Entrex System
Central Control Group

The ENTREX System 480 combines the advantages of a small programmed processor, a magnetic disk unit, and a magnetic tape unit to produce accurate data for immediate computer processing. All are contained in a central cabinet.

The Processor
A small programmed processor controls and validates the data keyed from up to 64 DATA/SCOPE™ Key-stations. Checking the data as it is entered provides immediate error detection. With 65,536 bytes (characters) of core memory, the Data General Nova Processor has proven itself a versatile performer. Its unusual and flexible features have followed not only the design but the continued development of System 480 software into the most capable data entry system in the industry.

The processor has the following hardware features.

- 16-bit word
- 4 accumulators
- 2 index registers
- Direct memory access channel
- Priority interrupt channel
- Power failure protection and automatic restart

Central Disk
The System 480 disk unit is used for intermediate data storage. Because data keyed by each operator is stored as a batch on the disk, it can be reformatted before being written onto magnetic tape. Files previously written on tape by System 480 or created by another computer system can be read onto the disk and stored for further processing, including error correction, additional reformatting, and output.

In addition to the data, the disk contains libraries of input formats, output formats, and standard job definitions for an installation, as well as restart routines for backup.

The disk has a 2.4 million character capacity. Up to four disks can be attached to one System 480, providing a total capacity of approximately 10 million characters. The disk is organized with 203 cylinders of two tracks each. There are 24 sectors with 256 usable characters per sector. The System 480 disk features the following.

- Unique, redundant preamble to each sector containing the sector address to insure correct disk access.
- Cyclic redundancy check character.
- Read after write check. The address of any bad section is deleted from the list of available tracks.
- Density of 2200 bpi on inner track.
- Transfer rate of 1,560,000 bps.
- 67 ms. average access time.
- Dynamic allocation of disk space. Requests are sorted so that they are executed in optimum order.

Under normal conditions, one disk is capable of supporting the data (entry and verification) from 32 terminals for one 8-hour day.

Magnetic Tape Unit • Installation • Central Control Cabinet
on reverse side.

Magnetic Tape Unit

The final output of System 480 is a reel of magnetic tape containing the data keyed from the DATA/SCOPE Keystations. The data has been checked for accuracy by the processor and reformatted for output from the disk.

The tape drive is available with either 7- or 9-track format with 556, 800, or 1600 bpi. The drive can read or write at the rate of 25 ips and rewind at 150 ips. All industry-standard read checks are performed.

Up to four tape drives of the same type can be attached to one System 480 tape controller. Different types of tape units, requiring different controllers, can also be configured.

Installation

The only installation requirements for the System 480 Control Group are:

1. Adequate area for the Control Group allowing easy access to the tape drive,
2. A single-user power circuit capable of supplying 30 amp service at a Hubbell-type twistlock connector,
3. Air conditioning adequate for personnel comfort.

Central Control Cabinet

Dimension: 52″ wide x 26″ deep and 52″ high.

Weight: 750 lbs.

Power: 117 volts AC, 25 amps, 60 hz; or 230 volts AC, 12 amps, 50/60 hz.

Heat Output: 6400 btu/hr. Because very little heat is generated by System 480, separate air conditioning is not required.

Controls: Two locking switches — System Power and Cold Start, and momentary contact switches to select the source of the start routines — tape or disk.

Indicators: One — System Power.

In addition, the magnetic tape unit contains its own control panel.