



perfect control

nuQ systems



Turbosound®

Forget about boxes. Forget about crossovers.  
Forget about components.  
Forget everything you thought you ever knew about professional quality sound systems.

Because now you don't need to.  
Think systems. Think NuQ systems from Turbosound.

# you're in control

NuQ systems are offered in two formats: fully integrated digitally self-powered units, or as discrete loudspeakers enclosures used in conjunction with optimised control and power amplifiers. Whichever format you choose, acoustic performance is the same.



Whatever the venue or audience, NuQ systems put the ability to quickly and easily control audio performance at your fingertips. NuQ loudspeaker systems are a carefully assembled integration of highly sophisticated modern technologies: hardware and software, electronics and acoustics, advanced materials and network architecture. NuQ systems are designed to work either in conjunction with external controllers and Turbosound amplifiers or as integrated self-powered units, with the same end result in mind: reliable and consistently high quality audio reproduction without the unforeseen variables and potentially show-stopping weak links that can cost you time and money.



NuQ systems may be controlled remotely over a network in order to give you the maximum amount of control and flexibility over the loudspeaker system's performance and security. The topology is based around BVNet, a simple and effective daisy-chain network protocol.

BVNet allows you to create a network of multiple NuQ loudspeaker systems—passive, self-powered or a

combination of both—and control them all with a PC. Single controllers are connected via RS232, while multiple units and/or powered loudspeakers are connected to the computer via a simple USB BVNet adapter. Turbosound's proprietary TurboDrive™ software provides the ability to control and/or monitor the operating parameters of all the controllers or powered loudspeakers in the chain, either on-site using a laptop or wireless device, or remotely over a VPN (virtual private network).

This allows considerable flexibility in adapting the speaker system to the various demands of the acoustic environment with full user control of equalisation and delay, while at the same time ensuring a high degree of security control by monitoring critical functions such as current, impedance and limiting.



There's not much to say about loudspeaker components today, is there?



well, think  
again

NuQ systems may look unremarkable at first glance due to their discreet appearance. But beneath the surface there is plenty of creative technology that make them truly exceptional.



Originally developed for the high frequency section of the award-winning Aspect® series as one of the lowest-distortion compression drivers in the market, the custom-designed HF driver featured in NuQ-8 and NuQ-10 cabinets simply sparkles (without the crackles). It utilises a parabolic aluminium diaphragm (with a first break-up mode inaudible at beyond 22kHz) in a radially-polarized neodymium magnet structure, resulting in sweet-sounding high frequencies, reproducing all types of programme material with astonishing clarity.

Converging Elliptical Waveguides™ help to distribute sound evenly over a large listening area, and do not suffer from the harmonic distortion common to conventional exponential horns. That means better sound distributed cleanly to a wider audience.

#### Strength in Numbers

The innovation in NuQ extends even into the cabinets themselves. Take a thin sheet of plywood, cut it up and make a box out of it, glued and screwed. Now take the

same piece of plywood, bend it a couple of times and then make a box out of it. Same weight of plywood, but which is stronger? The unique pre-bent plywood cabinet construction provides a massive increase in strength-to-weight ratio by entirely eliminating four cabinet joints. And the symmetrical angled profile also allows the cabinets to double as monitor wedges and can be inverted for use as mirror-imaged pairs.

Class-leading neodymium magnet drivers are used exclusively throughout the NuQ range to reduce overall weight and lower power compression to negligible levels that translate into easier handling and better efficiency.

NuQ cabinets are sturdily constructed from multi-ply exterior grade plywood, finished in durable black semi-matt textured paint while the perforated steel grilles are backed with acoustically transparent reticulated foam. Designed for portable use, the cabinets are provided with flush handles for easy handling.

#### DP OR NOT DP - THAT IS THE QUESTION

It doesn't matter where the brain is. The result is exactly the same.

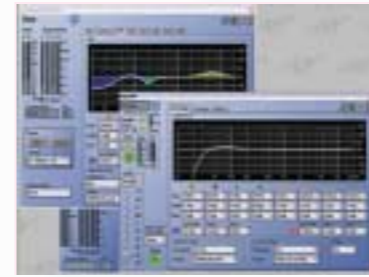
So the choice is up to you. Whether you prefer the sheer convenience of self-contained digitally powered loudspeakers with their low-weight onboard amplifiers and control electronics, or our centralised rack system housing the power and processing, all the model-specific parameters that dictate the resulting audio quality remain the same. There are of course different and separate benefits of each approach—self-powered systems can be more useful in portable applications because there are fewer components to load in and connect, while a centralised rack room offers the potential to more effectively control multi-zoned permanent installations. Naturally it is possible to mix powered and non-powered systems because they are designed to sound the same.

Considerable advances have been made in recent years in the field of self-powered loudspeakers. A far cry from early 'piggyback' amplifier concepts which often carried as much excess weight as a 19" rack power amp, Turbosound's modern digital amplifiers feature industry-leading 96kHz sampling rates to provide better sound quality and add less than 4kgs to the overall net weight of the product. Integrated NuQ power modules are more than 90% efficient: more power to your speakers; and less to wastefully heat up the environment.





TurboDrive™ control software gives online access and fast, intuitive control of Turbosound controllers and powered speakers, either individually or in a BVNet network of up to 100 devices.



# power to the people

User control of input EQ, delay and mute is available while key factory settings such as limiters and driver correction are locked out to ensure maximum flexibility to the user, whilst maintaining consistent voicing and driver protection in the field.

## The Clever Stuff

NuQ's control software enables rapid configuration of a fixed sound system in a multi-purpose venue equipped with an ethernet network. Many venues are typically configured with multiple zones all requiring widely varying musical styles and levels. Installing TurboDrive™ software on any resident PC connected to the network allows the system technician to tune and optimise each zone. The same task can even be accomplished remotely via a VPN (virtual private network), which also allows remote monitoring of the system.

## Plug and Go

Let's say you're mixing a live band for a theatre show which already has a NuQ house system installed, but it's a rock and roll gig so you'd prefer to beef up the house PA, rent in your own monitors, plus you want to add some flown cabinets to cover a balcony. No problem. You (the touring engineer) plug your laptop into the network, patch in an extra NuQ rack system for FOH and add a monitor rack and wedges. Set up your limiters, tune the room, and

you're away. Now the whole sound system is under central control even though the components were not originally integrated or even part of the same system.

## Power to the People

Power packs come in various pre-wired multi-channel configurations which are flexible enough to accommodate a huge variety of applications. A two-way configuration caters for passive enclosures with subs, monitor mixes, and basic delay systems. It incorporates Turbosound's 2-in 4-out LMS-D24 digital loudspeaker management system together with a 2U T-475 four-channel power amplifier.

A further configuration equipped with an LMS-D26 digital loudspeaker management system combines T-45 2-channel amplifiers, providing sufficient output channels to power a variety of other systems including bi-amped enclosures with subs, and multi-channel monitor mixes.

## IN THE DRIVING SEAT

TurboDrive™ is the new control software from Turbosound. TurboDrive™ enables the monitoring and/or control all of these operating parameters of an LMS series loudspeaker management system:

- Gain
- Mute
- Input EQ (6 parametrics and 2 shelves)
- Delay (up to 405ms)
- Output limiters
- Input meters
- Current preset
- Device name

TurboDrive™ provides monitoring/control of these operating parameters of a NuQ powered system:

- Power on/off
- Gain
- Mute
- Input EQ (8 parametrics and 2 shelves)
- Delay (up to 405ms)
- Heatsink temperature
- Output meters
- Input meters
- Current preset
- Device name
- Maintenance reporting



# nuQ-8

## NuQ-8 systems

The NuQ-8DP is the most compact self-powered loudspeaker in the NuQ range, and can be set up and working within minutes, requiring only mains power and a signal feed from a mixing console for correct operation. It is particularly effective in corporate, audio-visual or broadcast sound reinforcement applications that require small unobtrusive enclosures to accurately reproduce speech or music programme material.

Thanks to its use of class-leading neodymium magnets and networkable high-efficiency digital amplifier module, the NuQ-8DP weighs less than 10kgs, making it truly portable. Its elegantly shaped quasi-trapezoidal cabinet houses a passive two-way 8"/1" driver combination and a rotatable wide dispersion Converging Elliptical Waveguide (CEW™). This allows a swap of the horizontal and vertical horn pattern, so allowing the enclosure to be used horizontally or vertically while retaining a wide dispersion pattern.

Its integrated control module incorporates all the necessary processing and amplification to develop optimum performance with no outboard equipment, requiring only mains power and a signal feed from a mixing console for instant and repeatable performance.

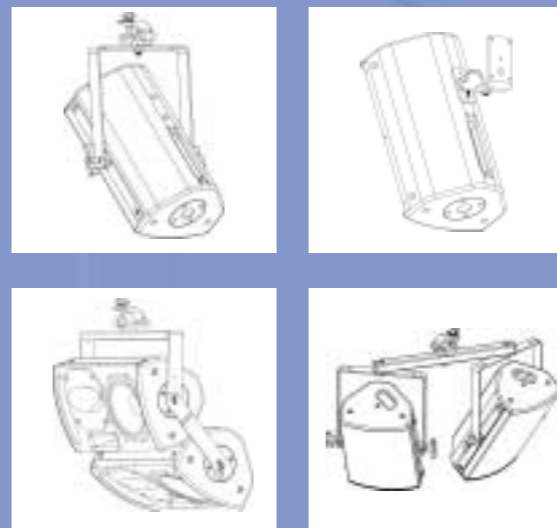
In its non-powered form, the passive two-way NuQ-8 is equally at home as a compact front-of-house box or as a low profile wedge monitor, or as a visually unobtrusive theatre underbalcony or front fill loudspeaker.

In a portable application use the NuQ-8 pole-mounted on B15 bass cabinets to add serious punch and provide extra level. Two NuQ cabinets assembled on a T-bar with a B15 provide a powerful, wide dispersion, full range system. The NuQ is easily adaptable to small vertical or horizontal clusters to increase coverage while remaining unobtrusive in corporate/industrial applications. These clusters can be either ground supported or flown from truss.



NuQ loudspeaker systems are offered with different size and output capabilities, each having the possibility to add sub-bass cabinets in order to extend the bass response and overall SPL. No matter which system you choose you can count on consistently high audio quality with similar voicing between models.

A compact, extremely portable and deceptively punchy loudspeaker system that is guaranteed to deliver great performance for a multitude of professional applications.



- Corporate/industrial portable applications
- Low profile floor monitoring
- Live music venues
- DJs and small bands
- Self-powered or non-powered
- Flexible ground support or truss rigging options
- Themed environments
- Distributed sound reinforcement and delays
- Theatre and broadcast
- Front fill, lip fill or underbalcony
- Ultra-compact symmetrical quasi-trapezoidal enclosure



# nuQ-10

## NuQ-10 systems

Combining a custom 1" neodymium HF driver on a rotatable 100° x 60° Converging Elliptical Waveguide™ with a 10" neodymium low frequency driver in a compact and easily transportable enclosure, **the passive NuQ-10 system is compact** but deceptively powerful, and is recommended for larger corporate and audio-visual applications as well as for smaller live music situations.

The NuQ-10 can also easily double as a floor monitor. Its symmetrical cabinet features an optimum wedge angle and a low profile which allows it to be used as left-right mirror-image monitor pairs. Rotating the horn pattern is a simple task in order to maintain a wider horizontal dispersion for these monitoring applications.

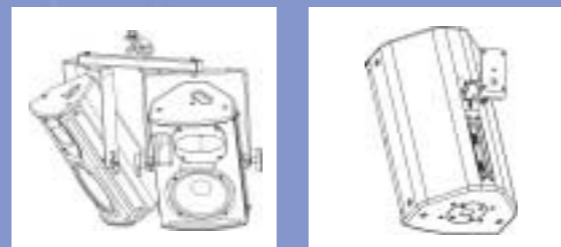
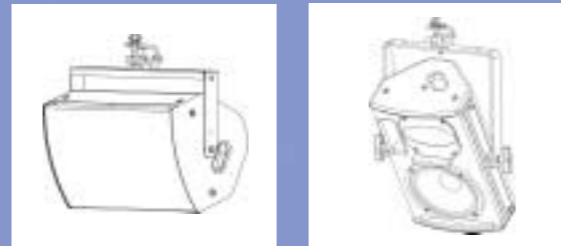
The NuQ-10 has a sufficiently low LF cut-off frequency to make it usable in many stand-alone speech and music applications without subwoofers. However the NuQ-10, as with all two-way NuQ enclosures, can also be augmented by a B15 bass cabinet in order to give a fully extended frequency response.

**The self-powered NuQ-10DP** incorporates intelligent digital processing with Class D power amplifiers in a rear panel module that is perfectly matched to the drive units, and offers better than 90% operating efficiency. The NuQ-10DP is a truly integrated and very portable sound reinforcement system, and features network capability via Turbosound's TurboDrive™ control software which enables control and monitoring of the system's operating parameters.

A variety of rigging options are available for both the passive and self-powered models: either ground supported using speaker stands or poles mounted on top of NuQ bass cabinets; or suspended either horizontally or vertically from a truss structure. Passive NuQ-10 enclosures can also be wall mounted using Turbosound or OmniMount™ brackets.



The larger enclosure of the NuQ-10 gives an increase in the amount of bass energy available compared to the smaller NuQ-8 and higher overall sound pressure level.



■ B15 subwoofer



- Full range response
- Self-powered or passive options
- Corporate and audio-visual applications
- Full range response
- Range of rigging hardware
- Symmetrical quasi-trapezoidal cabinet
- Front-of-house
- Floor monitoring

# nuQ-12

## NuQ-12 systems

This 12" two-way system is a very popular format due to an optimum combination of efficiency, frequency response, size and weight, and is ideally suited to many portable sound reinforcement applications.

**Self-powered NuQ-12DP systems** form the basis of a very flexible, compact and powerful, 'plug and go' rental inventory that will easily adapt to front-of-house or distributed sound reinforcement applications.

The NuQ-12DP features sophisticated DSP loudspeaker processing and Class D amplifiers in a rear panel module designed to provide maximum flexibility to the user in adapting to variable venue conditions while maintaining control over system security and reliability.

**The NuQ-12 is a switchable active/passive** enclosure, being ideally suited for use in passive mode for corporate shows, or readily adapted as a bi-amped monitor system

just by selecting a rear panel switch. It is designed to be used in conjunction with LMS series digital processors to ensure consistent and reliable performance for all applications. The LMS-D24 and LMS-D26 offer a choice of two or four output channels and factory presets optimised for all NuQ loudspeaker models, while the Turbosound rack options can be configured to provide individual amplifier/controller packages to suit any requirements.

In addition to regular front-of-house duties, NuQ-12 systems can also be readily deployed as wedge monitors thanks to their symmetrical quasi-trapezoidal cabinet profile and rotatable high frequency horns.

A comprehensive range of rigging hardware is available to enable systems to be ground supported on top of bass cabinets such as the B15 or B18, or on 35mm speaker stands. Wall mount options are also available as well as a provision for OmniMount™ compatibility.



A switchable active/passive two-way quasi-trapezoidal loudspeaker with wide dispersion for a multitude of sound reinforcement applications, also available in a digitally self-powered format.



■ B18 subwoofer



- Switchable active/passive
- Distributed sound reinforcement
- Dry hire
- Rotatable HF horn
- Front-of-house
- Floor monitoring
- Live music venues



# nuQ-15

## NuQ-15 systems

The active/passive NuQ-15 is the largest two-way loudspeaker in the series and its enclosure size gives this system considerable low frequency output to operate as a powerful stand-alone system for many applications without sub-bass support.

Designed to operate in conjunction with LMS series advanced digital signal processors and Turbosound amplifier rack systems, the NuQ-15 is a switchable active/passive format which can be user-configured either in bi-amped or passive mode as required simply by means of a rear panel switch. This eliminates the inconvenience of carrying both passive and active boxes in inventory. The combination of its symmetrical quasi-trapezoidal cabinet and rotatable wide dispersion Converging Elliptical Waveguide™ enables the NuQ-15 to provide front-of-house reinforcement and be quickly and easily adapted for use as a floor monitor.

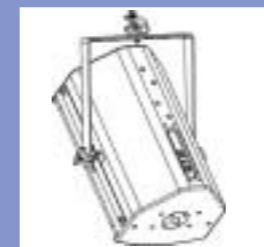
The NuQ-15DP offers the same acoustic performance in a fully integrated digitally self-powered format, combining sophisticated control electronics and Class D power amplifiers in a rear panel module with built-in networking capability via a pair of RJ45 connections.

Both non-powered and powered versions are supported with a range of rigging hardware designed to enable cabinets to be deployed for many different types of portable sound reinforcement applications. These can be either ground-supported with speaker stands or poles, or truss mounted using flying yokes or swivel brackets.

Use the NuQ-15 systems with the B18 band-pass subwoofer to extend its low frequency response into the sub-bass region and provide an extremely powerful portable PA system with a wide frequency range.



The larger cabinet of the NuQ-15 provides substantial bass response for stand-alone music applications and its symmetrical quasi-trapezoidal shape makes it adaptable for use as a powerful floor monitor.



■ B18 subwoofer

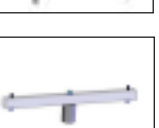
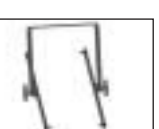
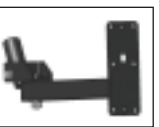
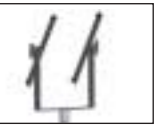
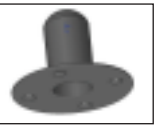


- High quality concert touring loudspeaker
- High power stage monitoring
- Audio/visual and theatre applications
- Rotatable wide dispersion HF horn
- Corporate and industrial applications
- Symmetrical quasi-trapezoidal cabinet
- Switchable active/passive operation



# Hardware compatibility

	NuQ-8	NuQ-10	NuQ-12	NuQ-15	NuQ-8DP	NuQ-10DP	NuQ-12DP	NuQ-15DP	
Pole Mount	Socket included	Socket included	Socket included	Socket included	Socket included	Socket included	Socket included	Socket included	fits 35mm poles and stands
	FY-PH	FY-PH	FY-PH	FY-PH	FY-PH	FY-PH	FY-PH	FY-PH	shown with flying yoke on poles or stands
Wall Mount	WB-20B	WB-20B	WB-55B	WB-55B	n/a	n/a	n/a	n/a	wall mount with tilt and pan
	PB-55	PB-55	PB-55	PB-55	PB-55	PB-55	PB-55	PB-55	universal bracket fits two-way cabinets
	WA20.5	WA60.0	WA60.0	WA120.0	n/a	WB60.0	WB60.0	WB120.0	OmniMount™ wall brackets
Ceiling Mount	CA20.5	CA60.0	CA60.0/ST60.0	CA60.0/ST120.0	n/a	ST60.0	ST60.0	ST120.0	OmniMount™ ceiling brackets
Flying Yokes	NuQ-FY8	NuQ-FY10	NuQ-FY12	NuQ-FY15	NuQ-FY8	NuQ-FY10	NuQ-FY12	NuQ-FY15	vertical orientation (plus optional SC-01 scaff clamp)
Swivels	NuQ-SB8	NuQ-SB10	n/a	n/a	NuQ-SB8	NuQ-SB10	n/a	n/a	horizontal orientation (plus optional SC-01 scaff clamp)
Extender Bars	NuQ-SB8 + NuQ-SBE8	NuQ-SB10 + NuQ-SBE10	n/a	n/a	NuQ-SB8 + NuQ-SBE8	NuQ-SB10 + NuQ-SBE10	n/a	n/a	small column (plus optional SC-01 scaff clamp)
Horizontal Array	NuQ-TB	NuQ-TB	n/a	n/a	NuQ-TB	NuQ-TB	n/a	n/a	small array with variable tilt and pan (shown with FY-PH)



# Technical specifications

LOUDSPEAKERS	NuQ-8/DP	NuQ-10/DP	NuQ-12/DP	NuQ-15/DP	B-15/DP	B-18/DP
Maximum SPL (peak)	124dB	127dB	133dB	135dB	132dB	136dB
Frequency Response ( $\pm 4$ dB)	60Hz - 20kHz	55Hz - 20kHz	55Hz - 20kHz	50Hz - 20kHz	45Hz - 120Hz	40Hz - 150Hz
Dispersion (@ -6dB points)	100°H x 60°V	100°H x 60°V	80°H x 50°V	80°H x 50°V	n/a	n/a
Dimensions (HxWxD)	464mm x 272mm x 220mm (252mm DP) 18.3" x 10.7" x 8.7" (9.9" DP)	525mm x 318mm x 258mm (281mm DP) 20.7" x 12.5" x 10.2" (11.1" DP)	655mm x 373mm x 340mm 25.8" x 14.7" x 13.4"	712mm x 430mm x 385mm 28" x 16.9" x 15.2"	464mm x 574mm x 620mm 18.3" x 22.6" x 24.4"	768mm x 574mm x 700mm 30.2" x 22.6" x 27.6"
Net Weight	9.5kg / 20.9lbs 13kg / 28.6lbs (DP)	12kg / 26.4lbs 15.5kg / 34.1lbs (DP)	20kg / 44lbs 23kg / 50.6lbs (DP)	26kg / 57.2 lbs 29kg / 63.8lbs (DP)	36.5kg / 80.3lbs 39kg / 85.8lbs (DP)	65kg / 143lbs 67.5kg / 148.5lbs (DP)

INTEGRATED AMPLIFIERS	NuQ-8DP/10DP	NuQ-12DP/15DP	19" RACK AMPLIFIERS	T-25	T-45	T-475
Power Output	500 watts @ 8 ohms	2 x 800 watts @ 8 ohms	Power Output	2 x 650 watts @ 8 ohms	2 x 1200 watts @ 8 ohms	4 x 750 watts @ 8 ohms
Dynamic Range	110dB	110dB	Gain	+26dB	+37.75dB	+26dB
Input Clip	10dBu	10dBu	Input Clip	+13dB	+6dB	+11dB
Bandwidth ( $\pm 0.5$ dB)	20Hz - 20kHz	20Hz - 20kHz	Dimensions	88mm x 482mm x 428mm 3.5" x 19" x 16.8"	88mm x 482mm x 428mm 3.5" x 19" x 16.8"	88mm x 482mm x 428mm 3.5" x 19" x 16.8"
Power Requirements	100V to 240V AC, 50/60Hz	100V to 240V AC, 50/60Hz	Net Weight	10.5kg / 23.1lbs	11kg / 24.2lbs	10.25kg / 22.5lbs

CONTROLLERS	LMS-D24 (2-in, 4-out)	LMS-D26 (2-in, 6-out)
Network	2 x RJ45 ports	2 x RJ45 ports
Input Level	+20dBu	+20dBu
Output Level	+20dBu into 600 ohm load	+20dBu into 600 ohm load
Dimensions (HxWxD)	44mm x 482mm x 254mm 1.7" x 19" x 10"	44mm x 482mm x 254mm 1.7" x 19" x 10"
Net Weight	2.7kg / 5.9lbs	2.7kg / 5.9lbs





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