Wiring Your Home for the 21st Century

MAKE SURE YOUR HOME IS READY FOR SMART TECHNOLOGIES

WHY IS A WIRED HOME NETWORK BENEFICIAL?

A wired home network uses Ethernet cable to connect the computers to the network router. The advantages of a wired network compared to a wireless (Wi-Fi) network include:

- **Lower Cost** - Wired home networks are less expensive to install and maintain.

- **Higher Speed** - Although Wi-Fi speeds are improving, in most cases the speed of a wireless network is still dwarfed by the faster speed and capability of a wired connection. A variety of things can interfere with Wi-Fi radio waves, making your wireless connection weaker and more unreliable.

- **Increased Security** - Security threats are everywhere today, and there is no such thing as a perfectly secure network. However, because a wired network relies upon physical connections for access, it is that much more difficult to compromise. Additionally, robust security measures are more easily put in place on a wired network.

SCHEDULE AN IN-HOME CONSULTATION

Trust the local experts at Alpine Communications to help you choose the right kind of network for your home.

Call Alpine at (563) 245-4000 and let us handle all your technology needs.

ALPINE communications

Phone: 563-245-4000 or 800-635-1059
PO Box 1008 • 923 Humphrey St. • Elkader, IA 52043
www.alpinecom.net

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Real Access. Real Value. Real People.

Structured Wiring Standards

TELECOMMUNICATIONS WIRING

A key component of the 21st century smart home is tele-communications wiring. These wires have many new uses in the modern home, including:

- Internet access
- Home security
- Remote heating and air conditioning monitors and controls
- IP TV and interactive video
- Home theaters

With so many technologies relying on telecommunications wiring, and more "smart home" innovations emerging each day, it's important to make sure your home has a solid telecommunications "backbone".

PLAN AHEAD!

Don't wait until the last minute to think about your wiring needs! Use the information in this brochure to make sure your house plans will accommodate 21st century wiring requirements.

Room Wiring
At least four "common area" rooms should have multimedia ports with a minimum of:

- Three CAT5E cables/RJ11 jacks
- One RG-6 quad shield coax cable

Each cable must be home run back to the termination box with no "daisy-chained" or looped wiring.

Any room with coax cable for video should also have CAT5E for IP and interactive video systems.

Utility Room
The utility room should have:

- A location close to the outside telephone box
- A distribution box or ample plywood backing for equipment
- AC outlets (single gang) reserved for telecom system and within three ft. of fuse panel
- Ability to accommodate dual 110 outlets and other electronics
- A minimum of two CAT5E cables and two RG-6 quad shield coax cables
- Possibility to have spare conduit to attic, and/or from NID to distribution panel, for future expansion

Electric Wiring
DO NOT run power wires parallel to communication wires.
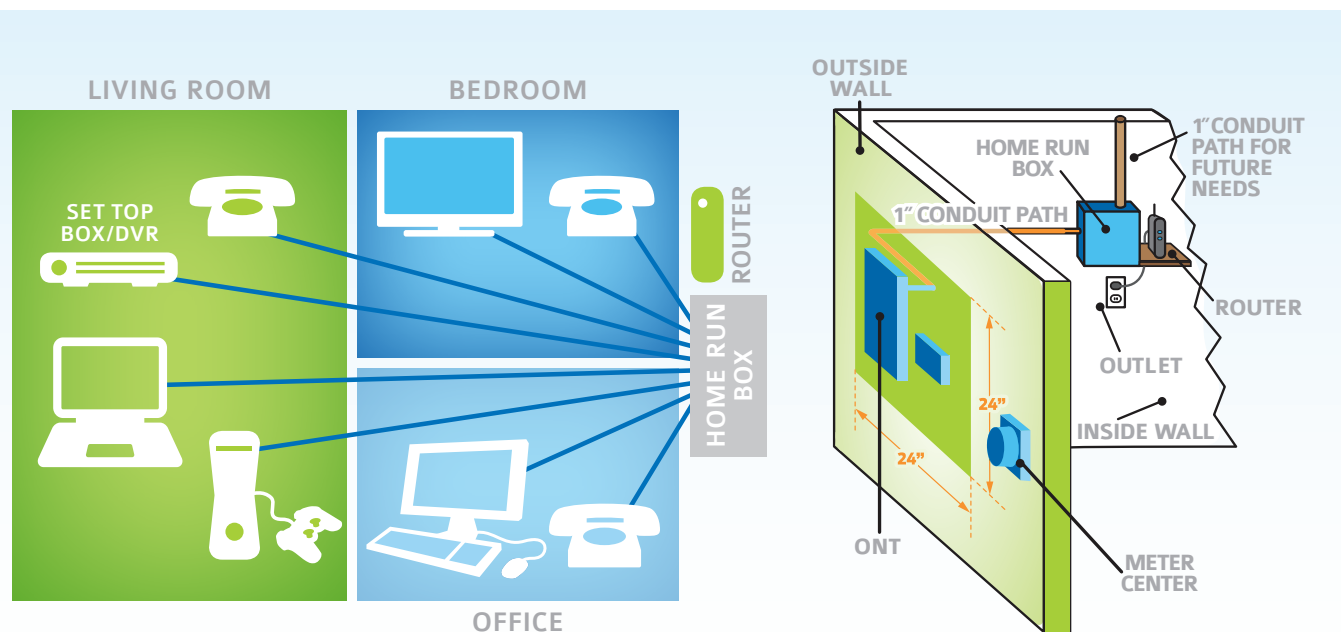
CABLING AND DOCUMENTATION STANDARDS

- Each cable should be labeled at the jack location, as well as the termination point on the distribution hub.
- Cabling will be installed and tested to EIA/TIA 568A/B standards.
- The wiring contractor should provide documentation to the homeowner, including the wiring system over-view, wiring diagram, and any tests completed.

ADDITIONAL RECOMMENDED WIRING STANDARDS

- TIA 570 Residential telecommunications cabling standard
- FCC Part 68 of Title 47
- IEEE 802.3 10baseT standards applied to a 100 Mbps Ethernet LAN and 1000baseT

LIVING ROOM

BEDROOM

SET TOP BOX/DVR

HOME RUN BOX

ROUTER

OFFICE

OUTSIDE WALL

1" CONDUIT PATH FOR FUTURE NEEDS

HOME RUN BOX

1" CONDUIT PATH

ROUTER

OUTLET

24"

INSIDE WALL

24"

ONT

METER CENTER