

IBM 3770
Data Communication System

IBM
3770

3770 Communication System Description

The IBM 3770 Data Communication System is a family of micro-code controlled, operator oriented, remote terminals and input/output devices.

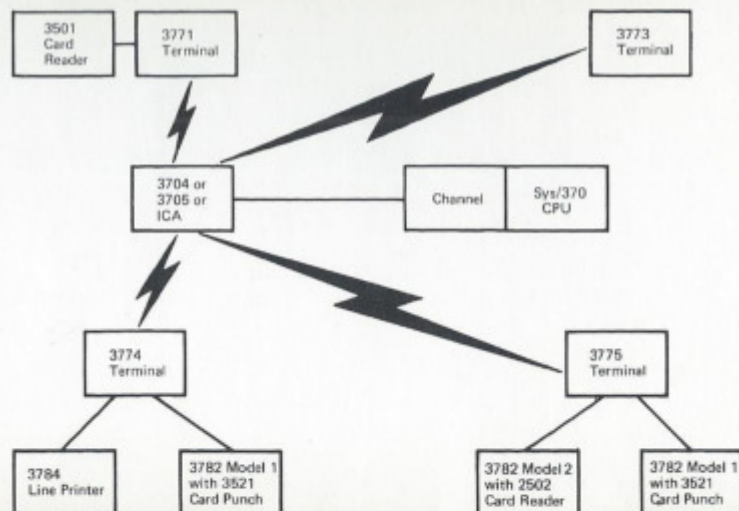
This is a general purpose system, and can be attached (via an adapter) to all System/370 models. It also provides serviceability features which enhance the service approach.

The terminals consist of various combinations of keyboard, printer, and control units, housed in a desk type console. These terminals can be upgraded in the field to meet user needs for batch operation, input/output attachments, opera-

tor aids, and throughput enhancements.

The 3770 Data Communication System consists of the following units:

- 3771 Communication Terminal Models 1 and 2
- 3773 Communication Terminal Models 1 and 2
- 3774 Communication Terminal Model 1
- 3775 Communication Terminal Model 1
- 3782 Card Attachment Unit Models 1 and 2
- 3784 Line Printer Model 1



3771 Models 1 and 2

Model 1 has a 40-character-per-second bidirectional wire matrix printer, and a capacitive coupled keyboard. The printer in the Model 2 can print 80 cps bidirectional. These terminals are suitable for interactive communications, and with the addition of optional devices can be made effective as card batch terminals.

3771 Optional Features

Customers may at their option order:

- Communication driver with or without business machine clock.
- Operator identification reader.

- 1200 bps integrated modem
- SDLC/BSC, switch control
- BSC point-to-point
- BSC multipoint
- SDLC
- Audible alarm
- Keylock (electrical)
- Variable width forms tractor
- Door keylock
- External modem attachment up to 4800 bps

In addition the user can order one of the following:

- 3501 Card Reader Attachment
- 3521 Card Punch Attachment

Both the 3501 and 3521 will operate at speeds up to 50 cpm.

3773 Models 1 and 2

Model 1 features a matrix printer at a speed of 40 characters per second, a capacitive coupled keyboard, and flexible disk storage with a capacity of 242,000 bytes. The Model 2 has a matrix printer with maximum speed of 80 cps. Both models are suitable for interactive communications but will be used primarily at batch output terminals.

3773 Optional Features

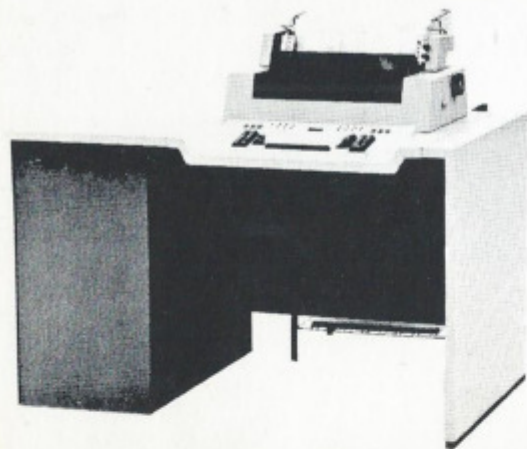
The 3773 offers all the optional features as the 3771 except for the 3501 Card Reader and 3521 Card Punch attachments.

3774 Model 1

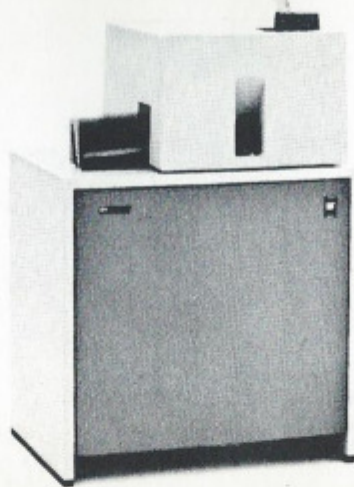
Highlights of the 3774 Communication Terminal Model 1 include a capacitive coupled keyboard and an 80 cps bidirectional wire matrix printer. Optional features tailored to fit individual customer needs make this device a multimedia batch terminal.

3775 Model 1

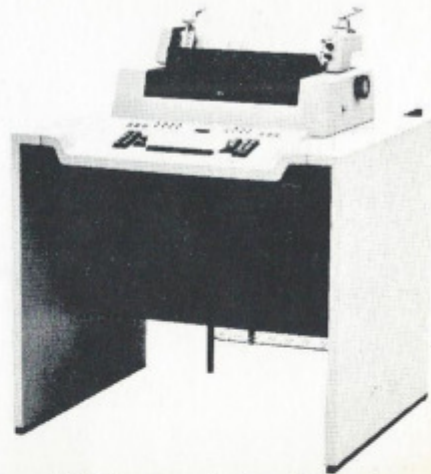
This terminal also is designed for multimedia batch operations. The 3775 has the same optional features and keyboard available for the 3774. Model 1 has an 80 or 120 lines-per-minute belt printer rather than the wire matrix printer.



3773/3774 Communication Terminal



3782 Card Attachment Model 1 with 3521 Card Punch



3771 Communication Terminal



3784 Line Printer



3782 Card Attachment Model 2 with 2502 Card Reader



3775 Communication Terminal

3774/3775 Optional Features

All of the features offered for 3771 and 3773 are available on the 3774 and the 3775. In addition, the following options may be ordered:

- 2400 bps integrated modem
- 2502 Card Reader Attachment
- 242K byte flexible disk storage
- Second 242K byte flexible disk storage
- 3784 Line Printer Attachment (3774 only)
- Record format feature

3782 Models 1 and 2

The 3782 Models 1 and 2 are not terminals but do attach to various terminals as outlined in optional features to provide card oriented input/output devices. 3782 Model 1 provides dc power and acts as a convenient stand for the 3521 Card Punch Unit.

The 3782 Model 2 is a control unit, provides dc power and acts as a stand for the 2502 Card Reader.

3782 Model 2 Optional Features

Optical mark read (in conjunction with the same feature on the 2502 Card Reader).

3784 Line Printer Model 1

The 3784 Line Printer provides expanded printing capability for the 3774 Communication Terminal.

The 3784 features an 80 or 120 lines-per-minute belt printer similar to the one used in 3775, and 155 lpm with 48 characters. The 3784 can be serviced in an offline mode because of the diagnostic package.

Basic Features

All of the terminals and the line printer use a common controller with microcoded functions.

The operator panel features include 16 light emitting diode indicators and a three-position digital LED display. Six toggle switches which enable the operator to exercise control functions, such as altering data on a disk file, are included in addition to the keyboard.

System Attachment

All 3770 terminals can communicate with all System/370 models. They are attached via teleprocessing lines to 3704 or 3705 Communications Controllers, or by communications adapters on Models 115 and 125. System programs supporting 3770 are DOS/VS, OS/VS1, and OS/VS2.

Serviceability

The 3770 Data Communication System offers the latest service techniques. Functional packaging of field replaceable units allows for rapid fault isolation and repair.

Serviceability features include:

- Integrated service manuals
- High level system diagrams
- MAP charts
- Resident diagnostic exercisers
- Error log
- Communication wrap tests
- A comprehensive offline diagnostic package
- Problem Determination guide

The primary serviceability feature is the offline diagnostic package.

Each terminal and the line printer will have a diagnostic cassette tape shipped with it. CEs servicing the 3770 will have a diagnostic cassette tape reader, adapter card and cable, and a latched indicator card, all of which can be stored in a convenient carrying case. Once the tape reader is connected, the CE will have options of running all or selected tests, running tests with or without manual intervention, or repeating a failing loop. The MAP charts will direct the CE when and how to use diagnostic tests.

These features should allow the CE to repair units of the 3770 system without requiring other customer resources.

FE Career Path

The 3770 Data Communication System is a "Data Recording" FE career path product.

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Printed in USA G226-3509-0