

Using the AP10/AP400 on a PBX line

The AP10/AP400 telco circuitry is designed to work at optimal performance with a standard, dedicated analog phone line from the public switched telephone network. This is also referred to as a POTS (Plain Old Telephone Service) line. All parameters (levels, impedance, etc.) of this type of phone line are defined and regulated by the FCC. Any devices, such as the AP10/AP400, that connect to this type of line must be FCC compliant.

It is also possible to interface the AP10 and AP400 to an analog extension provided by a Private Branch Exchange or PBX. The PBX must also be FCC compliant but only where it interfaces with the public network. The internal line parameters of the PBX are proprietary. This can result in a wide variety of levels and impedances, which may result in less than optimal performance of the AP10 and AP400's telco circuitry. Some side effects may include low transmit level, distorted receive audio and in extreme cases, intermittent side-tone or ringing (usually at the beginning of every call).

To optimize the performance of the AP10 and AP400's telco circuitry on a PBX line, the PBX line must be set to simulate the following parameters of a public analog line:

- Line Type Analog Tip/Ring
- Line Impedance 600Ω
- Line Level -15dBu to -9dBu nominal
- *Line Voltage 24VDC to 48VDC
- Maximum Loop Current 120mA
- Ring Amplitude 56Vpp to 300Vpp (typical 100Vpp)
- Ring Frequency 15Hz to 60Hz

Other telco specs

- Connector RJ11C
- Ringer Equivalence (.8B)

* The AP400 can be modified to operate on a dry line. Call Technical Support for details.