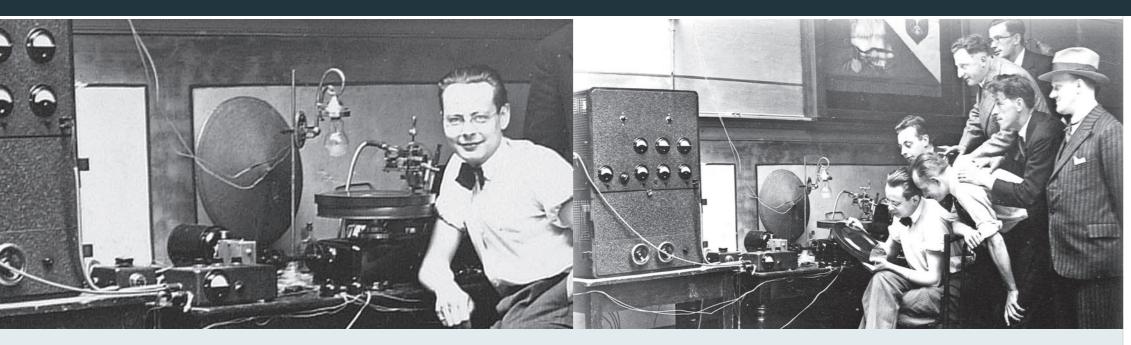


TOURING GEAR - THE BEST LIVE MICROPHONE SERIES WE'VE EVER BUILT.



## BEYERDYNAMIC I HANDMADE IN GERMANY



## PERFECT SOUND CRAFTED BY HAND

Producing true, natural sound has always been of highest priority at beyerdynamic. This goes all the way back to the companies' founder, Eugen Beyer, who was fascinated with the idea of recording sounds as perfectly as possible and then reproducing them just as perfectly. The dynamic microphone he invented in 1939 was a first milestone – and many more followed. Since then, scores of beyerdynamic engineers have continuously invented new technologies to achieve ever clearer and purer sound. The result: microphones developed and handcrafted in Germany, whose sound and quality are legendary throughout the world.





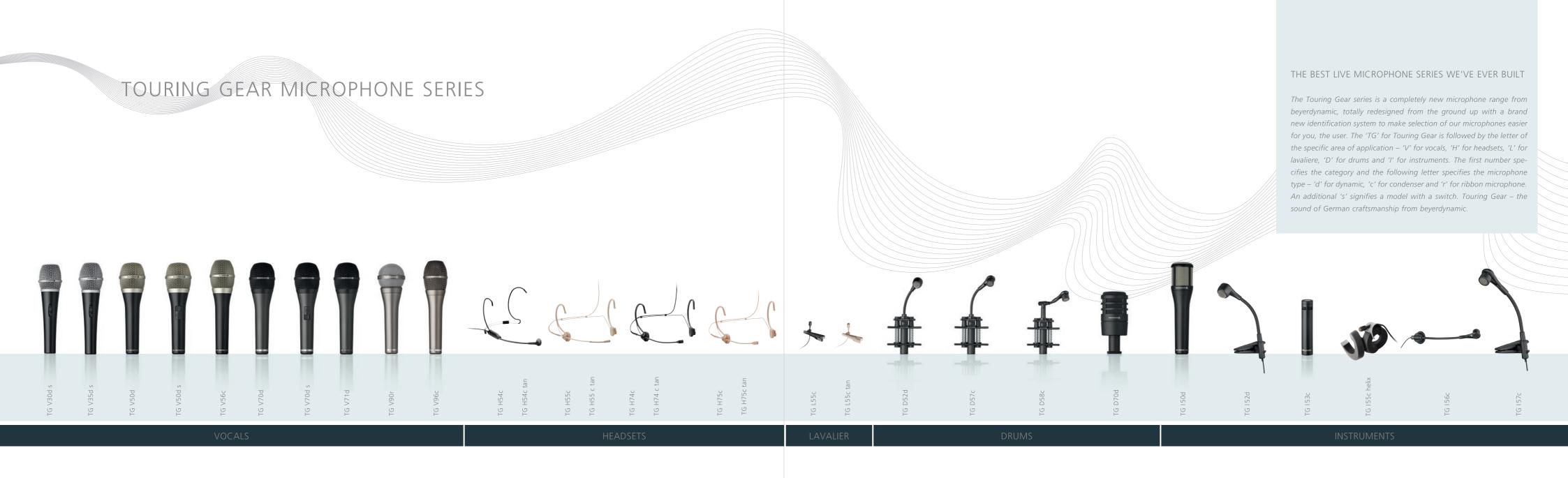


## THE POWER OF THE MICROPHONE

Whether for voices or instruments, whether at concerts, TV performances or in the studio, the microphone is an integral part of the connection between a performer and the audience. Because a microphone does so much more than just transform sound into electrical impulses; it can excite you, make you scream, make you beam, make you cry, send shivers down your spine and touch your soul. A microphone transmits sound, but it can also transmit so much feeling. Yet another reason for beyerdynamic to build the very best microphones.

## CONTENT

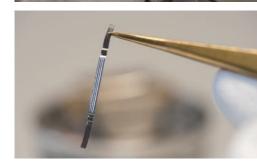
beyerdynamic Handmade in Germany The power of the microphone I Conter Touing Gear Microphone Series Touing Gear Elements of Sound Sound Channelling Technology How micophones work	nt 4	-	
Touing Gear - the four categoires TG 30, TG 50, TG 70, TG 90			
VOCALS I More than an instrument TG V30d I TG V35d s TG V50d I TG V50d s I TG V56c TG V70d I TG V70d s I TG V71d TG V90r TG V96c	12 14 16 18	-	1
HEADSETS I Big sound with room to m TG H54c + tan I TG H55c + tan TG H74c + tan I TG H75c + tan	iove		- 2
LAVALIER I Invisible quality TG L55c I TG L55c tan			2
DRUMS I Feeling the beat TG D52d I TG D57c TG D58c TG D70d			2 2 2
INSTRUMENTS I The power of interplay TG I50d I TG I52d TG I53c I TG I53c helix TG I56c I TG I57c	/		2 2 3













### ELEMENTS OF SOUND

How is one microphone different from another? Some are assembled by a machine and others are individually crafted by hand. Some can just be adapted to suit an application while others are designed specifically for it. Some only transport sound- others utilise special acoustic labyrinths to optimally channel the sound. Some are purely made up of parts while others contain the know-how and precision of one of the most experienced and respected companies in the audio industry. Experience the difference between conventional microphones and beyerdynamic microphones.

The new Touring Gear microphones from beyerdynamic are a series of live microphones that are set to excite performers in studios and on stages all over the world. Rugged in design with phenomenal audio quality, they are the perfect complement to beyerdynamic's legendary M series models, including well-known classics such as the M 88 and M 160, and the personalised M(y)88.



## THE SECRET OF PERFECT TUNING

To achieve that unique "beyer" sound, beyerdynamic has been developing and refining its Sound Channelling Technology (SCT) for decades. beyerdynamic's acoustic experts have created acoustic labyrinths with special geometries that provide optimised sound channelling. They influence the sound and model the polar pattern by using precisely tuned delay lines and attenuation pads. Whether with additional elements, special materials or unique design: every beyerdynamic microphone has its own Sound Channelling Technology to ensure optimal control of the sound waves. The result? Incredible sound quality. Details on which sound-channelling technology is used in each microphone can be found in the product descriptions in the following pages. You will hear and experience the result in every Touring Gear series microphone- that is our promise!





Every beyerdynamic microphone has its own sound channelling technology that is specifically tailored to the design of the diaphragm. For example for the TG V90r ribbon microphone, a special high-tech acoustic fabric is used on the inside of the sophisticated sound labyrinth on the back of the diaphragm. This special geometry provides the optimised sound channelling that contributes to the balanced, natural sound of the TG V90r. Another part of the sound channelling technology of the TG V90r is the newly developed treble resonator, which provides the smooth high-range reproduction typical of ribbon microphones whilst protecting the diaphragm against damage from plosives.

## HOW MICROPHONES WORK





### MICROPHONE TYPES

### CONDENSER MICROPHONE

In a condenser microphone the sound causes the conductive diaphragm condenser microphones but is able to process high/sound/pressure levels/with to vibrate, resulting in voltage fluctuations between the capacitor and the significantly less distortion and reduced crosstalk from other unwanted sound capacitor foil. Because the foil diaphragm of a condenser microphone is extremely light, it can detect even the most gentle of sound signals. As a result, condenser microphones are distinguished by their complex character which features especially fine resolution at high frequencies, a sound often referred levels are required. to as "open" and "elegant". Today condensers can be found in nearly every studio thanks to their high signal quality, although they always require a supply voltage, usually in the form of phantom powering from the microphone amplifier or mixing console.

### DYNAMIC MOVING COIL MICROPHONES

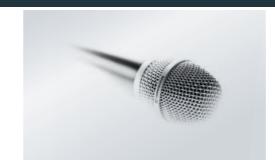
The M19b dynamic microphone, developed by Eugen Beyer in 1939, is based on the principle of induction whereby sound is transformed into electromagnetic voltage impulses. The advantage of a dynamic microphone lies in its rugged design, which allows it to better withstand mechanical stress and makes it conveniently insensitive to footfall and handling noise. The diaphragm of a dynamic microphone is heavier when compared to ribbon and

tion and a powerful sound. Dynamic moving/coil microphones do not require a supply voltage and are best suited to live performances or where high SPL

### RIBBON MICROPHONES

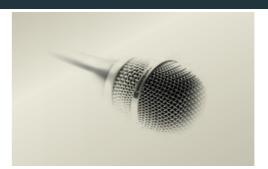
Although ribbon microphones are technically dynamic models, their sound characteristics resemble those of a condenser microphone due to their exceptionally light aluminium diaphragms. They are distinguished by their extremely clean transient behaviour while typically sounding warmer and softer than condenser models. They are particular popular for their natural, faithful midrange reproduction and a high-range reproduction that is significantly softer and smoother than condenser microphones. Therefore they are often used when highly complex sounds are required to be reproduced, whereas a condenser microphone might sound too "bright" or "analytical."

## TOURING GEAR – THE FOUR CATEGORIES





world of beyerdynamic live microphones. An entry sound quality, the TG 50 series is ideal for all level series that can produce big beyordynamic sound on a small budget.



TG 50

The TG 30 series is the perfect introduction to the With aesthetically pleasing looks and outstanding users. The series covers all applications relating to drums, to headsets and lavaliere microphones. TG 50 is the standard Touring Gear series with a truly premium performance.



TG 70

stage performing – from vocals, instruments and an even better sound. Every detail counts - both sound that is second to none. High-end- equipduring development and during manufacturing.



TG 90

The models of the TG 70 series go one step further Designed to be the very best in the Touring Gear with no compromises; even better technical character ange, the FG 90 series is manufactured to the racteristics and even higher quality materials for absolute highest quality standards and delivers a ment handcrafted in Germany for the user who is The result first-class microphones - handcrafted looking for the "non plus ultra". The TG 90 series provides an outstanding performance every time and can handle even the most demanding requirements on the stage.

# VOCALS



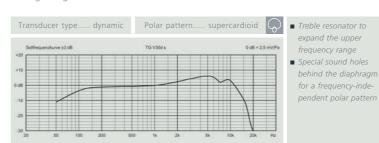




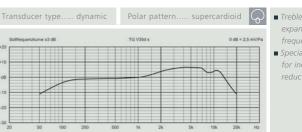
## MORE THAN AN INSTRUMENT

The human voice is like no other instrument. Every artist's voice is individual and unique – and each performance is one-of-a-kind. To turn these transitory moments into a special experience for the audience, you need a microphone that is optimally suited to the artist's voice. Time for the Touring Gear vocal microphones..

The TG V30d s is the perfect introduction into the world of beyerdynamic for both singers and event hosts. This dynamic microphone with a supercardioid polar pattern and especially natural sound is perfect for speaking events, karaoke and singing in the rehearsal room and on the stage. The TG V30d s lets you achieve solid results even without a lot of technical know-how, thanks to its high output level even in combination with simple pre-amplifiers. It features a noiseless on/off switch and includes an XLR cable, clamp and storage bag.



The reliable and rugged all-around TG V35d s model is a dynamic vocal microphone that is perfect for beginners. Its natural sound that is typical for beyerdynamic and its supercardoid polar pattern with high feedback rejection are valued by vocalists, DJs and speakers in rehearsal rooms and on the stage. Thanks to the high output level, the TG V35d s only needs a simple pre-amplifier in order to deliver impressive results. It features a noiseless on/ off switch and includes an XLR cable, clamp and storage bag.





## TG V50d I TG V50d s





The TG V50d is also available with a switch as the TG V50d s. and doesn't emit any





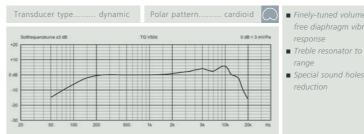
### THE NEW STANDARD FOR THE STAGE

An exceptionally powerful sound that never comes across as obtrusive – that's the basis of the TG V50d and the TG V50d s. The combination of sleek design and rugged construction that is perfect for the stage, this exceptional sound makes the TG V50d a reliable companion that you will never want to be without. That is the definition of the new standard for the stage.



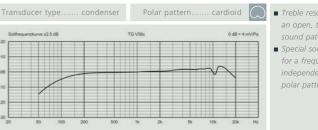


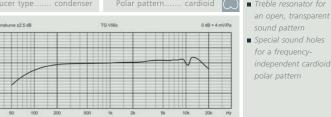
Whether in the rehearsal room or on a stage of any size, the dynamic TG V50d is an excellently tuned live vocal microphone. Especially notable are its balanced sound that is both powerful and natural, its very wide pick-up range thanks to its cardioid polar pattern, and its high feedback rejection; the whole product range is also outstanding in its handling, ruggedness, look and touch. The readiness of the TG V50d is also impressive – plug it in, activate the high-pass filter and it's ready. It is advantages like these that will win it many fans for use in lead and backing vocals of all music genres as well as by professional rental companies and sound technicians.



- Finely-tuned volume behind the diaphragm for free diaphragm vibrations and improved bass
- Treble resonator to expand the upper frequency
- Special sound holes for maximum feedback

The TG V56c offers many possibilities for vocals on stages and in rehearsal rooms. With the fine resolution typical of condenser microphones, it is suitable for a huge variety of requirements. It covers an extremely wide pick-up range due to its cardioid polar pattern, thereby giving flexibility for a wide range of vocal types and music genres. The subtle treble boost of the TG V56c ensures a very transparent signal and the high-quality decoupling of the capsule minimises handling noises.





## TG V70d I TG V70d s



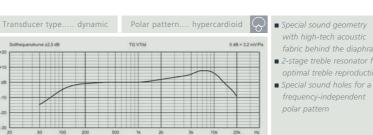


Together with the magnet, the very light kedly large dimensions ransmits even the finest nuances of the voice – and at the same time provides excellent damping of crosstalk from other sound

# TG V71d

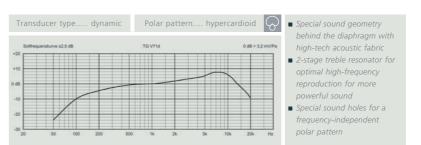


Whether it's the feel or the sound, the dynamic TG V70d live vocal microphone with a hypercardioid polar pattern is sure to impress both on the stage and behind the mixing console – for the singer, the audience and the rental company. The reasons: the powerful, extremely well resolved sound, the excellent feedback reduction and a marked proximity effect with saturated bass to support less powerful voices. Even without help from the tone control of the mixing console, it delivers an impressively rounded and exceptionally powerful sound. In other words: you only have to plug it in and activate the high-pass filter and you're done. Additional to its great looks, its handling and well-thought-out housing construction with a progressively damped capsule suspension for low handling noises will make it the standard for stage professionals. Available with or without switch.



- with high-tech acoustic fabric behind the diaphragm ■ 2-stage treble resonator for
- optimal treble reproduction ■ Special sound holes for a frequency-independent polar pattern

The dynamic vocal microphone TG V71d with a hypercardioid polar pattern was created for loud stages. Optimised for extremely close miking, it offers a perfectly resolved and powerful sound, which allows vocalists to stand out even on loud stages. As soon as it is plugged in and the high-pass filter is activated, it delivers a fascinatingly rounded and powerful sound – even without excessive tone control from the mixing console. Both the housing and the new, progressively damped capsule suspension are well-suited for the demands of the stage: handling noises are no problem with the TG V71d. Sound, ruggedness, design, rear-attenuation, hum-buck coil – a real professional on loud stages.











# TG V90r



the sound typical of a ribbon microphone while



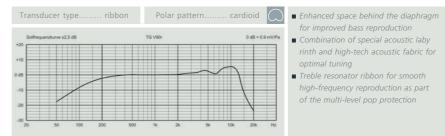


### ALWAYS SOMETHING SPECIAL

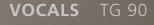
Ribbon microphones have always been beyerdynamic's speciality; a tradition which beyerdynamic continues on many fronts and with the TG V90r. The smooth, clear and unbelievably natural sound, the coherent design and its rugged construction – all are unique characteristics that only the TG V90r can



As the only ribbon microphone in the world that can stand out even with live vocals on loud stages, the TG V90r is a highlight of the Touring Gear series. This new interpretation of the legendary M 500 combines the incomparably clear and always unobtrusive sound of a ribbon microphone with the high feedback rejection and ruggedness required for use on tour today. This is made possible by a new system design that achieves a cardioid polar pattern, which is exceptional for a ribbon microphone, combining high output levels with a construction suitable for the stage. The clear, natural sound from this ribbon microphone with a cardioid polar pattern is due to the ultra-light, approx. 2 micrometres thin pure aluminium ribbon that provides exceptional impulse fidelity and outstanding transient behaviour. No other microphone highlights the individuality of a voice like the TG V90r – one reason why it is so loved by vocalists who want something special. In addition to the high-quality craftsmanship, the TG V90r is also impressive with its elegant design and special surface treatment.



- for improved bass reproduction ■ Combination of special acoustic laby rinth and high-tech acoustic fabric for
- optimal tuning ■ Treble resonator ribbon for smooth high-frequency reproduction as part of the multi-level pop protection





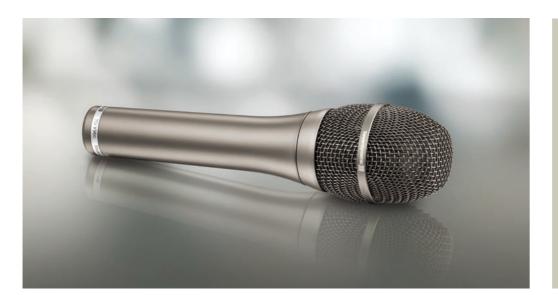






sintered, acoustically



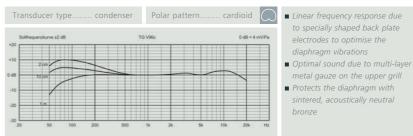


## A STANDARD FOR MEASUREMENT

Every comparison needs a reference – data, specifications, properties that can be measured against. For the vocal microphones of the Touring Gear series, the TG 96c real condenser microphone – the benchmark for live vocals assumes this role.

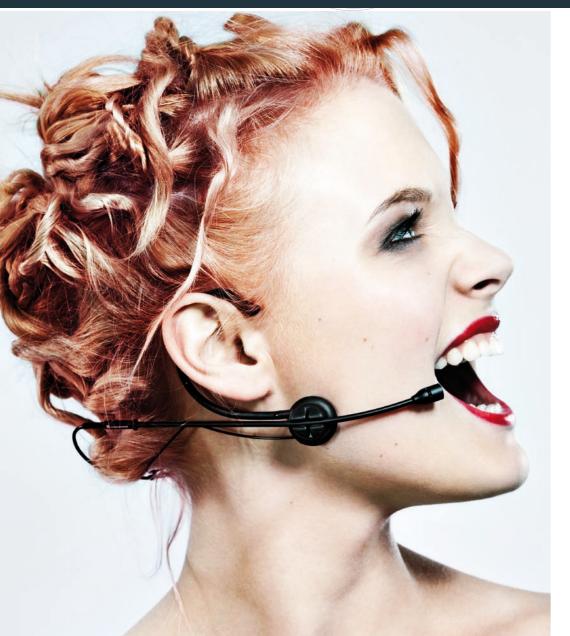


The strength of the TG V96c lies in its absolutely faithful reproduction - even of the finest nuances and on stage every detail counts. The microphone's exterior stands out for its sophisticated design, with a special coated surface that is pleasant to the touch. But it is what's inside that makes the TG V96c into a topclass microphone and makes it stand out with vocalists, professional rental companies and sound technicians: this real condenser microphone shines with a captivatingly natural sound. The subtle treble boost provides an open, finely detailed and unobtrusive sound pattern. Further advantages: the TG V96c can be operated with 11 volt phantom powering without affecting the performance. The 5-layer pop protection made from metal gauze of differing mesh sizes and a sintered plate optimally suppresses plosives while significantly improving the rear-attenuation. The TG V96c is rugged enough for the stage and is supplied with an individual frequency response curve print out. Handcrafted in Germany.



- to specially shaped back plate electrodes to optimise the diaphragm vibrations
- Optimal sound due to multi-layer metal gauze on the upper grill
- Protects the diaphragm with sintered, acoustically neutral bronze

# HEADSETS



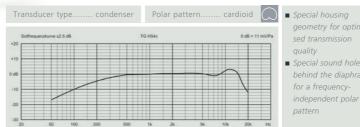


## BIG SOUND WITH ROOM TO MOVE

Many situations on stage require both optimal sound and maximum freedom of movement. These are situations where the advantages of the Touring Gear headsets really prove themselves. They let artists take full advantage of the entire space offered by the stage, both with their voice and with their



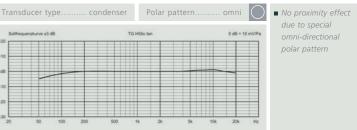
Easy handling, natural sound and a good fit – this perfectly sums up the characteristics of the TG H54c headset microphone with a cardioid polar pattern. That is why it is so popular on theatre and musical stages, especially with keyboardists and drummers who are also vocalists. But the TG H54c also cuts a fine figure off stage: like all headsets of the beyerdynamic Touring Gear series, it can be safely and compactly transported in the case supplied with delivery – thanks to collapsible ear loops and a removable microphone boom.



geometry for optimised transmission quality

■ Special sound holes behind the diaphragm for a frequencyindependent polar

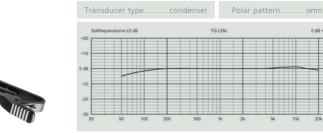
Both discreet and noticeable at the same time – with the TG H55c headset microphone, a noticeably balanced sound meets a discreet exterior. This water and sweat-proof microphone with omni-directional polar pattern can be mounted on either sides and can be easily positioned thanks to the microphone boom that can be varied in length and position, advantages which are especially advantageous in musical, theatre and sporting applications. Available in both black and tan.

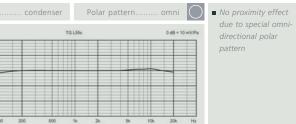


## INVISIBLE QUALITY

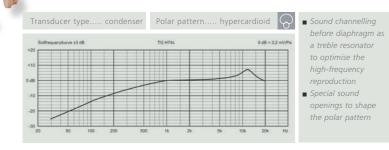
A clip-on microphone should be heard, not seen – and for good reason: a lavalier microphone should offer the perfect combination of maximum

The TG L55c clip-on microphone is the first choice for television and film, as well as for presentations and theatre applications. The omni-directional polar pattern of this acoustically balanced lavalier microphone allows a lot of flexibility in positioning – the TG L55c can be worn on a lapel, and it can also be disguised on the face with makeup. It is also water and sweat-proof, and is exceedingly insensitive to pop noises. Available in both black and tan.



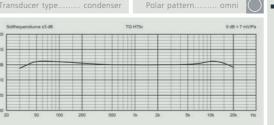


The TG H74c, designed for wireless operation, offers plenty of freedom of movement. With a supercardoid polar pattern and compensated proximity n effect, it is particularly suited for musical and theatre applications. Highly adjustable, exceptionally discreet, mountable on both sides and impressively small and rugged – what else could you want from a headset microphone? Available in both black and tan.





The TG H75c headset microphone is exceptionally rugged in several respects: it has no problem with sweat, can be flexibly positioned and is stunningly insensitive to pop noises thanks to its omni-directional polar pattern. Whether for moderators, or hosts, in shows, at sporting events or on the stage, you will be impressed by the balanced sound of the TG H75c for wireless systems. Available in both black and tan.

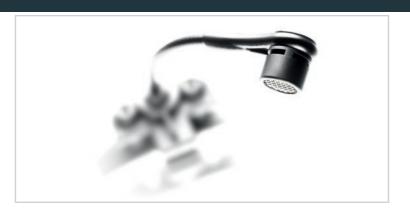


before diaphragm as a treble resonator to optimise thehigh-frequency reproduction



## DRUMS





## FEELING THE BEAT

Drums are more than just the beat in every piece of music. They are just as much a central component as they are a side note, as much a highlight as they are a detail. Drum microphones therefore have to sound clear, accentuated and palpable – they must transmit the natural sound of the drums instead of just replicating it. That is what the Touring Gear drum series is for: they can operate at high sound pressure levels, have excellent impulse performance and maximum feedback rejection.



# TG D57c

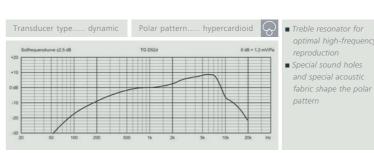


The patented clip-on mechanism with a horizontal swivel joint ensures that the microphone can be quickly, easily and securely attached and positioned relative to the sound source.

### TG D52

Those who prefer dynamic microphones for picking up sound from toms choose the TG D52d. The clip-on microphone can be mounted in a flash and optimally positioned thanks to the gooseneck. The TG D52d provides powerful sound with notably good channel separation; crosstalk from nearby instruments is reduced. Even extremely close miking is possible because the TG D52d can operate at enormously high-pressure levels

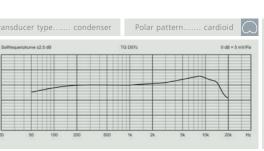






### 1G D5

Whether with standing toms, snare drums or percussion instruments - with its patented clip-on mount and integrated pre-amplifier, the TG D57c condenser microphone is mounted and ready in a flash. The expanded frequency range ensures faithful reproduction of all drum types and the 72 mm long flexible gooseneck allows it to be optimally positioned relative to the sound source. An elastic capsule suspension on the capsule housing protects against damage from drumstick strikes. The new electronics provide increased level accuracy and guarantee a very high maximum sound pressure level – even with phantom powering below 44 V.



- Optimally positioned treble resonator for optimised high-frequency reproduction
- 2nd treble resonator within the system
   Special sound holes
- Special sound holes for a frequencyindependent polar pattern

## TG D58c



With its flexible gooseneck, the Touring Gear Drum microphone can be perfectly aligned and retain the set position.



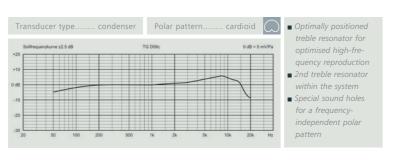




Special sound geometry behind the diaphragm with high-tech acoustic Expanded resonance space for exceptionally powerful sound.

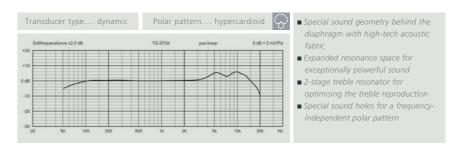
The practical advantages of the patented microphone clamp on the TG D58c condenser microphone are immediately apparent whether when using with rack toms, snare drums or percussion instruments: the microphone can be mounted and positioned quickly and securely. The balanced frequency response also makes it immediately ready for use. Pre-amplifiers are a thing of the past due to the integrated pre-amplifiers with downward-facing standard XLR connections. Its ability to operate at high levels compared to the previous model Opus 88 should also be mentioned, as is the newly designed, low-resonance housing, the elastic capsule suspension, the improved signal-to-noise ratio and technical values that remain valid even with phantom powering below 44 volts.





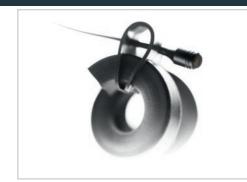


The TG D70d dynamic large-diaphragm microphone is exceptionally reliable for the transmission of sound from low-frequency instruments – the best friend of every bass drum, djembe and bass amplifier. Despite its bulky appearance, it can be easily positioned in the resonant head, even in bass drums with very tiny holes. The mass-reduced special membrane delivers exceptional impulse fidelity and the hyper-cardioid polar pattern ensures excellent feedback reduction. For each switch a specially equalised frequency response curve can be set, which delivers brilliant sound even without making complicated settings on the mixing console; or a linear frequency response curve can be set, which transmits the natural bass drum sound which can then be acoustically tuned via the mixing console.



# INSTRUMENTS







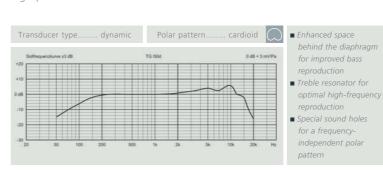
## THE POWER OF INTERPLAY

Great live concerts rely on perfect orchestration. A skilful interplay of voices and instruments can create a truly unforgettable experience for all those involved. For such a moment, every instrument needs the optimal sound – enter the beyerdynamic Touring Gear instrument series.

# TG I 50d

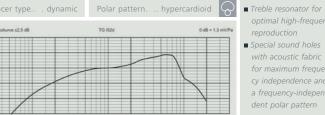


The perfect balance between rounded, powerful sound and excellent suitability for the stage make the well-designed TG I50d a very versatile microphone. Whether with electric guitar or bass amplifiers, snare drums or brass instruments, this dynamic instrumental microphone demonstrates notable feedback reduction even on the loudest rock-and-roll stages. Extreme EQ settings at the mixing console are not necessary with the TG I50d: plug it in, activate the high-pass filter if needed and then smile.



The powerful sound of the dynamic clip microphone TG 152d is specially designed for brass instruments such as trumpets and trombones. It functions best with high sound levels and the hypercardioid polar pattern delivers extremely good channel separation and maximum feedback rejection. The practical rubberised clip-on mount also ensures a secure hold, protects the instrument and provides very good isolation from physical vibration. The flexible gooseneck allows it to be optimally positioned relative to the sound source.





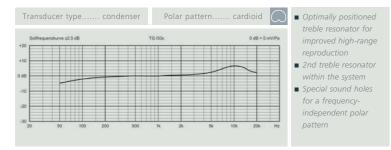
optimal high-frequency reproduction ■ Special sound holes with acoustic fabric for maximum frequency independence and



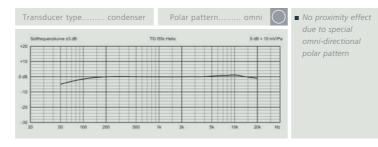
# TG I 55c helix



The very wide frequency response of the TG I53c opens up a variety of possible applications. From hi-hats and overheads to percussion, string and brass instruments and even choir singing – this condenser microphone with its subtle treble boost and excellent detail reproduction really excels. Because of its high sensitivity, it is also suitable for longer microphone placement distances, for example for large sound sources with complex radiation patterns. Further advantages: it is both light and rugged due to the carbon fibre reinforced housing.



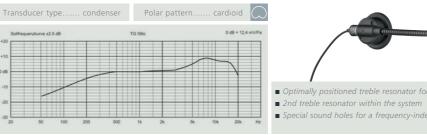
The versatile TG 155c helix condenser microphone really demonstrates its strengths when used in combination with the violin, viola, recorder, dulcimer, fretted stringed instruments or zither, cello, double bass and many other instruments. It delivers extremely natural, true sound reproduction without colouration due to the proximity effect. The omni-directional polar pattern ensures even sound – regardless of how the capsule is positioned. A further advantage is the unique, innovate clamp that enables quick and easy mounting – without drilling holes and without scratching the instrument.







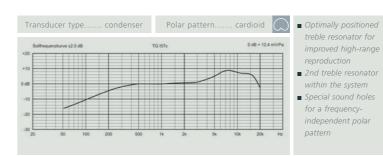
The TG I56c condenser microphone, whose frequency response is specially designed for live performances with accordions, bandoneons and zithers, is more than just practical. The special clamp enables simple mounting and easy transport: the microphone is simply removed and the clamp remains on the instrument. The cardioid polar pattern of the TG I56c also ensures high feedback rejection and the microphone capsule is isolated from vibration on the gooseneck preventing unwanted mechanical noise.





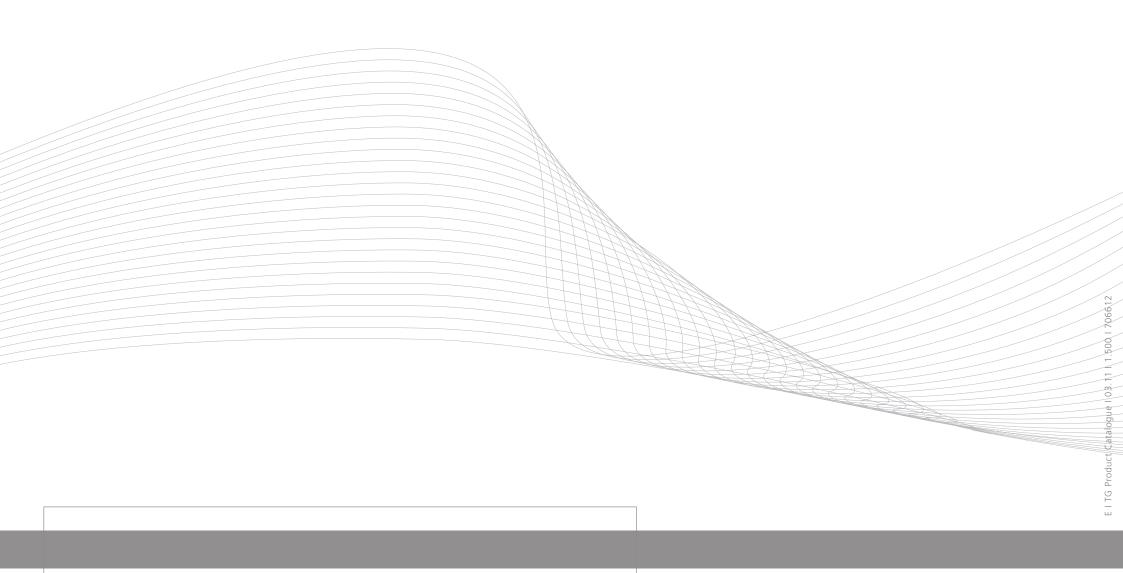
■ Special sound holes for a frequency-independent polar pattern

To pick up sound from brass instruments such as saxophones, trumpets, trombones or horns, a microphone really has to function at a high level, a requirement where the TG I57c premium clip-on condenser microphone succeeds with flying colours. It can operate at extremely high maximum sound levels and reliably suppresses unwanted noise as a result of its cardioid polar pattern. The easy to mount clamp with gooseneck for optimal positioning protects the instrument's surface and provides a reliable hold.









beyerdynamic GmbH & Co. KG
Theresienstraße 8
74072 Heilbronn – Germany
Phone +49 (0) 71 31 / 6 17 - 4 40
Fax +49 (0) 71 31 / 6 17 - 2 99

proaudio@beyerdynamic.de proaudio@beyerdynamic.com www.beyerdynamic.de/TouringGear www.beyerdynamic.com/TouringGear