The Voice Tracker™ II Array Microphone

The Voice Tracker™ II starts with Acoustic Magic's unique, customer proven, patented scanning beam array microphone technology, which spatially filters undesired sounds and noise over a 360° field of view. But it has been designed to enhance its applicability for video and audio conferencing , while retaining its attributes for meeting and lecture recording, speech recognition, voice control, and security monitoring.

Effective at Long-Range
The Voice Tracker™ II creates an exceptional signal to noise ratio by increasing its signal pickup while reducing room noise. It accomplishes room noise reduction through a two-stage process. First, it minimizes unwanted background noise and reverberation by beamforming. Its digital signal processor creates a "listening beam" (like a searchlight) that automatically and electronically focuses on the talker, spatially filtering sound from other directions. Then its proprietary noise reduction algorithms diminish the remaining background noise and reverberations. The Voice Tracker™ II increases its sensitivity by constructively adding the output from its six "always on" microphone elements. As a result, the Voice Tracker™ II has range of more than 20 feet for conferencing, meeting recording, and home automation applications; and a range of several feet for hands-free/headset free full vocabulary automatic speech recognition applications.

Full Duplex operation for VoIP and conventional conferencing
The Voice Tracker™ II has a high performance acoustic echo canceller built in. This AEC, combined with, a mute button, and the Voice Tracker™ II's long-range, make it ideal for conferencing and telephony (speakerphone) applications.

Portable
The Voice Tracker™ II is half the size of the original Voice Tracker™, and fits easily into a briefcase. It can be powered through its USB connection, eliminating the need to carry a wall power converter and making it operable in any country.

Easy to use
Our patented beam steering technology, noise reduction algorithms, and AEC, all operate from an internal DSP. No software needs to be loaded on your PC, and there is no drain on your computer's processing capability. There are no moving parts, so the Voice Tracker™ II is rugged and reliable.

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Features

- Automatic electronic steering of "listening beam" to talker location
- 360° field of view
- Long-range:
  - 20+ feet for conferencing/meeting recording/home automation voice control applications
  - 3 feet for desktop full vocabulary automatic speech recognition applications
- Six "always on" microphone elements
- Two-stage noise reduction (spatial filtering followed by conventional noise reduction)
- Full-duplex operation through internal Acoustic Echo Cancellation algorithm.
- Mute button
- USB audio output/microphone power
- Analog audio output jack, switchable between mic level and line level output
- 5 element LED display to indicate location of chosen talker and mute mode
- Talker location signal (serial-RS 232).

Specifications

Microphone:
Dimensions: 12" X 1.5" X 1.5"
Weight: 2 Lbs
DSP sample rate 48kHz
Frequency response: 100HZ- 11.25 KHZ
Analog Output level: mic level or line level, unbalanced
Analog output impedance: 200 Ohms

Connections
Main Connection: Mini USB
3.5mm mono jack for analog audio output
3.5mm jack for far end talker reference
DB9 jack for serial talker location signal

Acoustic Echo Cancellation:
Conforms to ITU-T G.167 Standard
Convergence speed: <100ms
Single Talk Acoustic Echo Cancellation: 70dB
Double Talk Acoustic Echo Cancellation: 40dB
Tail Length: 100ms
Algorithm sample rate: 48KHz

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