

Transmission Line System Design and Layout

- Offers a Custom, Optimized System Layout
- Simplifies and Speeds System Deployment
- Provides Critical Technical Expertise
- Comprehensive Engineering Design Package

Now broadcast system designers, station managers, and chief engineers can speed and simplify the deployment of antenna and transmission line systems with technical field and system site services from ERI.

The ERI Transmission Line System Design and Layout service provides a customized, integrated transmission line system layout to aid broadcasters in developing their RF systems. RF, mechanical, structural, and thermal engineering aspects are all integrated into your system design. This service provides customized system design of the ERI purchased RF components.

ERI uses a comprehensive approach that factors in customer needs, tower requirements, installation practices, and transmission line system design practices. Our computer-aided design software verifies design reliability and ensures correct line placement.

The ERI Professional Service Team is ideal for broadcasters who wish to simplify the system deployment process with one-stop ordering, who wish to optimize system electrical and mechanical performance, or in situations where a shortage of technical expertise exists.

Typical Activities

Aspects of the transmission line system include a number of interrelated technical issues, as well as a coordinated effort between customer, chief engineer, equipment suppliers, tower supplier and installation services provider. ERI will coordinate RF engineering, mechanical, and structural aspects with the customer, tower supplier, and installation services provider in order to achieve a workable transmission line system from transmitter building to the antenna input. After securing approval from all parties, ERI will provide system layout drawings which include:



1. Complete transmission line bill of materials
2. System routing details
3. Component location specifications
4. Recommended location for support hangers

In order to assure that proper tower support members are available and correct thermal clearances maintained, ERI System Engineers are available for collaboration with your tower service providers.

Required customer supplied information:

- Detailed tower and ice bridge drawings*
- Transmitter equipment room plans*
- Site plans as appropriate*

*Accuracy of these furnished drawings is the responsibility of the customer. ERI can furnish additional on-site field survey services to aid in this process and assure accuracy of information. In this case an additional fee will apply.

