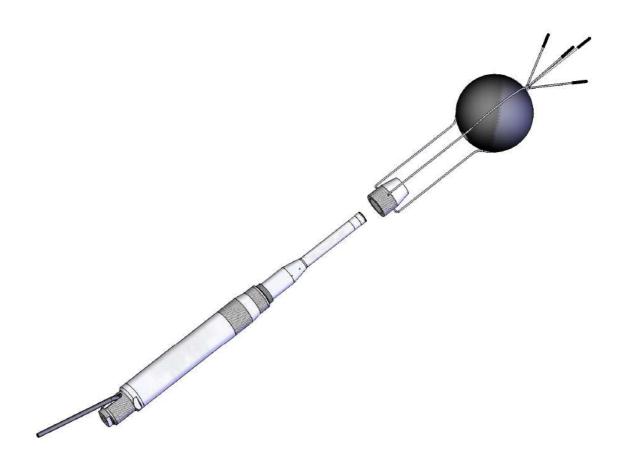
SA 203

Outdoor microphone kit for SVANTEK SLM Short User Guide





Warsaw, September 2008

ATTENTION

Please read the whole user guide before the start of assembling SA 203 outdoor microphone kit – IT IS VERY IMPORTANT.

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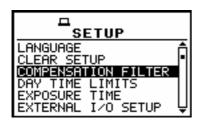
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1. Introduction.

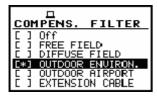
SA 203 outdoor microphone kit is designed to be used with SVANTEK Sound Level Meters. Outdoor kit protects the microphone from weather conditions and birds.

SA 203 is dedicated for **short period** environmental, community or airport noise monitoring.

When using SA 203 protection kit, the appropriate digital correction filter has to be selected in SVANTEK instrument. For this reason, the SA 203 kit <u>cannot</u> be used with SLMs from other manufacturers.



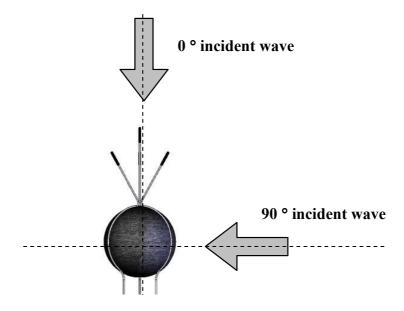
In order to choose the appropriate compensation filter, user has to select the **COMPENSATION FILTER** in the SETUP menu and press the <ENTER>. Selection of the filter is made by placing a special character in the line with the name of the proper filter and pressing <ENTER>. The frequency characteristics of the filters is given in Appendix D for the SLM's user manual.



OUTDOOR ENVIRON. compensation filter is used for measurements when the microphone position is perpendicular to the ground level and noise propagates in direction of the 90° incident wave (as it is shown below).



OUTDOOR AIRPORT compensation filter is used for measurements when the microphone position is perpendicular to the ground level and noise propagates in direction of the 0 $^{\circ}$ incident wave (as it is shown below).

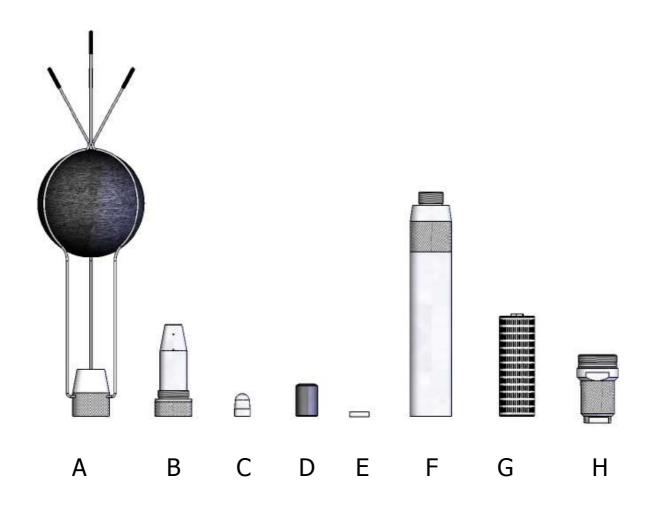


Other options such as Off or Free Field are not related to the SA 203. More informations about them are available in the user manual to the SVANTEK SLM.

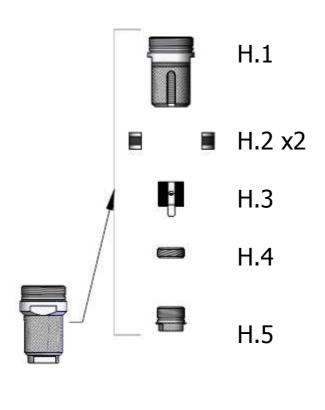
2. Elements of the SA 203.

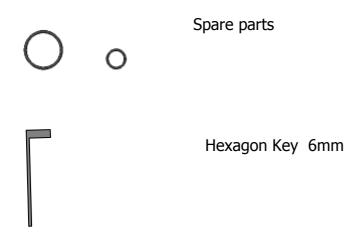
SA 203 consists of the following elements:

- A. waterproof windscreen with anti-bird spikes
- B. cone, the upper part of the preamplifier container
- C. applicator, a dummy microphone necessary for the successful assembling of SA 203
- D. fitting plastic ring (black) for the preamplifier container
- E. fitting plastic ring (white)
- F. casing for the bottom part of the preamplifier and desiccator
- G. desiccator container
- H. ending of the desiccator casing with a cable slot and mast /tripod mounting



Ending of the desiccator casing H consists of the six elements shown on a picture below:

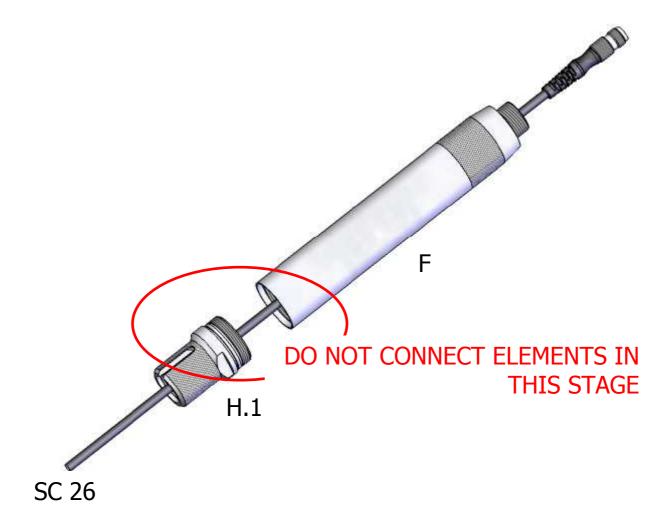




3. Assembling of SA 203.

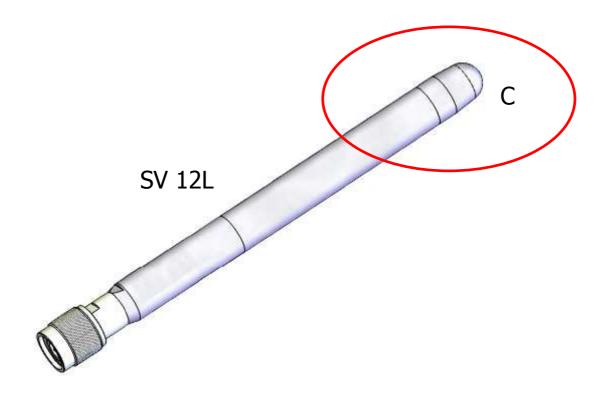
I. Step one: put the SC 26 cable through the element H.1 and element F as it is shown below.

Important: do not connect elements together.



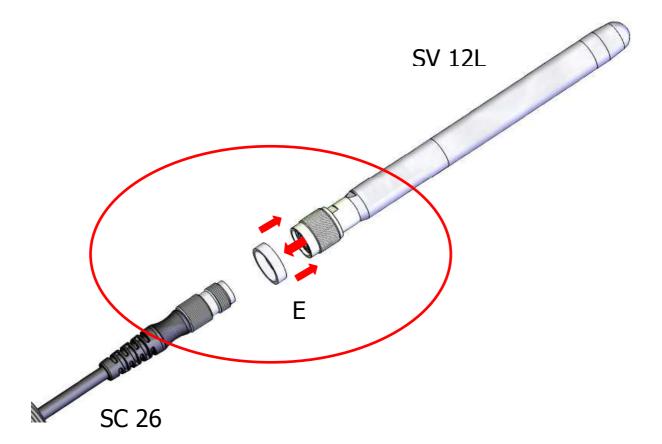
II. Step two: mount the element C (dummy microphone) on the SV 12L preamplifier. The element C will be used to put the SV 12L through the o-rings of the element B.

Important: sharp edge of SV 12L can damage o-rings inside the element B. Therefore, the element C must be put on the preamplifier.



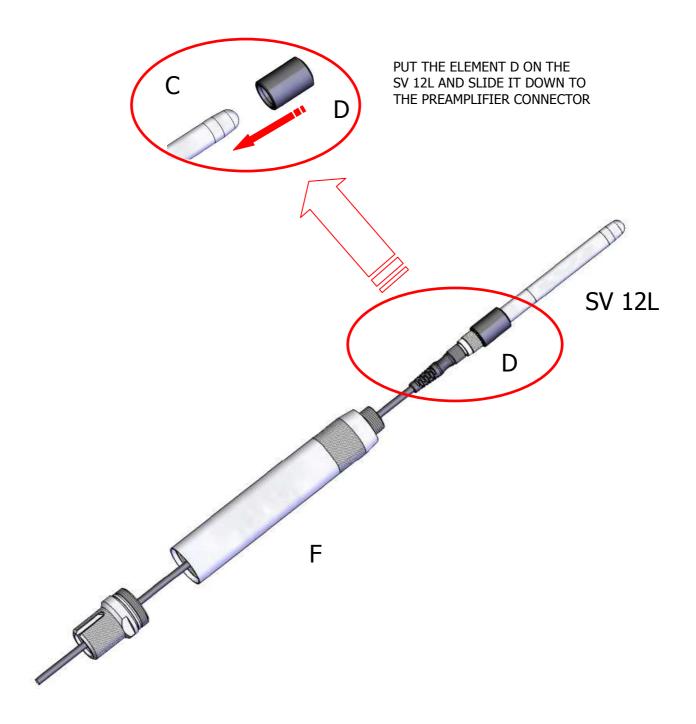
III. Step three: connect the SC 26 cable with the SV 12L preamplifier together with adding element E.

Important: first put the ring E on a TNC nut of the SV12L. Then connect the SC 26 cable with SV 12L preamplifier.



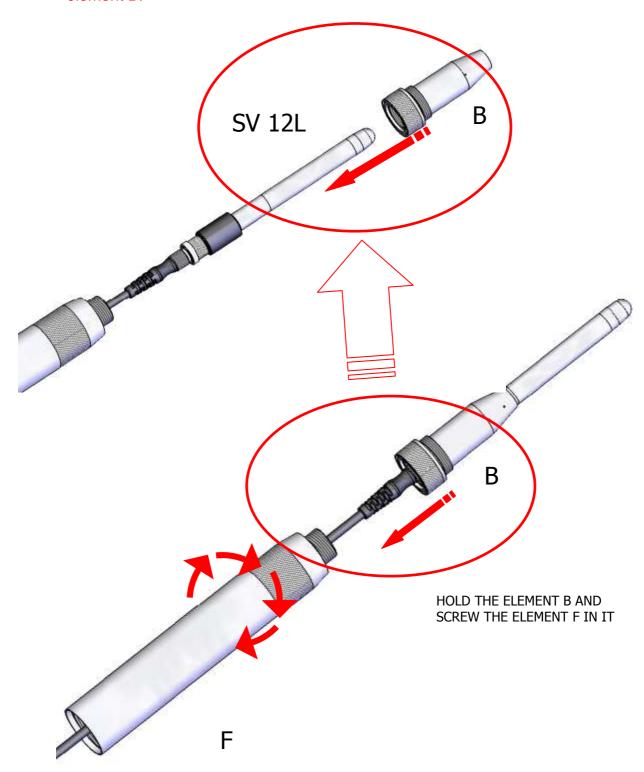
IV. Step four: put the element D on the SV 12L and slide down to the SV 12L preamplifier connector.

Important: Make sure that the element C is already fixed on the SV 12L.



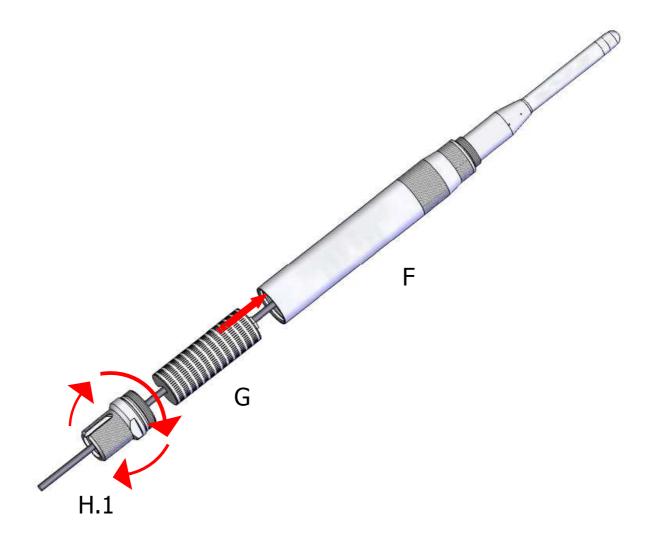
V. Step five: put the element B on the SV 12L preamplifier and slide it down to connect it with the element F.

Important: It may require to use some force to put the SV 12L preamplifier through the o-rings inside the element B. Slide the SV 12L inside the element B as it shown below. Rotate only the element F to screw it in the element B.



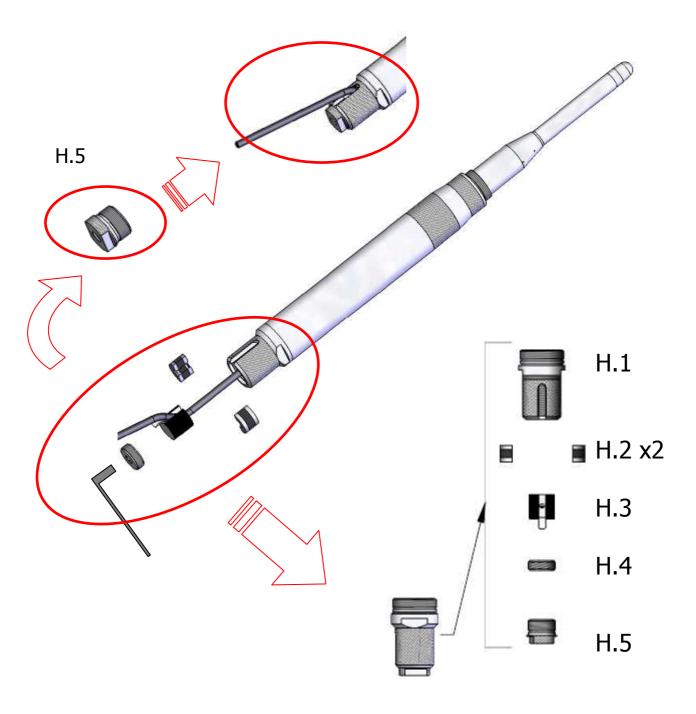
VI. Step six: put the desiccator G on the SC 26 cable and slide it inside the tube F, as it is shown below. Then connect elements F and H.1 together.

Important: Hold the element F and rotate only element H.1



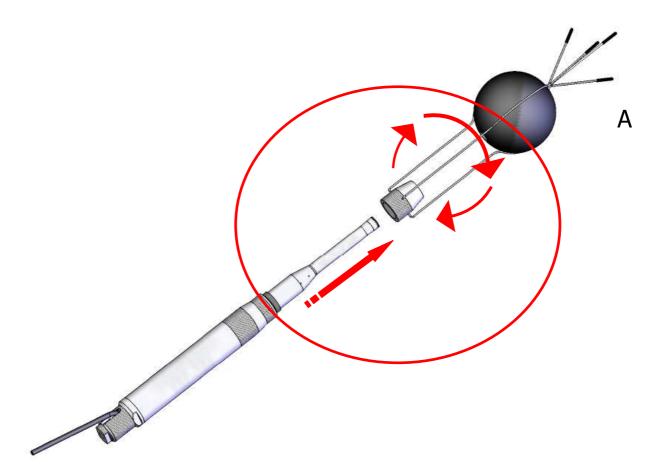
VII. Step seven: start mounting the bottom part H from putting two elements H.2 inside the element H.1. Next, slide them inside using the element H.3 (make sure that element H.3 is aligned in the direction as it is shown on a draw below). Then screw the element H.4 using the key provided. Finally, screw the element H.5 on the element F.

Important: connect all elements in the right order (from H.1 to H.5) as it is shown below.



- VIII. Step eight: replace the dummy microphone C by the ½" microphone cartridge (7052, GRAS 40AE).
- IX. Step nine: calibrate the complete system using SVANTEK acoustic calibrator.
- X. Step ten: install the element A by holding the element F and rotating the element A.

Important: microphone should be put inside of the waterproof windscreen.



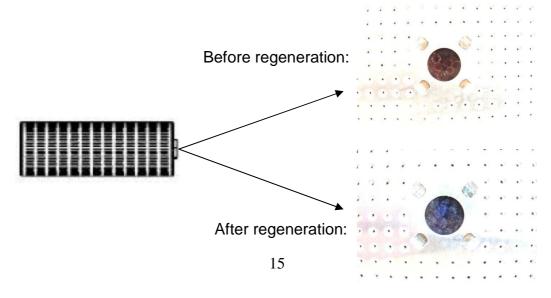
4. Important notes.

The SA 204 foam used in the element A protects microphone from wind and rain. If SA 203 microphone protection set is used continuously for a long period of time it is recommended to replace SA 204 foam at least once a year.

During continous usage the SA 204 foam is exposed to different weather conditions with possibility of causing meachanical damage to the foam's structure. Therefore it is recommended, at least once a quarter (3 months), to check the condition of the foam by egzamining the surface for cracks by squeezing the foam. If cracks or holes are observed, the SA 204 foam must be replaced.

SA 204 foam must be replaced whenever squeezing it causes severing of small pieces of its surface.

If colour of silica gel used in dessicator (part G) turnes red it means the dessicator is not able to absorb more moisture. In such case it is necessary to regenerate the dessicator by drying it for 3 hours in temperature of 150°C. The colour of silica gel is visible inside the hole placed on the top of dessicator.



Dessicator must be stored in a hermetic container when is not installed in SA 203 to prevent absorbing moisture unnecessarily.