

Soundsmith

THE FINEST SOUND

We have seen the future



Soundsmith

A lifetime in audio inventing, designing, manufacturing and mentoring

Under the auspices of Peter Ledermann, President and Chief Engineer, the Soundsmith Corporation has been crafted as a company for more than 40 years. It exists today as a substantial workforce of carefully selected, highly trained creative artisans and engineers. In parallel with creating and guiding the growth of Soundsmith, Peter has spent a lifetime in audio inventing, designing, manufacturing and mentoring for varied audio companies, as well as being employed for 11 years at the T. J. Watson IBM Research Center. He has conceived, designed and manufactured highly evolved and singularly unique audio products that have been well recognized as world-class designs. These products include phono cartridges, loudspeaker drivers and systems, power amplifiers, and preamplifiers under the Soundsmith brand, as well as for other major companies.

Although Peter has a wealth of experience in the design of most audio products, he is best known for and considered one of the world's foremost authorities in analog playback systems; specifically cartridge design and manufacturing as well as analog



setup. Peter is also one of a handful of people available who has both depth of design experience and skills required to restore and rebuild all current makes of cartridges as well as classic cartridges. Peter spends much of his day doing just that for satisfied customers from all over the world.

All Soundsmith products are hand crafted in the USA in the beautiful lower Hudson River Valley by Peter's team of dedicated and highly skilled men and women.

Moving Iron Design

A Moving Iron cartridge design has both the magnets and the coils fixed in place. By doing this, it allows a very low-mass and extremely precisely made iron element to be positioned between the magnet and coils.

A cantilever/stylus assembly is attached to the iron element, and when moved by the cantilever, it varies the magnetic field flowing to the coils. In this way the low mass iron component acts like it is a moving magnet by varying the magnetic field, but avoids the high mass aspect of a moving magnet system.

Since only the iron element moves, complete flexibility is achieved in terms of cartridge design, allowing high, medium or low output without changing the moving mass of the design.

Therefore more coil windings (*higher output*) and heavier magnets (*more powerful*) may be used without penalty. Other advantages to the MI design are very low moving mass (*greater resolution*), superior channel separation (*better imaging*), and durability of the design against aging effects or accidents.

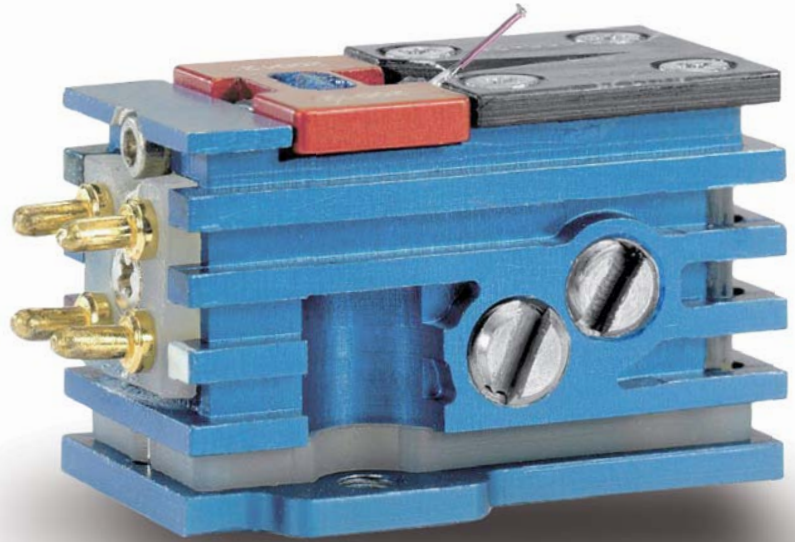
Made in the USA

Soundsmith is a specialty audio manufacturer located about an hour north of New York City. Founded in 1972, Soundsmith has achieved an enviable reputation in the audiophile world for outstanding sonic quality and extremely high-value products.

Perhaps best known now for their work restoring cartridges and for their Strain Gauge and Moving Iron cartridges, every Soundsmith product is hand-crafted in Soundsmith's Peekskill, NY factory by a carefully selected team of artisans and engineers.

Strain Gauge System

Soundsmith cartridges are based on first principles of how physics defines the accuracy of cartridge systems.



Low moving mass is key to performance, and by pursuing that key element, it is not surprising in the least that Soundsmith would develop and perfect not only low mass moving iron designs, but also a Strain Gauge cartridge system, one wherein the normal moving mass required to generate a signal is simply not necessary. That is in fact the case with the Strain Gauge design, a non-magnetic, non "voltage generating" system that is employed to read the grooves of a record. The design uses

the energy that is normally "lost" in supporting the cantilever, and routes that energy to two small elements made of silicon which vary the current flowing through them when they are placed under varying amounts of pressure. This results in a "displacement" measuring cartridge, which does not require RIAA equalization to correct the signal response as all magnetic cartridges do. This allows an elegant ultra-linear low distortion preamp circuit to be employed, further reducing the distance bet-



ween the music lover and the music. It is a system that must be heard to be understood or believed. There is a secret in those grooves, and the Strain Gauge will let you in on it.

What would happen if you built
The world's most unique cartridge?

People would sit down,
and take notice.

SG-200



SG-230

SG-210

The SoundSmith Strain Gauge system is for those music lovers who insist on making the cartridge and preamp completely disappear. Known for its lack of "colorization", extreme speed and neutrality, the Strain Gauge system transports you directly to the performance whether a live stage event or one that took place in the studio; you are there. By eliminating the generator mass, this cartridge is free to follow what was truly recorded into the grooves.

The **SG-200** features fixed line output, and 5 choices of user replaceable styli.

The **SG-210** features both fixed line output, as well as 15 dB boosted variable output to drive any amplifier directly if desired. 5 choices of user replaceable styli.

The **SG-230** is a full system preamp including. The Strain Gauge circuitry along with 4 line inputs, single ended and balanced outputs to drive any amplifier as well as fixed outputs. Full function remote control and 5 choices of user replaceable styli.



HYPERION

The truest testament to the quality and performance of any audio component is what others in that industry have to say about it.

The **HYPERION** is the cartridge of choice for the most esteemed audio equipment manufacturers. Why? Because when they exhibit their gear at HiFi shows, they want their turntable, amplifier or speaker systems to sound the very best that they can! Peter Ledermann's radical design utilizes an actual "cactus spine" for the cantilever. The naturally tapered shape, stacked columnar fibers and

desiccated resin damping fit the exact parameters of the perfect cantilever: Low mass, extreme rigidity, internal damping, and tremendous strength. Also available in a Dual Compliance Design for older Linear Tracking turntables as the HYPERION LT. HYPERIONS are offered with a choice of CL or OC-CL styli

HYPERION / HELIOS Technical specifications

Stylus: Contact Line Nude, 0.100mm SQ	(stereo only): 1000 Hz >36 dB (LT: > 34dB) 50-15,000 >25 dB
Radius of curvature	
Selected Diamond shapes: CL or Optimized (OCL)	Channel difference: <0.5 dB (Stereo) <1.0 dB (Mono)
Cantilever: Hand formed/ treated selected Cactus „Spine“	Output voltage HYPERION: 0.4 mV
Recommended Tracking force: 1.8 to 2.2 Grams	Output voltage HELIOS: 1.1 mV
Effective tip mass: 0.30 mg	Cartridge weight: 10.25 Grams
Compliance: 10µm/mN (low compliance) (LT) 12µm/mN vertical 7µm/mN horizontal	Loading HYPERION: ≥ 470 Ω
Frequency response: 20-20,000 Hz ± 1.0 dB	Loading HELIOS: ≥ 1.5 kΩ
Channel Separation	



HELIOS

This is our new medium output design. All other technical specifications are identical to the HYPERION

SUSSURRO

The Sussurro ~ critical design decisions, realized. Lowest internal mass.
Best damping. Esoteric stylus and cantilever.

Inspired by Frank Schröder, designed and individually hand made by Peter Ledermann, Soundsmith's **Sussurro** is a cartridge designed to specifically address the most intricate and critical issues of cartridge design. The new **MKII Sussurro** has a newly designed moving iron element to reduce moving mass by 70%. The resulting extremely low stored

inertia with a newly engineered damping system and innovative energy distribution path allow proper coupling into the tone arm. So what does all this mean?? Low jitter. Jitter? You probably thought that was a term reserved for digital systems. No so. Stylus jitter is responsible for loss of detail, and making a cartridge sound, well, like a cartridge.



SUSSURRO / MEZZO Technical specifications

MEZZO

This is our new medium output design. All other technical specifications are identical to the SUSSURRO



Stylus: Contact Line Nude, 0.100mm SQ

Radius of curvature: OCL (Optimized Contour Contact Line) SELECTED

Cantilever: Ruby

Recommended Tracking force: 1.8 to 2.2 Grams

Effective tip mass: 0.30 mg

Compliance: 10µm/mN (low compliance)

Frequency response: 20-20,000 Hz ± 1.0 dB

Channel Separation (stereo only): 1000 Hz >34 dB

50-15,000 >25 dB

Channel difference:

<0.5 dB (Stereo)

<1.0 dB (Mono)

Output voltage SUSSURRO:

0.4 mV

Output voltage MEZZO:

1.1 mV

Cartridge weight:

10.25 Grams

Loading SUSSURRO: ≥ 470 Ω

Loading MEZZO: ≥ 1.5 kΩ



PAUA

The Pua; adorned with sea shell to remind us of the beauty of the sounds of the world all around us. Nature healing nature.

The Pua is one of SoundSmith's most highly regarded top of the line low output cartridges. It has won numerous accolades and praise from users and reviewers around the world, including an "Editor's Choice Award" in 2015 from TAS. Featuring ultra-low internal moving mass, a specialized telescoping alloy cantilever and highly polished low mass nude Contact Line stylus, the Pua will

add a unique quality of warmth and smoothness to any analog system without leaving behind all the critical details you want and need to hear. The Pua reaches new heights of stylus control and performance, as is confirmed by its incredibly high channel separation figures. We have accomplished a work of art with the **Pua** design, resulting in an unparalleled and sublime performance.

PAUA / NAUTILUS Technical specifications

Stylus: Contact Line Nude, 0.100mm SQ	1000 Hz >34 dB 50-15,000 >25 dB
Radius of curvature: Nude Contact Line SELECTED	Channel difference: <0.5 dB (Stereo) <1.0 dB (Mono)
Cantilever: Telescoping Aluminum Alloy	Output voltage PAUA: 0.4 mV
Recommended Tracking force: 1.7 to 1.9 Grams	Output voltage NAUTILUS: 1.1 mV
Effective tip mass: 0.30 mg	Cartridge weight: 10.25 Grams
Compliance: 10µm/mN (low compliance)	Loading PAUA: ≥ 470 Ω Loading NAUTILUS: ≥ 1.5 kΩ
Frequency response: 20-20,000 Hz ± 1.0 dB	
Channel Separation (stereo only):	



NAUTILUS

This is our new medium output design. All other technical specifications are identical to the PAUA

ZEPHYR^{MIMC}



By popular demand, we introduce the Zephyr MIMC, our new lowest cost MC preamp compatible design.

Responding to the demand for a lower priced, low output design for those who own high gain preamps, the SoundSmith recently developed the **Zephyr MIMC**, which follows in the footsteps of the highly successful high-output Zephyr II. The handcrafted **Zephyr MIMC** (Moving Iron for Moving Coil Preamps) is based on the world-famous Sussurro cartridge and captures the gist of the

latter's sonic signature at a much more reasonable price. The **Zephyr MIMC** has been specifically designed to complement both unipivot arms and gimbaled bearing arms. Its sonic attributes include evenly balanced frequency response, dynamic shadings and remarkable detail retrieval; its slam will leave even the most die-hard analog buffs breathless.

ZEPHYR Technical specifications

Stylus: Selected Contact Line low mass Nude Stylus

Radius of curvature:
6 x 17 μ M

Cantilever: Boron

Recommended Tracking

force: 1.8 to 2.2 Grams

Effective tip mass: 0.32 mg

Compliance: 10 μ m/mN (low compliance)

Frequency response:

15-45,000 Hz \pm 2.0 dB

Channel Separation

(stereo only):

1000 Hz >28 dB

50-15,000 >25 dB

Channel difference:

<1.0 dB (Stereo)

<0.5 dB (Dual Mono operation- w/optimal VTF setting)

Output voltage ZEPHYR:

0.4 mV

Cartridge weight:

10.27 Grams

Loading: \geq 470 Ω



THE VOICE

Kudos, accolades and many “Product Of the Year” awards. The pinnacle of High Output designs – from SoundSmith ~ of course.

Since its introduction in 2009, **The Voice** has won numerous „product-of-the-year” awards and is – in Peter Ledermann’s words—“probably the best HO cartridge in production today”. Our design goal was to produce the lowest moving mass high output design possible using novel and advanced technology. Featuring a single crystal Ruby Cantile-

ver and our Optimized Contour Line Contact Stylus, we developed a specialized metallurgy for the low mass moving iron system. A cartridge that disappears. After all, if it sounds like a “record”..... it’s wrong. The cartridge should bring you directly to the performance; not stand between you and the music.

THE VOICE/SOTTO VOICE Technical specifications

Stylus: Contact Line Nude, 0.100mm SQ selected for low noise	20-20,000 Hz ± 1.0 dB
Radius of curvature: OCL (Optimized Contour Contact Line)	Channel Separation (stereo only): 1000 Hz >30 dB 50-15,000 >25 dB
Cantilever: Ruby	Channel difference: <0.5 dB (Stereo)
Recommended Tracking force: 10mN / 1.0 gm (high) 13mN / 1.3 gm (medium)	<1.0 dB (Mono)
Effective tip mass: 0.30 mg	Output voltage THE VOICE: 2.12 mV
Compliance: 28 µm/mN (high) 22 µm/mN (medium)	Output voltage SOTTO VOICE: 1.1 mV
Frequency response:	Cartridge weight: 6.8 Grams
	Loading THE VOICE: ≥ 47 kΩ
	Loading SOTTO VOICE: ≥ 1.5 kΩ



SOTTO VOICE

This is our new medium output design. All other technical specifications are identical to the THE VOICE

AIDA

A triumph of SoundSmith Engineering, Stereophile Class "A" rated, a rarity at its price point – and for good reasons.

The Aida employs a single crystal Ruby Cantilever and our Optimized Contour Line Contact Stylus; we did this to resolve the challenges of playing the inner grooves with the same level of confidence as the outer. How did we do this? The unique stylus shape of our OCL stylus has a "sharper" playing surface on the faceted diamond, allowing it to ride

easily into the groove modulations of even the most difficult passages and high frequency information that other cartridges simply cannot trace. The result - a truly superb cartridge, surpassing top MC designs with air, focus and sound staging no cartridge at this price should be able to achieve.



NORMA

This is our new medium output design. All other technical specifications are identical to the AIDA



AIDA / NORMA Technical specifications

Stylus: Contact Line Nude, 0.100mm SQ

Radius of curvature: OCL (Optimized Contour Contact Line)

Cantilever: Ruby

Recommended Tracking force: 10mN / 1.0 gm (high) 13mN / 1.3 gm (medium)

Effective tip mass: 0.30 mg

Compliance: 28 μ m/mN (high) 22 μ m/mN (medium)

Frequency response: 20-20,000 Hz \pm 2.5 dB

Channel Separation (stereo only): 1000 Hz >30 dB

50-15,000 >20 dB

Channel difference:

<1.0 dB (Stereo)

<1.0 dB (Mono)

Output voltage AIDA: 2.12 mV

Output voltage NORMA: 1.1 mV

Cartridge weight: 6.8 Grams

Loading AIDA: \geq 47 k Ω

Loading NORMA: \geq 1.5 k Ω



BOHEME

The Boheme, the jewel of our lineup. Far more music delivery and accuracy than you would expect for its entry fee.

The Boheme represents extreme value; featuring a single crystal Ruby Cantilever and low mass nude contact line diamond, the Boheme punches far past the performance of other cartridges in its price range. A vibrant, lively and compelling cartridge, the Boheme will breathe new

life into your system – opening up the true nature of the event of every type of recording, conveying far more music and emotion. A new suspension and ultra-light cantilever allow the Boheme to achieve sonic velocities and images with a deeper and broader acoustic palette.

BOHEME Technical specifications

Stylus: Contact Line Nude, 0.120mm SQ selected

Radius of curvature: Contact Line

Cantilever: Ruby

Recommended Tracking force: 10mN / 1.0 gm (high) 13mN / 1.3 gm (medium)

Effective tip mass: 0.32 mg

Compliance: 28 $\mu\text{m}/\text{mN}$ (high) 22 $\mu\text{m}/\text{mN}$ (medium)

Frequency response: 20-20,000 Hz \pm 2.5 dB

Channel Separation (stereo only): 1000 Hz >28 dB 50-15,000 >20 dB

Channel difference: <1.4 dB (Stereo) <1.0 dB (Mono)

Output voltage: >2.12 mV

Cartridge weight: 6.8 Grams
Loading: \geq 47 k Ω

The Zephyr II has achieved what no other cartridge has done since its inception; rapid recognition as a leading force

ZEPHYR^{MKII}

ZEPHYR MKII Technical specifications

Stylus: Selected Contact Line low mass Nude Stylus

Radius of curvature: 6 x 17 μm

Cantilever: Boron

Recommended Tracking force: 1.8 to 2.2 Grams

Effective tip mass: 0.32 mg
Compliance: 10 $\mu\text{m}/\text{mN}$ (low compliance)

Frequency response: 15-45,000 Hz \pm 2.0 dB

Channel Separation (stereo only): 1000 Hz >28 dB 50-15,000 >25 dB

Channel difference: <1.0 dB (Stereo) <0.5 dB (Dual Mono operation- w/optimal VTF setting)

Output voltage: 2.4 mV

Cartridge weight: 10.27 Grams

Loading: \geq 47 k Ω

The SoundSmith Zephyr MkII phono cartridge employs „Trickle Down“ Technology within the cartridge body as used in the SoundSmith’s well received high end Sussurro Cartridge. The Zephyr MkII is built using a selected „low mass contact line diamond“

stylus design, mounted on a Boron cantilever - capable of truly remarkable separation, sound stage and imaging. The composite body and unique energy distribution system contributes to the Zephyr MkII’s ability to produce high-end performance from a moderately priced cartridge.





CARMEN

Our Carmen design resolves high performance at an affordable price. A dramatic deep and wide soundstage, and ultra trackability.

The Created out of the desire to make a very high performance design at an affordable price. Just slightly lush with a well-developed midrange, the Carmen is surprisingly pleasing and will seduce you into late listening sessions. The stylus used is a part of what makes it special; an ultra-low mass occlusion free nude diamond

cut and polished into a true hyper-elliptical shape. The combination of low tip mass and the Moving Iron gives the Carmen a tremendous resolution advantage over MC designs selling for more than twice the price. Housed in a handmade solid Ebony case, the Carmen delivers.

CARMEN Technical specifications

Stylus: Nude Elliptical, 0.120mm SQ

Radius of curvature: 6 x 17 μ m

Cantilever: Aluminum Alloy

Recommended Tracking force: 12mN / 1.2 gm (high)
14mN / 1.4 gm (medium)

Effective tip mass: 0.35 mg

Compliance: 28 μ m/mN (high)
22 μ m/mN (medium)

Frequency response: 20-20,000 Hz \pm 2.5 dB

Channel Separation (stereo only): 1000 Hz $>$ 26 dB
50-15,000 $>$ 20 dB

Channel difference: $<$ 1.6 dB (Stereo) $<$ 1.0 dB (Mono)

Output voltage: 2.12 mV

Cartridge weight: 6.8 Grams
Loading: \geq 47 k Ω

Our entry level design captures more than its share of recorded beauty – by design. Big soundstage, detail and resolution at an affordable price.

OTELLO

OTELLO Technical specifications

Stylus: Elliptical Titanium Bonded, 0.20mm Round

Radius of curvature: 6 x 17 μ m

Cantilever: Aluminum Alloy

Recommended Tracking force: 12mN / 1.2 gm (high)
14mN / 1.4 gm (medium)

Effective tip mass: 0.50 mg

Compliance: 28 μ m/mN (high)
22 μ m/mN (medium)

Frequency response:

20-20,000 Hz \pm 2.5 dB

Channel Separation (stereo only): 1000 Hz $>$ 24 dB
50-15,000 $>$ 20 dB

Channel difference: $<$ 1.8 dB (Stereo) $<$ 1.0 dB (Mono)

Output voltage: $>$ 2.12 mV

Cartridge weight: 6.8 Grams
Loading: \geq 47 k Ω

The Otello is SoundSmith's entry level Moving Iron design, realizing an affordable pathway into the world of high-performance cartridges. Build by hand like all SoundSmith cartridges, the Otello provides a perfect balance of tone and resolution at a great price. The result is a cartridge that is at ease with any type of music. Just slightly warmer than other SoundSmith designs, Otello yields a richness of timbre that is utterly beguiling with a level of speed and dynamics not often found in cartridges at this price. The result? A wonderful design that gives the warmth of MM and the light-footedness of Moving Iron design.





IROX Blue

Unbreakable. Really. We wouldn't say it if it weren't true.

The industry has long waited for an unbreakable cartridge solution that plays with outstanding authority. Wait no more. SoundSmith introduces two levels of performance in "unbreakable" designs. A perfect solution for heavy duty use, par-

ties, institutions, and anywhere there is a potential handling issue or danger of misuse. Enter the IROX series.

High and Ultra-high performance from a low mass moving iron design that will make you a believer.

IROX Blue Technical specifications

Stylus: Elliptical Titanium
Bonded, 0.20mm Round

Radius of curvature:
6 x 17 μ m

Cantilever: Aluminum Alloy
Recommended Tracking

force: 2.0 – 2.5 grams

Effective tip mass: 0.55 mg

Compliance: 10 μ m/mN

Frequency response:
20-20,000 Hz \pm 2.5 dB

Channel Separation
(stereo only):

1000 Hz >26 dB

50-15,000 >20 dB

Channel difference:
<1.6 dB

Output voltage: >2.12 mV

Cartridge weight:

10.27 Grams

Loading: \geq 47 k Ω



IROX Ultimate

IROX Ultimate Technical specifications

Stylus: Nude Elliptical,
0.120mm SQ

Radius of curvature:
6 x 17 μ m

Cantilever: Aluminum Alloy
Recommended Tracking

force: 2.0 – 2.5 grams

Effective tip mass: 0.55 mg

Compliance: 10 μ m/mN

Frequency response:
20-20,000 Hz \pm 2.5 dB

Channel Separation
(stereo only):

1000 Hz >26 dB

50-15,000 >20 dB

Channel difference:
<1.6 dB

Output voltage: >2.12 mV

Cartridge weight:

10.27 Grams

Loading: \geq 47 k Ω

PHONO PREAMPLIFIER

Almost as critical as the cartridge itself, the phono preamplifier is key in any system. The SOUNDSMITH MCP-2, MMP-3 and MMP-4 preamps are revolutionary designs at their price points; proven by their world-wide acceptance. All preamps feature supreme linearity and ultra-low noise performance by employing the finest circuit parts available.

MCP-2

The SoundSmith MCP-2 is a high performance yet low cost way to enjoy your low output Moving Coil (MC) or Moving Iron (MI) cartridge. The SOUNDSMITH HYPERION, SUSSURRO, PAUA and Zephyr MIMC all mate well with this model.

The MCP-2 boasts a unique feature; continuously variable loading (10 Ohms to 5K Ohms) via a rotary control to afford you complete control of the high end response for your cartridge, system and individual listening preference. Featuring built-in SoundSmith designed and manufactured fully shielded step-up transformers the MCP-2 has been favorably demonstrated against preamps costing 3 to 4 times more with stunning results.

MMP-3

Designed to work with High output moving coils, moving magnet and moving iron types, the MMP-3 reminds the listener just how critical the phono stage is. Pairing with SOUNDSMITH high output cartridges, the MMP-3 takes the analog signal to the next level, without altering any of the detail, nuance and musicality for which analog is known.

MMP-4

Utilizing the same exact circuit design as the MMP-3, the MMP-4 is value engineered to offer very good performance at an entry level price point.



The Soundsmith

8 John Walsh Blvd., Suite 417
Peekskill, NY 10566 USA

(914) 739-2885

(800) 942-8009

FAX (914) 739-5204

Sales@sound-smith.com