KHT

ELECTRONICS

Technology Checklist

This will guide you through the basic functions of home technology, and help you budget, plan and design flexible, comfortable systems for your new home.

What is Home Automation?

Control all electronic systems in your home, with the push of a single button using a smartphone, tablet, computer or hand-held remote control. Including:
·Audio/Video
·Climate Control
·Home Theater
·Lighting Control
·Window Treatments
·Security Systems: Including Cameras and Access Control
·Home Networking: Phone, Intercom, LAN and Wi-Fi

Behind the Scenes Components of a Smart Home:

·Control system hardware
·Programming and user interfaces
·Low-voltage wiring infrastructure
·Wired/wireless network

Size of home? _____ square feet

Type of residence?
O - Single Family Home
O - Condo
O -Townhome

Type of construction?
O - New Construction
O- Extensive Renovation
O - Light Remodel
O - No Meaningful Construction

Construction schedule?
O - Long-term: I just started thinking about designing or remodeling
O - Short-term: I already have architectural drawings and plans
O - As fast as possible: My home is currently being built/remodeled

Unique aspects, challenges or functionality?
O - Vacation home or 2nd home
O - Secondary structures (pool house, guest house, etc.)
O - Communication challenges (cell or Internet service)

1 Infrastructure/Prewire
Budget: $1-3 per square foot

When considering home technology, one of the most important steps is proper pre-wiring. This is critical to future-proof a home, and ensures your systems can "talk" to each other. Remember that "wireless" doesn't mean "no wires." There still needs to be an infrastructure in place to operate all devices.

Important Considerations:
• How much flexibility for future needs do you want? Remember you only have one opportunity to prewire a home!
• Will you require fiber now or in the future?
• Future proofing: Are you ready for tomorrow's technology in the next 20 years?
• Number of Wi-Fi access points?
• Scope: What are we wiring for—i.e. basic TV and phone, audio around the house, touchscreens and wall-mounted iPads, security system?

2 Lighting Control
Budget: $3-6 per square foot

Lighting control systems, which can be put into new homes or retrofitted into existing homes with no need for rewiring, can be operated from a smartphone or tablet. These systems save energy, and make the home more comfortable, functional and secure.

Important Considerations:
• What areas of the home are included?
• How many lighting circuits/switches need to be on the system—i.e. how many separate groups do you want to control?
• Do you want to minimize the number of switches on the wall and replace them with an intuitive labeled keypad?

3 Natural Light Control (Shades & Drapes)
Budget: $1K-30K per window

Automatic shades/drapes, controlled by remote access via smartphone or tablet, increase privacy and security, provide potential energy savings, and protect from sun-related damage.

Important Considerations:
• Which areas of the home are included?
• What control do you want—i.e. shades, drapes, shades and drapes, two layers of shades, etc.
• Do you want automatic shading based on room temperature, sun direction, and daylight?
• Do you want your shades/blinds to disappear into the ceiling?

4 House Audio/Video
Budget: $350-20K per zone

A home audio/video system includes access to music and video libraries, and the ability to create a multi-room system controlled via smartphone, tablet or automatically.

Important Considerations:
• Which areas of the home are relevant, and how should they be grouped?
• Aesthetics: Would you like to hide video displays and speakers?
• Do you want surround sound for watching movies?
• Do you want distributed audio around the house?
• What quality of sound/video do you want (good/better/best)?
• Any acoustic or audiophile considerations?
• What level of soundproofing do you need?

5 Theater & Media Rooms
Budget: $15K-200K

A custom home theater or media room is the ultimate way to enjoy a movie theater or music experience from the comfort of your home.

Important Considerations:
• What is the size and shape of the room?
• Is the room dedicated or multi-purpose?
• Do you want a projection screen or television?
• What level of audio/video quality do you want (good/better/best)?
• Do you need sound and acoustic treatment?
• What kind of seating—quality, quantity?

6 Security & Surveillance
Budget: $1-3 per square foot

An automated home security system monitors a house, provides remote access, and alerts to any damage or security breaches.

Important Considerations:
• What is the size of your home or areas of concern?
• What level of intrusion detection do you need?
• Do you want to plan for environmental security considerations—gas, water leaks, etc.?
• Do you want cameras and where should they be located?
• Do you want remote access to unlock the door?
• What type of monitoring do you want for the house while you are away—i.e. status of windows, doors, garage door and cameras?
• Do you want to simulate at home presence with lights while you are away?

7 Home Networking
Budget: $1K-10K per home

Connect wired and wireless devices at the highest speeds possible, ensuring information and network safety. We provide two levels of networking, 1) residential grade, and 2) enterprise level for more complex systems.

Important Considerations:
• What size is your home?
• What devices need connectivity, both wired and wireless?
• What are your outdoor Wi-Fi coverage requirements?
• What are your network security concerns—VPN access, etc.?

8 Climate Control
Budget: $350-500 per zone

Climate control includes quick, simple and automatic adjustment of temperature without the need for unsightly thermostats. Automated climate control, which can be operated remotely via your smartphone, also provides substantial energy savings and makes your home more comfortable.

Important Considerations:
• What kind of heating/cooling technology do you have?
• How many zones are included?
• Do you want individual temperature control for each room or separate areas of the home?
• Do you want to replace thermostats with discreet remote temperature sensors?