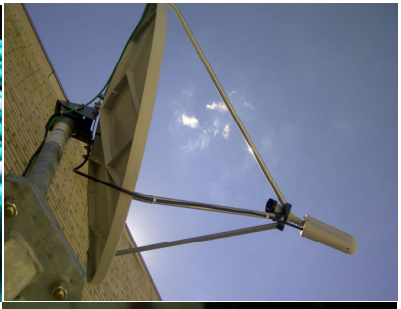
Integrated Security and Communications, Inc

Products & Services



Building Network Infrastructure that CONNECTS people and systems

Welcome to Integrated Security and Communications, Inc where you'll find products, and services available for supporting your companies data network and communications infrastructure.

From the data center to the desktop and in between, you can count on us to design, install and maintain your voice, data, and video networks.

We value your business and want you to consider Integrated Security & Communications first for all your networking and communications needs.

We look forward to working with you.

Frank Sulik, RCDD

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Network Design

Structured Wiring Systems

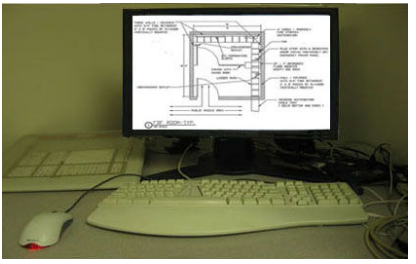
Are wiring and components used to create a communications infrastructure in an office, building or campus that supports signal transmission for voice, data, video and other applications. These systems are based on standards with ANSI-568 being the most common.

Planning a Structured Wiring System with clients

The ANSI-568 standard defines various cables types such as Category 5, Category 6, coaxial, and fiber optic, that are used in a wiring system,. The standard also defines the performance of the cables, length limitations, connector types, labeling and test procedures to be used in wiring systems. Installations that conform to this standard have a high degree of interoperability and performance for the devices connected to the system.

System Design

Integrated Security & Communications provides network wiring system design, for all types of voice, data, video, audio, wireless and security applications. System design is performed by a Registered Communications Distribution Designer certified by BICSI, the industries leading telecommunications association, and conform to all applicable industry standards.



Network design displayed in CAD system

Structured Wiring Services

Installation

Integrated Security & Communications provides installation of structured wiring systems.

Installations meet National Electric code and are tested to ANSI-568 standards.

Applications Experience

Offices

Industrial sites

Medical

Data Center

Aerial

Buried

Wire Types

Category 5

Category 6

Coaxial

Fiber optic

System Wiring

Voice

Data

Video

Audio

Security

WIFI

Category 6 Structured Wiring System

Contact

For more information about our network wiring services, contact Frank Sulik, RCDD, MCSE

Fiber optic Wiring Service

Fiber optic Systems

Fiber optic cables are used to distribute high bandwidth voice and data over longer distances with no interference.

Services

Integrated Security & Communications provides professional fiber optic wiring services.

Design

Installation

Testing

Cleaning

Troubleshooting

Fusion splicing

Certifications

Factory trained by Corning, AFL, and Sumitomo Lightwave

Experience

20 years field experience.

Systems

Voice

Data

Video

Audio

Security

Applications

Premise, data center, aerial and buried links.

Fiber optic security camera links

FIOS fiber optic cable installation

Cable Termination

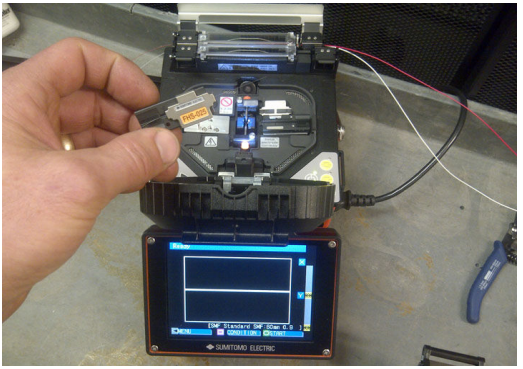
Termination of singlemode and multimode cables using no polish connectors and fusion splicing of pigtails and splice-on connectors.

Cable Splicing

All weather outdoor cable splicing and indoor splicing using mechanical and fusion splicing methods.

Repair

Complete cleaning, maintenance and repair services on all connector and cable types



Cable termination using a fusion splicer

Testing

Troubleshooting and repair services for fiber optic wiring problems using Laser fault finders, OTDR, and optical loss test equipment.

Fiber optic cable certification

Contact

For more information about fiber optic wiring services, contact Frank Sulik, RCDD, MCSE

Cabinets, Racks, Cable Management

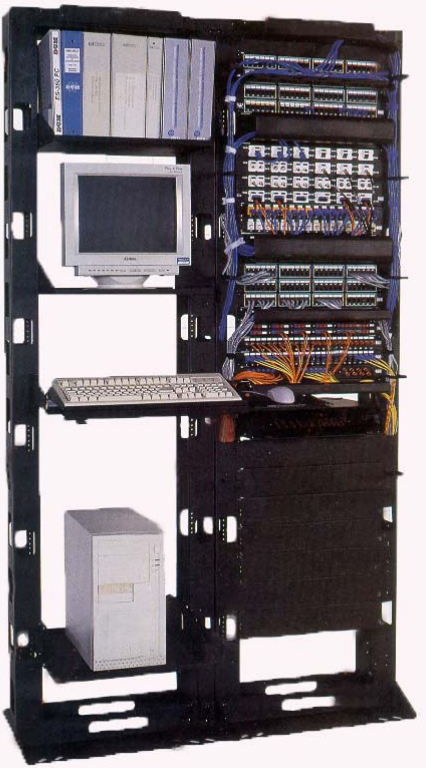
Installation

Integrated Security and Communications installs all types of equipment and cabling management hardware.

- Cabinets
- Relay racks
- Shelves
- Server Rails
- Wire managers
- Keyboard trays

Contact

For more information about these products or your application contact Frank Sulik, RCDD, MCSE



Cable and server management system

Cable Tray

Installation

Integrated Security and Communications designs and installs cable tray systems for supporting and routing low voltage telecommunications wiring.

Cable Tray in Wiring Closet

Types

- Cable tray
- Basket tray
- Conduit
- Messenger supports
- J hooks

Open ceiling office tray

Applications

- Voice
- Data
- Video
- Audio
- Security
- Wireless

Contact

For more information about our network wiring services, contact Frank Sulik, RCDD, MCSE

Industrial basket tray & conduit

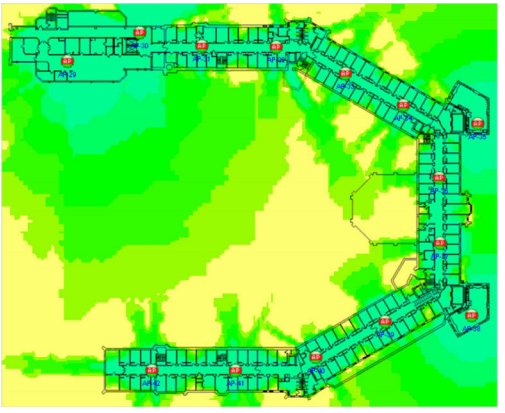
WIFI Network Service

Successful WIFI Projects

A WIFI network should provide reliable coverage and throughput for mobile clients, using the least amount of hardware. To create efficient networks, Integrated Security & Communications provides design, installation and repair of WIFI networks using AirMagnet WIFI tools.

Network Planning

WIFI networks have many components. End users, hardware, wiring, mobility devices, and application software. Planning is required to determine system bandwidth, area of coverage, and system performance.



Heat map showing RF signal strength throughout building

RF Predictive Design

Using WIFI tools allows us to create a network which takes into consideration the construction of the building, type of users, coverage, throughput, power levels, and interference. Network design determines the location, amount of access points, and types of antennas.

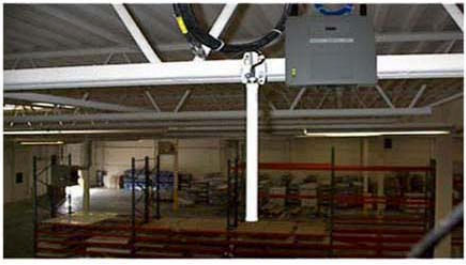
Laptop running AirMagnet WIFI Analyzer

Site Surveys

Active site surveys measure and record actual throughput and interference as the wireless signals propagate through the building using access points and site survey software. The data is analyzed against the network criteria from the predictive design, and the final number of access point locations, and antennas are determined.

Installation

In the installation phase, the wiring, power supplies, network hardware, access points, antennas, switches, and wireless controllers are installed and configured. Once this is done, the wireless infrastructure can be used as is, or configured with additional features such as authentication, encryption, and client server applications.



Warehouse installation of an access point

System Repair

Integrated Security & Communications provides troubleshooting and repair services for common wireless network problems, using WIFI analysis tools.

Spectrum analysis

For networks experiencing interference problems, RF spectrum analysis can be performed to find WIFI and non-WIFI device causing interference to the network.

Experience

Experienced with 802.11 a/b/g/n/ac standalone and controller based WIFI networks for offices, warehouse, hospitals, cold storage, outdoor areas, and building link applications

Contact

For more information about our wireless networking services, contact Frank Sulik, RCDD, MCSE

802.11N access point with Multiple Input Multiple Output antennas

Distributed Antenna Systems

Weak Cellular Signals

Wireless Cellular carriers generally provide consistent signal levels outdoors. However those signals can become too weak for reliable operation inside a building. Signal fade, dropped calls, garbled speech, or the inability to text or send emails are common problems with weak cell phone signals. These conditions apply to cellular modems used in M2M connection applications also. (ATM machines, wireless security systems, etc.)

A common solution to these problems is a Distributed Antenna System (DAS).

Integrated Security & Communications provides design, installation and service of Distributed Antenna Systems.

Cellular Radio Tower

Distributed Antenna System

Distributed Antenna Systems amplify the outdoor cell signal and send it throughout the building over an array of indoor antennas. The steps to implement a DAS system include a site survey, data analysis, system design, installation, and testing.

RF Site Surveys

The site survey is used to measure and record area cellular service providers and signal strength using a calibrated test instrument. Using the number of bars on a cell phone display is not an accurate way of measuring cellular signals.

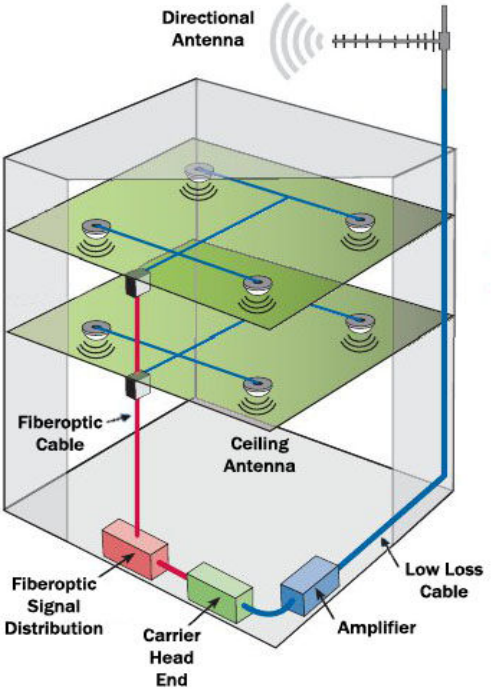
Calibrated Signal Measurement

System Design

Data collected during the survey is analyzed to determine the amount of signal amplification needed, cabling and antenna locations.

Installation

In the installation phase, the wiring, amplifiers, and indoor antennas are installed and configured. Outdoor signal antenna is installed and pointed for maximum signal input to the amplifier.



System Repair

Integrated Security & Communications provides troubleshooting and repair services for common cellular DAS problems.

Experience

Experienced with Wilson Electronics DAS products.

Contact

For more information about Distributed Antenna Systems, contact Frank Sulik, RCDD, MCSE

Satellite and Antenna Service

Satellites revolve around the earth in a geo-synchronous orbit approximately 42,000 km high, and are used for voice, data and video signal transmission.

The transmission frequencies are typically 4-18 Ghz

Integrated Security & Communications is experienced in the installation and service of satellite dishes and antennas.

We also work as a local subcontractor to National Service Organizations for rollouts, network upgrades and repairs to your specifications.

Roof mounted Satellite Dish

Installation Services

- Wall, ground, roof and pole mount installation
- Concrete base installation
- Dish Installation and removal
- Dish and LNB Alignment
- Wiring and component installation
- Moves, adds, changes
- Grounding and Surge Protection
- Site Surveys

Wall mounted Digital Video Dish

Headend Service

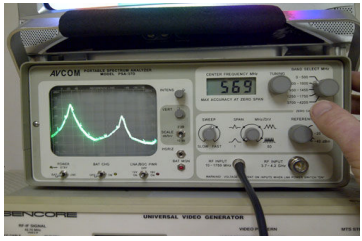
Analog and digital satellite signals are processed and distributed at the headend unit.

Integrated Security & Communications uses specialized test equipment, to align satellite dishes and antennas, and measure transmission frequencies for peak signal reception.

Signal processing and distribution

Troubleshooting

System troubleshooting and repair of common satellite system problems using Avcom Spectrum Analyzer



Display of a 6Mhz video channel

Alignment

Dish alignment service

Precision alignment

Cable TV

Services

Video displays and internet cable modems depend on signals at the proper level and low noise. Integrated Security and Communications provides design, installation and service of Cable TV wiring systems.

Experience

- Analog TV
- Digital TV
- HDTV
- Internet
- Audio Visual Systems
- Security camera integration

Hardline Coax cable

Installation

- Wiring and component installation
- Moves, adds, changes
- Grounding and Surge Protection
- Site Surveys
- TV's and mounts
- Audio

Field testing of signal levels using a meter

System Components

- Coax cable
- Connectors
- Amplifiers
- Taps
- Splitters
- Attenuators
- Channel Elimination Filters
- Modulators/demodulators
- Mixers
- Grounding and Surge
- Analog/Digital Conversion
- Copper/Fiber optic media converters
- Audio components, wiring, speakers

Headend Video Distribution System

Repair

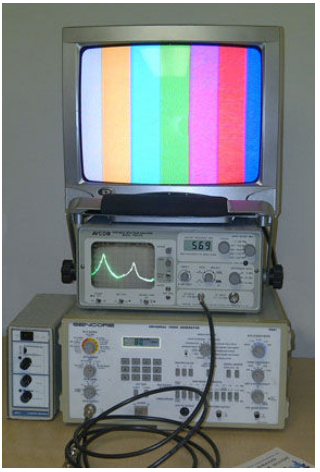
Troubleshooting and services for video headends, amplifiers, and wiring systems.

Alignment

Testing and alignment of headends and amplifiers.

Contact

For more information about video services, contact Frank Sulik, RCDD,



Alignment and testing using a video signal generator and Spectrum analyzer

Commercial Audio
Overhead Paging
Background Music

Audio Systems

Integrated Security & Communications provides design, installation and service of commercial audio systems.

- Background music
- Overhead paging
- Commercial audio
- Music on hold
- Night bell ringers
- Mass notification systems
- Analog and IP based systems

Experience

- Office space
- Restaurants
- Bars
- Retail stores
- Music stores
- Warehouse
- Training facilities
- Classrooms
- Firehouse

Paging applications

Installation

- Wiring
- Speakers
- Amplifiers
- Mixers
- Sound Processors
- Volume controls
- Telephone interface
- Digital audio
- CD players
- Microphones

Audio system components

Service and Repair

Troubleshooting and repair of common audio problems such as:

- Faulty devices
- Sound volume
- Dead zones
- Out of phase speakers
- Amplification
- EQ
- Feedback
- Distortion
- Noise
- Hum
- Ground loops
- Digital Audio Codecs

Measuring sound pressure levels

Brands

Experienced with Bogen, Valcom paging systems, and pro-audio equipment from Crown, QSC, Rane, TOA Electronics, Peavey, Sonos, Radio Design Labs, and others

Contact

For more information, contact Frank Sulik, RCDD, MCSE

Office Sound Masking

Sound masking systems are used to improve speech privacy in open office environments.

Integrated Security & Communications provides design, installation and service of sound masking systems.

Sound Masking Systems

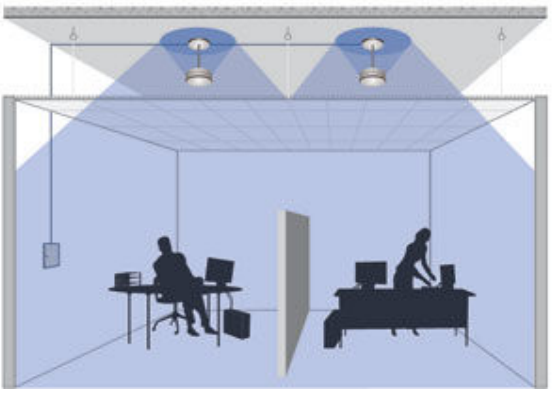
Sound masking systems are a series of loudspeakers installed in a grid pattern above the ceiling which distribute an engineered background sound similar to soft airflow throughout the office space. The background sound improves speech privacy. Unlike music, which is distracting, the engineered sound is constant, and can be set to the proper volume level. Sound masking minimizes distracting sounds, helps improve concentration and mood.

Sound masking is also used to meet HIPPA privacy standards by blocking the unintentional transmission of patient medical information as a result of sound leaks.

Its also used in anti-espionage applications for government offices, and increased speech privacy in legal practices, and law enforcement agencies.

Site Survey

System design starts with a site survey where the background ambient noise level is measured and the areas and reasons for sound masking are discussed.



System Design

Based on the site survey, a system is designed.

Installation

Installation of the cabling, controller, speakers and volume controls is performed. The system is then turned on, tested, and configured for volume levels and operating schedule.

Brands

Experienced with Logison, and Speech Privacy Systems products.

Experience

- Open office space
- Executive office space
- Law Enforcement
- Legal

Contact

For more information, contact Frank Sulik, RCDD, MCSE

Security Camera Installation

Security Cameras

Integrated Security & Communications provides professional installation and service of security camera systems.

Services

- System design
- Installation
- Repair
- Adds, moves, changes
- System upgrades
- Cleaning, focusing
- Displays

Systems

- Digital
- IP

Products

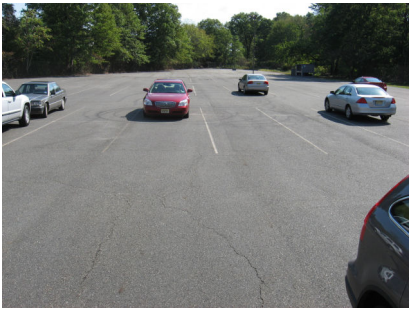
- Digital Cameras
- HD megapixel cameras
- Day, night and infrared cameras
- Video recorders
- Wiring
- Power supplies
- Surge protection
- Media converters

Experience

- Buildings
- Offices
- Doors
- Retail
- Parking lot

Entrances and exits

Retail space



Parking lots

Switch & Router Installation

Field Service

Installation and configuration of network devices

- Switches
- Routers
- Wireless routers
- Wireless Access Points and Antennas
- Wireless LAN controllers
- Copper and fiber optic media converters
- Demarc extensions

Switches and Routers

Applications

- Voice
- Data
- Video
- Wireless
- Security

Configuring devices remotely

https://www.integratedsecurityandcommunications.com

Integrated Security and Communications, Inc

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