

SIROCCO



3436.501.02

Version 1.4

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CAUTION

- ❑ **Protect the equipment against splashing, rain and excessive sun rays.**
- ❑ **Never use the device if it is damaged or insecure.**
- ❑ **Do not open the case; there is nothing that needs servicing inside it. Nevertheless, if the case must be opened, you must call for some qualified personnel. The power supply cable must be disconnected before opening the case.**
- ❑ **The information contained within this document may be modified without warning.**
- ❑ **Swiss Timing LTD cannot be held responsible for errors within this document nor for any subsequent nor consequential damages (including loss of profit) arising from its provision, nor performance or use of products described herein, which will be covered by another guarantee, contract or other legal document.**



This symbol indicates that this product should not be disposed with household waste. It has to be returned to a local authorized collection system. By following this procedure you will contribute to the protection of the environment and human health. The recycling of the materials will help to conserve natural resources (valid in the EU member states and in any countries with corresponding legislation).

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1 INTRODUCTION

The **Sirocco** is an Ultrasonic wind gauge (as requested by IAAF rule 163.11) to measure the wind speed in the race direction.

The **Sirocco** must be used with the Scan'O'Vision *Bridge* containing the Serial Multiplex option.

2 INSTALLATION

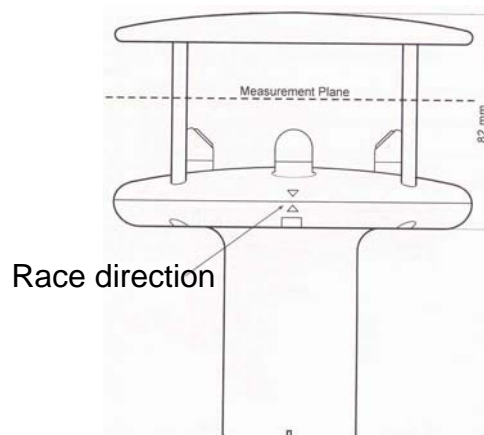
Verify that the cable is fixed on the **Sirocco** head and the cable pass through the hole of the support.

Screw the **Sirocco** head with support on the tripod.

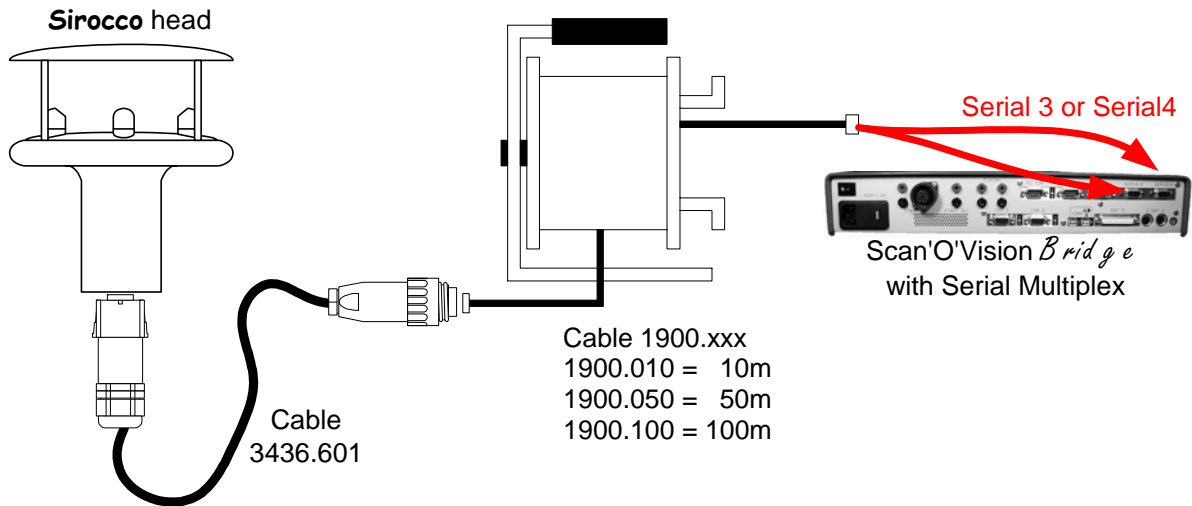
The head must then be positioned in height and direction. The height can be adjusted with the tripod.

The sensor height must be measured in the middle of the head. Please refer to the according rules to position the head. Chapter 5 is a summary of IAAF rules.

Finally the head must be placed in the direction of the race, the arrows / blue mark must point in the race direction (finish). In order to turn the head in the required position, use the tripod functionality.



The other end of the **Sirocco** head cable [3436.601] must be connected to the Serial 3 or Serial 4 connector of the Scan'O'Vision *Bridge* via the 1900. series cable.




Optional extended cable can be plugged between the cables 3436.601 and 1900. series cable (up to 400 meters).

3 CONNECTIONS

The cable 3436.601 must always remain connected on the **Sirocco** head. The other end of the cable is a Tuchel 7p female:

Connector	Pinning
RS422 (Tuchel 7pF)	1: Power input (9 - 30VDC max. 40mA) 2: N.C. 3: Tx- 4: Tx+ 5: Rx- 6: Rx+ E: GND

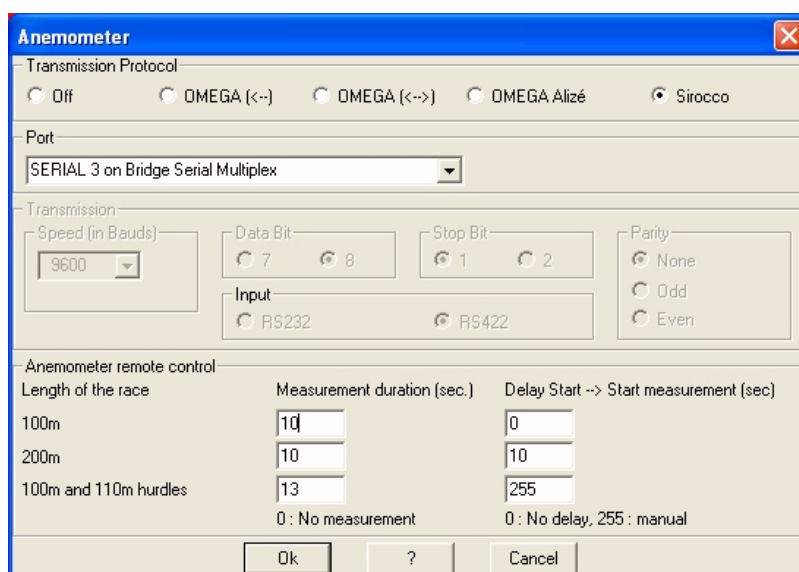


4 SCAN'O'VISION WITH Sirocco

To have automatically the wind measurement into you photo-finish results, you have to connect the **Sirocco** to the Scan'O'Vision *Bridge* Serial Multiplex on the Serial 3 or Serial 4 connector. This RS422 bi-directional connection will also power the **Sirocco**.

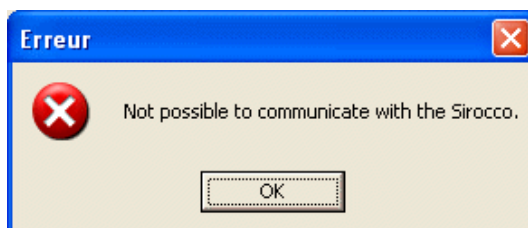
The Scan'O'Vision software version must be 3.82 or higher to allow the control of the **Sirocco**.

In the *Anemometer* configuration window of the Scan'O'Vision software, please select **Sirocco** as transmission.



Then select the port ("*SERIAL 3 on Bridge Serial Multiplex*" or "*SERIAL 4 on Bridge Serial Multiplex*") according to the hardware connection you made.

When you validate the window with the *Ok* button, the **Sirocco** is initialized, a window appears for a few seconds asking you to wait. If the port is not correct or the **Sirocco** not correctly connected, an error window is displayed.



The bottom left corner of the *Test* window (menu "*Options*" "*Test*") will display the actual wind speed and, between parenthesis, the perpendicular wind speed. Instead of these values, an error message is displayed if the **Sirocco** is disconnected or did not work.

5 SUMMARY OF IAAF RULES

This is a summary of IAAF rules for wind measurement. It refers to the "IAAF Competition Rules 2004 - 2005" handbook. Please check on the www.iaaf.org website for rules changes.

Track event:

Rule #	Text						
163.8	<p>The periods for which the wind velocity shall be measured from the flash of the Starter's gun or approved starting apparatus are as follows:</p> <table><tr><td>100m</td><td>10s</td></tr><tr><td>100m Hurdles</td><td>13s</td></tr><tr><td>110m Hurdles</td><td>13s</td></tr></table> <p>In the 200m event, the wind velocity shall be measured for a period of 10 seconds commencing when the first runner enters the straight.</p>	100m	10s	100m Hurdles	13s	110m Hurdles	13s
100m	10s						
100m Hurdles	13s						
110m Hurdles	13s						
163.9	<p>The wind gauge for track events shall be placed beside the straight, adjacent to lane 1, 50m from the finish line. It shall be positioned 1.22m high and not more than 2m away from the track.</p>						
163.10	<p>The wind gauge shall be read in metres per second, rounded to the next higher tenth of a metre per second, in the positive direction (that is, a reading of +2.03 metres per second shall be recorded as +2.1; a reading of -2.03 metres per second shall be recorded as -2.0). Gauges that produce digital readings expressed in tenths of metres per second shall be constructed so as to comply with this Rule.</p> <p>Gauges must be certified by an appropriate authority.</p>						
163.11	<p>Ultrasonic wind gauges shall be used at all International Competitions under 1.1 (a) to (f).</p> <p>A mechanical wind gauge should have appropriate protection to reduce the impact of any crosswind. Where tubes are used, their length on either side of the measuring device should be at least twice the diameter of the tube.</p>						
163.12	<p>The wind gauge may be started and stopped automatically and/or remotely, and the information conveyed directly to the competition computer.</p>						

Horizontal jumps:

Rule #	Text
184.4	<p>The wind speed shall be measured for a period of 5 seconds from the time an athlete passes a mark placed alongside the runway, for the Long Jump 40m from the take-off line and for the Triple Jump 35m. If an athlete runs less than 40m or 35m, as appropriate, the wind velocity shall be measured from the time he commences his run.</p>
184.5	<p>The wind gauge shall be placed 20m from the take-off board. It shall be positioned 1.22m high and not more than 2m away from the runway.</p>
184.6	<p>The wind gauge shall be read as described in Rule 163.10.</p>

The **Sirocco** is an Ultrasonic wind gauge as requested by IAAF rule 163.11.

