

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.

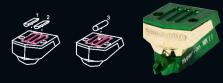
All Soundsmith products are handcrafted in the USA in the beautiful lower Hudson River Valley by Peter's team of dedicated and highly skilled men and women.

#### Soundsmith "Fixed Coil" cartridges

Our Fixed Coil cartridge designs are unique in having both the magnet and the coils fixed in place, allowing an ultra-low mass moving iron element between the magnet and coils to generate the signal. This design mimics a moving magnet by varying the magnetic field, but avoids the high mass aspect of both moving magnet and moving coils. The design also eliminates the fragile, unrepairable and age related failures of all moving coil designs.

By reducing the moving mass far below that of moving magnet and moving coil systems, Soundsmith designs deliver superior micro resolution, imaging and channel separation. Our design also vastly increases the durability against aging effects and handling accidents. Have an accident with a Soundsmith cartridge? We always rebuild to new condition for 20% or LESS, making Soundsmith purchases a long term investment in enjoyment, unlike any other cartridge manufacturer.

#### Soundsmith's new ES design



Our new ES series provides a Soundsmith owner with several additional distinct advantages over other cartridge designs. Our four year research effort resulted in the ES body development which provides a novel engineered energy path into the tone arm. This design increases detail retrieval and resolution by reducing reflective energy which normally contributes to stylus sampling or "jitter". The new slotted top design also allows freedom of choice for electrical isolation thereby eliminating common hum issues, as well as providing built-in azimuth adjustment when used with tone arms that do not allow such.

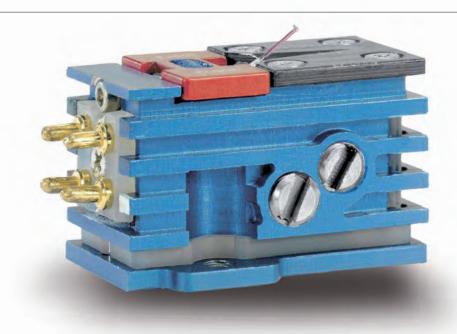
#### MADE in the USA

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

Perhaps best known for their work restoring cartridges of all makes and for their novel Strain Gauge and Fixed Coil cartridges, every Soundsmith product is handcrafted in Soundsmith's Peekskill New York 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 nonmagnetic, 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 ultralinear low distortion preamp circuit to be employed, further reducing the distance





between 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.

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 The **SG-230** is a full system preamp including the choices of user replaceable styli. Strain Gauge circuitry along with 4 line inputs,

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 MKII

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 MKII** 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.

### **HYPERION MKII** Technical Specifications

Stylus: Contact Line Nude, 0.100mm SQ Radius of curvature: OCL (Optimized Contour Contact Line) SELECTED Cantilever: Hand formed & treated

selected Cactus Spine

**Recommended Tracking force:** 

1.8 to 2.2 Grams

Effective tip mass: 0.30 mg

Compliance: 10µm/mN (low compliance)

Frequency response:  $20-20,000 \text{ Hz} \pm 1.0 \text{ dB}$ 

**Channel Separation** (stereo only):

1000 Hz > 36 dB 50-15,000 > 25 dB

Channel difference:

<0.5 dB (Stereo) <1.0 dB (Mono)

Output voltage: 0.4 mV Cartridge weight: 12.2 Grams

**Loading:**  $\geq$  470  $\Omega$ 



**LOW OUTPUT** 

### Sussurro MKII

The Sussurro MKII ~ 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 **Sussurro MKII** 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, allows 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. Not so. Stylus jitter is responsible for loss of detail, and making a cartridge sound, well, like a cartridge.

### **SUSSURRO MKII** Technical Specifications

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:  $20-20,000 \text{ Hz} \pm 1.0 \text{ dB}$ 

**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: 0.4 mV Cartridge weight: 12.2 Grams





**LOW OUTPUT** 

### PAUA MKII

The Paua; adorned with seashell to remind us of the beauty of the sounds of the world all around us. Nature healing nature.

The **Paua** is one of Soundsmith's most highly regarded top of the line low output cartridges. Winner of numerous accolades and praise from users and reviewers around the world, including an "Editor's Choice Award" in 2015 from TAS. Featuring ultralow internal moving mass, a specialized telescoping alloy cantilever and highly polished low mass nude Contact Line stylus, the **Paua** 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 **Paua** 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 **Paua** design, resulting in an unparalleled and sublime performance.

### **PAUA MKII** Technical Specifications

Stylus: Contact Line Nude, 0.100mm SQ

Radius of curvature:

Nude Contact Line SELECTED

**Cantilever:** Telescoping Aluminum Alloy

**Recommended Tracking force:** 1.7 to 1.9 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: 0.4 mV Cartridge weight: 12.2 Grams

**Loading:**  $\geq 470 \Omega$ 



**LOW OUTPUT** 

### ZEPHYR MIMC STAR

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 STAR**, which follows in the footsteps of the highly successful high-output Zephyr II. The handcrafted **Zephyr MIMC STAR** (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 STAR** 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 MIMC STAR** Technical Specifications

**Stylus:** Selected Contact Line low mass Nude Stylus

Radius of curvature: 6 x 17 uM Cantilever: Laser Drilled Sapphire Recommended Tracking force:

1.8 to 2.2 Grams

Effective tip mass: 0.32 mg

Compliance: 10µm/mN (low compliance)
Frequency response: 15-45,000 Hz ± 2.0 dB

**Channel Separation (stereo only):** 

1000 Hz >32 dB 50-15,000 >25 dB

**Channel difference:** 

<1.0 dB (Stereo)

<0.5 dB (Dual Mono operation-

w/optimal VTF setting)
Output voltage: 0.4 mV
Cartridge weight: 12.2 Grams

**Loading:**  $\geq 470 \Omega$ 



## 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 H.O. 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 Cantilever 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** Technical Specifications

**Stylus:** Contact Line Nude, 0.100mm SQ selected for low noise

Radius of curvature: OCL (Optimized Contour Contact Line)

Cantilever: Ruby

**Recommended Tracking force:** 

1.3-1.6 gm

Effective tip mass: 0.30 mg Compliance: 22 µm/mN

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

Channel Separation (stereo only):

1000 Hz >30 dB 50-15,000 >25 dB

**Channel difference:** 

<0.5 dB (Stereo) <1.0 dB (Mono)

Output voltage: 2.12 m V Cartridge weight: 9.2 Grams

**Loading:**  $\geq 47 \text{ k}\Omega$ 



### AIDA MKII

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

The **Aida MKII** employsa laser drilled Sapphire cantilever with ultralow mass Contact Line 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 CL 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.

### **AIDA MK II** Technical Specifications

Stylus: Selected Contact Line low mass Nude Stylus
Radius of curvature:

6 x 17 uM

Cantilever: Laser Drilled Sapphire Recommended Tracking force:

1.3-1.6 gm

Effective tip mass: 0.30 mg Compliance: 22 µm/mN

Frequency response:  $20-20,000 \text{ Hz} \pm 2.5 \text{ dB}$ 

**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: 2.12 mV Cartridge weight: 9.2 Grams

**Loading:**  $\geq 47 \text{ k}\Omega$ 



### ZEPHYR MKIII

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

The Soundsmith **Zephyr MKIII** phono cartridge employs "Trickle Down" Technology from a unique Energy Distribution System within the cartridge body as used in the Soundsmith's well-received high-end Sussurro Cartridge. The **Zephyr MKIII** features a newly developed Aluminum cantilever with contact line diamond stylus — capable of truly remarkable separation, sound stage and imaging. The new ES DEMS body design unique energy distribution system contributes to the **Zephyr MKIII's** ability to produce high-end performance from a moderately priced cartridge.

### **ZEPHYR MKIII** Technical Specifications

Stylus: Selected Contact Line low mass

Nude Stylus

Radius of curvature: 6 x 17 μm Cantilever: Aluminum Alloy Recommended Tracking force:

1.8 to 2.2 Grams

Effective tip mass: 0.32 mg

Compliance: 10µm/mN (low compliance)
Frequency response: 15-45,000 Hz ± 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: 12.2 Grams

**Loading:** ≥ 47 k $\Omega$ 



### CARMEN MKII

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

The **Carmen MKII** was 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 MKII** is surprisingly pleasing and will seduce you into late listening sessions. The stylus used is a part of what makes it special; an ultralow mass cut and polished into a true Hyper-Elliptical shape. The combination of low tip mass and the Moving Iron gives the **Carmen MKII** a tremendous resolution advantage over MC designs selling for more than twice the price. Housed in our new ES DEMS body design, the **Carmen MKII** delivers.

### **CARMEN MK II** Technical Specifications

**Stylus:** Nude Elliptical, 0.120mm SQ

Radius of curvature:  $6 \text{ x } 17 \text{ } \mu\text{m}$ 

Cantilever: Aluminum Alloy

**Recommended Tracking force:** 

1.3-1.6 gm

Effective tip mass: 0.35 mg Compliance: 22 µm/mN

Frequency response:  $20-20,000 \text{ Hz} \pm 2.5 \text{ dB}$ 

**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: 9.2 Grams

**Loading:** ≥ 47 k $\Omega$ 



### OTELLO

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

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 lightfootedness of Moving Iron design.

### **OTELLO** Technical Specifications

Stylus: Elliptical Titanium Bonded,

0.20mm Round

Radius of curvature: 6 x 17 µm Cantilever: Aluminum Alloy Recommended Tracking force:

1.3-1.6 gm

Effective tip mass: 0.50 mg Compliance: 22 µm/mN

Frequency response: 20-20,000 Hz ± 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: 9.2 Grams

**Loading:**  $\geq 47 \text{ k}\Omega$ 



# 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 worldwide acceptance. All preamps feature supreme linearity and ultralow 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 stepup 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**

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