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**AMK Commercial Series** 

### DT61-A / DT61-A-X

Network powered speakers
Dante<sup>™</sup> Enabled Network Audio
6" Coaxial Loudspeaker Assembly
2 x 2 lay-in Tile grill
(Preliminary)



#### Features:

- Network enabled Loudspeaker by Dante<sup>™</sup>
- PoE+ powered without a need for local power.
- RJ45 connection for audio from PoE+ Ethernet.
- 6" polypropylene cone with inverted rubber surround.
- 1" Polyamide dome tweeter
- Weather and water resistant.
- Single Channel Audio
- Plenum Rated

The AMK DT61-A (**DT61-A-X** for AES67, DDM Ready), is a Dante<sup>™</sup> audio network addressable and self-amplified ceiling speaker system. It is a 2x2 lay in grille speaker system for easy ceiling tile installation. No external power supply is required. The speaker system has a Class D amplifier which provides efficient use of power. The assembly comes with AMK's CX 602, highly efficient coaxial loudspeaker. This system will solve the issue of having to provide a separate amplifier or I/O interface for speaker installations.

The speaker is powered by PoE+ network switch. The CX602 loudspeaker driver has excellent dispersion, wide bandwidth and a smooth frequency response which makes this the top choice for all applications. This assembly can be used in wide range of projects for paging and background music applications. The DT61-A is ideal for hotels, education, hospitals, retail stores, performing art centers, restaurants, airports, houses of worship, and board rooms. The end users will appreciate both the sound and visual quality of these speakers.

For details on Dante Networking, please visit: <a href="https://www.audinate.com/resources/networks-switches">https://www.audinate.com/resources/networks-switches</a>

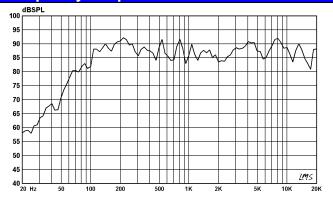
System Specification			
Frequency Response	100 Hz - 20 kHz (+/- 3dB)		
Maximum SPL at 1M	102 dB		
Voice-coil diameter	1."		
Magnet	Barium Ferrite (for high efficiency of the speaker driver)		
Nominal Coverage Angle (500Hz – 4kHz Average)	140° Conical Average		
Audio Input	Dante Audio via Ethernet		
Output Power	10W / Channel (5W per speaker)		
Signal to Noise Ratio	>99dB		
Power consumption	2 Watts Standby, 25 Watts Maximum		
Input connector on active speaker	RJ-45		
Maximum wire length to companion speakers	100ft at 18AWG		
PoE+	IEEE 802.3at-2009		
Controls	Dante™ controller software		
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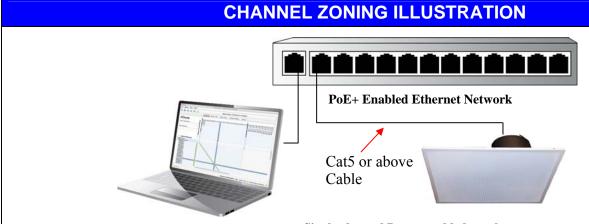
Dante™ controller software	
13mm polyamide hard dome	
Polypropylene	
Inverted rubber Surround	
5.0 kHz	
8.25"	
24.0" x 24.0"	
16.0 lbs	
42.0 lbs	

## AMK Dante Ceiling Speaker Advantage

- No need to have separate dante enabled amp or I/O interface
- \* A Single RJ45 connection to main active speaker with two conductor wire connection to each of the passive speakers.
- \* Highly efficient speaker driver due to barium ferrite magnet.
- \* Cost effective simple one system solution.
- \* 2' x 2' ceiling tile lay in system for fast and easy installation and visually attractive alternative







Single channel Dante enabled speaker system

# **SPEAKER CONFIGURATION \***



#### **Architect's & Engineer's Specifications**

The powered loudspeaker system shall be **AMK DT61-A** (**DT61-A-X** for AES67, DDM Ready). The speaker shall feature Audinate / Dante<sup>™</sup> network audio signal that broadcasts 1 channel of audio. The speaker system shall be a single speaker with one channel broadcasting.

The Network switch must have PoE+ to provide the power that is needed for the system.

The active unit of the system shall have one RJ-45 jack for network audio connection.

The speaker unit in the system shall be of the coaxial type with an 6.5" woofer of polypropylene, an inverted rubber surround, and a 1" polyamide soft dome tweeter mounted on a post. The transducer in the loudspeaker system shall be AMK CX 602 coaxial loudspeaker. The woofer shall have a 13 oz. (369g) Barium Ferrite magnet. The two transducer sections shall be coupled through a built-in capacitor bypass crossover.

The crossover frequency shall be at 5.0 kHz. The low frequency transducer shall have 1" (25.4mm) voice coil and the high frequency transducer shall have 0.51" (13mm) voice coil. The system shall have a frequency response of 65 Hz- 20 kHz (+/-10dB).

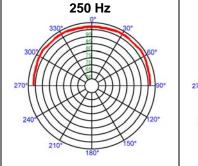
The system shall be on 2' x 2' metal perforated grille and 7" deep powered speaker enclosure attached on the back of the grille. The depth of whole speaker assembly 8.5" including the junction box attached.

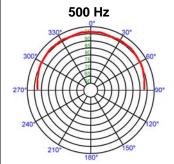
The total weight of the each of the speaker enclosure, tile bridge, and grille shall not exceed 16.0 lbs.

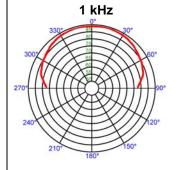
The loudspeaker system shall be AMK Innovations model **DT61-A** (**DT61-A-X** for AES67, DDM Ready).

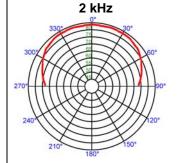
Conforms to EIA Standards: RS-276-A, RS-278-B, RS-426-A.

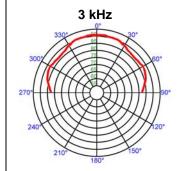
# Polar Responses (Measurement done in house)



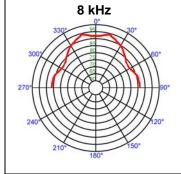


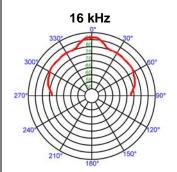












Freq	Deg	Q	DldB
250 Hz	100°	3.8	5.8
500 Hz	96°	4.8	6.8
1 kHz	79°	6.8	8.3
2 kHz	72°	6.7	8.2
3 kHz	66°	9.2	9.6
4 kHz	86°	8.4	9.2
8 kHz	40°	7.1	8.5
16 kHz	16º	15.3	11.8