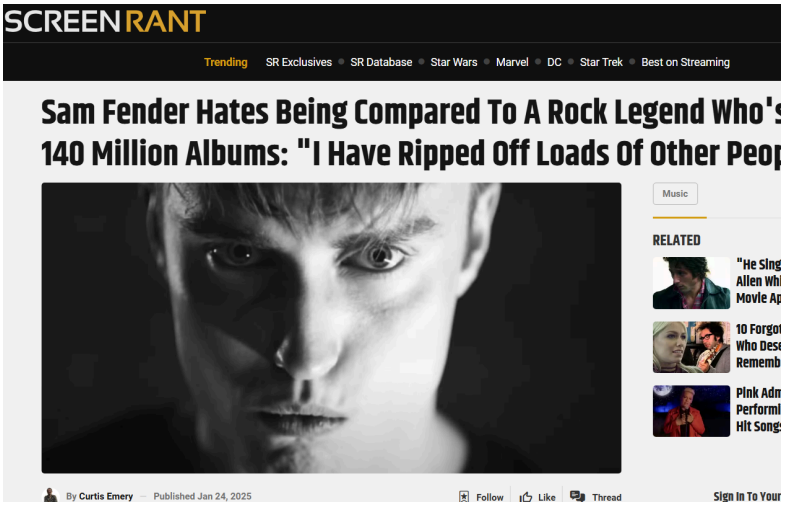
News/Evergreen Interest piece:



https://screenrant.com/sam-fender-bruce-springsteen-comparison-reaction-explainer/

Newcastle singer-songwriter Sam Fender has captured the English heart with his honest and unique take on rock and roll. The King of the North's specific brand of emotional songwriting is carefully curated by Fender himself, and while he consciously accepts the inherited legacy of those who came before him, one frequent parallel doesn't sit quite right with him.

It's somewhat inevitable that comparisons follow success: Ariana Grande inspired parallels to Mariah Carrey, Coheed & Cambria are some people's irrefutable Rush heirs, and Greta Van Fleet were almost immediately heiled the new Led Zeppelin. Sometimes, that's more concious of course, as with Airbourne lovingly paying homage to AC/DC in there distinctive riffs and chest-beating lyrics. But for Fender, the near constant allusion to him being the "Geordie Bruce Springsteen" is a step too far.

Why Sam Fender Is Called Bruce Springsteen's Heir Apparent

Like Springsteen, Fender's Working Class Voice Evokes Hope, Youth, and Rock and Roll Straight from the 1970's

Fender name-dropping Springsteen is commonplace. Fans have dubbed Fender with the affectionate nickname "Geordie Bruce Springsteen." However, after touring with The Boss in Italy, and gaining his own singular fame-- as evident from his headliner set at the northeast site of the Leeds Festival 2023, which featured a massive homecoming crowd that gave the main stage action in Reading a run for its money - the 30-year-old musician is finally his own in Britain and abroad.

Looking back on Sam Fender's love for Bruce Springsteen, and Fender's saxophone-laden, guitar-forward sound, being compared to The Boss seems like the best case scenario for Fender. According to the British Northern, he hates being compared to his hero.

From his love of denim down to his use of a Stratocaster, Sam Fender's vibe is nailed down tight. He plays rock and roll with attitude and just a little bit of flair. Paired with his admiration and public love for Bruce Springsteen, it was by no mistake that Fender earned the name "Geordie Bruce Springsteen."

Fender cried after meeting Bruce Springsteen for the first time, name-dropped the artist in countless interviews, and most recently toured Italy with The Boss in 2023. It is obvious Fender has no problem sidling up next to the New Jersey rock and roll genius. In a tweet from late 2022, Fender said, “I’m thinking about the moment [Springsteen’s] music first resonated with me when I was a teenager! Next year I’m opening up for him in Italy."

Fender Hates The Springsteen Comparison

Do Not Pigeonhole Sam Fender, the Geordie Rock Star Contains Multitudes

And, while the northern songwriter has appeared in recordings with the likes of Bruce Springsteen, Sting, and others, he is not in the business for recognition from his heroes, as he points out in The Sun's column Bizzare, "I feel I would rather be me." Fender wants the world to know he is his own artist. Besides, as Sam pointed out in The Sun, "'hang on, I don't just rip him off, I have ripped off loads of other people.'"

"You take bits from everything as a musician. I have a saxophone and I am from a working-class town and I speak about working-class life, so it is easy to get stuck in."

In Sam Fender's mind, being likened to Springsteen exclusively is over the top considering The Boss's extensive catalog and the nickname originating from his first album, asserting it is surface level at best.

"'The comparisons are just stupid, he is one of the greatest songwriters ever, he's had 19 albums out and I've had one album out. I'm like a sh*t, north-eastern, Geordie version. I'm actually waiting for the court case for when he comes to get us for all of the songs I've ripped off," Sam goes on in his interview.

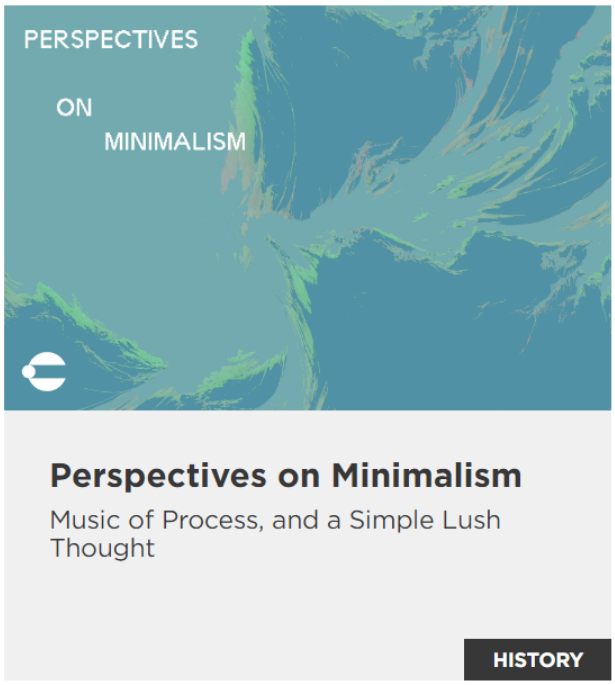
Seemingly more obvious to Fender, the comparison is nerve-wracking. In another interview with The Sun, Fenders speaks on teaming up with Springsteen and Mark Knopfler for a massive compilation: "Springsteen's on it as well. There's a million people... All of the legends and then me, a stupid Geordie."

It isn't hard to read the self-deprecating gratitude in Fender's sentiments, who is truly an up-and-coming legend in his own right. Fender has recently been in the headlines after canceling his tour in December 2024 due to an injured vocal cord following an electrifying performance while simultaneously being overcome with the flu, breaking the hearts of his massive UK fan base.

Add a few Ed Sheeran collaborations and Fender's insurmountable work ethic, and it is not hard to imagine Sam Fender's career lasting for decades. Soon the blue-collar crooner will be more peer than pupil to America's Jersey jewel - that is if he isn't already.

Source: Guitar.com, The Sun UK, Yahoo News

Blog Post:



Perspectives on Minimalism

Music of Process, and a Simple Lush Thought

Curtis Emery · 03/25/24

https://www.perfectcircuit.com/signal/history-of-minimalism

Let me set the stage: England, summer of 1971—The Who has just released “Baba O'Riley”, the opening track to their fifth studio album *Who’s Next*. The famous phrase “Don't cry / don't raise your eye / it's only teenage wasteland” is heard for the first time, and listeners at home get a taste of the live The Who experience with the sprawling five minute track (the original recording came in at 30 minutes).

At the front of the legendary rock track sits a strange but fascinating keyboard part designed and performed on a Lowrey Berkshire Deluxe TBO-1 home organ using the preset “marimba repeat function.” It's simple in execution, but the sound itself pointed to something much more intricate and imaginative.

“Baba O’Riley”: the song’s name is an amalgamation of religious leader Maher *Baba* and American avant-garde master composer Terry *Riley*. This is The Who's songwriter Pete Townshend's ode to two of his heroes, attempting to feed his spiritual guru Meher’s "Avatar" of god into a machine—which he attempted to capture with synthesizers like the EMS VCS3 and ARP 2600, but nailed *perfectly* with his TBO-1 home organ, which he performed in the style of Terry Riley, borrowing directly from Riley’s mind-bending piece *Keyboard Study #1* (1964).

Composers like Terry Riley and his peers were gaining worldwide attention for their work with synthesizers, tape machines, and seemingly enlightened production behaviors. By the 1970s,

artists like Brian Eno, Robert Fripp, and other prog rockers were captivated by the experimental, repetitive, avant-garde sounds coming from across the ocean.

Countless creative musicians were under the influence of one of America's most captivating moments in music history—the birth and practice of minimalism.

What is Minimalism?

Minimalism, or the practice of minimal music, is characterized by the use of the minimal amount of materials to create a heightened emotional response from the listener—often, relying on simple processes for musical development/evolution. Through the use of repetition, microtonal arrangement, tape loops, synthesizers, and extreme play lengths, Minimalist composers blended their transcendental understanding of reality with their specific, personal voices to create music that had never been heard before.

The period of the 1960s and 1970s was an exciting era in America for avant-garde art. It was a time of revolutionary thinking and revolutionary living. A social shift was well underway—a shift away from the conservative, authoritative past to a new, switched-on future. Free thinking and free living was appreciated, and the creative world was completely open to new ways of doing and being.

The emergence of groups like Fluxus, started by George Maciunas, which featured performance artists like Yoko Ono, who hosted some of the first Minimalist performances in her apartment, showcases the popularity of avant-garde art in NYC, and signals towards an open and waiting audience for process based work interested in more lofty art-thinking.

We can point to John Cage, American composer, as one of the main minds behind this new trend of process-based, conceptual work, and the generative force behind the genre of Minimalism.

In 1952, John Cage first presented the now-infamous and pivotal composition—*4'33"*. The title refers to the literal duration of the piece: it is four minutes and thirty three seconds of environmental sound, where the performer is totally silent; the audience then becomes increasingly aware of the sounds which surround the performers. Around this time, Cage also

organized his first “happening” at the historic and absolutely essential art school and community project Black Mountain College in North Carolina, USA. Cage’s “musical happenings” would set the pace for creative thinking literally around the globe.

Cage’s “musical happenings” were impromptu gatherings which blurred the lines between performance and pedagogy—proposing a new way of *doing* through performance. Attendees of these original events would go on to form Fluxus, and students of Cage would bring tools to the world not yet seen.

By the 1960s, avant-garde, process-obsessed acolytes were starting their own radical spaces and carving a name for themselves in the wilderness of America’s experimental art scene. The original wave of Minimalism was championed primarily by four legendary composers: La Monte Young, Terry Riley, Steve Reich, Philip Glass. Collectively, these composers introduced Minimalism to North America and the rest of the world. Their circles were tight, fanatic consumers of their peers’ work.

Minimalism arose from a trend away from the more typical and in-vogue experimental work of the time, which was primarily based on Serialism—an atonal, academic, constraint-based music composition style from the early 20th century, commonly represented by composers like Arnold Schoenberg, Milton Babbitt, Charles Wuorinen, and others. Serialism took a step away from tonal music based on major and minor scales, using abstract structures as the basis for creating musical passages without relying on conventional concepts of rhythm or harmony.

At one point in time, many composers saw this as a liberating process—granting them ways to break free from the confines of musical tradition. But by the 1960s, young composers who were taught serial techniques in school were largely growing disillusioned with the technique. The style was viewed as stale by up-and-coming composers like Riley, Glass, Harold Budd, John Adams, and Jon Hassell—all great composers, and the vanguard of proto-ambient music.

But, it was La Monte Young who first gained notoriety for taking this sentiment and creating something with it.

An Interwoven Account of the Early Years of Minimalism

Influenced by the serialist composer Anton Webern, La Monte Young's *Composition 1960 #7* is one of the very first notable performances of what would eventually be called minimalism. The piece was slow and gradual. It was written for any instrument, as long as the performer followed the simple, basic instruction: which was to play two notes, B3 and F#4, "to be held for a long time." The first performance in 1961 lasted 45 minutes and featured a string section and Young.

[Above: a modern performance of Young's Composition 1960 No. 7 using two long tape loops.]

Of the performance, The New Yorker commented, "when La Monte Young says take it from the top, he means next Wednesday," which is very fitting and tells of its place in the Minimalist canon. Since, Young has produced many works (and few recordings); one of his best-known works, the decades-in-development *The Well-Tuned Piano*, has been in a constant state of progress and evolution since 1964. A typical performance lasts five to six hours.

Like Young, to whom minimalism was a means to "let sounds be what they are", composer Steve Reich also sought to present sound in a whole new way. (Prendergast: *The Ambient Century*, p. 92) Reich believed in the promise of music to satisfy all wonder and found in minimalism a transcendental form.

Reich's now-famous 1968 essay "Music as a Gradual Process" talks about a slow-moving, radical approach to sound:

"By 'gradual' I mean extremely gradual; a process happening so slowly and gradually that listening to it resembles watching a minute hand on a watch--you can perceive it moving after you stay with it a little while."

The following year, in 1969, Reich handed this essay out to everyone who attended his iconic performance at the Whitney in NYC. On this occasion, Reich presented his *Pulse Music* to the public—playing his intricate electronic musical instrument, The Phase Shifting Pulse Gate.

The following year, in 1969, Reich handed this essay out to everyone who attended his iconic performance at the Whitney in NYC. On this occasion, Reich presented his *Pulse Music* to the public—playing his intricate electronic musical instrument, The Phase Shifting Pulse Gate, which had recently been developed in collaboration with engineer Larry Owens.

The Phase Shifting Pulse Gate performance at the Whitney featured several oscillators patched into the device, all tuned to the same minor scales used earlier in the performance by a small ensemble of log drummers. *Pulse Music* features an elaborate rhythmic phase shifting technique, of Reich's own algorithm, a process he described as phase shifting. The Phase Shifting Pulse Gate used simple electronic circuitry to provide access to a wide variety of shifting rhythmic gating patterns, effectively rhythmically automating the volume of the sounds patched into it. Reich pointed to the rhythmic structures of Balinese music as the inspiration for this technique—but ultimately, he did not continue to use the Phase Shifting Pulse Gate, and instead began to translate these techniques into instrumental music for live performers.

This wasn't Reich's first piece to explore different approaches to varying the rhythmic phase of multiple performers or sound sources. Reich's concept of phase shifting is perhaps best captured in his polyphonic tape loop experiments, in which two identical samples would be played—allowing the simple passage of time to modulate the performance of the actual tape the sample was recorded on. These differences playback speed between machines would create a mind bending, phase shifting experience and create interesting polyphonic sonic products. We can hear this concept perfectly in Reich's famous early work *It's Gonna Rain* (1968), which is a chaotically hypnotic composition for magnetic tape, 18 minutes of groundbreaking music and a key piece of the minimalism canon. Other pieces from the same period, such as the famously difficult-yet-beautiful *Piano Phase* feature similar techniques executed by live performers.

Tape experimentation was not a new concept at the time, of course; but Reich's implementation offered a step in a new direction from the work of La Monte Young's peer Terry Riley, whose work on the West Coast had helped set the stage for Reich's ideas.

Terry Riley is certainly one of America's best-known avant-garde composers. His dedication to Eastern thought and spirituality mixed with his totally unique playing and compositional style—partly based on traditional music techniques from India—quickly made him an influential figure on the West Coast.

Riley is best known for his minimalist pieces *In C* (1964) and *Keyboard Studies* (1965-1968), as well as his electronic album *A Rainbow in Curved Air* (1969) and collaborations with musicians all around the world. Terry Riley's interest with tape composition started in the 1950s, but really blossomed with the creation of his "time lag accumulator"—a fantastic device/recording process which accomplished delay-like effects using two reel-to-reel tape recorders. The process of

Time Lag Accumulation is similar to what we now think of as "looping", using long delay lines to capture overlapping layers of sound from a single source or performer. However, in Riley's work, Time Lag Accumulation wasn't used to create neat, clean rhythmic loops: instead, it was used to capture unsynchronized, overlapping layers of tones and arpeggios, with a sound that gradually evolved as the tape looped around again and again.

In the future, similar approaches would become integral to England's seminal ambient pieces; a very similar workflow was used, for instance, for Brian Eno's *Discreet Music.* Similarly, in Brian Eno and Robert Fripp's *No Pussyfooting* (1973) and performances around the time, Fripp used the quite similar "frippertronics" guitar technique to build layered sonic textures from his guitar.

Even back in the 1960s, Riley was recognized by his peers as a significant up-and-coming composer. His personal inner circle included many of electronic music's founding members and other important players in the early history of musical minimalism. Most notably, Riley was closely involved with the influential San Francisco Tape Music Center (SFTMC), though which association many of his ideas and pieces were allowed to flourish. The premiere performance of *In C* occurred at the SFTMC in 1964.

Among other things, the San Francisco Tape Music Center was effectively an incubator for music, musicians, and ideas that would eventually define modern synthesis, electronic music, and ambient composition. Members and associates included director Paulline Oliveros (eventual developer of the Deep Listening technique), and her co-founders Morton Subotnick, Ramon Sender (from historic anti-fasc Spanish Civil War family), Terry Riley, Tony Martin (early live lighting/projection/visual art performer), Steve Reich, Jon Gibson, Stuart Dempster, and many more.

Steve Reich began to develop his practice of phase shifting here at SFTMC—in fact, his first magnetic tape composition which featured phasing, *Come Out* (1966—a predecessor to *It's Gonna Rain*), was performed at the center. Reich's involvement with the SFTMC would prove invaluable: his new ear for electronic composition and technical proficiency would influence his attitude towards sound and influence the development of the ideas in the aforementioned essay on Gradual Music and his "pulse" technique.

Philip Glass, who became another one of minimalism's heroes, was accepted into the highly cross-pollinated growing field of minimalist composers after attending a performance of *Piano Phase* by his Julliard classmate, Steve Reich.

Glass—also a mentee of SFTMC member Jon Gibson—was influenced by composer and sitar virtuoso Ravi Shankar, and would eventually become known for his ritualistic use of repetition and additive composition. This was similar to the way that traditional Indian compositional techniques influenced Terry Riley, and how Balinese music influenced Reich. Today, Glass has an extremely prolific minimalist history, represented in part by his long-standing musical group the Philip Glass Ensemble.

Glass's *Music in 12 Parts* (1971–74) is one of his major contributions to the genre; its premiere erformance was one of two key minimalism-centric events to sell out Town Hall in NYC. The landmark performance lasted over four hours and featured three to four Farfisa mini compact organs (sourced mainly from post-Christmas listings, untouched by the children to whom they had been gifted). Soon, minimalism came into a new era with two seminal pieces: Reich's *Music for 18 Musicians* (1974–76) and Glass's *Einstein on the Beach* (1976)—now considered hallmarks of the genre.

Minimalism's Next Steps

While the 1970s seemed to lack the "hippy"-drug-cultured-collective finish of the early exploratory years of minimalism, it would net hundreds of thousands in record sales between its practitioners and launch avant-garde composition into the mainstream eye both at home in America *and* abroad.

The influence of minimalism on Brian Eno—and the later influence of Eno himself on the old guard of Minimalism—cannot be understated. Eno would see Philip Glass in concert live in 1970 and looked up to Steve Reich. Eventually, Eno would also launch Obscure Records, maybe one of the most important labels in the history of ambient and electronic music, which released records from John Adams, Steve Reich's conductor and teacher, and other composers from the top of the minimalist aesthetic worldwide like Michael Nyman, John Cage, Gavin Bryars, Harold Budd, and more.

As was with the inception of the genre, its evolution and maturation featured many changes and shifts. The bulk of the work establishing minimalism's basic tenets as a "genre" was completed between 1960 and 1980.

The original practitioners' processes demanded constant evolution, and their work developing minimalism as a practice would continue to be tweaked and reapproached, leading many of the composers into more melodic and harmonic spaces in ambient music, electronic music, and deep into the magic of synthesis.

More contemporary Minimalist projects like Julia Wolff's Bang on a Can (featuring Michael Gordon and David Lang) experiment with process-based ensemble work. Also representing minimal music, composers Bryce Dessner (from The National) and composer Nico Muhly maintain these minimal practices and concepts. And of course, the processes of minimalist music can be found in countless late-20th and early-21st-century genres, from post rock to ambient electronic music, drone, and beyond.

To say that minimalism lasted only 20 years would, of course, be against the gradual aspect of one of music's most important avant-garde movements. However, the popularity of the earliest approaches to minimalism began to break, leaving it an esoteric concept and a remarkable chapter in history. However, today, its processes and logic continue to be a beautiful and frequently-used tool in the modern composer's toolbox.

Press Release:

Middle Atlantic Offers Under Table Rackmounting with New TechPed Series

The TechPed Series Technology Pedestal is designed to provide localized and discrete equipment mounting in conference rooms and other collaboration spaces.

Middle Atlantic Products has introduced the TechPed Series Technology Pedestal. Designed to provide localized and discrete equipment mounting in huddle rooms, conference rooms and other collaboration spaces, the TechPed is designed to be a simply integrated and easily serviced conference table support system that houses equipment and cables.

The TechPed incorporates the company's Frame to Furniture design, an installer-friendly approach that eliminates long waits, speeds up integration and reduces the effects of transit damage. The inner steel rack frame ships directly from stock, allowing integrators to begin the integration of the system immediately. The outer surfaces are shipped separately to the installation site or shop and can be quickly and easily attached to the core structure to cover the metal and complete the installation.

Quick and simplified system maintenance is made possible by the TechPed's removable side panels and the inclusion of the patent-pending Lever Lock tool-free internal management system, which maximizes rack space and cable management options within the side channel of the pedestal.

Available in three sizes and a wide range of standard color choices, a custom millwork kit option is also available that provides detailed shop drawings for a woodworker to create a customized look for the TechPed and mounting hardware to attach it to the frame.

Print Media/ Product Review and Spotlight Piece:

Small Speakers, Big Sound

BY CURTIS EMERY

THERE MAY BE SOME PEOPLE outside of the audiophile community who know brands like Dynaudio and B&O, but the Scandinavians are not generally known for their audio engineering prowess.

Opalum, a relatively new manufacturer of lifestyle audio systems, hopes to change that. The company recently introduced its Stream .310 wireless speaker system, a product that combines everything contemporary consumers are looking for from a speaker manufacturer into a compact solution.

Designed to pack a dynamic, robust sound experience in a relatively small package, the Stream .310 may be comparable to other small speaker packages from a casual perspective. But once the speakers begin producing sound, the Stream .310 sets itself apart as an aggressive sound system that outperforms its small size and rivals larger systems.

The Opalum Stream .310 wireless speaker system surprises despite its small size.

Setting up the system is relatively painless. Left and right outputs on the system's Control Hub device correspond with respective left and right connections on the speakers. The Control Hub incorporates a choice of digital inputs, and the simple layout makes setting the system up almost instantaneous. In addition, the Control Hub boasts an optional analog subwoofer output and an analog stereo input. What separates the Stream .310 from other multimedia systems is Opalum's wireless network configuration port. Configuring the Opalum system to play wirelessly allows the streaming of media over a standard home wireless system. This wireless system is supported by any UPnP or DLNA devices.

I would recommend allowing the Opalum Stream .310 some time to break in before it can really provide the best sound – after testing it myself, I think about 36 hours of play should do the trick. Prior to break-in the sound was somewhat flat. It had the ability to reach high volumes with little to no peaking, giving it a full and forceful voice regardless of volume, but despite its great pallet of middle frequencies it was missing some top and bottom end extension. After break-in however, the system seemed to level out and I was blown away by the clarity of these small speakers.

I listened to a range of music through the system (I did the majority of my listening through the analog stereo input), from drone-artscapes, to upbeat jazz and even a couple of my own masters. I put the Opalum

system through a boot camp of genre- bending sonic drills. Right away I noticed the system's uncanny ability to portray just about every instrument in a song's sonic landscape. In some of the more chaotic samples, I heard instruments playing in the orchestration of the song that I had never heard before. With more docile tracks, I noticed that the Opalum system was also sensitive enough to gently coax subtle songs into a more glorified medium. Overall, I really enjoyed what I was hearing.

The Opalum Stream .310 is an impressive little system with a big voice. The set-up is easy and efficient with enough connectivity options to future-proof your home entertainment system for a while. The sound is coherent and adept, which is a plus for listening to complex music where delineation is important to encompass the sum of the song.

opalum.com

MSRP for the system, including a pair of Stream .310 loudspeakers, a Control Hub and a RF remote control is $1,199.

CURTIS EMERY is assistant editor at TechDecisions.com, a sister website to CE Pro.

CE PRO VERDICT

KUDOS: Digitally friendly speakers that are versatile.

CONCERNS: Proprietary technology that doesn't allow you to play well with others.

FEATURES 1 2 3 4 5
SETUP 1 2 3 4 5
PERFORMANCE 1 2 3 4 5
VALUE 1 2 3 4 5

Buying Guide/Product Round-up:

https://mytechdecisions.com/video/10-avb-products-for-high-quality-digital-audio-and-video-control/

10 AVB Products For High Quality Digital Audio And Video Control

Audio Video Bridging is the new standard for data transport and here are the components that make it possible.

IT managers thinking about integrating audio and video into their data management systems are looking to audio video bridging (AVB) as a standard for efficient Ethernet based data transport. AVB marks a new wave in data streaming over an Ethernet connection.

AVB is an IEEE 802.1 standard that ensures high quality, low latency and time synchronized transfer of digital audio and video data through an Ethernet port. With AVB, products are able to send multiple audio and video channels at the same time through one AVB capable high-speed Ethernet connection. In the world of AVB, AVnu is on the forefront of AVB education and expansion of the standard. AVnu is an organization of professionals interested in promoting the use of AVB standards and the purchase of AVB compatible devices. This AVB advocacy group was founded by Broadcom, Cisco, Harman, Intel, and Xilinx, and is promoted by a variety of audio and video technology companies. Along with general promotion, AVnu also works to create AVB compliance tests and procedures to continue the research behind AVB and ensure that the AVB technology in today's market is as efficient as possible.

AVB standard connections offer the most up-to-date control over digital audio and video. With a high-speed Ethernet connection, audio and video data can be transported in real time at the highest quality.

Through software and hardware upgrades, any Ethernet network can be converted into an AVB compatible environment. From a simple upgrade, such as an AVB options card installation, to the integration of devices which comply with the AVB standard, the following products show-off the different options IT integrators have for upgrading their Ethernet networks to support Audio Video Bridging.

4 Mindbending Audio Reactive Multi-Touch Installs

Conceptual sound and visual creation with multi-touch technology.

Imagine an interface that uses abstract visual cues to stimulate music. It then adds human interaction so a user can manipulate the visual cues, generating sound, ultimately creating music with colors, digital geometrics and physics.

This complete workflow of user and computer interaction is known as an audio reactive multi-touch installation, and within experimental interfaces for musical creation circles, represents the marriage of intense processing, musical theory and user experience concepts that are redefining a human's place in the world of multi-touch and creativity.

A lot of the thinking behind audio reactive multi-touch devices addresses the concept that creative mediums are not as distant from each other as they might appear. The realm of computer science, visual art and sound actually have a lot more in common once manipulated with a common interface. This interface levels the plane of control for human interaction, offering multiple dimensions of reaction from a single, or multiple, touch point.

Interestingly, these installations also redefine the amount of know-how for creation. While creating music, creating an image or programming software, each require their own specific skill set, these three mediums cooperating via an interface requires nothing more than the ability of touch from the user.These unique installations offer unlimited creative expression for little to no work from the user, re-imagining the definition of creation and expanding the landscape of creativity.

Matti Luhtala's installation Music of the Spheres (MOTS) is a poignant example of this concept. Designed for users of all ages, his particular audio reactive multi-touch installation uses the simple metaphor of gardening (multiplication of images) to create different phrases of sound - resulting in music. Currently set up in the Helsinki Kindergarten Museum, the Music of the Spheres installation allows users to use different geometric shapes, which are translated onto the screen, to modulate a sort of "kaleidoscopic" template and the correlating generative music.

“The interaction metaphor of the MOTS is closely related to the act of gardening and growing flowers. Using the tangible objects users are able to create kaleidoscopic geometrically shaped flowers and to explore the poly-rhythmic sound patterns,” according to Matti Luhtala’s blog, TunnelVision.

The spectrum of audio reactive multi-touch installations can range from homemade infrared, laser plane, control devices to highly established educational installations in museums and other creative institutions. Even though this spectrum accounts for a large grouping of technology, the basic premise behind these installations is basically the same: humans interacting with computers to create vivid visual or musical - in most cases both - aesthetic displays.

7 Robust Videoconferencing Apps for Android and Apple iOS

Videoconferencing apps mean face-to-face communication, content sharing and real-time annotation of the documents you need to do your job.

With videoconferencing software there is no meeting you cannot participate in. From trans-national to international, even just across your campus, videoconferencing has simplified how we communicate and share information.

The big names in desktop videoconferencing are known throughout the office environment. Companies like Cisco and Polycom, to name two, have taken the concept of collaboration and held it to a new standard. Mobile videoconferencing apps take conventional videoconferencing strategies and re-imagine them for a world that is constantly on the go.

Mobile videoconferencing apps do more than just connect people face to face. File sharing, real-time annotation and remote desktop connectivity mark these mobile apps as capable and robust utilities that are becoming a necessity for tech-savvy professionals with busy schedules.

There are two categories for videoconferencing apps, standalone and integrated. Standalone applications let you communicate, share files and engage in webinars, dictating the app as the only requirement of communication. These apps can also require a subscription fee, but usually specify two different sets of features: one set for subscribed users and another for unregistered users.

Integrated videoconferencing apps are meant to be used within an established enterprise-level videoconferencing system. These types of apps are great for work environments that encourage multiple devices per individual, making sure they have access to videoconferencing from their desk and abroad.

Knowing whether or not an integrated or standalone videoconferencing app is right for you is completely up to your specific environment. If you are already using a company-wide videoconferencing platform, talk to your IT administrator about mobile options, or see if a third-party conferencing app can also communicate with your current

set up. For everyone else, check out these great standalone products for guaranteed communication and content sharing 24/7/365.