

Revolutionary technology:

Motorized road vehicles from
Viessmann

CAR
motion

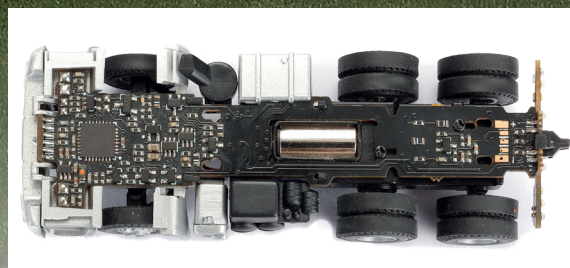


Viessmann[®]

NEW ITEM 2022



Cabin lighting
and figure



PCB serving as chassis



Tail/braking/flashing lights
and reverse lights,
Infrared transmitter

Overview of functions - basic models

As in reality, you are now able to control road vehicles electronically also in the model. After a development period of more than 4 years, it is now possible to bring the streets of the layout to life in a user-friendly way and with realistic driving behaviour, even away from the track. In all this, our vehicles are compatible with other road systems with steel or magnetic tape guidance and electromagnetic stop coils.

Look forward to a new way of setting vehicles into motion – Technology and price – simply ingenious!

Premium models with further groundbreaking, innovative solutions are currently under development. Our basic models can be upgraded to **Premium models** in the future with an expansion set.

All vehicles of the CarMotion series have the following functions:

- ▶ Charging connection
- ▶ Short charging times due to modern lithium polymer batteries
- ▶ Easy on-off switching thanks to a reed contact under the cab's roof and magic bar, telescopic magnetic bar item 8410, remote control item 8402
- ▶ Infrared transmitter/receiver for distance control (not compatible with other IR systems)
- ▶ Realistic braking resp. accelerating action and configurable speed due to speed-controlled motor
- ▶ Free cargo area due to underfloor drive unit
- ▶ Cabin lighting
- ▶ Braking and reversing lights
- ▶ Direction indicators right/left and warning lights controllable
- ▶ Low beam / high beam light
- ▶ Clear see-through driver's cab with figure
- ▶ 5-pole plug-in coupling for the connection of CarMotion trailers or semi-trailers
- ▶ Compatible with existing systems with contact wire or magnetic tape
- ▶ Control by remote control, permanent magnets in the road and electromagnetic stop coils

8000 **HO**

CarMotion basic starter set, MB ACTROS dump truck with rotating flashing lights

Consisting of MB ACTROS dump truck with rotating flashing lights item 8010, 1 charger with USB charging cable item 8400, 12 permanent magnets item 8431 and 1 magnetic bar.



Just magic!

The models can easily be switched on and off with the „magic wand“.



8010 **HO**

MB ACTROS 3-axle dump truck with rotating flashing lights, basic, functional model

This vehicle is equipped with an M cab and a tipping container.

L 8.4 x W 3.5 x H 3.7 – 6.1 cm

8210 **HO**

2-axle dump trailer, functional model

The trailer with rear lighting is equipped with a 5-pole plug-in coupling for the connection to the respective vehicle.

L 8.2 x W 2.9 x H 3.2 – 6.4 cm



Item 8210

Item 8010

Functions of the CarMotion trailers/semitrailers

By connecting to the tractor, the following functions are transferred to the trailer:

- ▶ Infrared transmitter for distance control
- ▶ Braking, rear and reversing lights
- ▶ Direction indicators right/left and warning lights controllable



8011 **HO**

MB ACTROS 3-axle articulate truck with rotating flashing lights, basic, functional model

This vehicle is equipped with an M cab.
L 8.2 x W 3.5 x H 3.7 cm



8211 **HO**

MEILLER tipper semitrailer MHKS 40/2, functional model

The semitrailer with rear lighting is equipped with a 5-pole plug-in coupling for the connection to the respective vehicle.
L 9.8 x W 2.8 x H 3.8 – 8.6 cm



8030 **HO**

MB ACTROS 3-axle articulate truck, basic, functional model

This vehicle is equipped with an M cab.
L 8.2 x W 3.5 x H 3.7 cm



8230 **HO**

MB ACTROS 2-axle concrete mixer semitrailer, functional model

The semitrailer with rear lighting is equipped with a 5-pole plug-in coupling for the connection to the respective vehicle.
L 8.5 x W 2.9 x H 4.2 cm

HINT

The trailers/semitrailers from the kibri range can be attached to all Viessmann CarMotion vehicles.
For illumination and distance control we recommend our retrofit sets, items **8420**, **8422** or **8423**.



8050 **HO**

Fire brigade MB ACTROS 3-axle with roll-off container and rotating flashing lights, basic, functional model

This vehicle is equipped with a hook roll-off construction and roll-off container as well as an M cab.
L 9.4 x W 3.5 x H 3.7 cm



8070 **HO**

THW MB ACTROS 3-axle with roll-off container and rotating flashing lights, basic, functional model

This vehicle is equipped with a hook roll-off construction and roll-off container as well as an M cab.
L 9.4 x W 3.5 x H 4.2 cm

Accessories

8400

Charger

For connection to a USB-A power supply. Recharged within ca. 35 minutes. The current charging status is indicated by the flashing of the vehicle's interior lighting.



8401

Programming device

With the programming device you can make settings of various vehicle parameters such as speed, active functions, light brightness and many more as well as software updates on your CarMotion vehicles. The user-friendly operating software (Windows/Mac) communicates with the vehicle, provides information about the charging status, the distance travelled etc. In particular, it is used for setting the desired reactions of the vehicles to the commands that can be triggered by the magnet arrangement in the roadway. Moreover, it is easy to copy configurations between vehicles.



8402

Remote control

The remote control facilitates the control of the CarMotion vehicles on the layout as well as simple settings at the vehicle. For this purpose the remote control is directed towards the front part of the vehicle. Distances of ca 0.5 – 1 m require a precise alignment of the remote control. Thus, starting and stopping a car, setting speed and other available functions at the car is possible also without the programming device. Moreover, the remote control complements the vehicle control via the magnet arrangement underneath the roadway – thus the user can carry out complex operations and has further options to intervene. With the remote control the vehicles can be switched off. A permanent magnet has been integrated to switch it on.



8410

Telescopic magnetic bar

The magnetic bar enables you to switch your CarMotion vehicles on and off on your layout even from a distance. No need to lift the vehicle from the road. Length: 12.6 – 64 cm.

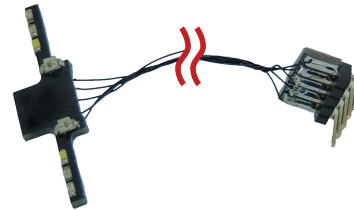


8420 **HO**

Bumper with LED lighting for trailers and semitrailers

With this set you can retrofit your trailers and semitrailers of kibri and other manufacturers to be able to use the full scope of functions of the CarMotion vehicles.

Contents: 1 bumper with 5-pole connection plug and infrared transmitter for distance control.

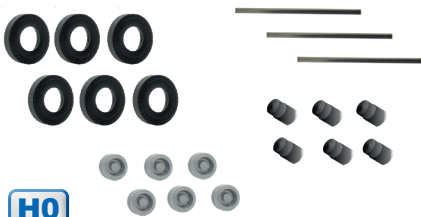


8422 **HO**

Retrofit set rubber wheels for kibri trailers and semitrailers, single tyre

With this set you can retrofit your kibri trailers or semitrailers to optimize the running smoothness and the tracking accuracy of the vehicle. This will improve the driving characteristics of the trailer resp. the semitrailer.

Contents: 6 rubber wheels, 6 rims, 3 steel axles, 6 sockets. Suitable for trailer and semitrailer with up to 3 axles and single tyres.

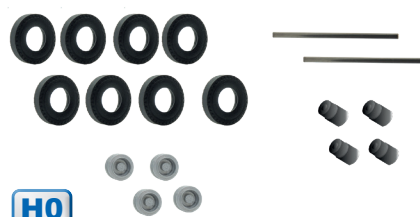


8423 **HO**

Retrofit set rubber wheels for kibri trailers and semitrailers, twin tyre

With this set you can retrofit your kibri trailers or semitrailers to optimize the running smoothness and the tracking accuracy of the vehicle. This will improve the driving characteristics of the trailer resp. the semitrailer.

Contents: 8 rubber wheels, 4 rims, 2 steel axles, 4 sockets. Suitable for 2-axle trailer and semitrailer with twin tyres.



8430

Magnetic tape, 5 m

The self adhesive magnetic tape is polarized on its surface (south pole on top). It leads the guiding magnets of the CarMotion vehicles. Depending on the type of road, it is integrated into a prefabricated road system or built into the layout plate with the help of a surface milling machine.



8431

Permanent magnets, 12 pieces








With a series of up to three magnets underneath the road stationary commands can be triggered, e. g. a speed variation or the switching of various light functions.







Ø 0.4 x H 0.5 cm



Remote control

With the remote control you can switch various functions. Below you will find an abbreviated form of the key assignment. Please refer to the manual for more detailed explanations!

Key	Function
	Switches the vehicle off (Switch on with integrated permanent magnet)
	When the key is pushed, the connection to the vehicle is confirmed by the illumination of the cabin light and the rotating beacons.
	Accelerate (in 10 km/h intervals)
	Brake (in 10 km/h intervals)
	Stops and reverses the vehicle as long as the key is pushed down.
	By pushing this key, the vehicle starts off.
	Display for battery charging level

Key	Function
	Direction indicator left
	Direction indicator right
	Switching of main lights
	Switching of high beam
	Switching of rotating beacons
	Switching of warning lights



Reed contact for switching on/off with magnet pen, telescopic magnetic bar or remote control



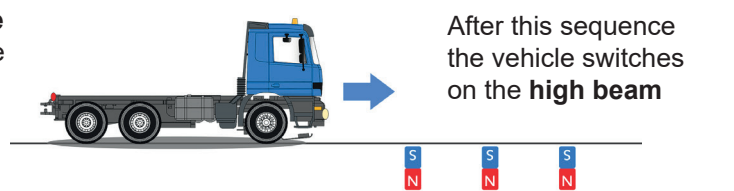
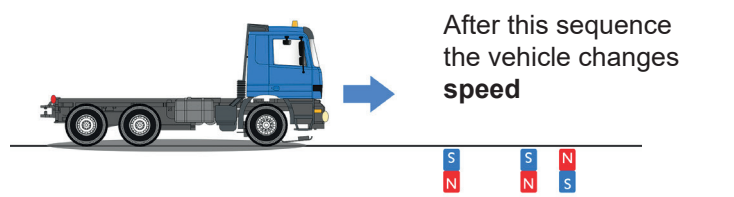
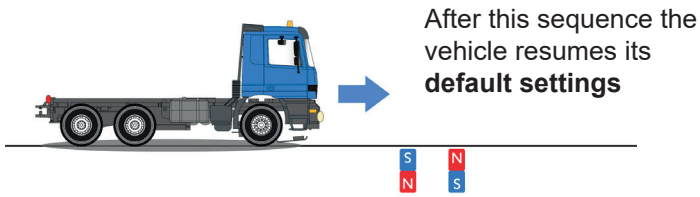
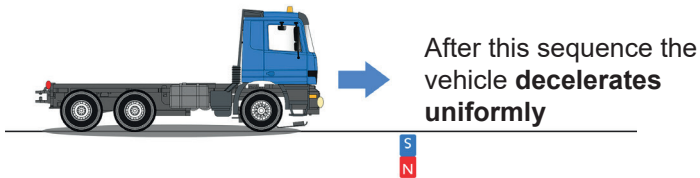
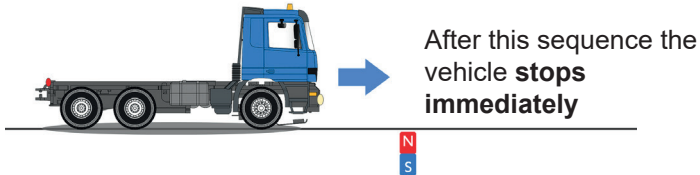
Item 8050

Default configuration of the CarMotion vehicles

By means of permanent magnets which can be embedded in the road, various special functions of the vehicles can be controlled. It is recommendable to leave a distance of 3 cm between the magnets. In case of two magnets with unequal poles, the distance can be reduced to 2 cm in order to save space.

At the factory, the following functions are assigned to these magnet sequences:

- ▶ N: Immediate stop
- ▶ S: Uniform deceleration
- ▶ S N: Cancels existing magnet commands: Direction indicators are switched off, previous speed is resumed.
- ▶ S S: Informs vehicles of a lane change for distance control
- ▶ S N N: Blinks right
- ▶ S N S: Blinks left
- ▶ S S N: Speed change
- ▶ S S S: Switch on high beam



For further magnet sequences please refer to the manual. Once a vehicle is switched off, it is de-energised.

Programming device: To change the default settings

The programming device in connection with the CarManager software are used to change the default settings.

CarManager (Windows/Mac)

Each vehicle is individually programmable. For this purpose, we provide the free software CarManager on our website. The CarManager enables the configuration of the following functions:

- ▶ Speed, acceleration, braking and lighting
- ▶ Distance control
- ▶ Function assignment of the permanent magnet sequences for each individual vehicle
- ▶ CV direct configuration
- ▶ Vehicle cloning
- ▶ Software updates
- ▶ Service data such as distance travelled

For further information and configuration options please refer to the manual of the programming device.

Default lights

- Head- and taillights
- High beam
- Roof beacons
- Turn signals, left
- Turn signals, right

Brightness of lights

- Headlights, low beam
- Headlights, high beam
- Brake lights, driving
- Brake lights, braking
- Turn signals

Magnetic commands

- N** **Immediate stop** [special settings](#)
(Common stopping coils and parking coils have a North magnetic pole at the top.)
- S** **Smooth braking** [special settings](#)
(A stopping coil mounted upside down can also be used.)
The smooth braking mode slows down the vehicle to the defined crawl speed over the given braking time. After reaching the crawl speed, the vehicle will continue driving with that speed, or if a limit is set. If a time or distance limit is reached and the vehicle still didn't encounter a stop.
- S N** Restore default driving mode and default lane
- S S** Switch to alternate lane (for infrared cruise control) braking blink for 20 cm after start
- S N N** blink to the right for cm limit speed during this km/h
- S N S** blink to the left for cm limit speed during this km/h
- S S N** change speed km/h limit duration

Excerpt from the CarManager

6

Same as with model railway systems, there are many configuration variables (CVs), by which the functionality of a vehicle can be modified and fine-tuned.

CV 6 Value 60

Default speed in km/h

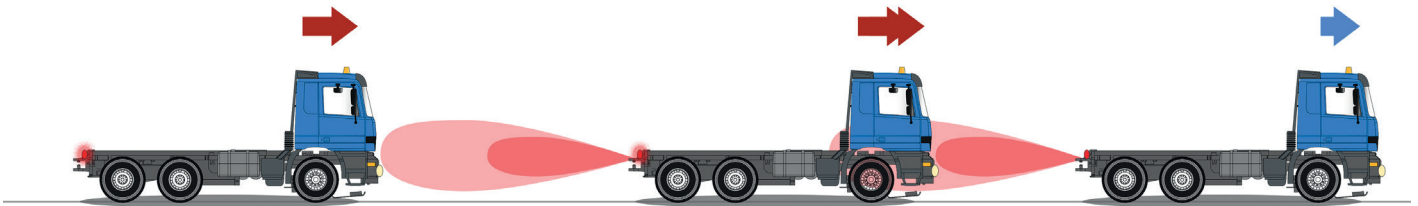
Excerpt from the CarManager

Infrared transmitter/receiver for distance control

This vehicle slightly decelerates in order to maintain the distance

This vehicle brakes harder in order to avoid a collision

This vehicle drives slowly



Compatibility with existing systems

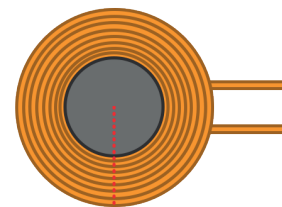
The CarMotion vehicles are compatible with most of the existing systems (routing with contact wire and magnetic tape, turnouts, stop coils, solenoid coils). Existing layouts can easily be complemented with our permanent magnets.

Currently, our IR distance control is only conditionally compatible with other systems. A corresponding update is in progress.

Centre of lane

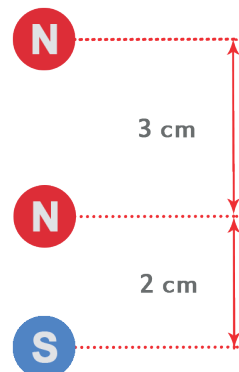


Electromagnetic stop coil



1 - 1,2 cm

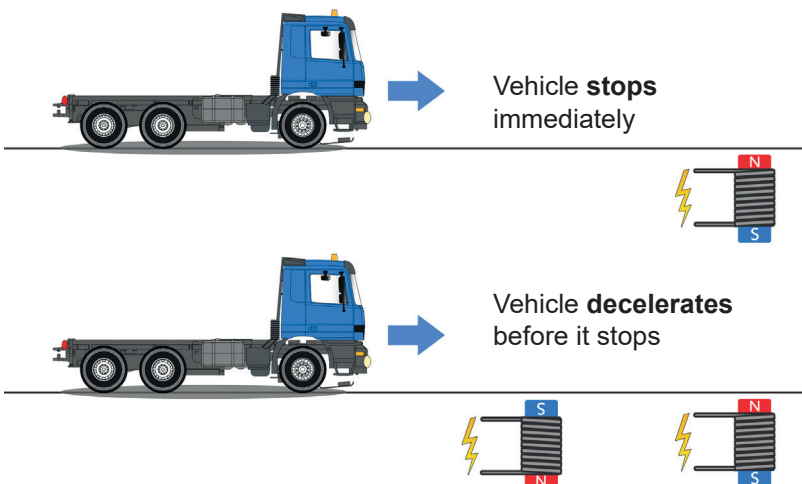
Permanent magnets, item 8431



3 cm

2 cm

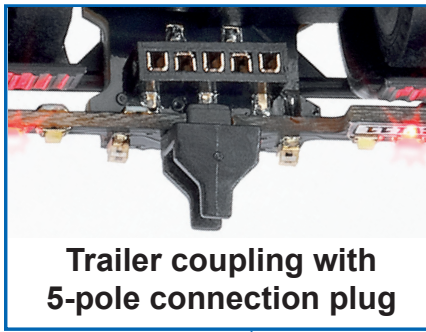
1 - 1,2 cm



Vehicle stops immediately

Vehicle decelerates before it stops

The basic cars in detail



Trailer coupling with 5-pole connection plug

Massive zinc die cast housing for motor and gearbox

Plug-in socket for charger/programming device

Precisely guided front axles allowing also reverse driving

Tail/braking/ flashing lights and reverse lights

Infrared transmitter for distance control

Hall sensor for magnet detection in the road

Infrared receiver for distance control and operation with remote control



Rotating flashing lights yellow or blue

Cabin lighting and figure

Infrared receiver for distance control and operation with remote control

Direction indicators

Headlights with low beam and high beam light

