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AMK Commercial Series

DS64-C / DS64-C-X

Network powered speakers
Dante™ Enabled Network Audio
6" Coaxial Loudspeaker Assembly
(Preliminary)



- Network enabled Loudspeaker by Dante[™]
- 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.
- 4 Channel Audio
- UL 2043 Listed Enclosure

The **AMK DS64-C** (**DS64-C-X** for AES67, DDM Ready) is a Dante[™] audio network addressable and self-amplified ceiling speaker system. The speaker is powered by PoE+ network switch meaning no external power supply is required. The speaker includes a Class D amplifier which provides effective use of power. This system will solve the issue of having to provide a separate amplifier or I/O interface for speaker installations.

The system comes with 6.5" coaxial 25W loudspeaker driver, CX602, that has excellent dispersion, wide bandwidth and a smooth frequency response which makes this the top choice for today's overhead commercial applications.

One PoE+ amplified speaker can power a total of (4) speakers, including (3) additional passive speakers, with one speaker per audio zone.

This assembly can be used in wide range of projects for paging and background music applications. The DS64-C is ideal for hotels, education, hospitals, retail stores, performing art centers, restaurants, airports, houses of worship, and board rooms.

For details on Dante Networking, please visit:

https://www.audinate.com/resources/networks-switches

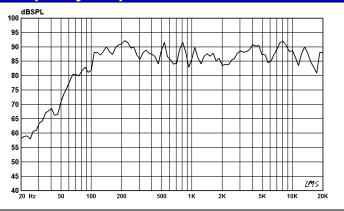
| System Specification | | | |
|--|--|--|--|
| Frequency Response | 100 Hz - 20 kHz (+/- 3dB) | | |
| Maximum SPL at 1M | 102 dB | | |
| Voice-coil diameter | 1." | | |
| Magnet | Barium Ferrite (for high efficiency of the speaker driver) | | |
| Nominal Coverage Angle (500Hz – 4kHz Average) | 140° Conical 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 | 300ft (100m) at 16-18AWG | | |
| PoE+ | IEEE 802.3at-2009 | | |
| Controls | Dante™ controller software | | |
| UL Listed Enclosure | UL 2043 | | |

AMK Dante Ceiling Speaker Advantage

- * 4 channels broadcasting system for four separate zones.
- * 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.

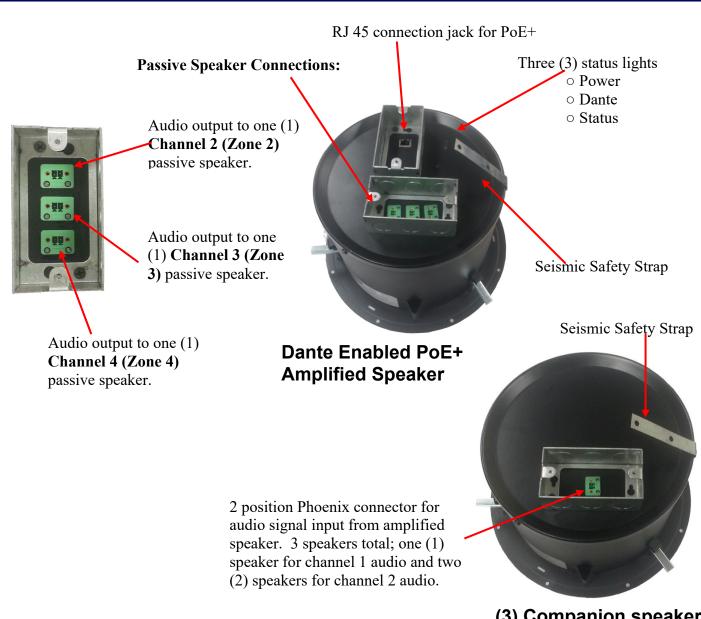
| Physical Speaker Data | | | | |
|--|--------------------------|--|--|--|
| Tweeter | 13mm polyamide hard dome | | | |
| Woofer Cone | Polypropylene | | | |
| Surround Material | Inverted rubber Surround | | | |
| Crossover Frequency | 5.0 kHz | | | |
| Depth | 8.25" | | | |
| Diameter of the Enclosure | 9.25" | | | |
| Diameter of the Grille | 12.75" | | | |
| Enclosure Mounting | Metal Swivel Clamp | | | |
| Net Weight of single speaker (Grille, Back Enclosure, and Loudspeaker) | 9.0 lbs | | | |
| Shipping Weight (2 boxes of 4 speakers) | 52.0 lbs | | | |

Frequency Response

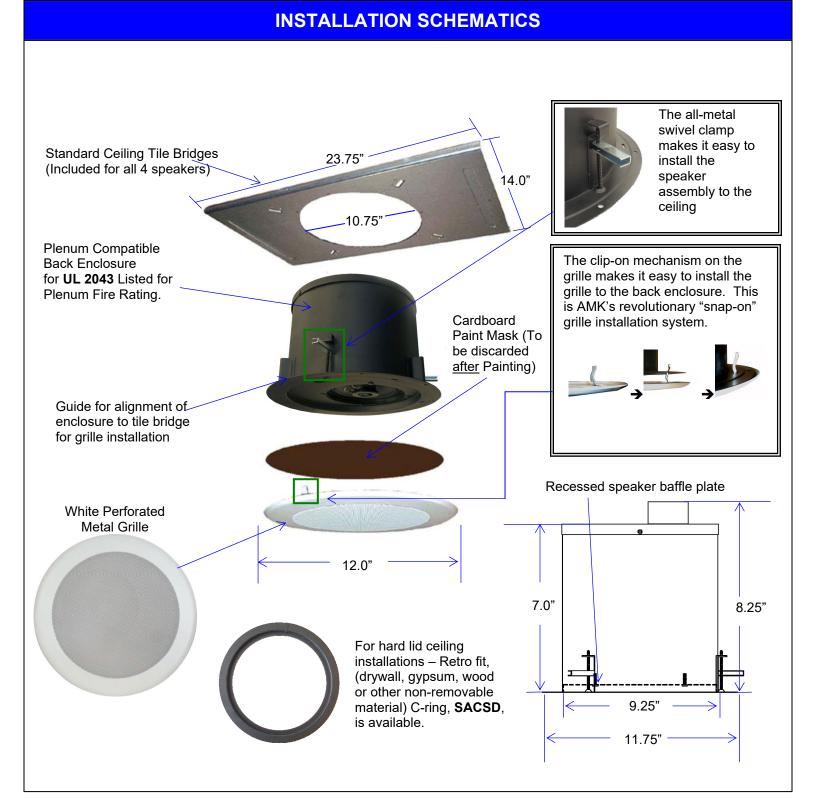


CHANNEL ZONING ILLUSTRATION DSP PoE+ (802.3at) ETHERNET SWITCH Two conductor speaker wire (16~18AWG) max 300ft (100m) DANTE CONTROLLER Channel 1 Channel 2 Channel 3 Channel 4 (Zone 1) (Zone 2) (Zone 3) (Zone 4)

SPEAKER CONFIGURATION *



(3) Companion speakers



| Model | Mounting | Dante | AES 67 |
|------------|-------------|-------|--------|
| DS64-C | Tile Bridge | YES | NO |
| DS64-C-X | Tile Bridge | YES | YES |
| DS64-C-S | SACSD Ring | YES | NO |
| DS64-C-X-S | SACSD Ring | YES | YES |

Architect's & Engineer's Specifications

The powered loudspeaker system shall be **AMK DS64-C** (**DS64-C-X** for AES67, DDM Ready). The speaker shall feature Audinate / Dante[™] network audio signal that broadcasts 4 channels of audio. The speaker system shall consist of a set of 4 speakers with 2 speakers for each channel of audio broadcast.

The Ethernet network 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. Then there shall be (3)three of the two position phoenix type (euro) connections. Each of the connections shall go the passive speakers at different zones.

The speaker unit in the system shall be of the coaxial type with a 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 depth of all 4 enclosures shall be 8.25 inches. The rim diameter shall be 11.75". The enclosure diameter shall be 9.25". The depth of the enclosures shall not exceed 8.25 inches. The system shall include 4 tile bridges. The system shall have a metal strap for attachment to a structure for seismic protection.

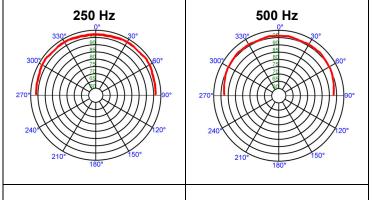
The total weight of the each of the speaker enclosure, tile bridge, and grille shall not exceed 9.0 lbs.

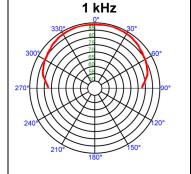
The loudspeaker system shall be AMK Innovations model **DS64-C(DS64-C-X** for AES67, DDM Ready).

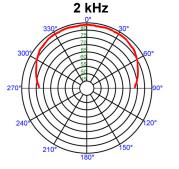
Conforms to EIA Standards: RS-276-A, RS-278-B, RS-426-A.

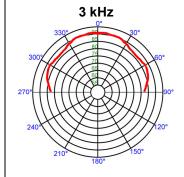
Polar Responses

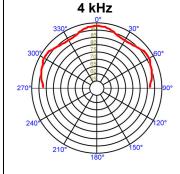
(Measurement done in house)

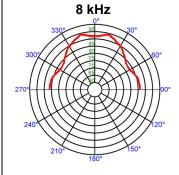


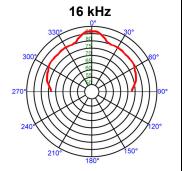












| Freq | Deg | Q | DldB |
|--------|------|------|------|
| 250 Hz | 100° | 3.8 | 5.8 |
| 500 Hz | 96° | 4.8 | 6.8 |
| 1 kHz | 79° | 6.8 | 8.3 |
| 2 kHz | 72° | 6.7 | 8.2 |
| 3 kHz | 66° | 9.2 | 9.6 |
| 4 kHz | 86° | 8.4 | 9.2 |
| 8 kHz | 40° | 7.1 | 8.5 |
| 16 kHz | 16° | 15.3 | 11.8 |