



New Energy with  **Dante™**



Professional Audio Over IP Solutions



New Energy with ...



MONACOR-DT – shaping up for the future ...

The new DT series from MONACOR now conveniently allows you to implement Audio over IP solutions with Dante™ interfaces at a very attractive price and includes the new speaker WALL-05DT which is suitable for fixed installations in shops, hotels, in pubs and restaurants, in schools or indoor sports facilities. With a classic design and state-of-the-art components, this speaker system provides an excellent sound for any application. Installation and setup ensure maximum efficiency. The Dante™ standard and an additional range of DT products allow almost unlimited options for application.

Audinate's Dante™ is a trendsetting network technology for digital audio transmission which allows to simultaneously transmit several digital audio signals. It is possible to transmit uncompressed and synchronised audio signals with virtually no latency. Thus, Dante™ technology is perfectly suited for live events, recording, broadcasting and installations.

The benefits of using a standard IT network for audio transmissions are obvious. Cabling used in the projects can often be more cost-effective. The technology also allows for a high level of flexibility

when planning and implementing a project. Instead of using heavy and expensive analogue cables or multicore cables, it is possible to apply cost-effective Ethernet cables.

Dante™ can be used in parallel to an existing network which makes it a particularly attractive option. With digital transmissions, there is no interference from other electrical devices and greater cable distances are possible without degrading the quality of the signal. With the free software 'Dante™ Controller', it is possible to determine from which specified Dante™-enabled device to which other specified Dante™-enabled receiver the audio signal is to be routed through the network. Due to logical connections instead of physical ones, it is possible to change the connections with a single click of the mouse button. Several different devices within the same network are able to receive one channel as an audio signal carrier.

The wall speaker WALL-05DT perfectly meets every requirement. It is not just a DSP module but also features an integrated 2-channel Dante™ module. This Dante™ speaker is particularly suitable for commercial applications in the professional sector. It can be used for applications where several audio channels have to be transmitted over great distances and to different areas or locations. The fields of application include schools, office buildings, fitness centres, shops and restaurants.

Digital transmission provides several advantages over analogue transmission. Even in case of greater distances, the signal features a comparably low susceptibility to interference and analogue audio transmissions also require a higher cable quality. In comparison with other Audio over Ethernet applications, e.g. CobraNet or EtherSound, Dante™ can support gigabit applications with several channels, features a lower latency and automatic configuration.

The power for WALL-05DT is supplied via PoE (Power over Ethernet) or via a 12 V power supply which is available at option. Furthermore, the integrated DSP module can be controlled via app which provides the most important functions like master volume control and controls for treble, midrange and bass.



Rear panel

WALL-05DT

Order No. 13.2390



Active speaker with integrated Dante™ module

- DSP-controlled 20 W amplifier
- 2-way system
- 13 cm (5¼") bass speaker and 13 mm (½") tweeter
- Function control via app
- Pivoting and tilting mounting bracket
- Power supply via PoE (Power over Ethernet) or 12 V power supply, available at option

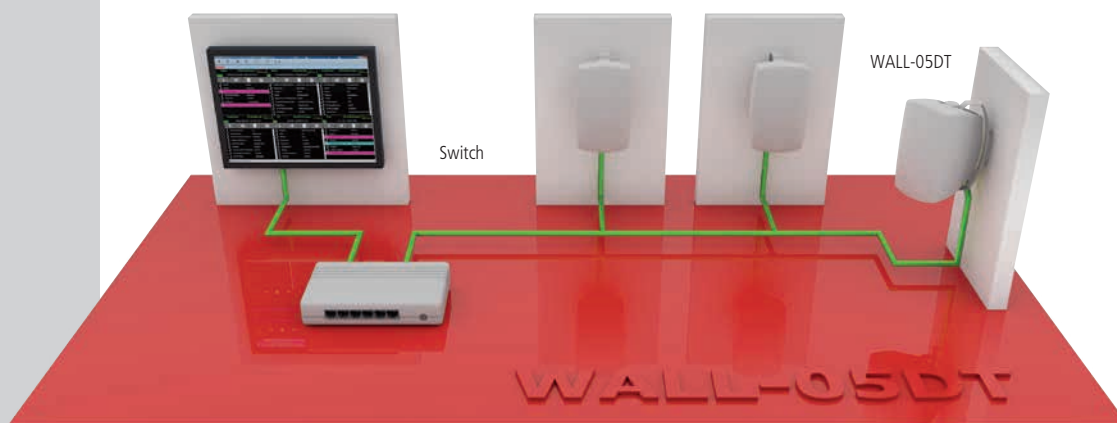
Model	WALL-05DT
Amplifier power	20 W
Frequency range	62-20,000 Hz
Number of speakers	2
Sensitivity	89 dB/W/m
Max. rated SPL	102 dB
Mounting facility	mounting bracket, pivoting and tilting
Admiss. ambient temp.	0-40 °C
Power supply	PoE or 12 V power supply (not supplied)
Dimensions	163 x 252 x 165 mm
Weight	1.95 kg
Inputs	1 x RJ45 (Dante™ in)
Outputs	1 x RJ45 (feed-through output)
Other features	integrated Dante™ module, DSP



The control is in your hands ...

Any device with an integrated DSP module and which is connected to the same WLAN network as the iPhone or iPad, can conveniently be controlled with the MONACOR-DT app for iOS. With various presets via drop-down menu, master volume control or settings for treble, midrange and bass, the app is particularly suitable for private applications.

Wall-mounted PC with Dante™ DVS and controller software as well as music streaming software



Perfectly emphasised areas ...

Regardless of their size, modern pubs and restaurants require individual solutions for different areas of the location. With the DT series from MONACOR, you will easily be able to handle these challenges.

The scenario: a bar with four zones. The chill-out area is to be provided with unobtrusive background music which should not disrupt ongoing conversations. The bar area, too, requires a volume level which allows you to hold a conversation or order drinks at the bar. For this purpose, we have applied the speaker systems WALL-05DT. In order to ensure a good atmosphere throughout,

background music ought to be provided to the sanitary facilities, too. To carry out this task, we have used ceiling speakers EDL-10TW/WS which are integrated into the system via PA amplifier AKB-160DT with integrated Dante™ module.

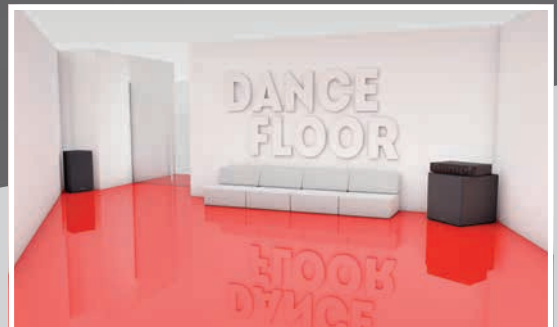
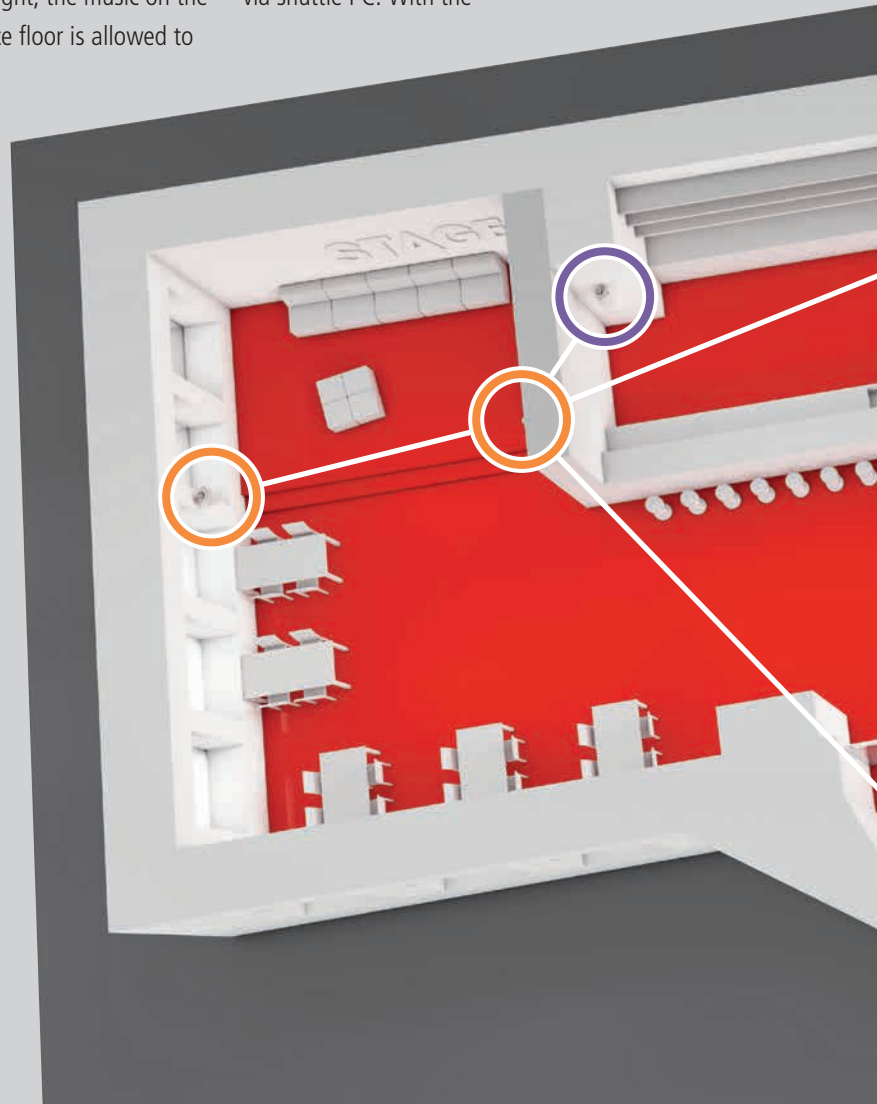
At night, the music on the dance floor is allowed to

be at a higher volume level. To achieve this, we have used speaker systems EUL-2/SW which are integrated into the system via AKB-160DT and subwoofer EUL-2SUB/SW which is driven by PA-900DT.

The system is controlled from the bar area/DJ area via shuttle PC. With the

easy-to-use software, the team is able to provide each area with an individual PA application which can feature a separate play list as well as different volume levels.

- ZONE 1: Bar
Shuttle-PC
WALL-05DT
- ZONE 2: Stage Area
WALL-05DT
- ZONE 3: Dance floor
EUL-2/SW
EUL-2SUB/SW
PA-900DT
- ZONE 4: Toiletten
AKB-160DT
EDL-10TW/WS



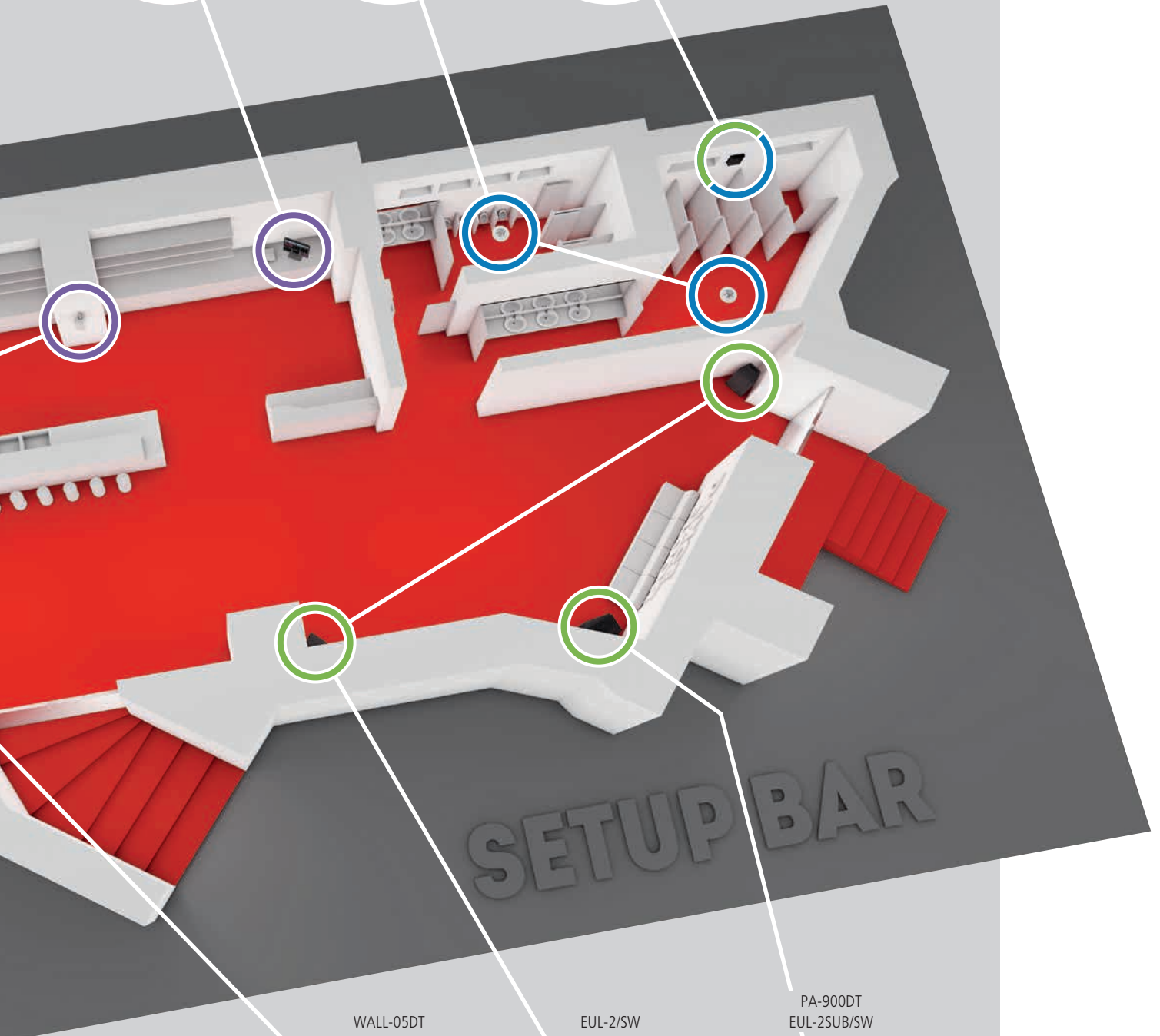
Shuttle-PC



EDL-10TW/WS



AKB-160DT



WALL-05DT



EUL-2/SW



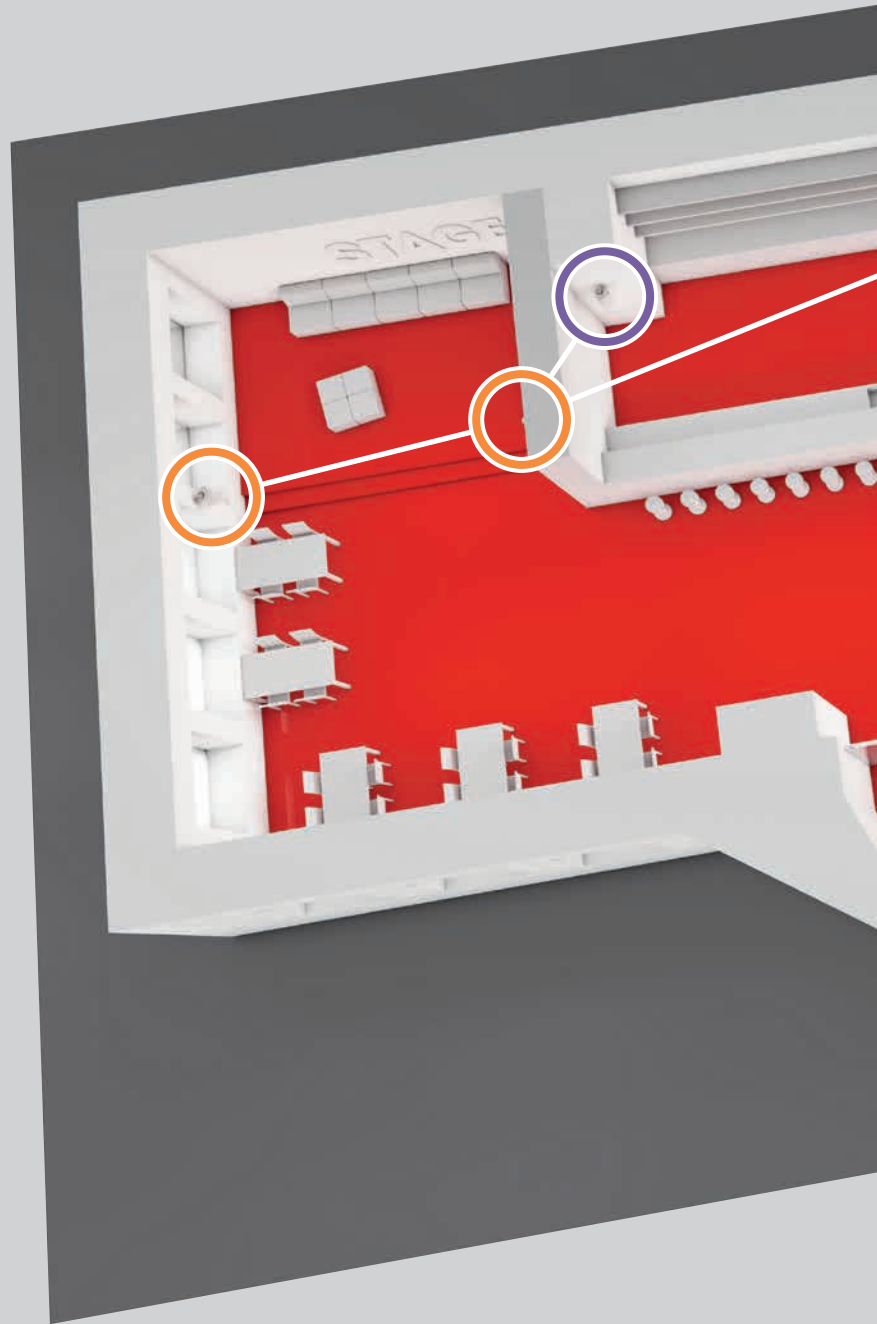
PA-900DT
EUL-2SUB/SW



Plug-and-play with WALL-05DT

The WALL-05DT is, of course, able to provide a very reliable PA application for each area of the bar. All that's left to do is to determine the size of the dance floor and whether to use the existing passive speakers.

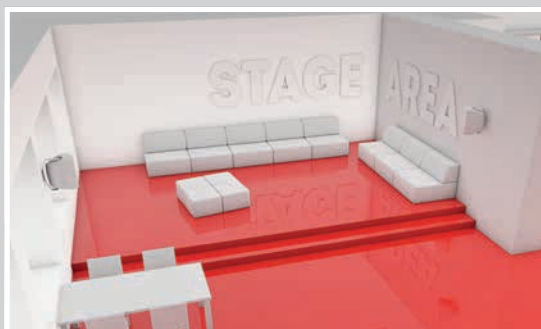
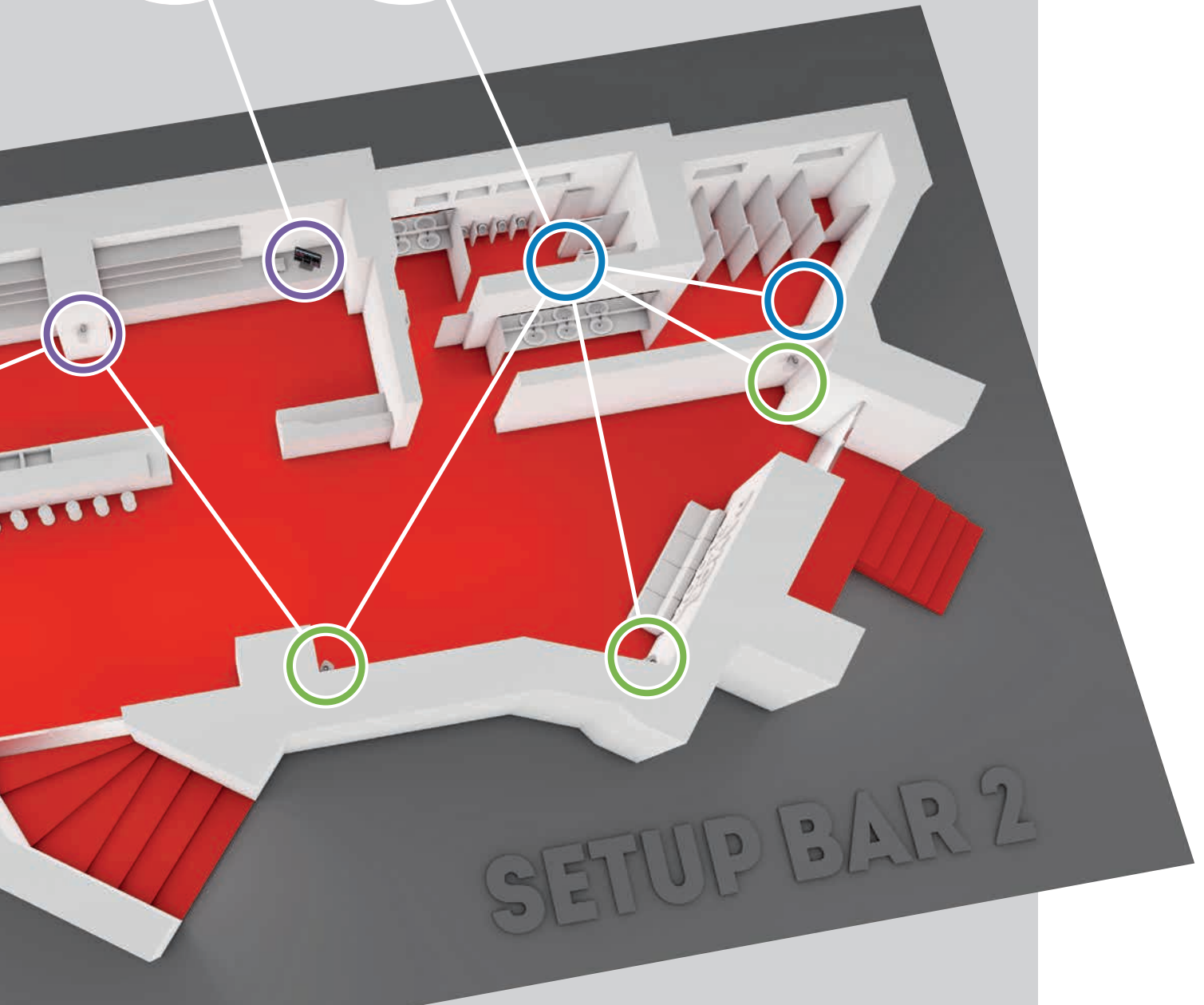
Thanks to the power supply via Power over Ethernet, you can surely call this a plug-and-play solution.



- ZONE 1: Bar Shuttle-PC WALL-05DT
- ZONE 2: Stage Area WALL-05DT
- ZONE 3: Dance floor WALL-05DT
- ZONE 4: Toiletten WALL-05DT

Shuttle-PC

WALL-05DT

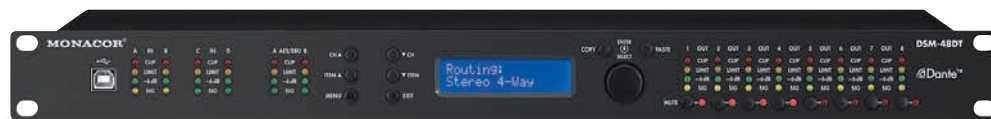


Breakout Box

Convenient audio management within a network ...

Due to the Dante™ interface, it is possible to conveniently integrate the speaker management system DSM-48DT as a 2-channel receiver into a Dante™ audio network. Both of the Dante™ signals are available for the input channels IN3 and IN4, alternatively to the analogue inputs and the digital input. Thus, the DSM-48DT allows you to receive one stereo audio signal or two mono audio signals from other Dante™-enabled devices which are located in the

same subnetwork and to process this/these in the same way as an analogue signal or AES/EBU signal. Speaker management systems featuring analogue inputs as well as outputs and additionally provide a Dante™ interface are called Breakout Boxes. In order to use the DSM-48DT as a receiver unit, it has to be connected to at least one Fast Ethernet switch (100 Mbps Ethernet).



DSM-48DT 482 mm 19" USB LAN App Dante™ NEW

Order No. 25.7790

Digital speaker management system, with Dante™ module.

- 4 analogue inputs and 8 analogue outputs (XLR, balanced)
- AES/EBU digital input, stereo
- 2 Dante™ channels
- 64-bit DSP, sampling rate: 96 kHz
- Dynamic range: > 118 dB
- Latency: 0.64 ms
- Routing via fader for user-defined routing of the inputs to the outputs
- Audio transmission over Ethernet via Dante™ protocol
- Graphical user interface, PC editing software (devices will be identified automatically)
- 80 user presets can be stored
- Remote control via USB or TCP/IP LAN
- Dot matrix display with 2 x 16 characters
- VU meter with 4 LEDs for each channel, level display and peak
- 482 mm (19") rack installation, 1 RS

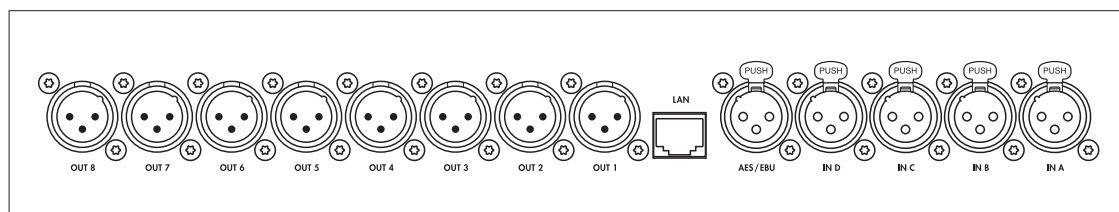
Input (data for each channel)

- Gain control: -48 dB to +12 dB
- 10 parametric equalizers with 8 types of filters each
- 2 crossover networks with Butterworth, Linkwitz-Riley and Bessel filters as well as individually created types of filters from 6 to 24 dB/oct.
- Delay to be switched between time (ms) and distance (m): 2,000 ms max. in steps of 10 µsec or 686 m max. in steps of 3.4 mm
- Limiter, threshold: from -48 dBu to +24 dBu
- Compressor, release time: 10 dB/s to 100 dB/s
- Mute

Model	DSM-48DT
Frequency range	10-40,000 Hz
Input signal	11 V max.
Output signal	4 V max.
S/N ratio	> 110 dB
THD	< 0.005%
Admiss. ambient temp.	0-40 °C
Power supply	~ 230V/50 Hz/15 VA
Dimensions	482 x 44 x 185 mm, 1 RS
Weight	2.3 kg
Inputs	4 x XLR, bal. 1 x AES/EBU, stereo 1 x RJ45 (LAN)
Outputs	8 x XLR, bal.
Other features	USB, LAN

Output (data for each channel)

- Gain control: -48 dB to +12 dB
- 10 parametric equalizers with 8 types of filters each
- 2 crossover networks with Butterworth, Linkwitz-Riley and Bessel filters as well as individually created types of filters from 6 to 24 dB/oct.
- Delay to be switched between time (ms) and distance (m): 2,000 ms max. in steps of 10 µsec or 686 m max. in steps of 3.4 mm
- Limiter, threshold: from -48 dBu to +24 dBu
- Compressor, release time: 10 dB/s to 100 dB/s
- Mute
- Routing mix for level adjustments via routing fader
- Selectable phase (invert, 180°)



Instreamer

Let's stream ...

The well-known and reliable amplifier systems PA-900 and AKB-160 now feature a 2-channel Dante™ module which turns them into Dante™ instreamers for versatile applications. They are able to receive one digital stereo signal or two mono signals via the RJ45

connections. These signals are converted into an analogue audio signal, amplified and then streamed. Thus, it is possible to integrate an analogue speaker system into a digital Dante network.



PA-900DT

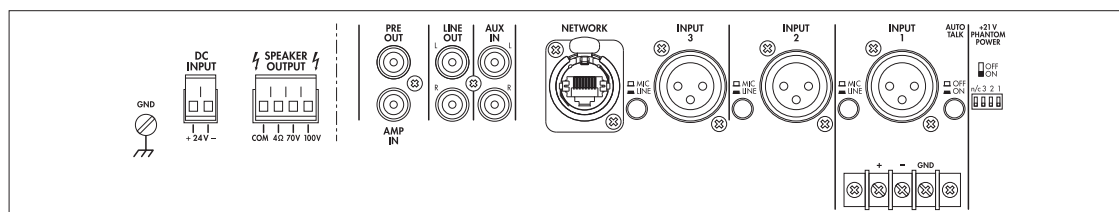
Order No. 17.6080



Mono PA mixing amplifier with integrated Dante™ module

- 1 x 120 W
- Silent operation due to fanless cooling concept
- 3 balanced mic/line inputs
- Dante™ input
- Mic 1 with priority circuit and automatic talkover
- Additional connection for desktop microphone via screw terminal
- 1 aux input
- Speaker outputs via screw terminals
- Line output
- Insert facility, e.g. for effect units, equalizers, feedback controllers
- Input and output level controls
- 2-way tone control for the output
- 20 V phantom power for each microphone input, can be selected individually
- Mains operation or 24 V emergency power operation
- Removable mounting brackets

Model	PA-900DT
Channels	5
Power rating	120 W
Peak music power output (P_{MAX})	160 W
Inputs	3 mV (mic), 200 mV (line), 140 mV (aux)
Frequency range	50-15,000 Hz, ± 3 dB
Equalizer bass	± 10 dB/100 Hz
Equalizer treble	± 10 dB/10 kHz
S/N ratio	> 80 dB
THD	< 0.5%
Power supply	~ 230 V/50 Hz/300 VA, = 24 V/9 A
Admiss. ambient temp.	0-40 °C
Dimensions	482 x 88 x 275 mm, 2 RS
Weight	9.9 kg
Connections	3 x XLR (mic/line), 1 x RCA L/R (aux), 1 x RJ45 (Dante™), screw terminals (speakers)



Instreamer



AKB-160DT

Order No. 17.6070

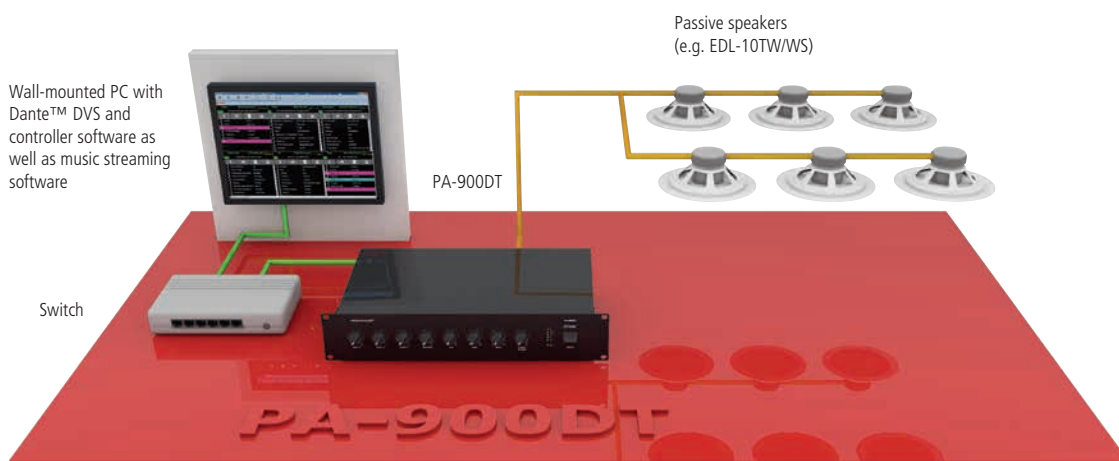
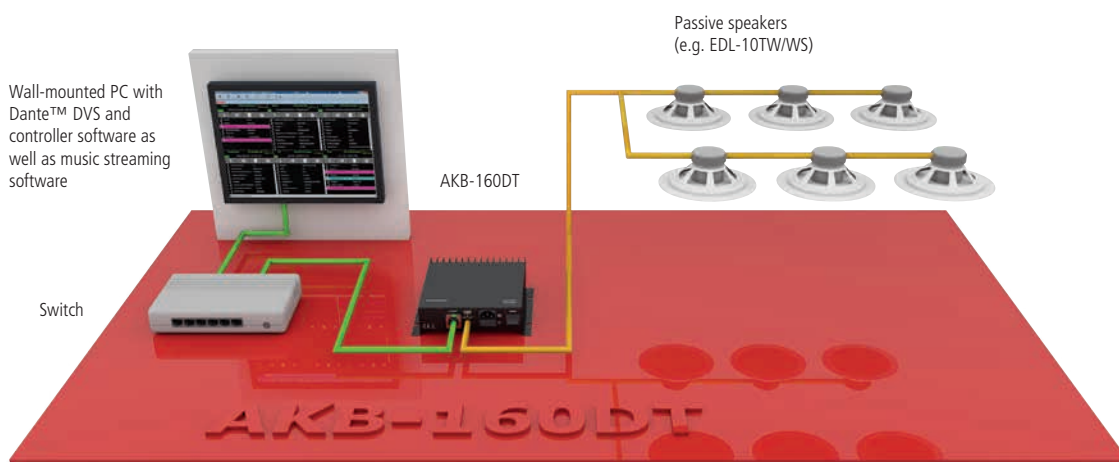


PA amplifier module with integrated Dante™ module

- 1 x 40 W
- 100 V output
- Silent operation due to fanless cooling concept
- Dante™ input
- Speaker output via spring-loaded terminals
- Metal housing with mounting brackets

Model	AKB-160DT
Channels	1
Power rating	40 W
Power rating at 100 V	40 W
Frequency range	17-20,000 Hz, -3 dB
S/N ratio	> 80 dB
THD	< 1%
Power supply	~ 230 V/50 Hz/75 VA
Admiss. ambient temp.	0-40 °C
Dimensions	213 x 55 x 238 mm
Weight	3.2 kg
Connections	1 x RJ45 (Dante™)

Configuration Examples





Your Project is Our Project

Let your business benefit from a modern service concept.

The times when customers just bought products are definitely over, especially in the fields of PA technology and security technology. The challenges and thus the solutions, too, become more and more complex. In most cases, even a state-of-the-art website or a catalogue with a perfect structure is often no longer sufficient.

In order for our partners to provide their customers with the perfect solution for audio or security applications, the Technical Project Management can give you expert advice and practical support right from the start of a more complex task. Thus, we can identify challenges at an early stage and together with our partners form the basis for a successful project.



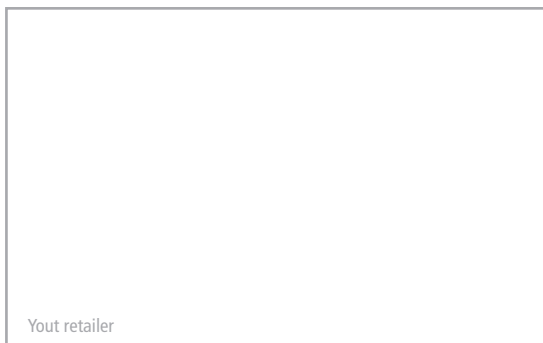
Frank Kammer, head of the Technical Project Management, Germany, explains: *"The requests for medium-sized and larger projects increased continuously. With the new department, we have now laid the foundation for a perfect customer service."*

If you are a planner or installer and intend to start with an audio project or security project, do not hesitate to contact our Technical Project Management at +49 421 4865-512 or via e-mail at dante@monacor.com.

Simply use this service component as part of our range of services, because success can be planned.



Professional Audio Over IP Solutions



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