

# PROFESSIONAL HEADPHONES

GUIDE



beyerdynamic



# THE FIRST CHOICE WHEN IT COMES TO PROFESSIONAL HEADPHONES

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# EDITORIAL

The DT series has been the centrepiece of our headphone production for years. And, contrary to what many may think, DT actually stands for "dynamic telephone". The origin of the DT series actually dates back to 1937: The DT 48 was Eugen Beyer's first dynamic headphone and it remained part of the company's product portfolio, in a slightly modified form, for almost 75 years – until the end of 2012. In the mid-1980s we introduced the legendary headphones DT 770, DT 880 and DT 990. Today, the advanced DT 770 PRO, DT 880 PRO and DT 990 PRO are considered the standard for most national and international recording studios.

The core feature of our products is, of course, the sound. Without exception, their characteristic sound tuning is what distinguishes our headphones. Our sound has earned the unwavering trust of music producers, sound technicians and broadcasters worldwide, where it is considered a benchmark.

As I'm also active in the music scene myself, I particularly appreciate the high level of comfort when wearing our products. Our headphones are not going to cause an unpleasant feeling of pressure for the wearer, even after several hours of use.

Another aspect that sets our products apart from the competition is that they are handcrafted in Germany. The components used in making them can be replaced if needed – we regularly receive inquiries from customers who have owned one of our headphones for more than a decade and who would like to replace an ear pad, for instance. At beyerdynamic, we are particularly proud of the longevity of our products.

## OUR MOTTO IS: CREATE BETTER

We make it possible for professional users to deliver even better results thanks to our headphones. Having the right headphone for the task is essential. We are pleased to provide this guide to help you with your selection.

We wish you all the best,



**JOSCHA KRETSCHMANN**

Team Lead Manager  
Product Management Pro Division



# HEADPHONE TYPES

OPEN HEADPHONES		CLOSED HEADPHONES
The earcup housings are open so they retain air and sound permeability	DESIGN	The earcup housings are completely closed so incoming and outgoing noise is cancelled
Spacious and transparent	SOUND PROPERTIES	Powerful and vibrant
Differentiated stage enables precise localisation of acoustic sources	PRO	Sound insulation prevents undesired acoustic artefacts on the recording track
Mixing Mastering Streaming	PRIMARY USE	Monitoring Recording Live Performance DJing

# WHAT DOES IMPEDANCE MEAN?

Impedance is the measurement of the headphone's resistance to alternating current under certain conditions. If, for example, the headphone has lower impedance, the audio source has to supply less voltage (but more power than with a high-impedance model) for the headphone to be loud enough. The impedance is stated in Ohms ( $\Omega$ ).

## LOW IMPEDANCE (16-80 Ohms)



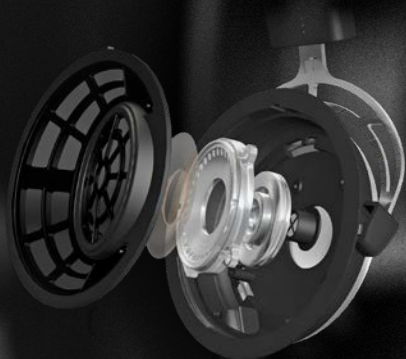
Due to their low voltage requirements, headphones with low impedance are particularly well suited for use with mobile devices such as smartphones and tablets or laptops and computers.

## HIGH IMPEDANCE (250-600 Ohms)



Headphones with high impedance best develop their sound with mixing consoles, amplifiers and other devices that can supply sufficient voltage (but less power).

## TESLA TECHNOLOGY



The supreme discipline at beyerdynamic is known by the name Tesla. Developed in-house, this technology marks a milestone in beyerdynamic's history of innovation and represents a quantum leap in sound quality and audiophile signal reproduction. Tesla headphones sound more precise and transparent. They are also much more efficient, which benefits the sound, especially on low-level playback devices. This enables Tesla headphones to reach a higher volume under the same conditions than most conventional headphones. They also have a wider transmission range and can play back higher sound levels without distortion.

## TECHNICAL DATA IN COMPARISON

	DT SOUND CONVERTER	TESLA SOUND CONVERTER
Magnetic flux density (field strength)	0.6 Tesla	1.2 Tesla
Acoustic material	Non-woven material	Precision fabric
Electromagnetic isolation	No	Yes
Equipped for symmetric connection	No	Yes
Weight	30 g	57 g
Nominal SPL	96 dB	102 dB





## GUIDE

	DT 240 PRO	DT 770 PRO	DT 880 PRO	DT 990 PRO	DT 1770 PRO	DT 1990 PRO
Recording	★★★	★★★★	★★	★	★★★★★	★
Mixing	★	★★	★★★★★	★★★★	★★★★	★★★★★
Mastering	★	★★	★★★★	★★★★	★★★★	★★★★★
Mobility	★★★★★	★★★★	★	★	★★★	★★
Wearing comfort	★★★★	★★★★★	★★★★★	★★★★★	★★★★★	★★★★★
Replaceable parts	★★	★★★★	★★★★	★★★★	★★★★★	★★★★★
Drawstring bag	✓	✓	✓	✓	✗	✗
Hard case	✗	✗	✗	✗	✓	✓
Headphone type	Closed	Closed	Semi-open	Open	Closed	Open
Impedance	34 Ω	32 Ω 80 Ω 250 Ω	250 Ω	250 Ω	250 Ω	250 Ω
Detachable cable	✓	✗	✗	✗	✓	✓
Tesla technology	✗	✗	✗	✗	✓	✓
Frequency response	5 - 35.000 Hz	5 - 35.000 Hz	5 - 35.000 Hz	5 - 35.000 Hz	5 - 40.000 Hz	5 - 40.000 Hz
Nominal SPL*	99 dB	96 dB	96 dB	96 dB	102 dB	102 dB
Weight	196 g	270 g	295 g	250 g	388 g	370 g
Made in Germany	✗	✓	✓	✓	✓	✓

\* 1mW@500Hz / All information as per EN 60 268-7

## DT 240 PRO



The **DT 240 PRO** is the ideal companion for listening to your productions while you're on the go. With its 34 Ohms driver, the mobile studio headphone works clearly and loudly with virtually any device and is very well-suited for producers who frequently travel and expect top sound quality even when outside of their own comfort zone.

## DT 770 PRO



The legendary **DT 770 PRO** is loved, used and cherished worldwide by professional users in every genre. Thanks to the detailed resolution and transparent sound of the DT 770 PRO, the monitor headphone has established itself as the benchmark in many studios around the globe.

## DT 880 PRO



The neutral sound and the extremely high resolution make the **DT 880 PRO** a reliable benchmark headphone for the studio. Its semi-open design gives it a wide stereo image that enables prompt identification of any errors in the mix, a characteristic essential for mixing and mastering.

## DT 990 PRO



The direct sound profile and three-dimensional sound reproduction of the **DT 990 PRO** is second to none anywhere in the world. Its open design enables accurate localisation of acoustic sources and perception of the most subtle acoustic details.



# DT 1770 PRO



The **DT 1770 PRO** combines decades of expertise in headphone production with the latest Tesla driver technology. Spaciousness and excellent resolution together with a precise, punchy bass make this closed headphone the first choice for professional studio use. Optimised contact pressure coupled with the latest high-tech textiles guarantee maximum wearing comfort and ensure a perfect fit during long studio sessions.

# DT 1990 PRO



The combination of an open-back design and the latest Tesla driver technology makes the **DT 1990 PRO** an uncompromising benchmark headphone for mixing and mastering. A natural, exceptionally spatial sound is achieved thanks to the open-back design of the circumaural headphone. This includes brilliant highs, richly detailed mid-ranges and a precise bass. Paired with the best wearing comfort, the DT 1990 PRO is predestined for long mixing and mastering sessions.



**LISTEN  
TO THE  
PRO**

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