



 **ravioli** SpA



ISO 9001: 2000
RAVI 9105

Industrial Radio Remote Controls type MICRO*più*

Push-button radio remote control Type MICRO π iù

Main features

The MICRO π iù push-button radio remote control is part of a range of products marked and produced in compliance with European standards.

This small-sized, lightweight transmitter is made of shock proof material and is easy to handle even while wearing gloves, due to the ample surface area of the push-buttons.

A series of adhesive labels is available for easy identification of the commands, either standard for both tower- and bridge-cranes or customised upon request.

The operating frequency can be adjusted directly from the transmitter by using a simple combination of buttons, with automatic realignment of the receiver.

The 12 relay receiver is available with both AC and DC power supply and can easily be cabled, thanks to the removable terminal board.

The dip-switches can be used to programme a series of special functions, thereby ensuring maximum installation flexibility.

The receiver electronic parts are housed in an attractive case featuring a handle for easy transportation and which can be wall-mounted, allowing the equipment to be removed without using tools. The fully modular composition allows components to be replaced rapidly by the after-sales service staff.

Reliability

All the MICRO π iù electronic parts undergo sophisticated functions testing in our laboratory.

In addition, are also realized tests for shock and chemical resistance, atmospheric agents and temperature changes.

After-sales Service

When you buy a MICRO π iù system you set not only a high quality, advanced technology product, but also access to the RAVIOLI after-sales service network, which covers most of Italy as well as many European countries.

Staff in the after-sales centres have been trained directly by RAVIOLI and attend frequent technical up-dating courses. The centres also keep a stock of spare parts to ensure rapid repair of equipment.

Assembly and Maintenance

Kindly refer to the USER'S MANUAL provided with all our devices.

Types and Codes

L MICRO6PIU 6-button MICRO π iù radio remote controls
Complete kit of 1TX, 1RX, 1CB, 2PB and technical information

L MICRO8PIU 8-button MICRO π iù radio remote controls
Complete kit of 1TX, 1RX, 1CB, 2PB and technical information



Technical Features

Operating frequency range	433.05 ÷ 434.790 MHz ISM
Max. no. commands	12 + start/stop
Hamming distance	6
Possibility of erroneous movement	4.7 x 10 ⁻¹¹
Command and stop response time	65 mS
Passive emergency time	<1.6 S
Operating range	80 m
Operating temperature	-10°C ÷ +55°C
Protection degree	IP65

TRANSMITTER

Power	10 mW ERP
Supply voltage	7.2 Volt c.c.
Consumption	65 mA max
Autonomy on continuous duty	8 hrs minimum
Case	nylon-glass
Size	210 x 85 x 45 mm
Weight inc. battery	550 g

RECEIVER

Antenna	incorporated
A.c. power supply Voltage	48/110V ~ 50-60 Hz 5 VA
C.c. power supply Voltage	12(24)V --- 5W
Command or stop relay load	8 A/250 V~
Case	ABS
Size	340 x 210 x 115 mm

For Your Safety

Safety has always been a priority at RAVIOLI, and that is why all our radio remote controls are designed with double control channels. The receiver operates using a double microprocessor circuit. In addition to receiving the commands from the transmitter, each of the two microprocessors carries out a continuous check on the functioning of the other. The exit circuit is provided with two safety relays for the STOP function. This particular circuit design ensures that any possible breakdown or anomaly will not affect the equipment's ability to stop. This equipment offers a higher degree of safety than that available on other systems using either a single microprocessor or STOP relay.

Guaranteed Quality Product

MICRO^{più} push-button radio remote controls are guaranteed under our CE Certificate of Conformity in which we state that the product has been manufactured by RAVIOLI in accordance with specific and recognised Safety Standards and in accordance with the Quality Standards indicated in RAVIOLI's UNI EN ISO 9001-2000 Quality System Certificate.

Compliance with Directives

MICRO^{più} push-button radio remote controls are CE marked and comply with the following directives:
R&TTE 99/05/EC - 2004/108/EC - 2006/95/EC - 98/37/EC



Transmitter

The lightweight transmitter is made of special shockproof material, has double steps contacts and comes in a water-tight casing. Its ergonomic shape means it can be operated using one hand only.

Key and Emergency Stop button

To ensure maximum operating safety, the selector key and the emergency STOP button are produced by leading manufacturers. In particular, a model certified according to the EN Standard no. 954-1 has been chosen for the emergency STOP button.

Receiver

The water-tight receiver with incorporated antenna comes with a handle which facilitates removal once work is finished. In addition, a practical accessory to facilitate wall-mounting is available upon request.

Batteries and Battery-charger

The SC103 rapid battery-charger ensures full recharging of batteries in 4.5 hours.

The NC700 battery pack allows 8 hours autonomy on continuous duty of the equipment.



Spare Parts and Accessories



Spare parts

Transmitter

Pos.	Code	Description
1	L MI42837 L MI42838	Micro8più kit: case + rubber gasket string Micro6più kit: case + rubber gasket string
2	L MI42802.8 L MI42802.6	Micro8più transmitter card Micro6più transmitter card
3	L MI33387	Complete mushroom emergency button
4	L MI42908	Complete selector key
5	L MITARST	Standard symbol label

Receiver

Pos.	Code	Description
6	L AZ 43033	Complete receiver box
7	L MI42822	Receiver base card
8	L MI42866	Micropiù radio receiver module

Accessories

Pos.	Code	Description
A	L AZ 43061	Fixing kit for receiver box
B	L AZTARSPEC	Special symbol label
C	L AZCABL	Cabling according to your needs
D	L AZLAMP	Alarm lamp

Batteries and battery-charger

Pos.	Code	Description
9	L SC103	SC103 battery charger
10	L NC700	NC700 battery pack
11	L SC203	SC203 green battery charger
12	L NC1300	NC1300 green battery pack