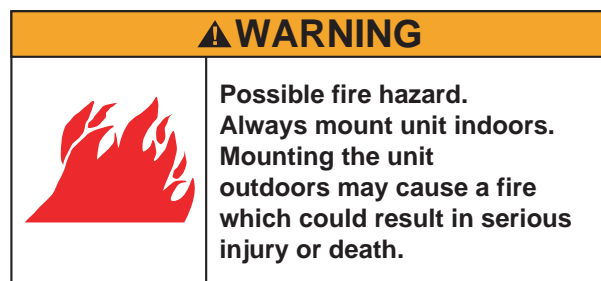
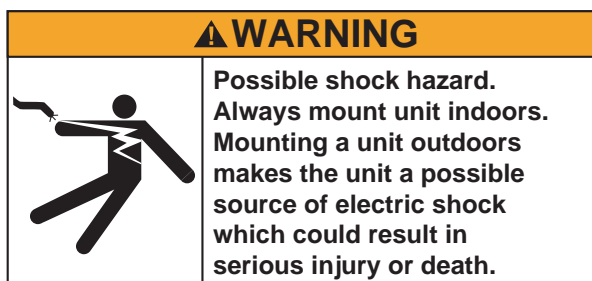
The ALPHA 220 Transit Display is designed for permanent installation on mass transit passenger vehicles to provide an information conduit for riders. These installation instructions describe the physical requirements for mounting the display and making connections to power and communications lines.

Safety

- ALPHA 220 Transit Displays are designed and intended for use as onboard vehicle message and information displays. Do NOT install in open areas of a vehicle where the display would be unprotected from weather and the elements.
- External wiring harness conductors and connectors must be enclosed in a suitable fire enclosure that is in compliance with applicable vehicle and electrical manufacturer's standards. For up-to-date information, see www.sae.org/products/standards/stdsinfo and www.nema.org/standards, web sites for the Society of Automotive Engineers and National Electrical Manufacturer's Association. The wiring harness connection to the AC power and communication circuit must also conform to applicable standards.
- Units are intended for flush mounting on surfaces capable of supporting at least 48 pounds. Suitable fasteners must be tightened to the correct torque specification and lightly coated with an approved liquid fastener compound. Loctite "Threadlocker 242", or equivalent, removable liquid fastener compound is recommended.

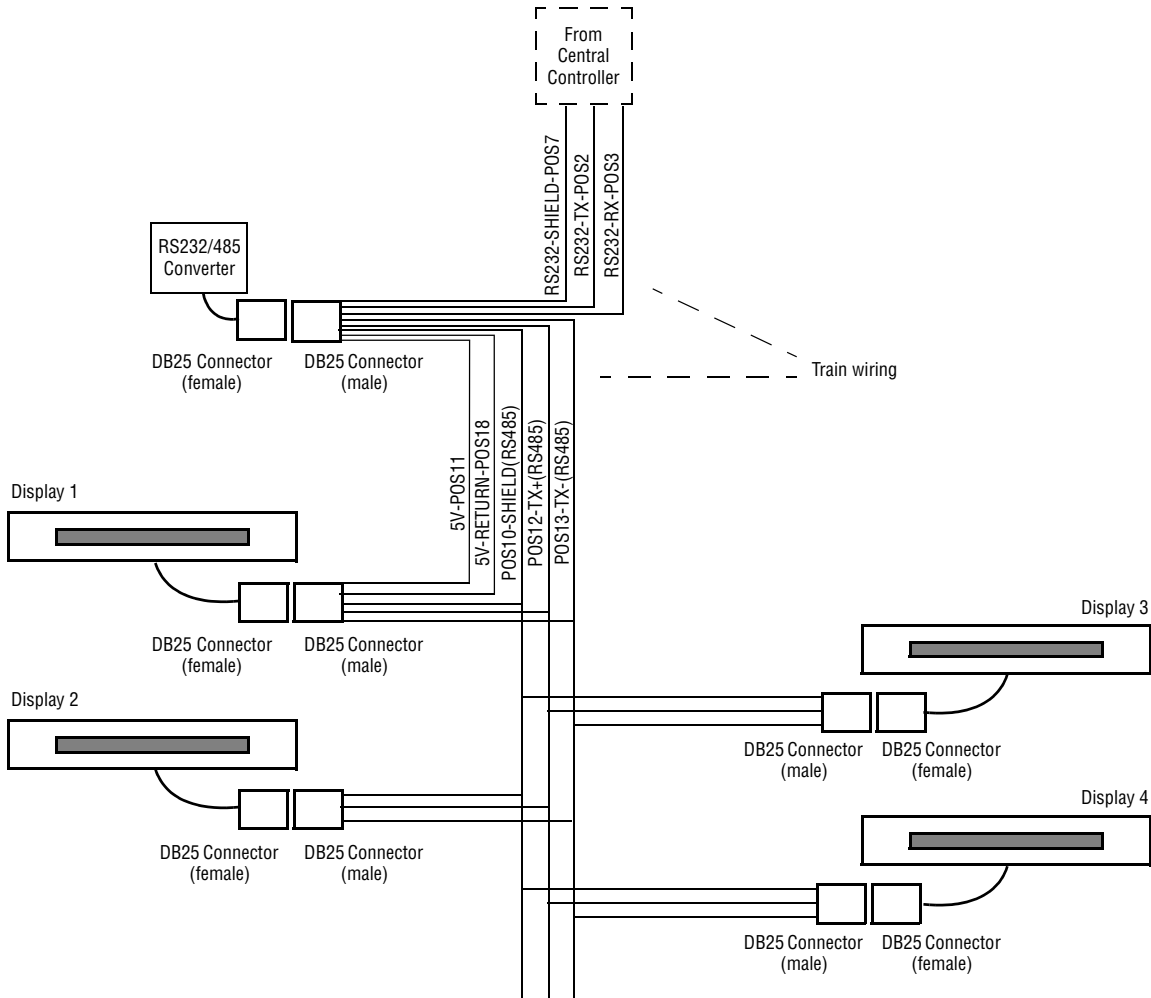


- Always disconnect power before you begin installation to avoid any chance of electric shock.



Installation guidelines

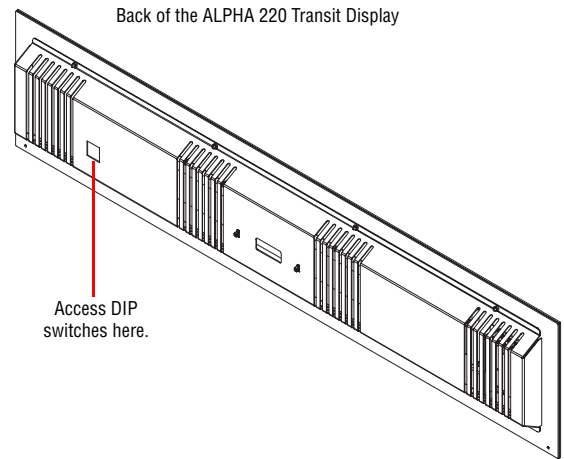
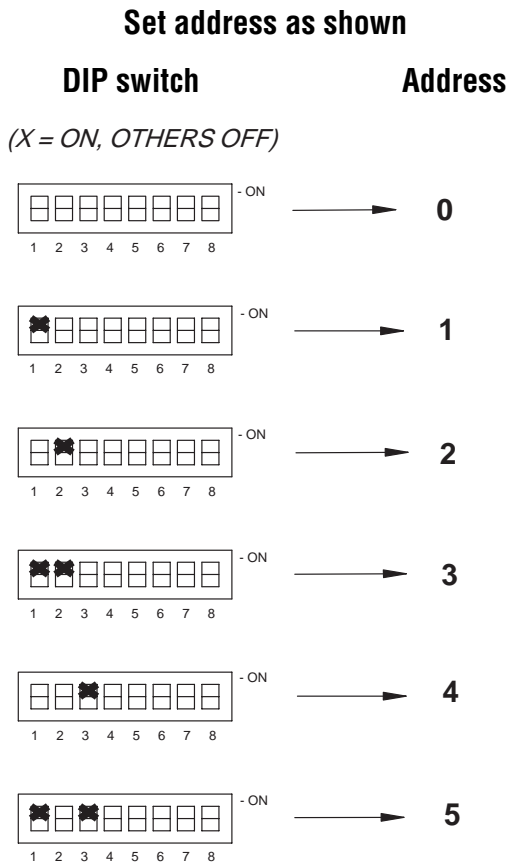
1. Run communications and AC power wires from the central controller according to your specifications.
2. Connect the communications (RS232) wires from the central controller (train wiring) to a male DB25 connector at the RS232/RS485 Converter as shown.



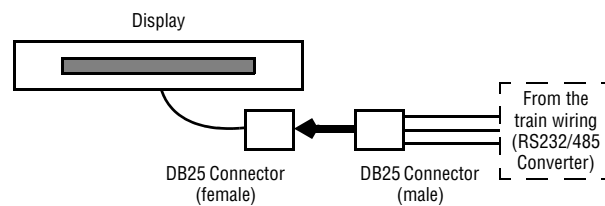
3. Connect the communications (RS485) wires from the male DB25 connector at the RS232/RS485 Converter (train wiring) to the male DB25 connector at each sign.

NOTE: Connect the 5 V power wires from the RS232/RS485 Converter to the male DB25 connector at the first ALPHA 220 Transit Display to supply power to the converter.

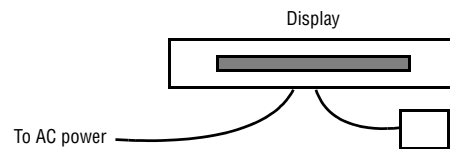
- Set the DIP switches as shown, in binary format, to assign an address to the ALPHA 220 Transit Display. There are 127 available address selections.



- Plug the male DB25 connector from the RS232/RS485 Converter (train wiring) into the female DB25 connector at the display.



- Connect the AC power wires from the central controller (train wiring) to the display. When powering up at temperatures below 0° C, for display loads that use at least 50% of the ALPHA 220 Transit Display’s pixels, allow ten minutes for the display to warm up.



- Mount the display according to your specifications.

