# Corival

Can be controlled by all known Cardio Pulmonary Exercise devices





## Highlights

#### Reliable and reproducible stress tests

The experience of professionals who calibrate many ergometers has learned that the Lode ergometers are the most reliable over the complete workload and rpm range and still within specifications even after many years of intensive use.

#### High standards

Lode is a social and environmental responsible company. All Lode products are RoHS/WEE compliant. Furthermore, Lode is ISO 9001:2003, ISO 13485:2008 and FDA 510K certified. All products comply the MDD 93/42/EEC standard, including IEC 60601-1.

#### Rotatable handlebar

The handlebar can be rotated 360 degrees and is constructed in such way that the test subject can be installed comfortably at every seating height. This design makes a height adjustable handlebar redundant.

#### Various test modes

Besides the mostly used hyperbolic (rpm independent) mode, the standard control unit gives the possibility to test in various other modes like fixed torque and linear. These modes can be used in both manual and terminal mode.

#### Q-factor equal to roadbike

The Q-factor of the ergometer is equal to the Q-factor of road bikes, enabling perfect training circumstances.





## **Corival** Can be controlled by all known Cardio Pulmonary Exercise devices



The Corival is one of the most popular ergometers worldwide. The low start-up load of 7 Watt is unique. The Corival can be controlled easily by all known stress ECG and pulmonary devices in the world. The Corival has an eddy current electro-magnetic braking mechanism. The biggest advantage of this system is the accuracy which is one of the most important Lode principles. With this ergometer, the stress tests performed are reliable and reproducible. The workload is adjustable in a range of 7 to 1000 watt. Moreover, the noise level is reduced to a minimum. Easy transportation of the device is possible by a simple retractable wheel.

Available as long as stock lasts

### Features



#### Compatible with ECG and pulmonary devices

The Lode ergometers have both analog and digital interfaces and can be controlled easily by all known stress ECG and pulmonary devices available in the world. This is one of the reasons why the Lode ergometers are very popular worldwide.



#### Extreme low start up load

The extreme low start-up load of 7 watts and the adjustability in small steps of 1 watt make this ergometer perfectly suitable for many different applications. The standard control unit shows multiple ergometry parameters and you can determine your specific default setting and start-up menu.



## Low noise

Due to accurate manufacturing and the careful choice of materials the product has an extremely low noise level



#### Accurate over a long period of time

The Lode ergometers are supplied with an electro-magnetic braking mechanism of Lanooy (eddy current). The biggest advantage of this braking system compared to a friction braking system is the absolute accuracy and the accuracy over time. Moreover, friction braking systems have more wearing parts.



#### Small adjustment steps

The workload of the Lode ergometers is adjustable in steps of only 1 watt. Depending on your wishes, the test operator or the test subject can adjust the workload. The steps of 1 watt are possible in the manual mode as well as within protocols.



#### Easy step-through

The ergometer has a comfortable step-through: a must for people who are not so mobile!

#### RS232 connectivity

RS232 ports enable connectivity to most ECG and ergospirometry devices as well as PC's



#### Service friendly ergometer

Lode ergometers are very service friendly. In general, total costs for spare parts are so low that they are negligible. Furthermore, most options are so easy to install and firmware is so easy to update that labor costs are minimal. Moreover, the ergometer can be cleaned easily.

#### LEM compatible

This product can be used with Lode Ergometry Manager (LEM) software to manage data and to apply specific protocols when a Communication card or Network card is present

#### LCRM compatible

This product can be used with Lode Cardiac Rehabilitation Manager software (LCRM)



## **Corival** Can be controlled by all known Cardio Pulmonary Exercise devices



The Corival can a.o be extended with the following options:



## **Related products**



NDARD IN ERGOMETRY

## **Corival** Can be controlled by all known Cardio Pulmonary Exercise devices



## **Specifications**

Workload			User Interface		
Minimum load	7 W		Readout Distance	yes	
Maximum peak load	1000 W		Readout RPM	yes	
Minimum load increments	1 W		Readout Heartrate	yes	
Maximum continuous load	750 W		Readout target HR	yes	
Hyperbolic workload control	yes		Readout Energy	yes	
Linear workload control	yes		ReadoutTorque	yes	
Fixed torque workload control	yes		Readout Time	yes	
Maximum rpm independent constant load	150 rpm		Readout Power	yes	
Minimum rpm independent constant load	30 rpm		Set Display	yes	
Optional heart rate controlled workload	yes		Set Resistance	yes	
Electromagnetic "eddy current" braking system	yes		Set P-Slope	yes	
Dynamic calibration	yes		Set Mode	yes	
Power range at maximum rpm (maximum)	1000 W		Manual operation mode	yes	
Accuracy			Preset protocol operation mode	yes	
Workload accuracy below 100 W	3 W		Analog operation mode	yes	
Workload accuracy from 100 to 500 W	3 %		Terminal operation mode	yes	
Workload accuracy from 500 to 1000 W	5 %		Selfdesigned protocol operation mode	yes	
Comfort			Connectivity		
Handlebar adjustment angle	360 °		Analog connector	yes	
Q-factor	180 mm		Dimensions		
Adjustability range seat	300 mm	11.8 inch	Product length (cm)	115 cm	45.3 inch
Minimum leg length user	645 mm	25.4 in ch	Product width (cm)	60 cm	23.6 in ch
			Product height	114 cm	44.9 inch
			Product weight	52 kg	114.6 lbs
			Allowed user weight	160 kg	352.7 lbs
			Power requirements		
			115 V AC 50/60 Hz (138 VA)	yes	
			230 V AC 50/60 Hz (138 VA)	yes	
			Standards & Safety		
			IEC 60601-1:2005	yes	
			ISO 13485:2003 compliant	yes	
			ISO 9001:2008 compliant	yes	
			Certification		
			CE class Im according to MDD93/42/EEC	yes	
			CTüVus according to NRTL	yes	
			CB according to IECEE CB	yes	

#### Order info

Partnumber

906900

\*Specifications are subject to change without notice.



Lode B.V. Zernikepark 16 9747 AN Groningen The Netherlands Tel: +31 50 5712811 Fax: +31 50 5716746 E-mail: ask@lode.nl Internet: www.lode.nl