

LUS Fiber Home-Ready Guide

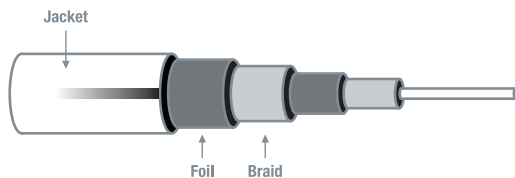


Residential new construction and remodeling guidelines that will help you provide the added flexibility for a future-ready fiber home.

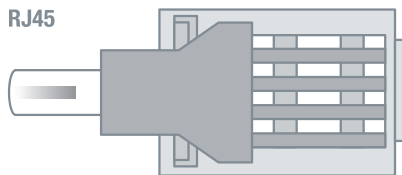
CUSTOMER WIRING GUIDELINES

Demarc Panel – A panel located in a garage, closet or basement that houses all of the home run coax and CAT5e cables from each wall jack location. This panel serves as the demarcation point for all of the home’s video, Internet, and phone services. All coax and CAT5e cabling should be home run with no splits, splices, or daisy chains. An electrical outlet is required at the demarc panel along with a 1” conduit going from the panel into an accessible part of the attic.

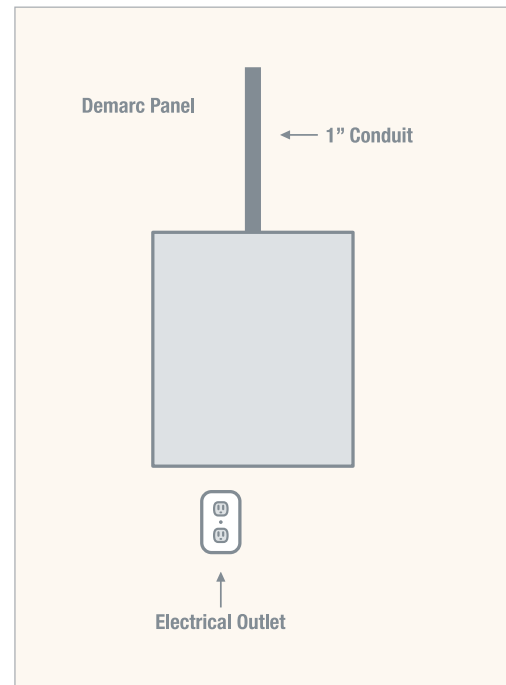
LUS Fiber Video – For reduced interference and better video quality use quad-shielded RG6 coax cable with a high-density braid of 77% or greater (costs about \$6 more than 60% braided coax for a 2,500 square foot home).



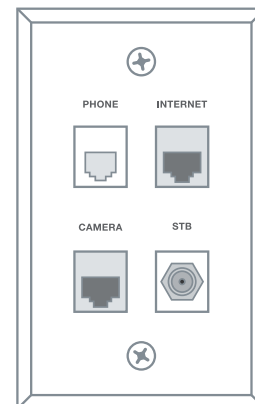
LUS Fiber Internet – CAT5e cable should be used for optimum future readiness. LUS Fiber’s Internet service uses all 8 wires of a CAT5e cable and should be wired to a dual jack in conjunction with coax to every room in the home.



LUS Fiber Phone – Each phone jack should be wired with CAT5e cable and home run to the demarc panel.



Typical Demarc Panel Setup



Multipurpose outlet diagram

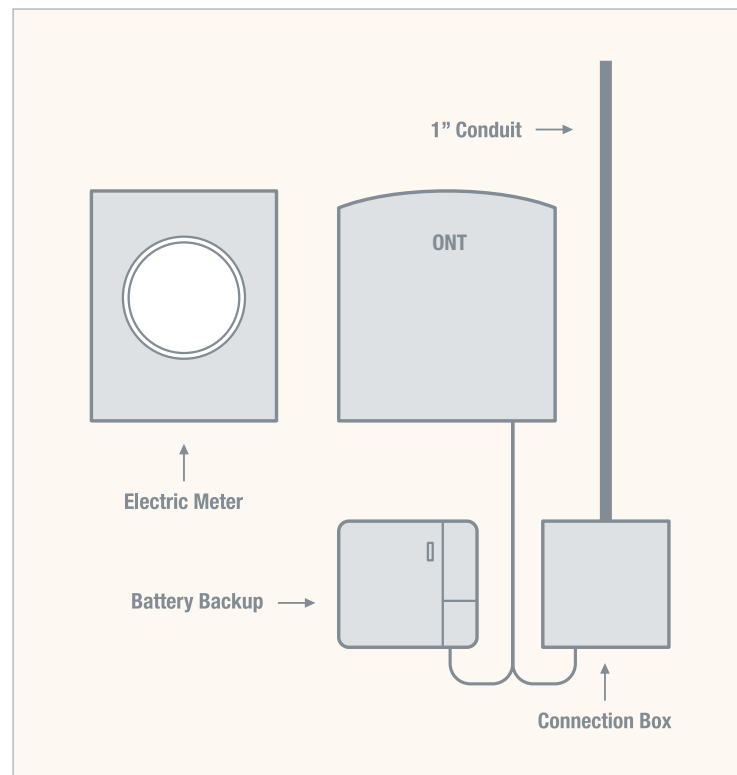
Follow LUS Fiber's wiring guidelines to maximize the home's service quality and to make future changes quick and easy.

GETTING TO KNOW LUS FIBER'S EQUIPMENT

ONT – LUS Fiber's ONT is an exterior box located near the home's electrical meter which converts fiber optic cable to copper in order to provide video, Internet and phone services.

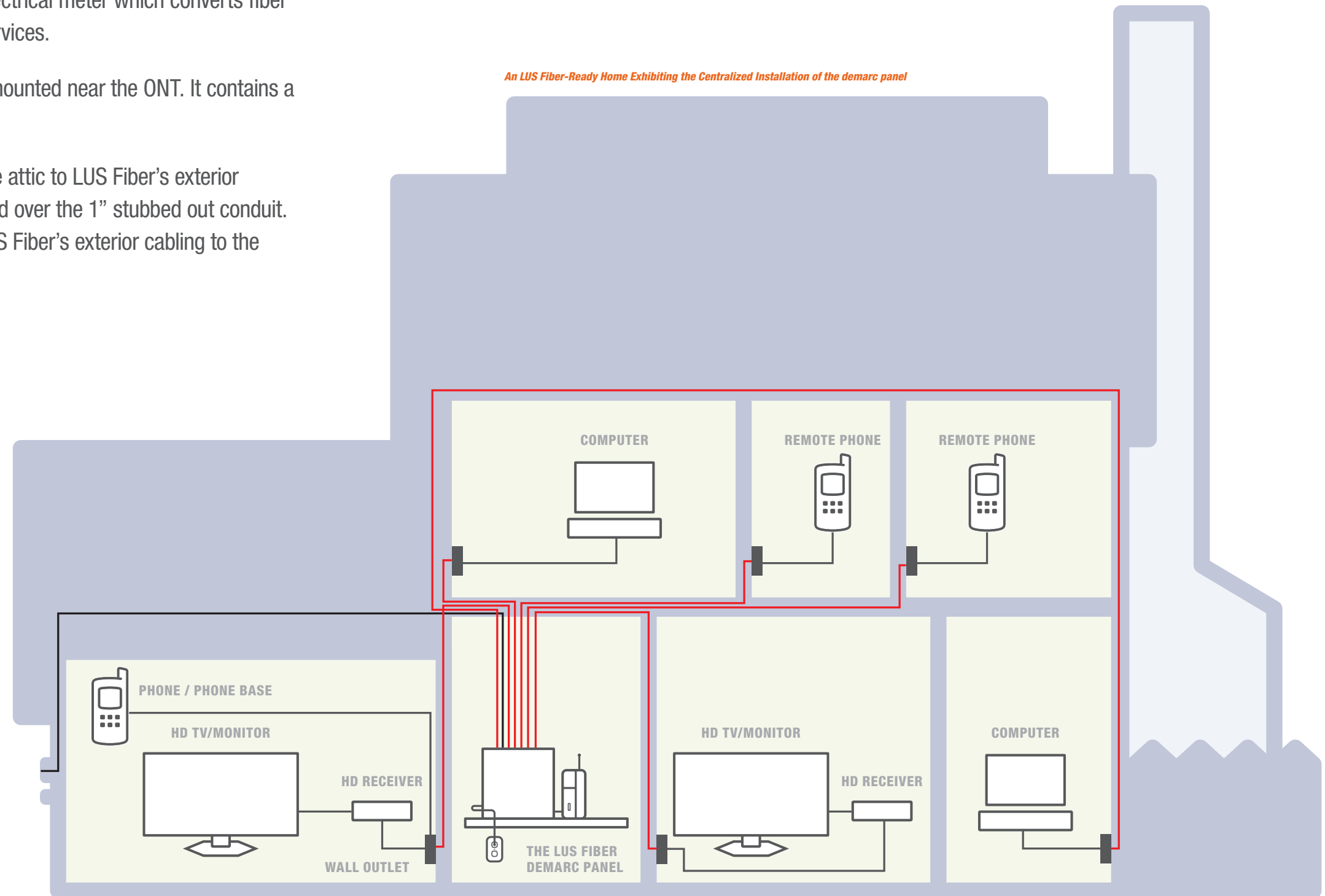
Battery Backup – LUS Fiber's Battery Backup is connected to and mounted near the ONT. It contains a battery which extends the life of service during a power outage.

LUS Fiber Connection Box – A 1" conduit is required to run from the attic to LUS Fiber's exterior service area near the electrical meter. A weather-proof box is mounted over the 1" stubbed out conduit. This box is a simple housing used as a connection point to extend LUS Fiber's exterior cabling to the interior demarc panel.



Outside Wall Exhibiting a Typical LUS Fiber Equipment Layout

An LUS Fiber-Ready Home Exhibiting the Centralized Installation of the demarc panel



WHAT IS AN LUS FIBER NEIGHBORHOOD?

An LUS Fiber Neighborhood is a community partnership where developers and LUS Fiber team up to offer customers unique access to today's most advanced fiber optic service. As part of these collaborations, LUS Fiber and the developers work together to pre-wire neighborhoods with LUS Fiber's 100% high-speed fiber optics. As a result, residents of these neighborhoods enjoy access to symmetrical gigabit Internet, high-quality HD video, and crystal clear phone technology of the future.



This differs from fiber installation in existing neighborhoods where trench work or area lines need to be installed. By using this approach, the surface quality of the new homeowner's property is maintained, with the added benefit of accelerated installation time. Internet, video and phone service are available more quickly to these homeowners for a move-in ready experience. Taking this concept to the next level, developers are encouraged to follow the included guidelines when building out homes. Homes built to these specifications enjoy a numbers of benefits not found in traditional constructions:

- Home value is increased by \$4,000 to \$7,000 (source: Render, Vanderslice, and Associates).
- Homes are optimized for today's cutting edge telecom services.
- Homes are more future proof and less prone to needing additional wiring or conduit runs later.
- Crossover technologies work more seamlessly together (ie: streaming video over internet, wireless services, etc).
- Light over fiber optics provides the option for more bandwidth than traditional copper technology.

INSIDE & OUTSIDE CONNECTIONS

Additional Notes – For LUS Fiber Internet service, such as our GIG Connection, make sure the router is located at the LUS Fiber demarc panel, along with a power outlet. And, ensure that the 1" conduit path to the outside ONT has no more than two 90-degree bends in order to ensure optimal service quality.

- The ONT will be located on the outside of the building in close proximity to the power meter.
- One-inch conduit should be installed to run from the location of the ONT to the attic.
- All conduits should have a long radius bend with no hard turns.
- All internal wiring should run central to the demarc panel located inside the climate-controlled area. The panel should NEVER be located in a non-climate controlled area.
- Each outlet should include coax and CAT5 connections.
- DO NOT use staples to install wiring.