

## Features:

**Full Frequency Response** on Both AM and FM **High Sensitivity** Low Noise Rack Mounting for Ease of Installation Visual Tuning Indicator for Both AM and FM Silicon Rectifier Shielded Tuning and **RF** Components Low Operating **Temperatures** Continuous, Trouble-Free Usage 72 or 300 ohm FM Antenna Connections Hi-Z, 150, or 600 ohm Audio Output (with 15095 Transformer)

## SOUND SYSTEM PROGRAMMING • BACKGROUND MUSIC DISTRIBUTION SYSTEMS • EDUCATIONAL INSTITUTIONS HOTELS, MOTELS, AND RESIDENCE CLUBS INDUSTRIAL PLANTS

The Altec 316A is designed for commercial and industrial applications which require a high-quality AM-FM tuner for continuous operation in order to furnish program material (such as background music) to sound systems or subscriber services. The 316A has been engineered for maximum flexibility and ease of installation; the attached front panel mounts in any standard 19" equipment rack; the audio output circuit accommodates Hi-Z and (with the addition of the Altec 15095 plug-in transformer) 150 or 600 ohm lines. Input and output connections are easily made to standard pin jacks and barrier terminal strips. In addition, the 316A utilizes a low noise, tuned RF stage within both the AM and FM circuits for maximum sensitivity and image rejection. Provision is made for either a 72 or 300 ohm antenna connection for FM; the AM antenna is a self-contained ferrite-rod loop.

The wide frequency response of both the AM and FM sections assures excellent reproduction of all broadcast signals; the precision, flywheel-drive tuning mechanism is further augmented by a visual tuning eye, indicating both 'on frequency' tuning and the relative signal strength of the AM or FM station selected. The shielded tuning capacitor and under-chassis mounting of the RF coils maintain radiation within FCC limitations. The low operating voltages and silicon power rectifier reduce operating temperatures to a point whereby long life of all components is readily assured. The entire unit is UL approved.



**UL** Approved

A Subsidiary of Ling-Temco-Vought, Inc.

1515 S. Manchester Ave., Anaheim, Calif. New York

## SPECIFICATIONS:

Output: Hi-Z; 150, 600Ω (w/15095 Trans.)

Tubes: 1 - 6CL8, 1 - 12AT7, 1 - 6BZ6, 2 - 6AU6, 1 - 6GM6, 1 - 6BE6, 1 - 12AU7,

1 - EAM86, 1 - 6M11 (GE) Compactron, 1 - Silicon Power Rectifier;

5 computer-type Diodes; 2 - 1N542 Detector Diodes.

Controls: Tuning; Volume (Screwdriver adjusted); AM-FM Selector; Power; AFC Defeat.

Power Supply: 117 VAC, 60 Cycles

Tuning Ind: Eye Type
Distortion: THD Below 1%

Hum and Noise: 65 db below 100% Modulation
Dimensions: (w/panel): 19" X 7" X 834" Deep.

Color: (Panel): Dark Green

Accessories: 15095 Plug-in Transformer (150/600Ω)

Weight: 9½ lbs.

FM SECTION:

Antenna:  $300\Omega$  (bal.) or  $72\Omega$  (unbal.) (Screw Terminal)

Sensitivity: 3.5 microvolts for 20 db quieting

Freq. Range: 88 - 108 mc.

Freq. Resp: 20 - 20,000 cycles ±1 db
Ant. Radiat: Within FCC requirements

AM SECTION:

Antenna: Ferrite Rod and Antenna Connection (Screw Terminal)

Sensitivity: 3 microvolts for 20 db quieting

Freq. Range: 550 - 1600 kc.

Freq. Resp: 20 - 8,000 cycles ±1 db

## ARCHITECTS AND ENGINEERS SPECIFICATIONS

The tuner shall be capable of receiving either AM or FM signals for distribution to audio lines having impedance requirements of 150, 600, or Hi-Z $\Omega$ ; the output impedances of 150 and 600 $\Omega$  shall be available with the addition of the Altec 15095 plug-in transformer, for which a socket shall exist on the tuner chassis. The tuner shall also incorporate an auxiliary AC (power) output socket on the rear of the chassis to supply line voltage of less than 2 amperes for powering additional equipment, if required. The tuner shall incorporate FM antenna connections for both a 300 $\Omega$  (balanced) and 72 $\Omega$  (unbalanced lead-in. The AM antenna shall consist of a ferrite rod 'loop' providing maximum sensitivity under a majority of operating conditions.

The tuner shall have the following controls mounted on the front panel: AC Power switch; AFC Defeat Switch; AM-FM Selector Switch; Tuning. The gain adjustment shall be controlled by a control mounted on top of the chassis, behind the front panel, to prevent tampering.

The tuner shall utilize a low-noise, tuned RF stage within both the AM and FM circuits for maximum sensitivity and image rejection; semi-conductor circuitry shall be incorporated in the power rectification section, together with wide-band, hum-free diodes in the FM ratio detector. Ample shielding shall be placed around the tuning and RF components so that FCC requirements for minimal radiation are met.

The FM section of the tuner shall have a sensitivity of 3.5 microvolts for 20 db of quieting; the AM section shall have a sensitivity of 3 microvolts for 20 db quieting. Hum and noise levels shall be 65% below 100% modulation; total harmonic distortion shall be below 1%.

The tuner shall be supplied with an attached panel for mounting in a standard 19" equipment rack. Dimensions of the unit (with panel attached) shall not exceed 19" long X 7" high X 8¾" deep; weight shall not exceed 9½ pounds. The entire unit shall be designed for continuous operation and shall bear the Underwriters' Laboratories seal of approval.

The tuner shall be Altec Lansing Model 316A.

NOTICE—
 ommend that you obtain your Altec products from factory trained
 red Alee Sound Contractors and Distributors. This will assure you
 r installation, a continuing source of knowledgeable advice, service,
 warranty protection.