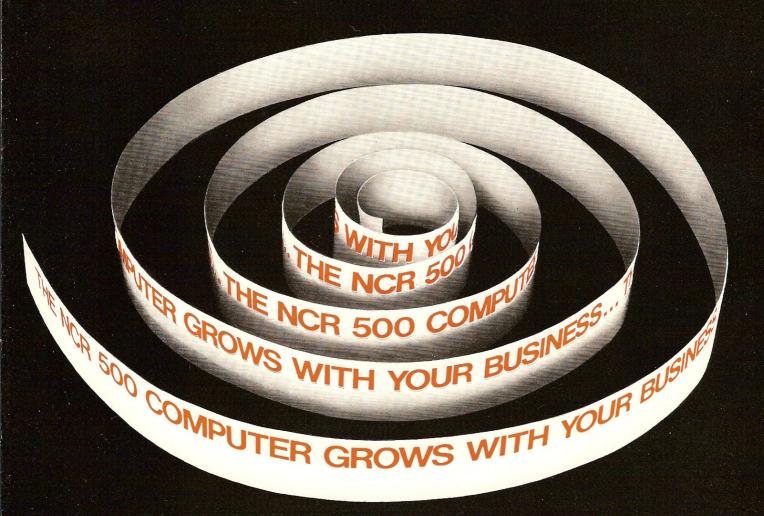
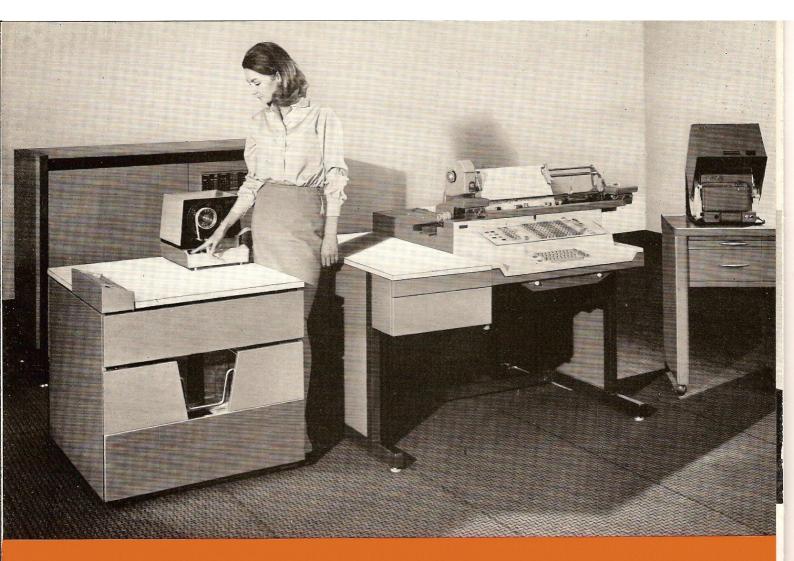
# Command the facts!





### MAGNETIC CARDS FOR UNLIMITED STORAGE...INSTANT REFERENCE

The basis of the 500 Series Magnetic Card System is a dual-purpose document with printed entries on one side and magnetic data on the other. NCR pioneered this record-keeping technique and has already incorporated it in many thousands of business machines.

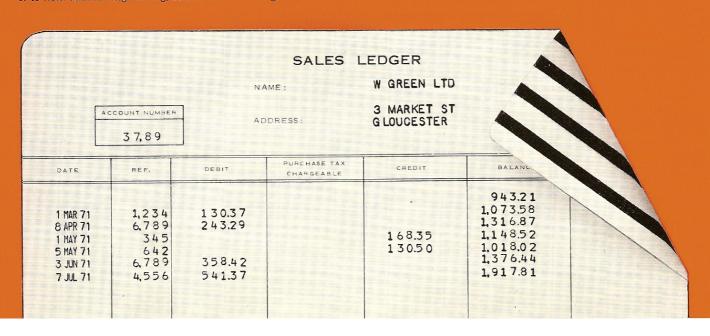
The cards are an inexpensive form of magnetic storage that can be expanded as required. In the 500 system they are used to maintain business ledgers, or to hold data for engineering, scientific

and other computer applications. They also provide a particularly convenient method of storing and inserting programs.

The face of each card is reserved for printed entries. On the back are the four magnetic stripes that form its 'built-in memory'. These can store over 320 characters of alphanumeric data (such as account numbers, names and addresses and balances) plus control

When the card is placed in the console, the magnetic data is read, checked and fed to the processor. During processing, the card is updated both visually and magnetically.

These magnetic files add a new dimension to low-cost data processing. Unlimited storage . . . automatic input . . . the flexibility of visible records that can be referred to at any time without interrupting the computer.





Many progressive companies would like to take the big step forward into electronic data processing but are held back by the cost and complexity of the computers they have read about or investigated. The NCR 500 Series breaks down that barrier.

Inexpensive . . . easy to install and operate . . . easy to understand . . . it provides the kind of data processing facilities that can immediately be put to work in a small, expanding business or one department of a large business.

With an NCR 500 Magnetic Card System you get the speed and versatility of a real, stored-program computer, *plus* the convenience of maintaining printed records in a form already familiar to your staff and customers. The magnetic card files enable unlimited quantities of data to be processed electronically . . . either serially or at random . . . yet are always available for visual reference.

As your business grows, your 500 Magnetic Card System grows with you. To start with, you can increase its capacity by adding compact units that read and punch paper tape.

Beyond that, you have a wide choice of high-speed peripheral units, including a line printer. Any of these can be plugged into the system at any time. No other low-cost computer makes it so easy to start . . . or can take you so far.

Because of its power and expansibility, the NCR 500 Series fills the price-and-performance gap between sophisticated accounting machines and magnetic tape computers. There are nearly 500 installations of this system in this country alone.

### **EASY TO INSTALL**

When you install your 500 system you will encounter none of the complications associated with larger computers.

Site preparation is kept to an absolute minimum. Normally no air-conditioning plant is needed – the 500 has been designed to work satisfactorily in all moderate temperatures. And because of the low power consumption of its transistorised circuits, the equipment can be plugged into the mains supply normally available on business premises.

Your 500 system will be ready for work almost as soon as it has been delivered to you.

### **EASY TO PROGRAM**

Programs can be held on any of the following media – magnetic cards, punched paper tape or punched cards. Programs can then be automatically read by the relevant reader and a complete set of instructions is automatically transferred to the ferrite core memory. This means that the processor has immediate access to the whole program – thus enabling it to work much faster than mechanically controlled systems.

As the work progresses, the program may be modified by the results of computations, or by special instructions entered through the console, or read from other magnetic cards.

Although the 500 offers these advanced facilities, it is very easy to program. There are only 20 basic commands, each identified by a simple, plain-language description. Any person of average intelligence can learn how to use them in less than three weeks; and efficient working programs can often be written in a matter of days.

For this reason there will be no difficulty in amending programs to keep pace with the changing needs of your business, or in setting up completely new applications. With the 500 you are in full control of your data processing operations.

#### **EASY TO OPERATE**

The console of the 500 is of familiar design so that members of your staff can use it quickly and easily.

There are no complicated controls. In many cases the operator has only to enter the required data and touch a single motor bar.

After a very short period of instruction — part of NCR's comprehensive installation services — the staff you have chosen for this work will be ready to bring the system into full operation.

## **NCR 500**

### DIRECT ENTRY COMPUTING



This is the basic 500 computer. It puts you in command of the facts you need to know. On visible computer records.

NCR 500 costs little more than a conventional VRC. But you're buying more than a 'desk size computer'. You're investing in the growth potential of the biggest small computer in the business. The computer that grows with your business.

Most of the facts needed to run your business are found in files. Of customers – their names, addresses, credit status, and accounting history. Of suppliers and employees – products, materials, and expenses. NCR 500 files the facts you need on visible computer records. In language you can understand. And in language your 500 computer can read. Faster.

One glance at an NCR computer card tells you the latest condition of a customer's account. The same card, presented to your 500 computer, will generate the customer's name and address on an invoice form. A complete file of NCR computer cards will produce a credit control report, to tell you all the facts you need to know. Instantly.

NCR computer cards look like ledger cards – and operate as computer file records. Instantly accessible to you and your computer.

# the computer that grov

AUTOMATIC INPUT AND OUTPUT

With this automatic feeder reader, NCR computer cards are presented for automatic interrogation at machine speed. To automate the sequential presentation of file records. To increase the *automatic* performance of your 500 computer and generate management reports.

Your sales ledger file can be interrogated to provide comprehensive age analysis reports to disclose the real facts about your investment in debts. Your stock ledger, cost ledger and other vital files can be reviewed to reveal the need for action and to achieve control by exception.





This desk top tape reader feeds facts to the 500 at 20 times the speed of a human operator. Right first time — every time. To increase the return on your investment in the machine and the productivity of your operator and your system. For less than 10 per cent on the price of the machine.



This desk top tape punch captures live data generated by your 500 computer. For automatic re-entry to the system. To generate management reports, telling you the facts you need to know. About your investment in customer debts, your sales performance, stock position, and expenditure control. For less than 10 per cent on the price of the machine.

High speed printing

## ws with your business

### INTEGRATED DATA PROCESSING

To increase your command of facts on file the magnetic ledger files of the basic 500 system can be supported by fast-moving computer language files on paper tape and punched cards. This is not just a matter of matching expansion in the volume of your business transactions. You will want to increase the scope of your computer operations. The NCR 500 computer grows with your needs.



This high speed paper tape reader reads computer files at the rate of 400 or 600 numeric characters per second — eight or twelve times as fast as the desk top reader. All the file data needed to generate a fully automatic payroll can be stored on a single tape reel.



This high speed paper tape punch enables you to 'up-date' employee's pay records at four times the speed of the desk top punch.



Versatile punch card peripherals 'up-date' your NCR 500 computer with reading speeds of 100 and 300 cards a minute with output punching up to 100 cards a minute.

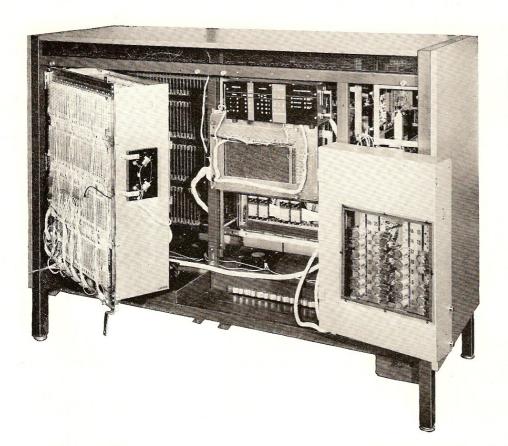
A powerful NCR sorter enables 'off-line' marshalling of input and record files.



This powerful line printer delivers end-results at up to 20 times the speed of the basic multi-form printer. It can be introduced at any point in the expansion of your NCR 500 computer. Invoices, pay advices and other high volume documents are produced at the speed you need to overcome peaks and to match the growth of your business. This frees the multi-form console printer to compile compact meaningful management reports to achieve control by exception.

### EVERYTHING TO GAIN – NOTHING TO LOSE

NCR 500 grows at the speed you need to match the growth of your business. Throughout the complete range of its expansion your 500 computer retains all the benefits of visible computer records on NCR computer cards.



### **POWERFUL PROCESSOR**

The central processor of the 500 system provides *real* computing power in a compact and economical form. All calculations are carried out automatically at speeds measured in thousandths of a second.

Processing is controlled by programs stored in the ferrite core main memory and automatically modified, where necessary, while the work is in progress. For this reason the 500 has the versatility of much larger and more costly EDP systems.

The memory holds 9,600 digits of data in the form of 800 12-digit 'words'. This enables the 500 to use complex programs far beyond the scope of mechanically controlled systems . . . and also makes it possible to perform such operations as the simultaneous analysis of results under several hundred heads.

Of solid-state construction, the processor employs the latest developments in 'wire wrap' circuitry. It is based on NCR's experience of building thousands of computers for businesses throughout the world.

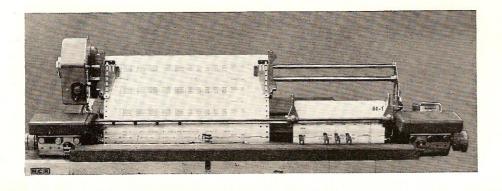


#### DIRECT-ENTRY CONSOLE

With the 500 system described here, you have two methods of input – direct entries through the console and automatic entries from magnetic cards. This combination provides the most practicable approach to many data processing operations.

By drawing on its unrivalled experience of direct-entry accounting systems, NCR has developed a console that is fast and easy to operate, yet far more versatile than the type normally available to computer users.

Two logically-arranged keyboards enable even inexperienced operators to enter alphanumeric data at high speed. The numeric keyboard accepts both *sterling and decimal figures* and is controlled by a single motor bar.



### **MULTI-FORM PRINTER**

One of the big advantages of the 500 system is that complete sets of working documents – for example, invoice, statement, sales ledger and sales journal – can be produced automatically as part of the data processing operation.

The printer, directly controlled by the processor, has a 26-inch printing line and handles all types of document from continuous stationery to magnetic cards.

## NCR 500 computer fills the gap between conventional VRC and EDP

### 1 Direct entry computing

Visible computer records on magnetic ledger cards.

All the facts you need to know – on NCR computer cards.

### 2 Automatic input and output

Low cost desk-top units automate live entry, capture live data. Automatic handling of magnetic ledger cards.

### 3 Integrated data processing

Computer language files on punched tape, punched cards.

### 4 High speed printing

Powerful line printer speeds results, beats peaks, contains expansion.

NCR 500 - The biggest small computer in the business.



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