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DATA COMM FOR BUSINESS

SM-56 Security Dial-Up Modem Application Troubleshooting Guide

A step-by-step configuration to implement an encrypted dial-up connection using two SM-56 units is shown starting on page 6 of the manual. The following are points at which problems may occur.

1. If your attached device does not provide a DTR signal, you need to issue the command `AT&D0` after the `ATS0=1` on the answering modem.
2. Both modems need the same key. If you use the auto-generated random key, then you should only generate the key on one modem and write down that key to enter it in the other modem. Auto-generating random keys on both modems will result in both modems having different keys and won't work.
3. The commands entered after the `AT+K` command in the answer configuration of the sample are entered blindly. That is, after the `AT+K` command, you only see "OK" after entering the remainder of commands (from `AT+E1` to `AT&Y0` on the list).
4. If the device connected to the answer modem is streaming data, the call will be aborted. This is characteristic of all dial-up modems.
5. If the device connected to the answer modem echoes data the modem will not answer. To correct this, issue the command `ATQ1&W` to the answer modem. This will quiet the modem result codes so that there is no data to echo. You will not see an "OK" after you issue this command.
6. The modem DTE speed is set by dip switches. Insure that you have that speed match your devices. See p. 11 of the manual. The default setting is 57,600.
7. If the modems connect but you are still having problems, suspect wiring issues. See p. 10 of the manual for the modem's interface description.

The SM-56 modem is shipped with several wiring adapters and a straight through line cord. Combining the DIRECT PC and REMOTE PC adapters with the line cord between them provides a null modem cable to connect directly to a PC for initial configuration. Combining the DIRECT PC and REMOTE PC 25 adapters with the line cord between them provides a cable to make the modem appear as a standard 25 pin modem DCE interface.