Telidon



The secret of Telidon is in its highly efficient coding scheme - The Picture Description Instructions "PDIs" which describe images in terms of basic geometric elements such as points, lines, arcs, rectangles and polygons. Telidon terminals can handle non-Latin characters, ideographic symbols or cursive scripts as well as the widest range of videotex attributes such as color, motion, overlays and display resolution.

The pictures on these pages illustrate some of the graphic capabilities and applications of Telidon. Being capable of creating detailed drawings and even reproducing photographs, it may be used for computer art, electronic mail, weather maps, city plans, illustrating real estate listings, charts, plans, and a wide variety of educational presentations.

The Telidon story begins in the late 1960s when revolutions in electronic miniaturization had reduced computers to desk top size. This new technology made it feasible to develop electronic information centres for the home and office. At the heart of such centres would be an interactive television system capable of displaying pictures, sound and text.

Canada had long been a leader in the field of telecommunications. Its scientists believed that they could make a significant breakthrough in interactive television. Research on a superior graphics system was carried out during the first half of the 1970s at the Communications Research Centre of the federal government's Department of Communications. In 1975 the scientific team had reached a point where a Canadian company was given a contract to develop compatible hardware and software. Two years later, Telidon's revolutionary Picture Description Instructions Language was complete and three patents were applied for. At the same time, other countries were competing to corner the lucrative Videotex market. In 1977, Canadian policy makers decided to review the various Videotex systems and realized that the approach that had been developed in their own Communications Research Centre was considerably superior. In consequence, the research team was encouraged to press ahead with its work.

Through government funding, Telidon technology continued to develop and programs were established to assist in its transfer to private industry. The federal government also assisted in Telidon sales and marketing.

Designed to be user-friendly, Telidon is easy to operate and requires the minimum equipment.

Videotex is the generic name for a system which integrates computer technology with a television set and allows for two-way communication.

Telidon's pictures are crisper and far more realistic than those of other Videotex systems which were designed before the price of computer components became affordable to home users. Telidon is flexible enough to be used in a whole range of situations including armchair shopping, public displays, sales seminars, and the Office of Tomorrow.





Telidon's novel Picture Description Instructions Language is the key to its success. Because it is fully compatible with the electronic systems of the future it will not easily become outdated.

Telidon can be brought into the home or office by a range of carriers; telephone, cable TV, optical fibres, broadcast television and, in the future, laser beams and radio. There are even portable and display stand-alone systems for special uses.

Canadian scientists and engineers work hand in hand with the Videotex industry to provide the most up to date Telidon equipment and services for every application.

Telidon's superior graphics speak for themselves. They make the system the most sophisticated in the world. In addition, Telidon is designed to adapt to any anticipated revolution in electronic information processing.

Other Videotex systems initially built their graphics out of coloured squares. The pictures look crude, with curves and diagonal lines being represented by a series of steps. Users of such systems have already faced the prospect of replacing terminal equipment as these systems become outmoded. Attempts to upgrade the images with methods such as Dynamically Redefinable Character Sets (DRCS) can improve their quality somewhat, but require more data storage and longer





the Videotex system of the future





Descriptions Instructions Language which creates graphics out of points and natural lines. Telidon's alphageometric computer language is so advanced that its picture potential is ten times greater than any existing television set. Even when future innovations occur, Telidon pages will be compatible with both new and old equipment. Telidon's page instructions are electronically coded in a highly efficient way and make the best use of computer and terminal memories. They also allow more information to be transmitted at lower cost.

The alphageometric coding scheme is simple to learn and writing a Telidon page does not require expensive equipment. Telidon page creation is therefore accessible not only to large businesses but to the small user with a simple message.

Telidon is designed to be independent of transmission media, television sets and data banks. As advances in electronics occur, Telidon pages will not become outmoded, and old and new equipment can be used together.

Telidon reception and transmission is possible with





a wide variety of equipment and over many different carriers. Systems are available at a variety of prices and can be selected for a specific use or situation.

Today Telidon has become the Videotex system of choice for several major corporations. It forms the heart of the North American videotex standard adopted by the American Telephone and Telegraph Company. Time Inc is using Telidon for its multichannel teletext service. The Government of Venezuela has purchased a Telidon network as a government information service, and Myer Communications of Australia uses the Telidon system for its international Videonet videotex service. Standard Telephone and Radio has developed a Telidon Service in Switzerland that is compatible with the British Prestel Videotex System.

In the UK several major organisations, such as Proctor & Gamble, JCB, ICI and Thames Television, have discovered the advantages of Telidon technology as a cost-effective business tool. Telidon technology has been introduced to the UK by a British company, Poulter Computervision Ltd of Leeds, which has an exclusive agreement with Norpak of Ottawa for the UK-Eire markets and an agreement covering the rest of Europe. Applications of Telidon in the UK so far include creation of 35mm photographic slides for audio-visual use, use as a complete audio-videotex system and use as a conventional videotex database. New applications are constantly being developed to take advantage of newly available technology married to the proven and forward-backward compatible Telidon technology.

Telidon is thus at work in offices, homes and public places both in Canada and abroad. Uses range from a province-wide information service for the agricultural community in Manitoba, to an electronic version of the Montreal newspaper La Presse. New applications of the technology are constantly being developed. The electronic future is exciting and extends to the limits of human ingenuity and imagination. One thing is certain, Telidon will be at its centre serving the world.

Further information can be obtained from the Commercial Division of the Canadian High Commission in London.

