4011 Cardioid Microphone

TABLE OF CONTENTS

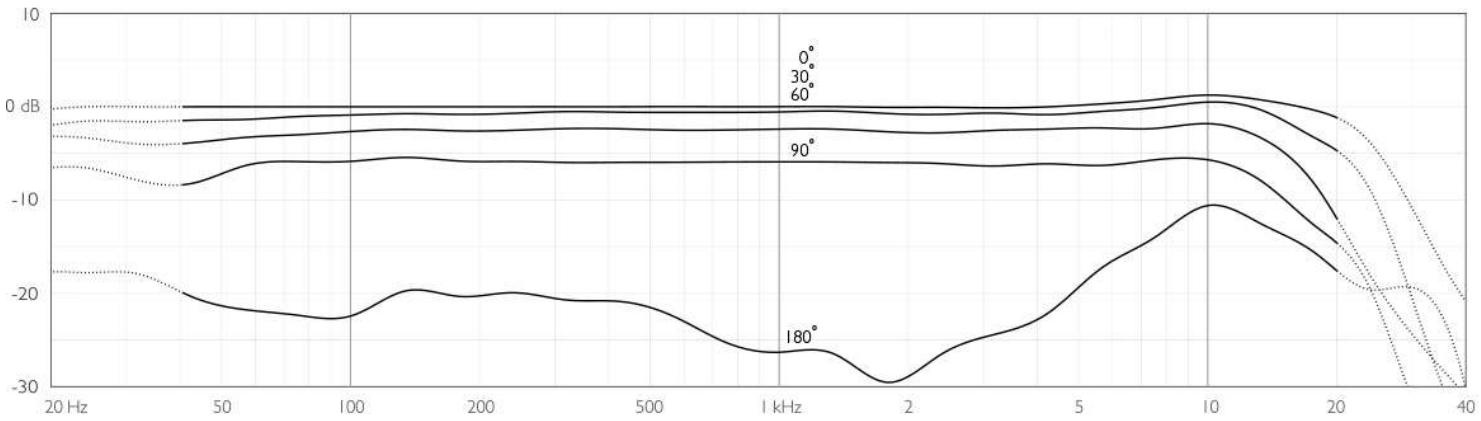
Specifications - 4011A	**1**
Specifications - 4011C	2
Specifications - 4011ER/ES	3

Specifications - 4011A

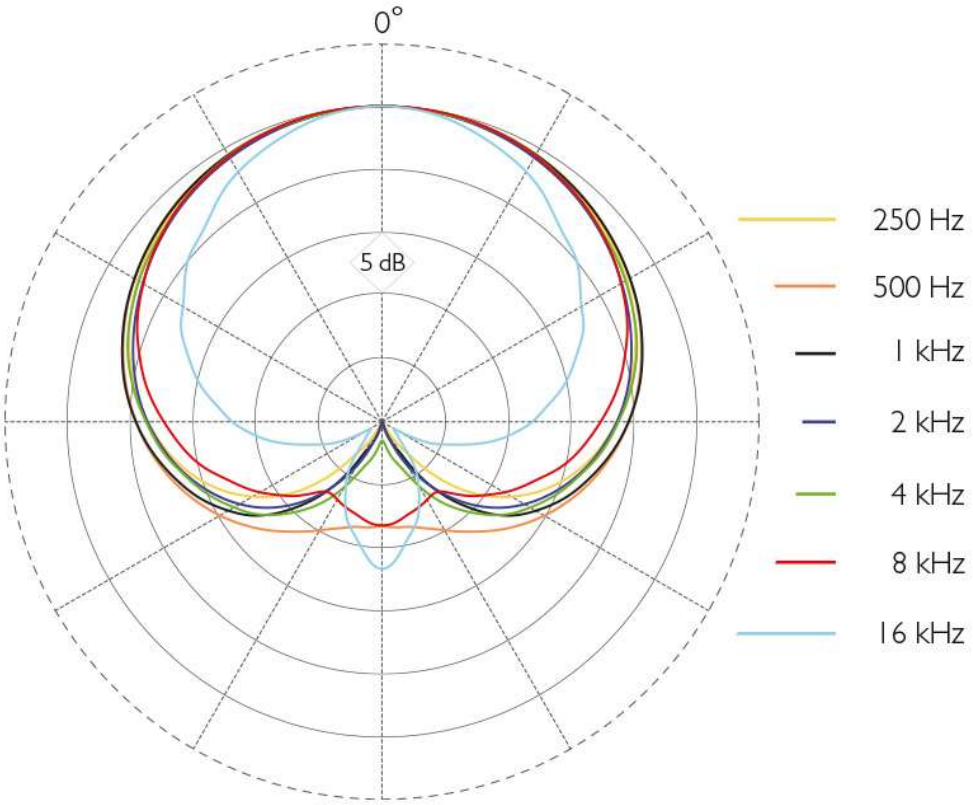
Directional pattern	Cardioid
Principle of operation	Pressure gradient
Cartridge type	Pre-polarized condenser
Frequency response	20 Hz - 20 kHz

Effective frequency range, ±2 dB, at 30 cm (11.8 in)	40 Hz - 20 kHz
Sensitivity, nominal, ±2 dB at 1 kHz	10 mV/Pa; -40 dB re. 1 V/Pa
Equivalent noise level, A-weighted	Typ. 18 dB(A) re. 20 µPa (max. 20 dB(A))
Equivalent noise level, ITU-R BS.468-4	Typ. 25 dB (max. 27 dB)
Distortion, THD < 1%	136 dB SPL RMS, 139 dB SPL peak
Dynamic range	Typ. 121 dB
Max. SPL, THD 10%	159 dB SPL peak
Switchable attenuator, filters etc.	0 dB / -20 dB
Rated output impedance	200 Ω
Minimum load impedance	2 kΩ
Cable drive capability	100 m (328 ft)
Output balance principle	Impedance balancing with Active Drive
Common mode rejection ratio (CMRR)	> 60 dB
Power supply (for full performance)	P48 (Phantom Power)
Current consumption	2.8 mA
Connector	XLR-3M. Pin 1: shield, Pin 2: signal + phase, Pin 3: - phase
Color	Matte black
Weight	158 g (5.6 oz)
Microphone diameter	19 mm (0.75 in)
Capsule diameter	19 mm (0.75 in)
Microphone length	170 mm (6.7 in)

Maximum output voltage, RMS	8 V
Polarity	+V at pin 2 for positive sound pressure
Temperature range	-40°C to 45°C (-40°F to 113°F)
Relative humidity (RH)	Up to 90%
Matching tolerance (frequency response and sensitivity)	±1 dB
Phase deviation for kit	< 10°



Typical on and off-axis response of a 4011A Cardioid Microphone measured at 30 cm (11.8 in).

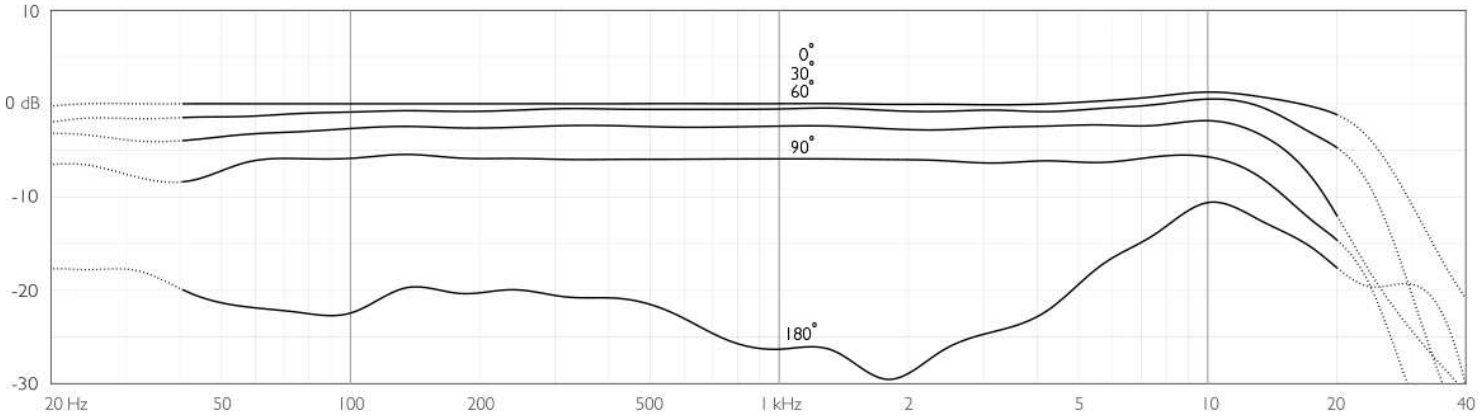


Typical directional characteristics of a 4011A Cardioid Microphone

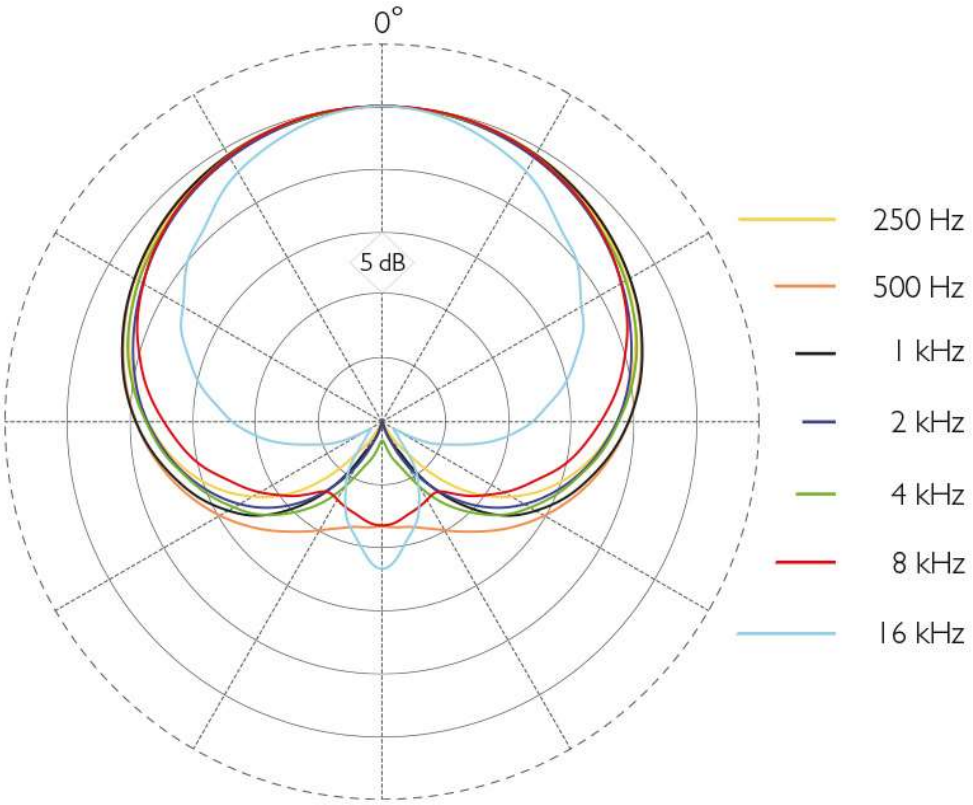
Specifications - 4011C

Directional pattern	Cardioid
Principle of operation	Pressure gradient
Cartridge type	Pre-polarized condenser
Frequency response	20 Hz - 20 kHz
Effective frequency range, ±2 dB, at 30 cm (11.8 in)	40 Hz - 20 kHz
Sensitivity, nominal, ±2 dB at 1 kHz	10 mV/Pa; -40 dB re. 1 V/Pa
Equivalent noise level, A-weighted	Typ. 18 dB(A) re. 20 µPa (max. 20 dB(A))
Equivalent noise level, ITU-R BS.468-4	Typ. 25 dB (max. 27 dB)
Distortion, THD < 1%	136 dB SPL RMS, 139 dB SPL peak
Dynamic range	Typ. 121 dB
Max. SPL, THD 10%	152 dB SPL peak
Rated output impedance	100 Ω
Minimum load impedance	2 kΩ
Cable drive capability	100 m (328 ft)
Output balance principle	Impedance balancing with Active Drive
Common mode rejection ratio (CMRR)	> 50 dB
Power supply (for full performance)	P48 (Phantom Power)
Current consumption	2.8 mA
Connector	XLR-3M. Pin 1: shield, Pin 2: signal + phase, Pin 3: - phase
Color	Matte black
Weight	58 g (2 oz)

Microphone diameter	19 mm (0.75 in)
Capsule diameter	19 mm (0.75 in)
Microphone length	64 mm (2.5 in)
Maximum output voltage, RMS	4.5 V
Polarity	+V at pin 2 for positive sound pressure
Temperature range	-40°C to 45°C (-40°F to 113°F)
Relative humidity (RH)	Up to 90%
Matching tolerance (frequency response and sensitivity)	±1 dB
Phase deviation for kit	< 10°



Typical on and off-axis response of a 4011C Cardioid Microphone measured at 30 cm (11.8 in).

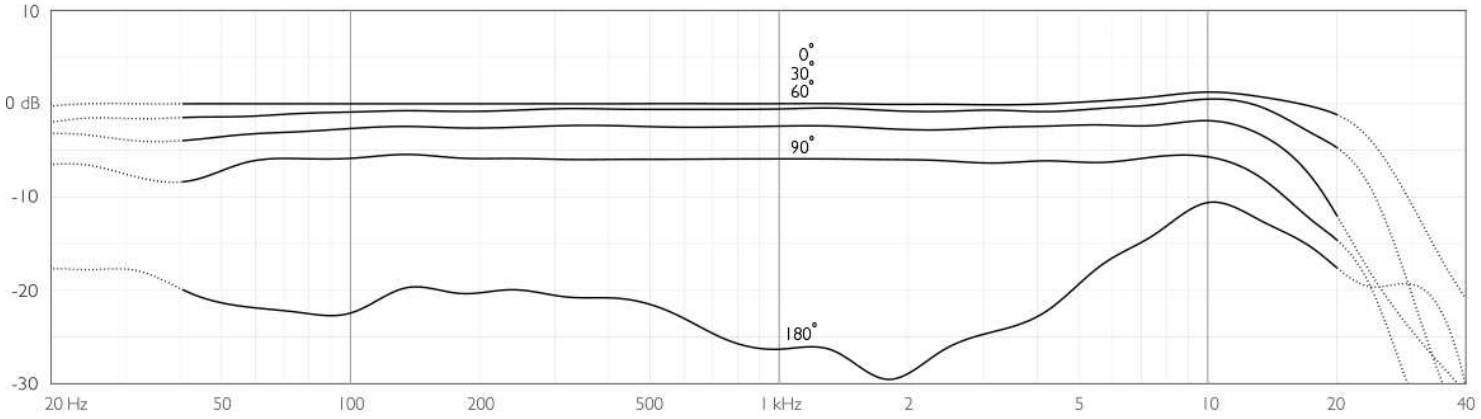


Typical directional characteristics of a 4011C Cardioid Microphone

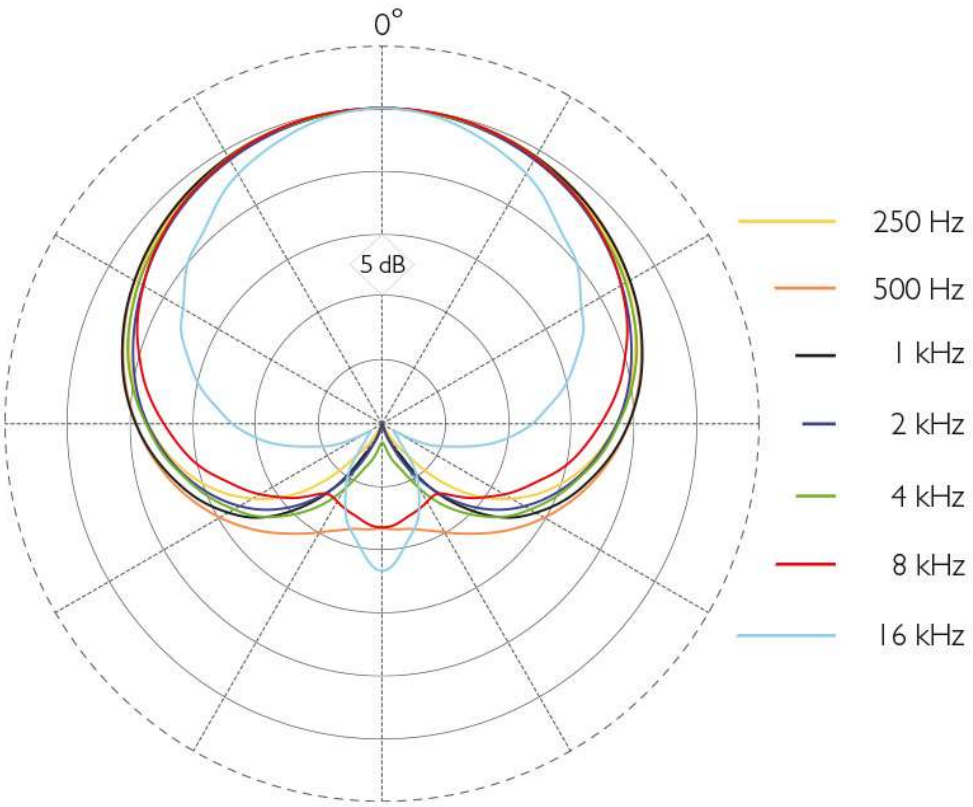
Specifications - 4011ER/ES

Directional pattern	Cardioid
Principle of operation	Pressure gradient
Cartridge type	Pre-polarized condenser
Frequency response	20 Hz - 20 kHz
Effective frequency range, ±2 dB, at 30 cm (11.8 in)	40 Hz - 20 kHz
Sensitivity, nominal, ±2 dB at 1 kHz	10 mV/Pa; -40 dB re. 1 V/Pa
Equivalent noise level, A-weighted	Typ. 18 dB(A) re. 20 µPa (max. 20 dB(A))
Equivalent noise level, ITU-R BS.468-4	Typ. 25 dB (max. 27 dB)
Distortion, THD < 1%	136 dB SPL RMS, 139 dB SPL peak
Dynamic range	Typ. 121 dB
Max. SPL, THD 10%	144 dB SPL peak
Rated output impedance	100 Ω
Minimum load impedance	2 kΩ
Cable drive capability	100 m (328 ft)
Output balance principle	Impedance balancing
Common mode rejection ratio (CMRR)	> 40 dB
Power supply (for full performance)	P48 (Phantom Power)
Current consumption	3.5 mA
Connector	XLR-3M. Pin 1: shield, Pin 2: signal + phase, Pin 3: - phase
Color	Matte black
Weight	109 g (3.8 oz)

Microphone diameter	19 mm (0.75 in)
Capsule diameter	19 mm (0.75 in)
Microphone length	35 mm (1.38 in)
Maximum output voltage, RMS	2.2 V
Polarity	+V at pin 2 for positive sound pressure
Temperature range	-40°C to 45°C (-40°F to 113°F)
Relative humidity (RH)	Up to 90%
Matching tolerance (frequency response and sensitivity)	±1 dB
Phase deviation for kit	< 10°



Typical on and off-axis response of a 4011ER/ES Cardioid Microphone measured at 30 cm (11.8 in).



Typical directional characteristics of a 4011ER/ES Cardioid Microphone