

millennium

T H E P O W E R W I T H I N



nt northern
telecom



100 Years Ago





Since the first public payphones were introduced more than 100 years ago, the telephone design has been continually remodelled to meet customer needs. But beneath the surface, the basic technology has remained the same.

Until now, Millennium is about to change the payphone industry, inside and out, with a totally new integrated system of public payphones. Offering amazing data transmission capabilities made possible by digital technology, Millennium can operate thousands of payphones on a single system. Each terminal is connected to a Network Control Center . . . the power within.


Behind Millennium is the strength of a time-proven partnership, combining the engineering expertise of Northern Telecom — the world leader in digital switching systems — with the design excellence of Bell-Northern Research.

Today's Human Race



The increased mobility of today's consumer presents new challenges to the telephone industry. As much as one-third of all operator system handled calls now originate at pay telephones. The fastest growing segment of the payphone market is credit card calling, allowing a more efficient, more convenient payment method.


Millennium's integrated system is equipped to keep pace with today's human race — at airports, shopping malls, restaurants, schools, institutions, even remote highway locations. Based on extensive consumer research including on-site testing, Millennium is ergonomically designed to ensure ease of use in the marketplace. Its modular design allows telephone features to be customized to each location. Plus faster call set-up and easier payment is now possible through access by credit cards.







Card Convenience



Pick a card, any card. The new card reading terminal, the first in the Millennium family, accepts all major credit cards — e.g. American Express, VISA and MasterCard — plus the telephone company calling card.

The calling process is totally automated, with no operator required for long distance or local calling. Credit card validation and call set-up can be completed in seconds. Visual prompts shown on a display plus voice prompts through the handset assist the customer through each step of call set-up.

To make a call you simply insert and remove your credit card. (Call set-up cannot be completed until the credit card is removed. This helps to ensure the customer does not leave the card in the payphone after use.) While card validation takes place, you dial the phone number which will appear on the display. Once the card is validated, the call goes through. To make additional calls you simply press the Next Call button and dial the number, with no card re-validation required.



Visual prompts assist in call set-up. The display also shows the number dialed. Information or advertising messages may be displayed when the set is not in use.

Language select button allows visual and voice prompts in English or French.

Next Call button lets you make additional calls without re-validating the card. Also used for number correction when dialing.

Adjustable volume for the handset receiver provides assistance for the hearing impaired, and allows easier use in noisy locations.


Dialpad features larger keys with extra spacing for ease of dialing.

Voice prompts through the handset provide further call set-up assistance.



Auto dial buttons allow one-touch dialing of convenient local services, providing value-added customer service.

Card reader accepts all major credit cards plus the telephone company calling card. The icon shows correct method of card insertion.

Network Control Center

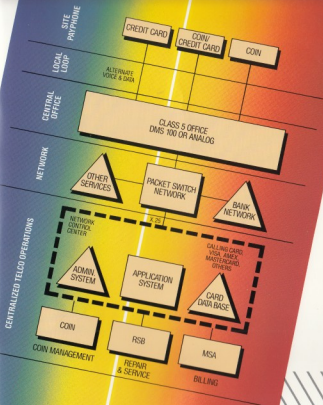


The power within Millennium is the Network Control Center (NCC) which drives all system management activities. This fully integrated system can efficiently operate public telephones located nearby or thousands of miles away from the NCC.



Valuable information is continually fed from each payphone terminal back to the central computer. By compiling this information into reports, Millennium can tell the system operator how well things are working at each payphone in the system, 24 hours a day.


Any operational or vandalism problems are reported immediately. Early fault detection ensures out-of-service phones are repaired quickly.




The NCC operates through a packet switched network, with standard X.25 service.

The NCC provides detailed credit card validation, allowing card numbers to be checked against internal or external lists. Important usage and call statistics are sent from each payphone back to the computer — including the frequency and type of calls such as local or long distance, and the time in use. This powerful data base allows the telephone company to plan where, when and what type of additional phones should be installed. The result is a phone system that can grow alongside of the market it serves.

The Evolution

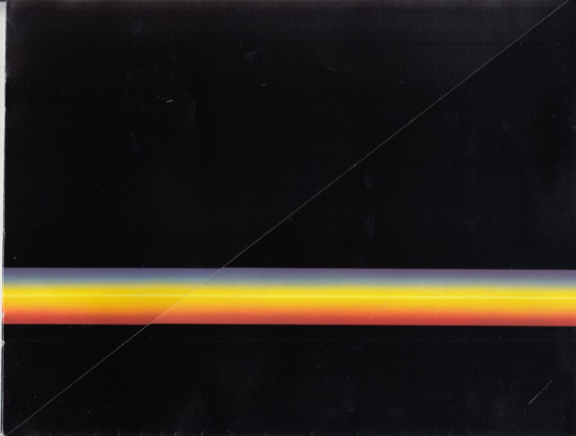


Millennium is designed with a flexible architecture, allowing the system to evolve alongside of industry developments. Among the future services we can expect are voice messaging, debit and smart card service, and data base access to directory assistance and electronic mail.



Initially the Millennium system will introduce three new public telephones: a card reading terminal, followed by a coin operated set, and a universal model accepting both cards and coins for call payment. The coin and universal sets are designed to accept the one dollar coin. Millennium will also include an upgrade kit for existing coin telephones, allowing all payphone operators to upgrade their equipment cost efficiently, while still taking advantage of the NCC. To ensure effective management and reliable customer service, Northern Telecom provides set-up assistance and ongoing system support.

Put powerful new service capabilities behind your communications system today, with Millennium. The power within.



Put the power of Millennium behind your
communications system today.

Find out more from your Northern Telecom or
telephone company representative about the
amazing new capabilities of Millennium . . .
the power within.

In United States call: 1-800-558-9936

In Canada call: 1-800-NORTHERN

The logo for Northern Telecom, featuring the lowercase letters 'nt' in a stylized, bold font. The 'n' and 't' are connected at the top. To the right of the 'nt' logo, the words 'northern' and 'telecom' are stacked vertically in a clean, sans-serif typeface.

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