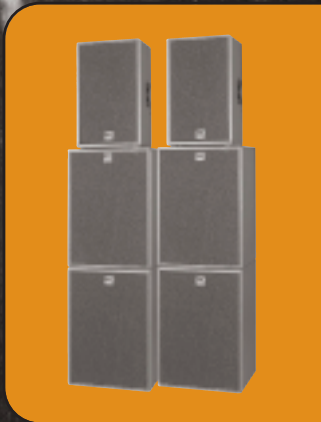
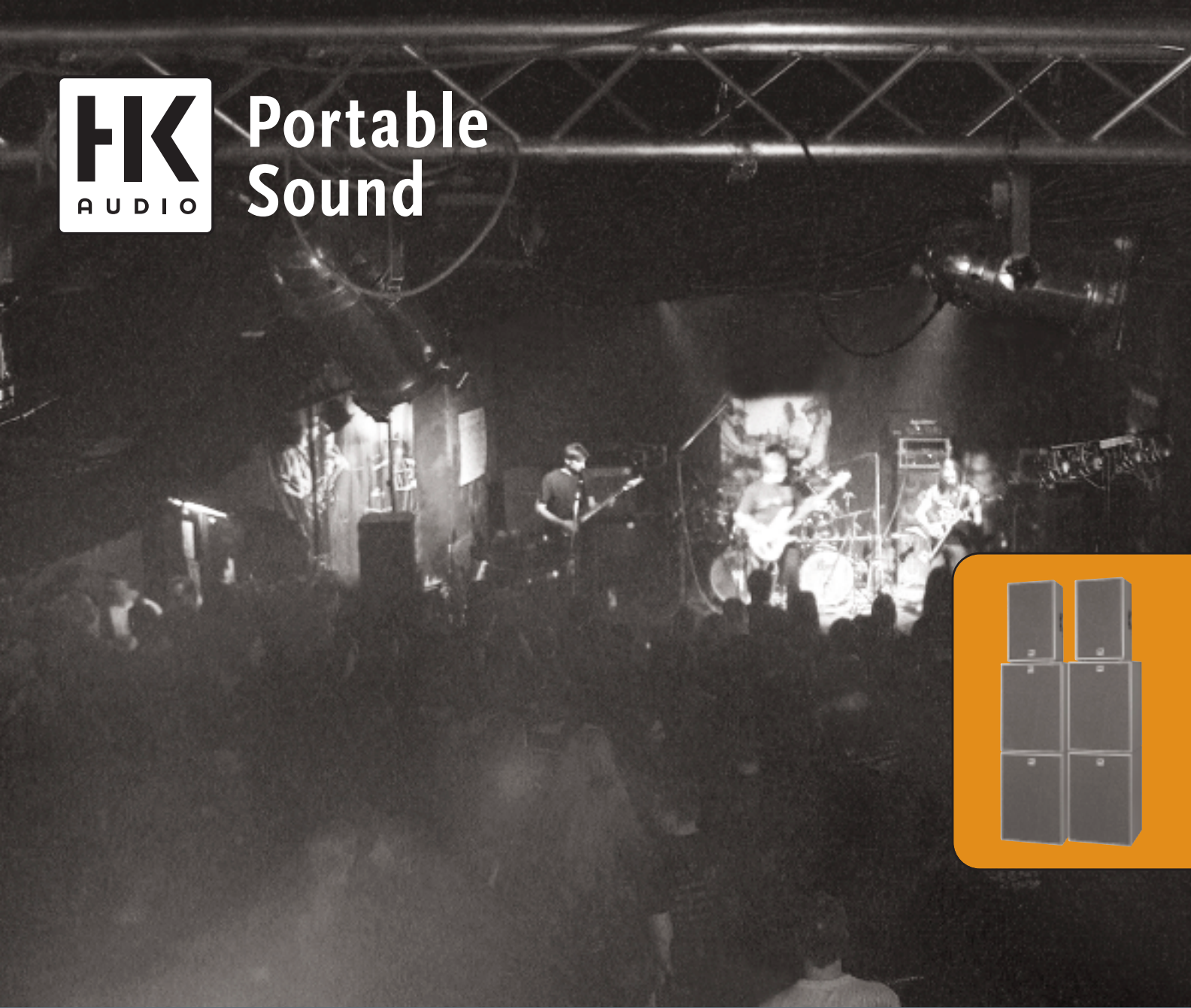




# Portable Sound



## D.E.A.CON

Dynamic Enhancement And Controlling System

Dynamics and punch  
at every volume



### Our goal: Pure listening pleasure!

Perfect sound is the product of perfect tuning. This is why the HK AUDIO® development team comprises a contingent of specialists. Engineers specializing in acoustics, analog and digital electronics, and physics work hand in hand, collaborating with a musicologist who tweaks the sound of every HK AUDIO® product to suit human auditory physiology. A world-class ultra-modern acoustics lab serves as the perfect proving ground for these developers.

It enables our engineers to document and analyze the audio properties and dynamics of a speaker system in exhaustive detail to ultimately advance the state of the art.

Every day in our sonic foundry is a day spent with a singular goal in mind - to forge extraordinarily accurate instruments of sound reinforcement! What does this entail?

- Your voice (or any other audio signal) is rendered with greater precision and authenticity.
- Greater utilizable sound pressure is assured.

- Frequency response is remarkably smooth and dynamics are consistent; no need to make corrections with a graphical EQ.
- Listening fatigue never sets in: Disharmonic distortion and resonance are minimized so your audience perceives the sound to be pleasant even after long listening sessions.
- Plug in, power up, and play: Great sound right out of the box.

HK AUDIO® systems get the job done faster and easier for you.



### Digital amping for enhanced efficiency and dynamic response

With an efficiency rating topping the 90% mark, class D digital power amps are considerably smaller, lighter, and more compact than conventional amps. The reduced thermal load on components enhances reliability, while the far faster slew rate and higher damping factor endow the system with faster, more precise dynamic response.

### Multi-Band Limiting and Companding

Several matched limiters and compressors are optimally fine-tuned to process different frequency ranges. This speaker-independent approach to signal processing results in natural-sounding dynamic response across the entire frequency spectrum and an assertive yet finely balanced sonic image.



### DDO™ Controller Technology

DDO™ controllers compensate for the varying response of PA components such as low-frequency, midrange and high-frequency speakers, power amps, crossovers and so forth to forge a homogenous system with uniform dynamics and a highly detailed sonic image.

### DuoTilt™ – making the most of sonic energy

The new DuoTilt™ pole mount allows sound energy to be utilized far more efficiently. DuoTilt™ offers 7.5° and 15° angles of tilt, enabling perfect satellite-to-audience alignment. Troublesome ceiling reflections are minimized; the soundscape is clearer, tighter, and more focused.



### Easy setup and handling spells less pre-gig stress

Like all HK AUDIO Active Systems, D.E.A.CON was designed as a cohesive unit consisting of very closely matched components. Painstaking effort was invested in ensuring that D.E.A.CON can be easily transported and swiftly set up. Handling and EQing couldn't be any easier, with no complicated and time-consuming tweaking challenges to master.

# D.E.A.CON

Dynamic Enhancement And Controlling System



## Dynamics and punch at every level

Seasoned bands know the score: Week for week, you're playing to new audiences and in new venues – a club, a hall, an open air event, and sometimes the local pub down the road. But no matter how disparate the venues, today's audiences are sound-savvy and their expectations are high. Not only is your band challenged to serve up a satisfying show, your PA system had better be up to snuff too. You need a setup with the audio quality of big touring rigs - clear, punchy, loud and dynamic sound, if you please. But it should also sound sweet at soft levels. And it shouldn't bust your budget or be too large – after all, the van is full enough as it is. Flexibility is what you want in a PA, as well as ease of use – no muss, no fuss, just a better-sounding system that sets up faster.

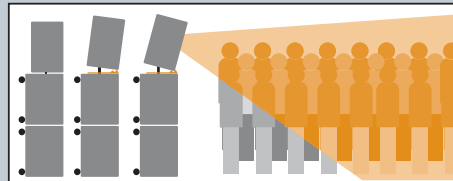
A compact, fully digital system designed for bands, D.E.A.CON is just what the doctor ordered. The new Digital Dynamics Optimization (DDO™) technology is the perfect prescription for dynamics and punch at every volume. The algorithms in the DDO™ controller compensate for the different responses of all D.E.A.CON's components, thereby endowing the system with uniform dynamic response. DDO™ controller is onboard to integrate and manage all system components. This unique technology's benefits are unrivalled: greater control, far faster sound-checks, no on-the-fly tweaking when the audience response gets spirited - the sound is just right at every volume. And if your sound tech likes to dial in hip effects, with D.E.A.CON you will hear them louder and clearer than ever before. EQs operate with surgical precision; the sound is sweet even at high levels. In a nutshell, you get a full yet transparent sonic image at every level from a whisper to a roar.

D.E.A.CON is a compact, active system for bands with discriminating tastes in sound. And it is the industry's new high-water mark in versatility, handling ease and, particularly, natural-sounding dynamic response. Loaded with a 12" woofer and 2" tweeter, the Mid/High unit – driven by an integrated 600 W RMS digital power amp – offers up a fresh yet assertive soundscape that gets your musical message across. As the system's nerve center, the onboard digital controller ensures true dynamic response, while DDO™ technology affords utmost accuracy and authenticity.



Built-in protective circuits assure maximum reliability for the entire system, even under critical operating conditions. The DuoTilt™ pole mount, the D.E.A.CON Tilt unit, or the M10 flight rigging points make cabinets easy to align to audiences regardless of venue. And the mid/high unit also delivers great sound when set to full-range mode.

The 18" subwoofer and its 1,000-watt RMS digital power amp pump out big, brawny low end. An additional passive subwoofer may be connected to enhance low-end punch for larger events. D.E.A.CON's components are amazingly easy to mix and match to suit the scenario. And courtesy of the DDO™ digital controller, this rig is astonishingly easy to operate. Best of all, it delivers expressive dynamics and potent sound pressure at every level.



D.E.A.CON Tilt-Unit

In combination with the integrated HK AUDIO DuoTilt™, the optional Tilt Unit lets you incline the mid/high units at 7.5° or 15° angles to make the most of sound energy and ensure that all listeners enjoy clear and focused sound.



### D.E.A.CON Full-range Set

For voice reinforcement, small events and rehearsal rooms  
 • 2 mid/high units with optional tripods



### D.E.A.CON Club Set

The compact rig for club gigs  
 • 2 mid/high units, 2 Sub A bins, optional mounting poles



### D.E.A.CON Standard System

For large halls and tents. The Standard System may be doubled up to create a twin D.E.A.CON system for such gigs as very large tents and even open-air events.  
 • 2 mid/high units, 2 Sub A bins, 2 Sub B bins



D.E.A.CON Mid/High Flight Frame  
 For flying the mid/high unit from a truss. A half-coupler, clamp or a TV stud may be used for mounting purposes.

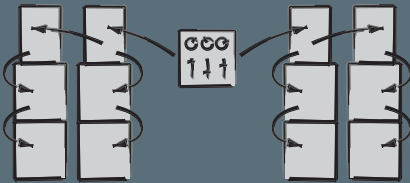
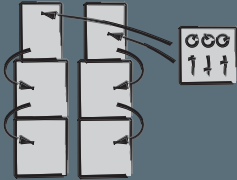


## Facts & Features

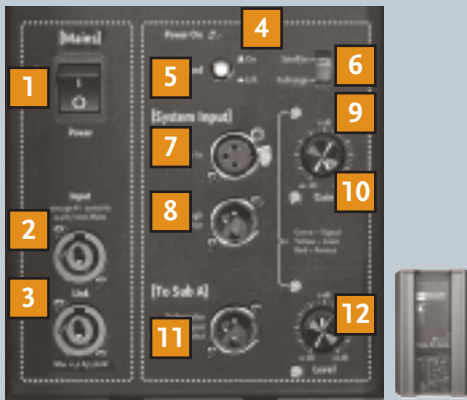
- A compact PA system for bands, featuring powerful, punchy sound and effortless handling for large events
- 12" / 2" mid/high units equipped with a 600-watt RMS digital power amp and digital system controller
- DDO™ controller technology for natural-sounding, true dynamic response at every volume level; affords reliable protection of the entire system
- Mid/high unit featuring full-range mode switch, DuoTilt™ and M10 flight rigging points
- 18" subwoofer equipped with a 1,000-watt-RMS digital power amp and a connector for an additional passive bass bin
- Subwoofer with 80 mm casters (3-1/8" wheels)
- Extraordinary flexibility: D.E.A.CON may be deployed with four, two or no subwoofers.
- Accessories: Protective cover, flight frame for mid/high unit, D.E.A.CON tilt unit



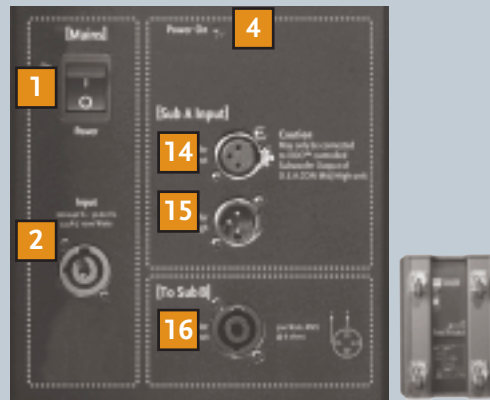
D.E.A.CON Protective Covers  
 Thickly padded, water-resistant and tear-proof.  
 The perfect solution for transporting the PA safely to gigs.



Simply plug in and power up, and D.E.A.CON is ready to rock out.



D.E.A.CON Mid-High Unit



D.E.A.CON Sub A active



D.E.A.CON Sub B passive

**1 Power switch.** On/off switch for the D.E.A.CON system.

**2 Mains Input.** Connects the D.E.A.CON system to a power source via the included Powercon® mains cord.

**3 Mains Link.** Powercon® Link to connect D.E.A.CON Sub A subwoofer.

**4 Power On LED.** Lights up when the power switch is set to ON and the system is plugged into a mains power supply.

**5 Ground.** Ground-lift switch for separating the signal and chassis ground in the event of ground hum.

**6 Mode Switch.** Configures the DDO™ controller for Satellite or Full-range mode.

**7 Input.** Electronically balanced XLR input that accepts the mixer signal (via master left/right, line out or similar ports).

**8 Through.** Parallel output for routing the incoming line signal out (e.g. to other D.E.A.CON systems).

**9 Limiter LEDs.** These two-coloured LEDs indicate the current limiter status.

**10 Gain.** This knob adjusts the line in signal level.

**11 To Sub A Output.** Sends the subwoofer signal from the DDO™ controller to the D.E.A.CON Sub A bin via an XLR cable.

**12 Subwoofer Level.** This knob adjusts the level of the subwoofer to suit the venue's acoustics.

**13 Flight rigging points.** Serve to attach the D.E.A.CON flight frame for flying the mid/high unit.

**14 Sub A Input.** Hook up the signal path coming from the D.E.A.CON DDO™ controller to the balanced subwoofer input socket via an XLR microphone cable.

**15 Subwoofer Through.** Parallel output for routing the DDO™ subwoofer signal to an additional D.E.A.CON Sub A.

**16 To Sub B Output.** Speakon® output for connecting a D.E.A.CON Sub B passive subwoofer.

**17 Sub B Input.** Speakon® input for Sub B.

## Technical Specifications.

### D.E.A.CON Mid/High Cabinet

Frequency response +/- 3dB:**)	80 Hz - 19 kHz full-range mode 130 Hz - 19 kHz satellite mode
Axial sensitivity 1W@1m:*)	104 dB
Max. sound pressure level @1m: *)	130 dB @ 10% THD
Mid-range/treble power amp:	600 W RMS/ Class D
Active protection circuits:	DDO™ Controller, Multi-Band Limiter, Subsonic Filter
Connectors:	XLR Line In XLR Through XLR Subwoofer Out
Midrange woofer:	12"
Tweeter/driver:	2"
Directivity:	60° x 40° CD Horn
Crossover frequency, slope:	900 Hz, 12 dB/ octave
Pole mount:	HK AUDIO DuoTilt™, 36 mm, 7.5°, 15°
Flight points: rail	4x M10 thread for optional flight rail
Accessories:	D.E.A.CON Tilt-Unit, 7.5°, 15°
Dimensions (WxHxD):	40 cm x 66 cm x 50 cm 15-3/4" x 26" x 19-3/4"
Weight:	39.7 kg/ 87.3 lbs

### D.E.A.CON Sub A

Frequency response +/- 3dB:**)	44 Hz - 130 Hz
Axial sensitivity 1W@1m: *)	102 dB
Max. sound pressure level @1m: *)	134 dB
Subwoofer amp:	1000 W RMS/ Class D
Active protection circuitry:	DDO™ Controller, Multi-Band Limiter, Subsonic Filter
Connectors:	XLR In XLR Through Speakon® Parallel Out
Subwoofer:	18"
Pole mount:	M 20 thread
Casters:	4x 80 mm casters on the back
Dimensions (WxHxD):	52 cm x 72.5 cm x 71.5 cm 20-1/2" x 28-1/2" x 28-1/8"
Weight:	49.5 kg/ 109 lbs

### D.E.A.CON Sub B

Nominal power handling capacity:	500 W RMS/ 8 ohms
Frequency response +/- 3dB: *)	44 Hz - 130 Hz
Axial sensitivity 1W@1m: *)	102 dB
Max. sound pressure level @1m: *)	134 dB
Connectors:	Speakon® In
Subwoofer:	18"
Pole mount:	-
Casters:	4x 80 mm casters on the back
Dimensions (WxHxD):	52 cm x 72.5 cm x 71.5 cm 20-1/2" x 28-1/2" x 28-1/8"
Weight:	47 kg / 103.4 lbs

\*) All measurements taken under half-space conditions

\*\*\*) Via the active system crossover

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