



# Mini+

handheld radio control  
compact

**ELCA**  
RADIOCONTROLS

MINI+ enhances the characteristics of the MINI model, the ELCA “pocket” system for professional use: small, lightweight, comfortable and easy to use, waterproof, powered by a long-lasting lithium battery, always reliable!

Available with: MITO electronics; E1 electronics.

Common characteristics:

- larger buttons;
- description of commands, customisable, high-visibility;
- protective anti-slip rubber edge;
- power supply: Rechargeable lithium or alkaline AA batteries;
- key to turn on the software (command sequence);
- shoulder strap (provided) with integrated supports;
- “ELCA-CLIP” USB charging cable for lithium battery;
- cases dedicated to 2, 4, 6, 8 commands;
- MINI receiver.

Furthermore, MINI+ with E1 electronics includes:

- Latching stop mushroom button, PL d cat. 3 EN ISO 13849-1;
- 4 “Data Feedback” signalling LEDs;
- buttons with single/double release;
- MINI, Flexi receivers.



### SERIE MITO MINI+ compact handheld



### SERIE E1 MINI+ compact handheld



#### KEY

- ... available commands
- Start button
- Start/Stop button
- commands available 1 and/or 2 speeds
- Stop button
- Stop mushroom button, PL d cat. 3 EN ISO 13849-1
- 4 Data Feedback LEDs

The MINI+ radio control system consists of: transmitter (MITO MINI / E1 MINI), receiver (AR MITO MINI / AR E1 MINI), power supply with ELCA-CLIP USB cable, shoulder strap, user's manual.

# Mini+

handheld radio control  
compact

scale 1:1



dimensions: L62 x H137 mm  
weight: from 200 g

### Configurations

Lower part and power supply

Batt. Litio +  
STOP +  
ELCA-CLIP USB  
SERIE E1



Lithium battery  
+  
ELCA-CLIP USB  
SERIE MITO, E1



Alkaline  
batteries 3XAA  
SERIE MITO, E1



## Technical data

|                                                | MITO ELECTRONICS                                                                   | E1 ELECTRONICS        |
|------------------------------------------------|------------------------------------------------------------------------------------|-----------------------|
| ISM band work frequency                        | 868,0125 - 870,000 MHz<br>opz. 434,075 - 434,775 MHz<br>opz. 920,000 - 921,150 MHz | 433,100 - 434,775 MHz |
| Transmission mode                              | LBT-AFA                                                                            | LBT / FHSS            |
| Working temperature                            | -25 ÷ +55 °C                                                                       |                       |
| Operating range                                | 150 m                                                                              |                       |
| Hamming distance                               | ≥10                                                                                | ≥9                    |
| Passive Stop time                              | < 1 s                                                                              | < 0,5 s               |
| Active Stop Time                               | < 0,35 s                                                                           | < 0,1 s               |
| Safety functions (according to EN ISO 13849-1) |                                                                                    |                       |
| Stop protection (with stop mushroom button)    | /                                                                                  | PL d cat.3            |

## Transmitters

|                                                      | MITO MINI+                     | E1 MINI+                   |
|------------------------------------------------------|--------------------------------|----------------------------|
| Antenna                                              | incorporated                   |                            |
| Power supply                                         | 3.7 V 1100 mAh lithium battery |                            |
|                                                      | 3xAA 1.5V alkaline batteries   |                            |
| Current draw                                         | < 25 mA                        | < 45 mA                    |
| Absorbed power                                       | < 0,1 W                        | < 0,15 W                   |
| RF emission power                                    | < 5 mW ERP                     | < 10 mW ERP                |
| Flat battery pre-warning time                        | approx. 10 minutes             | 1 hour - 5 min. - 100 sec. |
| Autonomy with battery charged at 20°C                | approx. 50 hours               | up to 20 hours             |
| Protection degree                                    | IP65                           |                            |
| Dimensions and weight with lithium battery (stop)    | /                              | 62x137x70 mm - 250 g       |
| Dimensions and weight with lithium battery           | 62x137x35 mm - 200 g           |                            |
| Dimensions and weight with alkaline batteries (3xAA) | 62x137x47 mm - 260 g           |                            |

## Receivers

|                           | AR E1 FLEXI A                                                                                                                                                                            | AR E1 FLEXI SW | AR E1 MIDI A             | AR E1 MIDI SW                                                                 | AR E1 MINI                                                  | AR MITO MINI                           | AR MITO DIN                                       |
|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|--------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------|----------------------------------------|---------------------------------------------------|
| Power supply              | 48/55/<br>110/230 Vac<br>~ 50/60 Hz                                                                                                                                                      | 12-24 Vdc      | 24-230 Vac<br>~ 50/60 Hz | 12-24 Vdc                                                                     | 12-24 Vdc (E1 MINI)/<br>24-48 Vac<br>~ 50/60 Hz (E1 MINI A) | 12-30 Vdc /<br>12-24 Vac<br>~ 50/60 Hz | 9-24 Vdc                                          |
| Protection degree         | IP65                                                                                                                                                                                     | IP65           | IP65                     |                                                                               | IP67                                                        | IP67                                   | IP00                                              |
| Dimensions (mm)           | 133x256x88                                                                                                                                                                               | 133x256x88     | 152x152x75               |                                                                               | 110x165x50                                                  | 110x165x50                             | 45x140x60                                         |
| No. of available controls | up to:<br>- 16/24 digital<br>- 16 digital + 6 proportional<br>- optional expansion board<br>CanOpen, EtherNet/IP,<br>PROFINET, PROFIBUS<br>communications<br>- 4 digital feedback inputs |                | up to<br>12 digital      | up to:<br>- 12<br>digital<br>+ 3 proport.<br>- 4 digital feed-<br>back inputs | - 8 digital<br>- CanOpen<br>- 4 digital<br>feedback inputs  | 4/8/10 digital                         | 8 NPN/PNP<br>OPEN<br>COLLECTOR<br>+<br>2 analogue |

## Accessori opzionali:



Wall mount



Wall mount with  
USB charging



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