

ALTEC
LANSING

*Voice of the
Theatre*

YOU AIN'T HEARD NOTHIN' YET!

Al Jolson said it in *The Jazz Singer* in 1927; and Altec Lansing's experience with theatre loudspeakers had begun.

Theatre-goers have listened to more soundtracks through Altec Lansing loudspeakers than through any others. The reference standard for Hollywood sound directors, they are the only loudspeakers recommended by the Research Council of the Academy of Motion Picture Arts and Sciences. They fill a movie theatre with rich, full music and thunderous effects, while still allowing the dialogue to be crisp and clear. Their realism and accuracy draw the audience into the film. Their high efficiency makes miserly use of amplifier power. Their dependability year in and year out is legendary among theatre owners and service representatives. They are, truly, the VOICE OF THE THEATRE®.

The A1, A2, A4, and A6 VOICE OF THE THEATRE loudspeakers fill the needs of the largest theatres, arenas, auditoriums, and stadiums. The A1, A2, and A4-X feature a Y-throat behind the horn and two compression drivers for greater sound pressure levels. The A4 and A4-X use a powerful low frequency cabinet, seven-feet tall and almost three-feet wide, with two bass drivers. Braced wings on each side improve efficiency at the lowest frequencies. The A2 has an additional cabinet and two more bass drivers making it the no-compromise choice for large theatres that need big bass for today's higher fidelity soundtracks. The A1 uses six bass drivers for the ultimate wall of sound. All these cabinets can be turned on their sides and raised on scaffolding for better midrange coverage across the front row and improved stereo effect. And, for facilities requiring full-size sound from a small package, there's the newest member of the VOICE OF THE THEATRE line—the compact, powerful A6.

Altec Lansing's new MANTARAY® constant directivity high frequency horn is available as part of the A6 loud-

speaker system, instead of the usual multicellular horn. The theatre sound engineer will need a MANTARAY horn in very reverberant theatres or those with difficult architecture. The improvement in intelligibility can be miraculous. In all theatres, the MANTARAY gives improved coverage and more uniform frequency response throughout the seating area.

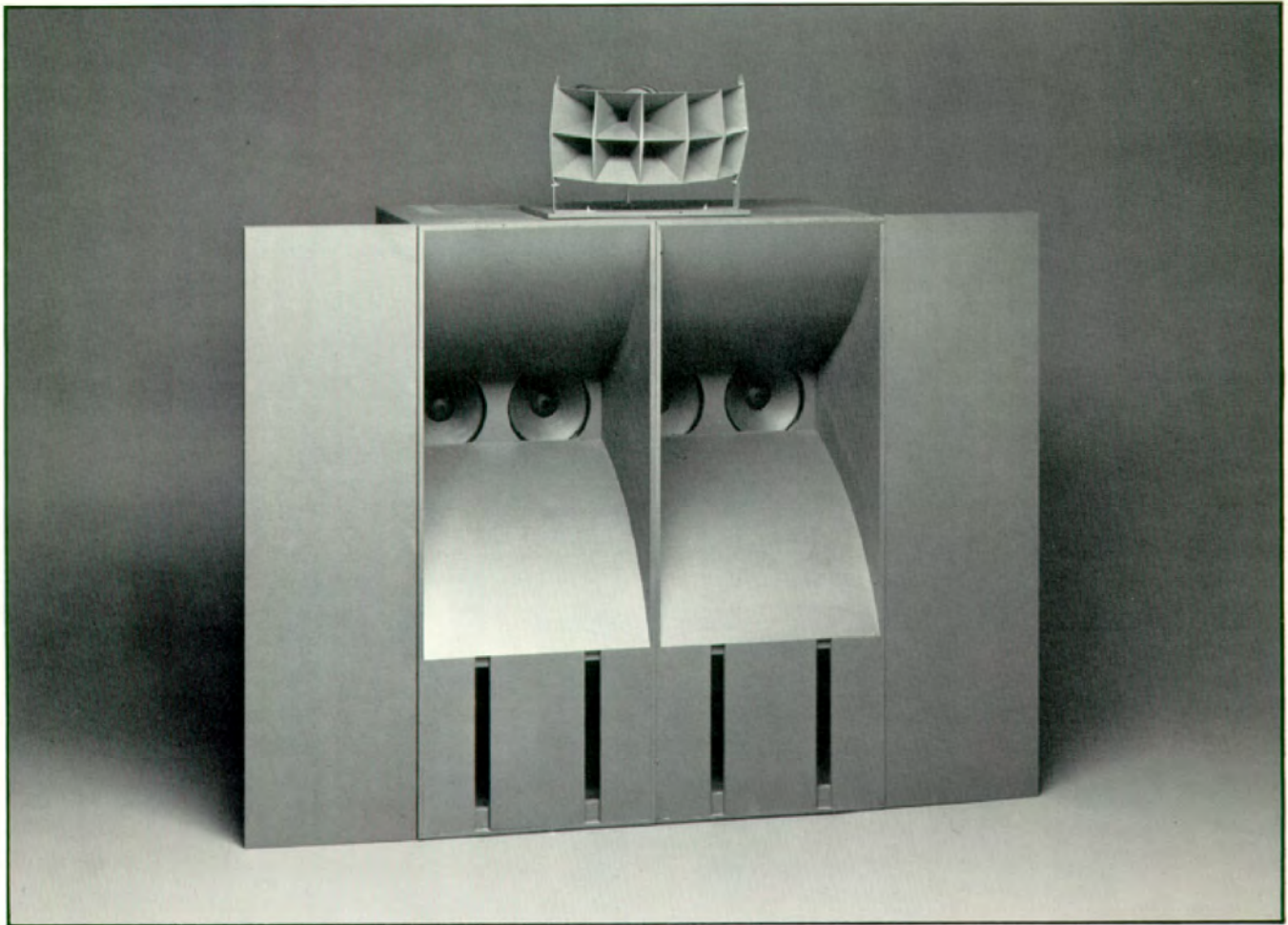
The new A6 VOICE OF THE THEATRE system delivers the same sound levels and punch as the larger Model A4, all from a behind-screen depth of less than 20 inches. The compact, and economical, A6 features the high frequency precision of the Mantaray Constant Directivity Horn paired with a newly-designed long-throw woofer.

The A5 and A7-500 VOICE OF THE THEATRE loudspeaker systems meet the needs of today's smaller, multiple theatres. They use a carefully designed low frequency cabinet and single bass driver. The A5 is available with a choice of high frequency horns to cover a variety of seating arrangements. The A7-500 uses a sectoral horn for typical theatres with lower reverberation times. The A5 and A7-500, while smaller and less costly than the A4 style, retain the distinctive qualities that make the VOICE OF THE THEATRE unique.

The A8 VOICE OF THE THEATRE loudspeaker system retains its popularity as a surround speaker and in the smallest screening rooms, where its 12" depth solves a variety of space problems. It is the speaker-of-choice when VOICE OF THE THEATRE performance and reliability are needed in a very small package.

Today VOICE OF THE THEATRE continues its tradition of quality engineering and craftsmanship while utilizing the most advanced technology. More than ever, the ideal motion picture theatre loudspeaker system is VOICE OF THE THEATRE from Altec Lansing—*the sound of experience.*

ALTEC LANSING A1 SYSTEM, A2 SYSTEM



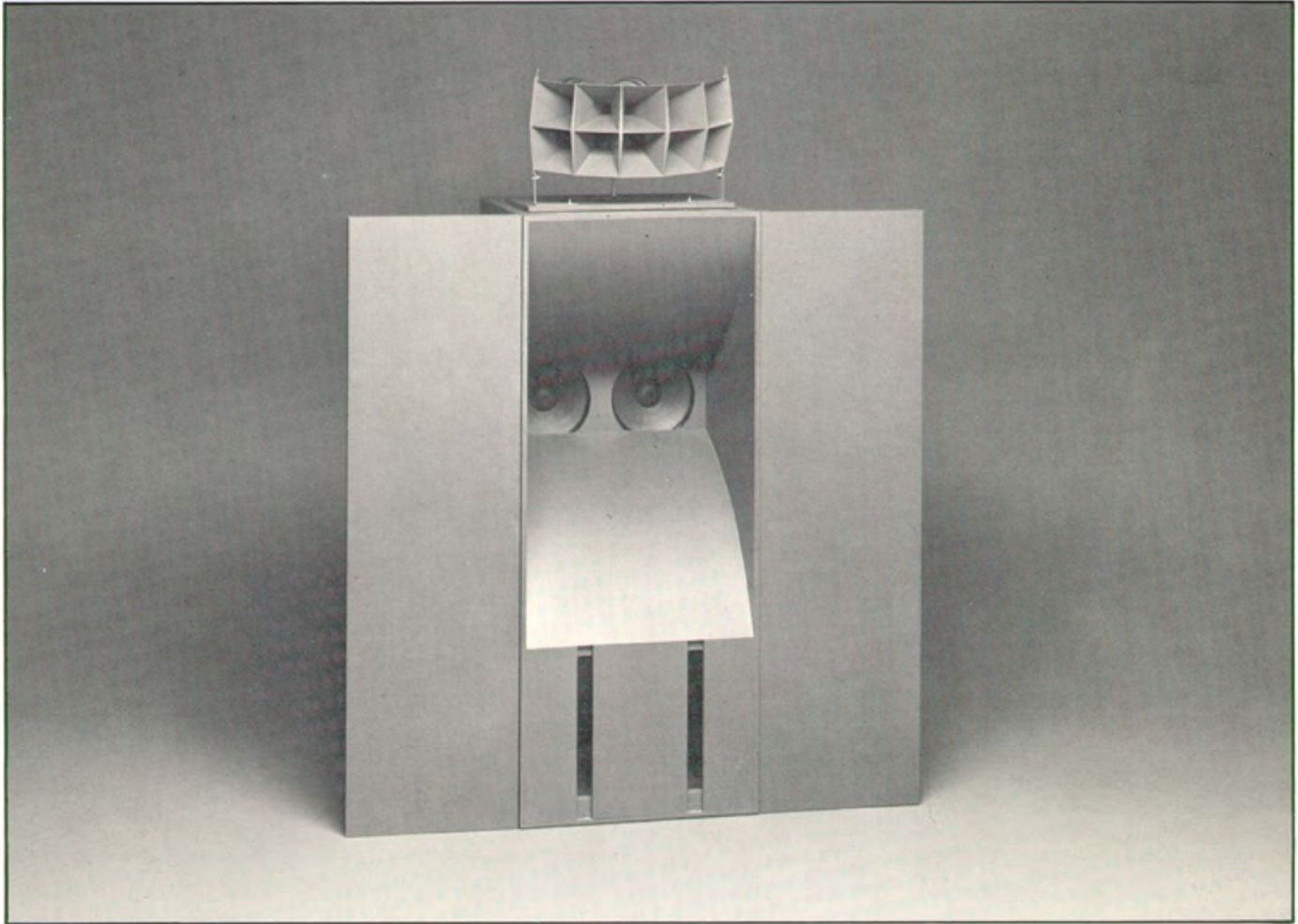
VOICE OF THE THEATRE Systems and Components

System Model Number	Low Frequency Drivers	High Frequency Drivers	High Frequency Horns	Throats	Networks	Low Frequency Cabinet
A1A-X/1005B	(6) 515E	(2) 288-16K	(1) 1005B	(1) 30170	Bi-amplification	(3) 210
A1A-X/1505B	(6) 515E	(2) 288-16K	(1) 1505B	(1) 30172	Required	(3) 210
A2A-X/1005B	(4) 515E	(2) 288-16K	(1) 1005B	(1) 30170	N500F/(1) 15067	(2) 210
A2A-X/1505B	(4) 515E	(2) 288-16K	(1) 1505B	(1) 30172	N500F/(1) 15067	(2) 210

Model	System Height	System Width	System Depth	Unequalized Frequency Response	Distribution Pattern	Impedance	Crossover Frequency	Weight
A1A-X/1005B	102½ in. (260 cm)	150 in. (381 cm)	39½ in. (100 cm)	40—15,000	40° V by 100° H	16 ohm	500 Hz	1664 lb. (755 kg)
A1A-X/1505B	108½ in. (276 cm)	150 in. (381 cm)	39½ in. (100 cm)	40—15,000	60° V by 105° H	16 ohm	500 Hz	1674 lb. (759 kg)
A2A-X/1005B	102½ in. (260 cm)	116 in. (295 cm)	39½ in. (100 cm)	40—15,000	40° V by 100° H	16 ohm	500 Hz	1155 lb. (524 kg)
A2A-X/1505B	108½ in. (276 cm)	116 in. (295 cm)	39½ in. (100 cm)	40—15,000	60° V by 105° H	16 ohm	500 Hz	1165 lb. (528 kg)

*Request Theatre Applications Note TAN-6A, "A4's Forever!"

ALTEC LANSING A4 SYSTEM



VOICE OF THE THEATRE Systems and Components

System Model Number	Low Frequency Drivers	High Frequency Drivers	High Frequency Horns	Throats	Networks	Low Frequency Cabinet
A4A/805B	(2) 515E	(1) 288-16K	(1) 805B	(1) 30162	N500F/(1) 15067	(1) 210
A4A/1005B	(2) 515E	(1) 288-16K	(1) 1005B	(1) 30210	N500F/(1) 15067	(1) 210
A4A/1505B	(2) 515E	(1) 288-16K	(1) 1505B	(1) 30166	N500F/(1) 15067	(1) 210
A4A/MR94A	(2) 515E	(1) 288-16K	(1) MR94	(1) 34656	N500F/(1) 15067	(1) 210
A4A-X/1005B	(2) 515E	(2) 288-16K	(1) 1005B	(1) 30170	N500F/(2) 15067	(1) 210
A4A-X/1505B	(2) 515E	(2) 288-16K	(1) 1505B	(1) 30172	N500F/(2) 15067	(1) 210

Model	System Height	System Width	System Depth	Unequalized Frequency Response	Distribution Pattern	Impedance	Crossover Frequency	Weight
A4A/805B	102½ in. (260 cm)	82 in. (208 cm)	39½ in. (100 cm)	40—15,000	40° V by 80° H	16 ohm	500 Hz	623 lb. (283 kg)
A4A/1005B	102½ in. (260 cm)	82 in. (208 cm)	39½ in. (100 cm)	40—15,000	40° V by 100° H	16 ohm	500 Hz	626 lb. (284 kg)
A4A/1505B	108½ in. (276 cm)	82 in. (208 cm)	39½ in. (100 cm)	40—15,000	60° V by 105° H	16 ohm	500 Hz	639 lb. (290 kg)
A4A/MR94	110 in. (279 cm)	82 in. (208 cm)	39½ in. (100 cm)	40—15,000	40° V by 90° H	16 ohm	500 Hz	632 lb. (287 kg)
A4A-X/1005B	102½ in. (260 cm)	82 in. (208 cm)	39½ in. (100 cm)	40—15,000	40° V by 100° H	16 ohm	500 Hz	646 lb. (293 kg)
A4A-X/1505B	108½ in. (276 cm)	82 in. (208 cm)	39½ in. (100 cm)	40—15,000	60° V by 105° H	16 ohm	500 Hz	656 lb. (298 kg)

*Request Theatre Applications Notes TAN-6A, "A4's Forever!" and TAN-7, "Selection Guide to Voice of the Theatre Loudspeaker Systems."

ALTEC LANSING A6 SYSTEM



VOICE OF THE THEATRE Systems and Components

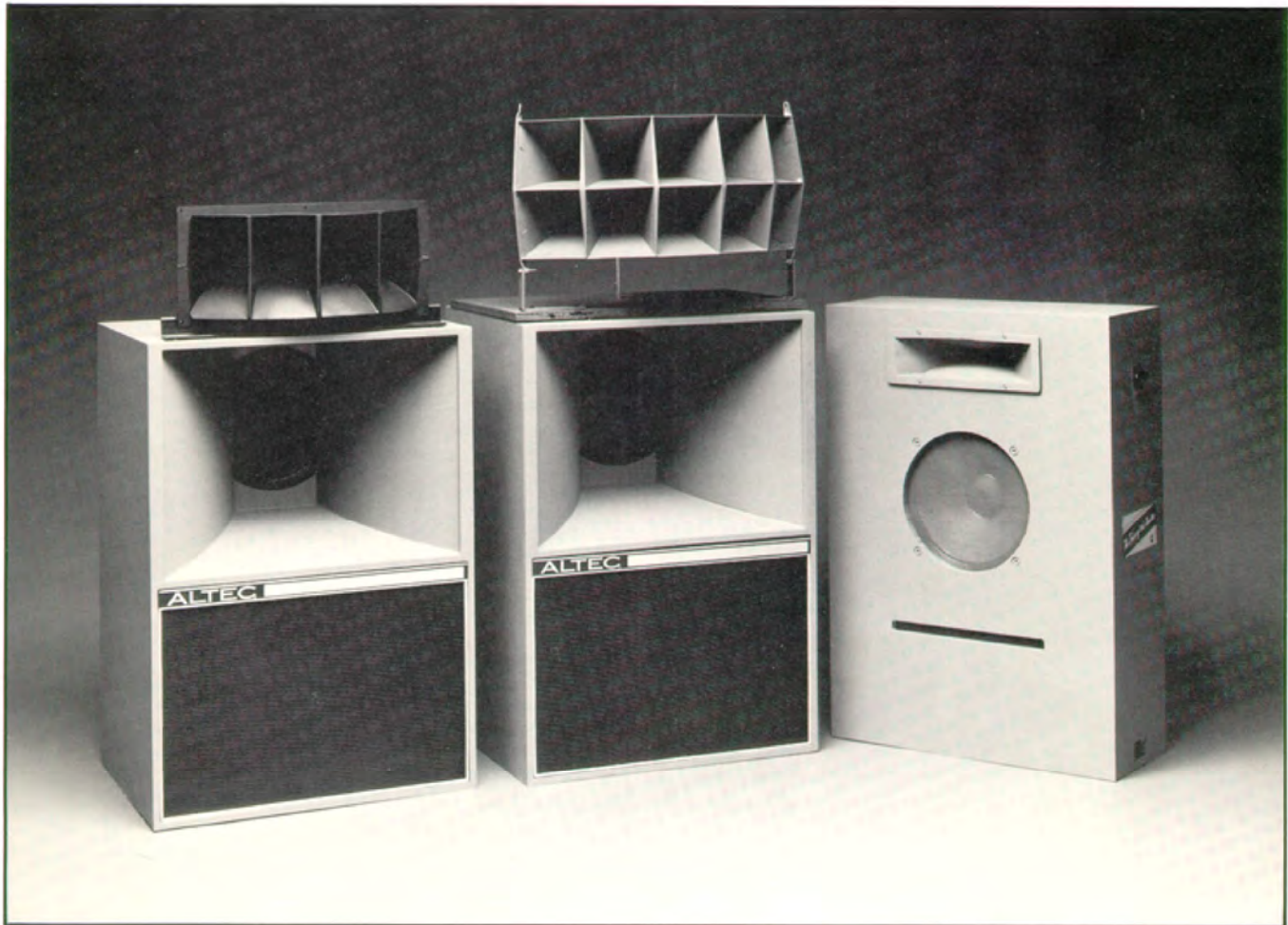
System Model Number	Low Frequency Drivers	High Frequency Drivers	High Frequency Horns	Throats	Networks	Low Frequency Cabinet
A6A/MRII564	(2) 3156	288-8K	MRII564	None required	N8500-8A	8256X
A6A/MRII594	(2) 3156	288-8K	MRII594	None required	N8500-8A	8256X
A6A/MRII5124	(2) 3156	288-8K	MRII5124	None required	N8500-8A	8256X

Model	System Height	System Width	System Depth	Unequalized Frequency Response	Distribution Pattern	Impedance	Crossover Frequency	Weight
A6A/MRII564	49 in. (124.5 cm)	30 in. (76.2 cm)	19 in. (48.3 cm)	40—15,000	40° V by 60° H	8 ohm	500/ 800 Hz*	152 lb. (68.7 kg)
A6A/MRII594	49 in. (124.5 cm)	30 in. (76.2 cm)	19 in. (48.3 cm)	40—15,000	40° V by 90° H	8 ohm	500/ 800 Hz*	152 lb. (68.7 kg)
A6A/MRII5124	49 in. (124.5 cm)	30 in. (76.2 cm)	19 in. (48.3 cm)	40—15,000	40° V by 120° H	8 ohm	500/ 800 Hz*	152 lb. (68.7 kg)

*Switch selectable at crossover, 500 Hz recommended.

**See Theatre Applications Note TAN-7, "Selection Guide to Voice of the Theatre Loudspeaker Systems."

ALTEC LANSING A7-500 SYSTEM, A5 SYSTEM, A8 SYSTEM



VOICE OF THE THEATRE Systems and Components

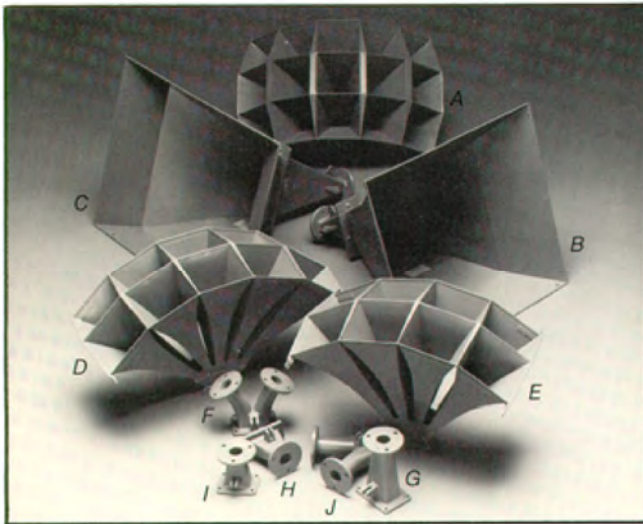
System Model Number	Low Frequency Drivers	High Frequency Drivers	High Frequency Horns	Throats	Networks	Low Frequency Cabinet
A5A/805B	(1) 515E	(1) 288-16K	(1) 805B	(1) 30162	N500F	(1) 828-G
A5A/1005B	(1) 515E	(1) 288-16K	(1) 1005B	(1) 30210	N500F	(1) 828-G
A5A/1505B	(1) 515E	(1) 288-16K	(1) 1505B	(1) 30166	N500F	(1) 828-G
A7-500-8E	(1) 416-8C	902-8B	511B	Not Required	N8500-8A	(1) 828-G
A8-16B	Shipped Assembled. Individual components available as replacement parts only.					

Model	System Height	System Width	System Depth	Unequalized Frequency Response	Distribution Pattern	Impedance	Crossover Frequency	Weight
A5A/805B	59 in. (150 cm)	30 in. (76 cm)	27¾ in. (71 cm)	40—15,000	40° V by 80° H	16 ohm	500 Hz	240 lb. (109 kg)
A5A/1005B	59 in. (150 cm)	30 in. (76 cm)	30½ in. (78 cm)	40—15,000	40° V by 100° H	16 ohm	500 Hz	243 lb. (110 kg)
A5A/1505B	64 in. (163 cm)	30½ in. (78 cm)	30½ in. (78 cm)	40—15,000	60° V by 105° H	16 ohm	500 Hz	256 lb. (116 kg)
A7-500-8E	54½ in. (138 cm)	30 in. (76 cm)	24 in. (61 cm)	40—18,000	40° V by 90° H	8 ohm	500 Hz or 800 Hz	206 lb. (93 kg)
A8-16B	42 in. (107 cm)	30½ in. (78 cm)	12¼ in. (31 cm)	40—18,000	60° V by 90° H	16 ohm	800 Hz	106 lb. (48 kg)

*Switch selectable at crossover, 500 Hz recommended.

**See Theatre Applications Note TAN-7, "Selection Guide to Voice of the Theatre Loudspeaker Systems."

ALTEC LANSING HIGH AND LOW FREQUENCY ACOUSTICAL COMPONENTS



Model Number	Component
A 1505B	MULTICELLULAR HORN
B MR64A	MANTARAY HORN
34654	SINGLE THROAT FOR MR64A HORN
C MR94A	MANTARAY HORN
34656	SINGLE THROAT FOR MR94A HORN
D 1005B	MULTICELLULAR HORN
E 805B	MULTICELLULAR HORN
F 30170	Y-THROAT FOR 1005B HORN
G 30162	SINGLE THROAT FOR 805B HORN
H 30166	SINGLE THROAT FOR 1505B HORN
I 30210	SINGLE THROAT FOR 1005B HORN
J 30172	Y-THROAT FOR 1505B HORN

Model Number	Component
K 511B	SECTORAL HORN
L 515E	15-INCH LOW FREQUENCY SPEAKER
M N500F	500 Hz CROSSOVER NETWORK
N 416-8C	15-INCH LOW FREQUENCY SPEAKER
O 15067	AUTOFORMER
P 288-16K	HIGH FREQUENCY DRIVER (FOR LARGE HORNS)
Q 902-8B	HIGH FREQUENCY DRIVER (FOR 511B AND 32C HORNS)
R N8500-8A	CROSSOVER FOR A7-500 SYSTEM

Model Number	Component
S MR11564	MANTARAY HORN
T MR11594	MANTARAY HORN
U MR115124	MANTARAY HORN
V 3156	15-INCH LONG THROW LOW FREQUENCY SPEAKER
W 3182	18-INCH LONG THROW LOW FREQUENCY SPEAKER

ALTEC LANSING ACCESSORIES AND ELECTRONIC EQUIPMENT FOR THEATRE SOUND

Complimenting the legendary Voice of the Theatre® loudspeakers behind the screen is Altec Lansing's complete line of associated equipment for motion picture sound reproduction.

Surround loudspeakers and subwoofers are among the newer and more exciting developments in theatre sound, and today's audiences know and appreciate the way these innovations can enhance the viewing experience. Altec Lansing invented the first surround systems years ago—and today produces systems to suit a wide variety of theatres, formats and budgets.

For the thunderous impact of extended low frequency film audio, Altec presents the new Model 8182 Subwoofer System, with bone-jarring sub-bass response down to 20 Hz (-6 dB)! The Model 8182 is powered by Altec's new Model 1270 direct-coupled Sub-woofer Amplifier, delivering up to 800 watts in the bridge mode.

In the realm of electronics for theatre sound, Altec's Green Line products have earned a reputation for quality

and unparalleled reliability during years of demanding use in theatres around the world. Now, the Green Line is joined by a new generation of superior Altec electronics including new mixer/preamplifiers, projection booth monitors and power amplifiers engineered for today's motion picture theatre needs.

Stereophonic sound, for instance, is an important element of film entertainment that theatre-goers are coming to expect, and Altec's Models 1268, 1269 and 2200 Series Power Amplifiers are a particularly cost-effective method for driving stereo loudspeaker systems. The new Incremental Power® amplifier system is another first for Altec, with plug-in power options of 75 or 150 watts, power per channel from 75 to 600 watts, and a unique feature unavailable in any other piece of sound equipment: in case of amplifier failure, the unit may be configured for instant, automatic switching to a standby amplifier with no change in sound level or quality. (See also: TS1, TS2 Theatre Sound Systems.)

ALTEC LANSING SURROUND LOUDSPEAKER SYSTEMS



Surround Loudspeaker Systems*

Model	System Height	System Width	System Depth	Frequency Response	Distribution Pattern	Impedance	Crossover Frequency	Components	Weight
310 3-Way Surround	23 in. 58.5 cm	14 ⁵ / ₈ in. 37.0 cm	12 ¹ / ₄ in. 31.0 cm	65-20 kHz ± 4 dB	120° horiz. 90° vert.	4-8 ohms	3,000 Hz, 10,000 Hz	10 in. LF, 4 in. mid, 2 ¹ / ₂ in. HF	30 lbs. 13.6 kg
312 3-Way Surround	28 ¹ / ₄ in. 71.8 cm	16 ³ / ₁₆ in. 41.1 cm	12 ³ / ₁₆ in. 31.0 cm	55-20 kHz ± 4 dB	120° horiz. 90° vert.	4-8 ohms	1,200 Hz 7,000 Hz	12 in. LF, 5 in. mid, 2 ¹ / ₂ in. HF	41 lbs. 18.6 kg
9842	24 ¹ / ₁₆ in. 61.1 cm	28 ¹ / ₁₆ in. 71.3 cm	14 ¹ / ₁₆ in. 35.7 cm	35 Hz to 20 kHz	90° X 30° up 10° down	8 ohms	1500 Hz	12 in. LF, 902-8A HF, MR 931-12 Horn, 1500 Hz Crossover	7016 lbs. 31.8 kg

*Request Theatre Applications Note TAN-3B, "Surround Loudspeakers in the theatre"

ALTEC LANSING SUBWOOFER, SUBWOOFER POWER AMPLIFIERS



Subwoofer*

	Height	Width	Depth	Frequency Response	Components	Weight
8182 Theatre Subwoofer System	54 in. 137.2 cm	36 in. 91.4 cm	26¼ in. 28.8 cm	20 Hz (-6 dB) to 200 Hz	(1) 3182 Extended Low Frequency Sound Reinforcement Loudspeaker	147 lbs. 67 kg.

Subwoofer Power Amplifier*

Model	Number of Channels	Power Output Per Channel	Minimum Load Impedances	Frequency Response	Total Harmonic Distortion	Signal to Noise Ratio	Height	Width	Depth
1270	1 or 2	800 X 1 Chan, 400 X 2 Chan	4 ohms/1 Chan, in Bridge Mode 70 V	±0.25 dB 20 Hz to 20 kHz	Less than 0.05% 20 Hz to 20 kHz	100 dB	5¼ in. 13.3 cm	19 in. 45.3 cm	15¼ in. 38.7 cm

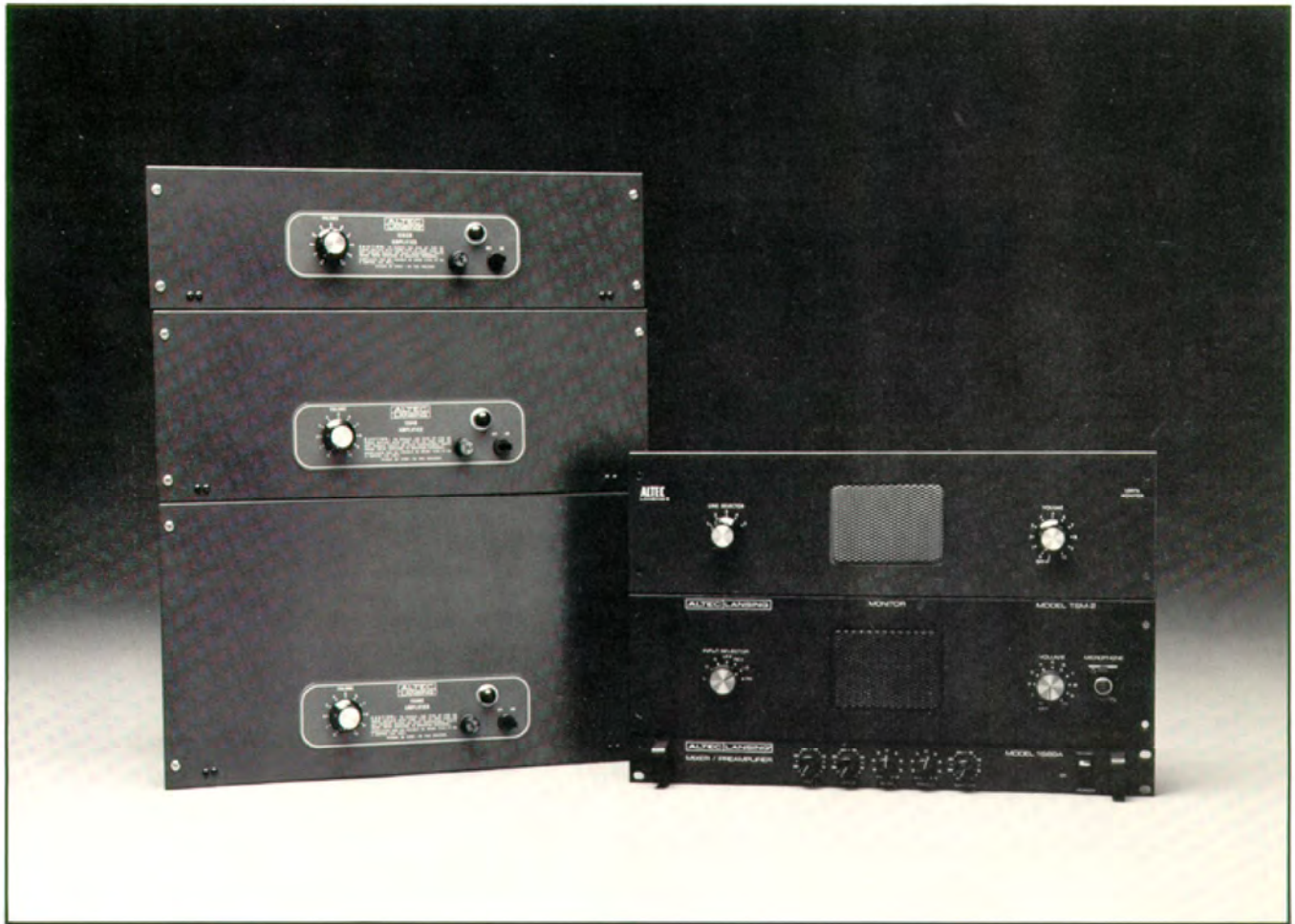
*Request Theatre Applications Note TAN-2A, Cinema Applications of Subwoofers"

Subwoofer Bandpass Filter*

Model	Number of Channels	Power Output Per Channel	Frequency Response	Total Harmonic Distortion	Load Impedance	Height	Width	Depth
SS5001	1	+18 dBm (6.15V)	20 Hz to 80 Hz ±1 dB	Less than 0.25%	15 kΩ	1¾ in. 4.45 cm	19 in. 48.26 cm	8 in. 20.32 cm

*Not required if Dolby cat. 160 module is used.

ALTEC LANSING MIXER/PREAMPLIFIERS, PROJECTION BOOTH MONITORS, POWER AMPLIFIERS



Mixer/Preamplifiers*

Model	Input Channels	Power Output	Frequency Response	Total Harmonic Distortion	Load Impedance	Height	Width	Depth
1689A	2	+18 dBm (6.15V) w/600 ohm line	± 1 dB 20 Hz to 20 kHz	Less than 0.25%	600 ohms (transformer isolated output)	1 1/4 in. 4.45 cm	19 in. 48.26 cm	8 in. 20.32 cm

Projection Booth Monitors*

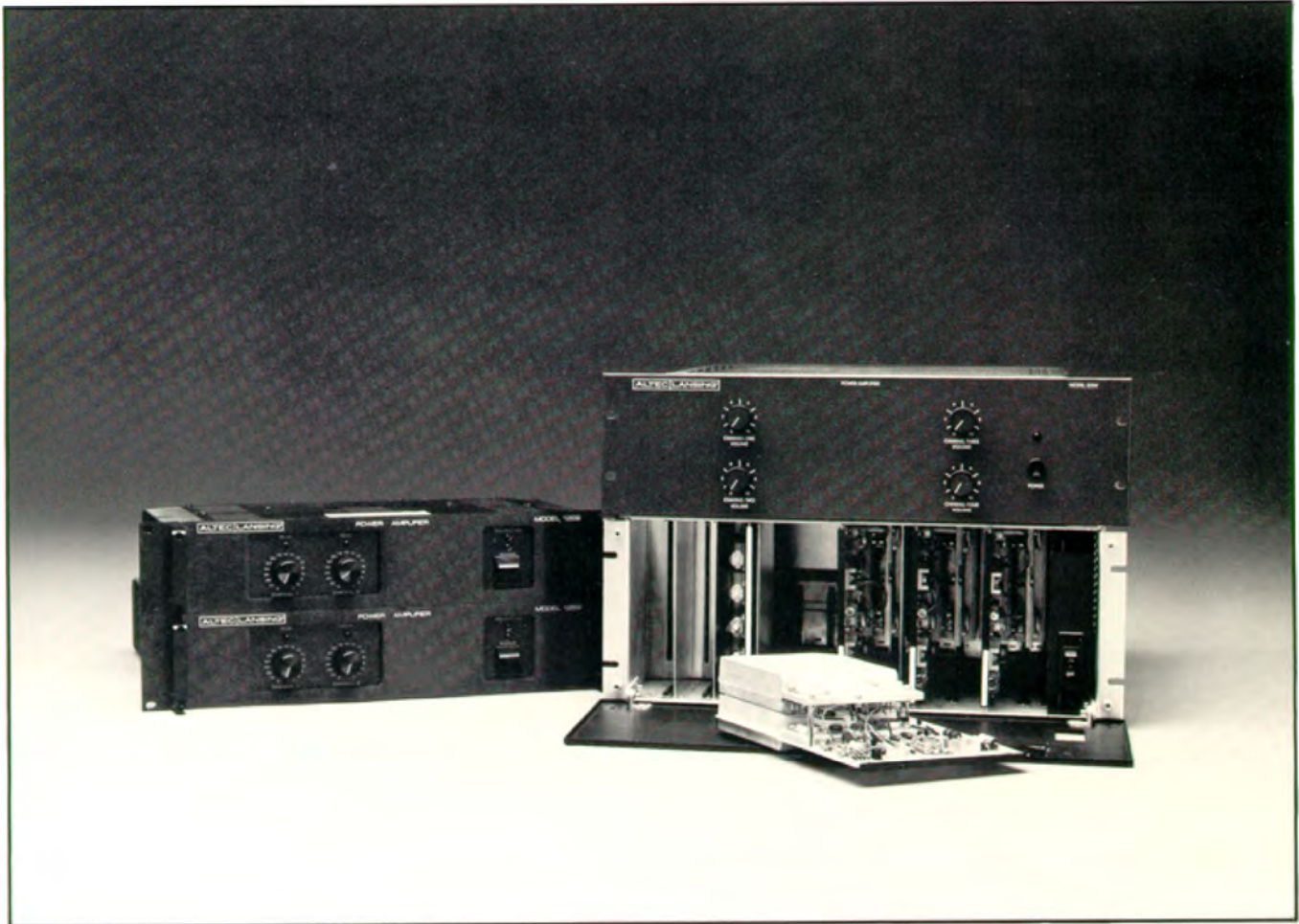
1597A Passive Projection Booth Monitor	Provides audible monitoring of line signal from up to five different 70-volt lines. Draws 1 watt from input line.
1698A Amplified Projection Booth Monitor	Provides audible monitoring from 7 signals (loudspeaker or line level). Has built-in 2-watt amplifier. Operates on 110 Vac or 28Vdc.

Power Amplifiers

Model	Power Output Per Channel (watts)	Minimum Load Impedances or Voltage Outputs	Frequency Response	Total Harmonic Distortion	Signal to Noise Ratio	Height	Width	Depth
1593C	50	4 ohms, 8 ohms, 16 ohms 70 volts	± 1 dB 20 Hz to 20 kHz	Less than 1% 45 Hz to 20 kHz	85 dB	5 1/4 in. 13.3 cm	19 in. 48.3 cm	7 3/8 in. 18.7 cm
1594B	100	4 ohms, 8 ohms, 16 ohms 70 volts	± 1 dB 20 Hz to 20 kHz	Less than 1% 35 Hz to 20 kHz	85 dB	7 in. 17.8 cm	19 in. 48.3 cm	8 1/2 in. 21.6 cm
1590E	200	4.5 ohms 70 volts 100 volts, 140 volts 200 volts	± 1 dB to 20 kHz	Less than 1% 50 Hz to 20 kHz	85 dB	10 1/2 in. 26.7 cm	19 in. 48.3 cm	8 1/2 in. 21 cm

*Request Applications Note AN-3, "A single channel cinema sound system"

ALTEC LANSING POWER AMPLIFICATION SYSTEMS



Multi-channel Power Amplification System (2200)

Model	Number of Channels	Power Output Per Channel (watts)	Minimum Load Impedances or Voltage Outputs	Frequency Response	Total Harmonic Distortion	Signal to Noise Ratio	Height	Width	Depth
2204A	1 to 4	300 X 1 Chan, 150 X 2 Chan 75 X 4 Chan	2 ohms to 16 ohms* 50 volts	+0, -0.5 dB, 20 Hz to 20 kHz	Less than 0.25%, 20 Hz to 15 kHz	96 dB	5¼ in. 12.7 cm	19 in. 48.3 cm	16 in. 40.6 cm
2200A	1 to 8	600 X 1 Chan up to 75 X 8 Chan in various combinations	1 ohm to 32 ohms* 70 volts	+0, -0.5 dB, 20 Hz to 20 kHz	Less than 0.25%, 20 Hz to 15 kHz	96 dB	7 in. 17.8 cm	19 in. 48.3 cm	17½ in. 44.8 cm

*Depending on mode

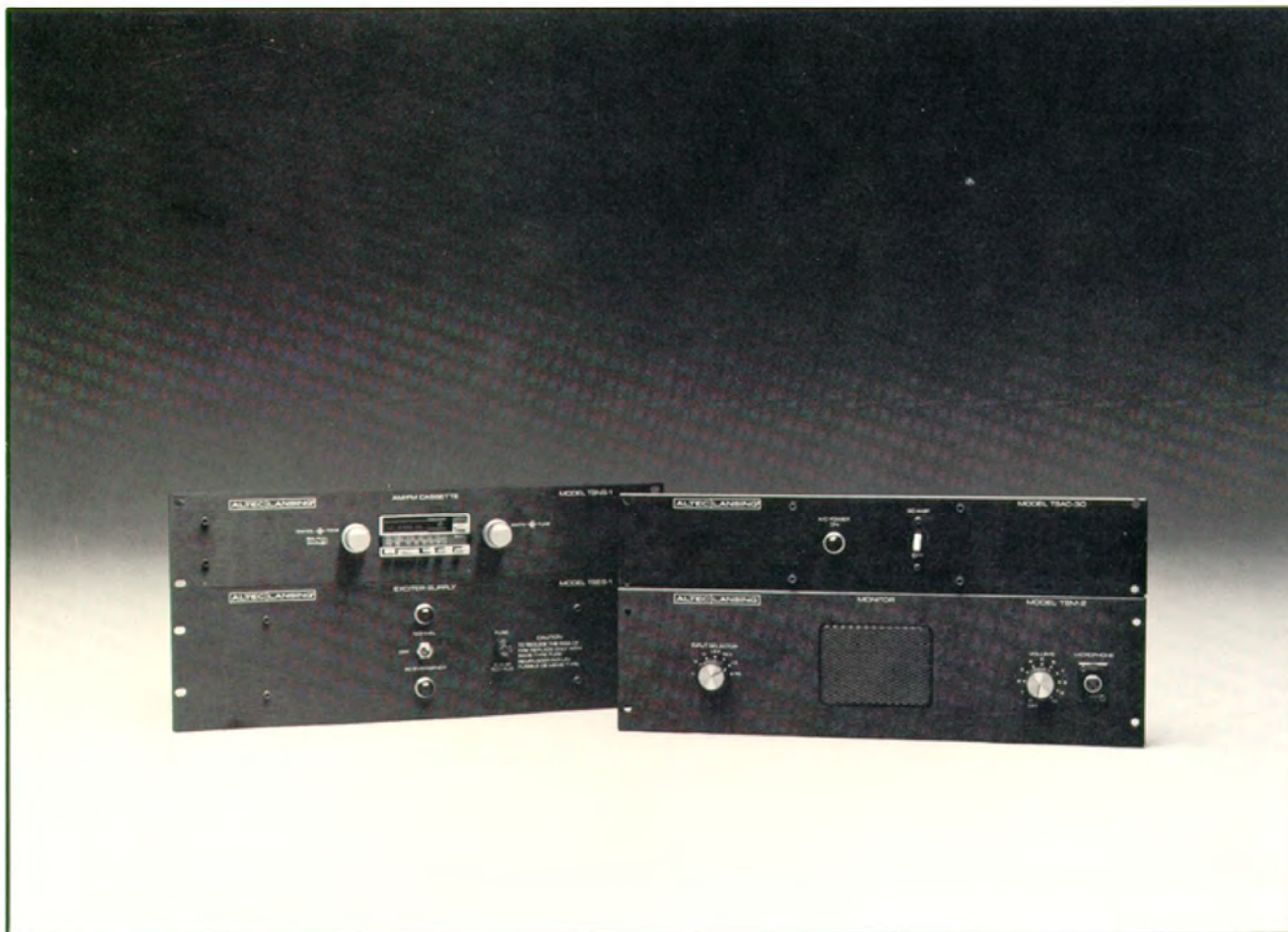
Two-channel Power Amplifiers

Model	Number of Channels	Power Output Per Channel (watts)	Minimum Load Impedances	Frequency Response	Total Harmonic Distortion	Signal to Noise Ratio	Height	Width	Depth
1268	2	60 X 2 Chan, 120 X 1 Chan	4 ohms	±0.25 dB, 20 Hz to 20 kHz	Less than 0.05%	100 dB	3¼ in. 8.9 cm	19 in. 48.3 cm	10 in. 25.4 cm
1269	2	120 X 2 Chan, 220 X 1 Chan	4 ohms	±0.25 dB, 20 Hz to 20 kHz	Less than 0.05%	100 dB	3¼ in. 8.9 cm	19 in. 48.3 cm	14¾ in. 37.47 cm

*Request Theatre Applications Note TAN-1, "Cinema Applications of 2 and 4 channel Amplifiers"

†Request Applications Note AN-2, "Cinema Applications of Incremental Power"

ALTEC LANSING THEATRE SOUND ACCESSORIES



Theatre Sound System Accessories

	Device Type	Indicators/Controls	Connectors	Power Required	Rack Height	Color
1698A	Amplified monitor panel	Channel selector, volume control	Screw terminals	110 Vac, 4 W	5¼"	Black
3510	AM/FM stereo/auto reversing stereo cassette player	"Stereo" light, tuning dial, station selector, volume control	Screw terminals	110 Vac, 20 W	3½"	Black
3520	Triple exciter lamp power supply	Green light for DC output; red light for AC operations; DC-OFF-AC selector switch	Screw terminals	110 Vac, 200 W	5¼"	Black
3530	Power distribution panel	Red light for power on	Terminal strip, AC outlets	Will handle 30 amps	3½"	Black

ALTEC LANSING TS1, TS2 THEATRE SOUND SYSTEMS

As anyone familiar with the industry knows, in-the-theatre fabrication of equipment racks for film sound can be a highly complicated and very expensive operation. And, due to the less than ideal conditions surrounding in-house fabrication, extensive trouble-shooting is often required to bring the completed system up to optimum performance levels.

Altec Lansing's new TS1 and TS2 Motion Picture Theatre Sound Systems offer an alternative to in-theatre fabrication that is not only quicker and more reliable, but *significantly more economical*.

Providing power amplification, monitoring and other essential function required for use with the Dolby™ CP-50R and CP-200 Cinema Processors, Altec's new TS systems will reproduce all existing and contemplated future formats of photographic sound for 35mm (TS1) and photographic or magnetic sound for 35 and 70mm formats (TS2).

At the heart of both systems is the ultra-compact Altec Incremental Power® amplifier system, featuring front-panel plug-in and service, choice of 75 watt, 150 watt or 70.7 V outputs for each channel and automatic switch-to-

spare amplifier configuration for uninterrupted sound in case of amplifier failure. Incremental Power is the reason the TS2 is the *only* complete 70mm sound system currently on the market that fits in a single cabinet.

Both the TS1 and TS2 allow for subwoofer channel, intermission music source and exciter lamp power supply options, with stereo surround inputs available in the TS2. These options may be purchased with the TS systems or inexpensively added later.

The TS systems are manufactured to standards developed during 50 years of Altec Lansing theatre sound experience. In addition to the technical and economic benefits of controlled-environment assembly and testing, Altec's TS systems also offer single-vendor consistency and Altec-engineered component-matching and reliability.

The Dolby Cinema Processors, which must be purchased separately, are mounted to the TS systems at Altec's Anaheim, CA plant. The entire system is then burned-in at full power and completely tested before being shipped directly to the theatre.

Available from your full service,
full line, theatre equipment dealer;



1515 South Manchester Avenue, Anaheim, California 92803