



KINTRONIC LABORATORIES, INC.

CUSTOM ANTENNA TRANSMITTER AND/ OR PATTERN SELECTION CONTROLLERS FOR RADIO BROADCAST TRANSMITTING FACILITIES

Kintronic Labs offers an array of options for custom antenna system controllers with features to integrate control of main/auxiliary transmitter selection, dummy load operation, RF switch control and status monitoring, and the coordination of switching of antenna patterns with transmitter muting and power level selection. All Kintronic controllers are based on the proven control sequence used in Kintronic relay and PLC based controllers in use at stations world wide.

STANDARD FEATURES

- Failsafe Logic To Mute RF During Switch Position Changes
- Adjustable Duration Switching Window For Solenoid Protection
- Adjustable Delay Between Command and Switching To Permit Residual RF Dissipation
- Redundant 24 VDC Power Supplies
- Local and Remote Interface For Transmitter and Pattern Selection Command
- Local and Remote Status of Transmitter Enable and And Pattern Selection
- Local Indicators of Individual Switch Position Concurrent With Interlock Status



OPTIONAL FEATURES

- PLC or Traditional 24 VDC Electromechanical Relay Based Logic
- Control Via Direct Application of 110 or 220 VAC Or Via 24 VDC Slave Relays
- Control of Open Frame Contactors or Coaxial Switches
- Main/Auxiliary (No. 1/ No. 2) Transmitter Switching
- Interlock Bypass For Dummy Load Operation
- Transmitter Power Level Select and Power Level Interlock For Each Pattern
- Custom Features To Meet Specific Site Requirements

RELAY BASED CONTROLLERS

Kintronic Laboratories Offers Traditional 24 V-DC Electromechanical Relay Logic Based Controllers.

ADVANTAGES

- Most Economical For Transmitter Control Systems Or Pattern Control of Directional Arrays Involving 2 to 4 Towers
- Proven 24 V DC Electromechanical Relay Technology Which is Most Familiar to Site Technicians
- Redundant Main/Standby Power Supplies
- Key Operated Interlock Bypass Switch
- Easily Replaceable Socket-mounted Relays
- LED Status Indicators And Mechanical Flags Provide Visual Confirmation Of Logic Element State

DISADVANTAGES

- All Interconnections Are Point To Point Wire Connections
- Requires Maximum Time Of All Controller Options For Troubleshooting
- Controllers For Large Systems Require More Rack Space Than Standard PLC Based System.
- More Frequent Maintenance Required



PROGRAMMABLE LOGIC CONTROLLER (PLC) BASED CONTROL SYSTEMS

Kintronic Laboratories offers Programmable Logic Controller (PLC) Based Systems Which Provide Several Advantages Over the Traditional Relay Based Logic Controllers. Time Proven Relay Logic Flow is Emulated in Software For Reliable Performance, With the Advantage of Flexibility.

ADVANTAGES

- Flexible and Adaptable Control System
- Cost Effective For Control of Large Or Multi-Tower Antenna Systems
- Minimal Number Of Point-To-Point Wire Connections Controller Logic Back Up on Memory Card
- Separate PLC And Control Relay Power Supplies
- Integrated Pattern Switching Clock
- Custom Error Trapping For Diagnosing of Site Related Problems - Including Traps For Intermittent Faults
- Input and Output Modules Customized To Site Requirements
- Modem Interface Allows Remote Trouble Shooting And Logic Modification By Kintronic Labs Technical Support
- Proven Reliability at High Power (50 KW) Transmitter Sites

DISADVANTAGES

- Relay Logic Emulation Locally Accessible Only With Optional Software Purchase
- Trouble Shooting And Logic Modification Requires Kintronic Labs Technical Support

KINTRONIC  LABS, INC.

P.O. Box 845, Bristol, TN 37621
(P) 1.423.878.3141 (F) 1.423.878.4224
www.kintronic.com