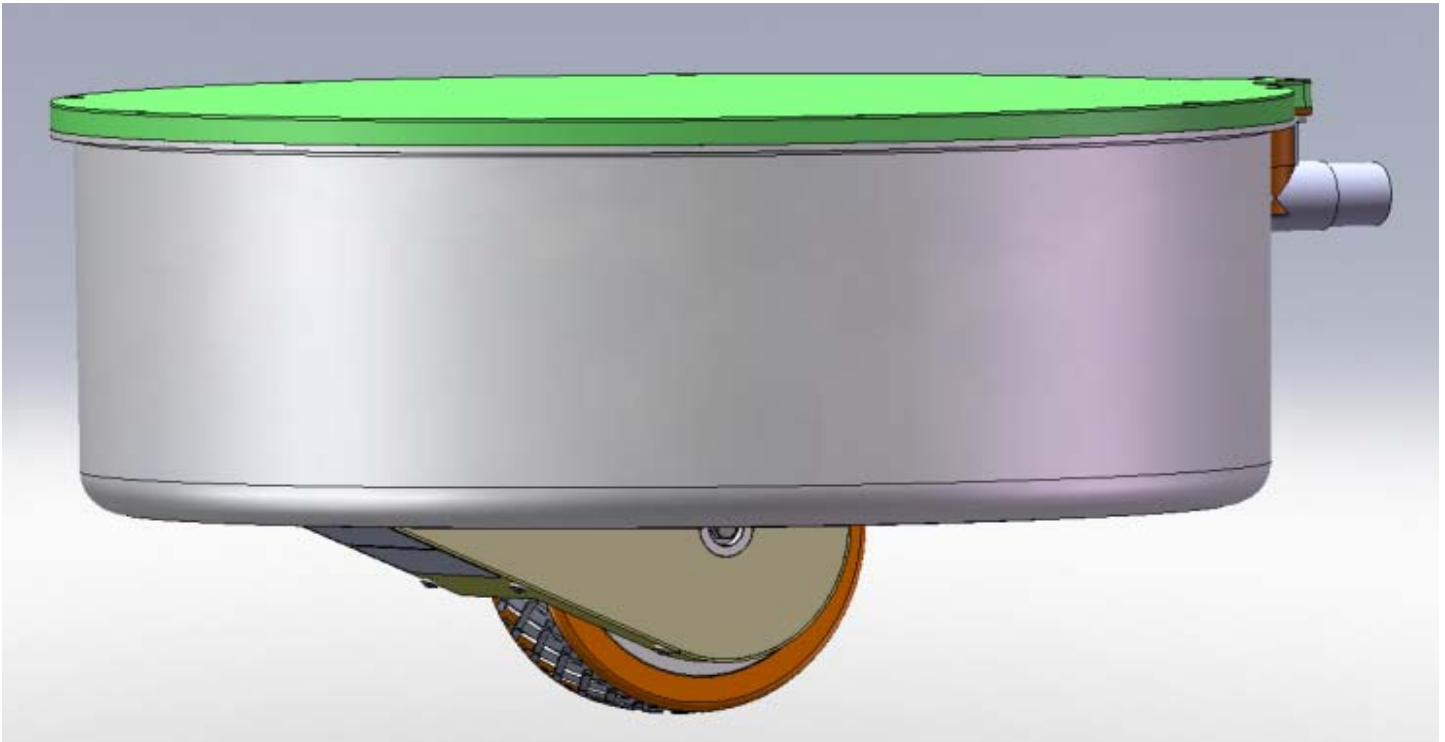


# Working with ease...

"Zero-Effort-Driving" with CompassDrive Assistive Drive Technology

Add Power Drive to Your Business

**Let CompassDrive do the hard work!**



Get rid of dangerous push and pull tasks

- Avoid back and knee injuries
- Increase your efficiency
- Improve your work environment
- Move 750kg at the push of a button

CompassDrive is easily mounted on all types of carts like food trolleys, linen trolleys, OP tables etc. - nearly anything on wheels can be moved easily and safely.

**MATERIALS**  
**Handling** *Working with ease...*  
PTY LTD

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**Australia Wide Sales and Service**

# Say goodbye to heavy pushing and pulling jobs!

Pushing heavy wheeled objects is dangerous!!



Manual handling of heavy objects on wheels is widespread in spite of increasing automation. Most lifting tasks have been motorized, but when it comes to handling wheeled objects manual pushing is still normal.



The push and pull tasks involved in manually handling heavy wheeled objects is very dangerous and causes knee and back injuries due to asymmetrical loading of the musculoskeletal system – often ending as permanent injuries. The result is a poor work environment, low productivity and too high costs.

## Improve your efficiency and solve the problem by installing CompassDrive

The solution to back injuries and poor work environment is called CompassDrive. CompassDrive is installed beneath the wheeled object and does all the hard work. The user controls the system and drives the object with just a push of a button.

CompassDrive can drive both forward/backwards and sideways. Just push the arrow pointing the way you want to go. No more twisting and shoving in order to turn or initiate movement. This makes navigation in small rooms, elevators, and narrow corridors extremely easy. The Drive speed can be selected to match any need.



Power driven person lifter



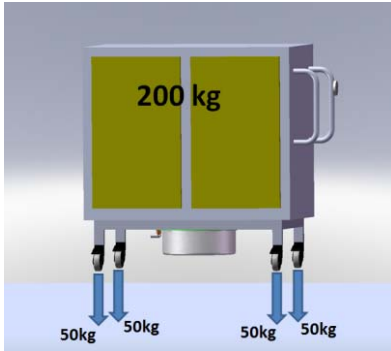
Food Trolley



Hospital Stretcher

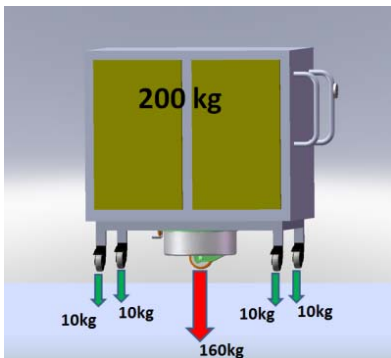
## What makes CompassDrive a unique & unparalleled system.

Here is how it works



### *Example: Driving a heavy trolley manually*

A 200kg trolley will have 50 kg on each castor. Driving the trolley means you have to overcome the friction on these wheels. This is possible when driving forward and the castors have swung into the right direction. But when you need to change direction and force the castors around, it gets difficult. The heavy load on each castor increases the forces needed to change direction. And some floor materials make it virtually impossible to do.

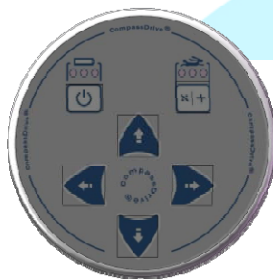


### *Example: Driving a heavy trolley with CompassDrive*

When CompassDrive is turned on, the central wheel is pushed against the floor. The system automatically adjusts the force to be 80% of the total trolley weight. When pushing a drive arrow, CompassDrive will supply the force necessary to drive in that direction. All the user has to do is to steer the trolley - but with no force needed. With CompassDrive carrying 80% of the weight only 5% - or 10kg in this example - are left on each castor. Therefore it is extremely easy - and demands no force - to change direction and rotate the trolley.

## Driving any direction

When you push an arrow on the Man Machine Interface (MMI) control unit, the drive wheel is rotated to point in that direction. Therefore you can drive in any direction: East, West, North & South



## Retracting drive wheel allows pulling carts and trolleys in train sets

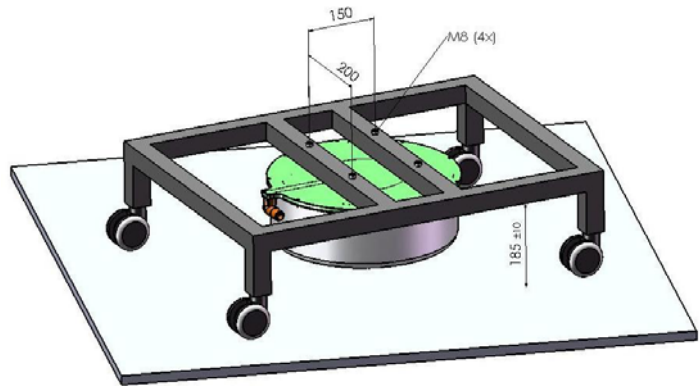
When CompassDrive is powered down, the drive wheel is retracted into the unit. This leaves the wheeled object free to be moved e.g. in train sets without the drive system being damaged.

CompassDrive is based on patented technology.

## CompassDrive is extremely easy to install

CompassDrive is installed with just 4 screws. Besides the drive motor unit all you need is an MMI, a cable set and batteries. Everything is delivered for easy "Plug 'n Play" assembly.

The simple installation means that CompassDrive can be retrofitted onto almost any wheeled object. Competitive systems require design changes to the wheeled object.



Contact one of our Application Engineers and let us help you find a solution for your wheeled objects.

## Specifications

Application:	As a 5 <sup>th</sup> wheel ideally placed at the centre of rectangular wheeled object
Drive directions:	"North, South, East, West"
Drive speed:	Programmable from 0-6 km/h. Each drive direction can be set individually
Vehicle weight:	Maximum total vehicle weight is 750 kg if driving on slopes and 1000 kg if driving only on level ground.
Dimensions:	Diameter: 400mm, Height: 140mm
Power:	Operates on 48V. Battery capacity is matched to vehicle requirements
Torque:	Has sufficient power to haul 750kg up a 6° (10%) slope.
Traction control:	The system adjusts the pressure of the drive wheel against the floor automatically depending on the total vehicle weight.
Safety features:	Comprehensive safety features in the drive software ensures controlled braking and prevents "run-away" when driving down slopes.
Man-Machine Interface:	100% intuitive "hold-to-run" MMI. From 1 to 3 MMIs per vehicle.

**See the CompassDrive in action by clicking here!**

## For more information

Please contact us via email or phone if you have any questions or need any help regarding driving heavy wheeled objects.