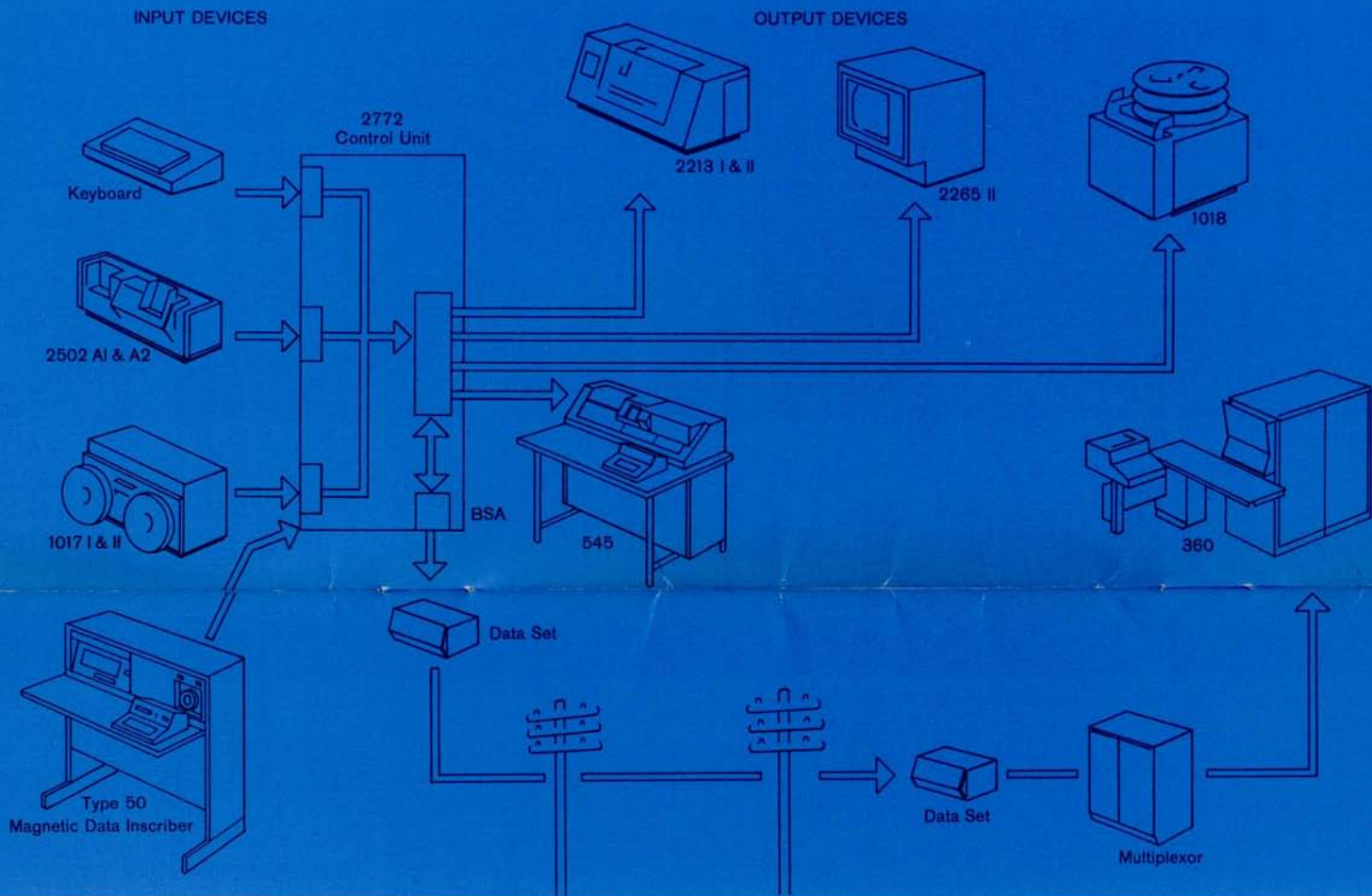


IBM field engineering announcement





The IBM 2770 Data Communication System

is a medium speed, modular, general purpose terminal for both batch and inquiry operation.

- Twin Buffer Blocks for better line utilization.
- Transmission Line Rate 600 (World Trade only), 1200, 2000 or 2400 bits/second.
- Binary Synchronous Communications.
- Consists of the following units:

2772	Multi-Purpose Control Unit with Keyboard
2213	Printer, Model 1 and 2
2502	Card Reader, Model A1 and A2
545	Output Card Punch, Model 3 and 4
2265	Display Station, Model 2
1017	Paper Tape Reader, Model 1 and 2
1018	Paper Tape Punch
50	Magnetic Data Inserter
1255	Magnetic Character Reader

The IBM 2772 Multi-Purpose Control Unit

is a buffered transmission unit which controls the flow of data to and from the various I/O devices and the communication facility.

Configurations

The 2772 Control Unit provides for attachment of a printer and any two different media (display, magnetic tape, card I/O, and paper tape I/O). Two Type 50 Magnetic Data Inscrivers can be attached by one input adapter and will be considered one input device.

Standard Features

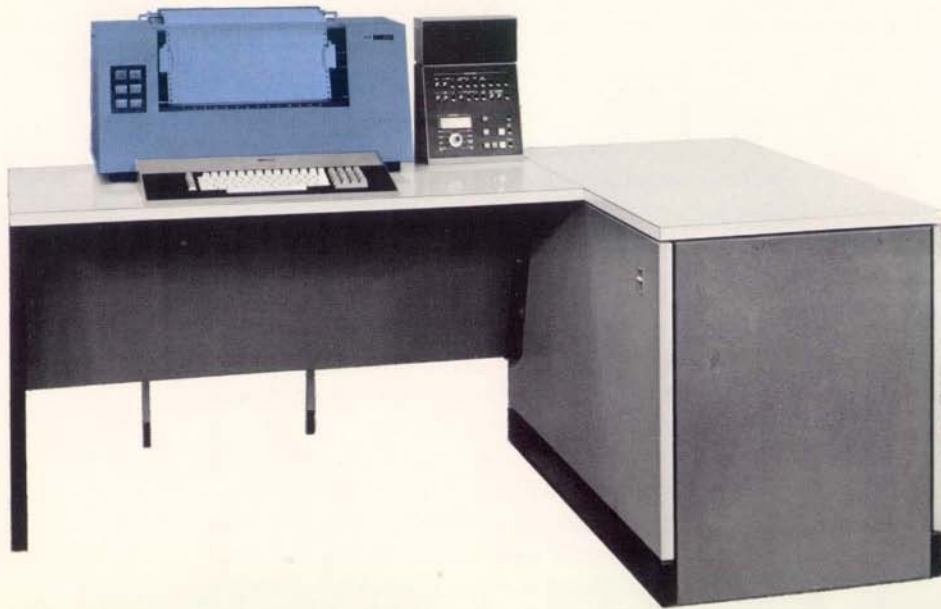
- Line Mode as well as "Home Loop" operation.
- Two 128 position monolithic buffers.
- Keyboard for data entry and manual control of 2770 System.
- Line Checking with Automatic Retransmission.
- One Format Control Rotary Switch for job set-up.
- Audible Alarm to indicate need for manual intervention.
- Processor Interrupt for CPU intervention of terminal transmission.

Optional Features

- Buffer expansion to two 256 position buffer blocks.
- Multipoint Data Link Control for multiple terminals on a line.

- Automatic Answering for dial facilities.
- Transmit Receive Monitor Print Feature will print data after it has been sent or received by another I/O device.
- EBCDIC Transparency permits transmission of all EBCDIC codes as data.
- Keyboard Correction allows Backspace and New Line correction of data in the buffer.
- Conversational Mode accepts text response to an inquiry without prior selection.
- Display Format Control enables horizontal tabulation and data protection.
- Synchronous Clock for use with 1200 BPS data sets (no Data Set clock).
- Identification provides a two character identification sequence upon transmitting the first time after establishing a switched line connection.

Data System Category



The IBM 2213 Printer

is a printer using a modified 7 by 5 dot matrix pattern of print wires to form characters. The print head moves a vertical column of seven print wires across the paper. As the print head moves each wire can "fire" up to five times per character. Half-way "firing points" may be selected for better character resolution. A lead screw, driven by a stepper motor, moves the print head carrier across the print line at 6.6 inches per second. The carrier returns at 16 inches per second.

Available in Two Models

The 2213 Model 1 has a friction feed platen and may use a pin feed platen.

The 2213 Model 2 utilizes a Vertical Forms Control (VFC) carriage.

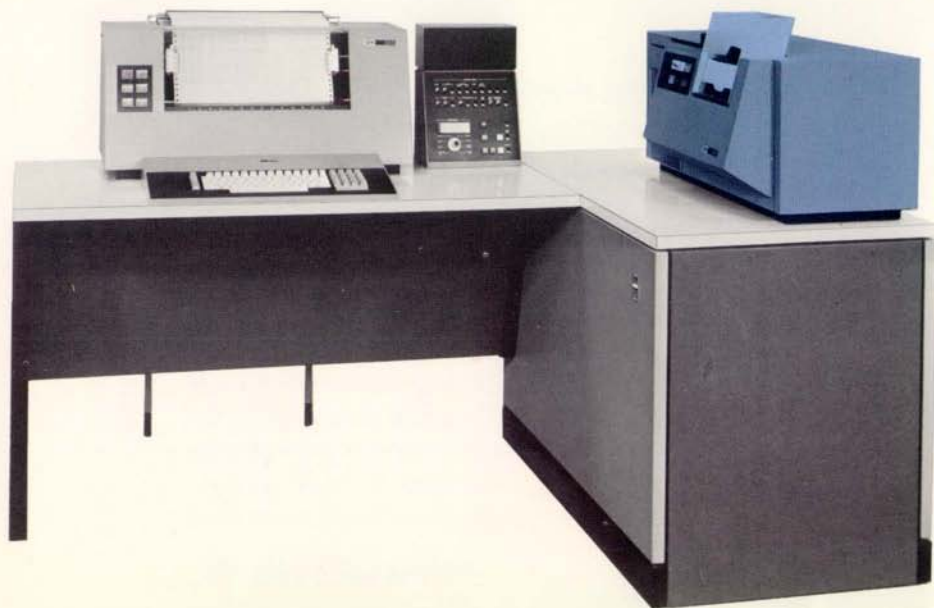
Standard Features

- Serial Printing at 66 characters per second.
- 10 character per inch horizontal spacing.
- 132 character print line.
- Line Feed Select Lever for single or double line spacing. (Model 1 only)
- Forms Rack (Model 2 only)

Optional Features

- Forms Stand Stacker for friction feed platen. (Model 1 only)
- Pin Feed Platen. (Model 1 only)
- Roll Paper Feed. (Model 1 only)

Data System Category



The IBM 2502 Card Reader

is a serial card reader used for automatic entry of punched card data to the transmission line or the off-line operating I/O devices.

Available in Two Models

The 2502 Model A1 reads cards at up to 150 cards per minute.

The 2502 Model A2 reads cards at up to 300 cards per minute.

Standard Features

- 700 card Hopper capacity.
- 600 card Stacker capacity.

Optional Features

- 51/80 Column Interchangeable Feed.
- 66/80 Column Interchangeable Feed.

Data System Category



The IBM 545 Output Card Punch

is a serial output punch for systems use and also performs the functions of the basic IBM 29 Card Punch.

Available in Two Models

The 545 Model 3 is a non-printing output punch operating at a speed of 20 columns per second.

The 545 Model 4 will print a 48 or 64 character set at a rated speed of 18 columns per second.

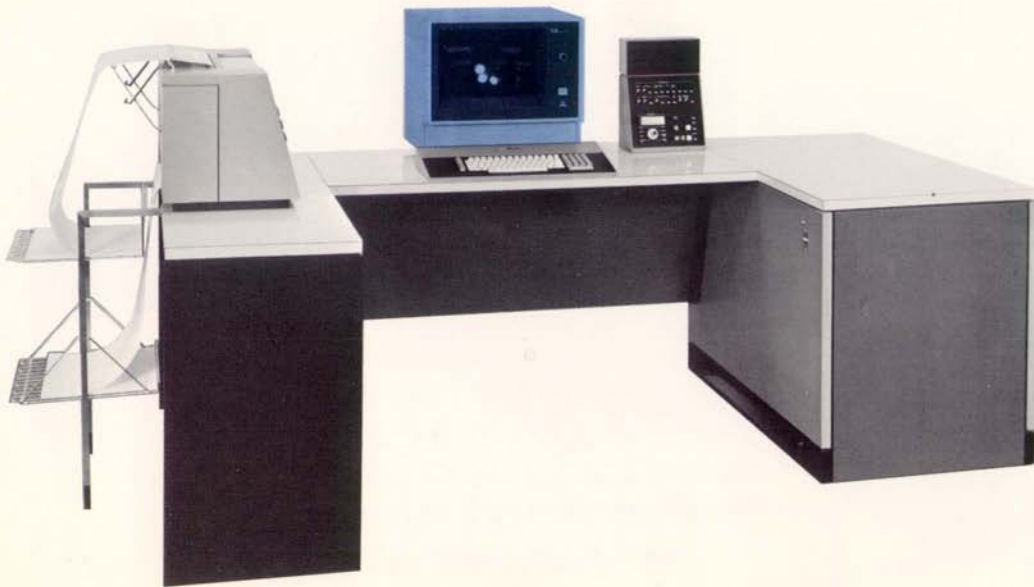
Standard Features

- Keyboard, control switches, and program control for preparation of data off-line.
- Skips and Releases at 80 columns per second.
- Print Protect will permit punching of codes outside the 64 character subset without damage to the print unit (Model 4).

Optional Features

- Punch 81 Indication.

Data Recording Category



The IBM 2265 Model 2 Display Station

is a 14-inch cathode ray tube displaying data characters formed by a stroke generation technique.

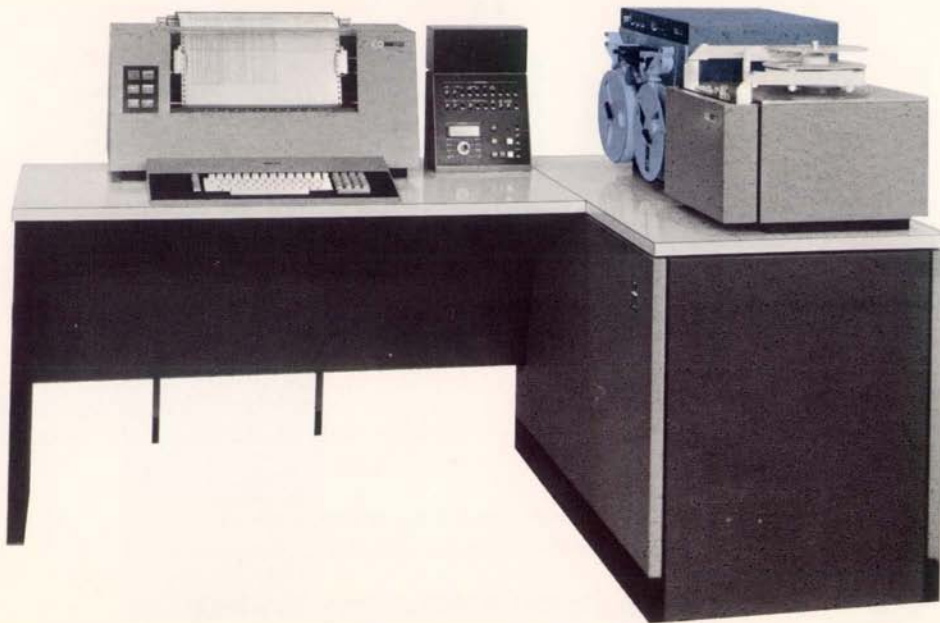
Standard Features

- 960 character capacity.
- 2 Formats
 1. 15 rows, 64 characters per row.
 2. 12 rows, 80 characters per row.
- 36 Alphanumeric and 28 special characters.
- Cursomatic Action by sustained pressure on cursor control keys.

Optional Feature

- Display Format Control provides Horizontal Tab and Data Protection.

Data System Category



The IBM 1017 Paper Tape Reader

provides data input by reading either chad type punched paper tape or punched laminated polyester tape.

Available in Two Models

The 1017 Model 1 reads strips of punched tape.

The 1017 Model 2 includes a supply and take-up reel for reading tape in strips or from reels.

Standard Features

- Reads $1\frac{1}{16}$ inch 5 track, $\frac{7}{8}$ inch 6 and 7 track, or 1 inch 8 track tape.
- Odd, Even or No Parity operation can be selected.
- Supply and Take-up Reels have approximately 1,000 feet capacity.
- Reading Speed is rated at 120 characters per second.

Data System Category



The IBM 1018 Paper Tape Punch

provides data output by punching chad type paper or laminated polyester tape.

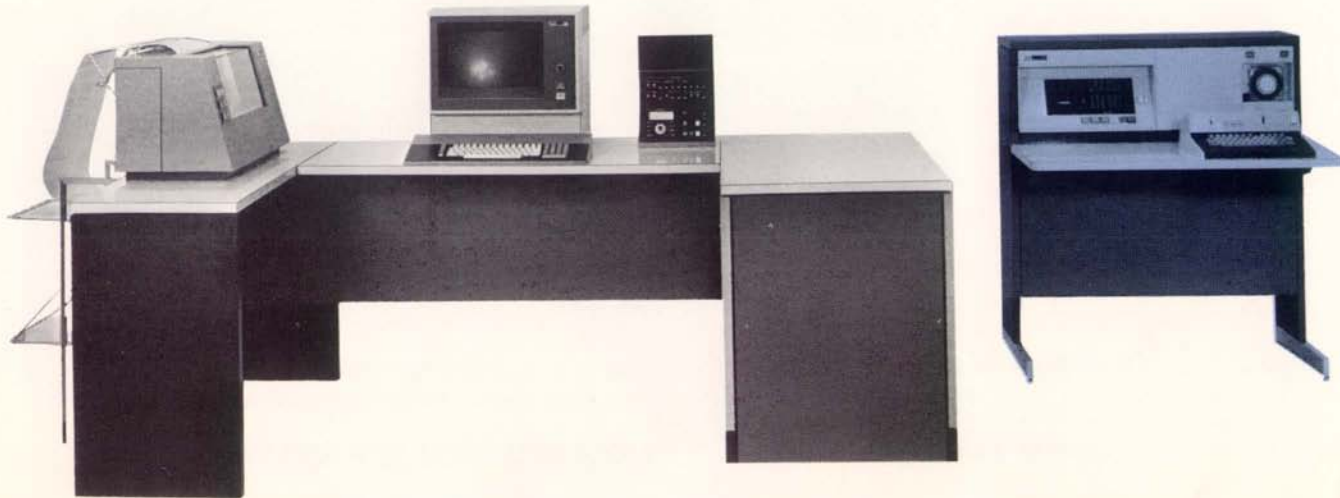
Standard Features

- Punches $1\frac{1}{16}$ inch 5 track, $\frac{7}{8}$ inch 6 and 7 track, or 1 inch 8 track tape.
- Supply Reel with 1,000 feet capacity.
- Punching Speed is rated at 120 characters per second.

Optional Feature

- Take-up Reel

Data System Category



The IBM 50 Magnetic Data Inscrber

is a magnetic tape key entry machine employing a 16mm sprocketed tape and an incremental tape drive. The 50 Magnetic Data Inscrber will be used to input data for transmission.

Standard Features

- Recording Density of 20 Bits per inch.
- Nine tracks (8 plus parity)
- All basic functions of the IBM 29 Card Punch.
- Left zero (fill).
- Eight Program levels—50 fields on program card.

- Character Display active during readout.
- Field and Record Backspace can be used during Write Mode to correct keying errors.
- Automatic functions (skip, duplication and left zero) executed at 117 characters per second.

Data Recording Category



The IBM 1255 Magnetic Character Reader

is a six-pocket magnetic character reader/sorter designed for low volume banking locations.

Standard Features

- Reads/sorts up to 500 six inch documents per minute.
- Checks character validity while sorting.
- Checks fixed field lengths (when activated) while sorting.
- Single gap reading technique.
- Sorts on any field.

Optional Features

- Balance list allows pre-transmission balancing of stacked document batches.
- Dash Symbol Transmission to distinguish between duplicate foreign and U.S. transit numbers.
- 51-Column Card Sorting.
- Self-Checking Number for checking Modulus 10 or 11 self-check digit account numbers up to 10 positions including the self-check digit and dashes.

Data System Category

Maintenance

Maintenance of the IBM 2770 will be accomplished by the use of operator console overlays, built in CE Box, and the following tests:

On-Line Test Feature

- Binary Synchronous on-line test messages performed on a terminal to processor system.

On-Line Terminal to Terminal Tests

- A method of testing point-to-point terminals. The routines will exercise input I/O, control units, binary synchronous adapters and output I/O.

Control Unit Off-Line Tests

- General Home Loop Tests
- Initial Conditions
- CE Load
- CE Display
- Input/Output
- IRS Recognition and Control
- End of File
- Clock Test
- Audible Alarm
- Transparency Control
- Monitor Print

Communication Off-Line Tests

- These tests will exercise the Binary Synchronous Adapter by using a CE Serializer—Deserializer which acts as another terminal. The CE SERDES transmits data to and receives data from the terminal SERDES.

Line Simulation Tests

- Isolate Binary Synchronous Adapter failures from the common carrier and the Control Unit Interface.

Keyboard Tests

- Direct Data Transfer
- Keyboard Locking Function
- Keyboard Enter Function
- Keyboard Start
- Keyboard Correct Feature

I/O Attachment Tests

- A set of tests to exercise each I/O and attachment in Home Mode.

PRINTED IN USA 226-3011-0

IBM

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