



System for controlling construction machinery

MC-1D

The universal laser solution
for dozers, excavators, wheel-loaders

Savings on material
Savings on material

Simple and quick installation
assemble / disassemble, transfer

No corrections, no digging
less risk of human error

Work comfort
signal transmission
to the cabin display



Measurement solutions
for construction

NIVEL
SYSTEM

System for controlling construction machinery MC-1

Fast, precise and economical control of the machine operation

The system consists of the laser sensor that receives a signal from the rotating laser. The system uses LED indicators, which inform the operator about the current height at which the working element has to be set (excavator's bucket, dozer's blade). This information will also appear on the cabin receiver (RD-1MC), which performs the functions on a display. The set is configured in this way, which allows quick and efficient execution of the earthworks and the need to control measurements.

The system works with the rotating laser with a red beam. The laser is set on the axis of the road, pitch and the square (on its outskirts), which allows you to determine the slope of plane without having to move the laser. The machine operator of the Nivel System lasers, can change the instruments settings remotely by using a remote control.

EXCAVATOR SYSTEMS DOZER SYSTEM

MC-1D **MC-1D** **MC-1D**
LIGHT MAGNETS CLAMPS

Operating modes accuracy	accurate ($\pm 10\text{mm}$), coarse ($\pm 20\text{mm}$)	
Receiving range	250 mm, 360°	
Type of received beam	laser (red)	
Fixing system	magnet mounts	clamps
Cabin display	no	yes
Power supply	7,2V Ni-MH (2500mAh)	
Working time	40 hours	
Charging time	15 hours	
Operating temperatures	$-20^{\circ}\text{C} \sim +50^{\circ}\text{C}$	
Protection class	IP 54	
Dimensions	280 x 280 x 130 mm	
Weight	5,5 kg	

Included

MC-1D - the machine sensor with the built-in rechargeable battery

MC-RC1 - the cabin display (not applicable for MC-1D Light)
- not applicable for MC-1D Light

the cable connecting the sensor with the cabin display (10m)
- not applicable for MC-1D Light

the cable for connecting the power supply (12V / 24V clamps)
- not applicable for MC-1D Light

the charger

How does the Nivel System MC-1D laser system work?

The rotating laser emits the laser beam invisible to the eye but it is received by the **MC-1D** sensor. The beam is spinning around a vertical axis with a speed of several hundred rpm - creates the horizontal or the inclined plane (in one or two directions). This laser plane (which can be precisely set on the laser control panel) becomes the reference plane for the sensor installed on the machine. The operator (while digging) observes the indications of colored LEDs on the sensors. LEDs indicators show the current position of the bucket relative to the reference laser plane and give the simple messages: „move down the bucket or the blade“, „move up the bucket or the blade“, „keep it on this level“. This information is also presented in the operator's cabin via the Nivel System **MC-RC1** display.



Your local distributor