

APPLICATION NOTE 25

Calling Party Disconnect (COD) for the 761SG Security Guard

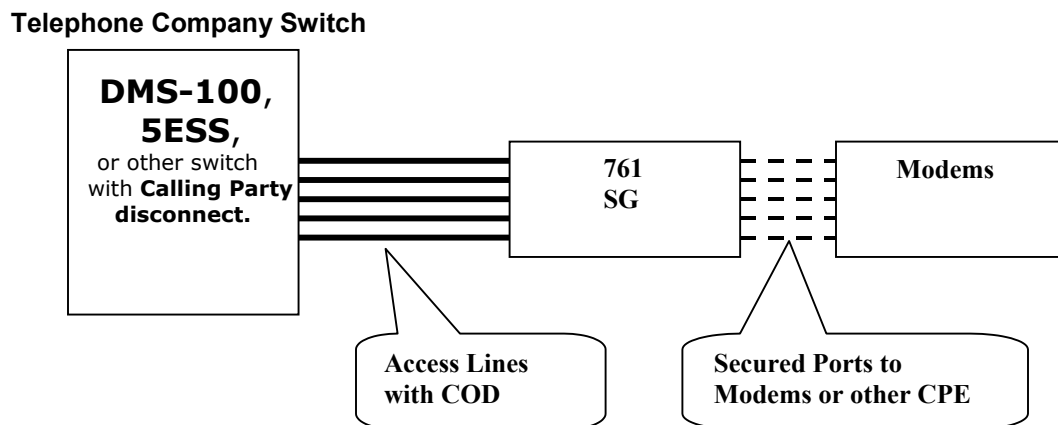
This white paper will insure a Modem or Secured Device will Not Tie-up if the calling party disconnects (hangs up) while accessing it through a 761SG Security Guard

Many PBX's, key systems and other Telecom equipment can sometimes be tied-up to a local Central Office line indefinitely unless precautions are taken. To prevent a line from being tied up and going to LOCK OUT, the Telecommunications industry has agreed on a method to release a call when the calling party disconnects (hangs up). This method is the Calling Party Disconnect Signal.

The Callnet 761 SG will detect the standard CALLING PARTY DISCONNECT that comes from the Telephone Company after the calling party disconnects (hangs up). A normal central office phone line will not send an open loop (COD) when the far end hang-ups. Therefore the line must have the option Calling Party Disconnect added to the local switch. The option name in the Nortel DMS-100 is COD (Cutoff on Disconnect). If the local switch is a Lucent 5ESS, the office wide Special Feature 515 will provide an open loop.

A given Phone Line can be tested to determine if it has CALLING PARTY DISCONNECT by placing a DC Voltmeter across the Tip and Ring of the Phone Line. The voltage will normally be around 52.8v when the line is not in use and somewhere between 5 and 24 volts when it is OFFHOOK or in use. When the far end hangs up, the line should go quickly to 0 (zero) volts if COD is on the line. Since this zero voltage condition only lasts approximately 800ms, sometimes this can not be easily seen with a digital voltmeter. Therefore an older type analog voltmeter should be used to view the instantaneous rapid drop in voltage. Almost immediately the idle voltage of 52.8v will be re-applied.

In summary, all five Access Lines that are wired to the 761SG should have the option CALLING PARTY DISCONNECT added to the local Telephone Company Switch.



Note-The Control Line does NOT require the COD option.