

## SPECIFICATIONS (See notes 1 - 3)

**Driver Type:** 2.8 in. / 71 mm exit, extended midrange

**Operating Range:** 300 Hz - 8 kHz (with equalization)  
400 Hz - 4 kHz (+/-3.4dB)

### Max Input Ratings:

160W continuous, 400W Program  
36 volts RMS, 80 volts momentary peak  
Recommended Power Amplifier:  
330W to 480W @ 8 Ohms

### Sensitivity 1W/1m:

112 dB SPL (315 Hz - 8 kHz 1/3 octave bands)

### Maximum Output:

134 dB SPL / 141 dB SPL (peak)

**Nominal Impedance:** 8 Ohms

**Min Impedance:** 10.8 Ohms @ 1.9 kHz

**Compression Ratio:** 4:1

### Lowest / Highest Crossover Frequencies:

300 Hz / 8 kHz

### Optimum Crossover Frequencies:

400 Hz / 6 kHz

### Recommended LF Protection Capacitor: \*

100 mfd non-polar (for 400 Hz crossover)

### Diaphragm:

Diameter: 3.55 in. / 90 mm

Material: Carbon fiber composite

### Voice Coil:

Diameter: 3.55 in. / 90 mm

Material: Copper-clad aluminum edgewound wire  
on Kapton former

### Input Connection:

(2) 3/16 in. wide solder tabs

### Bolt Pattern:

(4) 1/4-20 threaded studs on 5.75 in. / 146 mm bolt circle

### Required Accessories:

Electronic crossover

### Supplied Accessories:

(4) 1/4-20 washer / lockwasher / nut sets

### Recommended Community Horns:

PC194 - 90 x 40 large format midrange and voice only horn  
PC164 - 60 x 40 large format midrange and voice only horn  
PC142 - 40 x 20 large format midrange and voice only horn  
PC394 - 90 x 40 medium format midrange horn (800 Hz)  
PC364 - 60 x 40 medium format midrange horn (800 Hz)  
PC342 - 40 x 20 medium format midrange horn (800 Hz)

### Dimensions (without mounting studs):

Depth: 3.4 in. / 86 mm  
(4.4 in. / 112 mm with mounting studs)

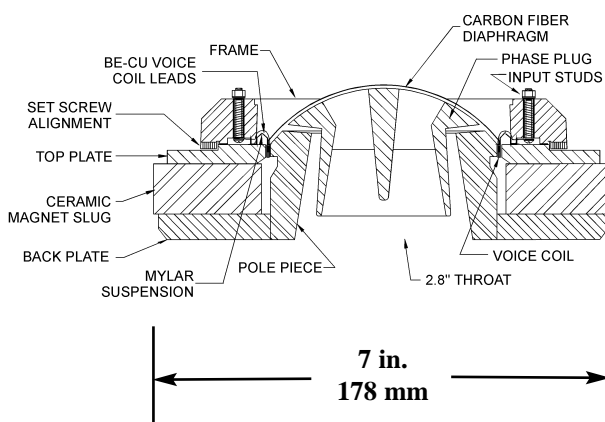
Diameter: 7 in. / 178 mm

**Weight:** 12.4 lb. / 5.6 kg

**Shipping Weight:** 14 lb. / 6.4 kg

- Sensitivity:** Free field pink noise measurement at 15 ft / 4.6 m at 15% power; extrapolated to 1 meter and an input of 2.83 volts RMS.
- Watts:** All wattage figures are calculated using the rated nominal impedance.
- Data:** All performance data measured on a PC194 90 x 40 horn.

\* Capacitor is only for protection against DC voltage or catastrophic amplifier failure and not to be used as a crossover.



## APPLICATIONS:

- Multi-way Component High Fidelity Systems
- One-way Voice Announcement Systems

## FEATURES:

- Carbon Fiber Diaphragm
- 2.8" (71 mm) Throat Exit
- Low Distortion, High Efficiency
- High Power Output

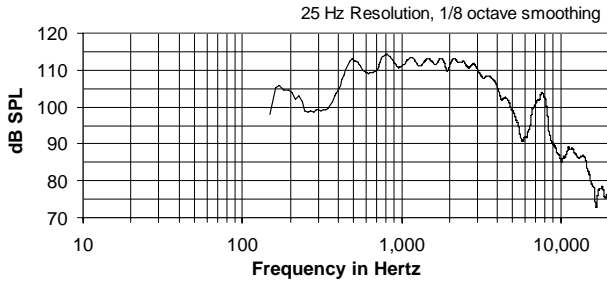
## DESCRIPTION

The EM280 Mid Frequency Compression Driver is a high output, high sensitivity driver for systems requiring powerful upper midrange capabilities. This includes component two, three and four-way full range high fidelity music systems as well as one-way, voice-only high output announcement systems. The EM280's carbon fiber diaphragm exhibits smooth frequency response throughout its operating range. The EM280 is matched with Community's PC300 Series of fiberglass horns.

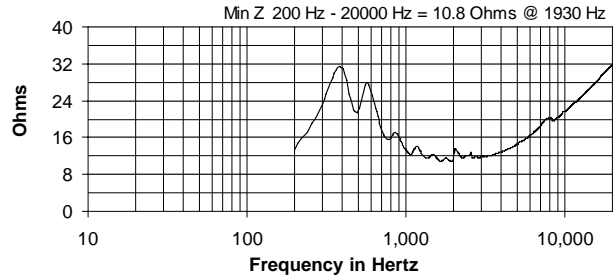
The EM280's diaphragm is made of two different carbon fiber composites combined to form a strong, low mass, high stiffness dome that resists resonant behavior. It exhibits a smooth frequency response throughout its operating range.

Community drivers incorporate large area, low compression phase plug loading and large magnet structures for extremely low distortion at high outputs while maintaining high efficiency and low power compression. There is a two year warranty.

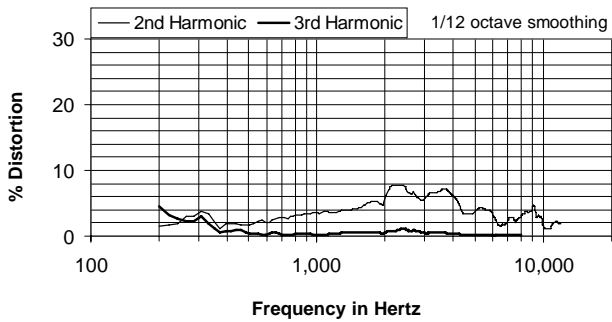
## FREQUENCY RESPONSE



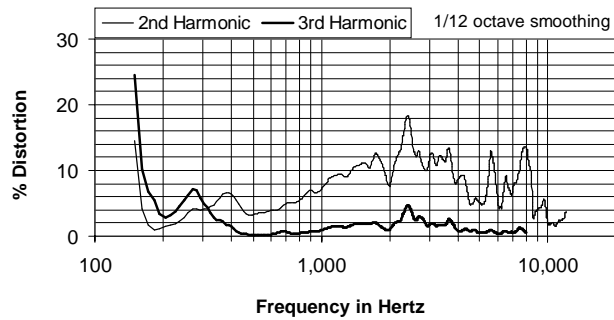
## IMPEDANCE



## HARMONIC DISTORTION (10% POWER)

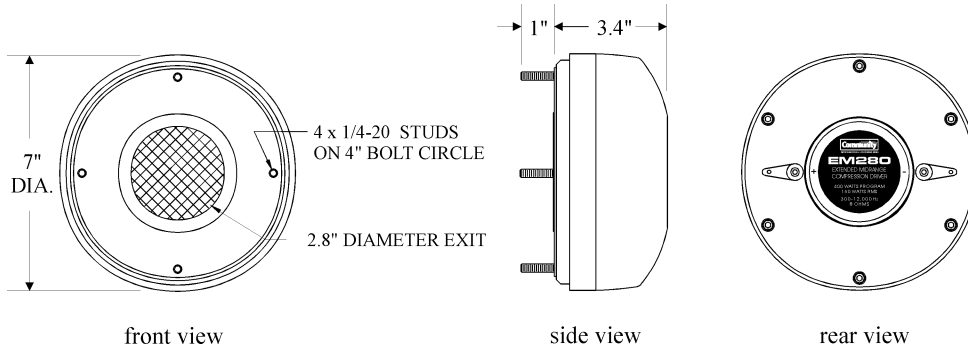


## HARMONIC DISTORTION (100% POWER)



Note: all graphs measured on PC194 horn.

## DIMENSIONS



## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The driver shall be a 2.8 inch (71 mm) exit compression type, specifically designed for extended midrange frequency response. On a PC194 horn the driver shall have an amplitude response of 400 Hz to 4 kHz dB (+/- 3.4 dB), input capability of 36V RMS, 112 dB sensitivity at 1 meter / 2.83V, and a nominal impedance of 8 Ohms. The driver shall incorporate a large magnet structure, a one-piece 3.55" carbon fiber diaphragm and a copper-clad aluminum edgewound voice coil on a Kapton former immersed in Ferrofluid. The compression ratio shall be 4 to 1. The diaphragm assembly shall be field replaceable. The driver shall be 7 in. (178 mm) in diameter, 3.4 in. (86 mm) deep plus 1 in. (25 mm) mounting stud projection, and weigh 12.4 lb. (5.6 kg).