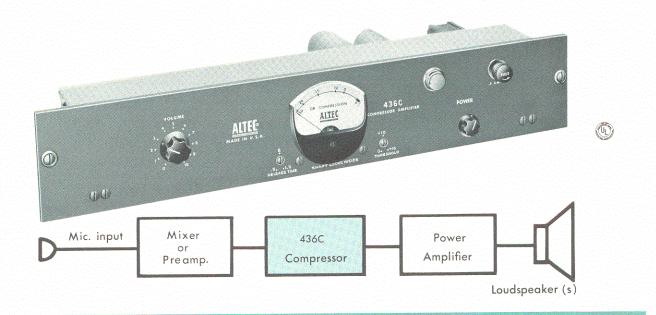
436C Compressor Amplifier



Features

Variable Compression
Ratio, Threshold,
and Release Time.
Fast attack
Smooth recovery
Wide frequency response
30 db of compression
Balanced input
Input gain control
Compact
Self powered
Rack or table mount

The 436C Compressor Amplifier is a self-powered, level-controlling amplifier with a versatility which makes it a desirable part of most audio installations. In response to a strong input signal, it will reduce gain up to 30 db automatically, rapidly, and quietly, without the introduction of thumps.

The 436C utilizes variable threshold/compression ratio and release time controls, permitting maximum flexibility in virtually any type of installation.

The 436C Amplifier is intended for use in automatic level-control applications in recording, TV broadcasting and public address systems. Level differences caused by individual voice intensities and unequal distances of performers from the microphone can be minimized by its use. The bridging input permits the 436C Compressor to be used to control level differences between two or more program sources or for automatic fading for voice-over-music announcements. In industrial locations where sudden high-level sounds might cause "blasting" with attendant danger to amplifiers and loudspeakers, the 436C Amplifier will prevent such overloading. Altec compressor amplifiers are also being used in TV broadcast pickup of variety, dramatic, musical and operatic productions to minimize level disparities and to relieve the control operator from the need for over-compensating for unpredictable bursts of volume.

The front panel contains all controls, fuse, and a meter which indicates db of compression. The front panel is hinged and, when open, provides ready access to all components and wiring for easy service. For economical installation, all connections are made to simple barrier-type terminals on the rear of the amplifier. A three-conductor power cord is pre-wired to the unit. For those installations where compression is desired only part of the time, this unit will also operate as a straight high-quality line amplifier when the 6AL5 tube is removed from its socket. A gain control is provided at the input, and the input and output transformers permit use on balanced lines.

The 436C occupies only $3\frac{1}{2}$ " of rack space in the standard Altec relay rack or may be mounted in the Altec 12495 Cabinet for table installations. For remote monitoring of compression, the Altec 6049 Meter may be ordered for installation in the control console or at the announcing position.

The wide range of application and excellent performance of this new Altec compressor amplifier will make it a valuable part of any good sound system.



PERFORMANCE SPECIFICATIONS:

Type: Compressor Amplifier

Gain: 56 db from 15,000 ohm source; 40 db bridging 600 ohm line

Frequency Response: ±1.5 db, 30-15,000 cycles
Power Output: +24 dbm (as straight amplifier)

Harmonic Distortion: At 25 db of compression: Less than 1.5%, 35-15,000 cycles; At 30 db of compression: Less than 2.5%, 25-10,000 cycles;

(0 db threshold setting)

(U db fhreshold seffing)

Noise Level: 74 db below rated output (-111 dbm equivalent input noise)

Input Impedance: 15,000 ohms bridging transformer (ungrounded)

Source Impedance: Any up to 15,000 ohms

Load Impedance: 150/600 ohms

Maximum Compression: 30 db

Attack Time: 50 milliseconds

Release Time: Adjustable: .3 to 1.3 seconds (63% recovery) **Threshold:** Adjustable: 0 dbm to +16 dbm output

Compression Ratio: 2:1 at 0 dbm threshold; 4:1 at +16 dbm threshold Controls: 2:1 at 0 dbm threshold, Release Time, Power Switch

Power Supply: 117 volts, 60 cycles, 20 watts

Tubes: 6BC8, 6CG7, 6AL5

Dimensions: 19" Long; 3½" High; 6" Deep

Color: Dark Green Weight: 8½ lbs.

Special Features: Compression meter; shaft locks for threshold and release time controls

ACCESSORIES

12495 Cabinet, 6049 Meter

ARCHITECTS AND ENGINEERS SPECIFICATIONS

The compressor amplifier shall have a frequency response of ± 1.5 db from 30 to 15,000 cycles. It shall be capable of delivering a power output of +24 dbm as a straight amplifier. With 25 db of compression, distortion shall not exceed 1.5% over the frequency range from 35 to 15,000 cycles and at 30 db of compression, less than 2.5% from 35 to 10,000 cycles. The threshold shall be adjustable from 0 to +16 dbm output; maximum compression provided by the amplifier shall be 30 db. Attack time shall be fixed at 50 milliseconds; release time shall be adjustable from .3 to 1.3 seconds for 63% recovery.

The gain of the amplifier shall be 56 db from a 15,000 ohm signal source or 42 db bridging a 600-ohm line. Input noise shall not exceed -111 dbm. The signal-to-noise ratio shall be at least 74 db.

The input impedance shall be 15,000 ohms (ungrounded); the load impedance shall be 150 or 600 ohms. The amplifier shall operate from a 115 VAC, 60 cycle supply and shall be provided with a panel meter reading in db of compression. The amplifier shall be of the rack-mounting type and shall also have provisions for mounting in a desk-top type cabinet for remote operation, where required. The unit shall measure $3\frac{1}{2}$ " high, 19" long, 6" deep and weigh in the order of $8\frac{1}{2}$ pounds. The tube complement shall consist of one 6BC8, one 6CG7, and one 6AL5. The hinged front panel shall be finished in dark green and shall provide access to the shaft locks of the threshold and release time controls.

Any compressor not meeting these specifications as to the amount of compression, variable threshold, compression ratio, and release time controls, or that does not permit the use of the compressor unit as a straight amplifier by the removal of one vacuum tube, shall be deemed unacceptable under these specifications.

The compressor amplifier shall be Altec Lansing model 436C.

We recommend that you obtain your Altec products from factory trained authorized Altec Sound Contractors and Distributors. This will assure you of proper installation, a continuing source of knowledgeable advice, service, and quick warranty protection.