The MT107KSK is a DSP based, four microphone, beamforming, and echo canceling system specifically designed for the various environments that Kiosks are exposed to. Providing increased pick up quality via directed beamforming to a singular point (person talking) in a crowded environment.

**Features**

- The MT107KSK is a four microphone, beamforming, single output, stereo, 8KHz Noise Canceling / Echo Canceling solution.
- The MT107KSK utilizes our set of two, two-split microphones and your own amplified loudspeaker.
- A total of four microphones provide high quality beamforming directed pick up in kiosk Environments.
- The microphones are connected to the two inputs via 3.5mm jacks.
- The far end input is via USB connection only.
• Controllable input level and phantom power supply via free downloadable utility
• Phoenix’s proprietary echo canceling, beamforming, noise canceling, and AGC algorithms with no gating, to prevent the loss of critical information

Specifications
• 16KHz sampling frequency; 100Hz-8KHz bandwidth
• Two levels of Echo Canceling aggressiveness and three levels of Echo Canceling speed.
• Controllable tail length – up to 200 ms.
• Residual noise suppressed to the environment noise level to prevent pumping noise
• Eight preset color filters for both the output and the speaker signal
• Low delay (10msec)
• Microphone inputs connected to the tip and ring of IN1 and IN2. *Units are preset to Mic level with 6dB boost and Phantom On. The following microphone settings are available using the setup software:
  o Mic level (140mV peak-to-peak)
  o Line level (2V peak-to-peak)
  o add 6dB boost (In1&2 Only)
  o Optional 2.8V power supply (phantom)
*Units are preset to Mic level with 6dB boost and Phantom On

How To Connect:
IN1 - Microphone Input: connect your microphone input into this jack
IN2 – Microphone Input: connect your microphone input into this jack
OUT2—Audio Out: Connect OUT2 to your system’s audio input. NOT REQUIRED FOR USB COMMUNICATION
OUT1 – Speaker: Connect OUT1 to your loudspeaker amplifier.

Note: User should use the provided dual split microphones connected to the tip & ring of both IN1 & IN2. (Identical single microphones could be used in place of the dual split microphones. Option to use only one Input is viable)
• The far end input is via USB connection only.

Notes:
1) Far-End Input will be received through the USB channel
• Audio Input (mic jack) of system is connected to the tip of OUT2.

Dimensions
Height/Width/Depth MT107: 3.75in/2in/1in
Weight: .5lb

**Microphone Specifications & Set up**

It is recommended that the four microphones delivered by Phoenix Audio are used in the setup for maximum quality. The following is a guideline for placement and set up of the microphones to ensure the highest quality audio possible.

- If indeed you chose to use your own microphones, ensure that they have boots, and are identical in all aspects
- Place the microphones in the horizontal axis. (Do not place them vertically)
- The spacing between the microphones should be 2in for optimal performance. However, it could be placed 1-3in. apart. (Do not place closer than 1in. apart)
- Mount the microphone by drilling the holes onto the kiosk console or in a microphone box, and mount using the microphone boots. (*ensure that the microphone enclosure has ample space and that the microphones are facing the front of the kiosk, directly in front of where microphone input is received)
- A cloth, foam cover, or grill should be placed in front of the microphones to reduce wind distractions and increase pick up clarity

For additional information please refer to our website at [www.phnxaudio.com](http://www.phnxaudio.com).