
RESTREPO INNOVATIONS

Crestron Elite Pro Dealer | HTA Luxury Certified

Legacy System Conversion Manual

Lite Touch & Legrand to Crestron Migration:
Process, Wiring Standards, and Field Checklist

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SECTION 01

Scope of This Manual

This manual covers the complete process for migrating a Lite Touch or Legrand residential automation system to Crestron. It is written for Restrepo Innovations installation and programming staff and may be shared with qualified prospects to demonstrate scope and process.

It covers: pre-survey preparation, site survey methodology, wiring assessment and documentation, zone mapping, infrastructure decision-making (reuse vs. replace), Crestron hardware selection, installation sequence, programming handoff protocol, commissioning checklist, and client training.

SECTION 02

System Background: Lite Touch and Legrand

Lite Touch

- Centralized lighting control system. Processors, keypads, dimmer/relay modules.
- Company ceased operations. No manufacturer support, no replacement hardware, no firmware.
- Wiring: typically 4-conductor low-voltage to keypads, home-run to central processor panel.
- Common wire gauge: 22 AWG for signal, 18 AWG for power runs.
- Key gotcha: some installations used 3-conductor instead of 4. Verify at survey — this affects Crestron keypad compatibility.
- Key gotcha: Lite Touch panel enclosures vary. Document the panel location, dimensions, and power feed before spec'ing the Crestron processor.

Legrand (LC7001 / RFLC system)

- RF-based lighting control using 900 MHz ISM band.
- LC7001 hub discontinued 2021. Eliot Cloud abandoned. No migration path from manufacturer.
- Wiring: switches are line-voltage with RF communication. No low-voltage bus to the keypads.
- Key gotcha: Legrand RFLC switches are line-voltage devices. The existing switch wiring (hot, neutral, load) can be reused for Crestron Horizon or Crestron Home dimmers — confirm neutral wire presence at every switch location before specifying.
- Key gotcha: Legrand uses 900 MHz RF. Crestron infiNET uses 2.4 GHz. No frequency conflict, but RF survey required in dense installations.

SECTION 03

Pre-Survey Preparation

Before arriving on site:

- Request original system documentation from homeowner (if available): zone list, keypad locations, panel drawings, original integrator scope
- Confirm total square footage and number of floors
- Confirm number of lighting zones (keypads), AV zones, shade zones, HVAC zones if applicable
- Identify scope: lighting-only replacement, or full platform (AV, shading, networking, security integration)
- Pull permit history if available — confirms original wire gauge specifications
- Confirm access to all mechanical spaces, panel rooms, and attic/basement for wire tracing

Tools to bring to every Lite Touch or Legrand survey

- Tone generator and probe (wire tracing)
- Multimeter (voltage verification, continuity)
- Cable tester (4-conductor verify for Lite Touch keypad runs)
- Flashlight, inspection mirror
- Tape measure (panel enclosure dimensions)
- Laptop with Crestron Toolbox installed
- Camera (document everything)
- Blank zone map template (paper or tablet)

SECTION 04

Site Survey: Wiring Assessment

Step 1: Locate the central panel(s)

Document location, enclosure dimensions, power feed, existing modules, and available space for Crestron processor and power supplies.

Step 2: Map every keypad location

Walk every room. Document: keypad make/model, number of buttons, wire count at back of keypad, wire gauge (if accessible), and any observable damage.

Step 3: Trace wire runs

For Lite Touch: confirm 4-conductor runs from panel to each keypad. Flag any 3-conductor runs — these require either new wire or Crestron wireless keypads with local power supply.

For Legrand: confirm neutral wire presence at each switch location. Legrand RFLC switches required neutral; if neutral is present, Crestron wired dimmers drop in. If neutral is absent, specify Crestron wireless or no-neutral dimmers.

Step 4: Document AV and integration points

If the project includes AV, shading, or security integration: identify existing equipment, communication buses, IP infrastructure, and integration points. Note any equipment being retained.

Step 5: Photograph everything

Panel interior, keypad locations, wire bundles, junction boxes, mechanical spaces. Label photos by zone/location.

SECTION 05

Zone Mapping Template

Use a table with these columns for every project. Complete one row per keypad/zone before leaving the site. This becomes the basis for the Crestron hardware spec.

Zone #	Room / Location	Keypad Model (existing)	Wire Count	Wire Gauge	Neutral Present	Crestron Replacement	Notes
01	Foyer	Lite Touch LT-6BTN	4	22 AWG	—	CLW-SWAR (6-btn)	Reuse run
02	Kitchen	Lite Touch LT-8BTN	3	22 AWG	—	CLW-SW (wireless)	Pull new — 3-cond
03	Primary BR	Legrand RFLC	n/a	14/2 NM	Yes	CLW-DIMEX	Neutral OK
04	Garage	Legrand RFLC	n/a	14/2 NM	No	CLW-DIMNEX	No neutral — no-N dimmer
05	...	...	...	...	...	...	...

Rows 2–5 above are illustrative. Replace with field data captured at survey.

SECTION 06

Infrastructure Decision: Reuse vs. Replace

Reuse criteria (Lite Touch wiring)

- 4-conductor 22 AWG or better, intact, no visible damage
- Run length within Cresnet spec (maximum 1,000 feet from processor to device)
- Properly terminated, no splices in inaccessible locations
- Confirmed with tone and continuity test

Replace criteria (Lite Touch wiring)

- 3-conductor only — cannot power Cresnet keypad
- Damaged, crushed, or water-exposed runs
- Runs exceeding Cresnet distance spec
- Improperly terminated or spliced in wall cavities

Reuse criteria (Legrand switch locations)

- Neutral wire confirmed present at switch box
- Line-voltage wiring is standard NM or conduit — compatible with Crestron wired dimmers
- Box has sufficient depth for Crestron dimmer module

Replace criteria (Legrand)

- No neutral wire — requires wireless or no-neutral Crestron device
- Non-standard wiring configuration (multi-gang with shared neutrals improperly wired)
- Box depth insufficient

Document every decision in the zone map with reasoning.

SECTION 07

Crestron Hardware Selection Guide

For Lite Touch replacement (Cresnet-based)

Role	Crestron Specification
Processor	CP4 or CP4-R (residential, standalone lighting + AV control)
Keypads	TPMC series (touchscreen) or CLW-SWAR series (button keypads, Cresnet)
Power supplies	CNPWS series, sized per zone count
3-conductor runs	CLW-SW (wireless, with local power supply using existing 2-conductor)

For Legrand RFLC replacement (line-voltage dimmers)

Role	Crestron Specification
Dimmers (with neutral)	CLW-DIMEX or CLW-DIM series
Dimmers (no neutral)	CLW-DIMNEX (no-neutral spec)
Controller	Crestron Home (CP4N) for full platform, or Crestron Home Hub for lighting-focused
RF	infiNET EX (2.4 GHz) for wireless devices; no conflict with Legrand 900 MHz legacy

ALWAYS confirm current part numbers in the Crestron Product Catalog before spec'ing. Hardware generations change.

SECTION 08

Installation Sequence

1. Power down existing system completely. Tag and lock out at panel.
2. Remove existing processor/controller. Photograph before and after.
3. Label all wires at panel end. Do not rely on color coding alone — use numbered labels.
4. Install Crestron processor(s) and power supplies in panel enclosure.
5. Terminate Cresnet wiring to processor per Crestron wiring spec.
6. Install Crestron keypads at each location. Photograph each completed termination.
7. For line-voltage locations: install Crestron dimmers. Confirm neutral wire properly landed.
8. Power up system. Confirm all devices enumerate on Crestron Toolbox before programming begins.
9. Document any devices that fail to enumerate — troubleshoot wire runs before handing off to programmer.

SECTION 09

Programming Handoff Protocol

Before handing to programmer, confirm the following deliverables:

- Completed zone map with all Crestron device IDs (IP IDs / Cresnet IDs)
- Device enumeration report from Crestron Toolbox (all devices online)
- Client's scene and schedule list (written, confirmed with client before programming begins)
- Integration points documented: AV equipment model numbers, IP addresses, shade controller spec, thermostat spec
- Client's preferred keypad labeling (what each button should say/do)
- Client's preferred app name (Crestron Home app — confirm account setup)

Do not hand off to programming with unenumerated devices. Troubleshoot first.

SECTION 10

Commissioning Checklist

Walk every zone with the client present. Confirm each item below before requesting client sign-off.

- ☐ Every keypad button functions as programmed
- ☐ Every lighting scene runs correctly
- ☐ Schedules tested (advance clock if needed to confirm)
- ☐ App controls confirmed on client's phone — iOS and Android if applicable
- ☐ Remote access confirmed (off-network test)
- ☐ Integration points confirmed: AV, shading, HVAC, security
- ☐ Client trained on app navigation, scene editing, schedule adjustments
- ☐ Client trained on keypad button functions in every room
- ☐ Programming documentation saved to Restrepo project file
- ☐ Warranty documentation provided to client (Crestron lifetime warranty registration)
- ☐ Client sign-off obtained in writing

SECTION 11

Common Failure Points and Gotchas

01. 3-conductor Lite Touch runs

The most common cause of scope expansion. Always verify wire count at the keypad end, not just the panel end. Wires can be mislabeled.

02. Missing neutral at Legrand locations

Builders who wired Legrand switches before neutral requirements were standard sometimes pulled switch loops only. No neutral = no wired Crestron dimmer. Confirm before spec'ing.

03. Cresnet distance violations

Older homes with panels in unusual locations can produce runs over 1,000 feet. Use a tone generator to verify actual run length, not blueprint measurement.

04. Unenumerated devices after installation

90% of the time this is a termination issue. Check the 4-pin Cresnet connector seating before assuming a defective device.

05. Client app setup delays

Crestron Home app requires account creation and provisioning. Do this before commissioning day. Do not discover it on-site.

06. Legacy AV equipment integration

Clients often assume all existing AV equipment integrates automatically. Confirm driver availability in Crestron driver library before committing to integration scope.

07. Panel enclosure conflicts

Lite Touch panels were often mounted in tight mechanical spaces. Crestron processors and power supplies may require enclosure modification or relocation. Assess this at survey, not during installation.

08. Programming scope creep

Clients will add scenes and integrations during commissioning. Set scope expectations in writing before programming begins. Changes after programming is complete are billable.

SECTION 12

Document Control

Field	Value
Version	v1.0 — May 2026
Owner	Restrepo Innovations
Review cycle	Annual or after any major Crestron platform update
Distribution	Restrepo Innovations installation staff; qualified prospects (remove Section 12 for prospect copies)

Questions

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