

# Columbia

## ULe CONVERSION KITS:

Rack Loader/Unloader Systems - (ULe)

- UL Relay to PLC Controls Conversion Kit (Encoder):**

This relay replacement conversion is designed to be used in conjunction with Encoder Positioning on Lift Cylinder on the Loader/Unloader Towers. Includes; two Encoders and encoder cables, Allen Bradley SLC5/03 Programmable Logic Controller, analog output card, Panelview Color Operator Interface for setting height positions, control selector switches for jogging - Loader/Unloader carriage forward/back, forks up/down, Rack Conveyor forward/reverse, Elevator up/down, Green Conveyor manual/off/auto, Pallet Return Sections man/auto, E-Stop, Reset, and Automatic.



Features:

Panel Enclosure  
Allen Bradley PLC  
Fused terminal access  
Safety Start-up delay horn

Warning Beacon

Industry standard parts  
Panelview Operator Interface  
Color Screen (8.3 x 6.2 inches)

Typical Screens:

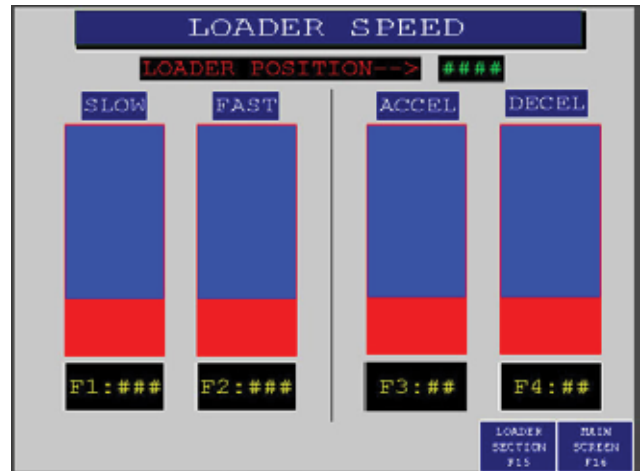
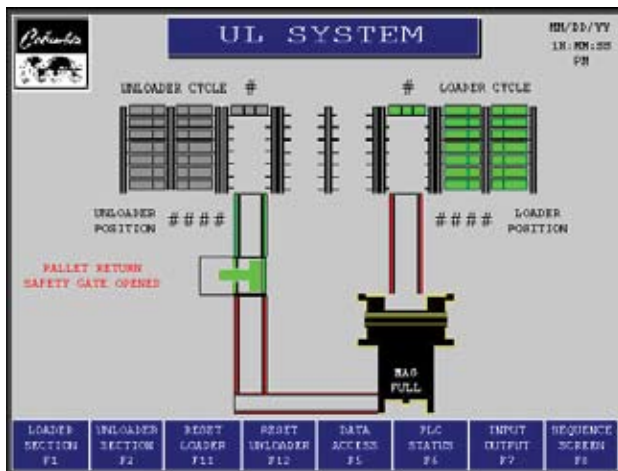
UL System Overview  
Loader / Unloader Setting  
Loader / Unloader Speed  
Loader / Unloader Shelf Position  
I/O Status indication  
Production Report

Benefits:

Free Standing or Wall-mountable  
Superior reliability & latest controls technology  
Ease of troubleshooting  
Auditable (6 sec.) warning when system is turned into automatic  
Visual indication while the machine is in automatic mode  
Readily available parts  
Menu driven setups, pallet positioning  
Easy to use

Kit Includes:

Control Panel assembly  
Encoder Kit, (two (2) encoders with cables)  
PB Station - Pushoff  
PB Station - Cleaner & Oiler/Crossover Conveyor  
PB Station - Pallet Turnover & Scraper  
Alarm Horn & Warning Beacon  
Machine wiring diagrams  
Switch layout drawing & wiring schedule



For more information on Columbia's Conversion Kits  
please visit [www.columbiamachine.com](http://www.columbiamachine.com) or call us at **1-360-694-1501** x573

### ULe CONVERSION KITS:

- **Proportional Valve Conversion Kit for UL Lift Cylinder (Forks):**

Designed to replace the indexing tree on the Loader/Unloader towers, to be used in conjunction with the Encoder Positioning - Allen Bradley PLC conversion.

<u>Machine Model No.</u>	<u>Kit No.</u>	<u>Description</u>
307.210. series	382.1035.1.xxx	Proportional Valve Conversion
307.218. series	382.1035.1.xxx	Proportional Valve Conversion

Features:

Proportional Valves  
Adjustable Pallet Height  
Speed Control on lift  
Product changeovers quicker

Benefits:

Eliminates the mechanical indexing trees  
Better control on pallet height position  
Smoother lift operation, fewer product rejects  
Improves over-all production

Kit Includes:

Proportional Valves with cable (two each)  
Cartridge valve (two each)  
Encoder Drive Assembly (two each)  
Idler Assembly (two each)  
Clevis with Encoder mount (two each)  
Fittings, chain, miscellaneous nuts and bolts  
Installation drawings



**Note:** On all upgrades or conversions, it is highly recommended that you update your machine with current safety standards using perimeter guarding, safety warning devices, safety lock-out disconnects, and warning beacons. Proportional Valve conversions are designed for Loader/Unloader towers with mechanical #: 307.210. & .218. series, (UL20, UL26 & UL37).

For more information on Columbia's Conversion Kits  
please visit [www.columbiemachine.com](http://www.columbiemachine.com) or call us at **1-360-694-1501** x573