# DAKOTA AUDIO INC. MINI-ARRAYS MA-5 & MA-4



DAKOTA AUDIO INC.

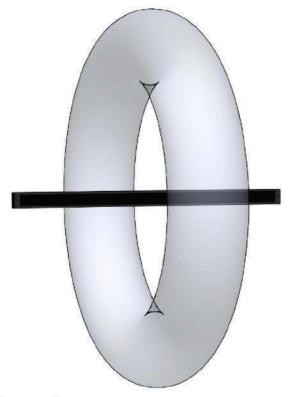
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# SOUND PATTERN

THIS SHOWS THE
AREA OF MAXIMUM
SOUND LEVEL.
IT IS NOT MEANT TO
REPRESENT ALL OF THE
SOUND EMITTED BY THE
ARRAY.



# This shows the area of maximum sound level.

The sound extends 360 degrees around the axis of the speaker array.

It gives good sound isolation side-to-side, with very little directionality vertically.

A child in a wheelchair or a pro basketball player will be in the pattern vertically.

It is almost never necessary to "tip" the arrays up or down, there is no directionality up or down.

It is not meant to represent all of the sound emitted from the array. There will be sound outside of the indicated area, but it will be at a lower level than the sound in the focal area. It is important to note that our ears are logarithmic. In order to achieve a ¾ reduction in apparent loudness, the sound energy has to be reduced approximately 99%. In quiet areas with reflective surfaces, this can be difficult to achieve. If you have any questions, please read our white papers that explain this in more detail.

# MA-4 OR MA-5

WHICH IS BETTER FOR MY APPLICATION?

## MA-4

The MA-4 was originally designed for science museums to have good intelligibility in a noisy environment. It is smaller than the MA-5. The low frequency response is limited, it is designed for voice, not optimal for music.

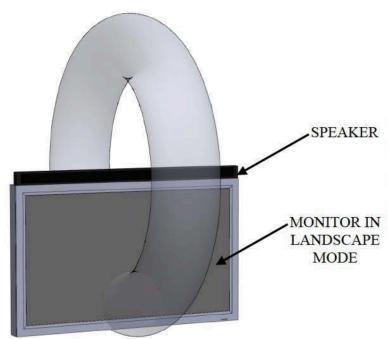
They come in various lengths, the lengths are for looks, to match a screen or kisok dimensions. All the lengths have the same pattern

### MA-5

The MA-5 was originally designed for digital Signage as in malls, for voice and for incidental music. The frequency response is tailored for good voice intelligibility with acceptable low frequency response.

They come in various lengths, the lengths are for looks, to match a screen or kiosk dimensions. All the lengths have the same pattern.

# SPEAKER ARRAY MOUNTING

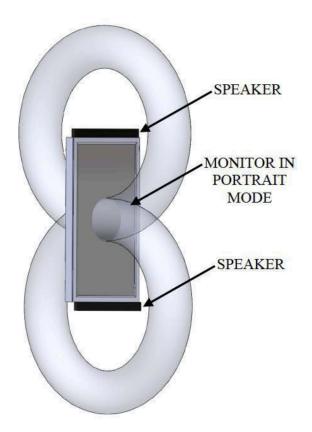


# LANDSCAPE MONITOR

In most cases, the speaker array will be mounted at the top of the video monitor.

Please note that the sound projects from the back of the array almost as loud as from the front. If this is a problem it may be necessary to place a baffle behind the speaker array.

(SEE INFORMATION ON NEXT PAGE)



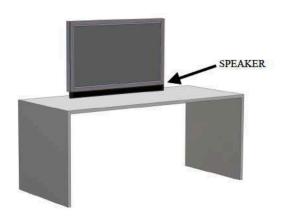
# **PORTRAIT MONITOR**

A large monitor mounted in portrait mode may require two speaker arrays to provide satisfactory vertical coverage. The included amplifier has two speaker outputs to drive two arrays.

Please note that the sound projects from the back of the array almost as loud as from the front. If this is a problem it may be necessary to place a baffle behind the speaker array.

(SEE INFORMATION ON NEXT PAGE)

# SUGGESTED MOUNTING METHODS

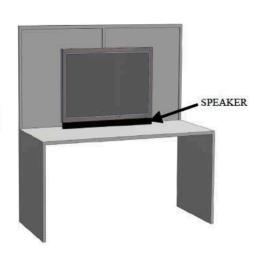


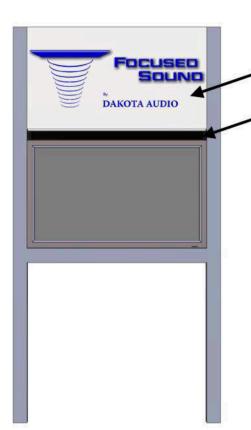
# **DESK**

By mounting the speaker at the bottom of the monitor, the monitor and the surface of the desk help reduce the sound spill to the rear.

# WORK STATION

For increased isolation, especially where the workstations are mounted back to back, a physical barrier is recommended to prevent interference between the workstations.





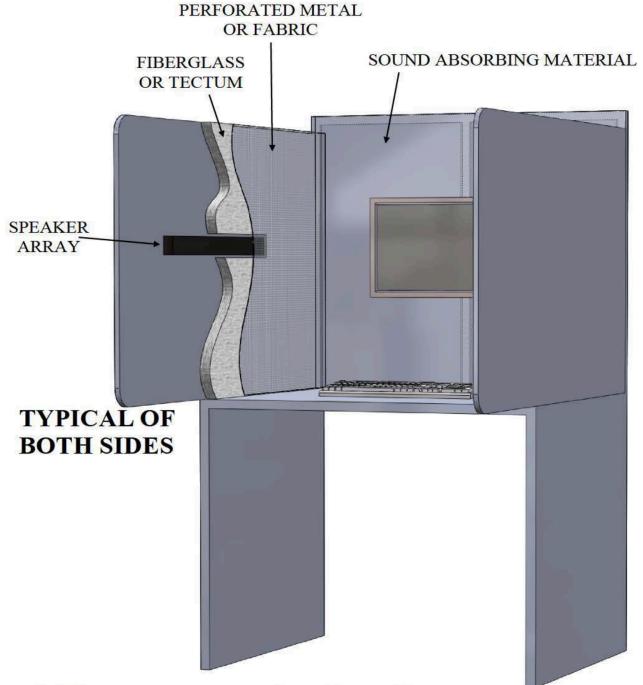
ADDED SIGN (SOUND BAFFLE)

SPEAKER

# **FREE STANDING**

The sound spill to the rear of a free standing exhibit can be reduced by adding a sign or other flat surface above the speaker array.

# PRIVACY BOOTH



As it becomes more common to enter private information into a computer, privacy is becoming an issue.

By combining our mini-arrays with sound absorbing material, privacy can be enhanced considerably.

With the addition of background noise masking, very good sound isolation can be achieved.

# **AMPLIFIER**

### 3.5mm (1/8") mini-phone jack input.

Automatically combines stereo to mono. This input is unbalanced and is susceptible to noise and hum pickup.

### Volume control

This controls the 3.5mm input jack. It does not have any effect on the balanced input

### Gain switch

Always try the 'HI' setting first. It's better to increase the signal level from the audio source if possible to reduce the possibility of noise or hum.

### **Balanced** input

This input is balanced, transformer isolated. It is generally used with professional equipment or if the sound source is located some distance from the amplifier.



# FOCUSED FOCUSED FOCUSED FOCUSED POWER DAKOTA AUDIO Dakota Audio Inc. 1815 Michigan Aversue Bismarck, ND 58504 USA WWW.DAKOTAAUDIO.COM Model MA-AMP5 SPEAKER FOCAL LENGTH FOCAL LENGTH

### Power jack

12 volt, 0.5 amp power. The power supply must be regulated, low noise. The jack is 5.5 / 2.1 mm Center pin is positive.

### Speaker outputs.

The amplifier can drive two speaker arrays, use either output.

### NOTE.

The cables from the speakers should not be extended. Please contact us for information.

ALWAYS CONTACT US BEFORE ATTEMPTING TO EXTEND
THE CABLES FROM THE SPEAKER HOUSING TO THE AMPLIFIER.

IF YOU HAVE HUM OR NOISE, GIVE US A CALL, WE PROBABLY HAVE A SOLUTION