Amplifiers

1593B Power Amplifier

The 1593B is a 50-watt solid-state power amplifier designed for standard 19" rack mounting, and features a front panel gain adjustment. The 1593B will operate on 120 or 240 volts ac or 28 volts dc, making it ideal for permanent, mobile, or emergency use. Output taps for 4, 8 or 16 ohms and 70.7- or 210-volt line operation are included.

1594B Power Amplifier

Like the 1593B, the 1594B is an all-solid-state power amplifier designed for rack mounting. It is capable of delivering 100 watts into 4, 8 or 16 ohms, or 70.7- or 210-volt distributed systems, and will operate from 120 or 240 volts ac. or 28 volts dc.

1590C Power Amplifier

The 1590C Power Amplifier is designed for applications where uninterrupted operation is a requisite. The 1590C provides 200 watts of power at less than 1% total harmonic distortion (THD) from 50 Hz to 12 kHz, and has a frequency response of ±1 dB from 20 Hz to 20 kHz. Output transformer taps provide connections for 70.7-, 100-, 140- and 200-volt line distribution systems.

9440A Stereo Power Amplifier

The ultimate in high power and ultra-low distortion, the 9440A is a magnificent amplifier. It is capable of delivering 200 watts per channel into 8 ohms at less than 0.1% total harmonic distortion, at any frequency from 20 Hz to 20 kHz, or greater than 800 watts monaural into 8 ohms.

1609A Biamplifier

The 1609A is a rack-mounted biamplifier composed of two separate power amplifiers and an electronic crossover circuit. It is used to drive wide-band 2-way speaker systems for music reproduction and sound reinforcement. It will deliver 100 watts to the bass driver and 50 watts to the treble driver, with a crossover frequency selectable at 500 Hz, 800 Hz or 1500 Hz with 12 dB per octave high- and low-pass elements.

351C Power Amplifier

The 351C is a compact 50-watt amplifier designed for shelf mounting. Its small size, low distortion and low power consumption make it an ideal choice as a portable paging amplifier.

1224A Biamplifier

The 1224A is an electronic crossover/biamplifier delivering 30 watts to the high-frequency component and 60 watts to the bass driver. It is a unit of modest size and weight, designed to be installed in the 828B low-frequency horn and other Altec utility speaker enclosures for use with high-accuracy playback and reinforcement systems.

1626A In-Wall Mixer/Power Amplifier

The 1626A provides a versatile control center for speech reinforcement in applications where local access to the controls is required.

1626A Specifications

Power Output (watts): Input Sensitivity:

Frequency Response:

0.5V direct, 0.1V Balanced ±1 dB, 20 Hz to 15,000 Hz

Load Impedance (ohms):

6, 16, 50

Dimensions:

Weight:

26" H x 175%" W x 3%" D (66.0cm H x 44.8cm W x 9.8cm D)

38 lbs. (17.2 kg.)



1611A Mixer/Power Amplifier

Although best known for massive installations and sophisticated sound products, Altec provides sound equipment for even the smallest installations. Such is the case with the 1611A. Providing the basic essentials - mixing capabilities for three inputs and master bass and treble controls, it can serve as the complete electronics package for a small sound reinforcement system or background music and paging system.

1606A Mixer/Power Amplifier

Where an increase in output power and flexibility over the 1611A is required, the 1606A is the answer. Its built-in power amplifier delivers 40 watts into 4-, 8- or 16-ohm loads or 70.7-volt distributed systems. Features include four mixable inputs which can be used with various sources through plug-in modules, switchable gain levels (low and high) on each input channel, master gain control, and bass and treble controls.

1607A Mixer/Power Amplifier

Five mixable inputs, adaptable for many uses through plug-in modules, and 75 watts of power into 4-, 8- or 16-ohm loads or 70.7-volt distributed systems, are just a few features of the 1607A. A built-in test tone, master bass and treble controls, a variable-range VU meter (optional), a bright/normal switch, frontpanel-accessible circuit breaker, and monitor output with volume control complete the package. An ideal unit for medium-sized installations with requirements for up to five inputs. A wide variety of accessories can be ordered to customize the unit to your particular requirements.

1608A Mixer/Power Amplifier

The 1608A can be loaded with accessories to emerge as an amazingly well-equipped single unit. It comes standard with everything the 1607A has, but with twice the output power. The 1608A can be equipped (as can the 1607A) with a variable-range VU meter, variable-threshold compressor, shelf-mounting cover and Acousta-Voicing filters.

9477B Power Amplifier

You may not have realized it yet, but one of the best ways to increase the loudness of your sound system, and at the same time lower the distortion, is with high quality power amps.

9477B Specifications

Power at Clip Point: Typically 130 watts continuous into 8 ohms

Frequency Response: ±0.5 dB 20-20,000 Hz

Total Harmonic Distortion: 30-20,000 Hz

Input Sensitivity: 0.8V RMS for rated output (0 dBm input) Dimensions: 7"H x 19"W x 8½"D (17.8cmH x 48.3cmW x 21.6cmD) Weight: 34 pounds (15.5 Kg)

Load Impedances:

8, or 16 ohms selectable







		PC	WER AMP	LIFIERS		BIAMPLIFIERS		MIXER/POWER AMPLIFIERS				
	351C	1590 C	1593B	1594B	9440A	1224A	1609A		1606A	1607A	1608A	1611A
Power Output (watts)	50	200	50	100	200 channel (8 ohms) 400 channel (4 ohms)	60 (LF) (8 ohms) 30 (HF) (8 ohms)	100 (LF) 50 (HF)	Input Channels	4	5	5	3
Eain (each channel)	60 dB	67 dB	61 dB	64 dB	55.7 dB w/15335A (8-ohm load)	52 dB w 15335A (LF)	64 dB (LF)	Power Output (watts) Gain (each	40	75	150	25
					58.7 dB w/15335A (4-ohm load) 61.7 dB w/15335A	66 dB w 15095A (LF) 49 dB	61 dB (HF)	channel) with 1588C with 15095A	115 dB 65 dB	119 dB 63 dB	121 dB 71 dB	97 dB 62 dB
					in mono mode (8-ohm load)	w 15335A (HF) 63 dB w 15095A (HF)		Input Sensitivity (for full output) Microphone	11			
Imput Sensitivity with 15335A with 15095A	450 mV rms	0.8V rms	0.8V rms	0.8V rms	0.6V rms	0.5V rms 0.5V rms 0.1V rms	0.8V rms	Channels with 1579C with 15095A Auxiliary Channel	1 mV rms 87 mV rms 160 mV rms	1 mV rms 87 mV rms N/A	1 mV rms 87 mV rms N/A	5.4 mV rms 92 mV rms 340 mV rms
Frequency Response	±1 dB from 20-20,000 Hz	±1 dB from 20-20,000 Hz	+ 1 dB from 20-20,000 Hz	+1 dB from 20-20,000 Hz	±0.25 dB from 20-20,000 Hz	+ 1 dB from 20-20,000 Hz	±1 dB from 20-20,000 Hz	Frequency Response	±1 dB from 20-20,000 Hz	±1 dB from 20-20,000 Hz	±1 dB from 20-20,000 Hz	±1 dB from 20-20,000 Hz
Crossover Frequency					e.	500, 800 or 1500 Hz with 12 dB/ octave slope	500, 800 or 1500 Hz with 12 dB/octave slope	Source Impedance (ohms) with 1588C	150/250	150/250	150/250	150/250
input Impedance (shims) with 15335A with 15095A	50,000 50,000 2,000	15,000 15,000 600	15,000 15,000 600	15,000 15,000 600	15,000 15,000 600	15,000 15,000 600	15,000 15,000 600	with 1579C with 15095A with 15356A with 15335A	Up to 47,000 600-15,000 150 or 600	Up to 50,000 600-15,000 150 or 600	Up to 50,000 600-15,000 150 or 600	Up to 47,000 Up to 15,000
Laad Impedance	4, 8, 16	25/50/and	4, 8, 16	4, 8, 16	4 (minimum)	4 (minimum)	4, 8, 16 and 50 (LF)	Load Impedance (ohms)	4, 8, 16 or 125	4, 8, 16 or 66	4, 8, 16 or 32	2, 8, 25 or 200
phims)	and 100	100/200	and 100	and 50			4, 8, 16 and 100 (HF)	Equivalent Input Noise	—129 dBm*	—129 dBm*	—129 dBm*	—129 dBm*
Signal-to-Noise Ratio	90 dB	85 dB	85 dB	85 dB	100 dB	90 dB	85 dB	Dimensions	51/4"H x	7"H x	83/4"H x	31/2"H x 17"W
Dirmen sion s	51/8"H x 93/4"W x 93/8"D 13.0 cm H x 24.8 cm W x 23.8 cm D	101/2"H x 19"W x 81/4"D 26.7 cm H x 48.3 cm W x 21.0 cm D	51/4"H x 19"W x 73/8"D 13.3 cm H x 48.3 cm W x 18.7 cm D	7"H x 19"W x 8½"D 17.8 cm H x 48.3 cm W x 21.6 cm D	7"H x 19"W x 11"D 17.8 cm H x 48.3 cm W x 27.9 cm D	6½"H x 9%"W x 9"D 16.5 cm H x 25.1 cm W x 22.9 cm D	7"H x 19"W x 81/2"D 17.8 cm H x 48.3 cm W x 21.6 cm D		19"W x 7"D 13.3 cm H x 48.3 cm W x 17.8 cm D	19"W x 9"D 17.8 cm H x 48.3 cm W x 22.9 cm D	19"W x 101/2"D 22.2 cm H x 48.3 cm W x 26.7 cm D	x 9½"D 8.9 cm H x 43.2 cm W x 24.1 cm D (Rack mount brackets available)
₩eight	16.5 lbs- 7.5 kg	41 lbs- 18.6 kg	23 lbs- 10.4 kg	35.5 lbs- 16.1 kg	56.5 lbs- 25.6 kg	16 lbs- 7.3 kg	37 lbs- 16.8 kg	Weight	19 lbs- 8.6 kg	29.3 lbs- 13.3 kg	42 lbs- 19.1 kg	17.75 lbs- 8.1 kg





Mixers

1628A Mixer/Amplifier

The 1628A is an 8-channel, solid-state mixer/amplifier with provision for plug-in input accessory modules. Total system gain is held constant by automatic adjustment of the signal level in each channel, dependent on the channel-to-system signal-to-noise ratio (U.S. Patent Pending). This process provides maximum gain to any single microphone and prevents feedback in multimicrophone operation. Additional 1628A's may be linked together to extend the number of available inputs.

1592B Mixer/Amplifier

The 1592B is an excellent general-purpose mixer. It features inputs for five signal sources, adaptable by means of plug-in modules, separate master and monitor gain controls, a variable-range VU meter, separate bass and treble controls, test tone, a normal/bright switch and a gain level switch for each microphone input channel.

1599A Mixer Extender

The 1599A is a six-input mixer designed to be used as the only mixer in the system with outboard equalization, or to extend the input capabilities of another mixer such as the 1592B. Each input is adaptable, through plug-in modules, to receive a variety of signal sources; each input is also equipped with a microphone gain level switch.

1589B Mixer/Amplifier

The 1589B is a 2-channel mixer designed as a basic mixer, mixer extender, or for use in coupling two other mixers together in one system. Each input has plug-in module capabilities, and a fuse accessible from the front panel.

		MIXER/PREAMPLIFIERS		9
	1589B	1592B	1599A	1628A
Input Channels	2	5	6	,
Gain With 1588C With 15095A With 15356A	77 dB 28 dB 42 dB	87 dB 38 dB 54 dB	48 dB —1 dB 15 dB	91 dB
Power Output	+20 dBm	+30 dBm	+6 dBm	+25 dBm
Frequency Response	±1 dB from 20-20,000 Hz	±1 dB from 20-20,000 Hz	±1 dB from 20-20,000 Hz	±1 dB from 20-20,000 Hz
Total Harmonic Distortion	Less than 0.5%	Less than 0.5%	Less than 0.5%	Less than 0.5%
Source Impedance (ohms) With 1588C With 1579C With 15095A With 15356A	150/250 Up to 50,000 600-15,000 150 or 600	150/250 Up to 50,000 600-15,000 150 or 600	150/250 Up to 50,000 600-15,000 150 or 600	150 — 600
Load Impedance (ohms)	150 or 600	150 or 600	600	150 or 600
Equivalent Input Noise With 1588C	—129 dBm	—129 dBm	—129 dBm	—29 dBm
Output Noise Level (below rated output)	85 dB	85 dB	85 dB	85 dB
Dimensions	1¾"H x 19"W x 4¾"D 4.5 cmH x 48.3 cmW x 12.1 cmD	5½"H x 19"W x 6½"D 13.3 cmH x 48.3 cmW x 16.5 cmD	3½"H x 19"W x 7"D 8.9 cmH x 48.3 cmW x 17.8 cmD	3½"H x 19"W x 12½"D 8.8 cmH x 48.3 cmW x 31.8 cmI
Weight	4.2 lbs-1.9 kg	10.5 lbs-4.8 kg	7 lbs-3.2 kg	15 lbs-6.8 kg



Special-Purpose Electronics and Accessories

1603A SEQUR Amplifier Coupler

The 1603A is used to safely couple two power amplifiers in parallel to drive a common load. Should one amplifier fail, the 1603A isolates it from the other amplifier, preventing the failure of the second amplifier and keeping the sound system in operation.

1605B NOALA

NOALA means "Noise-Operated Automatic Level Adjustment". What this device does is sense increases and decreases in ambient noise levels through the speaker system, and adjust amplifier gain to compensate for these variations.

1612A Limiter Amplifier

In sound systems great variations in input signal level can occur. The 1612A is highly effective at controlling dynamic range, making the average sound level more uniform. The 1612A functions as a limiter, or as a line amplifier and features two inputs, compression/VU meter, a dual range attack/release mode switch and a limit/line balance control to defeat limiting without affecting the average preset output level.

1650 Active Equalizer

The 1650 Active Equalizer is designed to provide accurate equalization of the entire audio spectrum for professional and industrial applications. The 1650 contains 28 active bandrejection filters at ISO preferred ½-octave center frequencies from 31.5 to 16,000 Hz. Each filter section provides up to 15 dB attenuation at its center frequency and is skirted to cross over with adjacent sections at —7 dB, combining to give ripple-free summation over 85% of the range. A gain control restores equalization losses.

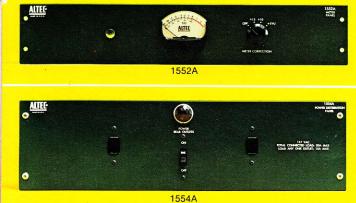
The high- and low-pass filters roll off at 18 dB/octave with continuously variable 3 dB down points. The control panel is calibrated in markings of OFF/20 Hz/40 Hz/80 Hz/160 Hz (high pass), and OFF/5 kHz/8 kHz/12.5 kHz/20 kHz (low pass). A slide-type bypass switch allows the filter set to be conveniently switched in and out of the circuit.

9430A Digital Delay System

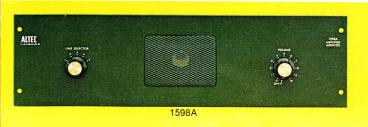
The 9430A provides excellent quality audio signal delays from 5 to 320 milliseconds, incremented in 5-millisecond steps. Its outstanding 90 dB dynamic range makes signal delay possible where delay tubes, magnetic tape and drum systems, and earlier digital models have been historically unsatisfactory.

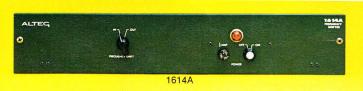
9880A Active Filter

The 9880A provides high- and low-pass filter action to eliminate unwanted noise at the ends of the audio band. High-pass filter frequencies are selectable in ½ octave steps from 31.5 Hz to 250 Hz; low-pass filter frequencies are selectable in the same way, from 2 kHz to 16 kHz. Separate bypass switches are provided for high- and low-pass functions. A removable front panel protects the filter switches.





























Special-Purpose Electronics and Accessories (Cont.)

1552A Meter Panel

A separate 3-range VU meter for monitoring audio levels.

1554A Power Distribution Panel

Provides six switched, two unswitched 3-pin ac outlets for master power control.

1597A Passive Monitor Panel

Provides audible monitoring of line signal from up to five different 70-volt lines. Draws 1 watt from input line.

1598A Amplified Monitor Panel

Provides audible monitoring of line signal from up to five 600-ohm lines. Has built-in 2-watt amplifier. Operates on 110V ac or 28V dc.

1614A Frequency Shifter

Shifts input signal 3 to 6 Hz to aid in feedback control in speech reinforcement systems.

Blank Panels

Are available in a variety of heights to fill open areas in standard 19" racks.

1579C Equalized Preamplifier

Converts most Altec mixer inputs to accept magnetic phono input. Equalized to meet RIAA standards.

1588B/C Microphone Preamplifier

Converts most Altec mixer inputs to accept low-impedance microphone. Features 129 dBm equivalent input noise and phantom power for condenser microphones.

8080B Pink Noise Generator

Provides random pink noise source for the calibration and adjustment of equalizers and filters, and for use in speech privacy systems.

15036 Repeat Coil

This precision inductor provides isolation and line matching for 150- or 600-ohm line through selectable taps.

15095A Line Transformer

A precision transformer used for input and output impedance matching in 600-ohm systems.

15335A Matching Transformer

A precision-manufactured device used to provide isolation and line matching for 15,000-ohm lines.

15356A Line Matching Transformer

Provides isolation and line matching for 600-ohm lines. Typical of Altec precision inductor construction.

9025-1 / 9025-2 Dividing Networks

Two high-precision passive crossover networks for use before power amplifier stage for biamp operation. Crossover frequencies are 500 Hz (9025-1) or 800 Hz (9025-2).



Microphones

There is an Altec microphone for every purpose. Spanning the complete range of applications, from microphones used with mobile radios to ultra-sophisticated studio-quality units, Altec has a quality microphone ideally suited to meet the demands of any situation.

Altec makes both cardioid (having a basically hemispherically shaped pickup pattern as measured from above the microphone) and omnidirectional (having a spherical pickup pattern) microphones. Each type of pickup pattern is inherent in both dynamic and condenser type microphones. Dynamic microphones tend to be more universal in their applications, but condensers are best for absolute accuracy.

Dynamic Cardioid Microphones

650BL/BH Built-in windscreen. All-metal case. Ideal for rugged, multi-use applications. BH model uses 183A cable with built-in transformer making a high-impedance unit, with an output impedance of 20,000 ohms.

654A Built-in windscreen. All-metal, nonglare-finished case. Ideal for rough-service entertainment use.

656AL Built-in windscreen. One-piece, nonglare, nickel-finished case. Shock-mounted element.

Dynamic Omnidirectional Microphones

655AL Built-in windscreen. One-piece, nonglare, nickel-finished case. Shock-mounted element.

677B Miniature lavalier microphone weighing less than 1 ounce. Nonglare finish. Includes tie clip mounting and lavalier cord.

687B Ideal for stationary announcing and paging applications. On-off switch for microphone and accessory equipment operation.

668A Ideal for high-intelligibility voice communication systems. Impact-resistant case. Push-to-talk switch with audio muting feature for accessory equipment operation.

699A Special noise-cancelling microphone with amplifier for use in telephone-type hand-sets. Black finish.

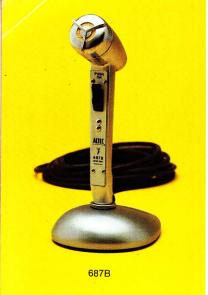
Condenser Microphones

M53 Cardioid pickup pattern. Ideal for high-precision applications. Requires 12V to 50V dc phantom power (supplied by 1588C preamplifier). Includes windscreen and holder.

M54 Omnidirectional version of the M53.

624A Omnidirectional lavalier microphone. Uses 1.3-volt mercury battery. Up to 110-hour battery life. On-off switch connector. Supplied with tie/lapel clip.

626A Uses 1.35-volt mercury battery. Up to 700-hour battery life. Supplied with both omnidirectional and cardioid cartridges, cable, and slip-on swivel adaptor. On-off switch. Windscreen. Nonglare nickel finish.









Microphones

MICROPHONE STANDS AND ACCESSORIES

Model	Height	Base	Stem Assembly
UMS-100	35 to 63"	10" Diam. black wrinkle	Bright Chrome
UMS-101	34 to 62"	10" Diam. bright chrome	Bright Chrome
UMS-102	34 to 62"	10" Diam. bright chrome	Bright Chrome
UMS-103	36 to 63"	12" Diam. black wrinkle	Bright Chrome
UDS-100	4" only	6" Diam. black wrinkle	Bright Chrome
UDS-101	8 to 13"	6" Diam. black wrinkle	Bright Chrome

Model UGN. Flexible "goose necks" may be used with any mic stand for hard to reach applications. Bright Chrome finish.

Model UGN-106: 6 inches; Model UGN-113: 13 inches; Model UGN-119: 19 inches.

Model UBB-100. Boom attachment, features a solid machined brass swivel mount. Fits securely on any standard floor stand. Bright Chrome finish.

Model UBS-10	00. Boom swive		on UBB-100.	as a	replacement,
or can be use	d to mount sev	eral mics to or	ne floor stand.		d 10

Model	Туре	Pickup Pattern	Frequency Response	Output Level**	Finish	Dimensions	Weight
*M53	Condenser	Cardioid	20-20,000 Hz	-40 to -72 dBm (adjustable in -8 dB steps)	Nonreflective Satin Chrome Microplate	3/4" (1.9 cm) dia. x 53/6" (14.7 cm) long (cartridge and base)	3.4 oz-96 gm
*M54	Condenser	Omnidirectional	20-15,000 Hz	-40 to -72 dBm (adjustable in -8 dB steps)	Nonreflective Satin Chrome Microplate	3/4" (1.9 cm) dia. x 53/16" (14.7 cm) long (cartridge and base)	3.4 oz-96 gm
624A	Electret condenser lavalier	Omnidirectional	70-15,000 Hz	—57 dBm	Brushed Chrome Plate w/Black Trim	%6" (1.4 cm) dia. x 13/4" (4.4 cm) long	0.75 oz-21 gm
626A	Electret condenser	Cardioid or Omnidirectional	50-15,000 Hz	-48 dBm (switch out) -58 dBm (switch in)	Matte Satin Nickel	13/4" (4.4 cm) dia. x 8" (20.3 cm) long	8 oz-227 gm
650BL/BH	Dynamic moving coil	Cardioid	50-15,000 Hz	—56 dBm	Satin Chrome Finish	1¾" (4.4 cm) dia. x 7¼" (18.4 cm) long	8.6 oz-244 gm
654A	Dynamic moving coil	Cardioid	50-15,000 Hz	—56 dBm	Matte Satin Nickel	2" (5.1 cm) dia. x 71/4" (18.4 cm) long	8.5 oz-241 gm
655AL	Dynamic moving coil	Omnidirectional	50-15,000 Hz	—56 dBm	Matte Nickel	1½" (3.8 cm) dia. x 6½" (16.5 cm) long	6.75 oz-191 gm
656AL	Dynamic moving coil	Cardioid	60-15,000 Hz	—62 dBm	Matte Nickel	1½" (3.8 cm) dia. x 6½" (16.5 cm) long	6.75 oz-191 gm
668A	Dynamic moving coil, close talking, hand held	Omnidirectional	100-5000 Hz	—60 dBm	Impact- Resistant Plastic	2½" (6.4 cm) H 35'8" (9.2 cm) W 2" (5.1 cm) D	4.5 oz-128 gm
677B	Dynamic moving coil, lavalier	Omnidirectional	70-12,000 Hz	—58 dBm	Dark Green Baked Enamel	7/8" (2.2 cm) dia. x 13/8" (3.5 cm) long	0.91 oz-26 gm
687B	Dynamic moving coil, announce and paging, w/stand	Omnidirectional	50-15,000 Hz	—58 dBm	Satin Chrome	7½" (19.1 cm) high 3" (7.6 cm) deep 1½" (4.1 cm) dia.	16 oz-454 gm
699A	Noise-cancelling dynamic moving coil w/built-in amplifier for G-1 telephone handsets	Omnidirectional	100-5000 Hz	-31 dB; 1 volt at 1 dyne/cm²	Mounts in G1 Telephone Handset	2" (5.1 cm) dia. x 1" (2.5 cm) high	1.5 oz-43 gm

Note: All models have a nominal 200-ohm (low) impedance except the M53/M54, which have a 150-ohm impedance. *The M53/M54 require 12V to 50V dc, 5 mA or less phantom power (can be supplied by 1588C preamplifier). **Referenced to 10 dynes/cm²

	Wirs. Wodel #	Description	Spec. Item #	Govt. Net Price (Discount Deducted)
		INDUSTRIAL SOUND PRODUCTS		
		AMPLIFIERS, POWER SUPPLIES & ACCESSORIES		
	351C 357A 1177A 1219B 1220AC	Amplifier (50 watt) Tone Generator Travel Case for 9477B Portable Biamp Power Speaker System Control Console (Case Included)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	\$ 360.00 126.00 69.00 870.00 2,475.00
5	1224A 1552A 1554A 1579C 1588B/C	Electronic Crossover Biamplifier VU Meter Panel Power Distribution Panel Phono Preamplifier (plug-in) Preamplifier (plug-in)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	360.00 114.00 126.00 48.00 33.00
	1588C 1589B 1590C 1592B 1593B	Preamplifier (plug-in) Preamplifier Amplifier (200 watt) Mixer Amplifier Amplifier (50 watt)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	45.00 216.00 540.00 453.00 354.00
	1594B 1597A 1598A 1599A 1603A	Amplifier (100 watt) Monitor Speaker Panel Amplified Monitor Speaker Panel Six Input Microphone Mixer SEQUR Amplifier Coupler	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	417.00 108.00 222.00 264.00 126.00
/	1605B 1606A 1607A 1608A 1609A	NOALA Unit Mixer Power Amplifier (40 watt) Mixer Power Amplifier (75 watt) Mixer Power Amplifier (150 watt) Commercial Biamplifier	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	594.00 420.00 630.00 810.00 675.00
	1611A 1612A 1614A 1626A 1628A	Mixer Power Amplifier (25 watt) Limiter Amplifier Frequency Shifter In-wall Amplifier Automatic Microphone Mixer	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	270.00 525.00 897.00 588.00 990.00
	9440A 9477B 10280 10281 10282	Amplifier (800 watt) Power Amplifier (130 watt) (Less Case) Blank Panel (134") Blank Panel (3½") Blank Panel (5¼")	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	999.00 480.00 7.50 9.75 9.00
	10283 10284 10399 10440 10441	Blank Panel (7") Blank Panel (8¾") Blank Panel Perforated (1¾") Blank Panel (10½") Blank Panel (12¼")	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	10.50 10.50 7.50 12.00 13.50
	13690 14678A 15036 15095A 15335A	Touch Up Paint (ALTEC Green) Compressor Assembly (1607A, 1608A) Repeat Coil Plug-in Transformer Plug-in Transformer	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	9.00 99.00 90.00 27.00 27.00
	15356A 41780B 42500A 42526 42625	Plug-in Transformer Back Box (1626A) VU Meter Assembly (1592B, 1607A, 1608A) Shelf Cover (1606A, 1607A) Shelf Cover (1608A)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	27.00 36.00 63.00 54.00 54.00
		EQUALIZERS AND FILTERS		
	729A 1650 8080B 9025-1 9025-2	Acousta Voicette Stereo Equalizer One-third Octave Equalizer Pink Noise Generator Dividing Network (500 Hz) Dividing Network (800 Hz)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	\$ 972.00 840.00 150.00 75.00 75.00

	Mfrs. Model #	Description	Spec. Item #	Govt. Net Price (Discount Deducted)
		INDUSTRIAL SOUND PRODUCTS (Contir	nued)	
		EQUALIZERS AND FILTERS (Continued)		
	9431A 9432A 9433A 9434A 9880A	Digital Delay (Basic Frame) Memory Module (9431-A) Output Module (9431-A) Extension Frame (9431-A) Active Filter	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	\$2,700.00 495.00 525.00 1,725.00 336.00
	30904	Attenuator/Equalizer	174-20-1	18.00
		LOUDSPEAKERS AND ACCESSORIES		
	A7-8 A7-8 Kit A7-500-8 A7-500-8 Kit A8	Voice of the Theatre System (Utility) Speaker Components (Less Cabinet) Voice of the Theatre System (Utility) Speaker Components (Less Cabinet) Voice of the Theatre System	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	557.00 353.00 589.00 385.00 504.00
	27A 31A 32B 203B 210	Receiver Attachment (31A) Horn (Less 27A Attachment) Horn H.F. Horn (1 x 2 — 300 Hz) L.F. Horn (Two L.F. Loudspeakers)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	21.00 108.00 63.00 225.00 495.00
	211A 288-8G 288-16G 290-4G 291-16A	L.F. Horn (Two L.F. Loudspeakers) H.F. Driver Unit (8Ω) H.F. Driver Unit (16Ω) Compression Driver H.F. Driver Unit	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	534.00 252.00 252.00 282.00 177.00
21	291-16B 292-8A 311-60 311-90 403A	H.F. Driver Unit H.F. Driver Unit Sectoral Horn Sectoral Horn Speaker (8")	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	282.00 249.00 150.00 225.00 12.00
	403T 405A 405-8G 405T 409-8C	Speaker (8") (w/Xfmr) 4" Wide Range Speaker Speaker (4") Speaker (4") (w/Xfmr) Speaker (8")	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	25.00 18.00 13.50 26.00 16.50
	409T 411-8A 414-8C 416-8B 417-8H Series II	Speaker (8") (w/Xfmr) 15" Bass Speaker 12" Bass Speaker 15" Bass Speaker Hi-Power Guitar Speaker, 12"	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	29.00 134.00 104.00 119.00 112.50
2	418-8H Series II 421-8H Series II 425-8H Series II N-500C N-500F	Hi-Power Guitar Speaker, 15" Hi-Power Bass Speaker, 15" Hi-Power Guitar Speaker, 10" Network Network (500 Hz — 16Ω)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	120.00 127.50 105.00 90.00 168.00
	N501-8A 511A 511B 511E 515B	Network (500 Hz) Horn Horn Horn L.F. Speaker	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	75.00 102.00 83.00 150.00 174.00
	604-8G 612C 614D 616-8A 617-8A	15" DUPLEX Monitor Speaker (incl. Network) Cabinet (Utility, for 15" Speaker) Cabinet (Utility, for 12" Speaker) Ceiling Speaker 12" Ceiling Speaker	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	300.00 135.00 108.00 234.00 147.00

	Wirs. Wodel #	Description	Spec. Item #	Govt. Net Price (Discount Deducted)
		INDUSTRIAL SOUND PRODUCTS (Continue	d)	(2)
		LOUDSPEAKERS AND ACCESSORIES (Continued)		
Ť	619-8A 620A 755E N-800D N801-8A	15" Ceiling Speaker Cabinet (Furniture, for 15" Speaker) Wide Range Speaker (8") Network (800 Hz — 16Ω) Network (800 Hz)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	\$ 195.00 285.00 48.00 75.00 75.00
	803B 805B 808-8A N809-8A 811B	H.F. Horn (2 x 4 — 300 Hz) (Less Throat) H.F. Horn (2 x 4 — 500 Hz) (Less Throat) H.F. Driver Network (800 Hz) H.F. Horn	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	270.00 264.00 120.96 72.00 71.00
2	814A 815A 816A 828B 849A	Extenda-Voice Speaker (Single Speaker) L.F. Horn (Two L.F. Loudspeakers) L.F. Horn (One L.F. Loudspeaker) L.F. Horn (One L.F. Loudspeaker) Column Speaker System	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	216.00 282.00 147.00 204.00 210.00
	1003B 1005B 1111A 1114A 1115A	H.F. Horn (2 x 5 — 300 Hz) (Less Throat) H.F. Horn (2 x 5 — 500 Hz) (Less Throat) Cover for 1204B Rotating Chrome Stand for 1211A Vinyl Cover for 1211A	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	318.00 312.00 24.00 57.00 30.00
	1117A 1204B 1208B 1208B Kit 1211A	Vinyl Cover for 1217A Voice of the Theatre Speaker System Voice of the Theatre Speaker System (Utility) Speaker Components (Less Cabinet) Two Way Column Monitor Speaker	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	39.00 570.00 522.00 372.00 216.00
	1217A 1218A 1221A 1505B 9844A	Deluxe Two Way Column Speaker Portable Voice of the Theatre Speaker System Stage Monitor Speaker System H.F. Horn (3 x 5 — 500 Hz) (Less Throat) Monitor Speaker (Utility)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	390.00 570.00 447.00 432.00 558.00
	9845A 9846-8A 9849-8A 9849-8D 13691	Monitor Speaker (Utility) Monitor Speaker (Utility) Monitor Speaker (Utility) Monitor Speaker (Furniture) Touch Up Paint (Theatre Gray)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	648.00 563.00 435.00 468.00 9.00
	21216 30162 30166 30170 30172	Adapter (1" Throat to 1.4" Throat) Horn Throat (Single, for 803B, 805B) Horn Throat (Single, for 1505B) Horn Throat (Double, for 1003B, 1005B) Horn Throat (Double, for 1505B)	174-20-1 174-20-1 174-20-1 174-20-1 174-20-1	21.00 21.00 24.00 36.00 36.00
	30210 30546 30619	Horn Throat (Single, for 1003B, 1005B) Adapter 45°(288, 290, 291, 292) Adapter 90° for 511A	174-20-1 174-20-1 174-20-1	18.00 27.00 22.50
		70 VOLT MATCHING TRANSFORMERS		
1	15045A 15064 15065 15066	Transformer (100 watt) Transformer (1 watt) Transformer (8 watt) Transformer (32 watt) Transformer (150 watt)	174-20-2 174-20-2 174-20-2 174-20-2 174-20-2	\$ 54.00 24.00 27.00 39.00 39.00
	15074 15075A 15132 15313 21256	Transformer (4 watt) Transformer (15 watt) Transformer (4 watt) Transformer (30 watt) Weatherproof Transformer Housing	174-20-2 174-20-2 174-20-2 174-20-2 174-20-2	18.00 15.00 11.25 24.00 24.00

Mfrs.	Description	Spec.	Govt. Net Price
Model #		Item #	(Discount Deducted)
	INDUSTRIAL SOUND PRODUCTS (Cor	ntinued)	(4)
	MICROPHONES		
M53	Cardioid Condenser Omni Condenser System Electret Lavalier Mic Electret Condenser Mic Cardioid Dynamic (Hi-Z)	174-20-1	\$ 245.00
M54		174-20-1	245.00
624A		174-20-1	77.00
626A		174-20-1	182.00
650BH		174-20-1	120.00
650BL	Cardioid Dynamic (Lo-Z) Cardioid Dynamic Mic Omnidirectional Dynamic Cardioid Dynamic Mic Close-Talk Omnidirectional Dynamic	174-20-1	116.00
654A		174-20-1	126.00
655AL		174-20-1	93.00
656AL		174-20-1	93.00
668A		174-20-1	66.00
677B	Lavalier Dynamic Mic	174-20-1	71.00
687B	Paging/Announce Mic	174-20-1	87.00
699A	Noise Cancelling Dynamic	174-20-1	74.00
	MICROPHONE ACCESSORIES		
34A	Desk Stand w/Shock Mount	174-20-2	\$ 21.00
35A	Gooseneck and Mounting (677B)	174-20-2	21.00
39A	Matching Transformer	174-20-2	30.00
183A	Cable Set (with Transformer)	174-20-2	36.00
189A	Holder (M53, M54, 650BH/L, 655AL, 656AL)	174-20-2	3.75
	FLOOR STANDS		
UMS100	Microphone Stand De-Luxe Stand, Chrome Base Microphone Stand Professional Mic Stand	174-20-2	\$ 12.60
UMS101		174-20-2	15.60
UMS102		174-20-2	13.20
UMS103		174-20-2	19.80
	DESK STANDS		
UDS100	Non Adjustable Stand	174-20-2	\$ 4.50
UDS101	Adjustable Desk Stand	174-20-2	7.20
	BOOM ACCESSORIES		
UBB100	Baby Boom Arm	174-20-2	\$ 10.20
UBS100	Boom Swivel Adaptor	174-20-2	6.60
	ADAPTORS		
UAD100	5/8"-27 female to 1/2" pipe thread male (RCA) 3/4" long, 5/8"-27 male running thread 5/8"-27 female to 5/8"-27 female, coupling 3" long tube, 5/8"-27 male each end 6" long tube, 5/8"-27 male each end	174-20-2	\$ 1.40
UAD101		174-20-2	.90
UAD102		174-20-2	1.20
UAD103		174-20-2	1.40
UAD104		174-20-2	1.40
UAD105	Flange, 5/8"-27 female, Base Diameter 2"	174-20-2	1.40
UAD106	Flange, 5/8"-27 male, Base Diameter 2"	174-20-2	1.40
UAD107	12" long tube, 5/8"-27 male each end	174-20-2	2.60
UAD108	24" long tube, 5/8"-27 male each end	174-20-2	3.90
	STAND ACCESSORIES		
UGN106	Goose Neck — 6" Long	174-20-2	\$ 2.70
UGN113	Goose Neck — 13" Long	174-20-2	3.60
UGN119	Goose Neck — 19" Long	174-20-2	5.10
US01	Snap-On Mic Accessory	174-20-2	4.50