


# Universal Audio TIME-ALIGNED™ STUDIO MONITOR SYSTEM

™ Licensed by E. M. Long Associates

MODEL  
813

## FEATURES:

- First TIME ALIGNED™ monitor system designed for the professional studio.
- Features UREI 800 series TATM network (patent pending).
- 6048G duplex with UREI custom H.F. horn for extended and more uniform H.F. response.
- Second L.F. 15" direct radiating driver fed from 3-way TA network for extended L.F. response and higher power handling capability at low frequencies.
- >11.5 cu. ft. enclosure with pressure control aperture for excellent L.F. damping, good efficiency and low distortion.
- Unique enclosure damping method provides high efficiency conversion of low frequency sound pressure to adiabatic energy.




The 813 Studio Monitor System is the first generation product of a joint R & D effort of UREI and E.M. Long Associates. The TIME-ALIGN™ TECHNIQUE is a real-time design method, utilizing proprietary instrumentation developed by Long which allows the driver placements and network parameters to be adjusted simultaneously, achieving near perfect alignment of the frequency components of a complex transient waveform as heard by a listener.

The importance of time (phase) parameters of loudspeaker systems, in addition to smooth frequency response, has been postulated for many years. These group time delay anomalies may be severe in some multi transducer systems, although they may exhibit satisfactory or even excellent frequency response.

Within the last decade, many advocates have presented outstanding scientific papers on this subject. Richard C. Heyser, among others, has contributed magnificent re-

search dealing with the importance of time (phase) correlation.

Quoting from Heyser in Audio, June 1976: "We realize that the concept of time response of a speaker is a whole new ballgame to many people and is probably a bit confusing if all you ever considered before was steady state frequency measurements."

Edward M. Long presented a paper before the Audio Engineering Society in May of 1976, entitled "A Time Align Technique for Loudspeaker System Design." UREI is a licensee of E. M. Long Associates, for the instrumentation methods and the use of the Trademark ™.

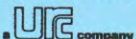
For stereo applications the model 813 Studio Monitor System is built in "mirror-image" (813 L, 813 R) to produce identical dispersion towards the listening position between two systems. The series 800 TA networks\* with the 800H custom H. F. horn, are also available separately in two way and three way configuration for both the 6048G and the 604E. (\*Patent Pending).



**UNITED RECORDING ELECTRONICS INDUSTRIES**

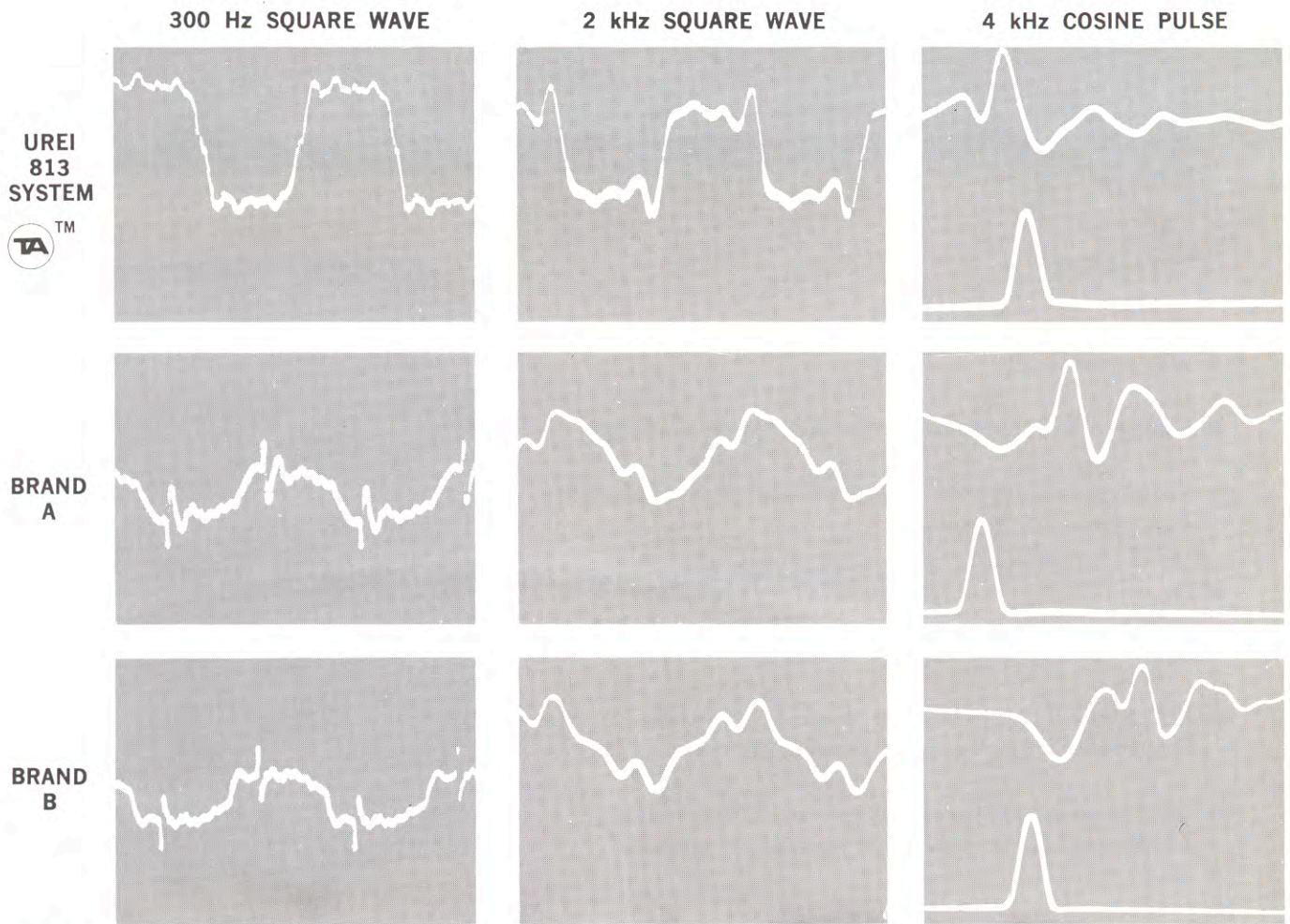
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The excellent transient behavior of the 813 system compared to two other popular networks and systems designed for the 604 series duplex speakers is graphically demonstrated below. (Crossover controls adjusted per manufacturers' instructions for best frequency response.)



## SPECIFICATIONS:

**Type:** Dual woofer coaxial with Model 838 three way TA network

**Power Rating:** 75 watts 40 Hz to 20 kHz, with pink noise

**Frequency response:**  $\pm 3$ dB, 40 Hz to 15 kHz measured "freespace"  
 $4 \pi$  steradians (H=5M D=1M)

**Sensitivity:** 89 dB SPL/volt/meter

**Impedance:** 8 ohms, nominal ( minimum impedance 3.7 ohms)

**Network:** UREI 838, 3-way

**Cabinet:** Utility flat black painted

**Weight:** 79.8 kg (176 pounds)

**Shipping Weight:** 100.2 kg (221 pounds)

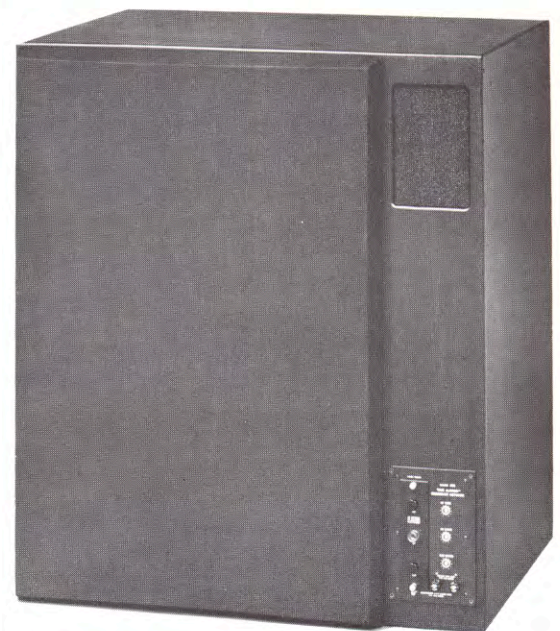
**Dimensions:** H = 0.914 m (36")

W = 0.787 m (31")

D = 0.584 m (23") without grille

0.603 m (23¾") with grille

**Accessory:** Grille 813 G



UREI 813 SYSTEM  
WITH ACCESSORY GRILLE