SPACEPRO ELECTRIC SYSTEMS CONTROLLER SPECIFICATIONS

SOFTWARE
- The software utilized by the logic system has been developed under QS 9000 certified methods and procedures. The logic system allows user function programming and system adjustment programming as a standard and custom security and adjustments through the use of a program provided on CD ROM, as an option.

USER INTERFACE
- User interface to operate the system is accomplished through the use of a Touchpad sensitive to the human bodies inherent electricity. The touchpad provides, as a standard, a contact area large enough to enable handicapped users easy access to the system and accommodates "hands full" activation by system users.
- The touchpad provides a clear and easy to understand indication that a carriage has been secured for limited access.
- The touchpad provides a diagnostic display that gives a clear indication of a system operating problem. The logic system indicates the type of problem on the touchpad.

CARRIAGE MOVEMENT CONTROL
- The Logic system provides soft carriage starting and stopping to avoid unnecessary motor and parts wear.
- The logic system monitors motor current consumption to automatically detect changes in carriage weight load so that carriage running speed and carriage stopping distances may remain consistent after load weight changes. The Logic system provides consistent running speeds and stopping distances even though carriages within a system are carrying significantly different weights

CARRIAGE STOPPING CONTROL
- The logic system provides for smooth stopping through the use of infrared analog sensors, which automatically calculate and adjust slow down and stopping time requirements based on the weight being carried. This system does not utilize mechanical or moving parts to accomplish carriage stopping.

CARRIAGE STOPPING DISTANCE ADJUSTMENT
- The logic system provides for adjusting carriage stopping distances to allow a greater distance between carriages in their closed positions. This allows for storage of items extending past the edge of the system shelving. The stopping distance change is accomplished with no moving parts or mechanical devices and can be controlled by user personnel.
- The stopping distance adjustment is accomplished by the "One touch transponder technology" or optional PC Interface.

Converting Mobile Carriage To Stationary
- The logic system allows all motor equipped carriages to be converted from stationary to mobile or mobile to stationary to accommodate changes in mobile system usage levels or patterns on a temporary or permanent basis. The logic system allows for this conversion by an authorized user utilizing One Touch Transponder Technology or optional PC Interface..

Limiting Aisle Access (Security Function)-Optional
- The logic system allows for limiting specific aisle access to specific authorized users. Access to secured aisles by authorized users is accomplished in a simple one-touch manner with a Security Access Key Set.
- The Logic system permits up to ten unique security authorization patterns as a standard. The Logic system also allow access authorization changes to be made remotely from a PC.
- The Logic system allows for user changes of the Security Access Keys through the use of a PC without special personnel or training required.

Safety Systems
The logic system provides three built-in safety systems as standard functionality included with all logic units shipped.
- Passive safety, a feature that may be activated or deactivated. When activated the logic system requires a user to touch the touchpad on **both** sides of the open aisle prior to creating a new aisle, thus assuring they have visually inspected the aisle for occupants.
- The second safety system is a motor current monitoring system (MCMS). The logic system is capable of recognizing the change in motor current utilized as the result of pressure applied against the moving carriage or its contents and instantaneously shutting down carriage movement. The pressure required to activate MCMS is approximately 25 lbs.
- The third standard safety system is the Infrared Floor Sweep running the length of each carriage aisle, mounted approximately 1 1/2" above floor level. The carriage stops immediately when the infrared beam is interrupted.
- The logic system allows for user programming of aisle light activation when an aisle is opened. The system allows for user programming aisle light duration time.
- In the event of a power failure the logic system is capable of recognizing that carriages have been stopped during an aisle opening sequence and automatically activates the passive safety system. When power is restored, this capability will prevent movement until after the passive safety system is deactivated. This feature is considered to be of key importance because a user may enter a partially opened aisle during the power outage and still be in the partially opened aisle when power is restored.

Ability to Interface with Building Environmental Systems-Optional
- The logic system is capable of interfaces with environmental systems such as fire alarm and suppression, temperature control, humidity control and ventilation control. The logic system allows for user programming of defined carriage response to activation by such systems. The logic system allows for user programming of automatic carriage positioning in off-hour periods.