Earthworks™

PRECISION AUDIO

TOMORROW'S

TECHNOLOGY

TODAY

About Earthworks

Earthworks was formed by David Blackmer, the brilliant inventor and founder of dbx™, where he invented new technologies in VCAs and true RMS detectors for companders and compressors. At Earthworks his passion focused on inventing new technologies for microphones, preamplifiers and monitor speakers. These new advanced, patented technologies provide Earthworks with the ability to manufacture the "next generation" of professional audio products that will significantly outperform any other quality professional audio equipment on the market.

Those who use Earthworks microphones, amplifiers and monitor speakers refer to them as "stunning," "most impressive" and "life changing." This is because Earthworks advanced technologies provide a dramatic increase in audible quality. Reviews of Earthworks products in the press have been superlative. We are much more excited by the excellent results people get using our equipment.

Earthworks is a New Hampshire, U.S.A. based company that is dedicated to quality and sonic excellence. Each Earthworks product is made with great care, meticulous attention to detail and a strong emphasis on quality. We pride ourselves in making only the very best in professional audio equipment and it is all made right here in the U.S.A.

Warranty

We view our products as creative tools and understand the importance of reliability in the field. Earthworks provides a two year warranty on parts and labor, unless the unit is damaged by abuse or modification.

If you have any questions or if we can assist you in any way, please contact us by email or phone from 9am to 5pm EST. We also invite you to visit our website for additional information.

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Earthworks™
PRECISION AUDIO

The Earthworks Difference

Most sound recordings don't live up to the sonic experience of listening to live music. We have discovered that audio equipment with extended high frequency response and better time domain performance will yield a substantial audible improvement and more life-like results. The time resolution of human hearing is 10 microseconds or better, which corresponds to frequencies beyond 80 kHz. People continue to be astonished and amazed when they use our products with extended high frequency response. While you may not be able to hear pure tones beyond 15kHz, you will hear the difference in the time domain and impulse response of live music. If you don't believe us, then listen to one of our Demo CDs, or better yet, try out one of our microphones, amplifiers, or monitor speakers. The proof is in the listening.

Why Earthworks Microphones?

Earthworks microphones are not just another version or variation of existing microphone technology — they utilize proprietary, patented, and advanced design technologies that are not available in other microphones. There is an incredible, audible difference. Here are the reasons why:

Superior Impulse Response - the speed and accuracy in which a microphone responds to a signal with fast rise times such as percussion, guitar and brass. This helps retain the attack, punch and excitement in recorded music and sounds.

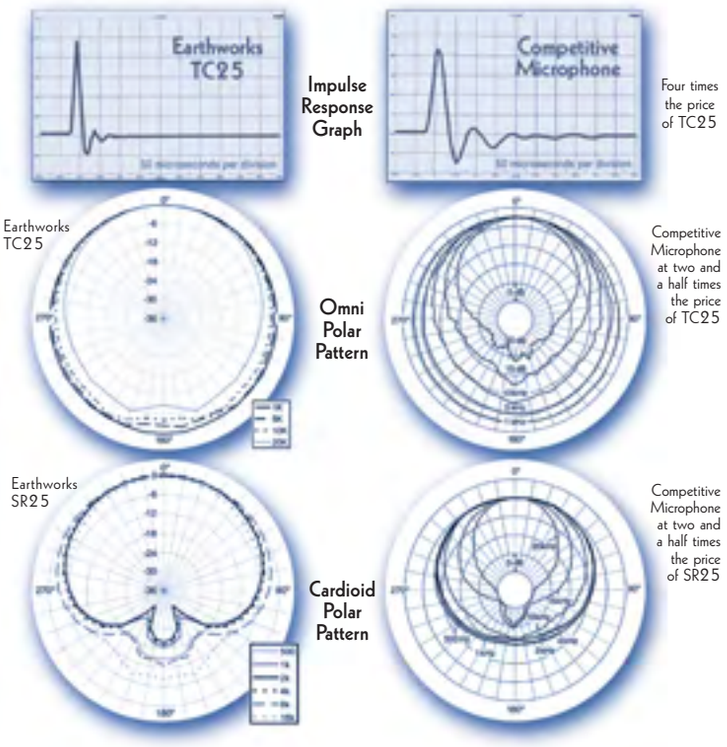
Fast Diaghragm Settling Time - how long it takes a diaphragm to return to rest. If a microphone's diaphragm is still vibrating from previous sounds while it is trying to pick up new sounds, it adds coloration and smearing of low-level signals that contain important minute details.

Pick-up Pattern Technology - maintaining accuracy and uniform frequency response throughout the pick-up pattern. With this improved uniformity there is no spotlighting, less off-axis phase problems and more gain before feedback.

Extended Frequency Response - capturing high frequency details and overtones is a clear advantage when using today's higher sampling rates for recording. Also, in most cases the higher the frequency response, the better the impulse response and time domain accuracy.

Technological innovation provides dramatically superior performance.

You will be astonished when you first use an Earthworks Microphone. You will hear more clarity, detail and transparency than you have ever heard from a microphone. Musical instruments and vocalists will sound more real, vibrant and alive. Earthworks microphones have superior performance because of their advanced pick-up patterns; they work better than conventional cardioid and omni microphones. Our microphones come in 20kHz, 25kHz, 30kHz, 40kHz and 50kHz models with a variety of advanced pick-up patterns. You can choose the microphone that best suits your requirements and pocketbook. Remember, the higher the frequency response, the better the impulse response.



"Using your gear, I can hear what color the King's shoes are as he sings in my studio."

— Sonny Ryan

The QTC series *(Quiet Time Coherent)* has been designed for recording quieter sources such as vocals, strings and distant miked orchestras or choirs. Earthworks' reputation for realism is based on these distinctive omnis. Their degree of clarity is unparalleled. Our claim of Time Coherent Response means these models do not smear the time domain as most microphones do. Earthworks microphones have exceptional impulse response and diaphragm settling time. They handle sound levels up to 150dB SPL with no proximity effect or handling noise. *(see page 12 for microphone specifications)*

For Quieter Sources

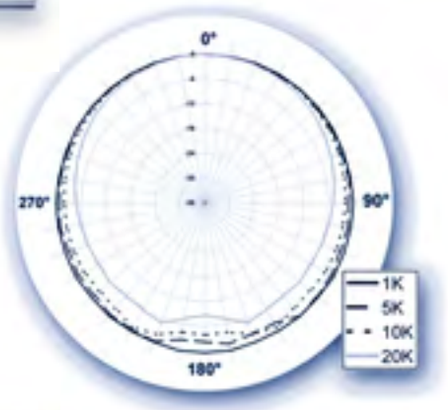
QTC50

QTC40

QTC30

QTC50 50kHz omni

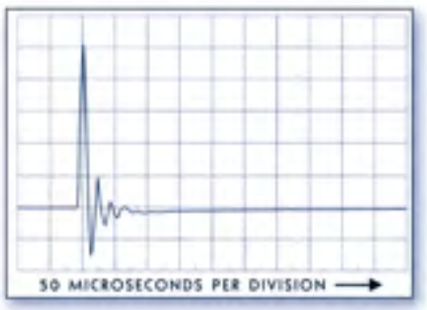
The QTC50 is an exciting new addition to the Earthworks microphone line. It has all of the exceptional attributes of our popular QTC1 *(same as QTC40)*. The QTC50 has an extended high frequency response to 50kHz and better impulse response. This microphone is for the sterling purist who wants something better than a QTC40. This new top of the line microphone has exceptional performance.



QTC40

QTC40 40kHz omni *(same as QTC1)*

The Quiet Time Coherent One *(same as QTC40)* has been called "the most accurate recording microphone available." For classical location recording a matched pair will provide spectacular results. It is ideal for quieter, more detailed sources and doesn't have most of the problems and limitations generally associated with competitive microphones. Its impulse response and diaphragm settling time is exceptional. Its sound is uncolored and it has no handling noise. The QTC40 will change the way you think about microphones.



QTC40

QTC30 30kHz omni

The QTC30 has an excellent cost/performance ratio. With a frequency response to 30kHz and excellent impulse response, it will reproduce sounds with incredible detail that are true and life-like, making it an ideal and affordable choice for recording applications. Its smaller stainless steel body is 6.5 inches long and has no handling noise.

All matched pairs come in beautiful wood boxes.

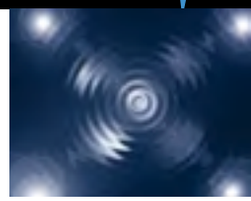
"In our tests, the QTC1 omnis were obviously more open, detailed, spacious, and had a 'realism' for lack of a better word, that blew the B&K's off the stage. It is no exaggeration to say that it was no contest."*

— Leigh Howard

*Same as the QTC40

TIME COHERENT OMNI MICROPHONES

The TC series *(Time Coherent)* is designed for recording louder sources such as drums, percussion, amplified instruments and loud sound effects. The TC Series allows recording of louder acoustic sources without overloading the preamplifier and with all of the same attributes as the QTC series in impulse response, diaphragm settling time and extended frequency response. All models in the TC series have a flat frequency response and are time coherent, so they sound natural and uncolored. They effortlessly handle high sound pressure levels up to 150 dB SPL while simultaneously capturing subtle details. *(see page 12 for microphone specifications)*



For Louder Sources

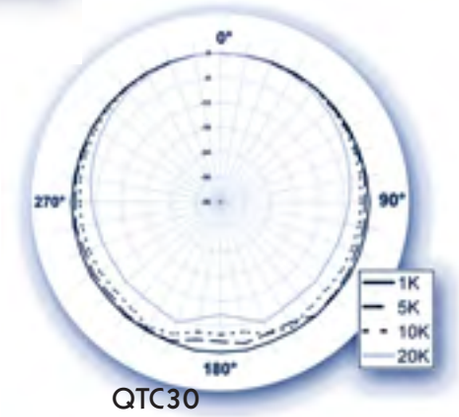
TC30

TC25

TC20

TC30 30kHz omni *(same as TC30K)*

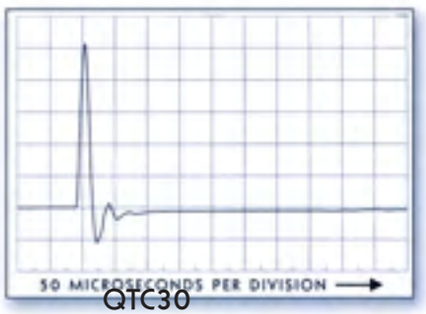
The TC30 *(same as TC30K)* is a general-purpose omni. It is an ideal choice for close miking louder sources like guitar, bass, piano, horns and percussion. The TC30 is very popular for drum overheads. It is incredibly clean up to 150 dB SPL while simultaneously capturing subtle details. Its fast, clean impulse performance yields a remarkably transparent sound. It is an excellent room mic for ambiance in the studio and for recording rehearsals and performances. It has no handling noise, no proximity effect and is very forgiving in terms of placement.



QTC30

TC25 25kHz omni

The new TC25 was designed specifically for drums and is a model that comes in the Earthworks DrumKit™ System *(see pages 6 & 7)*. The TC25 is the TC30's little brother and has the same attributes as the TC30; exceptions being it goes to 25kHz, will handle 145 dB SPL, is smaller in size, weighs less, and costs less. The performance vs. price ratio of this microphone is excellent. If you want to hear one in action, get a free DrumKit™ Demo CD *(information on pages 6 & 7)*.



QTC30

TC20 20kHz omni *(same as SRO)*

The TC20 *(same as SRO)* is our least expensive general-purpose omni with high frequency response to 20kHz. Its sound and performance is similar to the TC30 or TC25 and covers the same range of applications. For live sound the TC20 can be used for close miking stationary sources like instrument amps, drums or close-miked brass. A TC20 under the strings of a standup bass or inside a kick drum will produce amazing sound. A pair of TC20s connected to a stereo recorder will provide exceptional results for recording rehearsals and performances. The TC20 is great for general studio use and is an exceptional value.

"I just wanted to drop you a line to tell you that I LOVE those microphones! I used both SROs in a near coincident pattern about 6" from the instrument and it just sounded wonderful."*

— Bill Thompson

*Same as the TC20

Earthworks cardioid microphones are unlike all the rest, as they have patented near-perfect cardioid patterns. Sound across the entire front hemisphere is remarkably uniform and they are flatter at 90 degrees than most microphones are on-axis. This results in uncolored off-axis rejection for recording and greater gain before feedback for live sound. They effortlessly handle up to 145dB SPL while simultaneously revealing subtle details that other microphones mask. All SR models are a superb value in performance and are exceptional for both live performance and recording applications. *(see page 12 for microphone specifications)*

For Quiet and Loud Sources

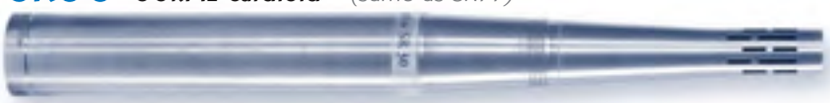
SR30

SR30/HC

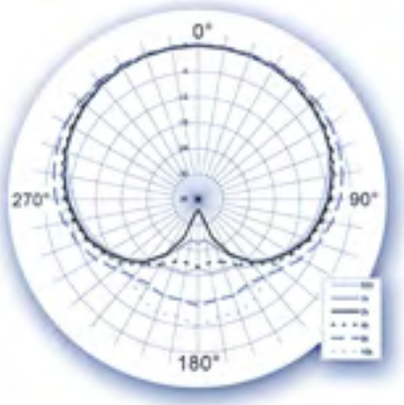
SR25

SR20

SR30 30kHz cardioid *(same as SR77)*



The SR30 *(same as SR77)* is a remarkable cardioid that maintains most of the characteristics of our omni microphones. At 6 inches it sounds as onmi-like as a cardioid can. The off-axis rejection is substantial yet uncolored. Its impulse response is very fast and smooth, and the sound stays the same across the entire front hemisphere of pickup. In the studio or on the stage the SR30 is an ideal choice for a variety of acoustic instruments including sax, flute, trumpet, guitar, piano and drums. It is superior for choir because it doesn't spotlight; rather it picks up an entire section or an area with no hot spots.The SR30 is popular among concert tapers because of its open uncolored sound, and among jazz enthusiasts for its ability to capture explosive performances while retaining the subtle nuances of artistic expression.

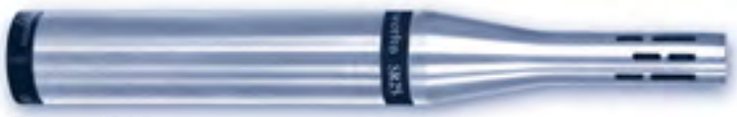


Cardioid
SR30

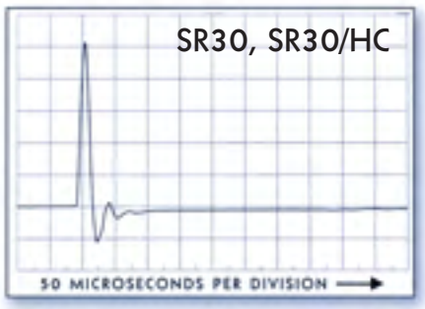
SR30/HC 30kHz hypercardioid *(same as SR78)*

The SR30/HC *(same as SR78)* offers exceptional directional performance for guitar, sax, flute, drums, bass, and vocals. It is ideal in any application where you want natural sound combined with more rejection, or when you want to reduce unwanted room sound. It can pick an acoustic instrument, like a guitar, out of an ensemble while still sounding detailed and life-like. It is a powerful tool for broadcast and vocal production applications because its clarity and detail enhances verbal communication. If you need open, uncolored clarity combined with uncolored rejection, try an SR30/HC and listen to what it doesn't pick up.

SR25 25kHz cardioid

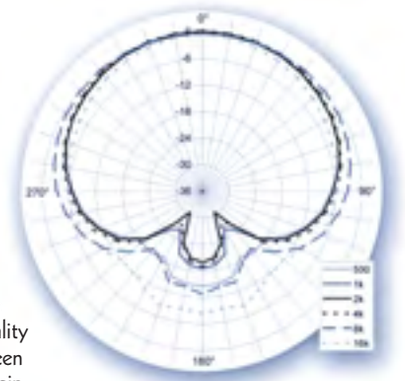


The new SR25 was designed specifically for drums and is a model that comes in the Earthworks DrumKit™ System *(see pages 6 & 7)*. The SR25 has a brilliance that is ideal for percussion, Leslie, guitar and brass. It goes to 25kHz, will handle 145 dB SPL, is smaller in size than the SR30, weighs less and costs less. It is a real performer and has an excellent price/performance ratio. If you would like to hear one, get a free DrumKit™ Demo CD *(information on pages 6 & 7)*.



SR20 20kHz cardioid *(same as SR69)*

As a vocal microphone the SR20 *(same as SR69)* is spectacular. It will accurately capture a voice with the same precision and quality up to 90 degrees off-axis. This means you can have the same pristine sound quality at the front and side of the microphone. Up close the SR20 is warm, not boomy while its unique windscreen assembly eliminates the popping of P's. Its patented design and uniform polar response will provide more gain before feedback than other microphones. Simply unscrewing the windscreen reveals a whole other persona of the SR20. It then becomes a great instrument mic, outstanding for piano, guitar, drums, brass, woodwinds and other instruments including kick drum. The SR20 will handle up to 145dB SPL and is an exceptional, versatile high quality microphone that is quite affordable.



Hypercardioid
SR30/HC

"What I like about the SR69 is that it has the acoustic transparency of an omni with the off-axis rejection of a cardioid. Its pick-up pattern is loose enough that it has very little coloration across a large enough area to be easy to use for vocals and acoustic instruments. I have recorded entire albums using the SR69* for all acoustic sources."*

— Fred Bogert, Briarpatch Audio Productions

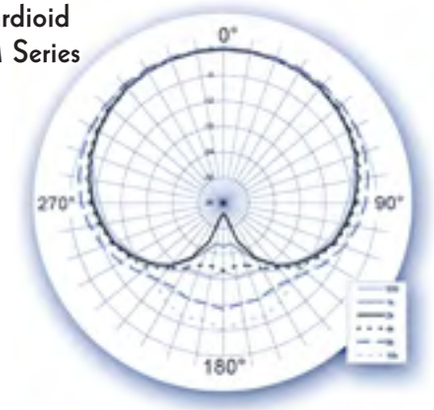
*Same as SR20"

Earthworks Flex Series microphones offer exceptional sound quality and intelligibility. Their patented pick-up pattern allows an orator to move up to 90 degrees off-axis and still be heard with the same exceptional sound quality. This is a real advantage for church, civic and corporate podium speech applications. As an added plus, the Flex Mics smooth off-axis response will provide more gain before feedback. The flexible neck allows adjustment of microphone positioning with no handling noise.

FM720
FM720/HC

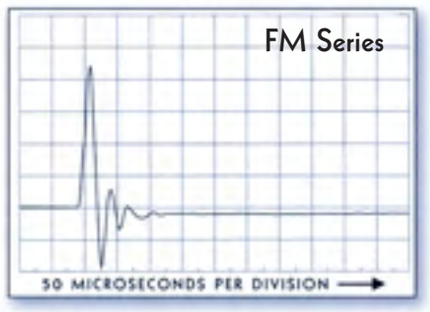
This extra long model (27 inches) is ideal for applications where extra length in a gooseneck is required. It can also be used as a choir mic or to pick up a group of mixed musicians with minimal visibility. Its flexible neck allows it to stand cobra-like on a desktop without the use of a microphone stand. The FM720 is superb for extra flexible reach and is available in cardioid and hypercardioid.

Cardioid
FM Series



FM500
FM500/HC

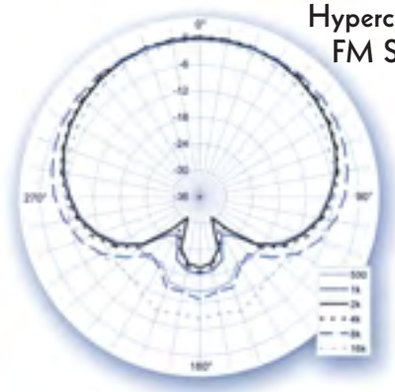
At 19 inches, this is just the right length for most podium and church applications. The FM500's swan-like neck can be adjusted with no handling noise and it will stay where you put it. It is also the perfect size to position unobtrusively in an instrumental ensemble or in front of a choir for sound reinforcement or recording. Available in cardioid and hypercardioid.

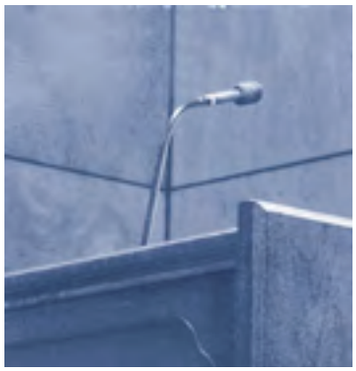


FM360
FM360/HC

The FM360 is powerfully equipped to totally dominate in situations that require a very low profile (only 13 inches long). It provides superb sound in tight places. The FM360 will effortlessly handle applications from tall lecterns to courtrooms. Available in cardioid and hypercardioid.

Hypercardioid
FM Series





Flex Mics are intended for podium use, hanging choir or orchestra microphones. Their sound quality is comparable to our other high quality cardioids for a variety of applications such as vocals, piano, acoustic instruments and even drums. They are flat from 50Hz to 20kHz within ±2dB at 6 inches and will handle up to 145dB SPL. In addition to smooth frequency response (on and off-axis), they have impressive impulse response and diaphragm settling time with a pristine sound quality that is not usually available in gooseneck or podium microphones. Earthworks Flex Mics facilitate high intelligibility and clear audible communication.
(see page 12 for microphone specifications)

"The FM360 mics were about 3 feet or so from the orator, (A. Busch III doesn't like shadows on his script), the audience was 6000, the mics were in the sound field of the main speakers, and yet I had great sound quality, more than adequate gain before feedback... thanks for a great product."

— Chris Gerber

The typical practice of miking drums normally involves the use of five to seven mics, or more. While developing a new 25kHz Series of microphones for percussion we tried using only two mics for overheads and one for kick drum. The result absolutely blew us away. We then made a comparative recording of the same drum set using seven other mics that are some of the industry favorites for miking drums. The difference in detail and sound quality of the three Earthworks mics vs. the seven industry favorites was staggering. The Earthworks microphones captured every nuance of sound from each piece of the drum set with such an exceptional clarity and cohesiveness that it sounded like a "live" set of drums, not a bunch of pieces. This discovery led to the development of the innovative Earthworks Drumkit™ System, providing a dramatic improvement in the sound quality of miking drums. This is truly astonishing — you must hear it for yourself.


TC25


SR25


KickPad™

Earthworks™ DRUM KIT™ SYSTEM

PRECISION DRUM MICROPHONES

The new 25kHz series of microphones was designed to be used for percussion. The TC25 omni has a frequency response of 9Hz to 25kHz and the SR25 cardioid response is 50Hz to 25kHz. Both models will handle up to 145dB SPL. The DrumKit™ microphones will also provide stunning results on a wide variety of instruments and vocals for recording or live sound. They are unlike any other microphones on the market, because of our proprietary and patented technologies. *(see page 12 for microphone specifications)*

DK25/R *(Recording)*

The Earthworks DrumKit™ System comes in two models. The DK25/R is for "Recording" and has two TC25 omnis for overheads, an SR25 cardioid for kick drum, a KickPad™ and a windscreen.

DK25/L *(Live performance)*

The DK25/L is for "Live Performance" and has three SR25s: two for overheads and one for kick drum; a KickPad™ and a windscreen. The patented cardioid pattern on the SR25 provides a more uniform off-axis response and has less susceptibility to acoustic feedback. Both versions come in the attractive solid wood carrying case.

The *KickPad™

A great kick drum microphone needs to be designed and optimized for that specific purpose. This means the microphone is great for kick drum and nothing else. To create a more versatile product we designed the kick drum optimization in an external XLR package - the KickPad™. Just plug a KickPad™ into the mic line going to the SR25 kick drum mic for magnificent results. With the KickPad™ removed, you can use the same SR25 microphone for most anything. All three high quality Earthworks microphones in the DrumKit™ System can be used for other instruments and vocals.

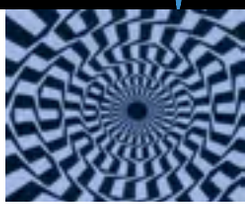
*Patent Pending

The Earthwo
System will lik
way drums a

The KickPad™ will also improve the sound of other popular microphones used for kick drum.

"I could not be more pleased with the new Earthworks™ 25 Series microphones. The SR25s are great for drum overheads. They have just the right amount of crispness, some air, and very little kick drum leakage... the drums sound great. I use a pair of TC25s on my grand piano and this is the best it has ever sounded... just fantastic. I can't find anything I don't like about these mics."

—Dan Penn, Songwriter/Producer, Nashville, TN



PURE SOUND

An Earthworks microphone is not just another microphone. Most every microphone on the market is just another version or variation of the same technology. In contrast, Earthworks utilizes proprietary, patented technology that will provide quality and performance other microphones cannot match. We are superior in several areas:

- **Impulse Response** - the speed and accuracy in which a microphone responds to a signal with fast rise times
- **Diaphragm Settling Time** - how long it takes a diaphragm to return to rest
- **Pick-up Pattern Technology** - maintaining accuracy and uniform frequency response throughout the pick-up pattern
- **Extended Frequency Response** - capturing high-frequency details and overtones

For a graphic representation of the above, in comparison to competitive microphones, refer to the impulse charts and polar response charts on page one.


TC25


SR25


KickPad™

rks DrumKit™
ely change the
re miked.

To get your free DrumKit™ System Demo CD and brochure, call (603) 654-6427, visit www.EarthworksAudio.com or send email to: drumkit@earthworksaudio.com


KickPad™ plugged into mic line.

MATCHED PAIRS
Recommended for Drums


TC25mp

For years, discerning recording engineers have been using Earthworks matched pairs of microphones for drum overheads with exceptional results. The TC30 and SR30 *(same as SR77)* matched pairs are very popular for this purpose. The new TC25s and SR25s also come in matched pairs and are less expensive than the TC30s. Our most economical matched pair is the TC20mp *(same as SRO box set)*.


SR25mp

All microphones in the QTC, TC and SR series are available in matched pairs, with exception to the SR20. The QTC40s *(same as QTC1s)* have been used in matched pairs for acoustic instrument recordings in the studio and on-location. Just choose the microphones that best suit your application and budget. For quieter sources and distant miking with omnis the QTC Series is ideal. Excellent results with omnis for louder sources such as drums or amplified instruments are achieved with the TC Series. For live sound or recording applications requiring a cardioid (for quiet and loud sources) the SR Series will provide excellent results. All matched pairs come in attractive wood boxes.

(see specifications on page 12)


TC30mp


SR30mp


TC20mp


SR30/HCmp

"I used the KickPad™ on a wide variety of preamps and kick drum mics including the SR25. It was amazing, because the input channel was flat and no matter what mic or preamp I used, the kick drum sound was right on and I didn't need to add EQ or anything. In addition, the KickPad™ has the same effect as a Pultec™ PEQ, at a fraction of the cost.

— Tom Size, Tomland Studios, Pacheco, CA

Earthworks has become the accepted standard for affordable, reliable reference and measurement microphones. These microphones are accurate in the time domain and frequency response. Earthworks measurement microphones are optimized for clean, fast impulse performance. This dictates an accurate wideband frequency response. They have virtually no handling noise and are remarkably stable with respect to temperature and atmospheric conditions. Our M Series measurement microphones are used by SMAART™, MLSSA™, Spectrafoo™, TEF™ and RTA in addition to acoustic measurement systems manufactured by dbx, EAW, DEQX and others. *(see page 12 for microphone specifications)*

Measurement Microphones


M50

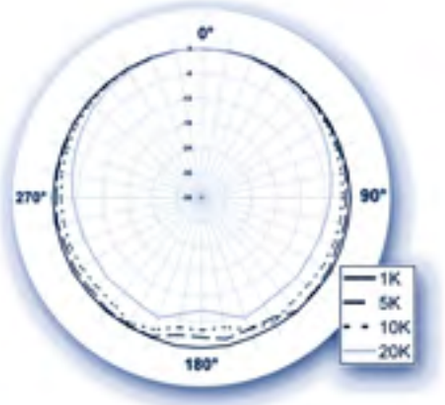

M30


M30BX

M50 50kHz omni *(same as M550)*

50 kHz Beyond the brick wall 3Hz to 50 kHz +1/-3dB

The M50 *(same as M550)* is our top of the line measurement microphone with extraordinary impulse response for those who have stringent requirements and demand the very best. This microphone provides laboratory grade accuracy for research "beyond the brick wall." Requires 48V phantom power.



M30, M30BX

M30 30kHz omni

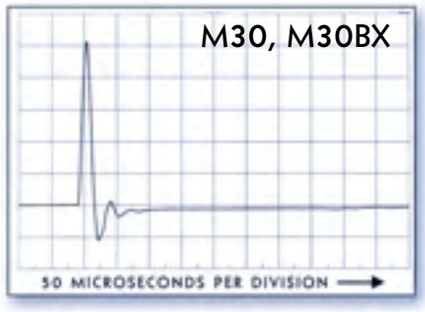
30 kHz Clean and Reliable 5Hz to 30 kHz +1/-3dB

The M30 is a very cost effective reference microphone for SMAART™, MLSSA™, Spectrafoo™, TEF™ & RTA and all "audio band" measurements. It is very clean and has a fast impulse response. Requires 48V phantom power.

M30BX 30kHz omni

Battery Powered M30 with built-in preamp
9Hz to 30kHz +1/-3dB

The M30BX features a built-in preamplifier with 14dB gain that will allow it to drive most computer sound card inputs directly. It is perfect for field measurement with a laptop computer and also sounds great for recording. A single 6V (28L type) battery provides approximately 300 hours of M30-like performance. An XLR to RCA female adapter and microphone battery are included. You can easily purchase 28L type replacement batteries wherever watch and hearing aid batteries are sold.



M30, M30BX

M50

Frequency response	3 Hz to 50 kHz+1/-3dB
Polar Pattern	Omnidirectional
Sensitivitiy	30mV/Pa (-30.5 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	142 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL equivalent (A weighted)
Dimensions L x D	229mm x 22mm (9 x .860 inches)
Weight	225g (.5lb)

M30

Frequency response	5 Hz to 30 kHz+1/-3 dB
Polar Pattern	Omnidirectional
Sensitivitiy	8mV/Pa (-42 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	150 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	27dB SPL equivalent (A weighted)
Dimensions L x D	229mm x 22mm (9 x .860 inches)
Weight	225g (.5lb)

M30BX

Frequency response	9 Hz to 30 kHz+1/-3dB
Polar Pattern	Omnidirectional
Sensitivitiy	8mV/Pa (-42 dBV/Pa) or 40mV/Pa (-28dBV/Pa) with 14dB gain
Power Requirements	6V battery - 28L (2CR-1/3N) Lithium or 4 LR44 Alkaline (approx. 300 hours work time)
Peak acoustic input	140dB SPL, 126dB SPL w/14dB gain
Output	XLR (PIN 2+) drives balanced or unbalanced input, drives most sound card inputs directly
Minimum output load	600Ω between pins 2&3
Noise	27dB SPL equivalent (A weighted)
Dimensions L x D	220mm x 23mm (8.65 x .910 inches)
Weight	180g (.4lb)


M30BX shown open for replacing battery and access to gain switch.

The ZDT preamplifier series is based on all new discrete circuitry designed by David Blackmer, establishing a new standard of sonic excellence in electronics. This exacting new standard provides frequency response from 1Hz to 200kHz ±0.5dB, an incredible rise time of 0.27 microseconds and distortion of less than 1 part per million (0.0001%) - eliminating all possibility of sonic degradation. These wide frequency band preamps are so fast, so clean and so transparent that you don't even know they are there. It is like plugging your microphone into a piece of "wire with gain." You will hear clarity and detail with the ZDT preamps that is not available in any other preamp at any price. Check one out for your studio or other applications that demand the highest quality electronics.

Zero Distortion Preamp Features

- The primary gain path (XLR input-stepped gain-XLR output) is entirely differential (this preamp is balanced all the way through, from input to output)
- Precision stepped gain switch from 5 to 60 dB in 5 dB steps
- 48-volt phantom power switch with LED indicator on each channel
- Variable gain control allows 20dB of gain reduction from stepped switch setting to a separate output amplifier and connector
- Standby switch mutes the output while the microphone remains powered
- Clip indicator LED shows imminent overload condition (10% below clipping) as well as actual clipping
- Polarity reversal switch on each channel
- Power on LED indicator

1021

"Like Wire With Gain"

1022

1024

Frequency response	2 Hz to 100kHz within ±0.1 dB, 1 Hz to 200kHz within ±0.5dB (50ohm source)
Impulse response	1% settling time - 1.4 μs; square wave rise time - 0.27μs
Distortion (all types)	XLR stepped output- less than 1 ppm (0.0001 %) Variable output- 0.001 %
Enoise (input)	1.6nV/Hz $^{1/2}$ typical spectral density @ 20dB gain; .86nV/Hz $^{1/2}$ @ 40dB gain; .6nV/Hz $^{1/2}$ @ 60dB
Translation of Enoise to EIN	-132dBV@20dB gain, -140dBV@40dB gain, -143dBV @60dB gain. (20Hz to 20kHz, A weighted) Typical current noise spectral density @ input 1.5pA/Hz $^{1/2}$
Slew rate	22V/μs
DC offset	servo balanced to ±1 mV typical
Power requirement	120V AC (100V, 240V available), standard IEC connector (supplied), internal 250mA 250V spare fuse included
Input	XLR balanced transformerless input (pin 2 +) one per channel
Input Impedance	10K ohm with phantom power on, 100K ohm with phantom power off
Outputs	XLR (differential, Pin2+) per channel from stepped gain control, 1/4 inch TRS (tip+, ring ref.) from variable gain control, balanced, single ended
Dimensions	1024, 1022 — 1 rack space 1.75" x 19" x 10.375" (1021 is 1/2 rack space)
Weight	1024, 1022 6lb. (shipping: 10lb.), 2.7 kg (shipping: 4.5 kg); 1021, 4lb. (shipping: 7lb.), 1.8kg (shipping 3kg)

"The Earthworks ZDT preamp is 60dB of nothing. I've never heard gain so pure."

— Kris Kervic

Earthworks Sigma 6.2 40kHz loudspeakers are an acoustic reality check and perfect for all critical listening. They allow you to hear all of the detail in your recordings; detail previously masked by the inaccuracies of conventional loudspeakers. The Sigma 6.2s apply the Earthworks principles of time coherent response and impulse response to the playback system with breathtaking results. They will not improve the sound of your recordings - they will tell you exactly what you have. In conjunction with Earthworks microphones and preamps, the Sigma 6.2 matched pair will allow you to hear the source with accuracy and honesty for the very first time.

Sigma 6.2

Sigma 6.3

Sigma 6.2

40kHz time coherent audio reference

The Sigma 6.2s are sold as matched pairs *(or matched sets of three or more)*. Their imaging is pristine and definitive. The front-to-back depth of their image is unparalleled. The way they sit in the room is more natural and less problematic than with most loudspeaker enclosures. Their unique port design provides tight and accurate bass reproduction and doubles as a convenient handle. The bass sounds incredibly real because the low frequencies are radiated into the room in the correct relationship to the rest of the signal. The Earthworks Sigma 6.2 is very close to being the perfect sound field reproduction system.

Frequency response	40Hz to 40kHz ±2dB
Impedance	8Ω nominal
Sensitivitiy	87dB 1W/1m
Power Handling	150 watts continuous program, 400 watts peak
Dimensions H x W x D	16.75" x 9.5" x 15.5", (42.5cm x 24cm x 39.5cm)
Weight	32 lbs. (shipping: 38 lbs.), 14.5 kg (shipping: 17 kg)

Features:

- Extended frequency response to beyond 40kHz
- Matched pairs or matched sets of 3 or more
- Incredible front-to-back imaging
- Unmatched impulse response
- Full magnetic shielding
- No bass peak in the low frequency response
- Extremely smooth response
- No listening fatigue
- Optimum listening distance: 3' to 9' (1m to 3m)
- Available in handsome black finish

The New Standard of Excellence

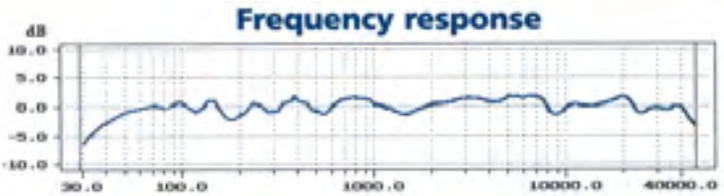
There is great detail and quality in construction of the Sigma Monitor Speakers; all components are custom selected and integrated, creating matched pairs; point-to-point crossover construction; heavy gauge air core inductors; fast clean polypropylene capacitors; the best tweeter we've ever measured; die-cast aluminum frame 6.5" woofer; gold-plated insulated WBT binding posts; precision machined custom hardware; high efficiency internal absorber; high quality WBT silver solder and OFC wire.

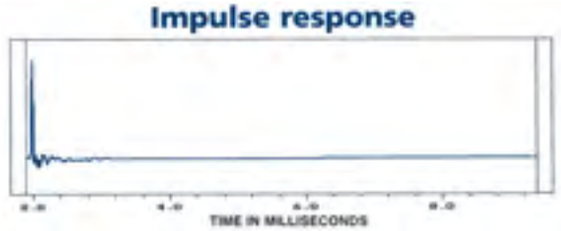
Sigma 6.3

40kHz time coherent audio reference with dual low frequency drivers

The 40kHz Sigma 6.3 was designed using all of the technology and high quality construction of its predecessor, the Sigma 6.2. The new Sigma 6.3 features dual low frequency drivers to achieve more powerful low frequency response. The Sigma 6.3 has the same impresssive impulse response and imaging. The optimum listening distance on the Sigma 6.3 is 5 to 18 feet. This is the monitor system for the studio or listening facility of those who demand only the very best.

Frequency response	40Hz to 40kHz ±2dB
Impedance	4Ω nominal
Sensitivitiy	87dB 1W/1m
Power Handling	150 watts continuous program, 400 watts peak
Dimensions H x W x D	22" x 9.5" x 19", (56.5cm x 24cm x 48cm)
Weight	52 lbs. (shipping: 58 lbs.), 24 kg (shipping: 26.5 kg)





"I just had a chance to audition a pair of Sigma 6.2s for a week and you will have to pry them from my cold, dead hands if you want them back."

— Steve Devino, Studio Owner

SRW1

Black Aluminum Windscreen for SR20, SR30, & SR30/HC

SRW2

Stainless Steel Windscreen for SR30 & SR30/HC

SRW3

Foam Windscreen for Flex Mics (all models) & SR25

OMW1

Foam Teardrop Windscreen for Omni QTC, TC & M Series Mics

EWB4

Wood box for one or two Mics (TC20, TC25, QTC30 & SR25)

ADP1

1/2" calibrator adapter for measurement mics

OMW2

100 mile per hour Foam Windscreen for TC, QTC & M Series Mics

EWB1, EWB2, EWB3

Wood box for one Mic & Windscreen (SR30, SR30/HC, R25 & SR20), one omni mic (QTC50, QTC40, QTC30 & SR25), or, one or two M30BX mics

ATP1

Acrylic Tube for one Mic (QTC, TC, ST & M Series)

MC2

Standard Shock Mount Microphone Clip (QTC, TC, SR & M Series)

MC1

Standard Microphone Clip (QTC, TC, SR & M Series)

ECB1

Cherry Box for two Mics (QTC40, QTC50, TC30, SR30 & SR30/HC)

This specifications section reveals the results of our research and development efforts, in addition to our strong commitment to manufacture the very best professional audio products that money can buy. Our superb product performance is due to proprietary advanced technologies, precise manufacturing techniques and tolerances, and a total commitment to product reliability. Dedicated employees work hard to insure that every Earthworks product meets only the highest of exacting standards. The following specifications are proof of the incredible Earthworks difference.

QTC50

Frequency response	3Hz to 50kHz +1/-3dB
Polar Pattern	Omnidirectional
Sensitivitiy	30mV/Pa (-30.5 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	142 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL (A weighted)
Dimensions L x D	229mm x 22mm (9 x .860 inches)
Weight	225g (.5lb)

QTC40

Frequency response	4Hz to 40kHz ±1dB
Polar Pattern	Omnidirectional
Sensitivitiy	30mV/Pa (-30.5 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	142 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL (A weighted), 24.5 dB SPL (Unweighted)
Dimensions L x D	229mm x 22mm (9 x .860 inches)
Weight	225g (.5lb)

QTC30

Frequency response	6Hz to 30kHz +1/-3dB
Polar Pattern	Omnidirectional
Sensitivitiy	30mV/Pa (-30.5 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	142 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL (A weighted), 24.5 dB SPL (Unweighted)
Dimensions L x D	165mm x 22mm (6.25 x .860 inches)
Weight	160g (.35lb)

TC30

Frequency response	9Hz to 30kHz +1/-3dB
Polar Pattern	Omnidirectional
Sensitivity	8mV/Pa (-42 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	150dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	27dB SPL equivalent (A weighted)
Dimensions L x D	229mm x 22mm (9 x .860 inches)
Weight	225g (.5lb)

TC25

Frequency response	9Hz to 25kHz +1/-3dB
Polar Pattern	Omnidirectional
Sensitivity	8mV/Pa (-42 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	145 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	27dB SPL equivalent (A weighted)
Dimensions L x D	165mm x 22mm (6.5 x .860 inches)
Weight	160g (.35lb)

TC20

Frequency response	10Hz to 20kHz ±2dB
Polar Pattern	Omnidirectional
Sensitivitiy	8mV/Pa (-42 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	145 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	27dB SPL equivalent (A weighted)
Dimensions L x D	165mm x 22mm (6.5 x .860 inches)
Weight	160g (.35lb)

SR30

Frequency response	30Hz to 30kHz ±1.5dB @6" (15cm)
Polar Pattern	Cardioid
Sensitivitiy	10mV/Pa (-40 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	145 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL equivalent (A weighted)
Dimensions L x D	212mm x 22mm (8.4 x .860 inches)
Weight	225g (.5lb)

SR30HC

Frequency response	30Hz to 30kHz ±1.5dB @ 6" (15cm)
Polar Pattern	Hypercardioid
Sensitivitiy	10mV/Pa (-40 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	145 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL equivalent (A weighted)
Dimensions L x D	212mm x 22mm (8.4 x .860 inches)
Weight	225g (.5lb)

SR25

Frequency response	50Hz to 25kHz ±2dB @ 6" (15cm)
Polar Pattern	Cardioid
Sensitivitiy	10mV/Pa (-40 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	145 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL equivalent (A weighted)
Dimensions L x D	165mm x 22mm (6.5 x .860 inches)
Weight	160g (.35lb)

SR20

Frequency response	50Hz to 20kHz ±2dB @ 6" (15cm)
Polar Pattern	Cardioid
Sensitivitiy	10mV/Pa (-40 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	145 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL equivalent (A weighted)
Dimensions L x D	212mm x 22mm (8.4 x .860 inches) 238mm x 22mm with windscreen
Weight	135g (.3lb)

FM360 & FM360/HC

Frequency response	50Hz to 20kHz ±2dB @ 6" (15cm)
Polar Pattern	Cardioid or Hypercardioid
Sensitivitiy	10mV/Pa (-40dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	145 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL equivalent (A weighted)
Dimensions L x D	360mm x 22mm (13 x .860 inches)
Weight	120g (.25lb)

FM500 & FM500/HC

Frequency response	50Hz to 20kHz ±2dB @ 6" (15cm)
Polar Pattern	Cardioid or Hypercardioid
Sensitivitiy	10mV/Pa (-40dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	145dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL equivalent (A weighted)
Dimensions L x D	500mm x 22mm (19 x .860 inches)
Weight	135g (.3lb)

FM720 & FM720/HC

Frequency response	50Hz to 20kHz ±2dB @ 6" (15cm)
Polar Pattern	Cardioid or Hypercardioid
Sensitivitiy	10mV/Pa (-40dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	145dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL equivalent (A weighted)
Dimensions L x D	720mm x 22mm (27 x .860 inches)
Weight	160g (.35lb)

M50

Frequency response	3Hz to 50kHz +1/-3dB
Polar Pattern	Omnidirectional
Sensitivitiy	30mV/Pa (-30.5 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	142 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	22dB SPL equivalent (A weighted)
Dimensions L x D	229mm x 22mm (9 x .860 inches)
Weight	225g (.5lb)

M30

Frequency response	5Hz to 30kHz +1/-3dB
Polar Pattern	Omnidirectional
Sensitivitiy	8mV/Pa (-42 dBV/Pa)
Power Requirements	48V Phantom, 10mA
Peak acoustic input	150 dB SPL
Output	XLR (PIN 2+)
Minimum output load	600Ω between pins 2&3
Noise	27dB SPL equivalent (A weighted)
Dimensions L x D	229mm x 22mm (9 x .860 inches)
Weight	225g (.5lb)

M30BX

Frequency response	9Hz to 30kHz +1/-3dB
Polar Pattern	Omnidirectional
Sensitivitiy	8mV/Pa (-42 dBV/Pa) or 40mV/Pa (-28dBV/Pa) with 14dB gain
Power Requirements	6V battery - 28L (2CR-1/3N) Lithium or 4 LR44 Alkaline (approx. 300 hours work time)
Peak acoustic input	140dB SPL, 126dB SPL w/14dB gain
Output	XLR (PIN 2+) drives balanced or unbalanced input, drives most sound card inputs directly
Minimum output load	600Ω between pins 2&3
Noise	27dB SPL equivalent (A weighted)
Dimensions L x D	220mm x 23mm (8.65 x .910 inches)
Weight	180g (.4lb)

1024, 1022 & 1021

Frequency response	2Hz to 100kHz ±0.1dB 1Hz to 200kHz ±0.5dB (50 ohm source)
Impulse response	1% settling time - 1.4µs; square wave rise time - 0.27µs
Distortion (all types)	XLR stepped output-less than 1 ppm (0.0001%) Variable output- 0.001%
Enoise (input)	1.6nV/Hz$^{1/2}$ typical spectral density@ 20dB gain; 86nV/Hz$^{1/2}$@40dB gain; .6nV/Hz 1/2 @ 60dB
Translation of Enoise to EIN	-132dBB@20dB gain, -140dBV@40dB gain,-143dBV @60c1B gain. (20Hz to 20kHz, A weighted)
Typical current noise spectral density@input	1.5pA/Hz$^{1/2}$
Slew rate	22V/µs
DC offset	servo balanced to ±1 mV typical
Power requirement	120V AC (100V, 240V available) standard IEC connector (supplied) Internal 250mA 250V spare fuse included
Input	XLR balanced transformerless input (pin 2+) One Per Channel
Input Impedance	10K ohm with phantom power on, 100K ohm with phantom power off
Outputs	XLR (differential (balanced), Pin2+) per channel from stepped gain control
Dimensions H x W x D	1 rack space 1.75 ≤ x 19"x 10.375 (1021 is 1/2 rack space)
Weight	1024, 1022 - 6lb. (shipping: 10 lb.), 2.7 kg (shipping: 4.5 kg) 1021- (shipping: 7lb.), 1.8 kg (shipping: 3 kg)

Sigma 6.2

Frequency response	40Hz to 40kHz ±2dB	Power Handling	150 watts continuous program, 400 watts peak
Impedance	8Ω nominal	Dimensions H x W x D	16.75" x 9.5" x 15.5", (42.5cm x 24cm x 39.5cm)
Sensitivitiy	87dB 1W/1m	Weight	32 lbs. (shipping: 38 lbs.), 14.5 kg (shipping: 17 kg)

Sigma 6.3

Frequency response	40Hz to 40kHz ±2dB	Power Handling	150 watts continuous program, 400 watts peak
Impedance	4Ω nominal	Dimensions H x W x D	22" x 9.5" x 19", (56.5cm x 24cm x 48cm)
Sensitivitiy	87dB 1W/1m	Weight	52 lbs. (shipping: 58 lbs.), 24 kg (shipping: 26.5 kg)

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