

The Dterm[®] IP

The Promise Fulfilled



Empowered by Innovation

NEC

The Dterm IP

Delivering Full-featured Telephony to the IP Desktop



Today's technology offers great potential. The Dterm IP is the promise fulfilled.

Stepping beyond the "phone set" concept into the realm of Desktop Management, the Dterm IP provides all the end-user features and functionality of NEC's traditional Dterm Series E phones in a pure IP environment. With the Dterm IP, end users can move seamlessly into the world of IP Telephony while maintaining the desktop productivity tools they need to keep their business sharp and competitive.

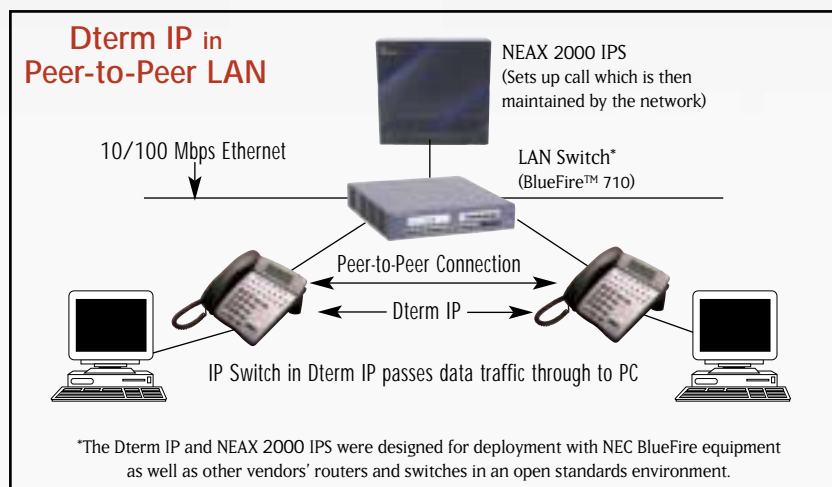
Full NEAX® IP Support

The Dterm IP was designed to work with NEC's full range of NEAX IP PBXs including the NEAX 2400 IPX (Internet Protocol eXchange) and the

NEAX 2000 IPS (Internet Protocol Server) as well as their Distributed Model counterparts, the NEAX IPX^{DM} and the NEAX IPS^{DM}.

All these support peer-to-peer IP Telephony connectivity as well as traditional time division multiplexed (TDM) switching. In the figure below, two Dterm IPs are shown connected peer-to-peer by a NEAX 2000 IPS in a LAN. Note that each Dterm IP unit has a small IP switch with two connectors allowing one cable termination to the desktop while passing the appropriate data traffic signals on to the end users' PCs. Dterm IPs can be similarly connected peer-to-peer node-to-node across a WAN as well.

NEON embodies NEC's philosophy that drives development of complementary communication solutions for OPEN networks, delivering value-added capabilities and quality of service, while protecting investment; all without compromising the user experience. The Dterm IP continues this NEON tradition. "Dterm" stood for "Digital Terminal" when introduced by NEC in 1983, as the industry began its transition from analog to digital telephony. The Dterm IP, NEC's first pure IP telephony terminal, similarly marks the transition from TDM to IP Telephony. NEC's NEAX 2400 IPX and NEAX 2000 IPS still support analog phone sets, as well as digital and IP phones, demonstrating the NEON commitment to investment protection.



The Dterm IP

The NEC Dterm IP represents a new step in the evolution of the Dterm product line. Designed to work with the entire family of

NEAX IP PBXs, it features all the basic functionality of our traditional TDM Dterm Series E phone set. The Dterm IP comes

in both an 8 and 16-line key version to support a wide variety of workplace environments.



Maximizing Productivity

Like its predecessors, the Dterm IP was ergonomically designed for natural comfort and offers a veritable "toolbox" of menu-driven, soft key functions – each delivering

power, versatility and programmability to every user station. This allows users to customize their desktops to maximize efficiency and productivity for their specific job functions

while helping minimize corporate overhead. In fact, the entire desktop surface is designed for user productivity, promoting speed, service and performance.

FEATURES AND SPECIFICATIONS

- 4 Soft Function Keys
- 8 or 16-Line/Feature Access/
Programmable Feature Access Key
- LCD with 24 Characters X 3 Lines and
Adjustable Angle
- Incoming Call/Message Indicator
- Input/Output 10/100 Mbps Ethernet
- Built-in IP Switch with 2 RJ-45
Connectors for Link to PC
- Peer-to-Peer IP Support
- LAN Protocols: TCP/IP
- Management and Utilities: SNMP
- Software Upgradeable via LAN FTP
or TFTP
- Audio Algorithms Supported
 - G.729A - 8 Kbps
 - G.723.1 - 5.3 or 6.3 Kbps
 - G.711 - 64 Kbps
- G.165 Echo Canceller Software
- Voice Packet Prioritization using
IP Precedence or DiffServ and
upgradeable to 802.1p and 802.1q
- Power Support (User Choice)
 - Spare Pair (see below)
 - External AC Adapter
 - In-line via Cisco Discovery Protocol

SN1604 Power Patch Panel



Powering the Dterm IP

Some analysts believe that one of the primary "market inhibitors" for adopting IP Telephony to the desktop has been the issue of power. In traditional TDM Telephony, the -48 VDC required for dial tone and ring voltage is delivered to the phone set through the same cable as the voice signals.

Ethernet was only designed to transport low voltage data bits; however, most Ethernet cabling in current use contains an extra "spare pair" of wires which can be used to carry the -48 VDC. To take advantage of the "spare pair," we have introduced the NEC SN1604 Power Patch Panel which can power up to 12

Dterm IP sets. Although individual AC power adapter units can be used for the Dterm IP, the SN1604 supplies power from a single source, thus facilitating the use of a UPS system for centralized system backup. SN1604 units are generally co-located in a power closet alongside the LAN switch and the UPS unit.

