



# **POWER, CABLING & EQUIPMENT CHECKS FOR PRIVATE LINES, UNMANAGED PRIVATE IP AND DIRECT VOICES SERVICES**

## **USER GUIDE**

### **Purpose and Objectives**

The purpose of the bulletin is to explain why Verizon request the customer to check the power and equipment on the site experiencing service issues.

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# 1 Introduction

Private Lines (leased lines), unmanaged Private IP (MPLS), Direct Voice (your PBX is connected via a TDM line to the Verizon Voice network), etc. These products may or may not use a third-party access lines using TDM or xDSL.

Analysis has shown the majority of service interruptions are caused by issues at the customer premises and can easily be rectified without intervention from Verizon. These issues are typically a loss of power and insecurely connected cables. Also, digital equipment occasionally requires a restart or a reset to resume normal operations.

## Please ensure that the following actions have taken place before reporting a incident

- 1) Verify that the all the equipment at your site, including the equipment from Verizon or the third-party provider, have power. Your router and LAN also require power.
- 2) Verify that all cabling (1, 2 and 3 as shown on the Typical Installations diagram on page 2) is securely connected. Examples of connectors are shown on page 3.
- 3) Record the status of the LED's on the Modem/Network Terminating Unit (NTU). These LED's often provide essential troubleshooting information, and many third-party providers cannot troubleshoot their Modem/NTU remotely. Examples of Modem / NTU's and LED's can be found on pages 4 through 7.
- 4) Identify a person who can provide access to the affected site. Also, provide the site access hours and the in-country mobile and/or fixed line phone numbers. Third-party engineers typically are not able to dial international numbers and will usually not dispatch an engineer without this information.

If the service remains impacted after having performed actions 1 through 4, please contact the Verizon Service Desk and provide details for each of these actions.

## Additional actions

At a later stage in the troubleshooting process, Verizon engineers may request that you take the following steps:

- Reset the access line Modem/NTU by disconnecting the power for 30 seconds and then reconnect it.
- Record the status of the LED's before and after the reset. The status of these LED's will help to determine the status of the access line.



Please do not reset any Verizon Business supplied devices without the approval of Verizon Business engineers. The device logs can provide important information that can assist in identifying issues with your service and may be lost after a reset.



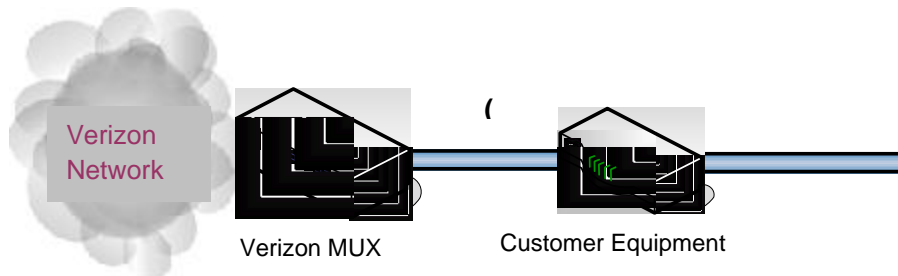
It is your responsibility to supply power to all the devices at your premises and to provide the connections between your equipment and the Verizon MUX or the third-party Modem/NTU.

Verizon may charge you for any costs incurred during the troubleshooting if the fault is isolated within your area of responsibilities.

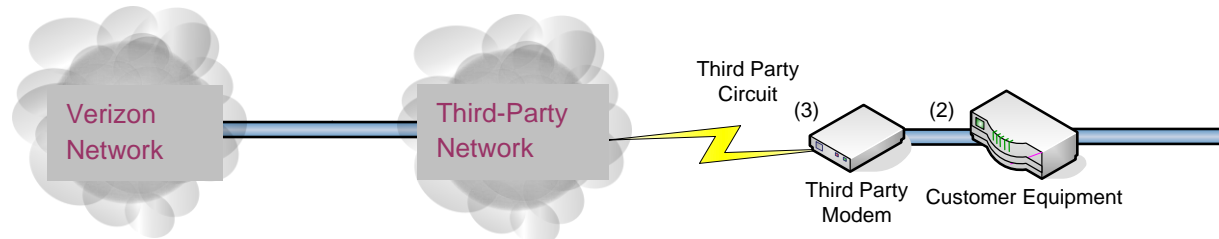


## Typical Installations

As part of the service provided by Verizon a number of cables and devices are deployed at your location. Below are two (non-detailed) examples of how Verizon may deploy services to your site.



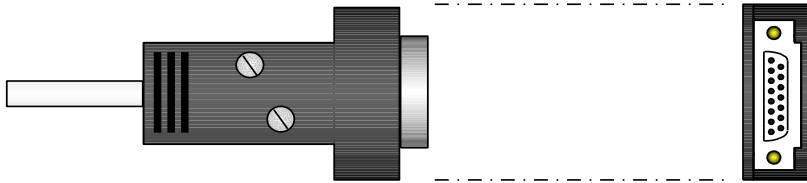
1. **On-Net** (shown above). Your equipment should be connected with a RJ-45 or BNC connector **(1)** to the Verizon MUX (equipment). In some cases, the Verizon connections may be presented in a rack mounted strip.



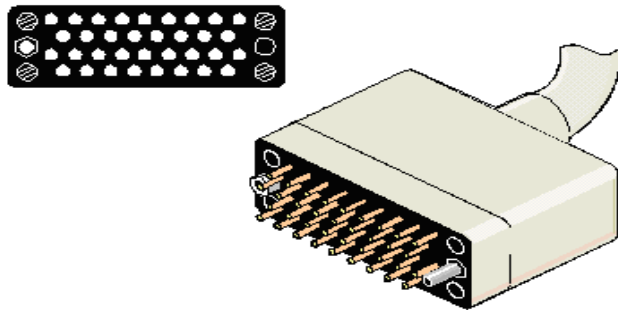
2. **Off-net** (shown above). The connection **(2)** between your equipment and the third-party network modem/NTU can be an RJ 45, V35, X21 (for speeds below 2Mb/s) or BNC connectors. The connection **(3)** between the Third-Party Modem/NTU and the access line may be via a BNC type connector or a four-wire cable.

## Examples of Connectors and Interfaces used on your site

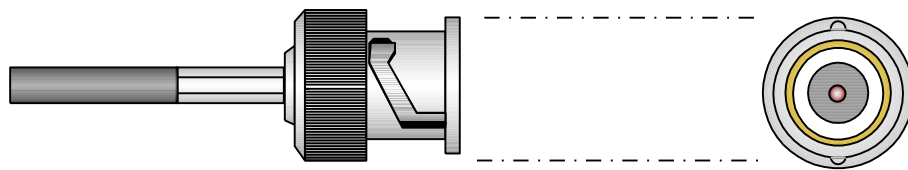
X21 Connector:



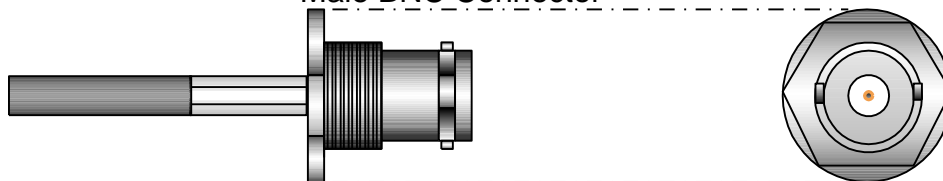
V35 Connector:



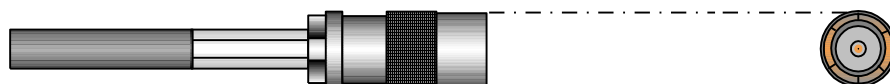
BNC Connectors:



Male BNC Connector



Female BNC connector



Type 43 Female connector

## Examples of Access Line Modem/NTU Status LED's

United Kingdom

Front View



Rear View



## France

### Desk Top



### Rack Mounted





## Spain

### NTU with LED's

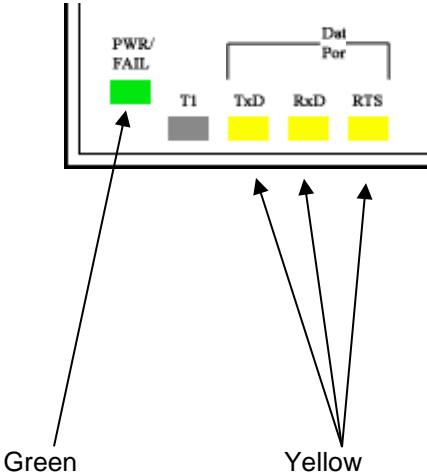


### NTU with LCD Screen

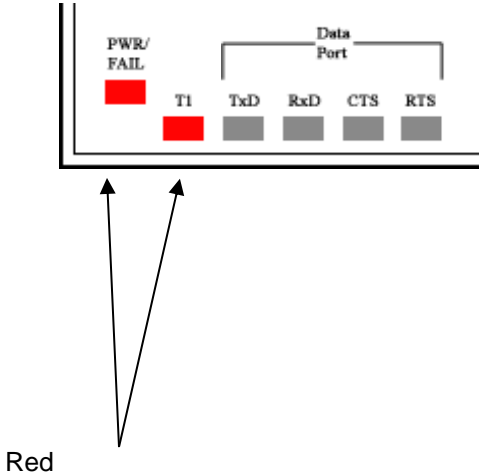


# Example of Access Line Modem Status LED's

1.1.1 Normal



1.1.2 Fault situation







## Service Assurance User Guides Library

Documents can be found on the [Service Assurance User Guides](#) page.  
The latest version of this document can be always found [here](#).

### General Customer Training Information

Go to our [Customer Training Portal](#)\* to enroll in training or to download other user and reference guides.  
\*Registration is required

### Verizon Enterprise Center

The [Verizon Enterprise Center](#) portal is an easily accessible tool that supports you in dealing with Repair related technical issues via repair tickets, as well as with Invoice inquiries and Account Management requests, offering an alternative to emails and phone calls.

### Getting started on Verizon Enterprise Center

Introduction to Verizon Enterprise Center and information on how to register can be found on the Guides & Tutorials page [here](#).



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