

Computer input and output

[Technology](#), [Computer](#)



Other data is originally recorded in a form that is acceptable to the computer

L] Magnetic ink character recognition (MICE) C] Optical character recognition (OCCUR) This approach is called SOURCE DATA AUTOMATION third basic way to enter data into the computer is to key it into an online key driven device. CIA fourth option permits data input in audible form, using a voice recognition unit. Input Options Source data Key to tape Machine Computer readable data OCCUR docs MICE Keyboard Terminals MICE, OCCUR units Card, tape, disk Units Chain Nell Voice Recognition CPU Output offers similar options.

Information or data can be recorded on a permanent medium, such as paper, microfilm, or punched cards, or the information can be displayed on a television like screen or resented audibly. OUTPUT options Chain Nell print information Termini al Display Plot Computer Output Microfilm Microfilm Microfilm Im printer Card punch Unit Punch Cards Viewer Channels and Control Snits The control unit contains the logic circuitry and storage needed for the control of multiple I/O devices. The channel contains the logic circuitry and storage needed to monitor several I/O device control units and provide pathways to and from the CPU.

Role of Channels and Control Control Units High Speed Control unit Low Speed Jinni I/O Devices Channels and Control Units The transfer of data between the I/O unit, he control unit, and the channel is serial, or one byte at a time. When this operation is performed, the CPU can process other data in primary storage. The CHIP halts processing just long enough to enter the data from the channel. The interruption of the program in process is very brief because all of the bytes from the channel are transmitted to primary

storage at once-? in parallel. The transfer of data from primary storage to an I/O unit works in the reverse sequence.

Smaller computers have only one channel; larger systems have many.

Importance of the channels: 0 Easy to overlook, but without them CPU reference would be drastically reduced. C] The channel hardware and the operating system permit the multiprogramming that maximizes computer productivity. Without channels, there COULD be no time sharing or distributed processing, and batch processing would extremely slow and costly.

SKYDIVER INPUT DEVICES Offline Skydiver Devices The most common input device was the keypunch machine. CLC The first key-to-tape and key-to-disk units used conventional magnetic tape reels and hard disks.

Offline skydiver Machines Keypunch disk Punch Cards co Zion magnetic Tape Cassette Hard disk Floppy disk Reader Magnet ICC tape Cassette et ICC disk Floppy disk Magnetic tape cassette Contains 285 Ft. Of polyester. Data can be recorded at the density of 800 bytes per inch. Capacity: approximately 2000 punched cards. Floppy Disk Sizes: 5 1/4 inches and 8 inches in diameter. Capacity: 2000-8000 punched cards. KEYED MEDIA INPUT UNITS Card-reading and punching 0 Card reading speeds of 2000 per minute are not uncommon, but punching speeds are in the range of 100-250 per minute.

C] Punched cards are used as turned around documents. Punched cards are also used to track materials as they flow through a plant or a distribution network. Floppy disk, Cassette, and Cartridge readers CLC Cassette, and Cartridge readers tapes are produced as a by-product of another operation

Online skydiver devices TWO basic types of keyboard terminal: Displays output on a CRT C] Prints output on continuous paper form. Online skydiver devices CRT terminal- also called an ALPHANUMERIC DISPLAY TERMINAL and a VIDEO DISPLAY TERMINAL, is all - electronic, noiseless, and economical.

C] Can display information very rapidly, filling the screen with characters much faster than the characters can be printed on the paper. Special features: CLC Color C] Reverse video 0 Blinking CLC Cursor L] Scrolling C] Paging C] Protected format Hard copy terminal - also known as TELEPROMPTER TERMINAL, is a terminal with paper output TWO basic categories of hardcopy terminal: C] Impact -? causes a print " hammer" to strike the paper to form the character Monomaniac - causes characters to be printed by means of some chemical or heat process, or by spraying the characters on the paper from an ink jet.