COOPER Safety

Fire Systems
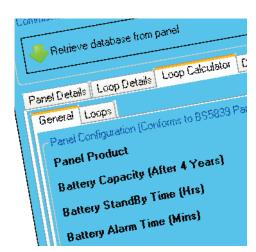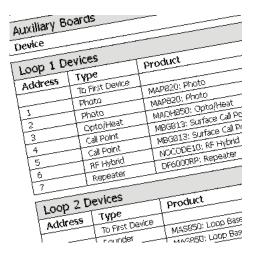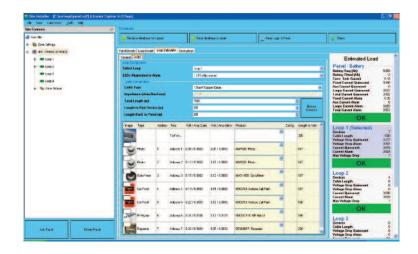
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Loop Calculator Software

Loop Calculator Software

Overview

Loop calculator software is designed to aid engineers in the design and testing of Cooper fire systems. Its primary purpose is to ensure the viability of a proposed loop design before any installation work is conducted, and also help identify problems in existing systems.

By accepting a small amount of information on the loop design, it can accurately model the loop and provide estimates on the expected voltage drops, current loads and battery requirements. The results of all the calculations are clearly displayed and any problems are highlighted to the user.

The loop calculator software is included as part of the site installer software package and so can quickly provide estimates of loop configurations which are uploaded and downloaded to any Cooper control panel. Once battery and cable details are entered, the loop calculator will consistently check any changes made to the loop design and warn if any limitation is exceeded.

Features

- Accurate loop modeling
- Battery requirement estimates
- Voltage drop and current estimates
- Produce estimates on proposed system designs
- Easily test existing systems
- Generate detailed HTML reports
- Manual or automatic cable length management
- Included as part of site installer

Benefits

- Printable reports for design files
- Ensures system viability
- Highlights problems at the design stage

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Technical Specification

Technical Limits	Quantity
Max Panels	126
Loops Per Panel	4
Max Devices Per Loop	200
Voltage Drop Formula	$V=IR$
	V=Voltage Drop, I=Current (Amps), R=Resistance (Ohms)
Battery Requirement Formula	B=C(IQTQ) + 1.75(IATA)
	B=Battery Capacity Required (Ah), I=Current (Amps), T=Time (Hours),
	C=Battery Capacity (1.25 or 1.11)
Supported Devices	All Cooper Fire Alarm Devices
Supported Panels	All Cooper Fire Alarm Intelligent Addressable Control Panels
Report File Format	HTML
Site Installer File Format	SDF

Requirements

Minimum Hardware Requirements	Intel Pentium or Equivalent 2 GHz or Better, 500MB Memory, 100MB Free Disc Space
Platform	Windows 2000 SP 4, Windows 2003, Windows XP SP2, Windows Vista, Windows 7
Display	High Resolution
	1024x768 Hi-Colour or True-Colour Display with 32,768 or 16 Million Colours
Software Libraries	Microsoft .Net 2.0 SP2, Microsoft SQL Server Compact 3.5 SP1

Product Codes

Code	Description
LOOPCAL	Loop Calculator Software