



Systems Idea Book
(A guide to what is possible with home electronics)

Overview

The purpose of this document is to help you navigate the available options in home electronics to determine what may make sense for your new home. Consider this a brochure which highlights ideas to make your home more secure, comfortable, and fun.

Ideas covered in this document include...

1. Environmental Controls (lighting, shades, HVAC)
2. Centralized entertainment systems (music & video)
3. Access Control (door locks, driveway alert, gate control)
4. Surveillance Cameras
5. Communications (intercom, network, gate)
6. Integrated User Experience

We hope the following pages will help you “get your bearings” while you consider how electronics can enhance your new home.

Environmental Controls:

LIGHTING CONTROL:

Why should I consider lighting control for my new home? Today’s lighting plans utilize a myriad of fixtures to highlight architectural features and to make a space warm and inviting. With so many fixtures to control, your wall can quickly become overrun with “mega-gangs” of switches and dimmers. Not only unattractive, this swath of wall acne can be cumbersome and frustrating to use. A lighting control system is a great way to unclutter your walls and take command of the light levels in your home.

With a single keypad, 6 or more ganged switches can be removed from the wall and an entire area can be set to the perfect light level with the press of a single button. In fact, we have developed and refined a technique whereby every room in the home operates with only four buttons. The result is a consistent and intuitive approach that is easy to understand.

Consider lighting control for the public spaces of your home where wall space is a premium, aesthetics are the priority, and there is a concentration of fixtures to orchestrate. Secondary bedrooms can retain conventional switching or if a “house off” feature is important consider the

use of “smart dimmers” that look and operate like traditional dimmers but can be remotely commanded.



Lifetime Warranty on lighting systems!

LED Compatibility.

Independent and redundant from other controls.

MOTORIZED WINDOW TREATMENTS:

Although there is something about how a bank of shades moving together in complete silence can make you smile, the use of motorized window treatments in a home is a practical decision. There are many practical reasons to choose motorized window treatments including the reduction of solar gain, the protection of floors and furnishings, and for privacy. Other conveniences include being able add treatments to windows that otherwise be out of reach and being able to close all of them when leaving the home for an extended trip.



Blinds



Romans



Skylight Shades



Drapery Track



Hundreds of Fabrics



Versatile Mounting Options

Lifetime Warranty on shade motors!!

HVAC CONTROL:

Turn the heat up on your way home from the airport. Check on temperatures and setpoints while on the road. Set the entire house back from a single button push or when arming the security system. Have a global view of temperatures and status in all rooms. Get rid of wall clutter and have thermostats tucked away.

These and more are the key benefits of having controllable thermostats that are part of a centralized control system. Like lighting control, we take great care to ensure this is redundant and operable even if the central system were down for some reason.



Communicating thermostat functions like regular thermostat but also becomes part of central control "eco-system".



Remote Temperature sensor. This would be located on the wall in place of the thermostat allowing the thermostat to be tucked away out of view.

Centralized Entertainment Systems:

CENTRALIZED MUSIC SYSTEM:

Centralized music systems have been popular for many years and for good reason. Why pepper a beautiful home with little independent stacks of stereo components and wires when the entire home can be served from one central system. With a centralized music system, your favorite online streaming sources like Pandora, Tidal, and Spotify as well as your personal music collections are at the ready, following you throughout your home wherever you go.

Think of the areas in your home where you would like to listen to music. While flush mount ceiling speakers do a great job delivering high quality music for background listening, please consider areas where really great sound would add more fun and enjoyment. The overall cost of increasing sound quality in a room is small as a percentage of the entire system once you considering wiring, amplification, etc.



CENTRALIZED VIDEO SYSTEM:

Like centralized music, it is now common to centralize your video systems. With this approach, we eliminate local equipment at each TV location and instead put it in the basement for distribution throughout the home.

This approach not only keeps TV areas free of wires and equipment, it provides efficiency in the use and management of video sources. For example, instead of having a cable box or Apple TV for each television, a smaller quantity can be shared across all the TV's. This cuts down on the number of devices that need to be purchased, rented, configured, and maintained. The other benefit is that your video follows you from TV to TV.

Access Control:

DOOR LOCKS:

Electronic door locks can add convenience to managing your home as they allow you to provide access to visitors remotely with your smart phone or tablet. It is also quite convenient to be able to get into your house without a key.

They can also add security to your home through a simple schedule that can be set to automatically lock the doors at night.

There are several approaches to adding door locks to a home. One approach is to use a communicating door lever lock or deadbolt in place of standard hardware. They are relatively inexpensive and are available in several finishes. These devices have a small keypad or touch screen built-into them which moves a motorized latch bolt in and out of a standard door strike plate.



Deadbolt Lock



Lever Lock

The other approach is to use a keypad mounted next to the door in conjunction with an electronic door strike plate. When unlocked, the strike plate moves out of the way of the latch bolt and the door opens freely. The benefit of this approach is that you can use any door handle you like. In addition, we can provide you with ability to manage, create or revoke key codes on the fly. The keypads come in a variety of finishes and can incorporate camera and/or intercom functions.



Elec.
Strike

GATE CONTROL:

A combination keypad, intercom, and camera unit is a great choice for placement at the gate. Using a touch panel on the wall, or your smart phone or tablet you can see your visitors, communicate with them, and open the gate for them (or not).

**DRIVEWAY ALERT:**

Using a device that gets buried next to your driveway and detects passing heavy metal, chimes in the home can be sounded, lights can be triggered.

**Surveillance & Security:****SURVEILLANCE CAMERAS:**

Some folks find value in keeping an eye on their property when they are away from home. Surveillance cameras come in several form factors and types. There are motorized models that provide remote control of the lens allowing you to move the image and zoom in and out. For most applications, we recommend fixed cameras which come in a “dome” or “bullet” housing.



Dome

Bullet

ALARM INTEGRATION:

As part of an integrated system we often emulate the alarm keypad on our touch panels and smartphone/tablet apps. For the purposes of redundancy, we recommend keeping the alarm keypads as well though they can be tucked out of the way.

For added convenience, we can integrate door lock keypads to arm and disarm your security system as well.

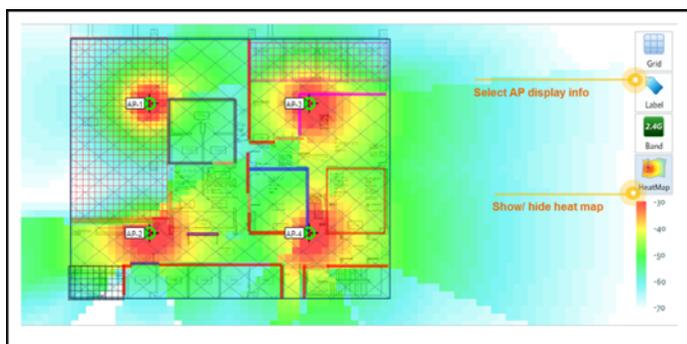


Communications:

NETWORK:

A robust and reliable network is a crucial element of your new home.

We will build an enterprise grade network for your new home. A powerful router/gateway at the heart of your system will manage all of the internal and external network traffic and will provide us with advanced remote troubleshooting tools. High grade centralized switches will provide wired connections for each TV location and for all wireless access points. We will provide the correct number of wireless access points per floor to provide seamless WiFi coverage inside your home. Ultimately the number of WAPs required depends on their placement and obstructions from construction materials including brick, concrete, and metal. Using software and your floor plans we will generate "heat map" of coverage that will serve as a guide for us to work with Ben to determine the best locations for the WAPs.



Most clients prefer strong Wi-Fi outside the home but they differ on how much coverage is needed. Please let us know your thoughts on what outdoor areas you would like to cover.



In addition to wireless, we would normally place wired connections in key areas of the home where permanent devices like printers will be located. These areas would include office spaces, mechanical rooms, AV cabinets and desk locations. Please let us know if you have any requirements for devices that could benefit from a wired connection.

INTERCOM:

Smartphones have displaced the use of intercoms in most applications. With that said, the touch panels we use can be configured for intercom functionality. Please let us know if you are interested in intercom capabilities and if so in what areas of your home.



Integrated User Experience: One of the powerful things we can do with these systems is to provide an integrated experience of control whereby all your systems operate in a similar manner, using an identical user interface. Instead of having multiple app's or multiple disparate user screens, we will provide a uniform and elegant solution that is accessible via purpose built touch panels, mobile devices and hand-held controls.

TOUCH PANELS:

These elegant devices are used to provide integrated control of your home. Cue up your favorite music, turn up the heat, see who is at the gate, and adjust the lighting all from a single intuitive user interface. We recommend the placement of these panels in key locations like the master bedroom and kitchen. There are various sizes starting a 5" diagonal moving all the way to 20" diagonal. Larger panels are often used in the kitchen where they can also display TV and video.



HANDHELD REMOTES:

For convenient couch-side channel surfing nothing beats a simplified handheld remote control. These devices have the power of a sophisticated control system behind them, but are very simple to use, have AAA batteries and can withstand being dropped on the floor.



SMARTPHONES & TABLETS:

Like the touch panels, your smartphones and tablets can be used as integrated control devices. Perfect for turning up the music while in the screen porch or turning up the heat when you're on your way home. It is also possible to use these for control within the home but there are some strengths/weakness to this approach that should be discussed.



KEYPADS:

Not only are keypads a terrific way to reduce wall clutter to command your home's lighting, they can also be used to control shades and speaker volume.

