

SQ1

SONOR®



SQ1



SonorMuseum.de

FEEL THE SOUND.



When we design drums, our intention is to continuously improve the acoustic quality in any given situation. We do not stop at wood selection or shell configuration. Many factors influence the acoustic performance: shell material and construction, drum head selection, tuning, mounting, room acoustics, individual perception and much more.

For SQ1 we worked closely with Chris Coleman and other Sonor artists in the development of this new drum series. The input from a professional players point of view provided many important insights.

As a first step we looked for a shell material that would meet the request for a very balanced sound. Our choice was birch because of its characteristic high end frequencies and clearly defined low-end. In blindfold tests we tried many different types of shell construction, from pure birch to hybrid versions. The pure birch

shell came out as a clear winner in all test situations. Then we went out to look for a birch variety that would meet our CLTF and OSM shell making standards and found a unique European birch that stood up to these demands.



SQ1 shell made of pure European birch



Humidity is constantly controlled at Sonor's timber warehouse.

THE STORY BEHIND CLTF AND OSM

Drum shells need to act as solid acoustic unities as the foundation for a great drum sound. We use cross-laminated plies of birch to form a perfectly round shell with great stability. Each ply is laminated at a 90° angle to allow for a shell that is tension-free. Sonor's tension-free shells would keep their round shape even if they were cut in half from the batter to resonant side.



CLTF

Our OSM shell construction (Optimum Shell Measurement) utilizes slightly undersized shell diameters to give the drum head the space to float freely, allowing unrestricted contact between the bearing edge and the drum head.



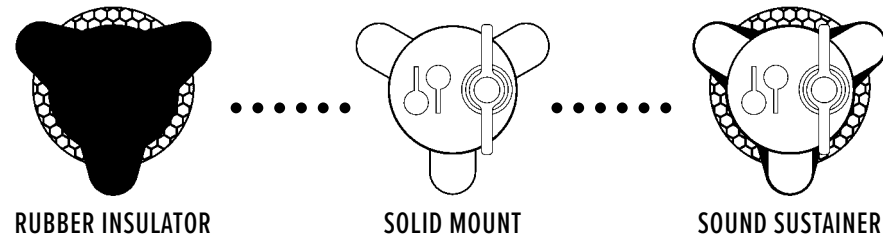
OSM

sonorMuseum.de



Sonor artist Chris Coleman and
Master Drum Builder Horst Treude
in the Sonor factory Germany

HEAR THE DIFFERENCE.



As a next step we wanted to find a drum mounting solution that would affect the resonance and sustain of a drum as little as possible while having a small footprint and great stability. Inspiration came from the automotive industry where vibration-control technology is used for engine mounting systems among others. What we developed was a unique concept of mounting toms and floor toms that integrates rubber insulation within the mount to avoid any shell-to-mount contact. Scientific research shows the considerable improvement in extended sustain compared to traditional mounting methods.

ANATOMY OF A SOUND SUSTAINER

Sound Sustainers offer an integrated insulation/mounting solution. Made of heavy duty composite rubber that originated in the automotive industry the insulation layer has a unique hexagon structure. It is combined with a metal prism clamp for extra firm grip. Sound Sustainers were prototyped using advanced Selective

Laser Sintering (SLS) technology. It is a highend 3D printing process that allows to integrate complex geometries within the construction components straight away. Due to its integrated design, Sound Sustainers need minimal footprint for maximum sound enhancement.



The SLS 3D Printing Process

- 01: CAD data from Sonor's R&D department is used.
- 02: The SLS system uses a layering process on high-melt polymers at temperatures of up to 385 °C.
- 03: The prototype is cleaned with air to remove remaining powder.
- 04: The finished prototype consists of layers of powder material.

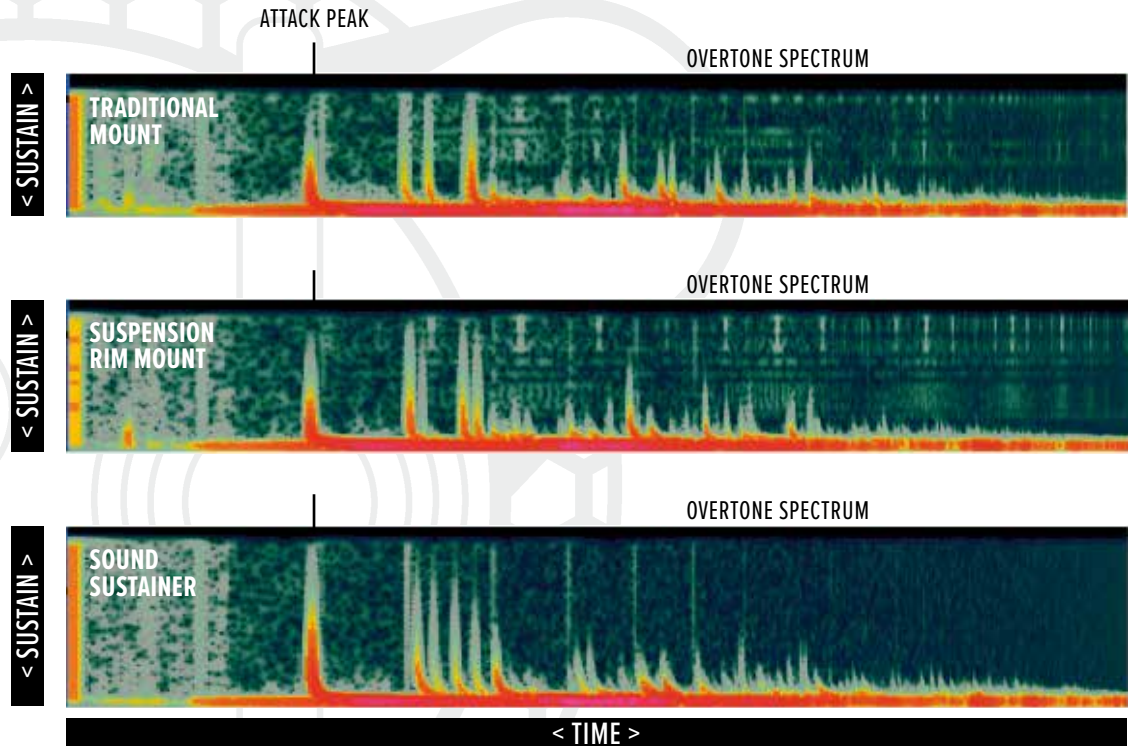
Philipp Rabe (Sonor R&D),
Chris Coleman and Frank Boestfleisch
(Sonor Product Manager)



DON'T TRUST US...

» When designing a product, we put a lot of “Gehirnschmalz”* into each step. We carefully think about what every part does to sound, usability and function. And while our intentions are always to produce the best performing instruments possible, sometimes you want the word from a different horse’s mouth. So, for SQ1 we’ve teamed up with renowned German microphone manufacturer Beyer-dynamic. We’ve sent two of our best people to their sound lab in Heilbronn, Germany, with an array of SQ1 drums, outfitted with different types of tom mounts – including the Sound Sustainers. The test results indicate that we’ve nailed our initial idea: Designing a mount that considerably enhances sustain of both tom toms and floor toms so you get more “uuhhhhmm” out of your drums. Much more. But see, or rather hear for yourself.

*Gehirnschmalz – German for “grey matter” or “savvy”



Traditional mounts show weaker fundamental attack and short sustain

Suspension rim mounts offer better sustain

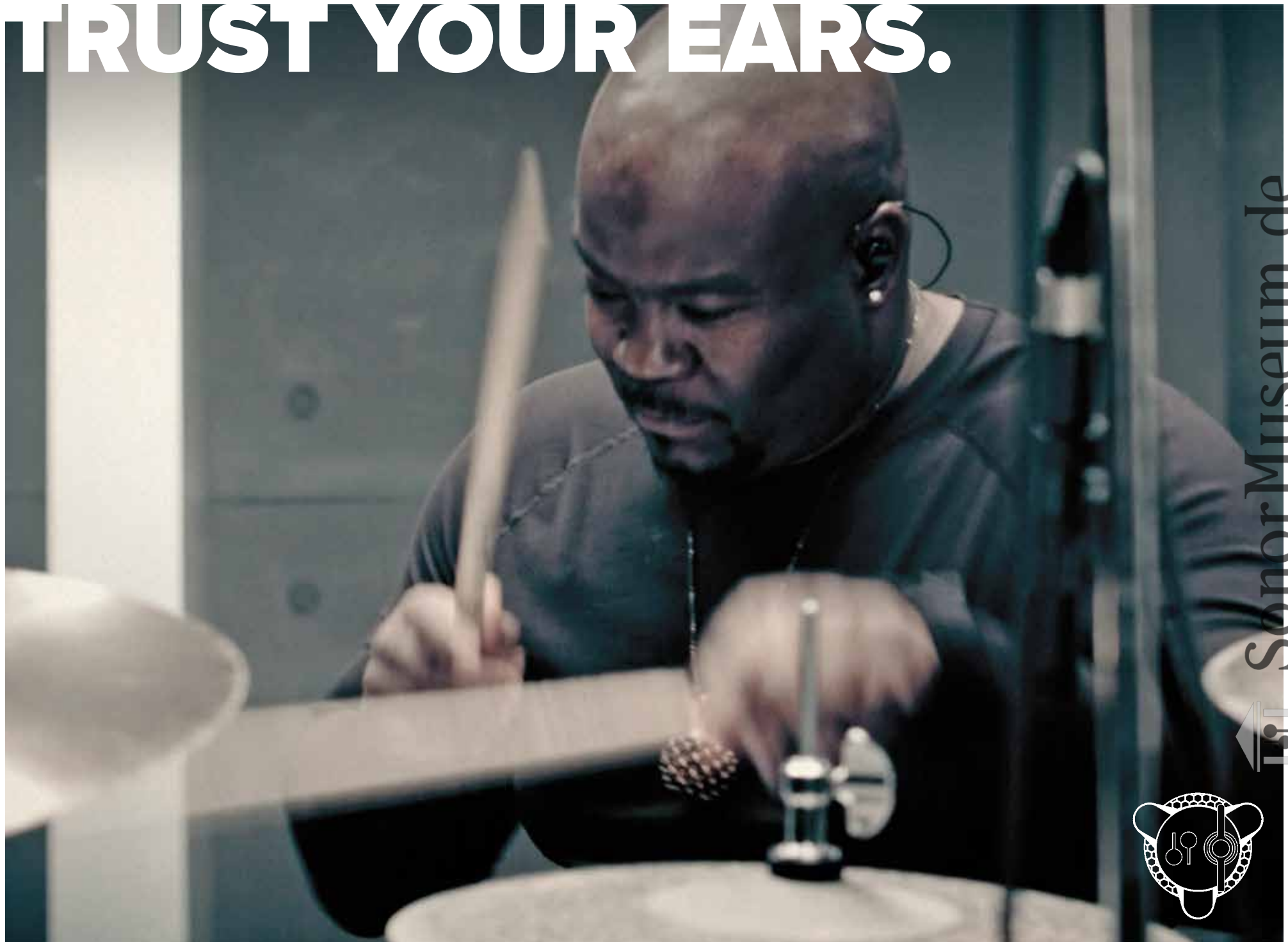
Sound Sustainers enhance sustain and provide clearly defined fundamental tone and a clean overtone spectrum

The acoustic research was done at Beyer-dynamic's sound lab.

For acoustic research precision devices allow the measuring of the complex vibration modes of a drum head.



TRUST YOUR EARS.



 SonorMuseum.de



INSPIRED BY CLASSICS.



From the classic racing tracks of Europe to the Malecón in Havana, our inspiration for the look and feel of our new SQ1 drum series came from many sources. Inspired by vintage car designs we

put together a palette of four unique lacquer finishes. Each of these colors is precision hand lacquered at the Sonor factory and finished with a special matte coating that gives each drum its exclusive touch.

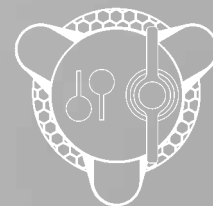


All SQ1 drums are hand lacquered and finished at the Sonor factory in Germany in an 8 step process:

- 01: inside protective sealing
- 02: applying the outside sealing
- 03: inside smoothing and additional sealing
- 04: outside smoothing
- 05: 2 day drying process
- 06: additional smoothing
- 07: color lacquering
- 08: 1-2 days drying process



Photo frames: fotolia.com
www.sonormuseum.de

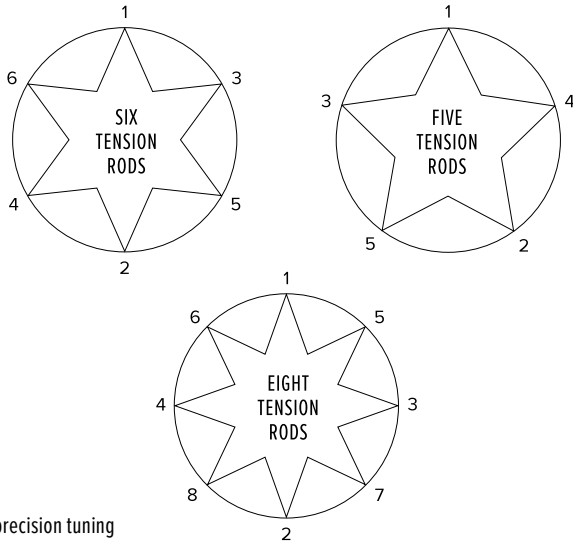


THE ART AND SCIENCE OF



Drum tuning techniques can be as individual and unique as each artist. Your selection of shell material, drum sizes, heads and mounts all are important components of a drum sound. How you tune your drums, how you use muffling techniques and where you play your set further influence the sound experience. We have asked some of our artists to provide some insight into their approach to tuning and their individual sound preferences. If you are interested in the science of drum acoustics check out Moritz Albes book “Die Stimmung der Trommel” (The Tuning of a Drum). It describes the way a drum sound is created physically and how precision tuning combined with that knowledge can lead to better tuned instruments and hence better sounding drums.

■ For more information visit sonor.com/sq1



For precision tuning
use the ‘opposite-lug’ method
for the sequence of tightening the tension rods



**ALEXIS
NUÑEZ**

“I use Remo coated Emperors on my toms, CS dot on my snares, and PST4 coated on my bass drum. As birch kits are more focused with less sustain I like to tune with little, if any, dampening. Making the overall sound of the drums ideal for studio work.”

“When playing birch drums I’ve always got on a set of Vintage Emperor double ply heads as I’ve already got enough attack from the shells. On floor toms I like to detune a lug for a bit more texture in the sound and on my bass drum I’ll detune the two left side lugs. With resonate heads I’ll tune a set of clear Ambassadors a tone higher.”



**JOSHUA
BLACKMORE**

DRUM TUNING.



**RYAN
VAN
POEDEROOYEN**

"With any recording I've done with birch drums, I've always used the combination of a single ply G1 Evans Batter Head and an Evans resonant Bottom Head. From tuning the top and bottom head the same pitch, I always get a defined, well balanced tone with beautiful sustain from every birch drum used."

"In general I tune the toms bottom heads slightly higher than the top, always make sure that when I tap the tom with my finger I can hear a clear consistent tone!"

When I need the vintage warm sound, I use the Evans Calftone 56 on all drums... and tune them higher and even on top and bottom heads!"



NIR Z



**CHRIS
COLEMAN**

"For SQ1 I choose EVANS EC2/top and G14/bottom (both clear). They give me all the fat tone and sing, the way I desire to hear them. This head/shell combo has become a go-to lately, studio & live."







“The SQ1 birch shells have that really big sound, with great versatility and full tone – even at lower tension ... these drums roar!”

Chris Coleman

Full SQ1 performance video
is available on sonor.com/sq1

LEGENDS ARE CREATED IN SELECT PLACES.

» No, we didn't go to London to test SQ1 drums in a studio setting. But we invited two Sonor artists, **Alexis Nuñez** from The Kooks and **Joshua Blackmore** from Strobes, to the Frankfurt based Abbey Road Institute, one of the 7 locations of the new education initiative from the legendary Abbey Road Studios. The brand new, state-of-the-art studio facility includes both a live recording space and

professional-standard control room. Here we found the perfect conditions to let both Alexis and Joshua get their first hand experience on SQ1 drums.



Alexis Nuñez/The Kooks | A self-described "pop" band, their music is primarily influenced by the 1960s British Invasion movement and post-punk revival of the new millennium.

With songs described as „catchy as hell“, The Kooks have experimented in several genres including rock, Britpop, pop, reggae, ska, and more recently, funk and hip-hop. (Wiki)



Since graduating from the Royal Academy Of Music in 2008 Joshua has toured across the globe and worked collaboratively with Strobes, Squarepusher, Troyka, Django Bates, Aurora and BBC Concert Orchestras and many more. He aims to succeed in the rare feat of bringing serious technical instrumentation to diverse musical genres such as electronica and progressive jazz.

Learn more about Alexis, Joshua, SQ1, and the Abbey Road Institute at sonor.com/sq1



"Birch being a popular choice of wood for the studio, tracking with the SQ1 will be a dream.

The new unique mounting system offers uninterrupted sustain that's controlled and full of that Sonor tone."

Joshua Blackmore

NIR



Nir Z is a well-established studio-session drummer known not only for his incredible studio chops and dynamic live presence, but also for the amazing energy he can bring to any musical situation.

His seventeen years in NYC and seven years in Nashville Tennessee led him to record and perform with major artists such as John Mayer, Genesis, Chris Cornell, Billy Squier, Alana Davis, Ray Wilson, Blake Shelton and many others.

Nir is also busy in his own personal recording studio using his vast experience to produce tracks and play drums and percussion for musicians all over the world.



SonorMuseum.de



RYAN VAN POEDEROOYEN



“Birch drums have been my ‘go to’ choice when it comes to recording in the studio. I’ve recorded many Devin Townsend records and studio sessions with that rich birch sound. The boosted high frequencies, slightly reduced midrange and excellent low-end punch best describe what birch drums are all about.

In my opinion and experience, a birch shell has this naturally equalized sound that covers all the frequencies required for many styles of music, in a live or studio scenario. With the SQ1 series, you’ll get everything I described about that birch sound along with expert craftsmanship, innovation and high standard German engineering, that Sonor has been known for, for over

a century. If you want a high quality, beautiful sounding and easy to tune drum kit for all scenarios and styles of music, look no further than the Sonor SQ1 drums. I highly recommend these drums, they live up to what you expect from a birch drum combined with that Sonor legacy ... That’s a combination that’s hard to beat!”



Photo: Neil Liam Sang

Ryan “RVP” Van Poederoyen is the drummer for the Devin Townsend Project DTP. He has performed as a studio/session drummer on many albums/singles for label acts and independent acts around the world. He has been a session drummer for producers such as Brian Howes (Nickelback, Hinder, Puddle of Mud, Daughtry), Chad Kroeger (Nickelback), Rhys Fulber (Fear Factory, The Tea Party, Josh Groban) among many others.



SonorMuseum.de

“A birch shell has this naturally equalized sound that covers all the frequencies required for many styles of music, in a live or studio scenario.”

Ryan Van Poederooyen



SQ1 FINISHES

GTB | GT BLACK
WITH NATURAL BEECH HOOPS



CRB | CRUISER BLUE
WITH WALNUT HOOPS



HRR | HOT ROD RED
WITH NATURAL BEECH HOOPS



RGR | ROADSTER GREEN
WITH WALNUT HOOPS



SQ1 REFERENCE



SQ1 SET

SQ1 320 SET NM* SHELLSET / BD 20" / TT 12" / FT 14"

SQ1 SET

SQ1 322 SET NM* SHELLSET / BD 22" / TT 12" / FT 16"

SQ1 SET

SQ1 324 SET NM* SHELLSET / BD 24" / TT 13" / FT 16"



SQ1 SNARE DRUM

SQ1 1465 SDW SNARE DRUM 14" X 6.5" / DUAL GLIDE



SQ1 TOM TOMS

SQ1 0807 TT TOM TOM 08" X 07" / SOUND SUSTAINER

SQ1 1007 TT TOM TOM 10" X 07" / SOUND SUSTAINER

SQ1 1208 TT TOM TOM 12" X 08" / SOUND SUSTAINER

SQ1 1309 TT TOM TOM 13" X 09" / SOUND SUSTAINER

SQ1 BASS DRUMS

SQ1 2016 BD NM* BASS DRUM 20" X 16"

SQ1 2217 BD NM* BASS DRUM 22" X 17.5"

SQ1 2414 BD NM* BASS DRUM 24" X 14"

* = NO MOUNT

SQ1 FLOOR TOMS

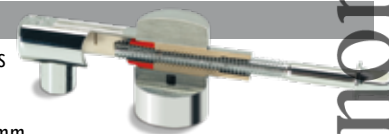
SQ1 1413 FT FLOOR TOM 14" X 13" / SOUND SUSTAINER

SQ1 1615 FT FLOOR TOM 16" X 15" / SOUND SUSTAINER

SQ1 1817 FT FLOOR TOM 18" X 17" / SOUND SUSTAINER

SQ1 FEATURES

- 100% European Birch shells
- BD shells: 10 ply, 10 mm
- SD, TT & FT shells: 7 ply, 7 mm
- **TUNESAFE** system - maximum tuning stability
- **CLTF** tension-free shell forming process
- **OSM** slightly narrowed outside shell measurements
- 45° bearing edges
- **SOUND SUSTAINER** mounting system on all tom toms and floor tom leg brackets
- **DUAL GLIDE** snare strainer mechanism
- 4 different matte lacquer finishes
- Bass drum hoops with different finishes (Natural Beech and Walnut)
- All bass drums without mount
- Remo USA Ambassador Coated batter heads and Ambassador Clear resonant heads (snare drum, tom toms & floor toms)
- Remo USA Powerstroke P3 Clear batter head Powerstroke P3 Fiberskyn resonant head with "off-set" SONOR logo (bass drums)



THE SONOR ARTIST FAMILY

SWITZERLAND

Christoph Blattner > Rhythmtalk
Christoph Fluri > Take This
Peter „DeeDee“ Kaufmann > George
Noby Lehmann > Rhythmtalk
Ruedi Maurer > Rhythmtalk
Jojo Mayer > Nerve
Ephraim Salzmänn > Stefanie Heinzmann
Philipp Schmid > Independent
Dany Schnyder > Independent
Simon Steiner > Redeem
Tom Steinmann > Treekillaz
Domenic Schüpbach > Yokko
Remo Signer > Independent
Sascha Weber > Purpur, Setup
Guido Wyss > Enigmatik

INDONESIA

Erhandy „Hendy“ Gusti > Gigi
Cendrianus „Cendi“ Luntungan > Elfa's Secioria
Jon Piliyang > Independent
Yesaya „Echa“ Soemantri > Independent
Antonius „Anton“ Suryo > Kerispatih

AUSTRALIA

Joe Accaria > Human Nature/David Campbell
Dave Goodman > Independent
Joel „Kustom“ Mammone > Independent
Mick Mills > Claymore
Evan Yako > Recording Artist

AUSTRIA

Klaus Brennstetter > Parametrix
Werner Groisz > Les Humphrie Singers
Christian Lettner > Basic Jazz Lounge
David Piribauer > Independent
Reinhard Schwarzwinger > Independent
Harald Tanschek > Independent

MALAYSIA

Martin Ngim > Independent

BENELUX

René Creemers > Drumbassadors
Wim De Vries > Drumbassadors
Hans Eijkenaar > The Voice Of Holland
Juan van Emmerloot > Stef Burns
John Engels > Independent
Mark Eshuis > Independent
Ed Warby > Independent
Sander Zoer > Delain

SWEDEN

Mikkey Dee > Motörhead / Scorpions
Tomas Haake > Meshuggah

FRANCE

Jacques Bourbasquet > Independent
Frederic Degré > Independent
Claude Gastaldin > Independent
Christian Grassart > Independent
Marc Jacquemin > Cock Robin – FLOX
Christian Monthieux > FFF - Independent
Paco Sery > SIXUN
Maxime Zampieri > Independent

USA

Nasar Abadey > Independent
Tal Bergman > Joe Bonamassa
David Bowen > Cody Canada & the Departed
Guillermo E. Brown > The Late Late Show
Jaimeo Brown > Jaimeo Brown Trio
Wild Mick Brown > Ted Nugent
Rocky Bryant > Average White Band
Lemar Carter > Demi Lovato
Dino Campanella > Dredg
Danny Carey > Tool
Chris Coleman > Beck
Paul Collier > Angelcorpse
Jack DeJohnette > Jazz Great
Arti Dixon > Independent
Vinnie Fiorello > Less Than Jake
Andres Forero > Hamilton Musical
Ian Froman > Independent
Kris Gustafson > Independent
Aaron Harris > Isis / Palms
Tootie Heath > The Heath Brothers
Mark Hernandez > Forbidden
Orlando Hernandez > Chayanne
Yoron Israel > Independent
Fernando Jaramilla > Chayanne
Jeffrey Jones > Independent
Dean Kosh > Airborne
Glenn Kotche > Wilco
Shannon Leto > 30 Seconds to Mars
Armand Majidi > Sick Of It All
Samantha Maloney > Independent
Sammy Merendino > Cyndi Lauper
John Miceli > Meat Loaf
Adam Nussbaum > The Impossible Gentlemen
Nat Scott > Independent
Leah Shapiro > Black Rebel Motorcycle Club
Jared Shavelson > Boysetsfire
Jeff Sipe > Jimmy Herring
Neal Smith > Independent
Steve Smith > Vital Information
Aaron Spears > Adriana Grande
Ed Udhuss > Zebrahead
Jeff Tain Watts > Independent
Nathan Walker > True Rivals
Ron Wikso > Greg Rolie
Joe Winters > Steepwater Band
Drummie Zeb > The Wallers

ITALY

Enzo Augello > Educator
Lele Boria > Educator
Gianni Caltran > Session
Francesco Corvino > Session
Luciano Galloni > NEK
Claudio Mastracci > Independent
Fabio Nobile > Session
Federico Paulovich > Destrage
Franco Penatti > Session
Sergio Pescara > Groovydo
Daniele Pomo > RanetRane
Giorgio Prette > Independent
Franco Rossi > Educator
Danilo Tasco > Negramaro

CANADA

Tyler Stewart > Barenaked Ladies
Chris Sutherland > The Bodyguard / Xanadu
Johnny Fay > The Tragically Hip
Sean Dalton > Independent
Pat Steward > Odds
Jim Boudreau > The Western Swing Authority
Aaron Edgar > Third Ion
Rich Irwin > Richard Irwin Trio
Chuck Keeping > Big Wreck
Davide DiRenzo > Cassandra Wilson / Tom Cochrane
Dave Langguth > Kim Mitchell
Anthony Michelli > Independent
Emmanuelle Caplette > Independent
Jeff Asselin > The Lucas Haneman Express
Aubrey Dayle > My id
Steve Caron > Radio Radio
Chris Lessa > Modus Factor
Dave Patel > Emmanuel Jal
Tim Timleck > Emm Gryner / Trapper
Andreas David > Ylva Murd
Bryan Valeriani > Terminal Baggage Claim
Alan Hetherington > Lenka Lichtenberg
Brian Craig > Les Ékarchés
Doan Pham > Independent
Sean Kilbride > Independent
Mario Roy > Independent
Bruno Roy > Independent
Ed Mortenson > Independent
Ben Riley > Matt Dusk / Blurred Vision

NORWAY

Rune Arnesen > Independent
Jan Axel "Hellhammer" Blomberg > Mayhem
Anders Engen > Bjørn Eidsvåg
Bjørn Gunnar Sando > Hellbillies
Claus Heiberg > Briskeby
Sola Johnsen > Dum Dum Boys/Helter Skelter
Espen Manger > Independent
Kim Ofstad > Dsound/Madcon
Ole Petter Hansen Chyllie > Dream Police/
Ingrid Bjørnov/Beat for Beat
Agne Sæter > CC Cowboys

JAPAN

Yuki Aoyama > nano.RIPE
Masao Fukunaga > Nana Mizuki
Genta > Masayoshi Yamazaki, bird
Naoya Hamada > Independent
Yuki Hatano > YELLOW
Yuichi Hokazono > Spicy Kickin', Sphere
Osamu Jinguji > Remioromen
Taro Koyama > Independent
Yuya Maeta > Martin Friedman
Ken Ken Sato > Plastic Tree
Yoshitaka Shirane > KREVA
Akira Suefusa > Ego Wrappin' and the Gossip of Jaxx
Masaaki Tamaki > Rimi Natsukawa, TUBE
Yutaka Watanabe > Independent
Hideo Yamaki > Independent
Yuzo Yoshioka > Monster-Tairiku
Yukky > Home Grown

GERMANY

Christian Blüm > Brings
Ronny Dehn > Silly
Stephan Emig > Triosence
Benny Greb > Moving Parts
Carola Grey > Noisy Mama
Holger Hübner > Independent
Rennie Hatzke > Münchener Freiheit
Eike Herwig > Donots
Sebastian Krajewski > Seeed/Peter Fox
Raffael Kühle > OK Kid
Thomas Lieven > Big Band der BW
Rudi Marhold > Götz Alsmann
Ralf Neuhaus > Independent
Jost Nickel > Jan Delay
Andreas Nowak > Silbermond
Dennis Poschwatta > Guano Apes
Pola Roy > Wir sind Helden
Klaus Scharfschwerdt > Puhdys
Christoph Schneider > Rammstein
Joe Styppa > Konvoj/Cro/Cassandra Steen
Ralph Winter > Big Band der BW
Michael Wolpers > Running Wild

UNITED KINGDOM

Steve Alexander > Independent
Craig Bacon > Independent
Richard Bailey > Incognito
Ian Bayne > Runrig
Joshua Blackmore > Strobes
Dane Campbell > Phil Campbell
Jack Carrack > Paul Carrack
James Chapman > Independent
Joe Crabtree > Wishbone Ash
Danny Cummings > Mark Knopfler
Blair Cunningham > Westernhagen
Guy Davis > Freeze the Atlantic
Dave DeRose > Moloko/Roisin Murphy
Martin Ditcham > Westernhagen/Status Quo
Dean Duke > Paul Carrack
Josh Gimber > Sons and Lovers
Gavin Harrison > Porcupine Tree/King Crimson
Ryan Jenkinson > Reverend & the Makers
Martin "Magic" Johnson > Bewitched
Vinnie Lammi > Mel C/Spice Girls
Ed Lay > Editors
Dafydd Iwan > Super Furry Animals
John Marshall > Soft Machine Legacy
Nicko McBrain > Iron Maiden
Bryan McLellan > 24 Pesos
Perry Melius > Tricky/Billy Ocean
Alexis Nuñez > The Kooks
Chris "Jungle" Polglase > Independent
Alex Reeves > Guy Garvey
Andy Robertson > Marlon Roudette
Arnaldo Rogano > Future Shock
Rocky Singh > Asian Dub Foundation
Henry Spinetti > Katie Melua/Eric Clapton
Richard Thair > Red Snapper
Alex Toff > Jack McManus
Paul Walsham > Hurts/Barclay James Harvest

ARGENTINA

Pablo LaPorta > Independent
Gustavo Meli > Independent
Jota Morelli > Independent
Pedro Pacheco > Soledad Pastorutti
Nicolas Polo > Asspera
Andy Vilanova > Carajo

INDIA

Ranjit Barot > John McLaughlin

KOREA

Joowon Eum > Independent
Ji-Hyun Kim > Independent
Junyong Quak > Independent

NEW ZEALAND

Patrick Kuitze > Independent
Darren Mathiasen > Shapeshifter/Hollie Smith
Phil Rudd > AC/DC



SONOR

SONOR

© SONOR GmbH 2017, 2018

Product Design: Karl-Heinz Menzel, Frank Boestfleisch, Philipp Rabe

Photography: Martin Kreutter, Marburg; Diana Seifert Lidschlag Photography and SONOR, Bad Berleburg-Aue

Concept: SONOR and Oliver Link

Graphic Design: DesignBüro Schönfelder, Essen · Text Concept: Oliver Link, Ferry Bult, Thomas Barth, Gary Ingrassia

A special thank you to the following contributors:

Chris Coleman, Nir Z, Alex Nuñez, Joshua Blackmore, Ryan Van Poederooyen, Abbey Road Institute, Frankfurt;

Beyerdynamic, Heilbronn; The Marmelade Visual Engineering, Hamburg; Blue Lines Rental, Frankfurt;

FKM Laser Sintering, Biedenkopf

SONOR reserves the right to update or change its products without advance notice. Wood is a natural product, which can cause slight alterations in color and grain. Print reproduction of drum designs and finishes can vary depending on color density and general print quality.

www.sonor.com