



AP-30/AP-30T(C)/AP-30T-25

Omni-Purpose® 30 Watt Horn Loudspeakers



AP-30 Series

Specifications

Models	AP-30, AP-30T(C), AP-30T-25
Power Rating	30 Watts Continuous
Frequency Response	300 - 12,000 Hz (Nominal) 500 Hz - 4500 Hz (±5dB)
Sensitivity	126dB at 30 Watts (Peak) 121dB at 30 Watts/1 Meter (Avg) 500 - 4500 Hz 108dB at 1 Watt/1 Meter (Avg) 500 - 4500 Hz
Dispersion Angle	60° (-6dB, 2000 Hz Octave Band)
Weight	AP-30: 4.5 lbs (2.0kgs) AP-30T: 5 lbs (2.3kgs) AP-30T-25: 5 lbs (2.3kgs)
Finish	Baked Epoxy
Dimensions	H 11" x W 10" x D 10½"
Temperature Range	-40°C - 70°C

Architect and Engineer Specifications

Loudspeakers shall be Atlas Sound Model _____ (AP-30 or, AP-30T(C), or AP-30T-25) or approved equal. Each loudspeaker shall be equipped with an integral compression driver within waterproof housing. The loudspeaker unit shall be constructed of structural aluminum with double re-entrant acoustic path and exponentially-flared outer bell. Power handling capability shall be 30 Watts continuous. Frequency response range shall be 300-12,000 Hz (nominal), 500-4500 Hz (+5dB). Sound pressure level shall be 121dB (30W/1M), 108dB (1W/1M). Sound dispersion angle shall be 60°. Model AP-30 shall have voice coil impedance of 8 Ohms. Models AP-30T and AP-30T(C) shall have impedance selection of 2500, 1300, 666, 333, 167, 89, 45 Ohms for 25, 70.7, or 100V line. Power taps shall be available at .9, 1.8, 3.7, 7.5 and 15 watts for 25V line; 2, 3.8, 7.5, 15 and 30 watts for 70V line; 4, 7.7, 15 and 30 Watts for 100V line. Model AP-30T-25 shall have selection of 500, 250, 125, 83, 42, 21 Ohms for 25V line. Power taps shall be available at 1.2, 2.5, 5, 7.5, 15, 30 Watts. Loudspeaker shall be furnished with mounting bracket allowing adjustment on the vertical and horizontal planes and shall include provisions for surface or strap mounting. Wiring terminals shall be enclosed. Units shall be weatherproof and constructed of metal and ABS plastic. Finish shall be grey or beige (C) baked epoxy as indicated. Dimensions shall be H 11" x W 10" x D 10½".

Features

- Superior Intelligibility for Voice and Tone Signaling
- Wide Frequency Response for Optimum Sound Quality
- Environment Resistant for Outdoor and Indoor Use
- Omni-Purpose® Bracket for Precise Positioning
- Choice of 8 Ohm or Transformer (T) Equipped Models for Versatile 25, 70.7, or 100V Line Applications
- U.S. Trademark Design is World Recognized for Quality and Dependability
- Available in Grey or Beige (C) Finish

Applications

All-purpose, environment resistant 30-Watt AP-30 Series loudspeakers provide cost effective high-intelligibility voice and signal transmission for high power indoor and outdoor public address, intercom, security, alarm, or industrial signal systems. Units incorporate high-efficiency compression drivers to project through high ambient sound levels, over long distances and in wide open areas with fewer loudspeakers. The AP-30 Series is renowned in the industry as the "professional standard" for applications such as commercial buildings, distribution centers, industrial warehouses, institutions, civic centers, and recreational facilities.

Description

The 8 Ohm Model AP-30 and transformer-equipped Models AP-30T and AP-30T-25 are double re-entrant loudspeakers which deliver 30 Watts of continuous power handling, superior intelligibility and unparalleled audio conversion-efficiency. The AP-30 Series operates within a nominal frequency range of 300-12,000 Hz and offers a sensitivity of 126dB at rated power to provide clear voice and signal communication.

Models AP-30T and AP-30T-25 each feature an integral transformer to meet a variety of distributed system needs. The AP-30T is equipped with a versatile, 3-way, 25, 70.7, 100V line transformer, while Model AP-30T-25 includes a 25V only line transformer. Transformers are adjustable using Atlas Sound's exclusive Vari-Tap® Connect Center which features a 7-position, watts/impedance selection switch. The labor saving Vari-Tap® terminal is screwdriver adjustable and includes a protective cover with built-in strain relief.

The trademarked square bell design signifies Atlas Sound quality and reliability. The Omni-Purpose® mounting bracket (included on all models) allows precise positioning in the vertical and horizontal planes with a single adjustment and provides for installation of the loudspeaker on conventional surfaces or by strap-mounting to 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 if suffixed with (C) where noted.

Accessories

BX-1A



Vandal resistant cover plate for armored cable and conduit connection. Constructed of cast aluminum.

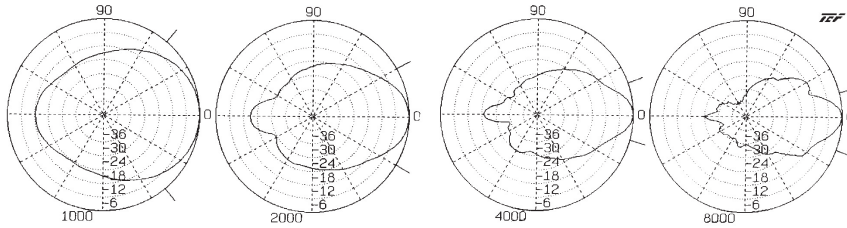
APXB-G/APXB-N



Optional mounting base for a standard 1-gang, 2-gang, or 4" sq. E.O. box. (G-Grey or N-Neutral)

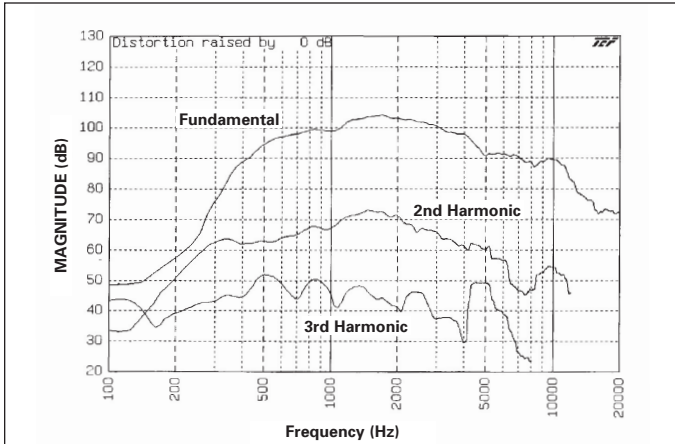
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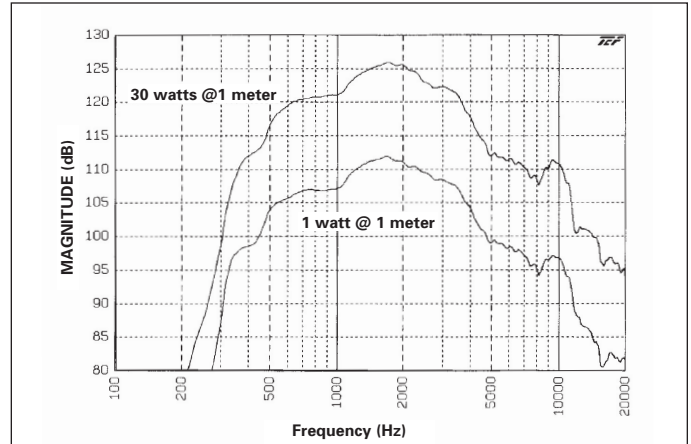


Polars Are Normalized To Zero On Axis

Frequency (Hz)	Q	Di	Beamwidth (Degrees)
500	3.09	4.89	160
1000	7.33	8.65	100
2000	17.84	12.51	60
4000	35.02	15.44	35
8000	48.15	16.83	35



AP-30(T) (Harmonic Distortion - 1.5 watts @ 1 meter)



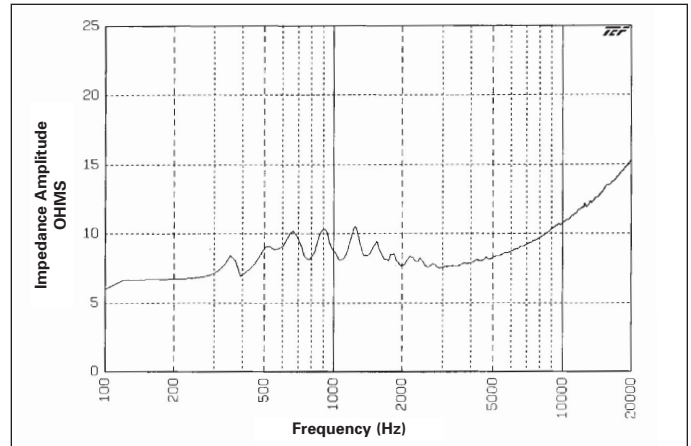
AP-30(T) Frequency Response

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).

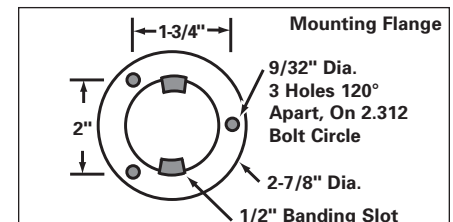
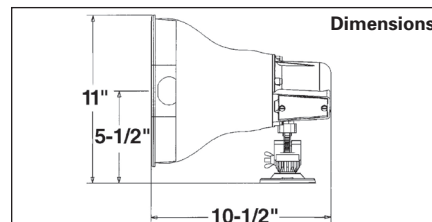
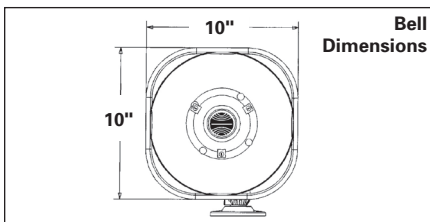
Typical Capacitor Values			
8 Ohm Driver	25 Volt Line	70 Volt Line	100 Volt Line
70 mfd	30 mfd	4 mfd	2 mfd

Switch Position	AP-15T Vari-Tap® Control Connect Center Xfmr. Power Taps			AP-30T-25 Xfmr. Power Taps		
	Impedance (Ohms)	Watts @ 25V	Watts @ 70.7V	Watts @ 100V	Impedance (Ohms)	Watts @ 25V
1	2500	-	2	4	500	1.2
2	1300	-	3.8	7.7	250	2.5
3	666	.09	7.5	15	125	5
4	333	1.8	15	30	83	7.5
5	167	3.7	30	X*	42	15
6	89	7.5	X*	X*	21	30
7	45	15	X*	X*	-	-

* Do Not Use



AP-30 (Impedance Sweep)



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