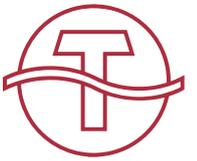


SCHOEPS
Mikrofone



SOLUTIONS
by SCHOEPS Mikrofone



CONCERT p. 4



FILM p. 6



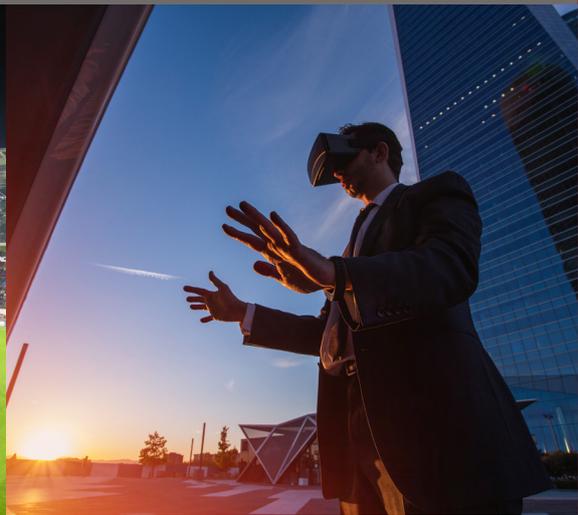
STUDIO p. 8



CONFERENCE p. 10



SPORTS p. 12



SURROUND & 3D p. 14

COLETTE p. 16

CCM p. 18

CMIT p. 19



CONCERT

ELEGANT MICROPHONE PLACEMENT IN SCHOEPS STYLE

On stage is where we feel at home. Visually, the focus should remain on the artist, not the microphone, while maintaining the highest level of sound quality. This is where the SCHOEPS Colette and CCM series, in combination with their elegant microphone stand options, form the perfect concert companion. Their sound, as well as their aesthetics, have forged a standard that is loved and respected by artists and audiences alike.

The **MK 4** cardioid capsule fulfills all important criteria for a support microphone in a live environment. Its linear frequency response in all directions enables the source sound to be captured as transparently as possible, while its stable pickup pattern – independent of frequency – ensures a natural representation of the room's acoustics. The MK 4 has earned a reputation as a problem-solver because its directional pattern is so consistent across the frequency range; off-axis sound is picked up at reduced level and without coloration.

Over time, a number of alternatives to the traditional cardioid pattern have emerged for different scenarios, depending on the sonic priorities of the sound engineer. The **MK 21**, for example, is a subcardioid capsule that captures more sound from the back and sides, and sounds slightly softer and warmer – at low frequencies its response is similar to that of an omnidirectional capsule. Subcardioid capsules are especially popular as stereo pairs, since (in contrast to omnis) their directionality enables them to distinguish between left and right signals, while still capturing the excellent stereo field of traditional A/B microphone placement. The **MK 22** „open cardioid“ capsule resides somewhere between the MK 4 and the MK 21, which makes it a perfect support microphone for soloists, and a beautiful alternative to the MK 4.

Even the slightly more directional **MK 41** supercardioid is no stranger to the stage: it is especially popular in opera productions, where it can be suspended from the ceiling or attached to our **BLC** mounting plate for stunning sonic results.

On stage, our microphones are usually mounted on our elegant **RC** active extension tubes. A full setup for a classic support or soloist microphone would for example consist of an **MK 4** cardioid capsule, paired with an **RC 1200** extension tube, **STR 350** support rod and **CMC 6** amplifier.

As an alternative, however, a microphone is often suspended from the ceiling in order to place it unobtrusively at exactly the right location. We offer a number of accessories to facilitate ceiling mounting, for example the **S 170 L** gooseneck, which can be used to suspend a tiny **CCM** microphone with ease and flexibility or the **HC** miniature cable hanger.

SCHOEPS offers a variety of specialized products dedicated to stereophony, surround sound and 3D audio, as well as competent technical support on the topic. All manner of possible two-channel recording techniques, ranging from **XY**, through **ORTF**, to **AB**, can be realised in a number of variations with **SCHOEPS** products. The compact **MSTC 64** is an **ORTF** microphone, and is our most popular stereo microphone on live stages.

For 5.1 surround in concert halls, our most popular solutions are the **OCT surround** and **Double MS** sets, as well as a **Decca tree** array consisting of individual **CCM** microphones. Our **CCM** microphones are also ideally suited for 3D audio, e.g. either using **OCT-3D** placement or as an array of omnis.

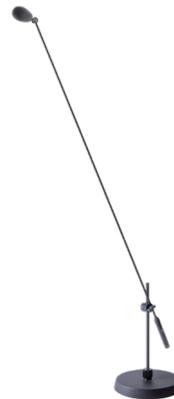
MSTC 64 U

No. 148003



RC SET „SINGER“

No. 133801



RC SET „VIOLIN“

No. 133802



RC

No. 13350_





FILM

UNCOMPROMISING QUALITY FOR PROFESSIONALS

SCHOEPS microphones have been present on film sets for a long time. For the demanding location sound engineer, pristine sonic quality at all incident angles, as well as high directionality and shielding from RF interference are all essential on set. Additionally, microphones mounted on booms should be small and light, as well as elastically isolated from vibrations and protected from wind.

Our line of SCHOEPS supercardioid and shotgun microphones have established themselves as an international standard for location sound, and they can always be found on the set of large film productions, be it in Hollywood, London or Berlin.

Our **CMIT 5** and **MiniCMIT** shotgun microphones, boasting high directionality and exceptionally natural off-axis sound pickup, are truly astounding outliers in their field. While these microphones do strongly reject off-axis sound, the attenuation rises quite steadily – with no coloration or sudden drops in sound level – meaning dialog recorded from the side is still usable. The digital **SuperCMIT** offers an even higher diffuse sound suppression. It has become a fixture in the industry for difficult shooting situations.

Our **MK 41** and **CCM 41** supercardioids are often used for interior shots due to their high directivity and the exceptional constancy of their directional pattern across the frequency range. This effectively provides a clean vocal sound in addition to natural room sound. Because of this, the CCM/MK 41 capsules are easily superior to any shotgun microphone for interior scenes – although many people don't know this. It's a real insider tip.

The CCM 41 supercardioid is a true master of the understatement. Taking up just 46 mm in length, it is often the only microphone that works with particularly difficult camera angles.

Together with our miniature elastic suspension **MINIX**, and the portable windshield **B 5 D** – designed to block unwanted noise even with fast boom movements – the CCM 41 is the smallest professional boom microphone on the market today.

Of course, with work on set being particularly demanding, a number of technical resources and accessories are needed that are specifically trimmed to the rough and hectic workflow of a film production. In addition to microphones, this includes filters, mounts and windshields that are all optimally designed for their respective microphone type. Nowadays, recordists often work with wireless booms on set – at SCHOEPS we have developed the **CMR** as the perfect amplifier for this specific application.

For on-set sound, protection from unwanted RF interference is absolutely crucial. This is why we have developed the “SCHOEPS RFI Shield”, our own strict standard that successfully suppresses RF influence. We continually measure and compare interference levels among all currently operating transmitters.

SCHOEPS also offers professional solutions for MS recording. Our **CCM 8** capsule – with a figure-eight pickup pattern and unrivalled studio quality – pairs well with our CMIT 5 and MiniCMIT microphones, as well as with our CCM 41, together in the same windshield. For **Double MS**, a mobile surround sound solution for documentaries and ambience recordings, a variety of complete setups are available, using just three microphones with a mount and windshield.

MiniCMIT

No. 140103



CMIT 5

No. 140101



SuperCMIT

No. 140301



CCM 41

No. 121017





STUDIO

TRANSPARENT SCHOEPS SOUND

Besides delivering a transparent sound, versatility and flexibility are key characteristics for any microphone in a studio environment. For this reason, you will mainly find microphones from our modular **Colette series in this section, as well as our studio microphone **V4**. SCHOEPS products have established themselves in particular for recording acoustic instruments. Our small-diaphragm condensers are especially renowned for their sonic characteristics when recording acoustic guitars, vocals, or as drum overheads.**

Our Colette-series **stereo sets** are another favorite in the studio - available in omni, cardioid, open cardioid, wide cardioid, supercardioid, figure-eight, or as a switchable capsule.

SCHOEPS **MK capsules** are popular for room recordings of acoustic instruments, since, in contrast to many other microphones, there is no coloration of the diffuse sound field (i.e. reflections and reverb). Especially in cases where the microphone is not placed in the immediate vicinity of the instrument, the acoustic characteristics of the room tend to have a large influence on the final sound. Of course, this means that a microphone in this case must sound good across its entire pickup pattern, not just from the front. Specifically, a microphone can be called transparent and free of colorations if its frequency response is linear in all directions – this goal is astonishingly difficult to achieve, and a unique characteristic of SCHOEPS microphone capsules.

The **V4** is an exceptional microphone for use in the studio. It is an homage to a classic SCHOEPS microphone of the 50's – a small diaphragm condenser with a bevelled ring, that combines the best of both small and large diaphragm condenser microphones.

STEREO SET

No. 13900_



V4 USM SET

No. 142103



MK 4

No. 131015



MK 22

No. 131007



CMC 6

No. 132005



PR 120

No. 170601





CONFERENCE

FOR HIGHEST ELEGANCE AND SPEECH INTELLIGIBILITY

SCHOEPS microphones are popular for conferences, since their high, frequency-independent directionality provides outstanding protection against undesirable noises and feedback loops, as well as yielding excellent sound and intelligibility. While dry sound and elegant, unobtrusive aesthetics are important, conference settings place additional demands on PA systems – such as rejection of RF interference and mechanical decoupling from vibrations.

A good microphone by itself is not enough; for great results, all accessories need to be optimized for the specific use case. This is especially true for microphones mounted on conference tables, speaker's podiums, or for television newscasting.

Our broad spectrum of both active and passive microphone stands and table mounts offer custom-tailored solutions for a wide range of uses. For use on stage, in addition to our classic **RC** tubes, SCHOEPS offers a range of fully-integrated microphone stands such as the **STV** and **STA** (e.g. for awards ceremonies).

For podiums or conference tables, the best fully-integrated microphone solution comes in the form of a long, rigid extension tube, with an optional ball joint or gooseneck mounted on the end for fine adjustments. Aesthetically, this is considerably more elegant and discreet than using just a gooseneck by itself. A few popular products in this category are our **RS** and **SRS** goosenecks, as well as our **RLG** extension tube.

For tabletop mounting, our free-standing, integrated table stands **TR KC** and **TSR** are particularly popular; however, our modular combinations of **RL** and **RC** tubes and goosenecks, in combination with our table stand **T 5** are perfectly suited for the task.

Our compact **CCM microphones** – also available in our “U” variant with hardwired cable – are excellent for tabletop applications due to their small size and low sensitivity to RF interference, e.g. from mobile phones. They are frequently used in conjunction with our **TC** miniature table stand.

TR KC
No. 133518



MK 4
No. 131015



TSR L
No. 123514



CCM 4
No. 121015



B 5 D
No. 170108



B 1 D
No. 170102





SPORTS

QUALITY AS IN THE CONCERT HALL

Over the years, SCHOEPS has been and continues to be partner of several large sports events. Sports are a niche of sound recording that perhaps places the highest demands on the recording equipment. Here, microphones are required to give their all: they need to have the ability to accurately reproduce a complex, non-uniform sonic environment; be deployable at the blink of an eye; be easy to handle; be robust enough to reliably withstand all manner of wind, weather and harsh conditions - all on top of delivering wonderful sound at all times. In addition, they should be as discrete as possible, without covering up any of the event itself, or the advertising banners. It is the combination of these factors that makes sports coverage such an interesting field – for organisers, engineers, service providers and manufacturers alike. Recently, SCHOEPS has made some breakthroughs in microphones setups that have significantly contributed to improving the audio quality of sports coverage.

The most important signal in sports coverage is often the commentary track. Good intelligibility of spoken commentary can only be achieved with the use of a specialized, high-quality speech microphone with a frequency-independent pickup pattern. SCHOEPS offers a solution to this specific need with the **HSC 4VP** headset for use inside a broadcast booth, and the **HSC 4VXP** for commentary directly in the stadium itself.

The atmosphere at a sporting event is generally recorded in stereo, surround, or 3D audio, in order to capture the ambience in a way that is convincing and immersive to the listener. Here, SCHOEPS offers their tried and true ORTF sets; these are available as fully-assembled plug & play solutions, and are put to use regularly at major sporting events. “**ORTF Stereo**” is well-suited for two-channel stereo, while “**ORTF Surround**” and “**ORTF-3D**” are geared toward 5.1 surround sound and 3D audio respectively.

All of these systems can be used in conjunction with multicore cables and suitable wind and rain shields – some with integrated heating elements – for easy and reliable deployment. Our credo is to deliver the highest possible sound quality with the greatest ease of use.

Often, for sports coverage, a number of supporting signals are recorded with shotgun microphones. For this application, we recommend the **SuperCMIT**, our digital shotgun microphone, as it provides the highest directionality without compromising sound quality. Our ultra-compact **MiniCMIT** with built in low-cut filter, paired with a small windshield, is also well-suited for the job.

ORTF STEREO OUTDOOR SET

No. 174201



ORTF SURROUND OUTDOOR SET

No. 175204



MiniCMIT MONO WINDSHIELD SET

No. 178003



HSC 4VP

No. 149002





Surround & 3D

ON THE WAY TO THE PERFECT SPATIAL SOUND

For many years SCHOEPS has been on the forefront of developing and realising techniques for Surround and 3D-Audio. Applications also include sound for 360°-videos and VR.

We offer microphone arrangements for almost every available surround recording technique. Many surround microphone arrangements can be assembled with our standard microphones. There is essentially an infinite variety of ways to design a surround microphone arrangement.

Special accessories then allow for optimal usage of the microphones, which is essential in practice. SCHOEPS offers in-depth, individual advice on surround sound and 3D recording, in person as well as through videos and application descriptions.

For recording music in 5.1 Surround using a stereophonic approach, main microphone techniques with omnis and cardioids are recommended, e.g. [Decca Tree](#), Williams, [OCT-Surround](#), or others created with the "[Image Assistant](#)". If a format with height channels like 9.1 or 5.1.4 is aimed at, these techniques can be amended by adding microphones for the height channels, for example as in the [OCT-3D](#) setup.

The [Double MS](#) technique is optimally suitable for film and music recording, as it is very flexible and small and can be postprocessed easily.

The dedicated solution for recording ambiances for film or sport events are the already-popular setups of the SCHOEPS ORTF series. These techniques achieve a beautiful, open spatial image through optimal signal separation, while maintaining the smallest form factor possible. **ORTF Surround** for 5.1 Surround as well as **ORTF-3D** for 3D-Audio are also available in a windshield and with multicore cables, as a Plug&Play setup. ORTF-3D has already proved to be ideal as the main microphone in recordings for VR and 360°-videos.

You will find many further information on our website, youtube channel and in our articles.

**DOUBLE MS WINDSHIELD SET
CYCLONE**

No. 175405



OCT SURROUND

No. 129004



ORTF SURROUND OUTDOOR SET

No. 175204



ORTF-3D OUTDOOR SET

No. 176201



OVERVIEW COLETTE

Microphones from our modular Colette series are comprised of a microphone capsule screwed onto an amplification unit. Any capsule can be combined with any amplifier.

Active accessories can be inserted between capsule and amplifier if desired. The RC active extension tube in particular graces many high-profile events with its stylish appearance. Due to its modular nature, the Colette system offers a large variety of options, for a wide range of use cases.

Since its introduction more than forty years ago, the Colette modular system has proved itself many times over, and is constantly being updated and expanded. Today's components are made using state-of-the-art electronics and materials.

SCHOEPS is dedicated to maintaining the Colette series, providing existing module owners an unending series of possibilities with future products.

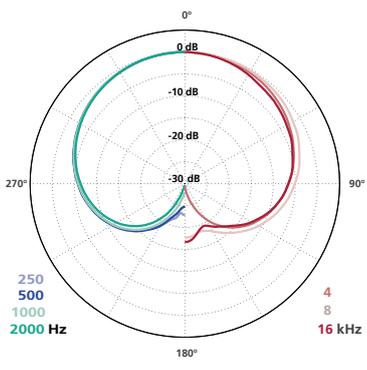
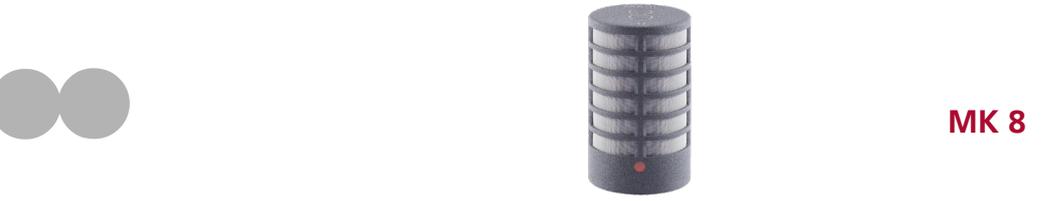
SCHOEPS generally pursues a customer-centric product policy that relies on the reliability and sustainability of the brand and does not unnecessarily force customers to checkout twice.

Every condenser microphone is a combination of at least two components: a capsule and an amplifier. The capsule houses the microphone diaphragm; it is purely a mechanical transducer without any electronic components, converting sound waves to an electric signal. The capsule is the defining element of the microphone in terms of pickup pattern and sonic characteristics. This means that the frequency response of the microphone capsule is determined solely by its mechanical properties – no electronic filtering takes place.

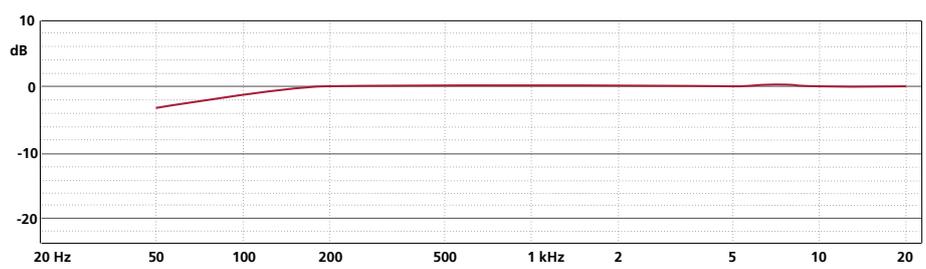
While the capsule is responsible for the initial signal, it is the amplifier circuit that supplies the polarizing voltage for the capsule, and renders the signal usable by converting it to a low impedance signal and balancing it. In addition, the amplifier is responsible for suppressing RF interference, e.g. unwanted signals from radio-transmitters or currents induced via the microphone cable.



KAPSELN COLETTE



polar pattern MK 4



frequency response MK 4

The CCM Series is our range of compact studio microphones. In each model a microphone capsule and miniaturized electronics are built into a compact housing of 46 mm length.

CCM-series microphones are fully equal in quality to Colette-series microphones; their capsules are in fact identical, while their electronics have identical specifications and performance.

The CCM series is particularly suitable where small size plays a decisive role, e.g. on a boom, for conference facilities, and in multi-channel arrangements.

For the sake of smallest possible size, the CCM-L versions use a Lemo socket with a diameter of only 8 mm instead of an XLR plug. A 5-meter adapter cable to XLR-3M is supplied with the microphone.

Alternatively, a variant (CCM-U) with a permanently attached cable is available, which terminates in a normal XLR-3 connector. This variant is used mainly for fixed installations for conferences, etc. Instead of the cable, the "U" variant can also be delivered as an elegant unit with permanently attached gooseneck or extension tube. The microphone itself is non-removable, while the arrangement remains optically discreet.



CCM U variant

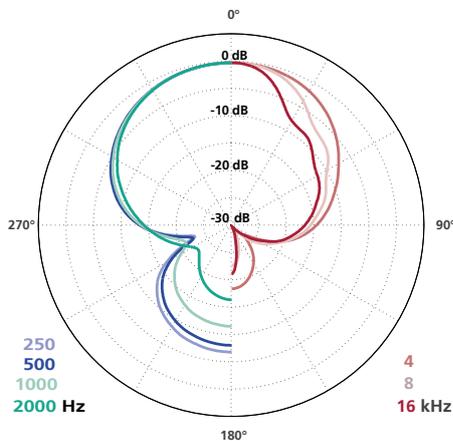


SCHOEPS shotgun microphones are used in leading film productions. They are appreciated worldwide for their exceptionally high sound quality.

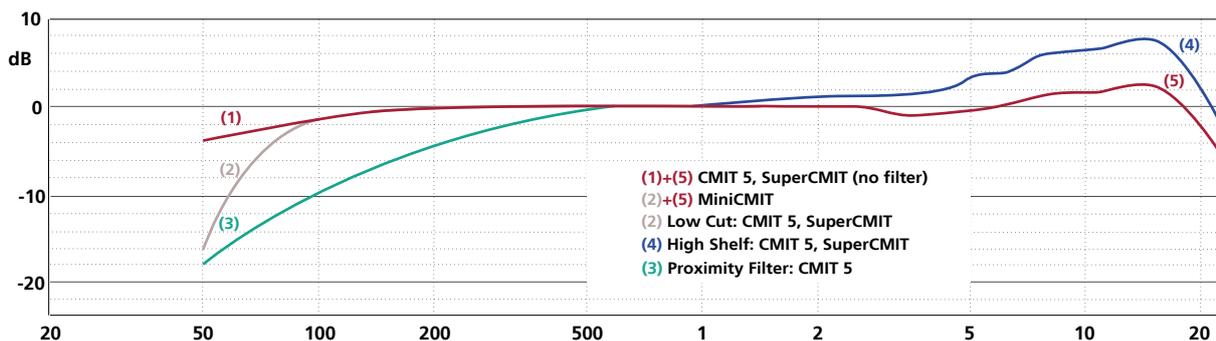
The CMIT Series consists of three microphones:

- The CMIT 5, which was introduced in 2005 and has since become a standard in its class;
- The MiniCMIT, which offers the characteristics of a CMIT in more compact form;
- The SuperCMIT, which achieves maximal directivity across a wide frequency range by means of intelligent digital algorithms.

All SCHOEPS CMIT-series microphones feature the same forward-facing capsule and interference tube, which has a reputation for exceptionally high sound quality. The capsule and microphone amplifier in CMIT-series microphones are not separable.



MiniCMIT, CMIT 5, SuperCMIT (ch2)



(1)+(5) CMIT 5, SuperCMIT (no filter)
 (2)+(5) MiniCMIT
 (2) Low Cut: CMIT 5, SuperCMIT
 (4) High Shelf: CMIT 5, SuperCMIT
 (3) Proximity Filter: CMIT 5



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