

RADIO

KIMAX 2 mixed



Radio Set includes:

Kimax 2 radio 1 SG + 1x2 air
Part number 033200-01D1

1 x display unit, cabin
1 x mounting frame + connection cable
2x angle fittings and air pressure throttle
2x T-fitting dia. Ø 8mm / 6mm / 8mm
additional you must purchase SG sensor and gluing kit

Kimax 2 radio display and Kimax 2 sensor 1SG+ 1x2 air
Part number 030000-0140

1 x display unit, cabin
1 x mounting frame + connection cable

Part number 053200-01B1

2x angle fittings and air pressure throttle
2x T-fitting dia. Ø 8mm / 6mm / 8mm
additional you must purchase SG sensor and gluing kit

- **Current total load for the entire vehicle ***
- **Total weight per tractor/trailer ***
- **Current load on all individual axles**
- **Payload for the entire vehicle ***
- **Payload per tractor/trailer ***
- **Alarm for overload on individual axles**
- **Alarm for gross weight**
- **All weights is displayed in tonnes**

Kimax 2 Radio fits your DIN slots

And offer you a load control of you vehicle, either as a solo instrument including build in air sensors and interface for SG Sensors, or as a display unit only, which needs contact to one or more Kimax 2 Sensors through the power line device bus, which can act on the existing electrical system on your vehicle.

- Kimax 2 calculates the current loads from the current air pressure in the suspension system and displays this figure as a three-digit value.
- The Kimax 2 On-Board Load Control is an electronic weighing system which can be used in all vehicles whose axles or axle groups are equipped either with air suspension system or steel spring suspension system.
- Due to the modular construction, the product is very flexible and can be individually adapted to most vehicle conditions.

.... and warns when limits are exceeded.

Kimax 2 has two separately adjustable alarm levels. Exceeding alarm level 1 is indicated by a flashing diode for the individual axle which has exceeded its limit.

Alarm 2 switches in an internal electronic "relay" when the total weight for the vehicle is exceeded. The relay signal can be used as ON/OFF input for another unit, for example a tracking GPS or a tachograph.

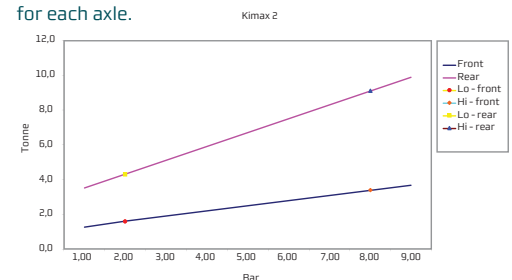
Kimax 2 helps to achieve economical transportation, avoids fines and simultaneously optimizes the cargo weight.

Axle load measurement

Kimax 2 uses the linearity between strain in the front axle and load of the axle

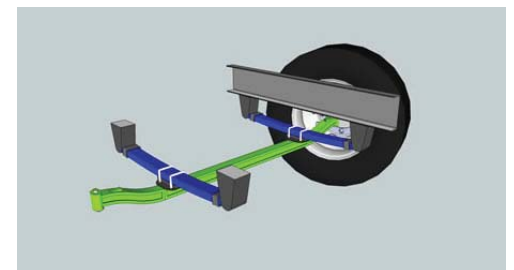
For the rear axle group Kimax 2 uses the linearity between air pressure and load of the single axles.

By using two reference points for each axle (empty weight and weight at maximum load) and the currently measured air pressure, Kimax 2 calculates the current axle load with an accuracy of 2 % of the maximum load for each axle.

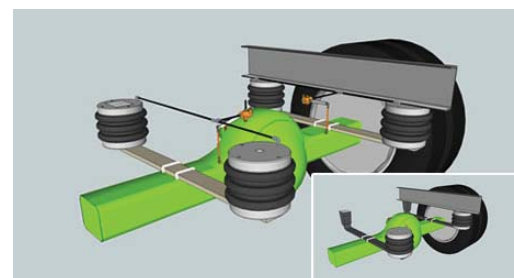


Basic operation

The strain in the front axle will increase lineary with the load above the axle.



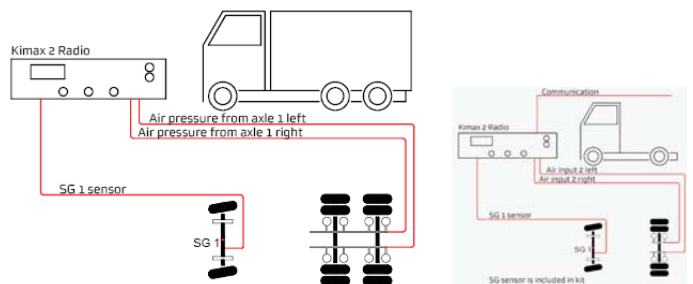
Depending on load of the vehicle, the level valve maintains a constant height of the chassis above ground surface by regulating the pressure in the bellows.



2/3-axle - less expensive system for best accuracy

Air tubes are routed into the cabin

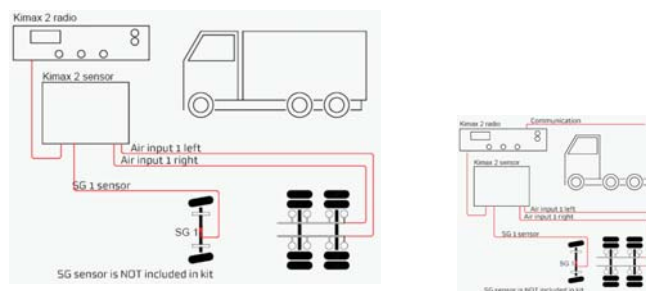
1SG sensor for the front axle and 2 air sensors for rear axle offer you the best accuracy. The influence of inclination or slightly uphill/downhill standing is partly compensated in this configuration, as well as weighing accuracy is unaffected on the distribution of goods loaded on the vehicle.



3-axle - easiest to install for best accuracy

No air tubes inside the cabin

1 SG sensor for the front axle and 2 air sensors for rear axle are connected to Kimax sensor box on the chassis. Sensor box communicate weight data with Kimax display inside the cabin.



Air circuits and sensors

On all vehicles you get optimal accuracy with two independent air inlets for each axle, one for each pneumatic circuits (right and left) per axle or axle group on air suspended axles, Kimax 2 calculates the current axle load on each axle from two reference values LO and HI.

- When less accuracy is enough for you, one air inlet on each axle or axle group is available too.
- Using a single SG sensor on a front axle typically offer you the same accuracy compared with an front axle with air suspension.

Optional versions:

Kimax 2 is exactly as flexible as your vehicle:

- Do you have a tractor equipped with air suspension on both front axles and rear axles combined with a lift axle? No problem!
- Do you have a truck with 2 front axles equipped with steel springs and two rear axles divided in left hand and right hand air circuits? No problem!
- Do you want to couple a trailer or semitrailer on the above vehicles? No problem!
- Do you want to couple a low bed trailer equipped with hydraulic suspension on a tractor equipped with air suspension? No problem!
- Do you want to swap from one trailer to another trailer? No problem!
- Individual calibration values are stored in the Kimax unit on each vehicle.

Associated units

- Kimax 2 Radio are able to communicate with both Kimax 2 Universal and Kimax 2 Sensor as input devices.
- Kimax 2 output units is RS-232 thermal printer or 433 MHz Wireless terminal.
- Visit www.kimax.com for more details and informations.

Technical Specifications

Supply voltage	10 ... 30 Volt direct current
Current consumption	max. 90 mA
Alarm 1	Flashing display
Alarm 2	output open collector NPN max. 0.2 A/ 50 VDC
Display	Three-digits 7-segment LED, character height 20.3 mm
Measuring accuracy	± 2% of maximum load at 0 °C - +50 °C
Air connection	Quick release connection, 6 mm hose
Maximum pressure	15.5 bar (225 psi)
Operating	pressure range 0 to 10.5 bar
SG Sensor	0-20 mA input
On-board Computer	RS-232 serial
Printer	RS-232 serial
Device bus	Power line communication
Operating temperature	-25 °C...+70 °C
Storage temperature	-40 °C...+70 °C
Dimensions	182 x 53 x 75 mm
Weight approx.	550 g
Approval	CE and E1

☐ KIMAX 2

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