



AP-15 Series

**TECHNICAL SPECIFICATIONS**

<b>Models:</b>	AP-15, AP-15T(C)
<b>Power Rating:</b>	15 Watts continuous
<b>Frequency Response:</b>	400 - 14,000 Hz (Nominal) 500 Hz - 6,000 Hz (± 5dB)
<b>Sensitivity:</b>	120dB at 15 watts (peak) 116dB at 15 Watts /1 Meter (avg) 500-6000 Hz 106dB 1 Watt/1Meter (avg) 500-6000 Hz
<b>Dispersion Angle:</b>	70° (-6dB, 2000 Hz octave band)
<b>Weight:</b>	AP-15 = 3.5 lbs (1.6kgs) AP-15T = 4 lbs. (1.8kgs)
<b>Finish:</b>	Baked epoxy in grey. Model AP-15TC is beige epoxy.
<b>Dimensions:</b>	7 <sup>7</sup> / <sub>16</sub> " W x 8 <sup>3</sup> / <sub>16</sub> " H x 9 <sup>5</sup> / <sub>16</sub> " D

**ARCHITECT AND ENGINEER SPECIFICATIONS**

Loudspeakers shall be avlelec.com Model \_\_\_\_\_ (AP-15, AP-15C, AP-15T, AP-15TC) or approved equal. Each loudspeaker unit shall be supplied with integral compression driver and shall be constructed of structural aluminum and ABS plastic with double re-entrant acoustic path and exponentially-flared square bell. The weather-resistant unit shall have a continuous audio power rating of 15 watts. Frequency response range shall be 400-14,000 Hz (Nominal), 500-6000 Hz (+5dB). Sound pressure level shall be 116dB (15W/1M), 106dB (1W/1M). Sound dispersion shall be 70 degrees (-6dB, 2000 Hz octave band). Mounting bracket shall allow vertical and horizontal adjustment and include provisions for surface mounting, banding or strapping. Loudspeaker shall have impedance selection, via seven-position switch of 5000, 2500, 1300, 666, 333, 89 and 45 ohms. Power taps shall be available at .48, .94, 1.8, 7.5, 15 watts for 25V line, 1, 2, 3.8, 7.5, 15 watts for 70.7V line and 2, 4, 8 and 15 watts for 100V line. Wiring terminals shall be enclosed for security and weather protection. Finish shall be grey or beige (C) baked epoxy as indicated. Dimensions shall be 7<sup>7</sup>/<sub>16</sub>" W x 8<sup>3</sup>/<sub>16</sub>" H x 9<sup>5</sup>/<sub>16</sub>" D.

**FEATURES**

- Superior Intelligibility for Voice and Tone Signaling
- High-Efficiency Driver with Proven Performance Reliability
- Transformer (T) Equipped Version for Versatile 25, 70.7, or 100V Line Applications
- Omni-Purpose® Bracket for Precise Positioning
- Environment Resistant for Outdoor and Indoor Use
- U.S. Trademark Design is World Recognized for Quality and Dependability
- Available in Grey or Beige (C) Finish

**APPLICATIONS**

AP-15 and AP-15T environment-resistant loudspeakers are the world standard for high-intelligibility voice and signal transmission in medium-power indoor and outdoor public address, intercom, security and industrial-signal-system applications. Cost effective, 15-watt units incorporate high-efficiency compression drivers to project sound over long distances or wide areas with fewer loudspeakers. The AP-15 Series is recognized throughout the world as "the performance standard" for commercial sound, intercom and protective-signaling systems. Units are commonly installed in commercial buildings, distribution centers, factories, schools, public access areas, civic centers and recreational facilities.

**GENERAL DESCRIPTION**

The 8-ohm Model AP-15 and the transformer-equipped Model AP-15T are double re-entrant loudspeakers which deliver 15-watts of continuous power handling, superior intelligibility and unparalleled efficiency. The AP-15 Series operates within a nominal frequency response range of 400-14,000 Hz and offers a sensitivity of 120dB at rated power to provide clear voice and signal communication.

Transformer-equipped Model AP-15T includes a versatile, 3-way, 25, 70.7, 100V line transformer to meet a variety of distributed system needs. The transformer is adjustable using Atlas Sound's exclusive Vari-Tap® Connect Center which features a 7-position, watts/impedance selection switch. The labor-saving Vari-Tap® switch is screwdriver adjustable and includes a protective cover with built-in cable strain relief.

The trademarked squared-bell design signifies sound quality and reliability. The Omni-Purpose® mounting bracket (supplied on all models) achieves precise positioning in the vertical and horizontal planes with a single adjustment and includes provisions for loudspeaker installation on conventional surfaces as well as for strap-mounting on I-beams or pillars. AP Series loudspeakers are U.S. made to assure superior service reliability. Weather-resistant construction is metal and matching ABS plastic with metal components finished in grey epoxy (standard) or beige epoxy (Model AP-15TC).

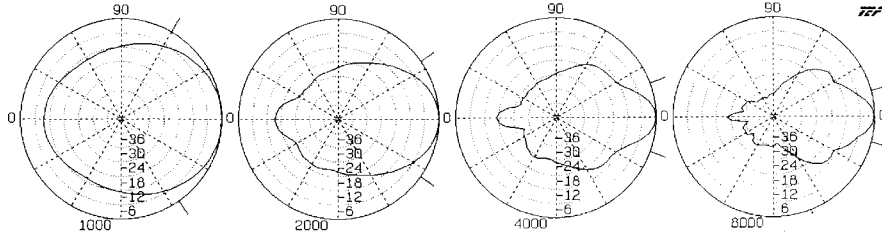
The AP-15 Series also includes a 45-ohm Model AP-15-45 and a 4-ohm AP-15-4 which are designed respectively for intercom and CB/auxiliary radio applications. (See SL2-1567).

**ACCESSORIES**



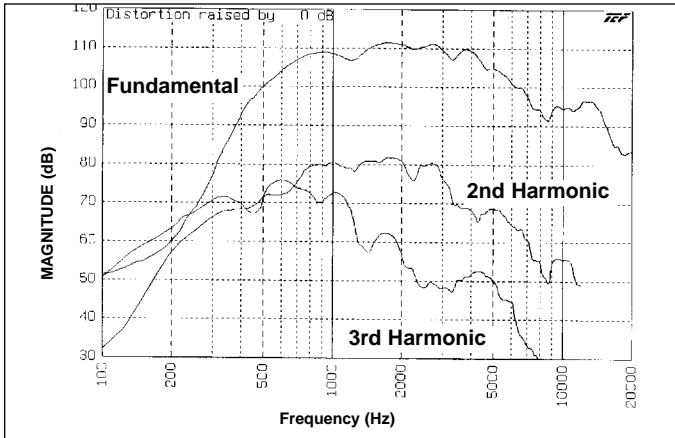
**BX-2A** Vandal Resistant Cover Plate for Armored Cable and Conduit Connection. Constructed of Cast Aluminum.

*Specifications subject to change without notice*

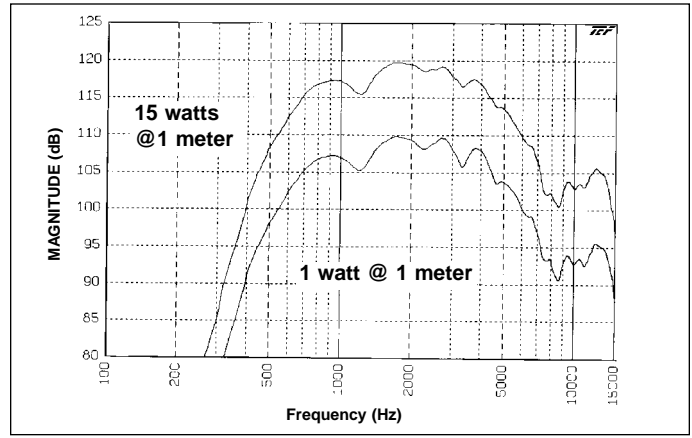


Polars Are Normalized To Zero On Axis

Frequency (Hz)	Q	Di	Beamwidth (Degrees)
1000	5.15	7.12	115
2000	13.90	11.43	70
4000	32.20	15.08	40
8000	39.90	16.01	30



AP-15(T) (Harmonic Distortion - 1.5 watts @ 1 meter)



AP-15(T) Frequency Response

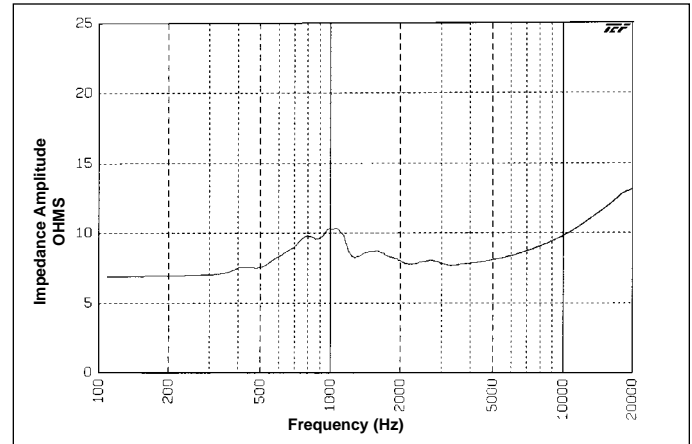
**DRIVER PROTECTION:** The horn loudspeaker should not be operated at frequencies outside the specified range, especially below horn cut-off. It is suggested that any program material be high-passed at 300 Hz with a 6dB per octave filter. This can be done by a low level filter at the amplifier input or by a series capacitor at each loudspeaker. Electrolytic capacitors can be used but they must be non-polarized.

(See Typical Capacitor Values Chart.)

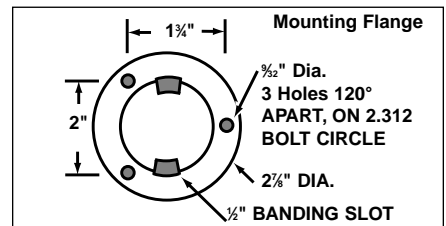
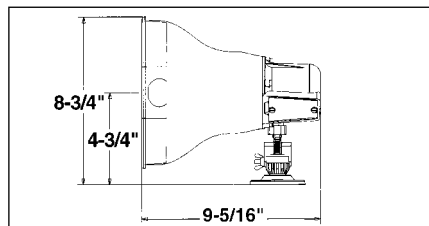
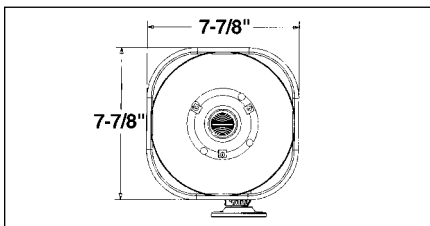
TYPICAL CAPACITOR VALUES			
8 Ohm Driver	25 Volt Line	70 Volt Line	100 Volt Line
70 mfd	15 mfd	2 mfd	1 mfd

APR-15T Vari-Tap® Control Connect Center Xfmr. Power Taps				
Switch Position	Impedance (Ohms)	Watts @ 25V	Watts @ 70.7V	Watts @ 100V
1	5,000	—	1	2
2	2,500	—	2	47
3	1,300	.48	3.8	7.7
4	666	.94	7.5	15
5	333	1.8	15	X*
6	89	7.5	X*	X*
7	45	15	X*	X*

\*Do not use



AP-15 (Impedance Sweep)



avlelec.com products are designed and tested in our well-equipped research laboratory which contains a fully anechoic chamber, complete analog Bruel & Kjaer measurement equipment and Techron® TEF 20® audio analyzer. Atlas Sound is proud to be a beta site for TEF software.

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