

We control the future

TH-EC40/LO

Remote Controls for Shunting Locomotives



CATRON
*theimeg*TM

TH-EC40/LO Remote Controls for Shunting Locomotives

The radio control system TH-EC40/LO consists of a transmitter, a receiver as well as various accessories, and is suitable for controlling all types of shunting engines and rolling stock. Because of the high safety requirements taken into consideration during the process of developing the TH-EC40/LO, the system is particularly suitable for industrial rail applications.

Special features

- Suitable for all shunting engines
- Easy to upgrade due to modular design
- Extremely safe due to backup microprocessor system
- Radio signal backed up by plausibility check, checksum and the system's own address
- Operator monitored by vigilance function (SIFA)
- Operator monitored by integrated tilt sensor
- Redundant emergency stop circuits
- With multiple frequency utilisation. Several installations can be operated simultaneously on one frequency
- Multi-transmitter operation: an engine can be controlled by different transmitters (option)
- Indication of speed, braking stage, etc. on a transmitter display (option)
- Selector switch for selecting the required signal frequency (option)
- User-specific operation break-down. User-specific setting of all functions



The receiver:

- With max. 42 fully programmable output relays
- Analog signal output for proportional controls (option)
- Vehicle data returned to transmitter, e.g. speed, brake pressure, etc. (option)
- Redundant and separately monitored emergency stop relays
- Service-friendly diagnostic system for maintenance and test work.



The transmitter:

- Reliable single-hand operation due to ergonomic design
- Tried-and-tested and user-friendly throttle brake switch
- Housing made of impact-resistant and robust plastic
- Low transmitter weight: approx. 1.9 kg, depending on transmitter design
- Integrated internal antenna
- Very loud buzzer for warning messages
- Use of tried-and-tested and reliable controls
- Rechargeable battery capacity for 8 hours permanent operation
- Recharger with recharging process control for max. battery life

Technical data:

Frequency range:	405 to 475 MHz (70 cm band)
Timing frequency:	2400 Hz - 7200 Hz (20 kHz)
Typical response time:	60 ms (at 2400 Hz)
Modulation:	FM
Signal coding:	PPM
Hamming distance:	d > 6 (message check)
Transmitter power:	Max. 500 mW
Receiver sensitivity:	> 1 µV 10 dB (1 + S/N)
Operating temperature:	-20°C to +60°C
Receiver output relay:	Max. 250 V AC / 6A Max. 30V DC / 6A (ohmic load)
Protection type:	Transmitter IP 65, receiver IP 65
Transmitter weight:	Approx. 1.9 kg incl. battery (depending on version)
Receiver dimensions:	300 x 360x 180 mm (WxHxD)
Receiver weight:	11.4 kg
Installation area:	400 x 500 mm (WxH)
Receiver operating voltage:	Standard: 24 V DC (18 - 32 V DC) Option: 110, 230 VAC, 50/60Hz ±10%
Power consumption receiver:	Approx. 50 VA
Transmitter operating voltage:	12 V DC +10% -5%

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