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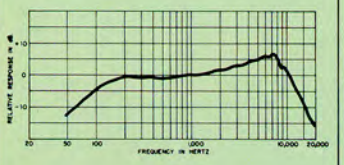
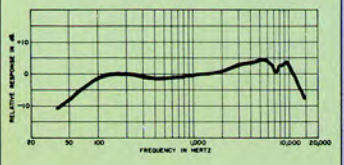
MODEL SM48

Type: Dynamic
Frequency Response: 55 to 14,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (270 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −77.5 dB (0.13 mV)
Power Level** . . . . . −59 dB



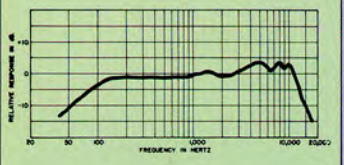
MODEL SM58

Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (310 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −75.5 dB (0.17 mV)
Power Level** . . . . . −56.0 dB



MODEL SM78

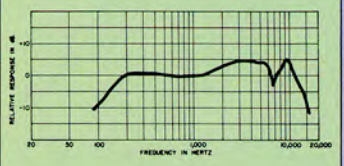
Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (250 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −77.5 dB (0.13 mV)
Power Level** . . . . . −57.5 dB



MODEL 588SD

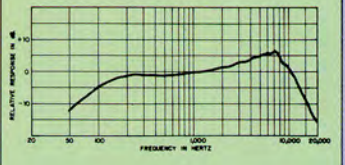
Type: Dynamic
Frequency Response: 80 to 13,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: LO Z: 150 ohms (180 ohms actual)
HI Z: "High"
Output Level: (at 1,000 Hz)

	LO Z	HI Z
Open Circuit Voltage* . .	−82.0 dB (0.08 mV)	−59.5 dB (1.1 mV)
Power Level**	−60.5 dB	



MODEL 587SB

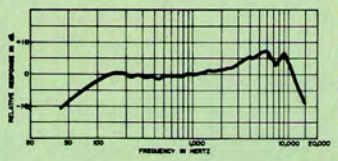
Type: Dynamic
Frequency Response: 55 to 14,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (270 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −77.5 dB (0.13 mV)
Power Level** . . . . . −59 dB



MODELS 565D and 565SD

Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: LO Z: 150 ohms (180 ohms actual)
HI Z: "High"
Output Level: (at 1,000 Hz)

	LO Z	HI Z
Open Circuit Voltage* . .	−76.0 dB (0.16 mV)	−54.0 dB (2.0 mV)
Power Level**	−56.0 dB	



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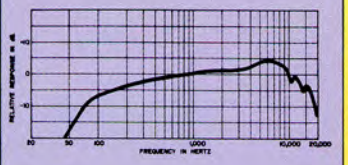
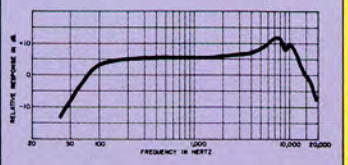
MODEL SM87

Type: Supercardioid condenser
Frequency Response: 50 to 18,000 Hz
Polar Pattern: Supercardioid (unidirectional)
Impedance: 150 ohms (85 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . . −74 dB (0.2 mV)



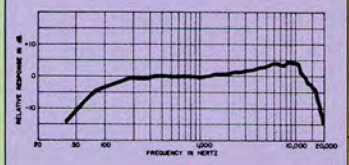
MODEL SM85

Type: Cardioid condenser
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (85 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . . −74 dB (0.2 mV)



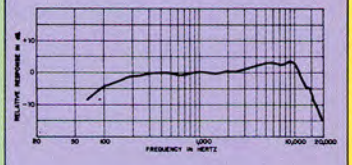
MODEL SM96

Type: Cardioid condenser
Frequency Response: 70 to 16,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (200 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . . −74 dB (0.2 mV) (phantom)
−75 dB (0.18 mV) (battery)



MODEL 869

Type: Cardioid condenser
Frequency Response: 70 to 16,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 600 ohms
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . −78 dB (0.13 mV)



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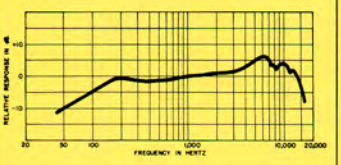
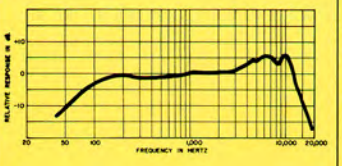
MODEL SM57

Type: Dynamic
Frequency Response: 40 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (310 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −75.5 dB (0.17 mV)
Power Level** . . . . . −56.0 dB



MODEL SM77

Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (250 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −77.5 dB (0.13 mV)
Power Level** . . . . . −57.5 dB



MODELS 545D and 545SD

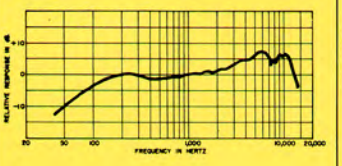
Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: LO Z: 150 ohms (275 ohms actual)
HI Z: "High"
Output Level: (at 1,000 Hz)

	LO Z	HI Z
Open Circuit Voltage* . .	−78.0 dB (0.13 mV)	−55.0 dB (1.76 mV)
Power Level**	−58.5 dB	

MODEL 545SH

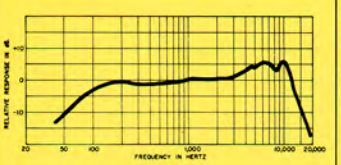
Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: LO Z: 150 ohms (250 ohms actual)
HI Z: "High"
Output Level: (at 1,000 Hz)

	LO Z	HI Z
Open Circuit Voltage* . .	−76.0 dB (0.16 mV)	−54.0 dB (2.0 mV)
Power Level**	−56.0 dB	



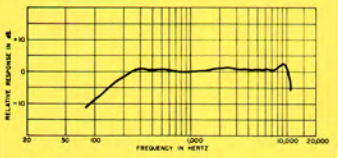
MODEL 545L

Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (250 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −77.5 dB (0.13 mV)
Power Level** . . . . . −57.5 dB



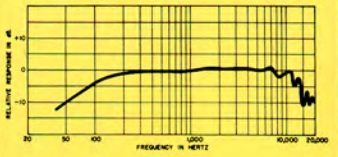
MODEL SM62

Type: Dynamic
Frequency Response: 100 to 10,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (180 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . −81.5 dB (.08 mV)
Power Level** . . . . . −60.0 dB



MODEL SM59

Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (160 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . . −83 dB (.07 mV)
Power Level** . . . . . −61 dB



MODELS 515SA and 515SB

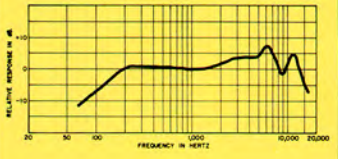
Type: Dynamic
Frequency Response: 80 to 13,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 515SA — "High"
515SB — 150 ohms (170 ohms actual)
Output Level: (at 1,000 Hz)

	515SA	515SB
Open Circuit Voltage* . .	−59.0 dB (1.1 mV)	−82.5 dB (.074 mV)
Power Level**		−61.0 dB

515SD

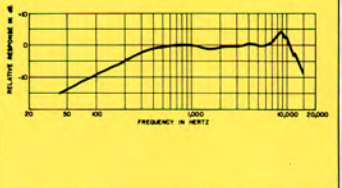
Type: Dynamic
Frequency Response: 80 to 13,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: LO Z: 150 ohms (170 ohms actual)
HI Z: "High"
Output Level: (at 1,000 Hz)

	LO Z	HI Z
Open Circuit Voltage* . .	−82.5 dB (.074 mV)	−59.0 dB (1.1 mV)
Power Level**	−61.0 dB	



MODEL SM17

Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Omnidirectional
Impedance: 150 ohms (200 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . −84.5 dB (.06 mV)
Power Level** . . . . . −63.5 dB



*0 dB = 1 V/μbar **0 dB = 1 mW/10 μbar

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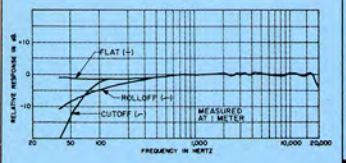
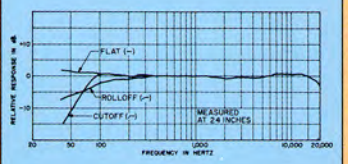
MODEL SM81

Type: Cardioid condenser
Frequency Response: 20 to 20,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (85 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −65 dB (0.56 mV)
Power Level** . . . . . −40.5 dB



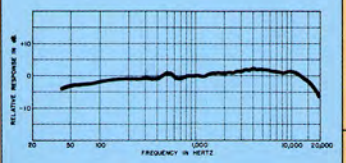
MODEL SM80

Type: Omnidirectional condenser
Frequency Response: 20 to 20,000 Hz
Polar Pattern: Omnidirectional
Impedance: 150 ohms (85 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −65 dB (0.56 mV)
Power Level** . . . . . −40.5 dB



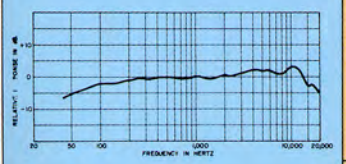
MODEL SM94

Type: Cardioid condenser
Frequency Response: 40 to 16,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (200 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . −69 dB (0.35 mV) (phantom)
−70 dB (0.32 mV) (battery)



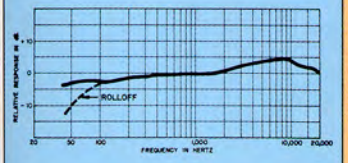
MODEL 849

Type: Cardioid condenser
Frequency Response: 40 to 16,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 600 ohms
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . −71 dB (0.28 mV)



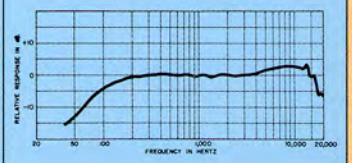
MODEL SM98

Type: Cardioid condenser
Frequency Response: 40 to 20,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (90 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −80.0 dB (0.10 mV)



MODEL SM99

Type: Supercardioid condenser
Frequency Response: 80 to 20,000 Hz
Polar Pattern: Supercardioid (unidirectional)
Impedance: 150 ohms (90 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −73.0 dB (0.22 mV)



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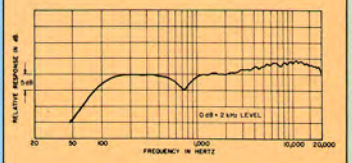
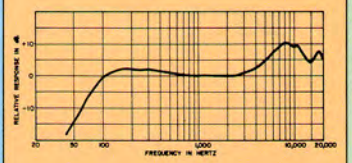
MODEL SM83

Type: Condenser
Frequency Response: 80 to 20,000 Hz
Polar Pattern: Omnidirectional
Impedance: 150 ohms (90 ohms actual)
Output Level: (at 2,000 Hz)
Open Circuit Voltage* . . . . −69 dB (0.35 mV)



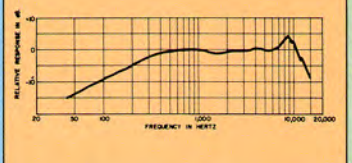
MODEL 839

Type: Condenser
Frequency Response: 80 to 20,000 Hz
Polar Pattern: Omnidirectional
Impedance: 600 ohms
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . −70 dB (0.32 mV)



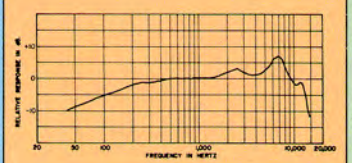
MODEL SM11

Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Omnidirectional
Impedance: 150 ohms (200 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . −85 dB (0.06 mV)
Power Level** . . . . . −64 dB



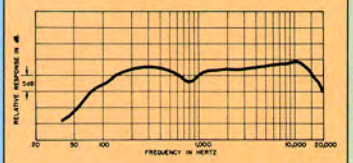
MODEL 570S

Type: Dynamic
Frequency Response: 50 to 12,000 Hz
Polar Pattern: Omnidirectional
Impedance: 150 ohms (180 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . −81.5 dB (.08 mV)
Power Level** . . . . . −60.0 dB



MODEL SM84

Type: Condenser
Frequency Response: 80 to 20,000 Hz
Polar Pattern: Supercardioid (unidirectional)
Impedance: 150 ohms (90 ohms actual)
Output Level: (at 2,000 Hz)
Open Circuit Voltage* . . . . −73 dB (0.22 mV)



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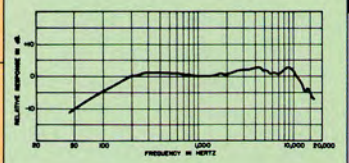
MODEL 512

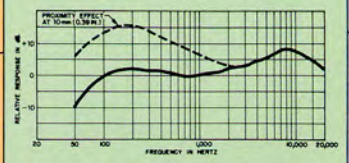
MICROPHONE
Type: Dynamic, Close-Talking
Frequency Response: (at 8 mm [5/16 in.]) 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (200 ohms actual)
Output Level: (close-talked at 1,000 Hz)
Open Circuit Voltage* . . . . −47.0 dB (4.5 mV)
Power Level** . . . . . −66.0 dB

RECEIVER
Type: Dynamic, open air, left-side only
Frequency Response: 100 to 10,000 Hz
Impedance: 300 ohms at 1,000 Hz
Output Level: (at 1,000 Hz)
94 dB SPL at ear with 1 mW input



MODEL SM15

Type: Condenser
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (95 ohms actual)
Output Level: (close-talked at 1,000 Hz)
Open Circuit Voltage*
−74 dB (0.2 mV) at 610 mm (24 in.)
−72 dB (0.025 mV) at 10 mm (0.39 in.)



MODEL SM2

MICROPHONE
Type: Dynamic, Close-Talking
Frequency Response: (at 8 mm [5/16 in.]) 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (200 ohms actual)
Output Level: (close-talked at 1,000 Hz)
Open Circuit Voltage* . . . . −47.0 dB (4.5 mV)
Power Level** . . . . . −66.0 dB

RECEIVERS
Type: Dynamic
Frequency Response: 100 to 8,000 Hz
Impedance: 2,000 ohms at 1 kHz
Output Level: (at each ear)
104.0 dB SPL with 1.4V at 1 kHz

MODEL SM1

MICROPHONE
Type: Dynamic, Close-Talking
Frequency Response: (at 8 mm [5/16 in.]) 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (200 ohms actual)
Output Level: (close-talked at 1,000 Hz)
Open Circuit Voltage* . . . . −47.0 dB (4.5 mV)
Power Level** . . . . . −66.0 dB

RECEIVER
Type: Dynamic
Frequency Response: 100 to 8,000 Hz
Impedance: 2,000 ohms at 1 kHz
Output Level: 104.0 dB SPL with 1.4V at 1 kHz

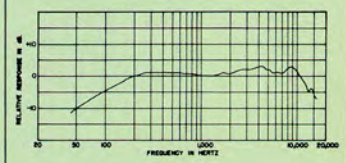
MODEL SM10A

Type: Dynamic, Close-Talking
Frequency Response: (at 8 mm [5/16 in.]) 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (200 ohms actual)
Output Level: (close-talked at 1,000 Hz)
Open Circuit Voltage* . . . . −47.0 dB (4.5 mV)
Power Level** . . . . . −66.0 dB

MODEL SM12A

MICROPHONE
Type: Dynamic, Close-Talking
Frequency Response: (at 8 mm [5/16 in.]) 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (200 ohms actual)
Output Level: (close-talked at 1,000 Hz)
Open Circuit Voltage* . . . . −47.0 dB (4.5 mV)
Power Level** . . . . . −66.0 dB

RECEIVER
Type: Dynamic
Frequency Response: 70 to 12,000 Hz
Impedance: 2,000 ohms at 1 kHz
Output Level: 105 dB SPL with 1.4V at 1 kHz



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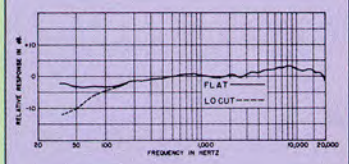
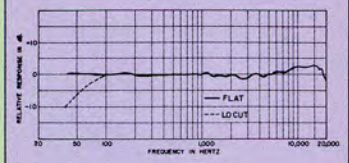
MODEL SM91

Type: Cardioid condenser for surface mounting
Frequency Response: 20 to 20,000 Hz at 30° incidence to infinite surface
Polar Pattern: Half-cardioid (cardioid in hemisphere above mounting surface)
Impedance: 150 ohms (90 ohms actual)
Output Level: (at 1,000 Hz, measured with sound source at 30° incidence to infinite surface)
Open Circuit Voltage* . . . −69.0 dB (0.35 mV)



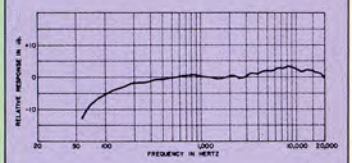
MODEL SM90

Type: Condenser for surface mounting
Frequency Response: 20 to 20,000 Hz at 30° incidence to infinite surface
Polar Pattern: Omnidirectional in hemisphere above mounting surface
Impedance: 150 ohms (90 ohms actual)
Output Level: (at 1,000 Hz, measured with sound source at 30° incidence to flat surface)
Open Circuit Voltage* . . . . −66.0 dB (0.5 mV)



MODEL 819

Type: Cardioid condenser for surface mounting
Frequency Response: 60 to 20,000 Hz at 30° incidence to infinite surface
Polar Pattern: Half-cardioid (cardioid in hemisphere above mounting surface)
Impedance: 600 ohms
Output Level: (at 1,000 Hz, measured with sound source at 30° incidence to infinite surface)
Open Circuit Voltage* . . . −71.0 dB (0.28 mV)

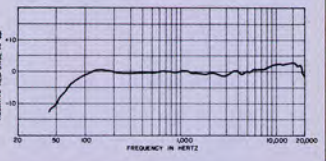


*0 dB = 1 V/μbar **0 dB = 1 mW/10 μbar

Technical Specifications

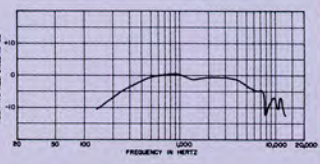
MODEL 809

Type: Condenser for surface mounting
Frequency Response: 50 to 20,000 Hz at 30° incidence to infinite surface
Polar Pattern: Omnidirectional in hemisphere above mounting surface
Impedance: 600 ohms
Output Level: (at 1,000 Hz, measured with sound source at 30° incidence to flat surface)
Open Circuit Voltage* . . . . −68.0 dB (0.4 mV)



MODELS SM18B and SM18W

Type: Dynamic
Frequency Response: 150 to 10,000 Hz, at 25°, 1m (39.4 in.) from sound source, microphone on flat surface
Polar Pattern: Cardioid (unidirectional), at 1m (39.4 in.) from horizontal sound source, microphone on flat surface
Impedance: 150 ohms (180 ohms actual)
Output Level: (at 1,000 Hz, 25°, 1m [39.4 in.] from sound source, microphone on flat surface)
Open Circuit Voltage* . . . −73.0 dB (0.22 mV)
Power Level** . . . . . −52.0 dB



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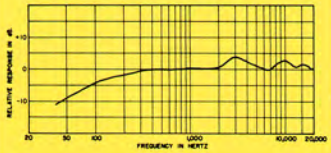
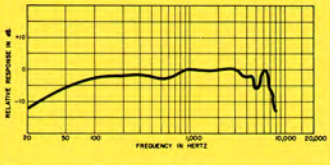
MODELS SM63 and SM63L

Type: Dynamic
Frequency Response: 50 to 20,000 Hz
Polar Pattern: Omnidirectional
Impedance: 150 ohms (270 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −76.0 dB (0.16 mV)
Power Level** . . . . . −56.5 dB



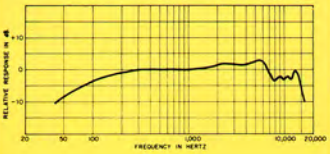
MODEL SM61

Type: Dynamic
Frequency Response: 50 to 14,000 Hz
Polar Pattern: Omnidirectional
Impedance: 150 ohms
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . −82.0 dB (.08 mV)
Power Level** . . . . . −60.5 dB



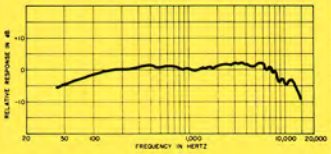
MODEL 579SB

Type: Dynamic
Frequency Response: 50 to 14,000 Hz
Polar Pattern: Omnidirectional
Impedance: 150 ohms (200 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −78.5 dB (0.13 mV)
Power Level** . . . . . −57.0 dB



MODEL 575SB

Type: Dynamic
Frequency Response: 40 to 15,000 Hz
Polar Pattern: Omnidirectional
Impedance: 150 ohms (200 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −79.0 dB (.112 mV)
Power Level** . . . . . −58.0 dB



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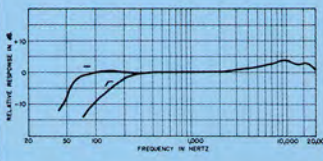
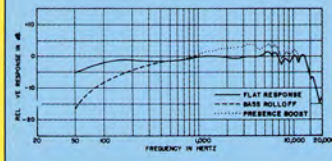
MODEL SM89

Type: Pressure gradient/line combination
Transducer: Condenser
Frequency Response: 60 to 20,000 Hz
Polar Pattern: Hypercardioid at low frequencies, lobar at frequencies above 1 kHz
Impedance: 150 ohms (100 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . . −53 dB (2.2 mV)



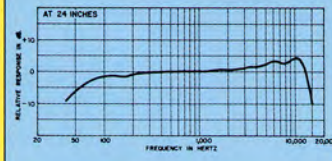
MODEL SM7

Type: Dynamic
Frequency Response: 40 to 16,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (150 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . −79.0 dB (.11 mV)
Power Level** . . . . . −57.0 dB



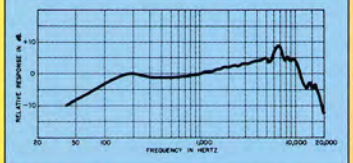
MODEL SM82

Type: Cardioid condenser with line level amplifier and limiter
Frequency Response: 40 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 250 ohms actual (designed for use with 600-ohm or greater loads)
Output Level: (1,000 Hz response)
Open Circuit Voltage:
−23 dBV (0.11V) for 74 dB SPL
Power Output:
−4 dBm into 600 ohms for 94 dB SPL



MODEL 55SH SERIES II

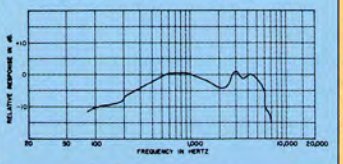
Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Impedance: 150 ohms (270 ohms actual)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . −78.0 dB (0.13 mV)
Power Level** . . . . . −58.5 dB



MODEL 520D

Type: Controlled Magnetic®
Frequency Response: 100 to 5,000 Hz
Polar Pattern: Omnidirectional
Impedance: (at 1,000 Hz)
Dual. Microphone rating impedance is 150 ohms (160 ohms actual) and "High."
Output Level: (at 1,000 Hz)

	LO Z	HI Z
Open Circuit Voltage* . .	−73.0 dB (0.22 mV)	−56.0 dB (1.6 mV)
Power Level**	−51.0 dB	



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MODEL FP11

Output Clipping Level: +18 dBm
Equivalent Input Noise: −129 dBV
Battery Life:* 25 hours

MODEL FP12

Output Clipping Level: 4 to 8 ohms: 750 mV
1 Kohm or higher: 15V
Equivalent Input Noise: −118 dBV
Battery Life:* 10 hours

MODEL FP16

Output Clipping Level: Line: +14 dBm
Equivalent Input Noise: −129 dBV
Phantom Power Voltage: 30 Vdc
Battery Life:* 20 hours

MODEL FP31

Output Clipping Level: Line: +16 dBm
Equivalent Input Noise: −129 dBV
Phantom Power Voltage: 11 to 18 Vdc
Battery Life:* 8 hours

MODEL FP32

Output Clipping Level: Line: +16 dBm
Equivalent Input Noise: −128 dBV
Phantom Power Voltage: 11 to 18 Vdc
Battery Life:* 6 hours

MODEL FP42

Output Clipping Level: Line: +18 dBm
Equivalent Input Noise: −129 dBV
Phantom Power Voltage: 30 Vdc
Battery Life:* 10 hours

MODEL FP51

Output Clipping Level: Line: +18 dBm
Equivalent Input Noise: −129 dBV
Phantom Power Voltage: 30 Vdc
Battery Life:* 10 hours

MODEL M68A/M68FCA

Output Clipping Level: Line (10 Kohm): 4V
Equivalent Input Noise: −123 dBV

MODEL M267

Output Clipping Level: Line: +18 dBm
Equivalent Input Noise: −128.5 dBV
Phantom Power Voltage: 30 Vdc
Battery Life:* 20 hours

MODEL M268

Output Clipping Level: Line (10 Kohm): 7.9V
Equivalent Input Noise: −128 dBV
Phantom Power Voltage: 30 Vdc

***With alkaline batteries, continuous use, normal operating conditions.

MODEL PS1A

Open Circuit Supply Voltage: 21.5 ± 1.5 Vdc, regulated
Frequency Response:
+0/ − 0.2 dB, 20-20,000 Hz
Hum and Noise: (20 Hz-20 kHz, unweighted)
Common Mode . . . . . − 90 dBV maximum
Differential Mode . . . . . −115 dBV maximum

MODEL M64A

Gain: (Measured at 1 kHz; input through 680 ohms; output terminated in 47 kilohms)

Switch Position	High-Level Output	Low-Level Output
Phono	+34.5 dB	+11 dB
Flat	+27.5 dB	+ 4 dB
Tape	+37 dB	+13.5 dB

Frequency Response:
Phono: ±2 dB of Standard RIAA curve from 40 Hz to 15 kHz
Flat: 20 Hz to 20 kHz, ±2 dB
Tape: ±2 dB of 7-1/2 ips NAB curve from 50 Hz to 15 kHz
Total Harmonic Distortion: Less than 1% with 2V output at 1 kHz in all switch positions. Phono position only: Less than 1% at 30 Hz with 2V output.
Hum and Noise: (20 Hz to 20 kHz)
Phono: Better than 71 dB below 10 mV input
Flat: Better than 64 dB below 10 mV input

(All Shure circuitry products are listed by Underwriters Laboratories, Inc. and listed by Canadian Standards Association as Certified.)

All Shure circuitry products operate (or can be modified to operate) on 120 or 240 Vac.

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MODEL W20R RECEIVER

Distortion: (at ±12 kHz deviation) Less than 0.5% THD, 100 to 15,000 Hz; 0.3% at 1 kHz typical
Dynamic Range:
98 dB A-weighted
92 dB unweighted
Audio Frequency Response: 50 to 15,000 Hz, ±1 dB
Output: −20 dB across 200 ohms maximum (mic level adjustable)
Antenna Type: 1/4 wavelength omnidirectional vertical
Power: 13.5 Vdc nominal (negative ground); 200 mA power converter supplied

MODEL W25DR RECEIVER

Distortion: (at ±12 kHz deviation) Less than 0.5% THD, 100 to 15,000 Hz; 0.3% at 1 kHz typical
Dynamic Range:
98 dB A-weighted
92 dB unweighted
Audio Frequency Response: 50 to 15,000 Hz, ±1 dB
Mic/Line Output:
Line . . . . . 600 ohms, +13.5 dB maximum
Mic . . . . . across 200 ohms, −10 dB maximum (mic level adjustable)
Antenna Type: 5/8 wavelength omnidirectional vertical
Power: 13.5 Vdc nominal (negative ground); 200 mA power converter supplied

MODEL W15HT/87

RF Power Output: 50 mW maximum
Transducer Type: Condenser
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Supercardioid (unidirectional)
Maximum SPL: (for 3% THD at 1 kHz) 138 dB
Battery: Standard 9-volt alkaline; 12-14 hours typical life

MODEL W15HT/58

RF Power Output: 50 mW maximum
Transducer Type: Dynamic
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Maximum SPL: (for 3% THD at 1 kHz) 138 dB
Battery: Standard 9-volt alkaline; 12-14 hours typical life

*0 dB = 1 V/μbar **0 dB = 1 mW/10 μbar

MODEL W10BT

RF Power Output: 50 mW maximum
Input Impedance: Actual: 16k (20k dc), pin 4 wired to pin 3 for WL83 microphone; 91k, pin 4 open for microphone or instrument pickup
Maximum Input Level:
Gain pot minimum,
gain switch high . . . . . 432 mVrms
Gain pot minimum,
gain switch low . . . . . 1.075 Vrms
Antenna: Attached, 305mm (12 in.), omnidirectional, flexible wire
Battery: Standard 9-volt alkaline; 6-8 hours typical life

MODEL WL83

Type: Condenser
Frequency Response: 50 to 16,000 Hz
Polar Pattern: Omnidirectional
Output Impedance: 1,200 ohms
Output Level:
Open Circuit Voltage* . . . . −65.5 dB (.53 mV)
Maximum Sound Pressure Level: 136 dB

MODEL WL84

Type: Condenser
Frequency Response: 50 to 16,000 Hz
Polar Pattern: Supercardioid (unidirectional)
Output Impedance: 1,200 ohms
Output Level:
Open Circuit Voltage* . . . . . −66 dB (.50 mV)
Maximum Sound Pressure Level: 136 dB

MODEL WM98

Type: Condenser
Frequency Response: 40 to 20,000 Hz
Polar Pattern: Cardioid (unidirectional)
Output Impedance: 1,200 ohms
Output Level:
Open Circuit Voltage* . . . . −74.0 dB (0.2 mV)
Maximum Sound Pressure Level: 144 dB

MODEL WM15

Type: Condenser
Frequency Response: 50 to 15,000 Hz
Polar Pattern: Cardioid (unidirectional)
Output Impedance: 1,200 ohms
Output Level: (close-talked at 1,000 Hz)
Open Circuit Voltage
−31.0 dB (2.82 mV) at 10 mm (0.39 in.)
−32.5 dB (2.37 mV) at 610 mm (24 in.)
Maximum Sound Pressure Level: 141 dB

RF frequency range on all wireless units is 163-216 mHz, high band VHF-FM. 15 frequencies are stocked.

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MODELS AMS4000 & AMS8000 MIXER

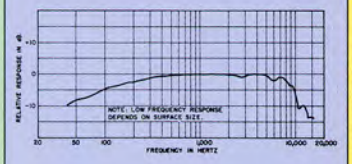
Output Level:
Microphone Input: (72 dB SPL in)
Line: +15.8 dBV (+18 dBm)
Mic: −34 dBV
Aux: +17 dBV
Direct: −56 dBV
Phones: −4 dBV
Input Clipping Level at 1 kHz: 128 dB SPL
Aux Input: (−22 dBV in)
Line: +15.8 dBV
Mic: −34 dBV
Aux: +17 dBV
Phones: −4 dBV
Input Clipping Level at 1 kHz:
+7 to +20 dBV*
*Depending on Aux control setting.
Frequency Response:
Aux Input to Outputs: 30 to 20,000 Hz ±2 dB
Mic Input to Outputs: 70 to 20,000 Hz ±2 dB (controlled low-frequency rolloff below 50 Hz)
Operating Voltage: 105-132 Vac, 50/60 Hz, 20W. Can be rewired for 210-264 Vac, 50/60 Hz, 20W.

MODEL AMS880 VIDEO SWITCHER INTERFACE

Inputs: Eight, plus ground, TTL logic level
Outputs: Eight, plus common, FET optically isolated; not connected to input ground
External power transformer: 120 Vac ± 10%, 60 Hz, 6W

MODEL AMS22

Type: Low-Profile
Frequency Response: 50 to 10,000 Hz
Polar Pattern: Hemi-Cardioid
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . . −47 dB

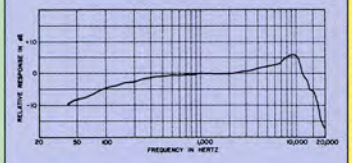


MODEL AMS24

Type: Gooseneck
Frequency Response: 50 to 16,000 Hz
Polar Pattern: Cardioid (unidirectional)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . . −54 dB

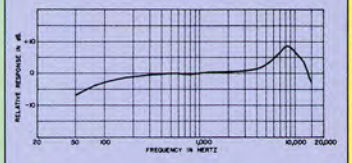
MODEL AMS26

Type: Probe
Frequency Response: 50 to 16,000 Hz
Polar Pattern: Cardioid (unidirectional)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . . −54 dB



MODEL AMS28

Type: Lavalier
Frequency Response: 50 to 16,000 Hz
Polar Pattern: Cardioid (unidirectional)
Output Level: (at 1,000 Hz)
Open Circuit Voltage* . . . . . −54 dB



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MODEL 1200 POWERMIXER

Type: Mono Powermixer
Frequency Response: Flat + 1, −3 dB, 40 Hz to 20 kHz (any input to any output)
Inputs: Six input channels: six unbalanced high- and/or balanced low-impedance inputs; channels 1 and 2 high-impedance inputs switchable to Aux level; available expansion modules each contain 2 high- and 2 low-impedance microphone inputs; two modules (4 channels) can be added to each 1200.
Power Output: (1 kHz, 120 Vac, 1% THD)
200 watts minimum with 4 ohm speaker
120 watts minimum with 8 ohm speaker

MODEL 3100/3200 SPEAKER

Power Rating: Maximum recommended amplifier output to 8 ohms: 120 watts program, 31 Vrms, 44 V peak
Frequency Response: 60 Hz to 13 kHz ± 5 dB
Impedance: 8 ohms rated 5.6 ohms minimum
Sound Pressure Level: 98 dB SPL at 1 m with 1 W input (2.83 V)

MODEL SC39EJ

Stylus Configuration: Biradial (elliptical)
Mounting Style: 1/2-inch
Tracking Force Range: 1.5 to 3.0 grams
Frequency Response: 20 to 20,000 Hz
Output Voltage: 4.0 mV
Channel Separation: 20 dB at 1 kHz

MODEL SC39B

Stylus Configuration: Spherical
Mounting Style: 1/2-inch
Tracking Force Range: 1.5 to 3.0 grams
Frequency Response: 20 to 20,000 Hz
Output Voltage: 4.0 mV
Channel Separation: 20 dB at 1 kHz

MODEL SC35C

Stylus Configuration: Spherical
Mounting Style: 1/2-inch
Tracking Force Range: 4.0 to 5.0 grams
Frequency Response: 20 to 20,000 Hz
Output Voltage: 5.0 mV
Channel Separation: 20 dB at 1 kHz

MODEL BC70

Stylus Configuration: Spherical
Mounting Style: 1/2-inch
Tracking Force Range: 2.5 to 3.5 grams
Frequency Response: 20 to 15,000 Hz
Output Voltage: 5.0 mV
Channel Separation: 20 dB at 1 kHz

MODEL BC80

Stylus Configuration: Elliptical
Mounting Style: P-mount
Tracking Force Range: 1.0 to 1.5 grams
Frequency Response: 20 to 20,000 Hz
Output Voltage: 5.0 mV
Channel Separation: 20 dB at 1 kHz

MODEL BC90

Stylus Configuration: Elliptical
Mounting Style: 1/2-inch
Tracking Force Range: 1.0 to 1.5 grams
Frequency Response: 20 to 20,000 Hz
Output Voltage: 5.0 mV
Channel Separation: 20 dB at 1 kHz

MODEL DC40

Stylus Configuration: Spherical
Mounting Style: 1/2-inch
Tracking Force Range: 2.5 to 3.5 grams
Frequency Response: 20 to 20,000 Hz
Output Voltage: 5.0 mV
Channel Separation: 20 dB at 1 kHz

MODEL DC50

Stylus Configuration: Elliptical
Mounting Style: P-mount
Tracking Force Range: 1.0 to 1.5 grams
Frequency Response: 20 to 20,000 Hz
Output Voltage: 5.0 mV
Channel Separation: 20 dB at 1 kHz

MODEL DC60

Stylus Configuration: Elliptical
Mounting Style: 1/2-inch
Tracking Force Range: 1.0 to 1.5 grams
Frequency Response: 20 to 20,000 Hz
Output Voltage: 5.0 mV
Channel Separation: 20 dB at 1 kHz

*0 dB = 1 V/μbar