

# SmartRider™



Intelligent leveling technology. An industry-first in fully accessible, easy access level boarding from curb to aisle.

New Flyer developed SmartRider™ to create an unmatched accessibility experience for all passengers - enabling buses to kneel to variable heights, minimizing the slope difference between a low-floor ramp and bus floor.

SmartRider™ is available on all Xcelsior® models, in one of two configurations, SmartRider™ and SmartRider™ Plus. SmartRider™ includes basic features on the front axle. SmartRider™ Plus applies to all axle systems, lending additional features such as curb-side kneeling, high ride/low ride and platform-level boarding.

## Why SmartRider™?

The SmartRider™ system is a breakthrough in public transit accessibility, offering:

**Unmatched** accessibility.

**Increased stability** and improved sway control.

**Reduced energy consumption** and upgraded components for increased reliability and lower maintenance.

**Integrated suspension kneeling operation** with SmartRider™ ramp to facilitate single operation for accessible boarding to a defined ramp angle.

**Actively maintained ride height** on uneven road surfaces.

## Benefits of SmartRider™ + SmartRider™ Plus



### Optimized Boarding

Optimized boarding and unmatched line accessibility for all passengers. SmartRider™ and SmartRider™ Plus can achieve a 1:6 slope ratio.



### Active Monitoring

Intelligent, independent monitoring of controlled wheel positions for enhanced stability.



### Enhanced Safety

Obstruction detection enables ramp to detect an obstruction. Ramp will stop and reverse to a vertical position within the doorway.



### Intelligent Kneeling

Intelligent technology that eliminates driver decision on when and how far to kneel.



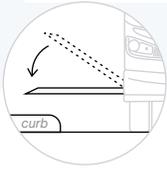
### Enhanced Reliability

Easy diagnostics and fewer parts and maintenance with reduced air spring wear, no external linkage, and easily replaceable linear sensors.

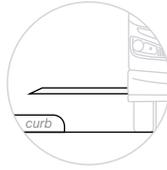


## How it works.

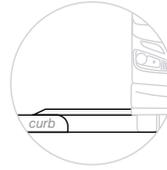
At a single touch of a button, a driver can deploy the ramp to enable the following:



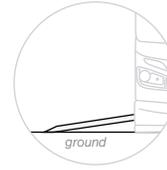
- 1** Ramp platform deploys to position parallel with entranceway floor, providing a constant slope to the interior bus aisle.



- 2** System holds platform in the constant slope position, then starts kneeling the bus via SmartRider™ suspension system.



- 3** Kneeling stops automatically when the ramp contacts the curb.



- 4** If full kneel does not achieve ground contact, then platform continues lowering until ground is reached.



## SmartRider™ vs SmartRider™ Plus

Some customization of features available.

✓ Included    ✓ Optional

Feature	SmartRider™	SmartRider™ Plus
Front Kneel	✓	✓
Curb-Side Kneel		✓
Enhanced Roll Stiffness	✓	✓
Over-Raise	✓	✓
Diagnostics	✓	✓
Platform Level		✓
High Ride/Low Ride		✓
Self-Leveling Auto Ramp Deploy	Available with SmartRider™ ramp	