

INSTRUCTIONS for the Voice Tracker III array Microphone

Included Components

The Voice Tracker III comes with one 6 ft. audio cable, a wall power adapter, and a ceiling/wall mount.

General Setup

Connect the power and audio cables to their appropriate jacks on the back of the Voice Tracker™ Array (see Figure 1). Plug the power adapter into a standard wall outlet (note that the Voice Tracker III can ship with wall power adapters for either USA, EU, or UK plugs/voltage). The adapter supplies 6V DC power (center pin positive) to the microphone.

Connect the other end of the audio cable to the **“mic in”** input on your computer's sound card, or a USB adapter like our part 102A, or an XLR adapter transformer.

Note that Apple computers don't have mic level audio jacks, so a USB adapter must be used. If your computer only has a single TRRS jack, you may need a TRRS to TRS (Mic & speaker) splitter/adaptor.



**Figure 1 – Rear Panel
Audio and Power Cable Connections**

The Voice Tracker™ Array may be used as the audio input device for a variety of speech and multi-media applications. Many of the software packages which utilize a speech input have setup tools, which allow you to specify whether you are using the “mic In” connection on your soundcard or the USB connection and to adjust the sound level (volume) automatically. Please refer to your specific application software for details. To adjust the volume or input selection manually on a Windows PC, see the **Adjusting Your Soundcard** section at the end of these instructions.



Figure 2– Voice Tracker™ Array Mic

The Voice Tracker III comes with feet to sit on a table or podium. To mount to a wall or ceiling, remove the feet and connect the ceiling/wall mount.



Positioning

Aim the array in the direction of the desired talker(s). When properly positioned, the talker will be able to see all 5 green position indicators. The Voice Tracker III will automatically scan its listening beam to the active talker.

Position Lights

The green position lights provide feedback on the operation of the array. They indicate where the array's listening beam is pointing. When the array recognizes a relevant sound, one of the 5 lights will be illuminated. The individual lights correspond to the range of potential sound source locations. For example, if a talker is directly in front of the array, the middle light will be illuminated. If the talker is to one side, a light on that side will turn on. If the talker moves across the field of view of the array, the lights will track the talker's motion. When two users are sharing the array, the light will indicate the direction of the active talker. When a second talker begins, the listening beam will move to him in 2 MSecs. When there is no active talker, the lights may flicker as the Voice Tracker™ searches for a talker.

Combining Two or More Voice Trackers

Voice Trackers can be combined using 3.5mm Ys or Mixers. Often 3.5mm extension cables can be used to obtain physical separation of the Voice Trackers for better room coverage. If the room has electrical noise, converting the output from the Voice Tracker from unbalanced to balanced might be required. An XLR adapter can accomplish this.

Where to position the Voice Tracker III

The Voice Tracker III pickup with a 360 degree field of view, but it is more sensitive from the front. The best location for the VT III is on the front wall (using the wall mounting bracket) or on the ceiling facing toward the rear of the room. If placed on a table or podium, it is best placed near the front of the room, facing toward the rear.

Using the Voice Tracker for Speech Recognition

Since the Voice Tracker™ operates differently from other types of microphones or audio input devices, you should retrain your speech recognition system after connecting the array and adjusting the soundcard gain level. This will allow you to more effectively utilize the improved sound quality produced by the Voice Tracker™ III and will improve the overall performance of your speech recognition software. Be sure to select mic in during the “New User” setup. Personalized vocabulary can usually be transferred to the retrained “User”.

Adjusting Your Soundcard or USB adapter

On your Windows PC:

1. Right click on the speaker ICON and select “sounds”
2. Click on the “Recording” Tab.
3. Select the soundcard as the default device if connected through the mic in jack or select the USB adapter as the default device if you are using an adapter.
4. Highlight the default device and select “properties”
5. Click on “levels” and adjust the mic level. If using the soundcard, be sure to add 30dB or more of “boost”
6. Go to “listen” tab and make sure the “listen to this device” box in **not** checked.
7. Go to the “Enhancements” Tab and make sure AGC is not checked
8. Macs will have similar controls

Trouble shooting:

No audio.

Check whether green lights track the talker. If so, the problem is probably in the computer. Make sure the computer is looking for recording input where the Voice Tracker is connected (mic in or USB).

If all the LEDs are blinking, repower the unit to reset the SW.

Low Audio

Adjust the level in your soundcard or USB adapter. Because of the Voice Tracker’s good signal to noise ratio, the gain can be turned up.

Underwater Artifact in Audio

The Voice Tracker III has background noise reduction. If the unit is placed too close to a fan or A/C duct, the algorithms can cause artifact that makes the audio sound “underwater”. Just move the Voice Tracker away from the stationary noise source; the Voice Tracker’s long pickup range will still capture the talker throughout the room.

FCC & CE Mark Compliance

This equipment has been tested and found to comply the limits for a Class A digital device, pursuant to part 15 of the FCC rules as well as the CE Mark rules. These limits are designed to provide reasonable protection against interference when the equipment is operated in a commercial environment. This unit generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference with radio communications. Changes or modifications not expressly approved by Acoustic Magic could void the user’s authority to operate the equipment.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the Radio Interference Regulations of the Canadian Department of Communications.

If you have further questions, e-mail us at CustomerService@AcousticMagic.com
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