COOPER Crouse-Hinds

DIGITRAC™

Computer Control System

Compliances:
FAA AC 150/5345-56: L-890

ALCMS

ETL Certified

The Crouse-Hinds Digitrac Control System is ETL Certified at all four levels of AC 150/5345-56. This provides our Customers with options ranging from a basic system with Control Only to a complete SMGCS system for low visibility operation.

Advanced Distributed Computer Technology for Airfield Lighting Control and Monitoring

The Crouse-Hinds Airport Lighting Products Digitrac™ Control System is a comprehensive and integrated solution to meet a wide range of airfield lighting control and monitoring requirements. Advanced, distributed architecture ensures reliable operation and greatly simplifies installation and maintenance.

Fail-safe design

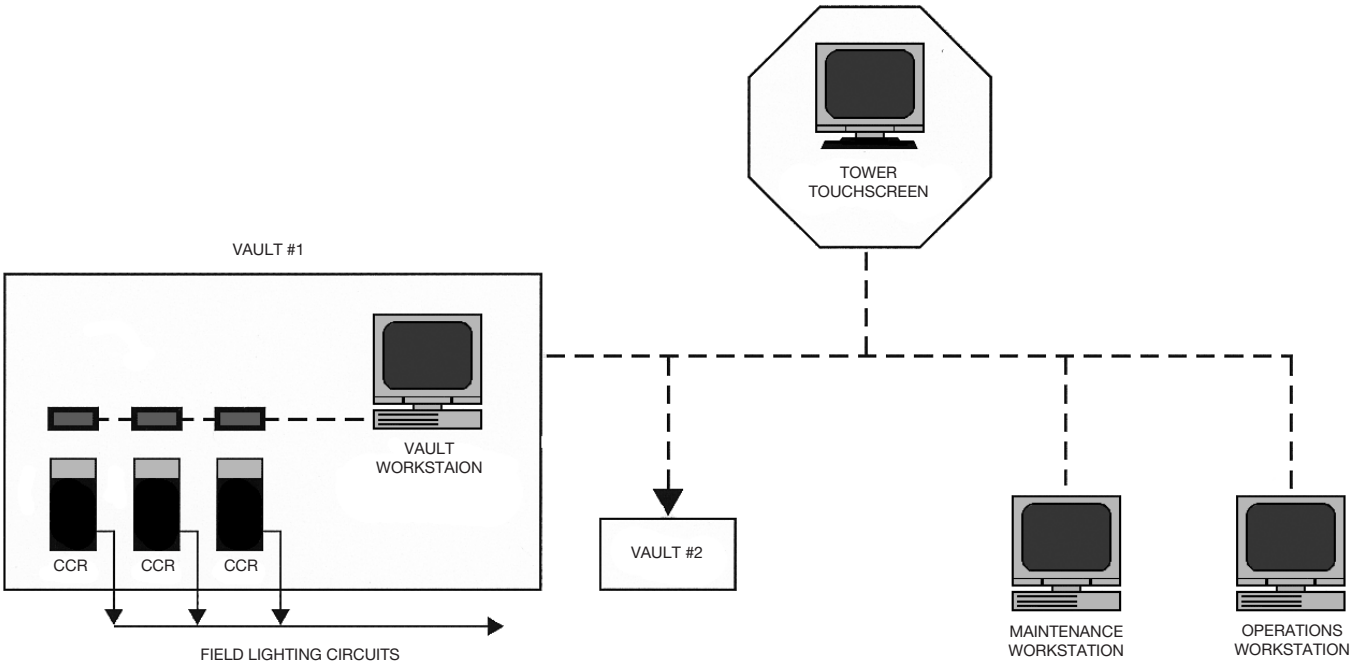
Each controllable element in the lighting system, a constant current regulator, selector switch or generator, has its own interface with the Digitrac communication network. In the event of component failure, a fail-safe feature assures continued operation of all elements at preset levels.

Touch-screen control

Choose color CRTs or flat-panel LCDs. Single or multiple touch screens for control and monitoring.

Comprehensive, real-time data

The scope and depth of information provide air traffic control, operations, maintenance and airport management with a complete picture of the entire airfield lighting system in real time.



Adaptable and flexible
Innovative design and modular architecture keep pace with airport growth and technological progress. Digitrac can manage a virtually unlimited number of elements; quick configuration to meet lighting control requirements for airports of any size.

Networking
Digitrac utilizes a wide area network to link the control tower, operations center, electrical vaults and maintenance areas. Circle or star configurations are available. Media include: Fiber optic cable, twisted pair or wireless. For increased reliability and security, we recommend and typically install redundant communication channels.

Within the electrical vaults, Digitrac uses two highly reliable independent communication networks for fast, reliable data transmission. The network protocol supports communications on a variety of wired and wireless media including twisted pair, power line, infrared, radio frequency, fiber optic and coaxial cable.

Digitrac interface
Each constant current regulator (CCR) and each controllable element has a Digitrac Interface. The Interface is a microprocessor-based module that includes all communication, command, monitoring, input/output and fail-safe functions. This distributed structure simplifies installation and significantly increases reliability and ease of maintenance. The controllable elements receive the air traffic controller commands via the communications network, execute the commands and report back the status of each controlled element to all control locations.

Software
The system is based on a network-capable operating system. The application, database and graphic software are off-the-shelf windowing packages refined to fit the specific needs of airport environments. The system provides security interlocks between various operator stations and the operational procedures used to define user access and capabilities. User-friendly definition tools modify the system easily. Simply install a Digitrac interface into new CCRs or control elements, connect to the local vault network and add its parameters to the system through a simple menu-driven interface.

Maintenance capabilities
One of the major benefits of Digitrac, beyond meeting requirements for air traffic control, is the availability of real-time historical information regarding the operation of the airfield lighting system. Digitrac notifies airport maintenance and operations personnel of malfunctions as they occur, reporting the time, type and nature of the problem as well as the area of system in which the malfunction occurred. Digitrac stores all malfunction reports and the associated information; hard copy reports are available through a printer connected to the maintenance computer.

Other capabilities
The Digitrac system is the solution for advanced requirements. This includes the control and monitoring of stop bars and guard lights as part of a Surface Movement Guidance and Control System plan, failed lamp locator and automatic series circuit insulation resistance monitoring.