

Overview

The brightline Motor Control System is designed to provide motorized lighting fixture movement to T-Series lighting fixtures. The System memorizes the positional information for a series of fixtures, and recalls those positions when requested. This information is stored as Movement Cues that can be implemented via a digital signal received from an external processor or by a push-button control station.

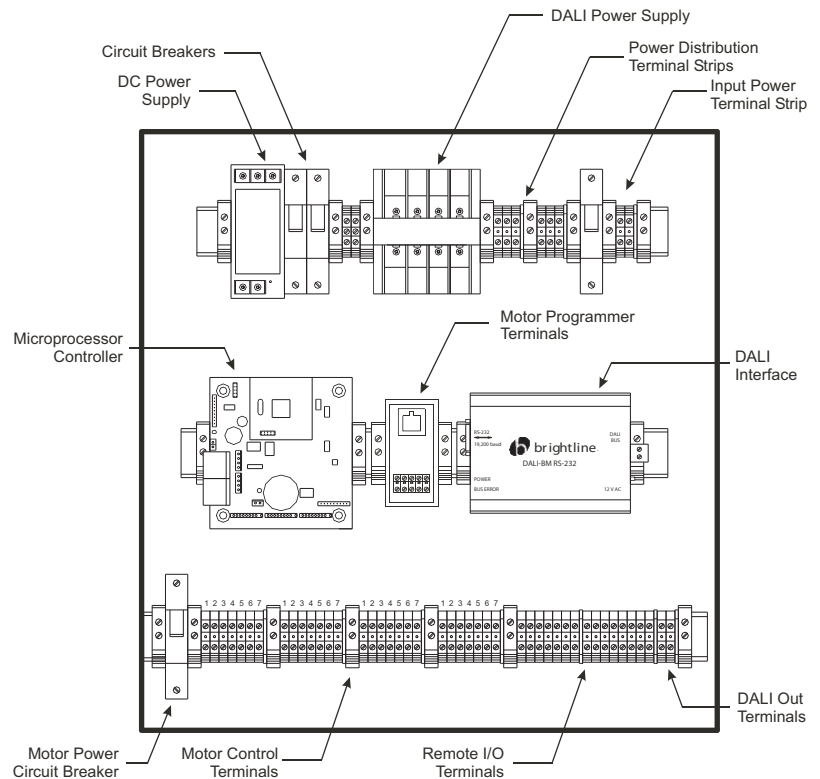
System Description

The Motor System is controlled by an industrial microcontroller unit that is capable of operating up to seven (7) lighting fixtures. An optional Expansion Card can be added to increase the number of fixtures to twenty-three (23). The System can receive commands digitally or via dry-contact closures from the control station. The Controller is fully wired for the number of lighting fixtures indicated making it easy to add fixtures at a future date.

A low-voltage digitally controlled stepper motor moves the fixture carriages. The digital signals are sent to the fixtures via a five-wire control cable, normally provided by brightline. The fixture has a locking receptacle (five-pin male XLR) for the control cable connection.

The System is capable of being digitally activated by an external controller via RS-232 serial protocol. The Motor Controller can receive commands and will respond to them.

An external Motor Programmer is provided with the Motor System. This unit is connected to the Motor Controller via a CAT-5 Control



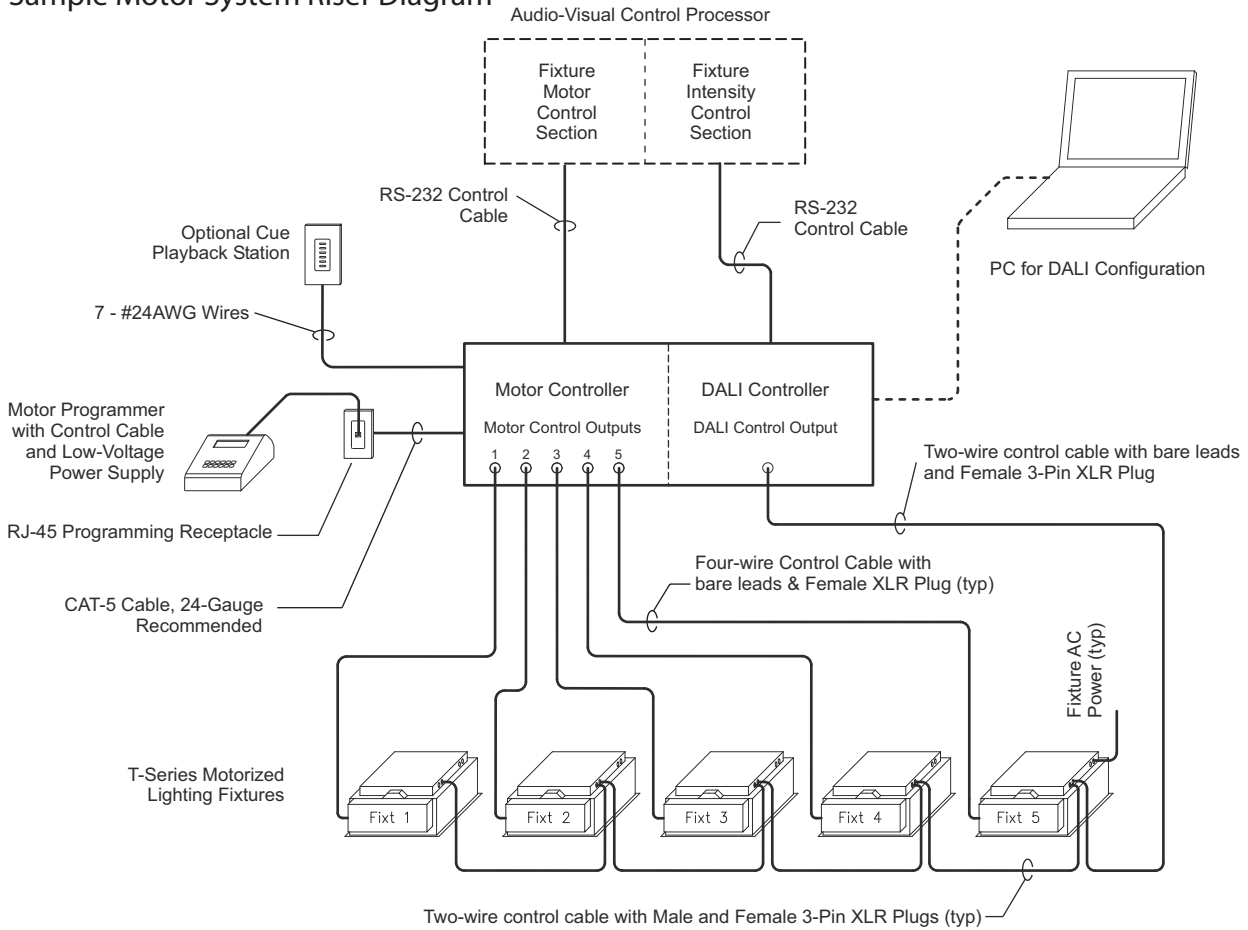
Layout of Seven-Axis Controller Enclosure

Cable and RJ-45 Receptacle. The total run of Control Cable should not exceed 150 feet [45m]. The Programmer is used to set the locations of the fixture carriages, which are then recorded into Cues for later playback. The Programmer can also be used to activate previously recorded Cues, and to change system parameters.

Often, the Motor Control Enclosure also houses an RS232/DALI interface, as shown above. The interface is used for intensity control of the fixtures; it too can be activated by RS-232 digital signals. Its output is two-wire; the fixtures have a locking connector for this signal as well (3-pin XLR).

The Motor Controller needs to be connected to a source of either 120VAC or 220-240VAC Power. Power consumption at 120 Volts is under 5 Amps.

Sample Motor System Riser Diagram



Notes:

- This Riser Diagram is for a system with five (5) Motors and DALI Intensity Control; it shows the Motor Programmer and a Six-Button Playback Station.
- Each fixture has its own Motor Control Cable that is home-run back to the Control Enclosure. The DALI wiring is normally daisy-chained as shown.
- Keep all Control Cable runs as short as possible.
- The Motor System can operate as a stand-alone device, using the Playback Station or the Motor Programmer.

