# Plano System

- ▶ HIGH DEFINITION PIANO MICROPHONES
- ▶ Invisible from Outside the Piano
- SUPERB SOUND WITH PIANO LID UP OR DOWN
- ▶ INCREDIBLE GAIN BEFORE FEEDBACK
- VIRTUALLY NO LEAKAGE FROM SURROUNDING INSTRUMENTS

# Introducing

The Ultimate Piano Microphone System That Will Change Piano Miking Forever





## The Sound Quality and Incredible Amount of Gain Before Feedback is Astounding. The Earthworks® PianoMic™ System is Absolutely Stunning!

We have been listening! Many have told us that there needed to be a better way to mike a piano for churches, performing arts centers and recording studios. The new Earthworks PianoMic™ System meets all of the needs that have been relayed to us. Here is what our revolutionary new piano microphone system will give you:

- Incredible High Definition Audio that will outperform any microphones at any price.
- Cannot be seen from outside of the piano (needs no stands or mic booms)
- Superb sound with the piano lid either up or down
- Virtually no leakage from sounds outside the piano
- Incredible gain before feedback
- Recording studios can now record piano with other instruments in the same room
- Quick, Simple and Easy Setup

It all started when sound contractors told us that they had tried all types of microphones and microphone pickup systems for pianos in churches. They didn't like the sound they were getting, they didn't like



the microphone stands in front of the piano, they couldn't get enough sound level before feedback and they were also getting leakage from nearby instruments into the piano microphones. In addition, engineers in recording studios told us how difficult it was to record an acoustic piano in the same room with other instruments. When we let churches and recording studios take the PianoMic prototype for a test drive they were amazed and said it was an absolute winner, hands down! If you have a piano in a church, performing arts center or in a recording studio you too will be amazed when you see and hear the new Earthworks High Definition PianoMic™ System.

### THE PIANOMIC™ SYSTEM GIVES YOU COMPLETE CONTROL...

...IN THE STUDIO



For recording studios the PianoMic™ System is a dream. You will never again have to spend the time and effort to mike a piano with stands and booms. Just place the PianoMic<sup>TM</sup> System inside the piano, position the two microphone heads where you want them and you are done. Anytime you want to record the piano, just plug the PianoMic™ System into your mic inputs and you are ready. Never again will recording engineers have to go to great lengths to record an acoustic piano in the same room with other instruments. Historically, they have had to place microphone booms inside the piano, close the piano lid (leaving room for the mic stand booms) then cover the piano and the openings around the mic booms with heavy moving blankets. It is a nightmare. With the PianoMic™ System, you simply close the piano lid (which will now close all the way because there are no mic booms) and you are in business. Leakage is insignificant, and if that's not good enough, you can now very easily cover the piano with a moving blanket (without having to work around microphone stands and mic booms). Recording studio engineers who have seen and used the PianoMic™ System say the PianoMic is incredible!

#### "FOR CHURCH SERVICES, THE PIANOMIC™ SYSTEM IS A DREAM COME TRUE!"

Franklin Denham, Highland Baptist Church, Meridian, MS

We took the PianoMic™ System into a church that was having piano sound problems: (1) they couldn't use the piano along with the organ, because the piano microphone went into feedback; (2) they were having problems with leakage from instruments in the orchestra into the piano microphone; (3) they could not get the piano loud enough in the choir monitors without running into feedback; (4) they could not hear the full range of the piano (low, mid and high strings) evenly; and (5) they were not happy with the overall quality of the piano sound in the sound system. When they tried the PianoMic™ System they obtained an incredible piano sound and could hear the full range of the piano including the high and low strings. They could now make the piano louder than the organ (without feedback). The choir members were now telling them to turn down the piano in the choir monitors and orchestra instrument leakage into the piano microphones was no longer a problem. The Earthworks® PianoMic™ System overcame every problem they were encountering with their piano sound.

#### ... IN CHURCHES AND WORSHIP CENTERS



# Now A Steinway Can Sound Like A Steinway In The Sound System With No Visible Microphones!

The Earthworks® PianoMic™ High Definition Microphones™ do remarkable things with the sound of a piano. You will hear fidelity and detail like never before. Acoustic feedback is no longer a problem. You can have all of the sound level you want and even more, all you will hear is the pristine sound of the piano. Better yet, there are no visible microphone stands or mic booms in front of the piano. All you see is the piano just like it is in the adjacent photo of a performing arts center while you enjoy its magnificent sound. The PianoMic™ System is also ideal for use in touring sound systems as it is easy to transport, easy to position and it will provide the same pristine sound quality every time. The Earthworks PianoMic™ System is a long-awaited, incredible product for performing arts centers. The PianoMic™ System has it all!

#### .. IN CONCERT HALLS AND PERFORMING ARTS CENTERS



#### 40kHz Random Incidence Microphones

The innovative PianoMic™ System required the design of unique high definition microphones. Virtually all microphones used for recording and sound reinforcement are "free field" microphones, designed to pick up sounds in front of them. In contrast, the microphones in the PianoMic™ System are actually placed within the sound field of the piano, where sound is coming at the microphones from multiple sources and multiple directions. Each string is a separate sound source and the soundboard is also a sound source. In addition, there are multiple reflections of each sound source from the soundboard, piano sides and piano lid. These reflections, arriving from different angles, create what is known as a "diffuse sound field." A "random-incidence" microphone is designed to be placed within such a diffuse sound field and pick up sounds uniformly, whether they arrive at the front, the sides or the rear of the microphone. The PianoMic™ System achieves much of its remarkable performance through the use of specially designed, 40kHz random-incidence High Definition Microphones™.



# PEarthworks NIC

- SUPERIOR "HIGH DEFINITION" SOUND
- INCREDIBLE VERSATILITY
- OVERCOMES A WORLD OF PROBLEMS

The innovative PianoMic™ System incorporates all of the Earthworks High Definition Microphone™ proprietary technologies and some new ones. The PianoMic System is time coherent and provides extended frequency response to 40kHz, incredible impulse response, very short diaphragm settling time, near-perfect polar response, high SPL handling, low distortion electronics and more.

The PianoMic<sup>™</sup> System is unlike any other microphone ever used on a piano. The specially designed telescoping bar spans across the piano over the strings and is supported at the ends by the piano case. Our research showed that incredible results can be obtained with the two microphones placed one-third of the way in from each side of the piano and 3 inches

The PianoMic™ System uses time coherent, omnidirectional microphones with no proximity effect (i.e. the low frequency response will remain the same no matter what the microphone distance is from the piano strings). The microphones are designed for random-incidence response to obtain optimum sonic results from the sound field inside of the piano.

The PianoMic™ System has also been designed to provide incredible sound with the piano lid either up or down. There is more air in the sound with the lid up and with the lid down the sound is more condensed, which is desirable for a number of applications such as playing or recording pop music, or when you want the piano to stand out more in a mix. A tremendous amount of gain before feedback is obtained via the proximity of the PianoMic™ System microphones to the strings and also because of



in front of the hammers and 3 inches above the strings (see Figure 1-A). However, the telescoping bar can be moved so the two microphones can be placed near the hammers (see Figure 1-A) or further away (see Figure 1-B). By loosening the two clutches, the center section of the rod can be moved as much as 8 inches one direction or the other if you desire to favor either the low strings (see Figure 2-A) or high strings (see Figure 2-B) of the piano. In addition, the flex arms attached to the microphone heads allow them to move approximately 4 inches to the left or right (see Figure 3-A) as well as up or down (closer or further from the strings as shown in Figure 3-B). This illustrates the versatility of the PianoMic<sup>TM</sup> System and how easily it can be adjusted to accommodate a wide range of placement options.

the near-perfect polar response of the microphones. Leakage from the sounds of instruments surrounding the piano is insignificant.

Some may look at the PianoMic™ System and say, "You can't get a good piano sound with the mics that close to the piano strings." For those who have doubts, we invite you to try the PianoMic™ System for yourself. We have obtained incredible results with this piano miking method using our microphones on numerous recording sessions and live performances.

The PianoMic™ System is a dream come true for live sound and recording applications. Call us and request a free demonstration so you can hear this incredible piano microphone system for yourself. You will be impressed!

#### S P E C I F I C A T I O N S

Frequency Response: 9Hz – 40kHz Polar Pattern: Omni directional (random-incidence) Sensitivity: 15mV/Pa (-36 dBV/Pa)

**Power Requirements:** 48V Phantom, 10mA **Peak Acoustic Input:** 148 db SPL

Output: XLR3 (Pin 2+)

Min. Output Load: 600 ohms between pins 2 and 3 Maximum Output Level: +30 dBV (peak) Noise: 22 dBA Mic Gooseneck Length: 4.75"

Dimensions: 64" fully extended, 46" fully collapsed Product Weight: Mic Assembly: 0.75lb (350g),

ht: Mic Assembly: 0.75lb (350g), with External Electronics Box: 1.5lb (700g)



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