

DS1 demarc information for LCONs

When ordering a communications circuit using T1 (DS1) local loops, there are a number of new terms that the customer may not be familiar with. Two of the most critical terms are **LCON** and **demarc** or **extended demarc location**.

An **LCON** or local contact is someone *in the building* that can schedule the circuit installation time with the Telco installer, meet the installer, and escort them to the Telco room or wiring closet. If this area is locked, the LCON must also provide the key or make other arrangements for this area to be opened. They do not need any technical knowledge about the circuit, but should have been warned in advance to expect a call from the Telco. If the demarc is to be extended, they should also be able to show the installer where the extended demarc jack is to be placed (see below).

The **Technical Contact** should be someone that understands the use of the new circuit and can answer technical questions about the circuit's configuration. This person may be remote, such as an IT or Telecom manager at the headquarters of the organization who placed the circuit order, but they should not be listed as the LCON unless they are physically present at the installation location. If someone other than the Telco is performing the demarc extension, the Technical Contact should be aware of and involved in that work.

A **Smartjack** is a small (6"x8"x2") circuit box or card within a larger circuit box to be mounted on the wall by the Telco installer, and will require a standard AC outlet within 6 feet. It is used by the Telco for testing and line signal strength adjustment.

The Telco **demarc** is the point of demarcation between the Telco and the customer, and can be thought of as the 'end' of the circuit. It is usually an RJ-45 outlet either on or within a few inches of the Smartjack for the customer to plug their equipment in to. *Unless an extended demarc is ordered, this will be the circuit endpoint.*

An **extended demarc** is the endpoint of any additional CAT5 wiring from the Telco demarc out to the floor and room where your end equipment is to be located. It is terminated with an RJ-45 outlet on a small phone jack, sometimes called a 'biscuit' jack. This extension work is usually ordered along with the circuit from the Telco, but in some closed buildings the work must be done by building maintenance staff, local union contractors, or the customer's IT shop. The LCON must be able to show the installers exactly where to mount the jack. This is often done by taping a brightly colored sheet of paper to the wall at the baseboard or inside a computer cabinet, labeled 'Place new circuit demarc extension(s) here'. If unsure, the LCON should speak to the Technical Contact.

The **NPA-NXX** of the site may be requested during the order process. This is just the Area Code and Exchange of a phone number that rings *in the building* such as the building's main number or LCON's desk number (not a cell phone or another office). Using the phone number 312-555-1212 as an example, the NPA is 312 and the NXX is 555. There may be several different exchanges used in the same building, any one of which will serve to positively locate the building within the Telco's local wiring infrastructure. Using a cell number or one located in a different building will cause the order to be delayed while the information is corrected.

Note: The word **Telco** is a generic one representing the local phone company serving a particular building, sometimes referred to as the Local Exchange Carrier (LEC). The Inter-eXchange Carrier (IXC) typically orders the 'last mile' or 'local loop' from the LEC.