

*$\mu$ COM*

# User Manual

**MICRO  GATE**

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## 2. Introduction

The μCOM intercom makes possible perfect audio connection between the start and finish and two or more intermediate stations. The connection can use the same line used for timing impulse transmission: communication can continue unaffected also while contact is closed (when the start gate is open).

The μCOM intercom is powered by rechargeable batteries and has useful auxiliary functions:

- the possibility of disconnecting the microphone with a key and just listening (useful when operating in noisy areas)
- volume control with the keys < + > and < - >

The intercom can be supplied with three different kinds of headsets:

- monoaural (single earphone)
- binaural (double earphone)
- professional binaural with enhanced sound-proofing

## 3. Overview

### 3.1. $\mu$ COM views

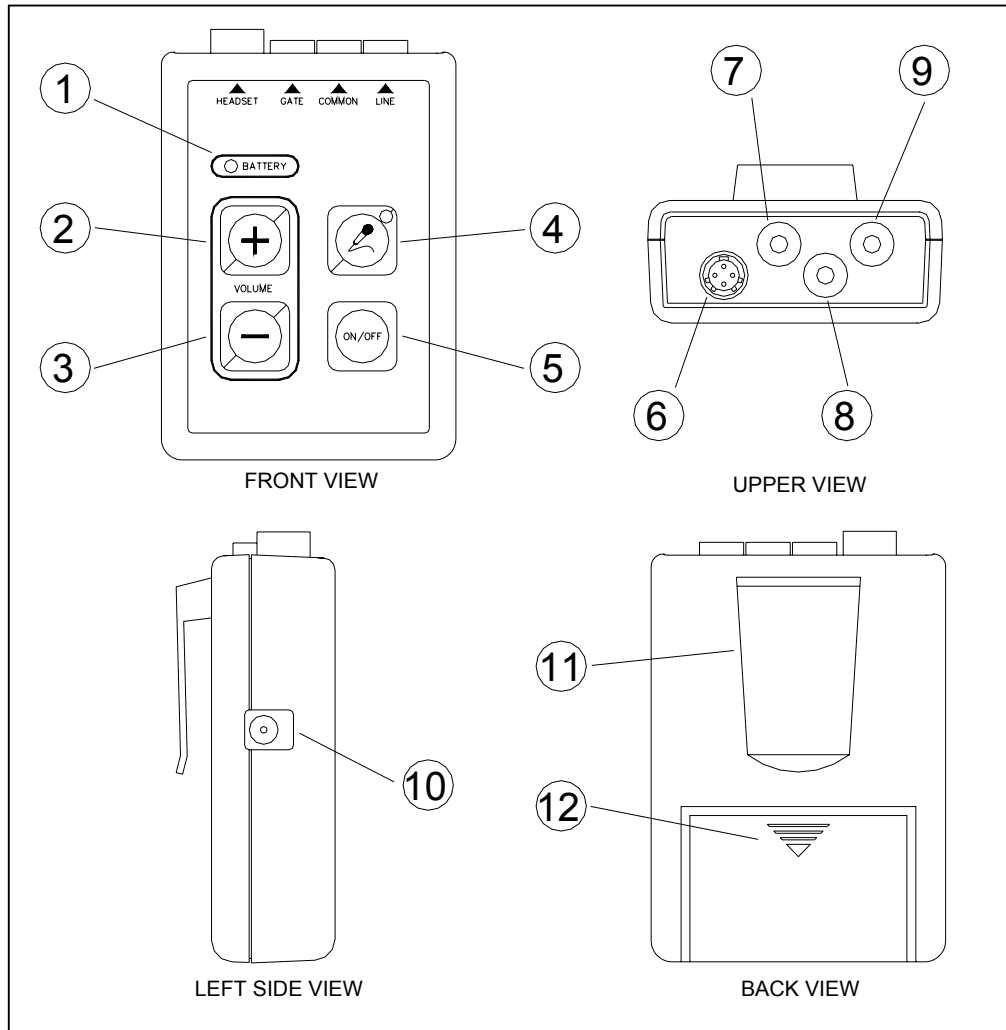


Figure 1

- 1 Battery status Led
- 2 Volume control key (to turn up volume)
- 3 Volume control key (to turn down volume)
- 4 Microphone off key
- 5 Key for switching  $\mu$ COM on/off
- 6 HEADSET connector
- 7 GREEN banana jack (GATE) for external input (start gate)
- 8 BLACK banana jack (COMMON) for ground signal
- 9 RED banana jack (LINE) for communication line
- 10 Jack connector for battery recharge
- 11 Clip for attaching to belt
- 12 Battery compartment

### 3.2. HEADSET connector

4 pole female panel connector (HIROSE SR30-10R-4S)

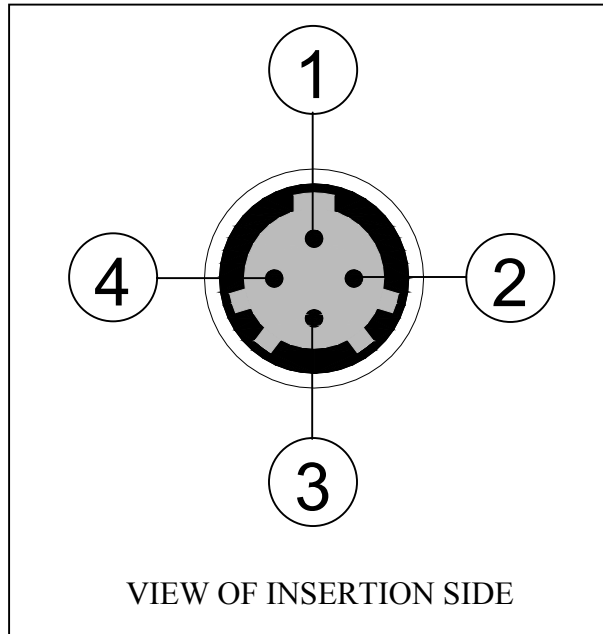


Figure 2

1. Microphone
2. Microphone GND
3. Headset
4. Headset GND

## 4. Switching on/off

Connect the headset to the Headset socket and press the ON/OFF key to switch the intercom on. When you do this, the battery status Led (blinking) indicates that the intercom is on.

Adjust the volume to the appropriate level with the two control keys (< + > < - >).

To switch off the system press the ON/OFF key for about 1 second until the battery status Led changes to continuous red. Release the ON/OFF key to switch off the intercom.

## 5. Volume control

The μCOM intercom has two keys for volume control.

Pressing the key < + > turns up headset volume and pressing < - > turns it down. Each time the < + > and < - > keys are pressed, the user will hear a beep indicating the change in volume until the maximum or minimum level is reached.

When μCOM is switched on, it is set to a default average value.

## 6. Microphone off

Enable this function by pressing the microphone off key. The blinking red Led indicates that the microphone is off. Doing this disconnects the microphone and makes it possible to just listen without disturbing communication. This function is very useful when operating in noisy areas.

## 7. Battery maintenance and recharge

### 7.1. *Battery maintenance*

The system is designed to eliminate the need for any kind of ordinary maintenance and in conditions of normal use the rechargeable batteries allow 24 hours of autonomous operation.

### 7.2. *LOW BATTERY warning*

When the time of μCOM's remaining autonomy is limited, it warns the user with a visual signal (the battery status Led changes to blinking red).

When this happens the batteries should be recharged.

### 7.3. *Battery recharge*

The μCOM intercom is supplied with rechargeable batteries. To recharge just connect the device to the battery recharger by inserting the plug in the Jack socket on the left side of the intercom. During recharging the green battery status Led blinks rapidly.

It takes 7 hours to fully recharge.

When recharging is over, the battery status Led stays on and is continuous green.

Instead of the rechargeable batteries, 2 alkaline AA batteries can be used.



Check the correct polarity of the rechargeable or alkaline batteries before insertion. Incorrect insertion could damage the device.

Do not recharge the device if alkaline batteries have been inserted in the battery compartment.

## 8. System connections

If the start-finish line offers free connection to the two lines necessary for the start signal (see Figure 3 – Dedicated line for communication ), it is convenient to use this line for the intercom.

If it doesn't, connect the system as in Figure 4 – Line shared with the START signal

It is also possible to connect the red and black plugs directly in parallel to the start line; however in this case communication will be interrupted while the start gate is open.

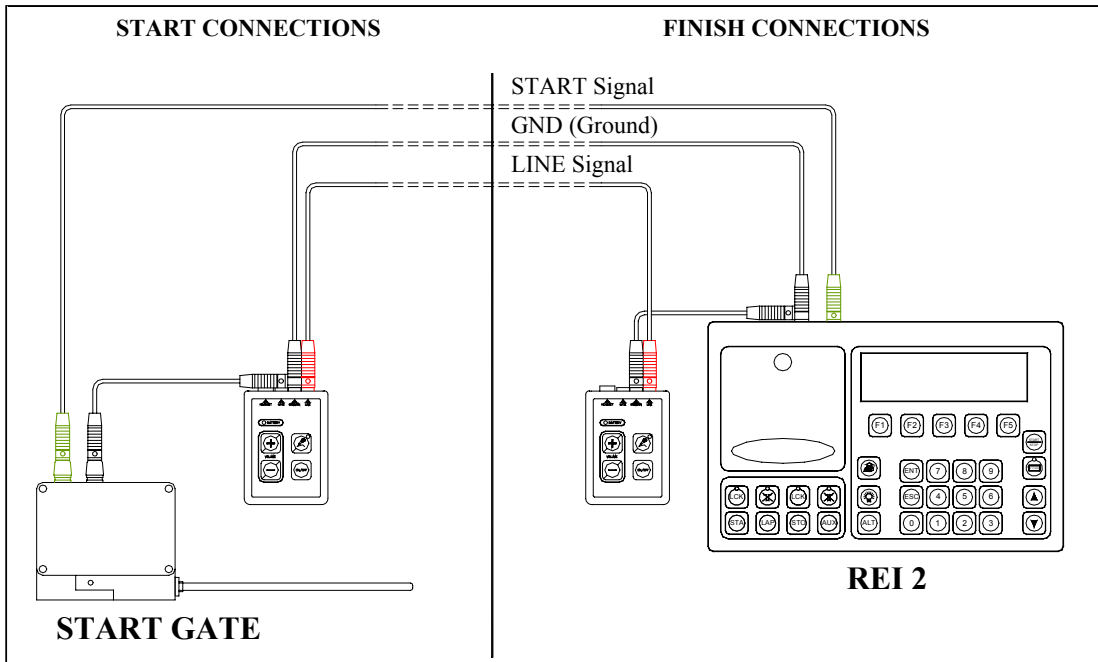


Figure 3 – Dedicated line for communication

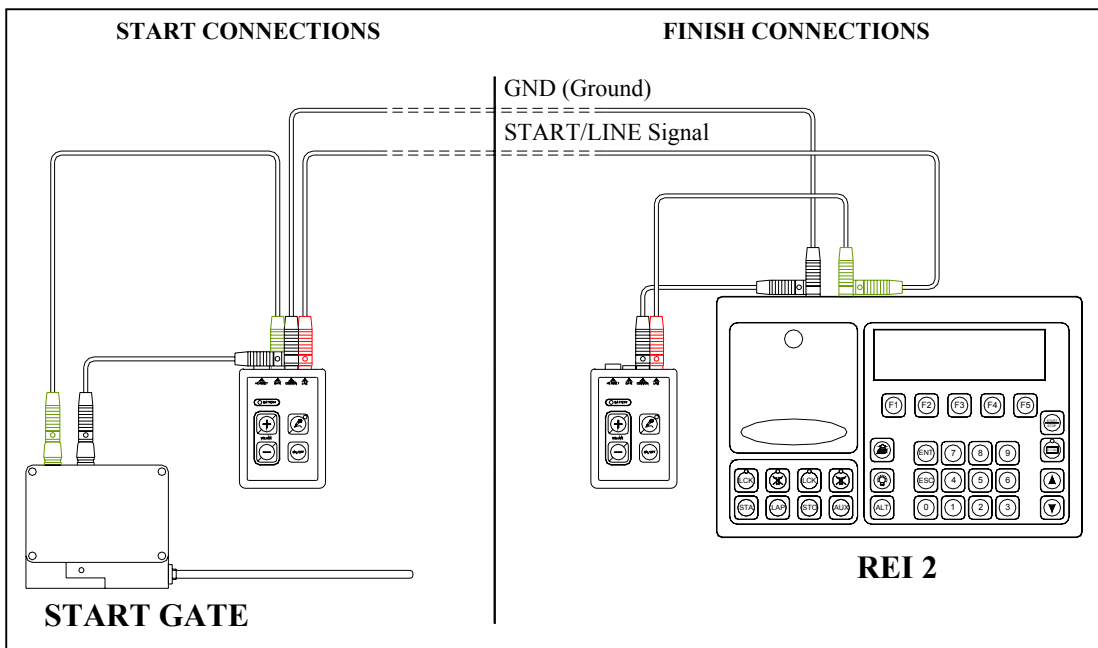


Figure 4 – Line shared with the START signal line

## 9. μCOM Technical data

Weight	170g
Size	92 x 68 x 28 mm (l x h x p)
Operating temperature	-25°/+70°C
Alimentazione:	
Batteries	2 AA batteries: Rechargeable: NiMH 1.2V (1450mAh) Non-rechargeable: Alkaline 1.5V
Recharge	8V±20VDC 300mA
Battery recharge	Built-in "smart" recharger
Autonomy	24 hours
Microprocessor	C-MOS 8 bit processor
Keyboard and controls	<ul style="list-style-type: none"> <li>• 2 volume control keys</li> <li>• Key for microphone off</li> <li>• ON/OFF key</li> <li>• Visual "Low Battery" indicator</li> </ul>
Connections	<ul style="list-style-type: none"> <li>• Connector for headset connection</li> <li>• Ø 4mm socket for communication line connection</li> <li>• External input on Ø 4mm socket for start gate</li> </ul>

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