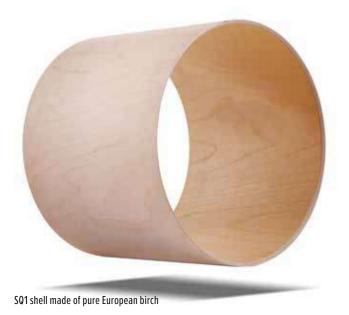


FEEL THE SOUND.



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.

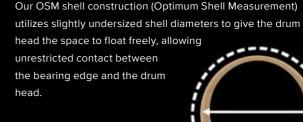


THE STORY BEHIND CLTF AND OSM

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

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.







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.



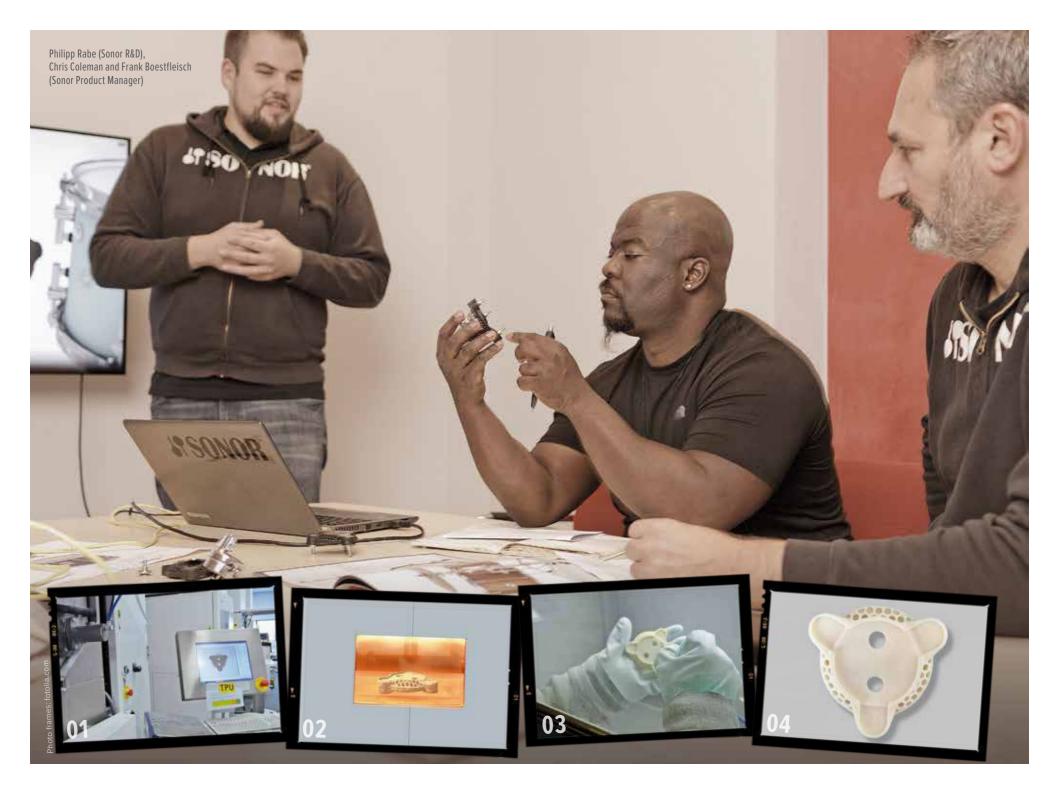
ANATOMY OF A SOUND SUSTAINER

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.

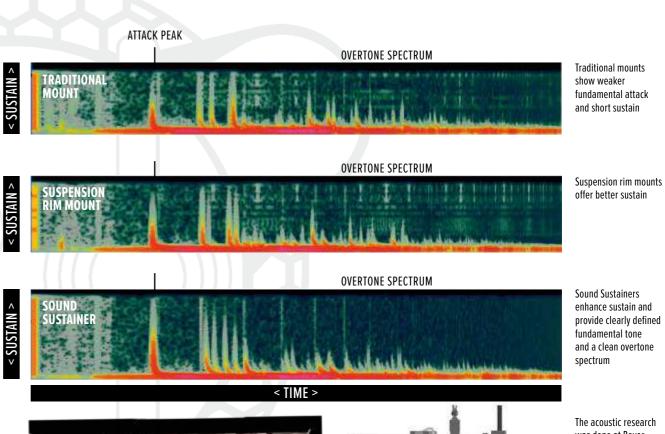
The SLS 3D Printing Process

- **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.



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 Beyerdynamic. 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.

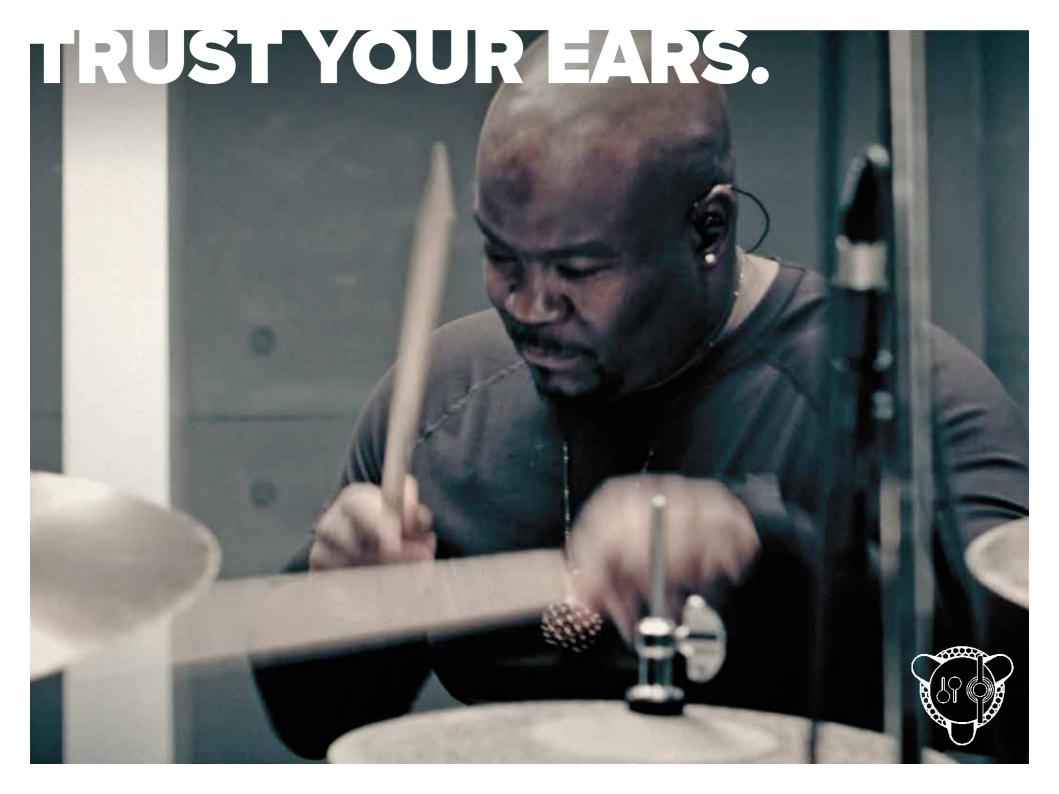






was done at Beyerdynamic's sound lab.

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



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



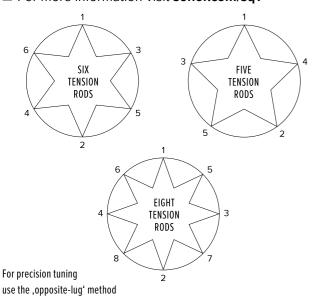


THE ART AND SCIENCE OF

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 the sequence of tightening the tension rods





"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."



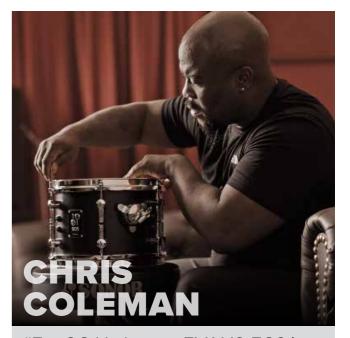
DRUM TUNING.



"With any recording I've done with birch drums, I've always used the combination of a single ply G1 Evans Batter Head and 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!"





"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."











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

ABBE ROAD AND ARREST TOTAL TOTAL ARREST TOTA

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

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



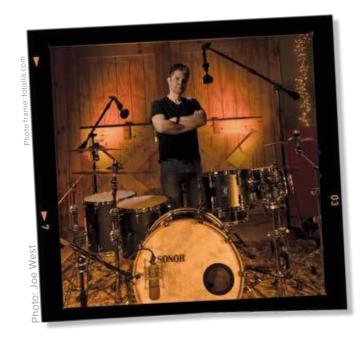
Alexis Nuñez/The Kooks I A self-described "pop" band, their music is primarily influenced by the 1960s British Invasion movement and post-punk revival of the new millennium.

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.





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.



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

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!"





SQ1 FINISHES











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 BASS DRUMS

SQ1 2016 BD NM* SQ1 2217 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 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 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

AUSTRALIA

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

AUSTRIA

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

Martin Naim > Independent

SWITZERLAND

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

SWEDEN

Mikkey Dee > Motörhead / Scorpions Tomas Haake > Meshuaaah

INDONESIA

Guido Wyss > Enigmatik

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

BENELUX

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

FRANCE

Jacaues Bourbasauet > Independent Frederic Dearé > Independent Claude Gastaldin > Independent Christian Grassart > Independent Marc Jacquemin > Cock Robin - FLOX Christian Monthieux > FFF - Independent Paco Serv > SIXUN Maxime Zampieri > Independent

USA

Nasar Abadey > Independent

Tal Beraman > 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 > Dreda Danny Carey > Tool Chris Coleman > Beck Paul Collier > Angelcorpse Jack DeJohnette > Jazz Great Arti Dixson > Independent Vinnie Fiorello > Less Than Jake Andres Forero > Hamilton Musical Ian Froman > Independent Kris Gustofson > Independent Agron Harris > Isis / Palms Tootie Heath > The Heath Brothers Mark Hernandez > Forbidden Orlando Hernandez > Chayanne Yoron Israel > Independent Fernando Jaramillo > Chayanne Jeffrey Jones > Independent Dean Kosh > Airborne Glenn Kotche > Wilco Shannon Leto > 30 Seconds to Mars Armand Maiidi > 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 Udhus > Zebrahead Jeff Tain Watts > Independent Nathan Walker > True Rivals Ron Wikso > Greg Rolie Joe Winters > Steepwater Band Drummie Zeb > The Wailers

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 > Nearamaro

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 Aubrev Davle > Mv id Steve Caron > Radio Radio Chris Lesso > Modus Factor Dave Patel > Emmanuel Ial Tim Timleck > Emm Gryner / Trapper Andreas David > Ydna Murd Bryan Valeriani > Terminal Baggage Claim Alan Hetherington > Lenka Lichtenberg Brian Craig > Les Ékorchés 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 Heibera > Briskeby Sola Johnsen > Dum Dum Boys/Helter Skelter Espen Mangen > Independent Kim Ofstad > Dsound/Madcon Ole Petter Hansen Chylie > Dream Police/ Ingrid Bjørnov/Beat for Beat Agne Sæter > CC Cowboys



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

JAPAN

KOREA

Joowon Eum > Independent

Ji-Hyun Kim > Independent

Junyong Quak > Independent

Yuki Aovama > nano.RIPE Masao Fukunaaa > Nana Mizuki Genta > Masayoshi Yamazaki, bird Naova Hamada > Independent Yuki Hatano > YELLow Yuichi Hokazono > Spicy Kickin', Sphere Osamu Jinguji > Remioromen Taro Koyama > Independent Yuva 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 Grev > Noisv Mama Holger Hälbig > Independent Rennie Hatzke > Münchener Freiheit Eike Herwia > 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 > Konvoy/Cro/Cassandra Steen Ralph Winter > Big Band der BW Michael Wolpers > Running Wild



Liu Gang > C.N.S.O Lu Xun > China Drummer Association Zheng Zhaohui Hao Zi > Independent

NEW ZEALAND

Patrick Kuhtze > Independent Darren Mathiassen > Shapeshifter/Hollie Smith Phil Rudd > AC/DC

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 Guv 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 Lav > Editors Dafydd Leuan > 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

