



INVICTUS NOISE MONITOR WINDSHIELD

TECHNICAL INFORMATION

CIRRUS RESEARCH PLC
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Introduction

Introduction

The Invictus is supplied with the MK:180 Outdoor Microphone which provides the following features:

- Electrostatic actuator for self-calibration & performance verification
- Dual-layer 200mm windshield with hydro-phobic coating
 - WS:75 200mm Outer Windshield
 - WS:77 Inner Windshield
- Automatic built in heater which switches on at approx. 0°C
 - This is disabled when the battery volts drop to preserve battery voltage.
- Tilt sensor which can be used to send Alarm to user to indicate that Pre-Amp may have been tampered with or fallen over.
- Windshield fitted detection
 - Provides automatic acoustic correction for when the windshield is fitted and prevents actuator calibration when not fitted.

The height from the tripod mount at the base of the preamplifier and the microphone is 29.5cm.

Each MK:180 unit is paired with its associated Invictus main unit and should not be swapped without a full factory calibration from being carried out.

Windshield Assembly

The windshield assembly on the MK:180 outdoor microphone has been specifically designed to allow the Invictus to be used for continuous and long term outdoor noise measurement applications.

When the windshield is removed, the Invictus will not allow the electrostatic actuator to operate as a safety precaution.

Windshield components

The windshield consists of two parts, the inner WS:77 and the larger, outer WS:75, each with a different density. These two parts are treated with a hydro-phobic coating to repel water.

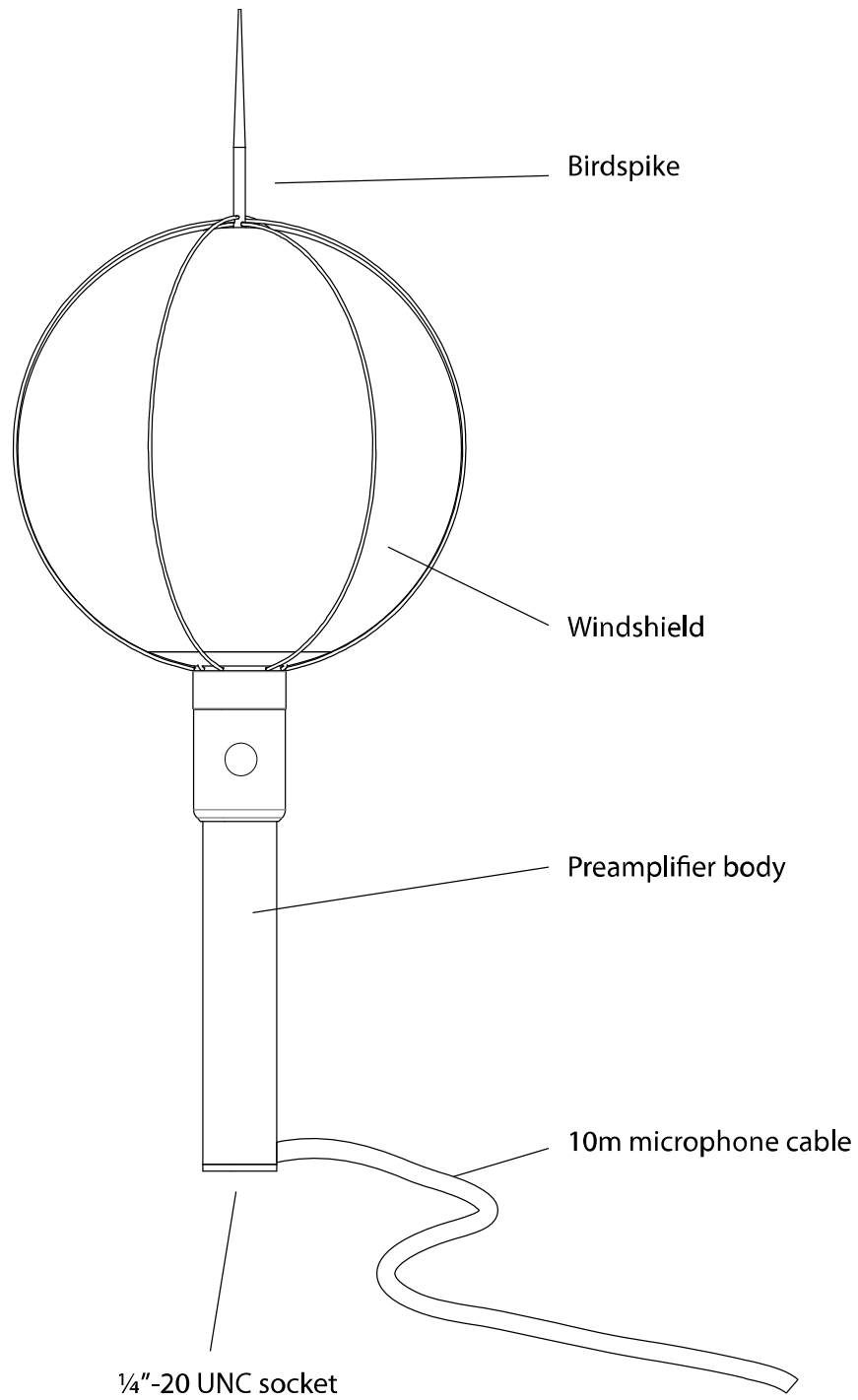
Automatic windshield correction

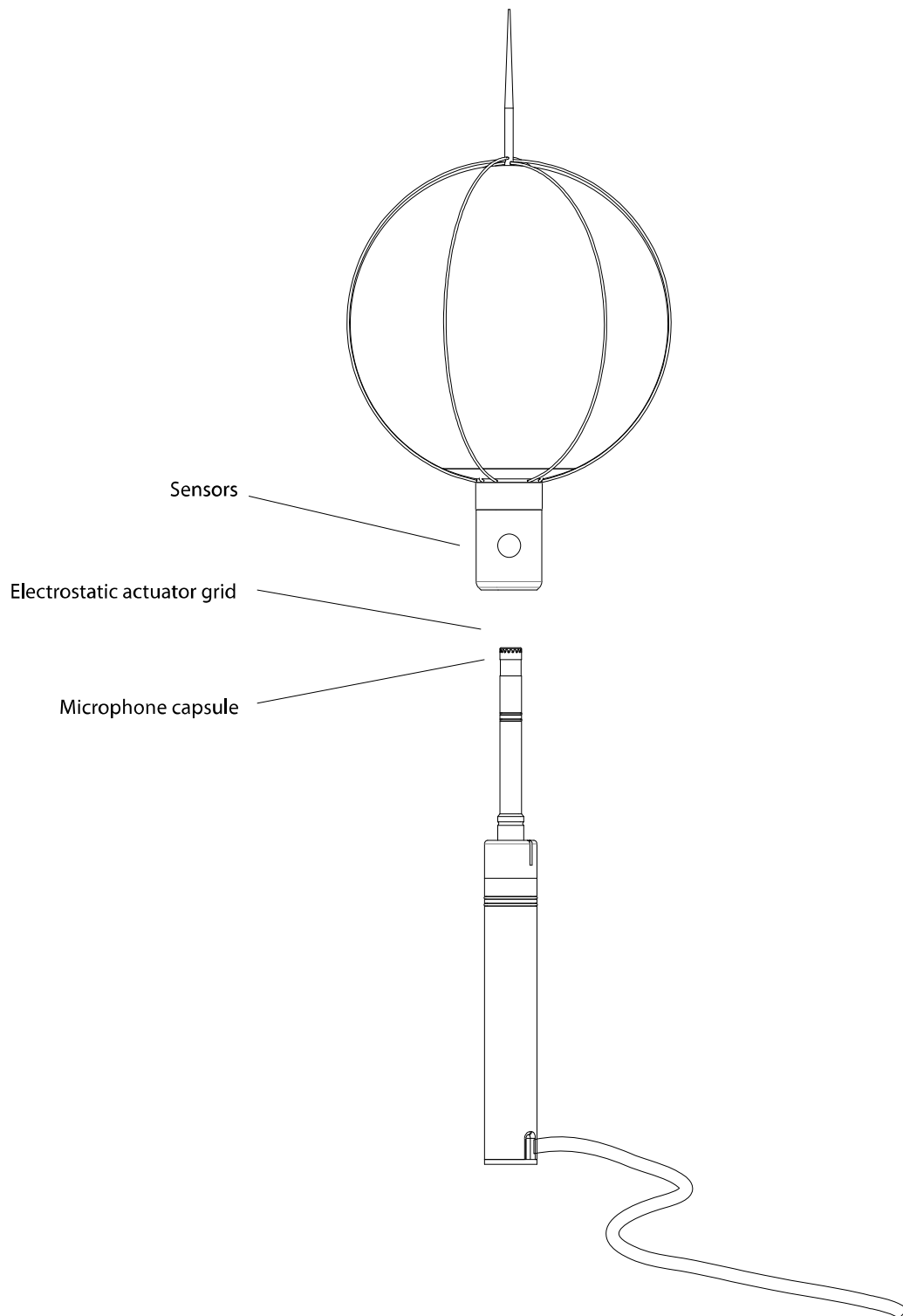
The Invictus automatically detects when the windshield assembly is fitted to the MK:180 and automatically applies a correction to take account of the attenuation of the windshield at different frequencies.

This ensures that the Invictus meets the requirements for a Class 1 Sound Level Meter to IEC 61672-1:2002 at all times.

No other corrections or adjustments are needed.

MK:180 Outdoor Microphone Schematic





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