

SM WIRED MICROPHONES

INDUSTRY STANDARD. PROFESSIONAL UTILITY.

Shure SM Microphones deliver an unparalleled mix of audio quality and rugged dependability that has made them the industry standard in professional sound for over 40 years. Built to withstand the rigors of regular stage and studio use, SM microphones are the cornerstone of a complete family of Shure wired microphones tailored to meet any audio need.



APPLICATIONS

Touring

Club Performance

Studio Recording

General Sound Reinforcement

PRODUCT HIGHLIGHTS

Industry standard, professional utility

Industry-defining sound

Rock-solid construction

Dynamic and condenser models

SM7B Cardioid Dynamic Microphone

Overview

The SM7B is a selectable frequency response microphone that delivers warm and smooth audio in close-proximity studio and vocal applications. Optimized shielding from external electromagnetic hum, along with internal shock mounting, external windscreens and adjustable bass roll-off and mid-range emphasis response settings provide clean, consistent reproduction.

Features

- Flat, wide-range frequency response for exceptionally clean and natural reproduction of both music and speech
- Bass rolloff and mid-range emphasis (presence boost) controls with graphic display of response setting
- Improved rejection of electromagnetic hum, optimized for shielding against broadband interference emitted by computer monitors Internal "air suspension" shock isolation virtually eliminates mechanical noise transmission

- Highly effective pop filter eliminates need for any add-on protection against explosive breath sounds, even for close-up vocals or narration Now shipping with the A7WS detachable windscreen, designed to reduce plosive sounds and gives a warmer tone for close-talk vocals
- Yoke mounting with captive stand nut for easy mounting and dismounting provides precise control of microphone position
- Classic cardioid polar pattern, uniform with frequency and symmetrical about axis, to provide maximum rejection and minimum coloration
- Rugged construction and excellent cartridge protection for outstanding reliability



SM7B	Includes foam windscreen, close-talk windscreen, and locking yoke mount.

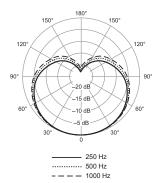
Specifications

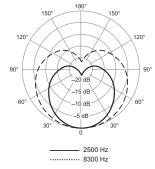
Туре	Dynamic			
Frequency Response	50 to 20,000 Hz			
Polar Pattern	Cardioid			
Electromagnetic Hum Sensitivity (Typical, Equivalent SPL/milliOersted)	60 Hz. 11 dB 500 Hz. 24 dB 1 kHz. 33 dB			
Impedance	150 Ω for connection to microphone inputs rated at 19 to 300 Ω			
Output Level (at 1,000 Hz)	Open circuit voltage: – 59.0 dB (1.12 mV) 0 dB = 1 volt per Pascal			
Switches	Bass rolloff and mid-range emphasis: Slotted response selector switches			
Cartridge Shock Mount	Internal air-suspension shock and vibration isolator			
Microphone Connector	Three-pin professional audio (XLR)			
Swivel Assembly	Integrated, captive nut for ease of attachment to stand, fits 5/8 in27 thread			
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3			
Case	Dark gray enamel aluminum and steel case with dark gray foam windscreen			
Weight	765.4			

Optional Accessories and Replacement Parts

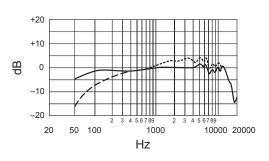
A7WS	Large close-talk windscreen	RPM106	Replacement cartridge	537A	Desk stand
RK345	Microphone windscreen				







Frequency Response





SM27 Cardioid Condenser Microphone

Overview

The SM27 is a rugged and versatile large-diaphragm, side-address cardioid condenser microphone, with low self-noise and extended frequency response that picks up vocal and instrument nuances with clarity. Durable Shure construction features three separate mesh layers that reduce wind and breath noise. Equally comfortable on stage or in the studio.

Features

- Cardioid polar pattern the most commonly used pattern for both studio and live applications 1 inch, externally biased, ultra-thin, 2.5 μ m, 24 Karat gold-layered, low mass, Mylar® diaphragm provides superior transient response
- Class A, discrete, transformerless preamplifier for transparency, extremely fast transient response and no crossover distortion, while minimizing harmonic and intermodulation distortions
- Premium electronic components and gold-plated internal and external connectors Subsonic filter eliminates rumble from mechanical vibration below 17 Hz

- Switchable 15 dB pad for handling extremely high sound pressure levels (SPLs) 3-position switchable low-frequency filter helps reduce unwanted background noise or counteract proximity effect
- Integrated three-stage pop protection grille reduces plosives and other breath noise
- Internal shock mount reduces handling and stand noise

Available Models

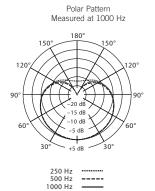
SM27 Includes stand adapter and zippered pouch		
	SM27	

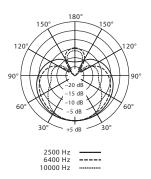
Specifications

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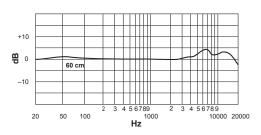
Optional Accessories and Replacement Parts

A27SM	Shure lock™ rubber isolated shock mount	A322B	Zippered pouch	A32WS	Windscreen
RPM642	Replacement rubber rings for shock mount (contains four)	PS6	Popper stopper™		





Frequency Response





SM27

SM48 Cardioid Dynamic Microphone

Overview

The SM48 is a rugged cardioid dynamic microphone with great sound and durable construction for reliable use in spoken word and karaoke vocal performance applications. Available with or without an on/off switch, and comes with a swivel adapter and carrying pouch for many of the benefits of the SM58® at an affordable price.

Features

- Cardioid pickup pattern rejects off-axis sound and provides superior gain before feedback
- Frequency response tailored for vocals, with brightened midrange and bass rolloff to control proximity effect
- Shock-mounted cartridge for exceptional ruggedness and reduced handling noise Built-in pop filter that reduces explosive breath sounds and wind noise
- Supplied stand adapter and carrying/storage bag Lockable on/off switch (SM48S only)
- Legendary Shure quality and ruggedness

Available Models

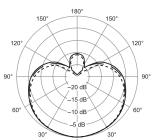
SM48	Includes stand adapter and zippered pouch		
SM48S	With lockable on/off switch. Includes swivel adapter and a zippered pouch		

Specifications

Туре	Dynamic
Frequency Response	55 to 14,000 Hz
Polar Pattern	Cardioid
Impedance	Microphone rating impedance is 150 Ω (270 Ω actual) for connection to microphone inputs rated at 19 to 300 Ω
Output Level (at 1,000 Hz)	Open circuit voltage: *–57.5 dBV/Pa (1.3 mV) *1 Pa = 94 dB SPL
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3
Connector	Three-pin professional audio (XLR), male
Weight	370 g
Dimensions	166 mm L x 54.2 mm W

Optional Accessories and Replacement Parts

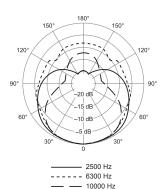
A25D	Microphone clip	A55M, A55HM	Isolation mount	C25F	7.6 m cable
A58WS	Windscreen	A26M	Dual mount	RK81S	On/off switch
R136	Cartridge	RK248G	Screen and grille assembly	RK40P	Plug assembly
S37A S39A	Desk Stand				

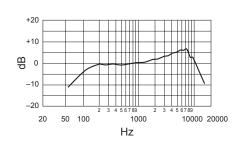


Polar Pattern

Measured at 1000 Hz







Frequency Response



SM48

LEGENDARY PERFORMANCE™

SM57 Cardioid Dynamic Microphone

Overview

An industry-standard, highly versatile cardioid dynamic microphone that can be found onstage and in studios around the world. The ideal choice for sound reinforcement and recording applications, the legendary SM57 is tuned for clean reproduction of amplified and acoustic instruments, targeting the main sound source while minimizing background noise.

Features

- Frequency response tailored for drums, guitars, and vocals
- Uniform cardioid pickup pattern isolates the main sound source while reducing background noise Pneumatic shock-mount system cuts down handling noise

- Extremely durable under the heaviest use Supplied break-resistant swivel adapter that rotates 180°
- Legendary Shure quality, ruggedness, and reliability

Available Models

SM57-LC	Includes stand adapter and zippered pouch			
SM57-LCE	Includes 5/8-inch to 3/8-inch thread adapter for mounting on European stands, swivel adapter and a zippered pouch			

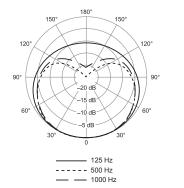
Specifications

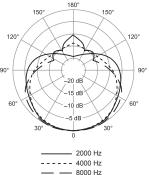
Туре	Dynamic
Frequency Response	40 to 15,000 Hz
Polar Pattern	Cardioid
Sensitivity (at 1,000 Hz Open circuit voltage)	Open circuit voltage: -56.0 dBV/Pa* (1.6 mV) *(1 Pa = 94 dB SPL)
Impedance	Rated impedance is 150 Ω (310 Ω actual) for connection to microphone inputs rated low impedance
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3
Case	Dark gray, enamel-painted, die-cast steel with a polycarbonate grille and a stainless steel screen
Connector	Three-pin professional audio connector (male XLR type)
Weight	284 g
Dimensions	157 mm L x 32 mm W

Optional Accessories and Replacement Parts

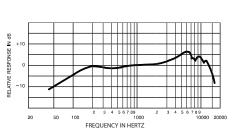
A2WS	Locking windscreen	A55M	Isolation mount	C25F	7.6 m cable
A25D	Microphone clip	A26M	Dual mount	RK244G	Screen and grille assembly
R59	Cartridge	S37A, S39A	Desk stand		







Frequency Response



LEGENDARY PERFORMANCE™

SM57

SM58® Cardioid Dynamic Microphone

Overview

The legendary SM58® is an industry-standard, highly versatile cardioid dynamic vocal microphone that is consistently the first choice of vocal performers around the globe. Even in extreme conditions, the SM58 is tailored to target the main sound source while minimizing background noise, delivering warm and clear vocal reproduction.

Features

- Frequency response tailored for vocals, with brightened midrange and bass rolloff
- Uniform cardioid pickup pattern isolates the main sound source and minimizes background noise Pneumatic shock-mount system cuts down handling noise Effective, built-in spherical wind and pop filter

- Supplied with break-resistant stand adapter which rotates 180 degrees
- Legendary Shure quality, ruggedness and reliability
- Cardioid (unidirectional) dynamic Frequency response: 50 to 15,000 Hz

Available Models

SM58-LC	Includes stand adapter and zippered pouch
SM58-CN	Includes 7.6 m XLR-male to XLR-female cable, swivel adapter and a zippered pouch
SM58S	Includes integrated on/off switch, swivel adapter and a zippered pouch

Specifications

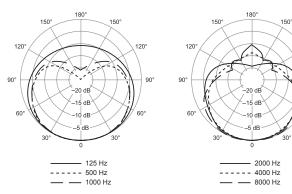
Туре	Dynamic
Frequency Response	50 to 15,000 Hz
Polar Pattern	Cardioid
Sensitivity (at 1,000 Hz Open circuit voltage)	–54.5 dBV/Pa (1.85 mV) 1 Pa = 94 dB SPL
Impedance	Rated impedance is 150 Ω (300 Ω actual) for connection to microphone inputs rated low impedance
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3
Case	Dark gray, enamel-painted, die cast metal; matte-finished, silver colored, spherical steel mesh grille
Connector	Three-pin professional audio connector (male XLR type)
Weight	Net: 330 g
Dimensions	162 mm L x 51 mm W

Optional Accessories and Replacement Parts

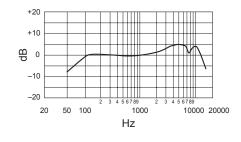
A58WS	Windscreen	A55M	Isolation mount	C25F	7.6 m cable
A25D	Microphone clip	A26M	Dual mount	RK143G	Screen and grille
R59	Cartridge	S37A S39A	Desk stand		



Measured at 1000 Hz



Frequency Response





SM81 Cardioid Condenser Microphone

Overview

The legendary SM81 is an industry-standard, flat-response cardioid condenser microphone, featuring a wide frequency response and low self-noise. Highly versatile, the SM81's renowned sonic accuracy is a constant choice around the world for acoustic stage and studio performance, including guitar, piano and drum overhead applications.

Features

- 20 Hz to 20 kHz frequency response
- Flat response curve for accurate reproduction of sound sources Low noise and high output clipping level
- Low distortion over a wide range of load impedances
- Cardioid polar pattern, uniform with frequency and symmetric about axis, providing maximum rejection and minimum coloration of off-axis sounds
- Low RF susceptibility Selectable low-frequency response: flat, 6 or 18 dB/octave rolloff
- 0 dB/10 dB lockable attenuator switch
 Phantom powering (DIN 45 596 voltages of 12 to 48 Vdc)
 Rugged steel construction for durability
- Field-usable over wide range of temperature and humidity conditions

Available Models

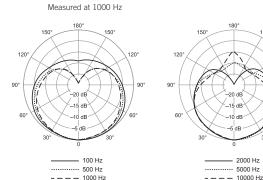
SM81-LC	Includes stand adapter and zippered pouch

Specifications

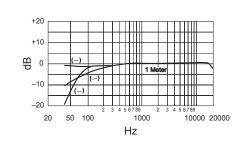
Туре	Condenser
Frequency Response	20 to 20,000 Hz
Polar Pattern	Cardioid
Sensitivity (at 1,000 Hz)	Open circuit voltage: -45 dBV/Pascal (5.6 mV) (1 Pa = 94 dB SPL)
Impedance	Rated at 150 Ω (85 Ω actual) Recommended minimum load impedance: 800 Ω
Output Clipping Level	$800~\Omega$ Load: -4 dBV (0.63 V) 150 Ω Load: -15 dBV (0.18 V)
Maximum SPL (at 1,000 Hz)	$800~\Omega$ load: $136~\mathrm{dB}$ (attenuator at 0) $146~\mathrm{dB}$ (attenuator at -10) $150~\Omega$ load: $128~\mathrm{dB}$ (attenuator at 0) $138~\mathrm{dB}$ (attenuator at -10)
Self-Noise	16 dB typical, A-weighted 19 dB typical, weighted per DIN 45 405
Hum Pickup	-3 dB equivalent SPL in a 1 mOe field (60 Hz)
Signal-to-Noise Ratio	78 dB (IEC 651)* at 94 dB SPL S/N ratio is difference between 94 dB SPL and equivalent SPL of self– noise A-weighted
Overvoltage and Reverse Polarity Protection	Max. external voltage applied to pins 2 and 3 with respect to pin $1: +52$ Vdc Reverse polarity protection: 200 mA max. (diode-clamped)
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3
Power	11 to 52 vdc, 1.2 mA
Case	Steel construction with vinyl metallic paint finish and stainless steel screens
Connector	Three-pin professional audio connector (male XLR type)
Weight	230 g
Dimensions	212 mm L x 23.5 mm W

Optional Accessories and Replacement Parts

A57F	Microphone clip	A81G	Grille and windscreen	A81WS	Large foam windscreen



Polar Pattern



Frequency Response



SM81

LEGENDARY PERFORMANCE™

SM86 Cardioid Condenser Microphone

Overview

The SM86 is an award-winning, rugged cardioid condenser microphone with an extended high frequency response. Constructed with a three-point shock mount and a two-stage internal pop filter, the tailored frequency response of the SM86 delivers consistently smooth reproduction of lead vocals, even

Features

- Condenser cartridge for studio quality sound
- Tailored frequency response for a clear reproduction of vocals Rugged construction withstands the rigors of touring sound
- Cardioid polar pattern minimizes unwanted background noise Excellent choice for stage monitors and personal monitors
- Built-in three-point shock mount minimizes handling noise Two-stage pop filter reduces wind and breath noise

Available Models

SM86-LC Includes stand adapter and zippered pouch	SM86-LC Includes stand adapter and zippered pouch	
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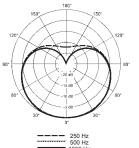
Specifications

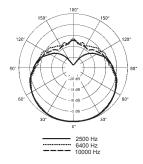
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Туре	Condenser
Frequency Response	50 to 18,000 Hz
Polar Pattern	Cardioid
Sensitivity (at 1,000 Hz)	Open circuit voltage: -50 dBV/Pa (3.15 mV) (1 Pa = 94 dB SPL)
Impedance	$150~\Omega$ at $1~\text{kHz}$ Recommended minimum load impedance: 600 Ω
Output Clipping Level	1000 Ω load at 1,000 Hz: +3 dBV (1.41 V)
Maximum SPL (at 1,000 Hz)	1000 Ω load (1% THD): 147 dB
Self-Noise	23 dB typical, A-weighted
Dynamic Range (1000 Ω)	124 dB (maximum SPL to A-weighted noise level)
Signal-to-Noise Ratio	71 dB at 94 dB SPL (IEC 651)* *S/N ratio is difference between 94 dB SPL and equivalent SPL of self-noise A-weighted
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3 of the output connector
Power Requirements	11 to 52 Vdc, 5.2 mA
Case	Dark gray, enamel-painted, die-cast with a stainless steel grille
Connector	Three-pin professional audio connector (male XLR type)
Weight	284 g
Dimensions	183 mm L x 49 mm W

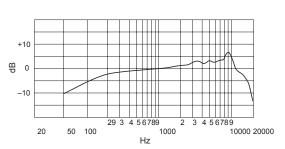
Optional Accessories and Replacement Parts

A25D	Microphone clip	A55M	Shock stopper cip	A55HM	Shock stopper half clip
A85WS	Microphone windscreen	RPM226	Replacement grille		









Frequency Response

LEGENDARY PERFORMANCE™

SM87A Supercardioid Condenser Microphone

Overview

The SM87A is a rugged, lightweight supercardioid condenser microphone with superior rejection for clear reproduction of warm and accurate lead vocals. Designed with a three-stage shock mount for low self-noise, and a tight polar pattern that excludes unwanted sound sources, the SM87A is an excellent choice for sound reinforcement in noisy or reverberant environments.

Features

- Highly directional supercardioid pickup pattern
- Controlled low-frequency roll-off Very low RF and magnetic hum susceptibility
- Minimally affected by varying load impedance
- Built-in wind and pop filter
- Transducer element shock mounted
- Rugged construction for outstanding reliability Field-usable over a wide range of temperature and humidity conditions
- Accepts a wide variety of phantom power sources, including DIN 45 596 voltages of 11 and 52 Vdc

Available Models

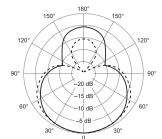
SM87A Includes stand adapter and zippered pouch		
	SM87A	Includes stand adapter and zippered pouch

Specifications

Туре	Condenser
Frequency Response	50 to 20,000 Hz
Polar Pattern	Supercardioid
Sensitivity (at 1,000 Hz)	Open circuit voltage: -52.5 dBV/Pa (2.4 mV) (1 Pa = 94 dB SPL)
Impedance	Rated at 150 Ω (100 Ω actual ±20%) Recommended minimum load impedance: 800 Ω
Output Clipping Level	1000 Ω Load at 1,000 Hz: -6 dBV (0.5 V)
Maximum SPL (at 1,000 Hz)	140.5 dB (0.25% THD, 1000 Ω load)
Self-Noise	24 dB typical, A-weighted 26 dB typical, weighted per DIN 45 405
Dynamic Range (1000 Ω)	116.5 dB (maximum SPL to A-weighted noise level)
Signal-to-Noise Ratio	70 dB at 94 dB SPL (IEC 651) S/N ratio is difference between 94 dB SPL and equivalent SPL of self– noise A-weighted
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3
Power Requirements	11 to 52 vdc, 1.2 mA
Case	Aluminum construction with steel grille and satin black finish
Connector	Three-pin professional audio connector (male XLR type)
Weight	200 g
Dimensions	192 mm L x 50 mm W

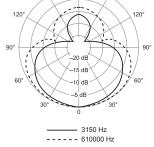
Optional Accessories and Replacement Parts

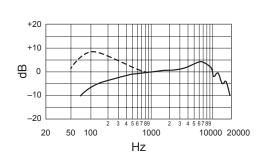
A25D	Microphone clip	RK128	Replacement cartridge and shock mount	A55M, A55HM	Isolation mount
A85WS	Microphone windscreen	RK214G	Replacement screen and grille		



---- 500 Hz, 1000 Hz

Polar Pattern Measured at 1000 Hz





Frequency Response



LEGENDARY PERFORMANCE™

SM94 Cardioid Condenser Microphone

Overview

The SM94 is a rugged, versatile flat-response cardioid condenser microphone, designed with a frequency response free of either presence peaks or low-end rolloffs, for use with live amplified and acoustic instruments. Additionally, the SM94 can be powered from one AA battery or phantom power, for remote recording applications and environmental conditions.

Features

- A sensitive mic with a wide, flat response ideal for live amplified and acoustic instruments.
- Extremely well-suited for reproduction of stringed instruments, woodwinds and cymbals
- AA battery or phantom power Internal shock mount
- Wide dynamic range
- Smooth, flat frequency response
- Uniform Cardioid condenser Frequency response: 40 to 16,000 Hz

Available Models

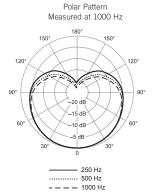
SM94	Includes stand adapter and zippered pouch

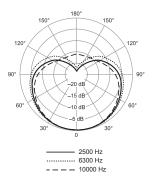
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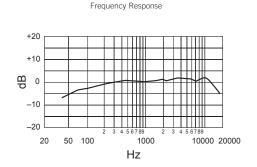
Condenser		
40 to 16,000 Hz		
Cardioid		
Open circuit voltage: –49 dBV/Pa (3.5 mV) (phantom) –50 dBV/Pa (3.2 mV) (battery) (1 Pa = 94dB SPL)		
Rated at 150 Ω; 200 Ω actual		
800 Ω Load – 14 dBV (0.63 V) (phantom), 1% THD; –23 dBV (0.71 V) (battery), 3% THD		
$<$ 0.25% (130 dB SPL at 250 Hz into 800 Ω load)		
800 Ω Load: 141 dB (phantom), 123 dB (battery)		
-3 dB equivalent SPL in a 1 millioersted field (60 Hz)		
22 dB typical, A-weighted 25 dB typical, weighted per DIN 45 505		
119 dB (phantom); 101 dB (battery) (maximum SPL, 2000 Ω load, to A-weighted noise level)		
72 dB (IEC 651)* at 94 dB SPL		
Maximum external voltage applied to pins 2 and 3 with respect to pin 1: +52 Vdc Reverse polarity protected to 75 Vdc		
Positive pressure on diaphragm produces positive voltage on pin 2 relative to pin 3		
Supply Voltage: 11 to 52 Vdc, (+) pins 2 and 3 Current Drain: 1.0 to 1.2 mA max. at 52 Vdc		
Type: 1.5 V alkaline, AA size (NEDA 15A) Life: Up to 5,000 hours with fresh battery		
XLR professional audio 3-Pin		
Steel and brass construction with gray finish and stainless steel mesh grille		
250 g less battery		

Optional Accessories and Replacement Parts

A25D	Microphone clip	A15AS	Switch-selectable attenuator	A53M	Isolation mount
Δ3WS	Microphone windscreen				









LEGENDARY PERFORMANCE™

SM137 Cardioid Condenser Microphone

Overview

The SM137 is a versatile, flat-response cardioid condenser probe microphone with an ultra-thin diaphragm for a frequency response that combines a smooth high-end with a tight, controlled low-end and a -15 dB pad for natural sound reproduction in both acoustic and high volume performance

Features

- Cardioid polar pattern to reduce the pickup of unwanted sounds
- Ultra-thin, 2.5 µm 24 karat gold-layered, low mass Mylar® diaphragm for superior transient response
- Class A, discrete, transformerless preamplifier for transparency, extremely fast transient response, no crossover distortion, and minimal harmonic and intermodulation distortion
- Premium electronic components, including gold-plated internal and external connectors Two-position switchable pad (0 dB and 15~dB) for handling extremely high sound pressure levels (SPLs)

Available Models

SM137	Includes a swivel adapter and a zippered pouch

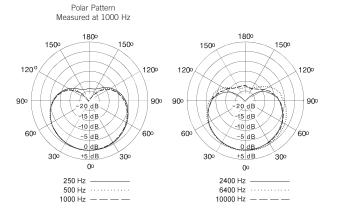
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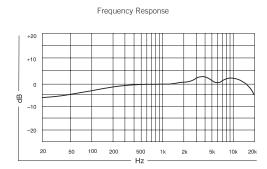
Туре	Electret condenser		
Frequency Response	20 to 20,000 Hz		
Polar Pattern	Cardioid		
Impedance	150 Ω (actual)		
Sensitivity (at 1 kHz, Open circuit voltage)	-41 dBV/Pa 1 Pascal=94 dB SPL		
Maximum SPL (1 kHz, < 1% THD)	1000 Ω load: 139 dB (154 dB, Pad on) 2500 Ω load: 144 dB (159 dB, Pad on)		
Signal-to-Noise Ratio (referenced at 94 dB SPL at 1 kHz)	75 dB S/N ratio is difference between 94 dB SPL and equivalent SPL of self noise, A-weighted		
Dynamic Range (at 1 kHz)	1000 Ω load: 122 dB 2500 Ω load: 128 dB		
Common Mode Rejection (20 Hz to 20 kHz)	> 50 dB		
Clipping Level (20Hz-20 kHz at 1% THD)	1000 Ω load: 3 dBV 2500 Ω load: 9 dBV THD of microphone preamplifier when applied input signal is equivalent to cartridge output at specified SPL		
Self Noise (typical, equivalent SPL, A-weighted)	19 dB		
Polarity	Positive pressure on diaphragm produces positive voltage on pin 2 with respect to pin 3		
Weight	195 g		
Switch	Attenuator: –15 dB		
Dimensions	162 mm L x 24 mm		
Connector	Three-pin professional audio (XLR), male		
Power Requirements	48 Vdc phantom, 5.2 mA		

SM137

Optional Accessories and Replacement Parts

A55M, A55HM	Shock stopper™ isolation mount	A53M Isolation mount	A25D Mi	crophone clip









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