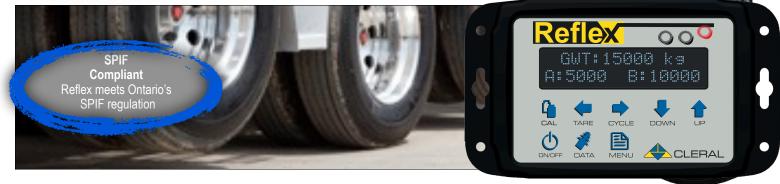
For any trailer suspension with or without auxiliary lift axle

It's a balancing act!

Reflex control is the only programable system on the market that dynamically equalizes the load on any trailer suspension.

SUSPENSION INTELLIGENT MANAGEMENT



OPTIMAL LOAD CONTROL ON AUXILIARY AXLES

Reflex control is the perfect tool to convert an ordinary suspension into a high performance suspension on semi-trailers.

CLERAL's Reflex is an innovative & intelligent device that automates the management of the auxiliary axle(s) and the control of the primary axle group, thereby increasing the performance of the suspension on a semi-trailer.

Reflex comes with several options, but its basic role is to display the weight of the primary axle group and the weight applied on the auxiliary axle of the semi-trailer.

One Reflex option is to equalize the weight applied to the auxiliary axle by regulating the pressure in its air bags. In the case of a lift axle, Reflex regulates the air pressure according to predetermined weight conditions. If the weight limit is met, Reflex will adjust the lift axle pressure to meet weight distribution regulations.

Reflex's unique position sensor, detects reverse movement of the semi-trailer in less than 20cm (8"), immediately raising the auxiliary axle to facilitate maneuvering. The sensor will also wait for sustained forward movement before lowering the lift axle, if the weight requires it.

When backing up an output on Reflex will block the SSA (self steering axle) aligned to the other wheels of the semi-trailer to facilitate various maneuvers.

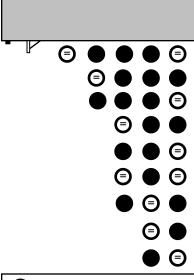
It is possible, from within the cab, to raise the lift axle if the vehicle is traveling less than 60 km/h (37 mph). This function is done without adding any switch or wired link.

The Reflex electronic control valve replaces existing pneumatic suspension valves in a single device. It controls the height of the chassis of the semi-trailer with superior accuracy. This has the advantage of displaying the weight with much more precision than with a traditional valve.

The valve response time is such that Reflex actually recuperates air from the suspension thus prolonging the compressors life cycle.

Safety is also taken into consideration with Reflex. The «pilot» option integrates the lateral management system to stabilize your trailer in various road conditions in both static and dynamic ways. This is even more apparent when turning onto highway exits and in turn pikes.

Reflex can transmit the trailer weight to Cleral's Sentinel PS3 hand held unit in the cab allowing the operator to manage the weight of the tractor and the semi-trailer. The operator can also use the Sentinel to lower the height of the semi-trailer chassis to fit the height of a loading dock, for example.





Auxiliary axle with load distribution Primary axle

ADVANTAGES

- Load distribution
- Weight display
- Automation of the axle
- Improve road handling
- More efficient braking
- Reduce tire wear
- Maneuverability in difficult terrain
- Load optimization
- No manual intervention
- Stress reduction