Electro-Voice®

ELECTRO-VOICE, INC.
BUCHANAN, MICHIGAN

Specifications

Model 729 and 729S Microphones

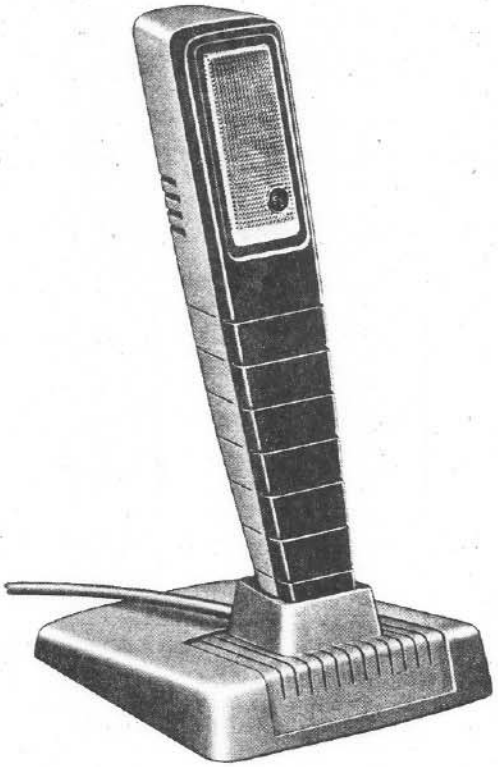
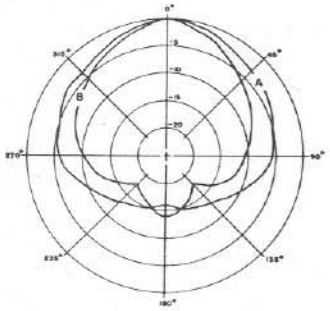


Fig. 1 — Model 729 Microphone



A — 300 cps B — 3,000 cps

Fig. 2 — Polar Pattern

The Electro-Voice Model 729 is a cardioid microphone of the ceramic type, designed for public address, call and paging systems, dictating machines, home recorders, radio amateurs, and general communication. The mechanical construction utilized is inherently rugged affording high protection from mechanical shock damage. Their small, slim size makes them easy to handle and gives an attractive appearance.

The Model 729 is designed for use under a great variety of conditions and climates. Because of its excellent and uniform polar response, it is especially useful in locations where ambient noise and reverberation exist. The Model 729 can be used on a floor or desk stand or carried in the hand.

The cardioid characteristic of the Model 729 gives wide angle front pick up, but is virtually dead from the rear. For best results in using a cardioid type microphone stay back at least 6". Working too close to a directional microphone gives you an unnatural bass response. In addition, the Model 729 gives the following advantages:

1. The uniform cardioid characteristic allows nearly double the pick-up range (distance from performer or sound source to microphone), over that of the conventional omni-directional microphone for average conditions of reverberations, acoustic feedback and room noise. For public address applications, this pick-up range may be increased considerably by proper placement of loudspeakers so that direct and reflected sound strikes the microphone at the back (dead zone).

2. Random room noise and reverberations are reduced by a factor of 67%.

3. The microphone may be positioned to cancel or substantially diminish pick-up of unwanted sounds.

4. High output level of Model 729 enables it to be used with any standard amplifier employing high impedance input.

SPECIFICATIONS

Type: Ceramic

Frequency Response: 60 to 8,000 cps.

Impedance: Hi-Z. Can be used with any amplifier employing high impedance input

Output Level: −55 db (0 db equals 1 volt/dyne/cm²)
RETMA Sensitivity Rating −155 db.

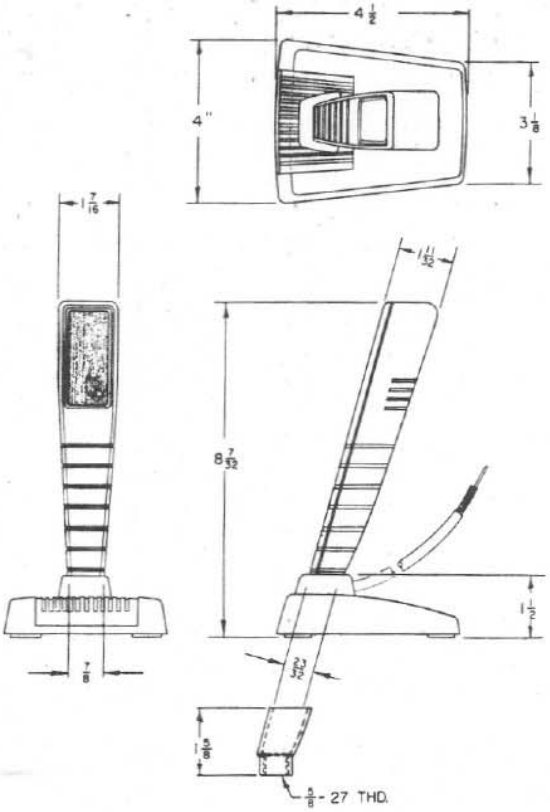


Fig. 3 — Dimensions

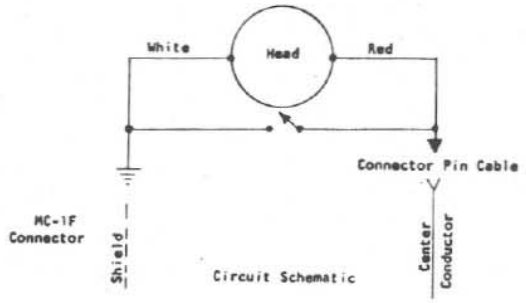


Fig. 4 — Wiring Diagram

Polar Pattern: Cardioid. See Figure 2

Case Material: Pressure diecast zinc front and plastic back

Finish: Metalustre gray front and medium gray back

On-Off Switch: (729S only) sliding contact short circuits microphone in off position

Dimensions: See Figure 3

Net Weight: 1 lb. including cable.

Cable: 10 feet single conductor shielded. Additional cable reduces the output level, but does not distort frequency response

Stand Coupler: 5/8" – 27 thread

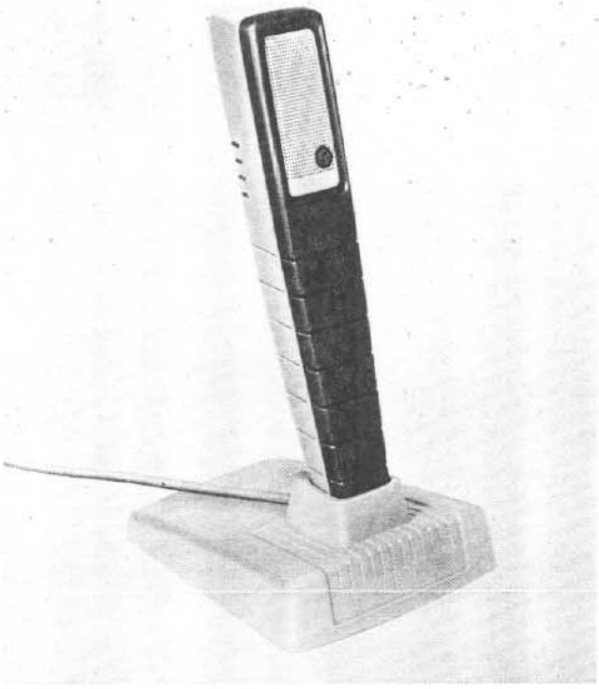
Temperature: May be used in any climate. Will withstand 200° F.

Warranty: The Model 729 is guaranteed against defects in workmanship and materials

Architects' and Engineers' Specifications

(The following specifications may be used when Model 729S is required by substituting Model 729S for model number 729.)

The microphone shall be an Electro-Voice Model 729 or equivalent. The microphone shall be an unidirectional, ceramic type, with uniform response from 60 to 8,000 cps. The microphone shall have a high impedance output that shall work into a standard grid resistance of from .5 to 2 megohms. The high impedance output level shall be –55 db with 0 db equaling 1 volt/dyne/cm^2. The RETMA sensivity rating shall be –155 db rising response. The case shall be of pressure diecast front and gray plastic back. The microphone shall have a maximum net weight of one lb. with cable. A 10' single conductor, shielded cable shall be provided. The Model 729S microphone or equivalent shall have an ON-OFF switch that short circuits the microphones output in the "OFF" position.



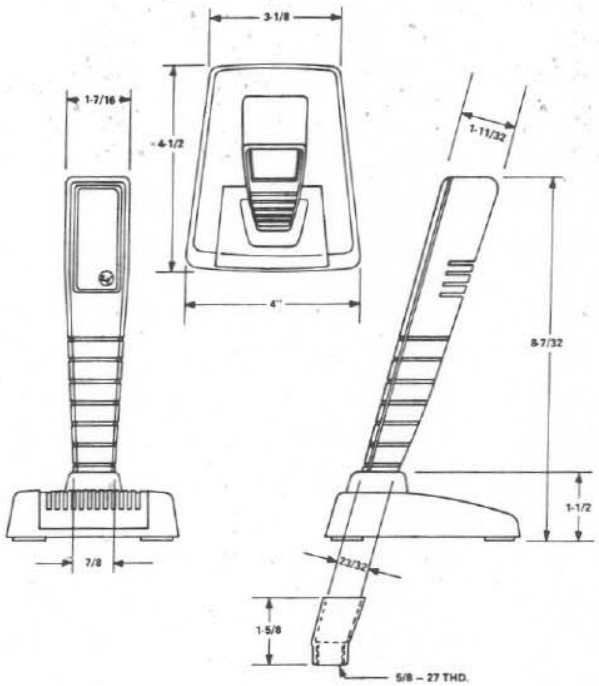


Figure 1 - Dimensions

DESCRIPTION AND APPLICATIONS

The Electro-Voice Model 729 is a cardioid microphone of the ceramic type, designed for public address, call and paging systems, dictating machines, home recorders, radio amateurs, and general communications. The mechanical construction utilized is inherently rugged, affording high protection from mechanical shock damage. The small, slim size makes it easy to handle and gives an attractive appearance.

The Model 729 is designed for use under a great variety of conditions and climates. Because of its excellent and uniform polar response, it is especially useful in locations where ambient noise and reverberation exist. The Model 729 can be used on a floor or desk stand or carried in the hand.

The cardioid characteristic of the Model 729 gives wide angle front pickup but is virtually dead from the rear. A working distance of six inches or more is recommended for best results. Working too close to a directional microphone gives an unnatural bass response. In addition, the Model 729 provides the following advantages:

1. The uniform cardioid characteristic allows nearly double the pickup range (distance from performer or sound source to the microphone) over that of the conventional omnidirectional microphone for average conditions of reverberation, acoustic feedback and room noise. For public address applications, this pickup range may be increased considerably by proper placement of loudspeakers so that direct and reflected sound strikes the microphone at the back (dead zone).

2. Random room noise and reverberations are reduced by a factor of 67%.

3. The microphone may be positioned to cancel or substantially diminish pickup of unwanted sound.

4. High output level of the Model 729 enables it to be used with any standard amplifier employing high impedance input.

SPECIFICATIONS

Generating Element:	Ceramic
Frequency Response:	60 to 8,000 Hz
Impedance:	Hi-Z. Can be used with any amplifier employing high-impedance input
Output Level:	−60 db (0 db = 1 volt/dyne/cm²) EIA sensitivity rating, −158 db
Polar Pattern:	Cardioid. See Figure 2.
Case Material:	Pressure die-cast zinc front and plastic back
Finish:	Metalustre gray front and medium gray back
On/Off Switch:	(729S only) sliding contact short-circuits microphone in off position
Dimensions:	See Figure 1.
Net Weight:	1 lb., including cable
Cable, 729:	8½ foot, single-conductor shielded. Additional cable reduces the output level but does not distort frequency response.
Cable, 729S:	8½ foot, three-conductor (one-shielded)

Stand Coupler:	5/8 inch –27 thread
Temperature:	May be used in any climate. Will withstand 200° F.
Warranty:	The Electro-Voice model 729 is guaranteed against defects in workmanship and materials.

ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

(The following specifications may be used when Model 729SR is required by substituting Model 729SR for model number 729.)

The microphone shall be an Electro-Voice model 729 or equivalent. The microphone shall be an unidirectional, ceramic type, with uniform response from 60 to 8,000 Hz. The microphone shall have a high impedance output that shall work into a standard grid resistance of from .5 to 2 megohms. The high impedance output level shall be –60 db with 0 db equalling 1 volt/dyne/cm^2. The EIA sensitivity rating shall be –158 db rising response. The case shall be of pressure diecast zinc front and gray plastic back. The microphone shall have a maximum net weight of 1 pound with cable. An 8½ foot, single-conductor, shielded cable shall be provided on the model 729. The model 729SR microphone or equivalent shall have an on/off switch that removes short circuits in the "On" position and closes from microphone relay circuit. Cable shall be three-conductor, one shielded.

Factory repair department for this product is located at: Electro-Voice, Inc./Sevierville, Tennessee 37862.

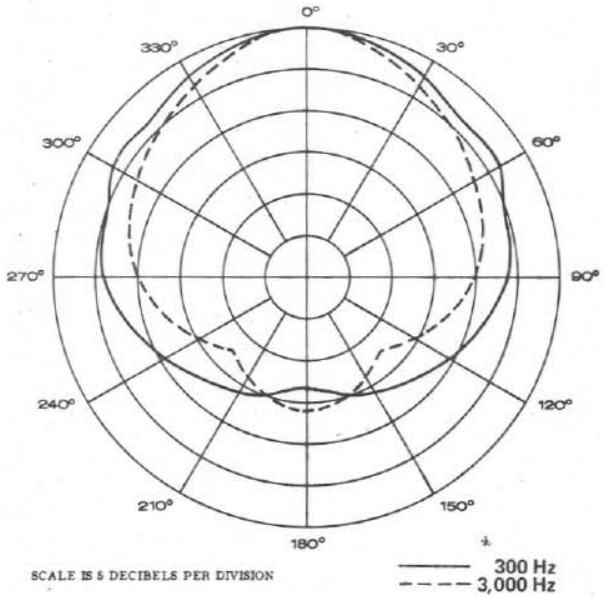


Figure 2 - Polar Pattern

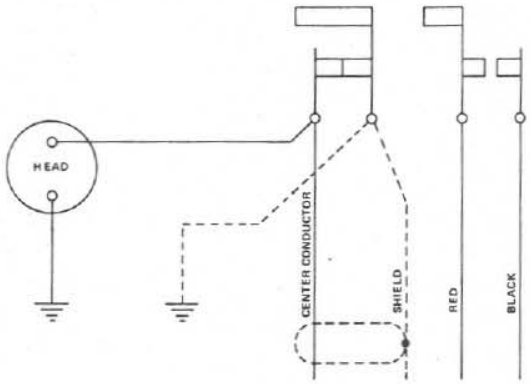


Figure 3 - 729SR Wiring Diagram