

Universal Audio

800 SERIES TIME-ALIGNED™  
CROSSOVER NETWORKS\*  
AND CUSTOM HIGH FREQUENCY HORN

MODELS

824 834

828 838

800H



™ Licensed by E. M. Long Associates

\*Patent pending

FEATURES:

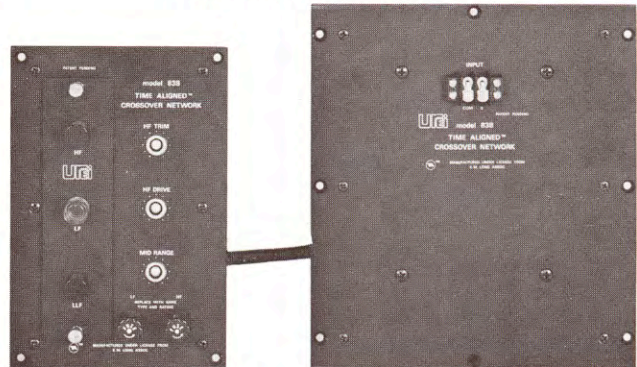
- Four models of TIME ALIGNED™ networks for all 604 duplex speakers.
- Available in two way models for single 604's, or three way models for adding second TIME ALIGNED™ low frequency woofer.
- Separate high frequency, drive and trim, and midrange controls.
- Aircore optimum form factor inductors.
- Peak current lamp indicators, as well as fuses, provide overload protection.
- Packaged for convenient installation in existing systems.
- UREI custom 800H high frequency horn provides extended and more uniform high frequency response.

The 800 Series crossover TAT™ networks and 800H high frequency custom horn are a joint R&D effort of UREI and E. M. Long Associates, using real time design methods and proprietary instrumentation developed by Long, which allows 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 research dealing with the importance of time (phase) correlation.

800 SERIES TIME-ALIGNED  
CROSSOVER NETWORKS



838  
CONTROL PANEL

838  
NETWORK



UREI 800H HORN

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 use of the Trademark ™.



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TELEX 65-1389 UREI SNVY

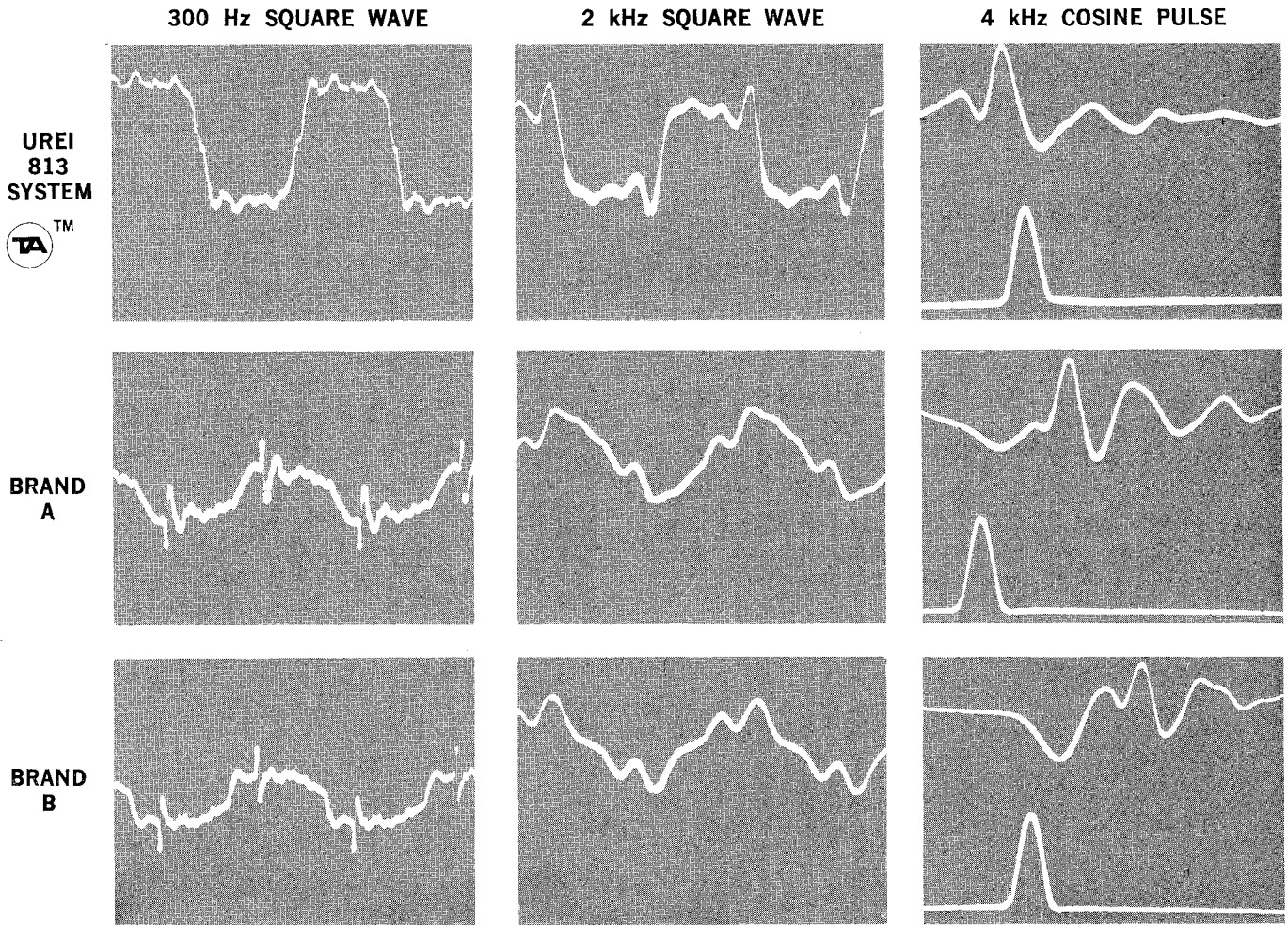
(213) 767-1000

UREI company

800  
SERIES



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:**

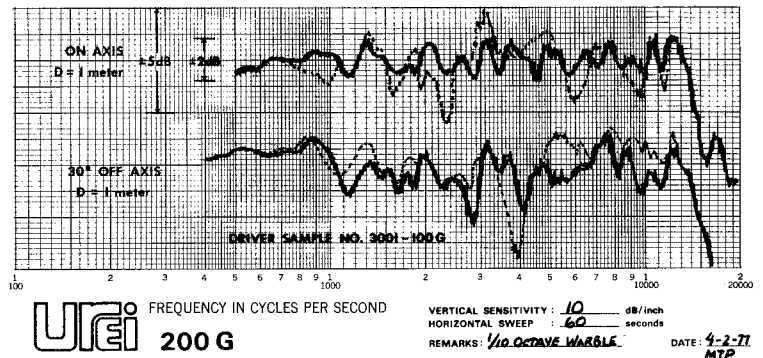
UREI 800H Custom H.F. Horn  
 Designed to retrofit 604E and 6048G compression drivers. Mouth opening 6.50" x 3.25", length 5.0" (Approx. 0.9" longer than standard sectorial horn)

UREI TIME ALIGN network and control panels:  
 Model 824 for 604E two way network  
 Model 834 for 604E three way network\*  
 Model 828 for 6048G two way network  
 Model 838 for 6048G three way network\*  
 \*For use with UREI 800W L.F. drivers only

**DIMENSIONS AND WEIGHT:**

TIME ALIGN NETWORK:  
 Dimensions: Panel 241 mm x 216 mm (9.5" x 8.5")  
 Housing, 216 mm x 190 mm x 89 mm (8.5" x 7.5" x 3.5")  
 Weight: 2.5 kg (5 lb., 10 oz.)

CONTROL PANEL & HOUSING:  
 Dimensions: Panel, 197 mm x 127 mm (7.75" x 5")  
 Housing, 190 mm x 120 mm x 89 mm (7.5" x 4.75" x 3.5")  
 Weight: 1.35kg (3 pounds)



EFFECT OF UREI 800H HORN ON H.F. RESPONSE  
 SOLID LINE: 6048G with 800H horn.  
 DASHED LINE: 6048G standard model.