Instructions
Long Ranger Multi Gate Switch System

System Components:
- #LRS110 (110V) or LRS220 (220V) Long Ranger Multi Switch Relay
- #LRGATE - Aluminum Super Gate with Switch
- #LRW100 - 100ft Spool of 22gauge wire
- Bag of connectors and wire nuts

Starter Sets:
- #LRMSET110 - for 110V Collectors. Includes 1 ea of all of the above with Multi Switch Relay #LRS110
- #LRMSET220 - for 220V Collectors. Includes 1 ea of all of the above with Multi Switch Relay #LRS220

How the system works:
The Long Ranger Multi Switch system is designed to turn on your dust collector when you open the blast gate to a woodworking machine. The switches on all of your shop's Super Gates are wired to the Multi Switch Relay in parallel so that when any of your gates are opened, the dust collector turns on. If several gates are opened, the dust collector will not turn off until the last gate is closed. The switches in the system activate a low voltage relay that turns on a 110 or 220 dust collector. Because of the low voltage, thinner wire can be used to wire the blast gates to the relay, which poses no threat of electrical shock.

The system has extra flexibility since the dust collector can be activated by closing the circuit in any manner. For example, if you connect a 2 wire toggle switch to the relay and run the wires to the other side of your shop, this can be used as a manual remote on/off switch for your dust collector. As many of these switches may be added to the circuit as you want (remember, all switches and blast gates must be closed before the dust collector is turned off). With parallel wiring, you can connect the wires to the Relay Terminals in several ways as shown.

Notes:
- Relay is activated by low voltage so wiring can be light gauge (22 gauge supplied) polarity not critical.
- Connections can be made with wire nuts.
- Closing the circuit between the Relay terminals will activate the Dust Collector.
- Switches on gates are low voltage, normally opened.
- A single wire may be run around the shop and tapped into at points close to the gates in use.
- Extra gates, wire and relay may be purchased separately.
- Use LRMS110 110V relay to turn on 110V Dust Collectors (up to 1- 1/2HP).
- Use LRMS220 220V relay to turn on 220V Dust Collectors (up to 2HP).