



# KINTRONIC LABORATORIES INC.

A COMPREHENSIVE AM/MW RADIO BROADCAST ANTENNA  
SYSTEM CORPORATION PREPARED TO HELP YOU DELIVER AUDIO,  
VOICE, AND DATA CONTENT VIA BROADBAND DIGITAL AM/MW  
TRANSMISSION TURN-KEY SYSTEMS.

ESTABLISHED IN 1949, KINTRONIC LABS IS THE OLDEST,  
CONTINUALLY OPERATED MANUFACTURER OF AM BROADCAST  
ANTENNA SYSTEMS IN THE UNITED STATES.



FROM CONCEPT TO ON AIR, KINTRONIC LABS, INC. IS READY TO  
SERVE YOUR RADIO BROADCAST FACILITY NEEDS IN A TIMELY,  
EFFICIENT, AND COST EFFECTIVE MANNER.



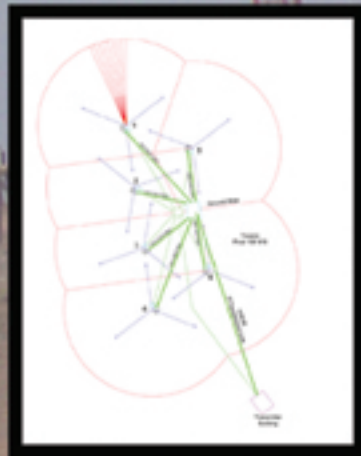
## PROPOGATION STUDIES

- ✳ ASSISTANCE IN DEFINING THE TRANSMISSION FACILITY REQUIRED TO COVER THE TARGET LISTENING AREA
- ✳ STUDIES ON DAYTIME GROUNDWAVE, NIGHTTIME SKYWAVE, AS WELL AS IDENTIFICATION OF THE ASSOCIATED FADE ZONE



- ✳ STUDIES CONDUCTED WORLDWIDE
- ✳ TRANSMITTER & ANTENNA COMBINATIONS ARE MODELED TO YIELD OPTIMAL PERFORMANCE & EFFICIENCY

## SITE PLANNING



- Complete Site Planning:**
- ✳ Ground System Design
  - ✳ Trench Layouts
  - ✳ Transmitter and Tuning House Plans



Building Layout Design



Pre-Fabricated Tuning Houses or Transmitter Buildings (Djibouti, East Africa)

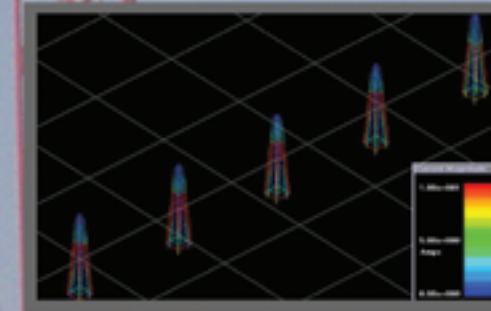


Open Wire Transmission Line

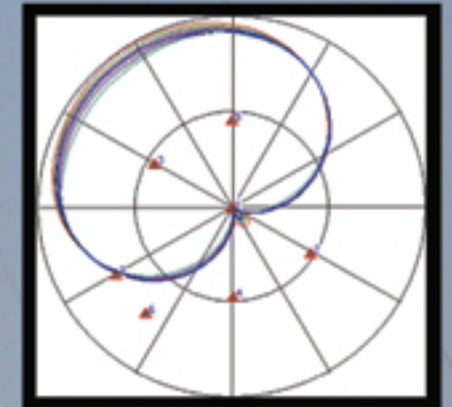


Copper Lined Multiplexed Antenna System Tuning House

## DESIGNING DIGITAL READY RF SYSTEMS



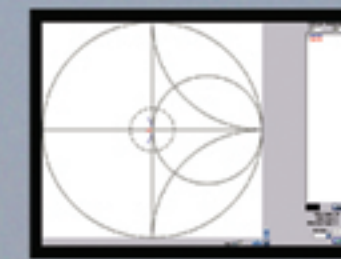
NEC Modeling of Tower Structures



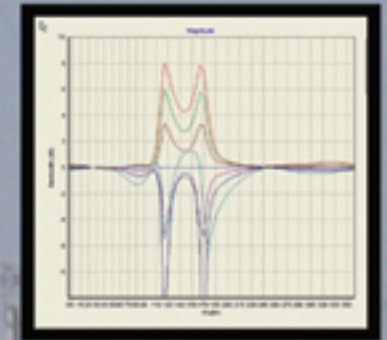
Pattern Bandwidth Optimization for HD IBOC\* or DRM Radio



RF Feeder System Designed Using Kintronic Developed CKTNET Software



Common Point Impedance Optimization



\* Trademark of IBIQUITY Corporation

## CUSTOM FABRICATION OF RF SYSTEMS

- ✳ DA RF FEEDER SYSTEMS
- ✳ MULTIPLEXED NDA & DA SYSTEMS
- ✳ ANTENNA MATCHING NETWORKS
- ✳ TRANSMITTER & POWER SWITCHING SYSTEMS
- ✳ CONTROL & MONITORING RACKS



Tuning House Mock-Ups for Customer Supplied On-Site Buildings

- ✳ P.I.E. RACKS
- ✳ INDOOR & WEATHERPROOF OUTDOOR DUMMY LOADS
- ✳ OPEN WIRE TRANSMISSION LINE
- ✳ TRANSMITTER COMBINERS / PARALLELING UNITS

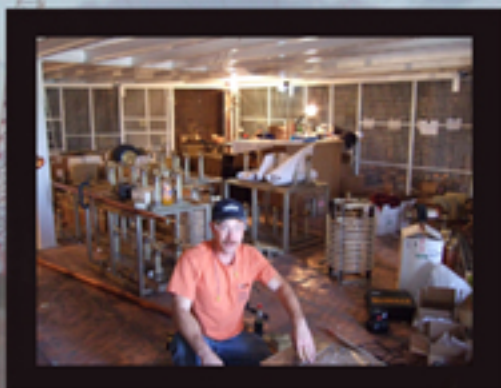


300 KW Weatherproof Dummy Load



# ON-SITE COMMISSIONING, INSTALLTION SERVICES, AND TECH SUPPORT

- Trouble shooting AM/MW antenna systems. Defining and implemeting solutions to resolve technical problems.
- Installation supervision and/or commissioning of Kintronic supplied antenna systems and accessories including:
  - Antenna Tuning Units
  - Directional Antenna Phasing Systems
  - Multiplexed Antenna Systems
  - Transmitter Combiners
  - Transmitter Test Loads
  - Main / AUX Transmitter / Dummy Load Switching Systems
  - Transmitter or Pattern Selection Control Systems
  - FM STL or Cell phone Isocouplers
  - Rigid Transmission Lines
  - KinStar Low Profile Antennas
  - Mobile Frequency Agile Antenna Systems
  - Emergency / Temporary Antennas
- Assessment of existing AM/MW radio stations for upgrading the antenna system from analog to digital operation.
- Support services for Broadcast Consulting Engineers to conduct field intensity measurements or to collect other station data that may be required by governing regulations for possible power increases, partial proofs of performance, Method of Moments(MOM) directional antenna system filings, etc.
- Site surveys and associated measurements to characterize existing operating conditions and to make appropriate recommendations for equipment upgrades, including tower impedance sweep measurements, electrical length measurements of transmission, sample lines and directional antenna common point impedance sweeps.
- On-site training on the use of Kintronic supplied antenna systems and accessories.



## KINTRONIC LABORATORIES INC.

144 PLEASANT GROVE ROAD  
BLUFF CITY, TENNESSEE 37618  
USA



1.423.878.3141  
1.423.878.4224 FAX

KTL@KINTRONIC.COM

WWW.KINTRONIC.COM

