

# **Q**ALTEC LANSING











The Voice of the Theatre.

**Limited Edition** 



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## warranty

#### **30-DAY PRODUCT RETURN WARRANTY**

If for any reason you decide that this A7 loudspeaker is not what you were expecting (including cabinet cosmetics), you may return it to us using the original packaging material within 30 days of receipt. For additional information and to receive a Return Merchandise Authorization (RMA), please contact ALTEC using the information below.

#### ONE-YEAR WARRANTY ON DRIVERS, NETWORK, AND BINDING POSTS

If you encounter any loss of functionality in the drivers, network, or binding posts due to manufacturing defects within one year of receipt, please contact ALTEC using the information below. Replacement parts and installation instructions will be mailed to you along with a pre-paid shipping box for returning the malfunctioning parts.

This one-year warranty does not cover cabinet cosmetics not reported to ALTEC during the first 30 days after receipt.

#### IF YOU ARE HAVING TROUBLE

Your ALTEC loudspeaker is a precision instrument, responding with high accuracy to the variations in electric current produced by other components in your system. Extraneous noise such as hum, rumble, or hissing do not originate in the loudspeaker. If you experience difficulty in realizing the fine performance built into your ALTEC loudspeaker, you may contact us directly.

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#### Introduction

ALTEC loudspeakers have been the standard of the professional recording, broadcast and theatre industries. These ALTEC loudspeakers are handcrafted and tested to meet ALTEC's standards—the most rigid in the industry.

In 1945, Altec introduced an amazing series of two-way speaker systems to the world of motion picture entertainment. Their success was instantaneous! Following prolonged competitive tests, this series of speaker systems became the only commercially available sound for motion pictures approved by the Research Council of the Academy of Motion Picture Arts and Sciences . . . thereby, establishing the "Voice of the Theatre" as the "standard" of the entire industry. (1966 Altec Lansing Product Catalog)

The Voice of the Theatre. Known by name. Known by sight. Known by reputation. A legend in its own time. Once an exclusively professional product, overwhelming demand forced its being made available to those who insist upon its unparalleled presence and efficiency for their homes. The only way to duplicate the excitement inherent in the sound of the theatre - the Voice of the Theatre.

Excitement . . . drama . . . realism . . . emotion . . . Adjectives that describe the ways you feel during the film experience. The experience of sight - and of sound. The experience that is the Voice of the Theatre - a legend in its own time. (1975 Altec Lansing Product Catalog)

The legacy of the A7 is a famous one. Starting life purely as a cinema playback unit, it was soon in demand for use as a studio monitor and home reproducer. Many engineers still swear by the A7, and have made it their standard of comparison for everything audio. Very versatile and efficient, the A7 is ideally suited for use wherever good projection over long distances of wide-response material is required. (1975 Altec Lansing Federal Product Catalog)



# unpacking

#### IMPORTANT: PROTECT THE LOUDSPEAKER

The loudspeaker cone assemblies are fragile and should not be touched.

- **STEP 1:** Before removing the protective shipping material, look for obvious signs of shipping damage such as severely crushed corners or deep punctures that may have marred the speaker cabinet. If severe damage has occurred, immediately contact the shipping company to file a claim.
- **STEP 2:** Using a knife, carefully cut away any plastic which is holding the cardboard-encased speaker on the pallet.
- **STEP 3:** Use metal snips to cut the metal straps holding the cardboard-encased speaker on the pallet.
- STEP 4: Remove the top cardboard cap.
- **STEP 5:** Using a knife, carefully cut on the dotted line printed along one corner of the cardboard. Only cut deep enough to penetrate the cardboard.
- **STEP 6:** Remove the protective cardboard, foam, and plastic packaging material.

#### IMPORTANT: USE CAUTION WHEN MOVING THE LOUDSPEAKER

Because each A7 weighs approximately 200 pounds, use caution when moving the loudspeaker to avoid personal injury. Use multiple people or a dolly and protective blankets when moving the loudspeaker off of the pallet and to its final location.

#### IMPORTANT: RETAIN THE PALLET AND PACKAGING MATERIAL

If there is a need to return the loudspeaker under warranty conditions, you will need the pallet and packaging material to properly repackage the loudspeaker for transit.

### components

The following components are contained in the A7 loudspeaker's shipping container.

#### CABINET — MODEL 828

This A7 Loudspeaker cabinet is hand made from 13 layer Baltic Birch and covered with a durable black splatter finish.

The prime reason for an enclosure or baffle is to separate the sound radiated from the rear of a low frequency loudspeaker diaphragm or cone so that it does not cancel the radiation generated by the front of the cone. The enclosure is designed as a component of an acoustical system. A properly designed cabinet cannot make a poorly designed loudspeaker operate satisfactorily, nor can a well designed loudspeaker perform efficiently when housed in an inferior enclosure.



LOW FREQUENCY WOOFER - 15" MODEL 515.

HIGH FREQUENCY COMPRESSION DRIVER - MODEL 902.

HIGH FREQUENCY SECTORAL HORN - MODEL 511B

90° X 40° Sectoral Horn.

**NETWORK - MODEL N-900A.** 

#### **BINDING POSTS - CARDAS ACBP-S**

Two pair. Non-magnetic, billet Brass, short binding post, Rhodium over Silver plate. Billet brass nut, Gold plate. Glass filled nylon insulator. We ship the A7 jumpered for mono wiring. Simply remove the jumpers for bi-amplification. Binding posts accept either \_" spades or banana plugs.

#### **MANUAL**

This document which contains product use and warranty information.

# assembly

#### IMPORTANT: FINISH ASSEMBLY BEFORE CONNECTING TO AMPLIFIER

For protection, this A7 loudspeaker is shipped with the horn assembly fixed inside the cabinet. For optimum sound quality, follow the assembly steps below for repositioning the horn assembly on top of the loudspeaker cabinet.

- **STEP 1:** Support the horn assembly during removal. Using a 5/32" allen wrench, gently remove the allen screws, and washers holding the horn assembly inside the cabinet. Keep track of the provided lock nuts, washers and screws for later use.
- **STEP 2:** Attach the front and rear support brackets to the horn utilizing the allen screws, washers and lock nuts provided. This will require the 5/32" allen wrench and a 7/16" wrench or socket.
- **STEP 3:** Position the horn/bracket assembly on top of the cabinet over the pre-drilled holes. Using a 5/32" allen wrench, reattach the horn assembly to the cabinet using the same allen screws,.
- **STEP 4:** Attach the Blue and Yellow wires extending from the top of the back panel to the positive and negative terminals of the Model 902 compression driver. Yellow is connected to the Positive terminal and Blue to the Negative terminal.

#### WIRING

# IMPORTANT: CHECK YOUR AMPLIFIER'S IMPEDANCE AND POWER SPECIFICATIONS

This A7 loudspeaker has an 8 Ohm (\_) input impedance and is designed to handle continuous input power levels of up to 125 Watts RMS.

Do not connect this loudspeaker to amplifier speaker terminals which are rated at less than 8 Ohms (\_); significant damage to the loudspeaker could result.

Do not connect this loudspeaker to an amplifier rated at more than 125 Watts RMS per channel; significant damage to the loudspeaker could result.

# assembly (cont.)

#### **IMPORTANT: WIRE SIZE**

Ordinary commercial 18-guage, stranded, insulated wire may be used for connection of ALTEC loudspeakers. This is considered minimum size wire for speaker/amplifier connections up to 30 feet. For wire runs longer than 30 feet, 16-guage or larger wire is recommended.

- **STEP 1:** Strip 0.5" of insulation off of both ends of the speaker wire if it has not already been done.
- **STEP 2:** Insert the bare end of the marked wire (usually marked with a colored pattern on its insulation) into the hole in the positive (+) speaker terminal post. Tighten the nut down securely.
- **STEP 3:** Insert the bare end of the second wire into the hole in the negative (-) speaker terminal post. Tighten the nut down securely.
- STEP 4: Lay out the wire over to the amplifier.
- STEP 5: Connect the other end of the marked wire (refer to step 2) to the positive (+)  $8\Omega$  terminal on the amplifier.
- STEP 6: Connect the second wire to the negative (-)  $8\Omega$  terminal on the amplifier.
- **STEP 7:** Power up the amplifier and enjoy the great ALTEC sound.

# specifications

FREQUENCY RESPONSE ±10 dB	45 Hz to 20 kHz
LOW FREQUENCY ROLL-OFF -3 dB	54 Hz
SYSTEM POWER CAPACITY Rating based on test signal of continuous pink noise, per IEC spectrum for two hours duration.	125 W
SENSITIVITY 1 watt at 1 meter	97 dB
NOMINAL IMPEDANCE	8 Ohms
CROSSOVER FREQUENCY	900 Hz
NOMINAL COVERAGE	90° horizontal, 40° vertical
HALF-SPACE REFERENCE EFFICIENCY	3.2%
MAXIMUM ACOUSTIC POWER OUTPUT Sine wave input	7 acoustic watts
SYSTEM POLARITY	Positive voltage to RED produces forward cone motion
BINDING POSTS	Two pair. Jumpered for mono wiring. Bi-amp capable. Accepts either spades or bananas.
FINISH	Black, abrasion resistant splatter
DIMENSIONS (W x D x H)	30 x 24 x 52 inches
NET SYSTEM WEIGHT	170 lbs