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HUMCO_{Electrical}

Atlas Speakers

AP-15/AP-15T(C)

Omni-Purpose® 15 Watt Horn Loudspeakers



AP-15 Series

Specifications

Models AP-15, AP-15T(C) **Power Rating** 15 Watts Continuous Frequency Response 400 - 14,000 Hz (Nominal) 500 Hz - 6000 Hz (±5dB)

Sensitivity 120dB at 15 Watts (Peak)

116dB at 15 Watts/1 Meter (Avg) 500 - 6000 Hz

106dB at 1 Watt/1 Meter (Avg) 500 - 6000 Hz

Dispersion Angle 70° (-6dB, 2000 Hz Octave Band) AP-15 Weight 3.5 lbs (1.6kgs)

AP-15T: 4 lbs (1.8kgs)

Finish Baked Epoxy

Dimensions H 8¾" x W 7½" x D 95/16"

-40°C - 70°C **Temperature Range**

Architect and Engineer Specifications

Loudspeakers shall be Atlas Sound 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, and 15 watts for 25V line, 1, 2, 3.8, 7.5, and 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 H 8¾" x W 71/8" x D 95/16".

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 mediumpower 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.

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 Atlas 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).

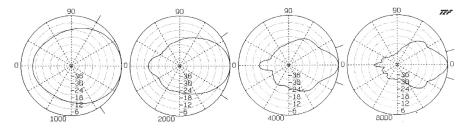
The AP-15 Series also includes a 45-ohm Model AP-15-45 and a 4 ohm Model AP-15-4 which are designed respectively for intercom and CB/auxiliary radio applications. (See SL2-1567).

Accessories

BX-2A

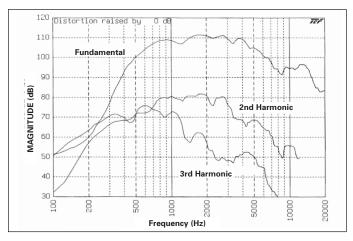


Vandal resistant cover plate for armored cable and conduit connection. Constructed of cast aluminum.



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

Polars Are Normalized To Zero On Axis

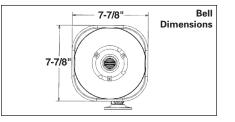


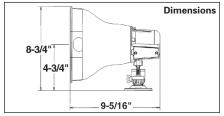
AP-15(T) (Harmonic Distortion - 1.5 watts @ 1 meter)

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).

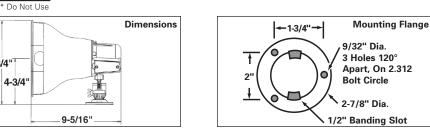
Typical Capacitor Values				
8 Ohm Driver	25 Volt Line	70 Volt Line	100 Volt Line	
70 mfd	15 mfd	2 mfd	1 mfd	

AP-15T Vari-Tap® Control Connect Center Xfmr. Power Taps				
Switch Position	Impedance (Ohms)	Watts @ 25V	Watts @ 70.7V	Watts @ 100V
1	5000	-	1	2
2	2500	-	2	4
3	1300	.48	3.8	8
4	666	.94	7.5	15
5	333	1.8	15	X*
6	89	7.5	X*	X*
7	45	15	X*	X*



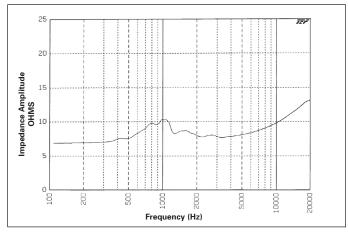


Atlas Sound products are designed and tested in our well-equipped research laboratory which contains a fully anechoic chamber, complete



120 115 15 watts @1 meter 110 MAGNITUDE 1 watt @ 1 mete 100 95 Frequency (Hz)

AP-15(T) Frequency Response



AP-15 (Impedance Sweep)

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



Omni-Purpose® 30 Watt Horn Loudspeakers



Specifications

AP-30, AP-30T(C), AP-30T-25 Models

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 101/2"

-40°C - 70°C **Temperature Range**

Architect and Engineer Specifications

Loudspeakers shall be Atlas Sound Model _ 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 101/2".

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



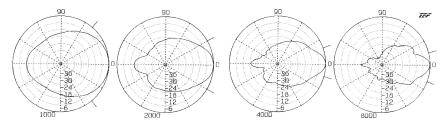
Vandal resistant cover plate for armored cable and conduit connection. Constructed of cast aluminum.

APXB-G/APXB-N



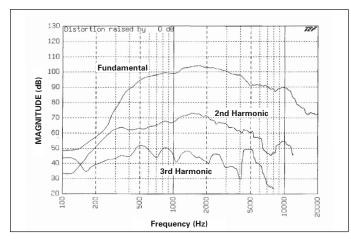
Optional mounting base for a standard 1-gang, 2-gang, or 4" sq. E.O. box. (G-Grey or N-Neutral)





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

Polars Are Normalized To Zero On Axis



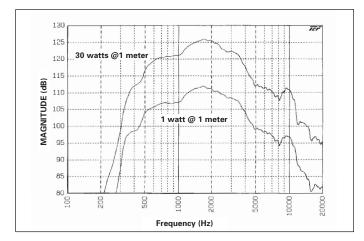
AP-30(T) (Harmonic Distortion - 1.5 watts @ 1 meter)

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).

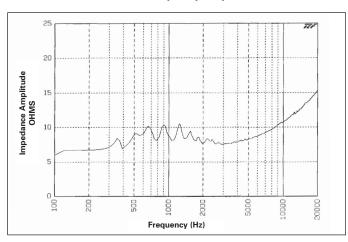
Typical Capacitor Values				
8 Ohm Driver	25 Volt Line	70 Volt Line	100 Volt Line	
70 mfd	30 mfd	4 mfd	2 mfd	

	AP-15T Vari-Tap [®] Control Connect Center Xfmr. Power Taps			AP-30T-25 Xfmr. Power Taps		
Switch Position	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*	_	-

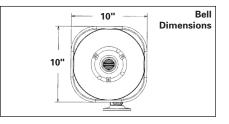
* Do Not Use

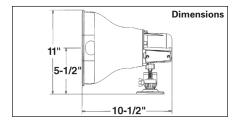


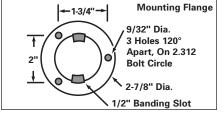
AP-30(T) Frequency Response



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 Techron® TEF 20® audio analyzer. Atlas Sound is proud to be a beta site for TEF software.

