



# ACCESSORIES

## THE QUALITY IS IN THE DETAILS

Microgate products offer precision and reliability on all occasions: a wide range of state-of-the-art products for every sort of measurement in sports.

The classic Microgate accessories make it even more simple to get the most out of our products, extending their functions, optimizing data reception and transfer and further improving transportability.

## STARTGATE

**STARTGATE** is a new start gate of modern design, with double contact in conformity with FIS regulations. The high temperature range (-40°C +85°C) high precision watertight switches (IP67) allow reduction of delay between the two contacts to zero.

The start gate mechanism is designed to prevent activation of the switches while the bar is being repositioned, thus ensuring longer life and complete prevention of false impulses.

The practical innovative connection system with a stainless steel clamp enables rapid installation on any support. It has been specifically designed to be used with gloves and to guarantee maximum flexibility of regulation and adjustment.

The resistance of the bar can be regulated using the screw on the side of the connections.

The start gate is also available in an automatic bar-return version (recommended for self-timing systems).



## MICROCOM

The new **MICROCOM** intercom makes possible perfect audio connection between the start-finish and two or more intermediate stations. The connection can use a dedicated line but also the same line used for timing impulse transmission, without disturbing communication even during opening and closing of the contacts (for example, opening of the start gate).

A distinguishing feature of **MICROCOM** is its small size and it is supplied together with its attachment clip.

**MICROCOM** is powered by two NiMh rechargeable batteries that guarantee autonomous functioning for several days in normal operating conditions. It is also possible to use normal AA batteries. The battery charge status can always be checked by means of the LED.

The device has some 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

### DIMENSIONS

width: 65 mm  
height: 95 mm  
depth: 35 mm  
weight: 161 g



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- 01 Microphone on-off key
  - 02 Volume keys
  - 03 On-Off key
  - 04 Monoaural headset
  - 05 Binaural headset
  - 06 Binaural headset with enhanced sound-proofing
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## MICROSEM

The sturdy light start signal light has red, green and yellow indicators and five indicators for the countdown. These are created using combinations of electromagnetic pixels in the three colours. The size of the indicators (7.5x9cm) makes optimal visibility possible even in conditions of strong background light. The extremely rapid on/off times guarantee very low power consumption (normally power consumption is almost zero and power is only really used during the on/off/on signal).

**MICROSEM** can be commanded:

- by MicroBeeper start beeper
- by the REI2 stopwatch
- by using the dedicated buttons set into the side panel of the start light
- by a digital signal

### DIMENSIONS

width: 285 mm  
height: 385 mm  
depth: 150 mm  
weight: 4080 g



## MICROBEEP

The **MICROBEEP** start beeper is particularly compact and light (dimensions 12,5x7,5x4cm, weight 300g) and has in it a powerful sound signaller that allows its use even in very noisy situations.

**MICROBEEP** has the following function modes:

- endurance test for the selection of athletes and national and international football referees;
- alpine skiing;
- Nordic skiing;
- four different rally modes for managing motor races.

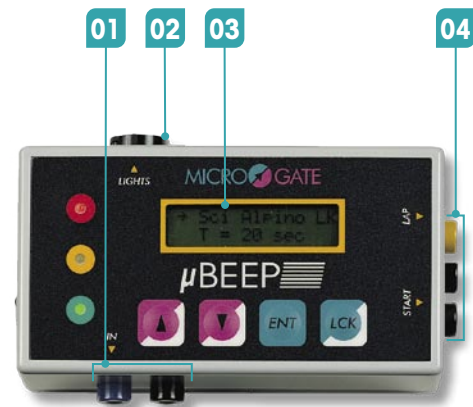
Thanks to the rapid and convenient way it can be set, however, the user can set the function cycle of the beeper in accordance with his/her own requirements.

**MICROBEEP** can also be:

- connected to the MicroSem start signal light and command the sequence in which the lights are switched on;
- set to manage and signal false starts in combination with the Microgate stopwatches;
- synchronized with other beepers using the dedicated connector;
- set for the automatic management of starts.

### DIMENSIONS

width: 125 mm  
height: 75 mm  
depth: 40 mm  
weight: 300 g



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- 01** Input for start devices
  - 02** Signal light command output
  - 03** Alphanumeric display 2 lines and 16 characters
  - 04** Outputs for connection to stopwatches
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## **STARTING GUN**

Drum-magazine gun with the barrel completely closed by a fixed steel cap, highlighted in red, in compliance with the most recent public safety norms. The barrel has a hole in its upper side to allow the gases to escape and to make it useless as a weapon. Thanks to a practical mounting clamp, the gun can be used in combination with a start sensor (transducer).



## **START SENSORS**

The sensors, available in normally open (NO) and normally closed (NC) versions, can be connected to the timing equipment by cable or radio (using the LinkGate system).



## **PRESSURE SENSORS AND CONTACT STRIPS**

Careful choice of the materials used for making sensors and the use of water-proof containers for the electronic and mechanical component make Microgate pressure sensors ideal for use in any weather conditions.

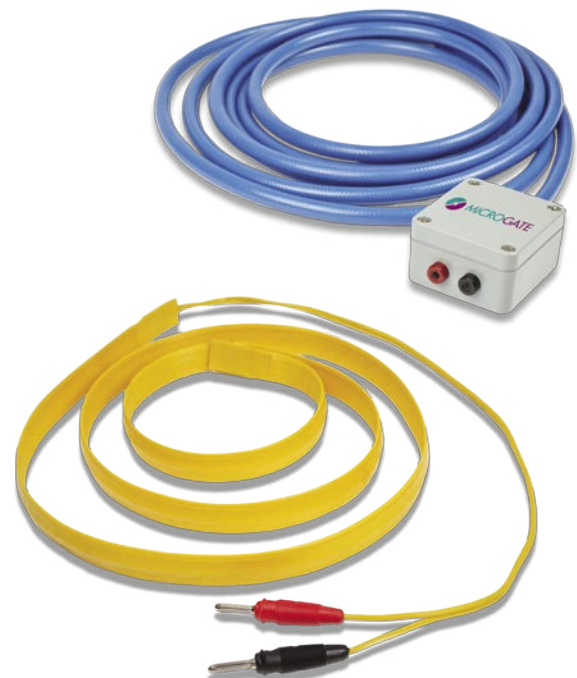
### **PRESSURE SENSORS FOR MOTOR RACING**

Pressure sensor with device for automatic compensation of air pressure. The sensitivity of the sensor does not change when climatic conditions (pressure and temperature) change. Maximum operational reliability is thus maintained. The tube, made of top-quality materials, offers a high level of resistance to the wear caused by passing vehicles.

### **CONTACT STRIPS FOR CYCLING**

The high sensitivity that characterizes Microgate contact strips guarantees high reading precision. Because the pressure sensor is only a few millimetres thick, the athlete does not notice when he/she passes over it.

Available in different colours.



## **START PAD**

The **START PAD**, a touch pad sensitive to pressure, can be connected with all the Microgate stopwatches by radio or cable. It is the ideal tool for all those situations in which circumstances make it impossible to use a photocell for taking the start. Depending on the settings on the stopwatch, the touch pad can be used as a normally open contact (the impulse is created when the touch pad contacts close) or normally closed contact (the impulse is created when the touch pad contacts reopen).



## **START BUTTON**

The Microgate **START BUTTON** guarantees optimal functioning even in difficult conditions. Its anatomical grip, the absence of double impulses and its imperviousness to spraying by water make it particularly reliable. The Microgate button is available with cables of various lengths. Contact is normally open.



## **MICROCLIMA**

The **MICROCLIMA** temperature sensor connected to the Race-time2 and REI2 stopwatches allows measurement of air temperature and humidity and snow temperature. Climatic data can be taken at fixed intervals, when an event is acquired or manually. All the data are automatically printed and stored by the Microgate stopwatches. The **MICROCLIMA** sensor can also be connected to the MicroTab and MicroGraph displayboards.



## **MICROBOX**

A specially created container for protecting the photocells and their accessories from the sun and bad weather when set up outdoors. **MICROBOX** contains a Polifemo photocell, a power adaptor and, where required, the LinkGate radio transmission system.



## BAGS

To fully meet the need for easy transport and protection of its timing systems, Microgate provides safety cases, bags, backpacks and pouches technically designed for the transport of its products.

For example the backpack with safety padding (consisting of a special damp-resistant synthetic rubber) can easily carry a stopwatch, a start gate, two photocells, two reflectors, two EncRadios, a DecRadio, the various cables, the adaptors, the anchorage poles for the photocells and the start post for mounting the start gate. The timekeeper or trainer can thus carry all the timing instruments on to the race site in a comfortable backpack and have his/her hands free for carrying skis or other equipment.



## SAFETY CASES

As well as the normal padding, the safety cases have a hard aluminium shell that guarantees greater resistance against knocks and crushing.

The backpacks and safety cases have a special damp-resistant synthetic rubber inside them that guarantees the equipment is securely lodged and protected from knocks.



## CABLES

The classic Microgate cables are made with materials of the highest quality.

Various cables are made of silicon materials with a wide temperature range able to guarantee optimal flexibility even at very low temperatures ( $-35^{\circ}\text{C}$ ).

The standard DIN connectors are fitted with a safety block and, where requested, with special filters to prevent interference.

