



MK342 E + iSV1611

1/4" High SPL USB Microphone



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The USB microphone model iSV1611 is a digital microphone consisting of a pre-polarized 1/4" MK 342 E condenser microphone capsule, A67 adapter, 2 channel (stereo) ADC and USB interface which can be used with apps on smartphone, tablet or PC.

PC, smartphone or tablet receive the digitized 2 channel signal data via a USB cable connected to the iSV1611.

The two-channel operation allows simultaneous measurement from 60 dBA to 186 dB.

The 1/4" microphone capsule MK 342 E has a constant pressure response and is therefore optimized for correct acoustic measurements on boundary layers or in acoustic couplers with extreme sound pressure levels.

The equalization of the static air pressure is by means of a capillary to the preamplifier (rear-vented) or by means of a lateral capillary (side-vented).

Technical data

A/D sampling frequency kHz	48/96/192
Frequency range (+/- 3 dB)	3.5 Hz - 70 kHz
Microphone capsule thread	60UNS
Polar pattern	Sphere
Electrical noise floor	12 dBA
Acoustic background noise	60 dBA
Limit sound pressure level	186 dB
Sensitivity	0.25 mV/Pa
Measuring range	60 dBA – 186 dB
USB Standard	2.0 & 1.1
Dimensions mm	φ20×230 mm
1/4" Diameter	7.0 ± 0.02 mm
Weight	125 g

MK 342 E Specs

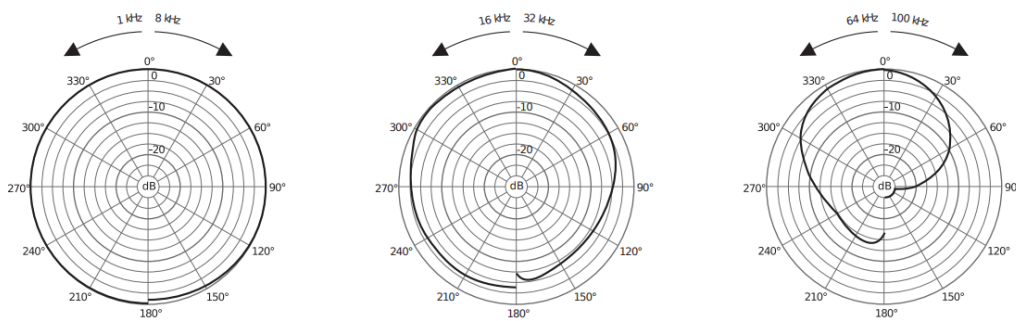
Transducer type	Capacitive pressure transducer	
Frequency range of the pressure response	±3 dB	5 Hz to 70 kHz
	±2 dB	5 Hz to 50 kHz
	±1 dB	0 Hz to 20 kHz
Field Idle Transfer Factor	0.25 mV/Pa	
Limit sound pressure level for 3 % distortion at 1 kHz	186 dB	
Noise	60 dB	
Polarization voltage	backelectret	
Capacitance with polarization voltage at 1 kHz	4.2 pF	
Working temperature range	-50 ... +100 °C	
Humidity up to	70 °C, 90 %	
Temperature coefficient	≤ 0.01 dB/K	
Static pressure coefficient	0.00001 dB/Pa	
Diameter with protective cap	7 ± 0.02 mm	
Height	9.7 mm	
Weight	2 g	
Thread for preamplifier	5.7 mm 60 UNS	
Thread for protective cap	6.35 mm 60 UNS	



Maintenance and servicing

In order to ensure proper functionality, the measuring microphone capsule must be protected from mechanical damage and, depending on the conditions of use, checked on all sides for contamination at intervals to be specified in the operating voltage-free state. After removing the protective cap, the impurities in its interior, as well as on the membrane, should be removed extremely carefully with a soft brush or cloth. The measurement microphone capsule is not suitable for use in chemically aggressive media and conductive dust. Condensation formation must be ruled out.

Polar diagrams



typical pressure frequency response

