



RadioRA 2 Design Checklist

This checklist is intended to provide reminders during the design stage of a project.

- Select the appropriate location that the residence is in**

Select the geographic location of the project to ensure that the design will fit the voltage and frequencies for that area of the world. Timeclock settings will also be set appropriately. This is done in the Project Setup Guide at the beginning of every new database.
- Determine the system topology**

Local topology systems (dimming and switching controls are in the living space) are typically used for retrofit and minor remodel where it is not easy to run new wire back to central panel locations. Centralized topologies would involve installing the dimming and switching controls in a back room while having mostly keypads in the living space. This is an option for new construction and major remodels. Wallbox Power Modules (Inclusive software only) may be leveraged to maximize cost efficiency for centralized jobs.
- Identify areas where there is to be LED lighting**

LED lighting comes with the extra layer of complexity of having numerous control options such as phase control, 3-wire, and 0-10V. As a result, it is imperative to identify the control type required for each lamp or fixture in order to be able to successfully design in the dimming control. Tools such as the LED Product Selection Tool and High Performance Fixture List are very important in identifying the proper dimming control and can be found at www.lutron.com/leds.
- Identify control points and determine the control point aesthetic**

It will be key to identify the areas from where the end user will need keypads to control their system. Points of entry into rooms, especially those with many layers of light, will require wall-mounted keypads to set an initial local scene for using the space. Once in the space, it is a best practice to have a tabletop keypad, Pico, smart phone, tablet, or an additional wall mount keypad (like in a Kitchen backsplash) for control from within. If a Lutron keypad is to be used, color and aesthetic will be the next key determination (seeTouch, GRAFIK T, or Pico).

- 4 Auxiliary Repeaters per Main Repeater, 2 Main Repeaters maximum per system**

Remember that up to 4 Auxiliary Repeaters can be assigned to a single Main Repeater for range extension. Repeaters can be either wired together (1000ft max between 2 Repeaters, 2000ft max wire run) or wirelessly assigned, 60ft between Repeaters. Two Main Repeaters can be used in a RA2 system, each speaking an independent RF frequency of Clear Connect wireless. Devices on one link cannot hear devices on the other link via Clear Connect. The two Main Repeaters then communicate over the network. Each Main Repeater can have up to 95 non-Repeater devices assigned to it.
- Ethernet**

Every RA2 Main Repeater must be connected to the same local area network in order to communicate with second Main Repeaters on larger installations, many 3rd party control systems, and/or Lutron mobile applications. Devices integrating via Ethernet with the RA2 system must also be connected to the local area network. Main Repeaters must be wired to their own router or switch port. Cross over and straight-through cables can both be used as the Main Repeater is capable of auto-detecting the cabling used and conforming to it automatically.
- RRD-6NA, RRD-10ND, RRD-8ANS, RRD-2ANF, RRD-F6AN-DV, RRD-HNx, RRT-G5NEW and all RRD-W in-wall keypads require a neutral in the wall box**

A neutral connection is required for the above models to operate properly. If neutral is not available, do not specify these products, and instead choose the RRD-6CL, RRD-10D, RRD-H, and RRT-G25LW devices.
- GRAFIK Eye QS and Wallbox Power Modules require a neutral in the box**

All GRAFIK Eye QS and Wallbox Power Module units require a neutral in the wall box.
- Remember RR-VCRX-WH or LMJ-CCO1-24-B for interfacing with dry contact devices**

Don't forget to include contact closure interfaces for interfacing with security systems, garage door openers, driveway sensors, etc.
- Lutron Connect Bridge**

Lutron Connect is the latest in mobile application technology for Residential Systems. The Connect Bridge is a device which lives on the local network and acts as a bridge to the Main Repeater, not just for the mobile app, but also for cloud based integration platforms. This device is an integral part of every system.
- Spelling and Punctuation**

The room list, device information, and engraving should always have proper punctuation and spelling. Room names, device location names (keypads), and zone names all show up in the integration file which is used by the Lutron Connect app as well as some 3rd party devices. Improper punctuation and spelling of these items will subsequently make their way to the end user.

Engraving

A job is never complete until the engraving has been finalized. Any text typed onto a button in the software will appear in an engraving report accessed through the Reports menu of the software. It is recommended to print a paper copy of the report and have the homeowner sign off on each sheet of the document in approval of the engraving prior to submission of the report to Lutron.