

Electro-Voice®

a MARK IV company

Model FC100

Compound Diffraction Horn

SPECIFICATIONS

Frequency Response, 4 Feet on Axis,
Swept 1/3-Octave Random Noise.
(See Figure 1 for curves)

1828C

195-14 kHz Nominal
(±5 dB 430-6 kHz)

1829

150-11.5 kHz Nominal
(±5 dB 300-6 kHz)

Dispersion Angle Included by 6-dB-Down-
Points, Octave Bands of Random Noise
(See Figure 2):

Center

Frequency

500 Hz	149°	84°
1000 Hz	109°	114°
2000 Hz	130°	110°
4000 Hz	82°	56°
8000 Hz	54°	66°

Sound Pressure Level, 15 Watts at 4 Feet
on Axis, Octave Band of Random Noise
Centered on 2000 Hz:

1828C

117.7 dB

1829

115.7 dB

EIA Sensitivity, 1mW at 30 Feet on Axis
Per EIA Std. SE-103:

1828C

40 dB

1829

38 dB

Finish:

Tan baked enamel on metal parts;
Grey molded fiberglass horn

Dimensions:

52.0 cm (20.5 in.) high
26.5 cm (10.5 in.) wide
51.0 cm (20 in.) deep

Mounting:

Steel "U" bracket with three 1/2-inch
holes spaced 2 inches apart

Net Weight:

7 kg (15.5 lb)

Recommended Drivers:

1828C	1828T
1829	1829T

DESCRIPTION

The FC100 consists of the two horn sections
of the 848A. It can be used with the 1828C,
as in the 848A, or with the 1829 for greater
power handling.

When combined with a driver, the FC100
provides a wide range public address
projector that has an extended high-
frequency response and a broadened high
frequency polar pattern.

The materials used in the FC100, including
the fiberglass large horn, die-cast small horn
and phenolic inner horn have been selected
for their strength and durability. The FC100
is specially suited for outdoor use and in
harsh environments.

For further information about applications
consult the Electro-Voice publication:

"The Electro-Voice Guide to Commercial
Sound Reinforcement and Public Address

Systems," available without charge by
writing to: Electro-Voice, Inc., Advertising
Dept., 600 Cecil Street, Buchanan, MI 49107.

DISPERSION

The dispersion of the FC100 is determined
by the physical size and shape of its two
horns, and is detailed in the polar plots
shown in Figure 2. These measurements
were made using octave-band random-noise
signals centered on the frequencies indicated
(10 ft in an anechoic chamber).

FREQUENCY RESPONSE

The frequency response of the FC100 with
the 1828C and 1829 are shown in Figure 1
(using a swept 1/3-octave random noise).

INSTALLATION

The FC100 is shipped with the "U" bracket
assembled for mounting in the normal
vertical position. This bracket may be moved
to the rear mounting position for 90° rotation
of the horns, or for mounts where the
mounting holes must be vertical. Using these
two mounting positions and the swivel
connection of the bracket to the horn allows
a wide variety of mounting arrangements.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The horn shall be of the compound diffraction
type with outer housing molded of one
piece fiberglass polyester resin. The low-
frequency horn shall be 20 1/2 inches high by
10 1/2 inches wide and 20 inches deep, not

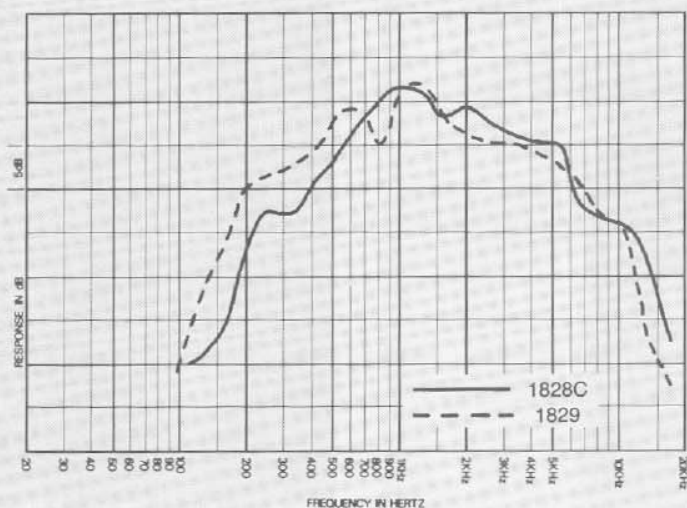


FIGURE 1 — Frequency Response

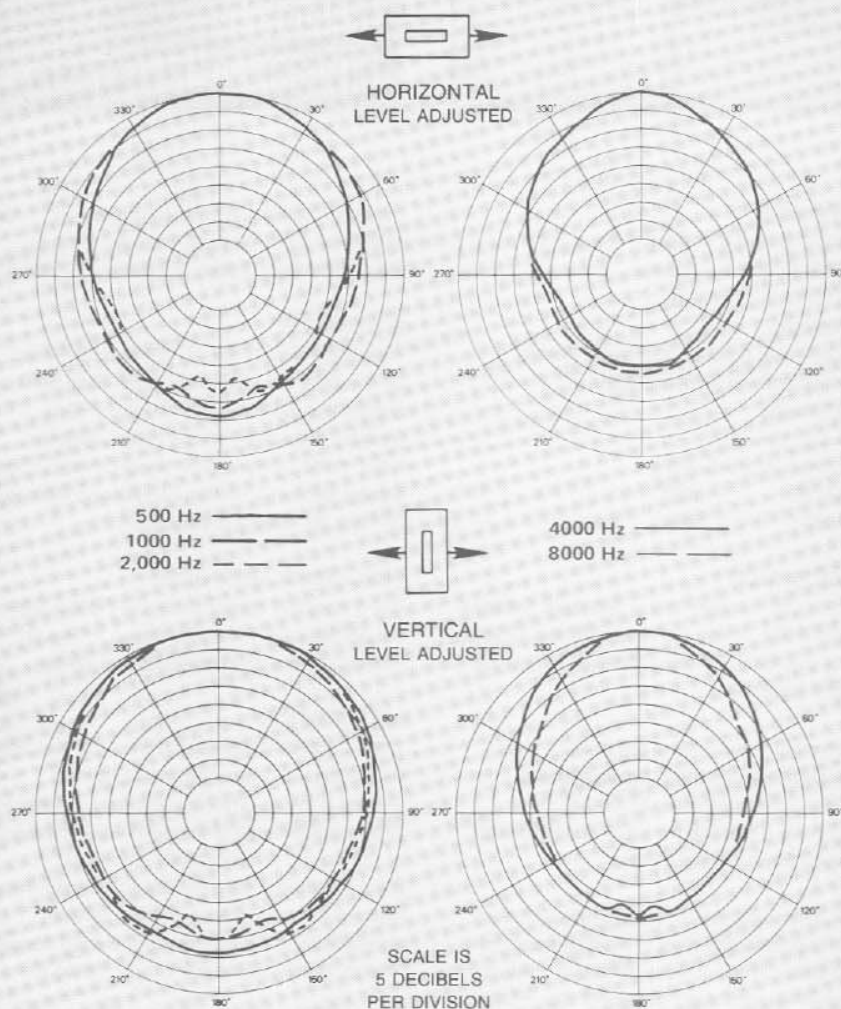


FIGURE 2 — Polar Patterns

including driver. A separate high frequency horn shall be provided which shall be capable of individual rotation. The acoustical crossover shall be 1000 cps. The low frequency horn shall have a rated 100 cps taper and cutoff and an air path length of 4 ft., 10 inches. The greatest dispersion shall generally be perpendicular to the long axis of each horn. The horn shall accept any Electro-Voice convertible driver. The grey finish shall be integral on the outer horn and tan baked enamel used on all metal surfaces. The net weight (less driver) shall not exceed 10¾ lbs. A steel mounting bracket shall be provided and it shall be possible to orient the horn vertically or horizontally. Electro-Voice FC100 is specified.

WARRANTY (Limited) —

Electro-Voice Loudspeakers, Speaker Systems, and accessories are guaranteed for five years from date of original purchase against malfunction due to defects in workmanship and materials. If such malfunction occurs, unit will be repaired or replaced (at our option) without charge for materials or labor if delivered prepaid to the proper Electro-Voice service facility. Unit will be returned prepaid. Warranty does not cover finish or appearance items or malfunction due to abuse or operation at other than specified conditions. Repair by other than Electro-Voice or its authorized service agencies will void this guarantee.

For correct shipping address and instructions on return of Electro-Voice products for repair and locations of authorized service agencies, please write: Service Department, Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107 (Phone: 616/695-6831) or Electro-Voice West, 8234 Doe Ave., P.O. Box 3297, Visalia, California 93291 (Phone: 209/651-7777).

Service and repair address for this product: Electro-Voice, Inc., 600 Cecil Street, Buchanan, Michigan 49107.

Electro-Voice also maintains complete facilities for non-warranty service.

Specifications subject to change without notice.

