

# ToneSpeak™

Model # Manchester 1290 Part # 86041  
12" Guitar Speaker, 90 Watt, 8 Ohm



## Key Features

- 12" Speaker
- 90 Watts
- 8 Ohm
- 50 oz. Magnet
- 1.75" Voice Coil Diameter
- Fiberglass Voice Coil Former

## Primary Specifications

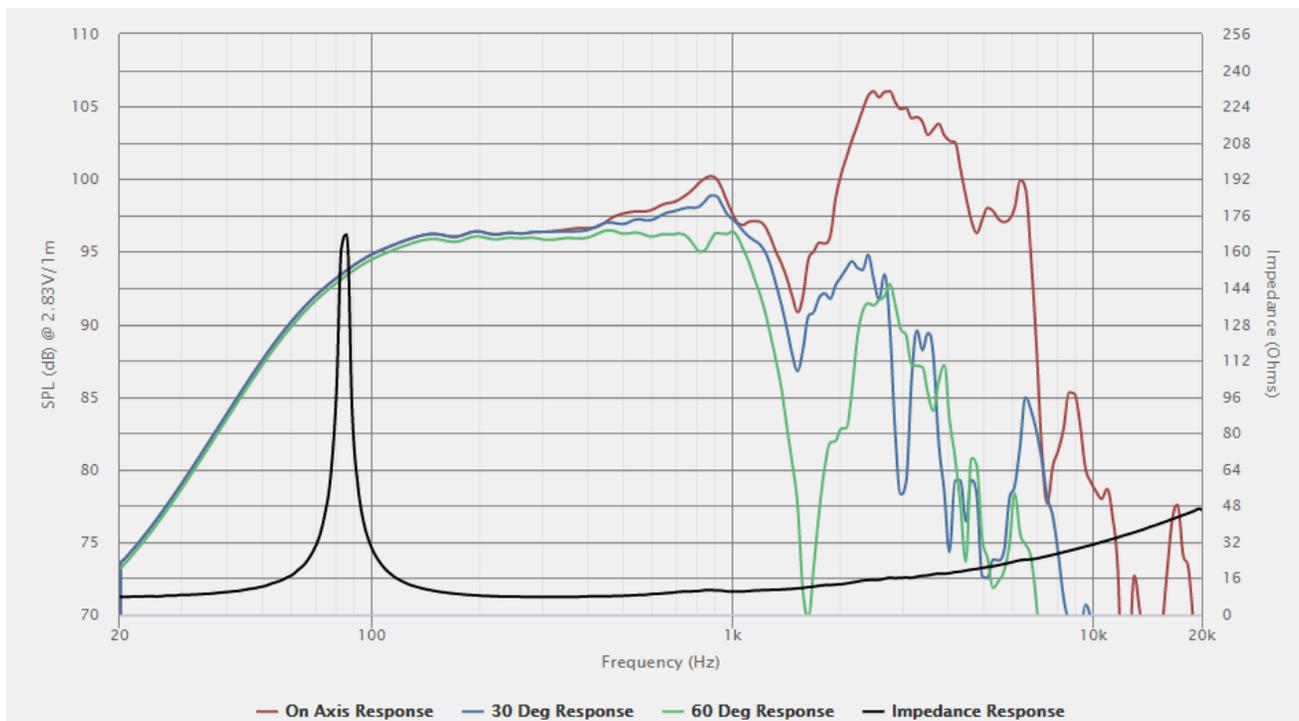
Size, Nominal (inch & mm)	12" (305 mm)
Nominal Impedance (Z) ( $\Omega$ )	8
Rated Power IEC268-5 (W)	90
Sensitivity (dB SPL)¹ (@1W/1 m)	100
Frequency range (Hz)	80 – 5,000
Resonant Frequency (Fs) (Hz)	85

## Product Description

Even and balanced from top to bottom. No sacrifice in tone for using higher power and/or higher gain with this speaker, it is crammed full of balance, definition, and most importantly, control. This speaker plays well with pedals and is slow to break up.

## Sensitivity & Impedance Curves

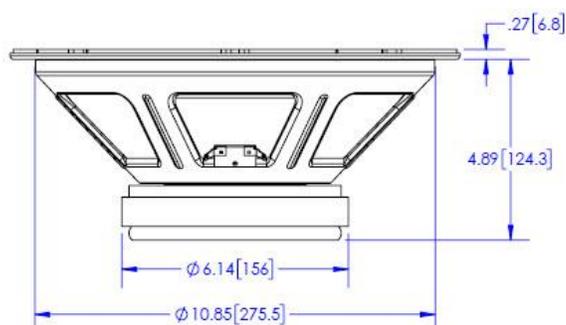
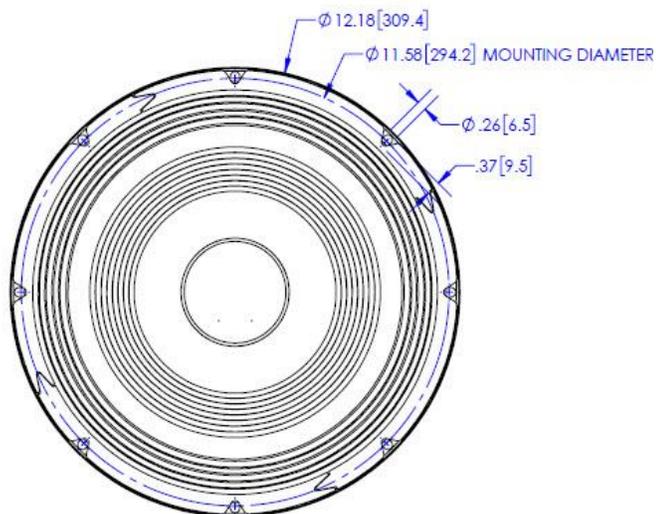
Input: 2.83 volts measured at 1 Meter



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## Transducer Drawings\*



\*CAD file available upon request

## Transducer Specifications (Klippel LPM)

Nominal Impedance (ohms)	8
DC Resistance (Re) (ohms)	7.1
Resonant Frequency (Fs) (Hz)	85
Voice Coil Inductance (Le) (mH)	0.39
Mechanical Q factor (Qms)	22.55
Electrical Q factor (Qes)	0.78
Total Q factor (Qts)	0.75
Moving Mass (Mms) (g)	31.4
Compliance (Cms) (mm/N)	0.1
Mechanical Resistance (Rms) (kg/s)	0.74
Effective Piston Area (Sd) (cm <sup>2</sup> )	539.1
Suspension Equivalent Volume (Vas) (liters)	46.3
Force Factor (Bl) (T*m)	12.38
Efficiency (No) (%)	3.47

## About ToneSpeak™

ToneSpeak guitar speakers are the result of years and years of the deep-dive for the perfect tone. Decades of testing, field experience and conversations with elite tone-chasers have all been poured into these fine products. When you play ToneSpeak, you play the best.

**All ToneSpeak products are assembled in Minnesota, with parts sourced from around the world to produce the highest combination of performance, consistency, and customer value.**

VERIFIED WITH  
**KLIPPEL**

