

Radio Remote Control Systems

MC-3100



Cavotec is a global engineering group that manufactures power transmission, distribution and control technologies that form the link between fixed and mobile equipment in the Ports & Maritime and Airports & Industry sectors.

One of Cavotec's eight Centres of Excellence, Cavotec Micro-control engineers advanced radio remote control systems in close co-operation with customers worldwide.

Benefits

- Engineered for continuous, efficient use and a high degree of operator mobility.
- Modern ergonomic design, suitable for all application types, including long distance operations.
- Compact and lightweight for easy handling, precise operation control and reduced weight load for operators
- Robust housing
- Easy and fast readable operation information via ASCII display (available on request)
- Two belt-carrying options
- Operator terminal layouts can be configured according to application and customer requirements:
 - Analogue or digital joysticks; toggle or rotary switches.
 - Three pushbuttons on each side, safety stop and On/Off key switch on side protected by enclosure design
 - 360° handling

Applications

- Concrete pumps, sludge trucks, crushers, mobile drilling machines, mini excavators, deposit tippers.
- Tower cranes, overhead cranes, portal, mobile and truck mounted cranes.
- Ship davits, forestry applications.



MC-3100 with six linear joysticks and display



MC-3100 with two joysticks



MC-3100 with joysticks

Technical characteristics

MC-3100 terminal

- Operations under complete control with unique signal encoding to prevent unintended handling.
- Activity check on start-up to guarantee safe operations.
- Digital and analogue feedback.
- Automatic frequency search or button to select next frequency.
- Several carrying options: one hand and two hand, fixed mounted waist belt or clip-on.

Options

- Feedback LEDs and/or graphic display for easy and fast readable operation information.
- ASCII mode on graphic display available.
- Cable back-up.

MC-3100 receiver unit

- The MC-IRX base unit is highly flexible as it can have multiple digital and analogue inputs and outputs.
- Easy use with direct connections to most available fieldbus systems: ProfiBus, ModBus RTU, CANopen, Device Net, ModBus Plus, ModBus TCP, Ethernet IP.
- Back up solution with cable connection for programming and control.
- Multiple terminal and/or multiple base unit systems possible, e.g. for tandem operations.

General data

Digital functions	Terminal 20 + 2 cross lever with up to 5 steps + start/horn + stop Base unit 32 relays + stop
Analogue functions	Terminal 6 movements (12 directions) Base unit up to 12 PWM Voltage or Danfoss Voltage
LED	White, Yellow, Green, Red, Blue
Display	Graphical display with ASCII text
Battery	Rechargeable 7.2 V 1700 mAh Li-Ion
Battery charger	12-24 VDC, 110-230 VAC
Operating time	Typical 20 hours, depending on configuration & temperature
Dimensions	225 x 140 x 140 mm
Weight	Approx. 1.3kg incl. 2 joysticks, belt and battery
IP	IP65 standard
Temperature	-25°C to +60°C, -13°F to 140°F
Operating distance	Approx. 200 m line of sight
Frequency	According to local authority guidelines

Approvals & Standards

Cavotec radio remote control systems comply with a variety of international rules and regulations. All systems are CE marked and can be used with our FCC Part 90 approved radio. The systems are designed in accordance with the Machinery Directive and comply with IEC 60204 and ISO 13849. In addition we have a wide range of compliant radios that can be used in explicit approvals of systems for specific countries worldwide.