



3270

Information
Display System
Enhancements

PRODUCT DESCRIPTION

The IBM 3270 Information Display System is being enhanced with additional machine types that are data stream compatible with existing 3270 products.

They include:

- 3274 Control Unit
- 3276 Control Unit Display Station
- 3278 Display Station
- 3287 Wire Matrix Printer
- 3289 Line Printer

A wide range of attachment, configuration and feature capabilities are offered to meet the needs of on-line information processing applications. For example, existing 3270 displays and printers can attach to the new 3274 Control Unit. 3270 Compatible mode is provided for existing applications, thereby requiring little or no re-programming.

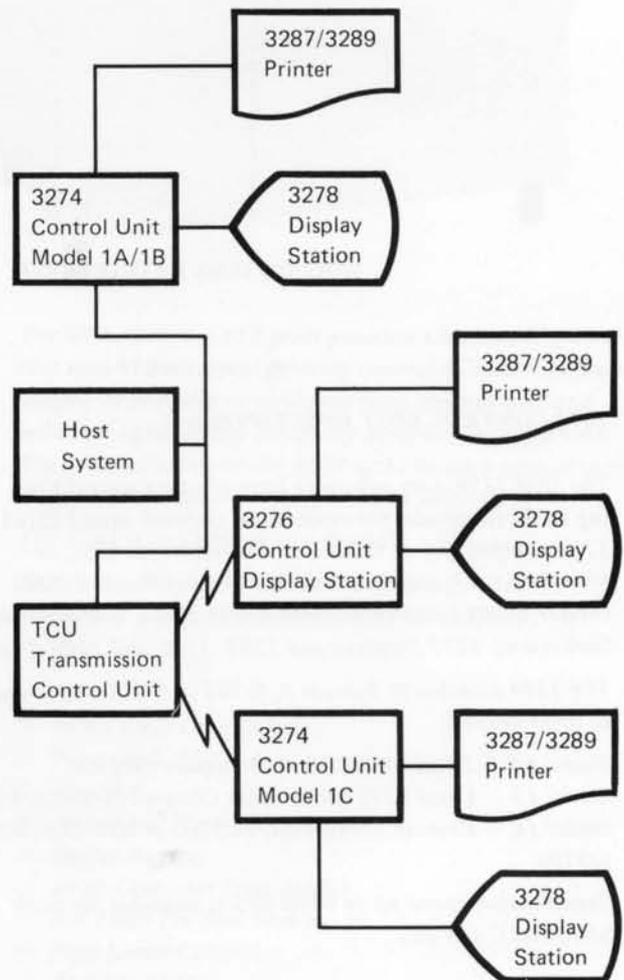
Improved Operator Factors on the new Display Stations :

- Anti-glare screen - Reduces reflections
- Operator symbols on display screen
- Keyboard - Lower with full-width hand rest

Enhancements available on the new Display Stations :

- 96-Character Set Display displays both upper and lower case
- Mono-case/Dual-case Switch
- Cursor Home Key
- Operator Selectable Alternate Cursor (character reversal, underline, blink or solid display.)
- Print and Printer ID Keys (operator initiated print)
- Extended Select (cursor select and selector pen operation)

Note: Keyboards used on 3275/3277 machines are not interchangeable with keyboards used on 3276/3278 machines.



All photos in this brochure are of design models



3274 CONTROL UNIT DESCRIPTION

The IBM 3274 is an enhanced large cluster Control Unit (up to 32 terminals) for either local channel attach (SNA or 3272 compatible) or remote communications (BSC or SNA/SDLC). It attaches the 3278 Display Station, 3287 Printer, 3289 Line Printer, and also attaches, with certain limitations, 3277 Displays and 3284, 3286 and 3288 Printers.

The 3274 attaches to System 3, S/360 or S/370 and is available in three models:

Model 1A – Local SNA Channel Interface (S/370)

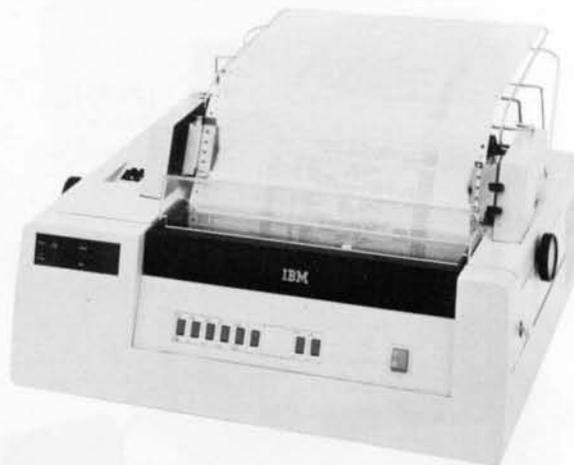
Model 1B – Local 3272 Compatible Channel (S/360, S/370)

Model 1C – Remote SNA/SDLC (S/370) or BSC (S/3, S/360, S/370)

Transmission speed up to 9600 BPS is available for both SNA/SDLC and BSC.

3274 SERVICEABILITY/MAINTENANCE FEATURES

- Customer Problem Determination Guides (PDGs)
- Internal Diagnostics
- Sub-system Error Logging
- CE/Operator Panel
- Maintenance Analysis Procedures (MAPs)
- No Scheduled PM



3287 PRINTER DESCRIPTION

The IBM 3287 is a 132 print position wire matrix printer that uses bi-directional printing control to attain increased output. It provides control functions, printer unit and indicator lights in one integrally designed desk-top unit.

The 3287 attaches to the 3274 or 3276 via a coaxial cable and is interchangeable with the 3278 displays.

The 3287 is available in two models:

Model 1 – 80 CPS Maximum Printing Speed

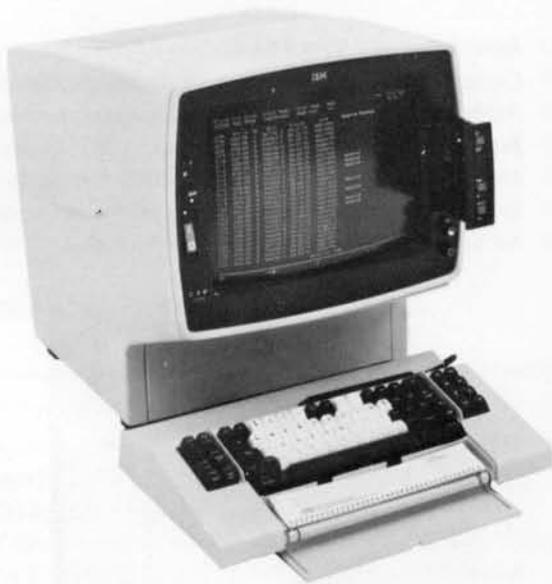
Model 2 – 120 CPS Maximum Printing Speed

3287 FEATURES

- Mono/Dual Case Switch
- Paper Roll Holder & Forms Guide with Paper Tear Bar
- Automatic Horizontal Skip
- Buffer Reprint
- 1920 Character Print Buffer
- 6/8 Lines Per Inch Switch
- Page Length Control
- Audible Alarm
- Single/Double Spacing
- X Print Error Indication

3287 OPTIONAL FEATURES

- Variable Width Forms Tractor
- Forms Stand (Purchase Only)
- Extended Printer Buffer 2K



3276 CONTROL UNIT DISPLAY STATION DESCRIPTION

The IBM 3276 is a teleprocessing control unit and display station which may operate as a standalone display or may attach up to seven dependent displays (3278s) and/or printers (3287s) to form a cluster of up to eight devices.

A switch panel is located in a drawer on the right hand side of the CRT, and is readily accessible by the operator or CE from the front of the machine. Operator indicators and switches located on this panel are used to easily set the address and modem transmit level, where permitted, as well as indicate error conditions when the customer is using the Problem Determination Guides (PDGs).

The IBM 3276 is available in eight models varying in character display capability (960 to 3440 characters) and line control (SNA/SDLC or BSC).

- Model 1/11 – 960 Character CRT Display*
- Model 2/12 – 1920 Character CRT Display*
- Model 3/13 – 2560 Character CRT Display*
- Model 4/14 – 3440 Character CRT Display*

3276 SERVICEABILITY/MAINTENANCE FEATURES

- Customer Problem Determination Guides (PDGs)*
- Customer Accessible Test Mode Switch and Indicators*
- Internal Diagnostics*
- Sub-system Error Logging*
- Maintenance Analysis Procedures (MAPs)*
- No Scheduled PM*

3278 DISPLAY STATION DESCRIPTION

The IBM 3278 is an enhanced, cathode-ray tube (CRT) display station that attaches to the 3274 Control Unit or the 3276 Control Unit Display Station via coaxial cable identical to that which is used to attach 3277s, 3284s, 3286s and 3288s to 3271s or 3272s. 1500 metres (4,920 feet) maximum cable length is now standard. The 3278 is available in four models:

- Model 1 – 960 Character CRT Display*
- Model 2 – 1920 Character CRT Display*
- Model 3 – 2560 Character CRT Display*
- Model 4 – 3440 Character CRT Display*

3278 SERVICEABILITY/MAINTENANCE FEATURES

- Maintenance Analysis Procedures (MAPs)*
- Customer Problem Determination Guide (PDG)*
- Sub-system Error Logging*
- Off-line Tests*
- Customer Accessible Test Mode Switch and Indicators*
- No Scheduled PM*

3287 SERVICEABILITY/MAINTENANCE FEATURES

- Basic Assurance Test (BAT)
- Customer Problem Determination Guides (PDGs)
- Alphanumeric Readout and Indicators
- Internal Diagnostics
- Maintenance Analysis Procedures (MAPs)
- Sub-system Error Logging
- No Scheduled PM



3289 LINE PRINTER DESCRIPTION

The IBM 3289 is a 132 print position, front loading line printer which is available in two models:

- Model 1 – 40, 80, 120 or 155 LPM (127, 94, 64 or 48 Char. Set)
- Model 2 – 160, 230, 300 or 400 LPM (127, 94, 64 or 48 Char. Set)

3289 FEATURES

- Monocase Print Capability
- 6 or 8 Lines Per Inch
- 4K Print Buffer
- Variable Width Forms Tractor
- Variable Width Forms Control
- Forms Stand/Stacker
- Automatic Vertical Index
- Vertical Forms Control/Forms Feed
- SNA Character String Support
- Buffer Reprint Facility

3289 OPTIONAL FEATURES

- Audible Alarm
- Isolated Print Error Indication

3289 SERVICEABILITY/MAINTENANCE FEATURES

- Customer Problem Determination Guides (PDGs)
- Alphanumeric Readout Indicators
- Basic Assurance Test (BAT)
- Internal Diagnostics
- Sub-system Error Log
- Maintenance Analysis Procedures (MAPs)
- No Scheduled PM

PROGRAMMING SUPPORT

Programming support for these products will be provided by the following:

- System Control Programs and Components: OS/VS1, OS/VS2 (SVS and MVS), DOS/VS, TSO, DIDOCS (1920,3274 model 1B only), VM370 and ACP.
- Telecommunications Support: BTAM, TCAM, VTAM, NCP, TSO/TCAM, TSO/VTAM, CICS/EXTM and NOSF.
- Program Products: CICS, IMS, and certain other products supporting 3270.

TECHNOLOGIES

- Large Scale Integration (LSI)
- Field Effect Transistor (FET)
- Random Access Memory (RAM)

IBM CAREER PATH

The 3274, 3276, 3278, 3287 and 3289 are "Data Recording" DPCE Career Path products. When attached to System/3, these products will be serviced by GSD Customer Engineering.

SUB – SYSTEM SUPPORT

Subsystem error statistics are recorded at the Control Unit (3274/3276) and are displayable within the subsystem via a 3276/3278.

CUSTOMER SET-UP (CSU)

The 3274 Model IC, 3276, 3278, 3287 and 3289 are designed to be set-up by the customer. Customer set-up offers the customer early availability and relocation flexibility. Set-up instructions provide step-by-step procedures for set-up, connections, switch settings and check-out of each machine.

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