

SUBJECT

## Installation Tips on the LO-21 / LO-21S

January 13, 1999

INSTRUCTIONS

1. Connect RED and BLACK wires to motor leads. On Gyrotech 300/400 or Horton 4160 controls, connect the RED and BLACK to the coil of the activation relay.
2. Connect ORANGE and BROWN wires to 24 VAC. If using DC Voltage for power, connect BROWN to positive and ORANGE to NEGATIVE.
3. Set meter to DC scale. Connect meter leads to LO-21/LO-21S data lines: positive to RED/WHITE stripe, and negative to WHITE.
4. Readings should be as follows:

Door Position	VDC Readings
Closed	0
Opening	12
Back Check	12
90 Degrees	12
Closing Sweep	7

\* If voltage drops at 90 degrees on a Stanley or Besam door, turn up stall or hold voltage until 12 VDC is achieved.

5. When the door reaches the closed position, voltage should again be 0 VDC.
6. Complete wiring as prescribed in manuals.
7. For the LO-21, Red LED should come on and stay on during complete closing cycle. The Green LED is safety beam identification.
8. For the LO-21S, the Red LED should only come on when presence is detected in the door CLOSED position. The Green LED should only come on when presence is detected in the door OPEN position.
9. For Low Energy door applications, the LO-21 should be used when a lockout is required. The LO-21S should NOT be used on Low Energy doors, especially those that can or will be used manually (the manual operation will cause the Bodyguard/DK-12 to activate the doors once moving, similar to "push and go").
10. Keep in mind that the **LO-21BG** Lockout is only compatible with Bodyguards manufactured before the programming change (**serial numbers of less than 10000**). Any LO-21BGs you have in stock should also be returned to B.E.A. in order to get a standard LO-21. Call B.E.A. for a return authorization number.

If after troubleshooting a problem, a satisfactory solution cannot be achieved, please call B.E.A., Inc. for further assistance during Eastern Standard Time at  
**1-800-523-2462 from 7am - 5pm or 1-800-407-4545 from 5pm - midnight & weekends.**

**DO NOT** leave any problem unresolved. If you must wait for the following workday to call B.E.A., leave the door inoperable until satisfactory repairs can be made. **NEVER** sacrifice the safe operation of the automatic door or gate for an incomplete solution.