

Skywatch Meteos Anemometer

Operating Instructions



Skywatch Meteos

You have just acquired a piece of high precision equipment which has been created using the most modern technology. It has been designed to stand up to intensive use. However, in order to maintain its appearance and its precision, we recommend that you treat it with care and read this manual carefully.

Functions of the buttons



ON: Press for 1 second
OFF: Press for 2 seconds (not auto off)
LIGHT: Press on and off briefly



UP: Setting mode
START/STOP: Chronometer mode



DOWN: Setting mode
LAP/RESET: Chronometer mode



SET/CAL: Setting mode



RESET MEMORY: Press for 3 seconds

Configuration

To access the configuration mode of your instrument, just press on the  button. Pressing the  button once again causes the system to confirm the setting have been changed. If not then it goes to the next setting. To modify the settings the  and  buttons have to be used. The next page instructs you on how to set up the different instrument settings.

Wind Measuring Units

The units to be selected are: knots, km/h, m/s, fps and bft. Once the unit is chosen, it remains displayed in the top right of the screen. If no other unit is chosen the instrument is set to the Beaufort.

Temperature Measuring Units

The units to be selected are °C, °F, °C  and °F .

Setting the time of the average

The times selected are: --- (weighting), 3", 6", 12", 30", 1', 6', 30', 1:00', 6:00', 12:00', 24:00', or timer. The

timer mode allows measurements of the average between start (press ) and stop (press ). This time is displayed on the lower lines. This timer allows the use of the LapTime function (press  the symbol flashes). The  button also allows the timer to be reset to zero. This works in the same way as a standard chronometer.

Setting the wind and temperature displays

The displays to be selected are: ---, MIN, AV, MAX. If AV is selected the average of temperature and wind are shown. The display of average windspeeds is always made simultaneously for the wind (at the centre) and temperature (at the bottom). The other modes (---, MIN, MAX) only concern the temperature.

Setting the display is not possible if the units selected are °C  or °F .

Measuring the wind

Important: The protective cap has to be removed from the instrument in order to rotate the impeller. The impeller has a maximum sensitivity in the vertical position (due to its magnetic levitation), and an optimised precision when its axis of rotation is perpendicular to the wind direction.

Instantaneous wind speed (top of the screen)

Maximum wind speed (centre of the screen)

The display of the maximum wind speed is made at the central part. It is the maximum measured value of the time of the average. The value is reset to zero during a RESET of the memory.

Measuring the temperature

Instantaneous temperature

Important: Thermal inertia of the instrument directly affects the stabilisation time of the measurement. The greater the temperature difference is the longer the this time will be. This time will be shorter if the windspeed is higher.

Wind-chill temperature

As you know, exposure to low temperatures is potentially dangerous to the human body. But did you know that wind plays an important part in how your body actually feels temperatures? For example, an ambient temperature of 0°C and a 30km/h wind have the same effect on you as a temperature of -13°C! The result of the calculation of the effect of wind on the temperature is called the "wind-chill temperature". By the sea, in the mountains, hiking or cycling, the Skywatch Meteos shows immediately the temperature felt by the body and warns of risks of chilblains and hypothermia.

Min and max temperature

These two modes show the min or max values measured over time of the average. The value is reset to zero during a RESET of the memory. These values are not those of the temperature felt by the body.

Technical Data

- Sealed and weatherproof instrument
- Thread on the bottom of the instrument for fixing to a tripod (1/4")
- Anemometer Precision: $\pm 3\%$, depending on its orientation in the wind
- Anemometer Resolution: 0.1 for all units
- Thermometer Precision: $\pm 0.2^\circ\text{C}$
- Thermometer Resolution: 0.1°C
- Power Supply: 2x 1.5v AA batteries
- Battery Lifetime: At least 3 years with occasional use of the display backlight. To replace, loosen the three screws on the metal plate.
- Weight: 235g (insubmersible)
- Dimensions: $\varnothing 65 \times 155\text{mm}$

The wind measuring principle of the SKYWATCH METEOS is based on the detection of a rotating magnetic field produced by an impeller. If the device is subject to a strong field produced by a transformer or motor, it may happen that the instrument shows undesirable values, without any rotation from the impeller.

For pricing or any further information please contact us.

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