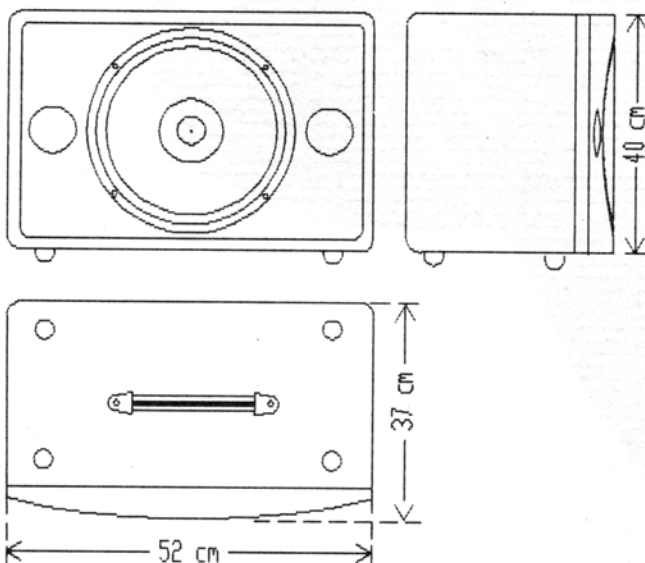




## DESCRIPTION

D.A.S. has been developing reduce-sized, reliable, systems for quite some time. Since the development of our co-axial loudspeaker range of professional transducers, the introduction of newer higher efficient, compact systems has been simplified. The professional audio marketplace now has a range of products from D.A.S., which we call the "Biflex Series".

The new Biflex-22 is another result of the co-axial loudspeaker technology developed by D.A.S. This mid-high frequency cabinet, built with the CX-22, is a definite choice for musicians live, in-door performances. The 2" titanium-domed driver unit used to reproduce the mid and high frequencies is the ultimate mate for the Biflex-40 (low frequency cabinet). Although its p.a. characteristics are greatly appreciated by many pros, we cannot forget that the Biflex-22 results in a highly efficient, reduce-sized, aggressive looking, disco cabinet. The compact system allows the sound contractor to hang as many as the installation requires, without resulting in a bulky, expensive loudspeaker design.



*Line drawings with dimensions.*

# BIFLEX 22

## SPECIFICATIONS

NOMINAL IMPEDANCE: 8  $\Omega$

FREQUENCY RANGE: 80 Hz to 20,000 Hz

SOUND PRESSURE LEVEL: 102 dB (1W/1m)

PROGRAM POWER: 400 W

SINUS POWER: 200 W

MAXIMUM SPL AT 1 METER: 125 dB

CROSSOVER FREQUENCY: 2,000 Hz

HORIZONTAL BEAMWIDTH

-6 dB, average 200 Hz to 800 Hz: 160° (+41°, -50°)

-6 dB, average 1 KHz to 16 KHz: 72° (+18°, -16°)

VERTICAL BEAMWIDTH

-6 dB, average 200 Hz to 800 Hz: 145° (+40°, -45°)

-6 dB, average 1 KHz to 16 KHz: 67° (+19°, -13°)

DIRECTIVITY FACTOR Q

200 Hz to 800 Hz: 4.5 (+2.21, -1.5)

1 KHz to 16 KHz: 11.81 (+4.83, -5.64)

DIRECTIVITY INDEX  $D_i$

200 Hz to 800 Hz: 6.36 (+1.94, -1.58) dB

1 KHz to 16 KHz: 10.55 (+1.66, -2.65) dB

DIMENSIONS: 40 cm (15.75") high

52 cm (20.47") wide

37 cm (14.57") deep

NET WEIGHT: 27 Kg (60 Lbs.)

Note: all directivity and polar specifications enclosed have been taken from the 1/3-octave bandwidth measurements (see text for details).

# POLAR MEASUREMENTS

The following characteristics were computed at selected, one-third-octave frequencies for the polar graphics shown on page 3 of this leaflet:

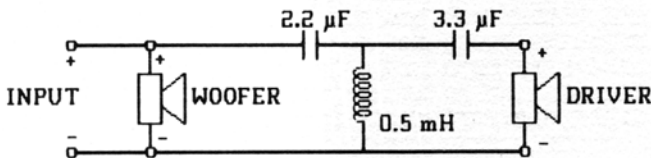
- a) the axial directivity  $Q$
- b) the directivity factor  $D_1$
- c) the beamwidth angles in degrees

These data are displayed on the right by means of two graphics.

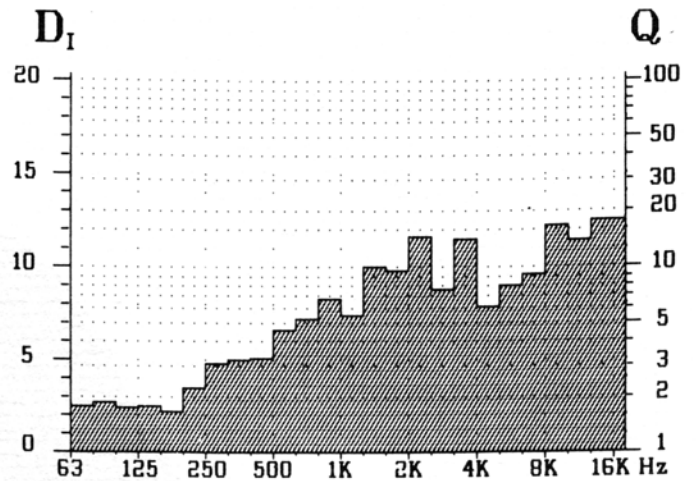
The polar graphs were obtained by placing the BIFLEX-22 inside our echoless room at the top of a closed box covered by foam. The microphone used for measuring was placed at a distance of 4 meters from the special unit's mouth.

Horizontal polar responses were plotted with a continuous line and vertical polar responses with an uncontinuous one. Scale is 5 dB per division. Rotation was carried out in the geometrical axes inside the horizontal and vertical planes as the drawings on the third page illustrate.

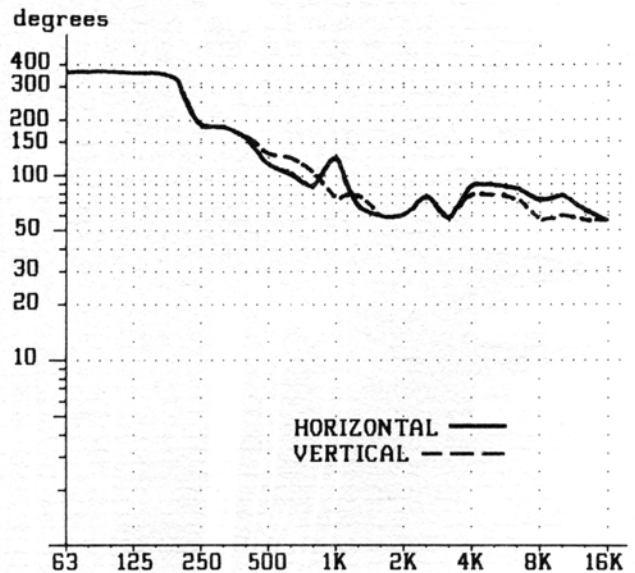
Possible errors due to the differences between geometrical and acoustical axes are insignificant because of the relatively large distances used during the measuring process.



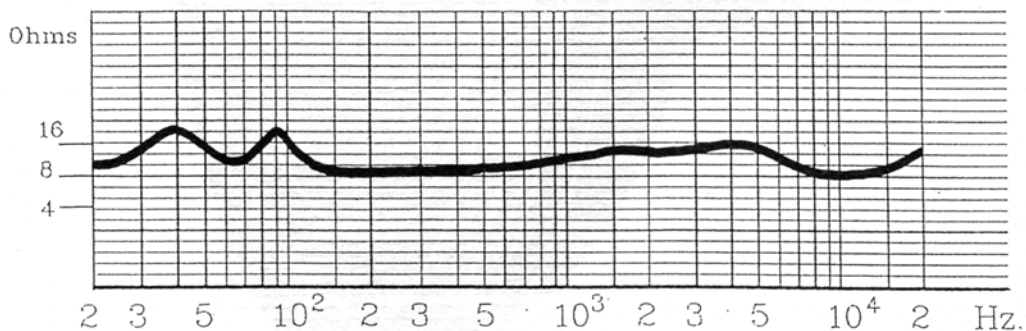
*BIFLEX-22's electrical network.*



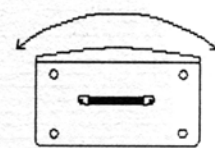
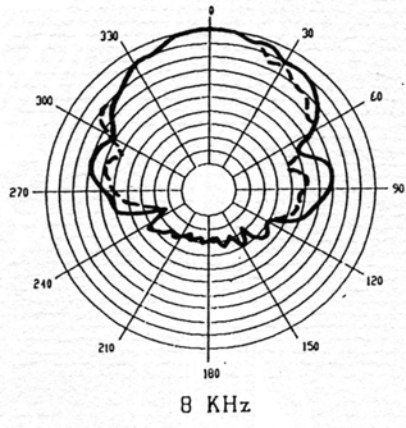
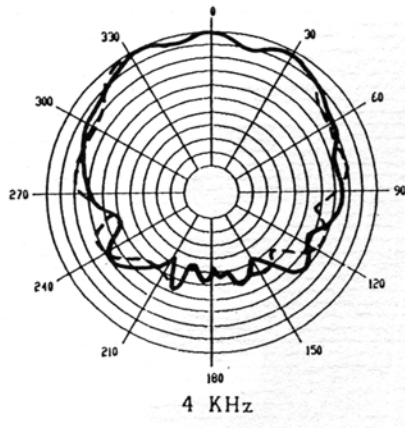
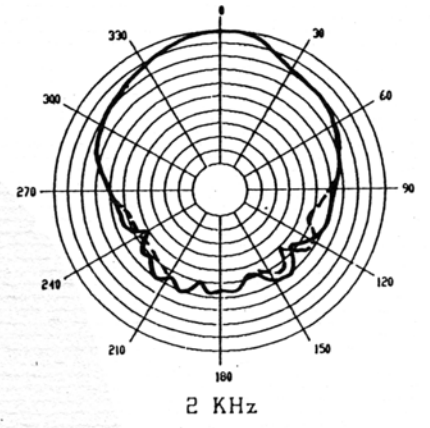
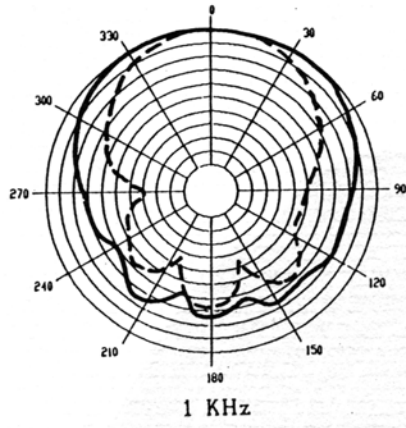
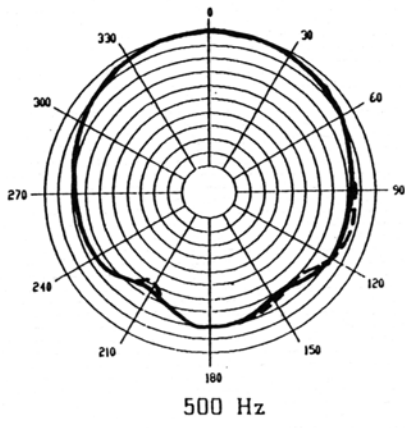
*Directivity vs frequency*



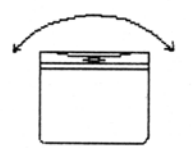
*Beamwidth in degrees vs frequency*



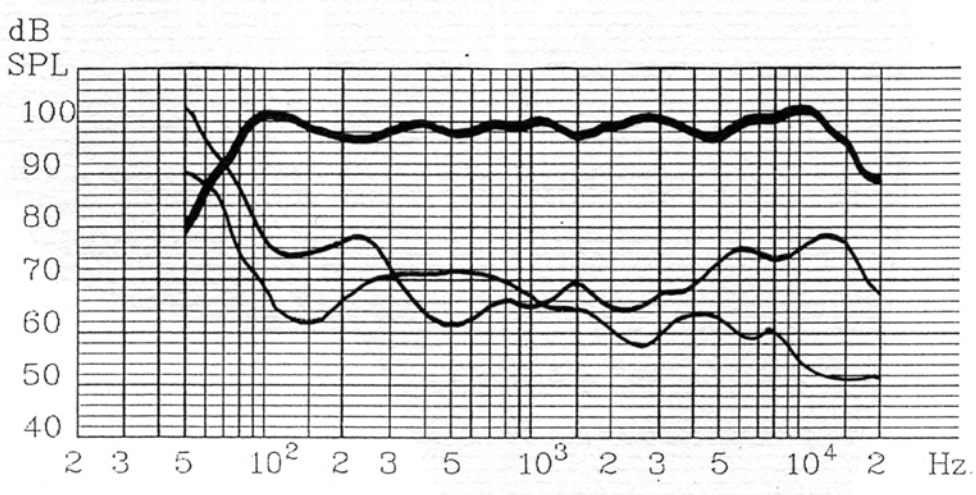
*Impedance frequency response.*



HORIZONTAL ROTATION



VERTICAL ROTATION



*Fundamental (top trace), 2nd harmonic distortion (center trace) and 3rd harmonic distortion (bottom trace) frequency response. All measures made in an anechoic chamber at 1 meter with 1 watt of electrical input power.*