

MultiDrive Safety Guide LSG01.20.22

The AutoSlide MultiDrive system has several built-in and included safety features. Additional variations of safety sensors for different applications are also available separately. Understanding and employing these redundancies in tandem with using the correct activation methods ensure safe operation for every application.

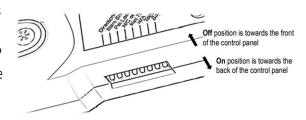
SAFETY REVERSE

All Autoslide systems (Autoslide, MultiDrive, AutoSwing) have a built-in safety reverse. This is based on resistance to the motor from pushing against objects in the door's path of travel. This feature detects:

- Inability to start opening the door from the closed position (e.g. door is manually locked closed when system is activated)
- Inability to close the door at any point while closing (e.g. object or person is in the door opening as it is closing)

Note that this does not detect an obstacle in the opening path after the system has successfully started opening the door. Usually, for sliding doors (which slide open over a wall or another panel), this is not needed.

Normally, the safety reverse feature will engage after approximately 10-15lbs of pressure on the obstacle. However, this is greatly impacted by the sliding panel's size/weight. On a **lightweight** door, it is highly recommended that **DIP switch #5** be turned **on** to reduce power to the motor by 75%. This lowers the threshold before safety reversal engages. Reprogram the system afterwards and test to ensure the MultiDrive has enough power to move the door.



SAFETY SENSORS

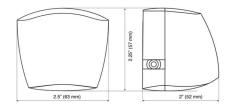
The Pet Sensor port on the MultiDrive doubles as a safety sensor input. When the door is in any mode except Pet Mode, a trigger to Pet Sensor while the door is closing will cause it to immediately reverse open. This only reverses the door while it's closing; it will not open the door from the closed position (unless in Pet Mode).

If hardwired pet sensors are being used in addition to safety sensors, Y-splitter cables (which allow you to feed multiple inputs into a single port) are available upon request.

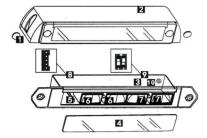
The Stacker Sensor port on the MultiDrive also doubles as a safety sensor input for the opening motion. When the door is in any mode except Blue Mode, a trigger to Stacker Sensor while the door is opening will cause it to immediately stop.



Every MultiDrive system includes a set of safetybeam sensors. These work via a wireless emitter and hardwired receiver. The hardwired receiver plugs directly into a sensor port. The emitter and receiver are mounted at opposite ends of the door.



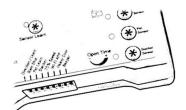
Autoslide Infrared Sensors (available separately) shoot out a beam that detects a heat source in front of the sensor. These sensors connect wirelessly or are hardwired. The sensor would mount at the side of the door opening looking across or at the top of the door opening looking down.



The Autoslide Safety Curtain (available separately) is a third safety option that can be used with the MultiDrive. It is mounted at the top of the door opening, and reads any heat source in a rectangular area of detection. This is hardwired into a sensor port.

The Autoslide sensor used for regular activation can also play a role in ensuring safe operation for the user.

- For wheelchair applications,
 - o RFID proximity tags are highly recommended as they keep the door open for as long as the tag is in range.
 - o If instead using motion sensors, it is highly advised to set the OpenTime dial to just below the maximum setting. This will allow the system to automatically close 24 seconds after activation ends, giving the user enough time to traverse through the door.
 - o If instead using a remote or button, it is highly advised to set the OpenTime dial to the maximum setting. This sets the MultiDrive to toggle the door open and closed (one activation opens the door, another activation closes the door).



OpenTime dial located on control panel



Autoslide RFID iOpen Smart Tag Set

- For pet applications,
 - All of our pet sensors (RFID proximity tag, IR sensor, pressure mat) continually activate the MultiDrive to keep the door open while a pet is by the door.
 - The RFID tag will keep the door open for as long as the tag is in range, but the IR sensors and pressure mats may have a very thin blind spot directly under the door opening (between the inside and outside). For this reason, RFID tags are especially recommended for applications with small dogs.

GENERAL OPERATING PROCEDURES

Regarding general operation for any application,

- Do not attempt to manually force the MultiDrive open when in any mode except for Green Mode.
- Do not attempt to manually force the MultiDrive closed (unless during emergency).
- Properly maintain the door (keep track free of dirt and debris, clean and lubricate track) on a regular basis (at least once a year).
- Ensure all users are properly educated on the MultiDrive and its operating modes (user-friendly guides available).

