

# **FMR 800-M/C**

MASCHINENEMPFÄNGER MACHINE CONTROL RECEIVER CELLULE GUIDAGE D'ENGIN



#### Dear customer,

Congratulations and thank you for choosing this *geo-FENNEL* product.

The FMR 800-M/C is a quality product that has been designed and manufactured to provide many years of precise and reliable use when used according to these instructions.

For optimum performance and safety, please read this user manual carefully and retain for future reference.

#### geo-FENNEL

Precision by tradition.

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#### **FUNCTIONS AND FEATURES**

- Machine control receiver FMR 800-M/C used with construction machinery to increase accuracy and boost productivity.
- · For continuous tilt and height control
- · Bulldozer: Blade tilt and height control
- · Excavator: Bucket tilt and height control
- · RF communication link to the remote display
- · Connectivity:
  - Magnetic connection directly to the machine
  - Clamp connection to the machine mast
  - Magnetic support (optional) for use on Excavator Arm or Bulldozer mast
- · Remote display FRD 807 (optional)
- · Connectivity:
  - integrated magnetic strips
  - strong suction pad for cabin windscreen

#### **Technical Specifications**

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FMR 800-M/C	
Beam reception angle	360 °
Detectable laser speeds	300 – 1200 rpm
Accuracy	
Bulldozer - mode	
· Blade tilt; fine / standard / coarse	±0,5 ° / ±1,5 ° / ±2,5 °
· Height indication; fine / standard / coarse	±2 mm / ±5 mm / ±15 mm
Excavator - mode	
· Bucket tilt; fine / standard / coarse	±0,5 ° / ±1,5 ° / ±2,5 °
· Height indication; fine / standard / coarse	±2 mm / ±5 mm / ±15 mm
Power supply	NiMH 3500 mAh
Working range with a class 2 rotating laser	250 m
Working range with a class 3R rotating laser	350 m
Battery charging time	4 - 5h
Automatic power off	60 min.
Dust / water protection	IP 66
Temperature range	-10°C - +50°C
D	
Remote display FRD 807	

Remote display FRD 807	
Wireless (RF) communication range	10 m
Communication channels	3
Power supply	4x AA Alkaline batteries

# **SUPPLIED WITH**

A

Machine control receiver FMR 800-M/C-SET, Art.Nr. 264550 built-in rechargeable battery, charger, remote display FRD 807 with suction pad and batteries, hard carrying case

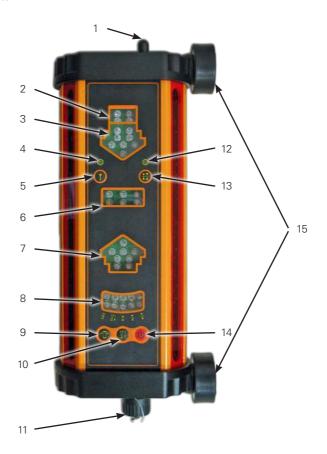
Machine control receiver FMR 800-M/C, Art.Nr. 264500 built-in rechargeable battery, charger, hard carrying case

Remote display FRD 807, Art.Nr. 264540 with adjustable suction pad mount and batteries

# **B** FEATURES FMR 800-M/C

- 1. Antenna for radio transmission to remote display FRD 807
- 2. Bucket dipping motion LED, excavator mode only
- 3. Elevation LED "down" all modes
- 4. Radio transmission LED
- 5. Radio transmission button
- 6. On-Level LED all modes
- 7. Elevation LED "up" all modes
- 8. Plumb indication LED's "left/level/right", bulldozer mode only and Battery status indicator

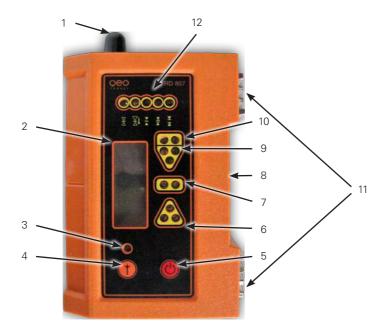
- 9. Bulldozer mode button
- 10. Excavator mode button
- 11. Charging socket
- 12. Accuracy LED
- 13. Accuracy button
- 14. Power On/Off
- 15. Shock absorbing mounting pads



# **FEATURES FRD 807**

- 1. Antenna for radio transmission
- 2. LCD Display
- 3. Radio transmission LED
- 4. Radio transmission button
- 5. Power On/Off
- 6. Elevation LED "down" all modes
- 7. On-Level LED all modes
- 8. Battery compartment
- 9. Elevation LED "up" all modes
- 10. Bucket dipping motion "fast" LED, excavator mode only

- 11. Magnetic strips
- 12. Plumb indication LED's Bulldozer mode only



### POWER SUPPLY FMR 800-M/C

The Machine control receiver FMR 800-M/C is powered by an internal NiMH rechargeable battery.

Charging the NiMH Rechargeable battery:

Connect the battery charger to a suitable AC outlet and the charging socket on the receiver.

The battery charger LED displays the charging status:

Permanent red light indicates that the battery is charging.

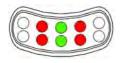
Permanent green light indicates that the charging process is completed.

The maximum operating time with a fully charged battery is between 40-45 hours.

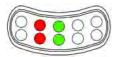
The charging time is between 4-5 hours.

#### Battery status indicator:

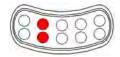
The rechargeable battery status is displayed when you power on the device



80-100% Full power



30–79% Power



5–29% Very low power, recharge NiMH battery pack

# **POWER SUPPLY FRD 807**

The remote display FRD 807 requires 4 AA alkaline batteries.

#### Changing the batteries:

Remove the battery compartment cover (one screw) and remove the batteries. Insert new batteries and follow the battery compartment symbols to ensure the correct polarity. Replace the battery compartment cover.



### CONNECTION TO CONSTRUCTION MACHINERY FMR 800-M/C

Magnetic connection directly to the machine, e.g. to the excavator arm or clamp connection to the machine mast (mast diameter 40-50 mm).

Replacing the clamps with magnets



Remove the nuts and washers that secure the clamps to the mounting pads.

Screw the magnets onto the mounting pads (clockwise) and secure with the locking grubscrew.



# **CONNECTION TO CONSTRUCTION MACHINERY FRD 807**

- Integrated magnetic strips allow a connection to metal surfaces in the cabin.
- A strong suction mount for fixing to a windscreen.

Exchanging magnetic mount / suction pad



The suction pad is connected to the FRD 807 by a magnetic mount.

Attach the suction pad to the cabin windscreen. Press the suction pad to the window and turn the locking mechanism clockwise (to remove turn anti-clockwise)

All FMR 800-M/C display functions are transferred to the FRD 807 remote display by RF wireless transmission.

All functions can be observed by the machine driver, even if the receiver is out of sight.