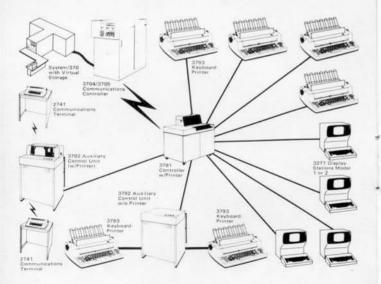# IBM

3790

Communications System

3790 COMMUNICATIONS SYSTEM DESCRIPTION

The IBM 3790 Communications System is a programmable, operator oriented terminal system. The 3790 is ideally suited for data entry, data inquiry, calculation, and document preparation. An intelligent, communication based system, the 3790 provides for the clustering of up to sixteen operator stations. These stations may include 3277 Mod 1 and/or 2 Displays and data entry orientated 3793 Keyboard Printers. The 3790 system also supports the attachment of remote 2741 Communication Terminals via an appropriate communication facility and, as a feature, 120 line-per-minute printers.

The IBM 3790 Communications System consists of the following machines:

- IBM 3791 Controller (Model 1 and Model 2)
- IBM 3792 Auxiliary Control Unit
- IBM 3793 Keyboard-Printer
- IBM 2741 Communications Terminal
- IBM 3277 Display Station

3791 Description

The IBM 3791 is a programmable control unit that serves as the base for the 3790 Communications System by providing for a cluster of operator stations at maximum distances of 48 feet (3793) or 2000 feet (3792 and 3277).

The 3791 attaches the terminals of the 3790 system to a System/370 (Model 125 and above) with virtual storage. Attachment is by means of the 3704 or 3705 communications controller.

3791 Basic Features

- Field Effect Transistor (FET) randon access memory.
- Integrated disk unit using IBM diskettes.
- Synchronous data link control interface to host system.
- Operator panel for function and data selection using a rotary switch and hexidecimal LED display.

3791 Special Features

- 1200 baud integrated modem or external modem.
- Up to 8.3 megabytes of Disk Storage in 3791 Mod 1, or 26.9 megabytes in 3791 Mod 2.
- Line printer provides up to 120 LPM, up to 132 print positions, and up to 96 character font (128 character font katakana feature.)
- Power on Keylock.
- Attaches up to sixteen IBM 3277 Display stations Model 1 and/or Model 2.
- Attaches up to three IBM 3792 Auxiliary Control Units.
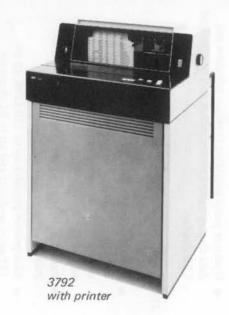- Attaches up to four IBM 3793 Keyboard Printers.

3791 Model 1
without printer

3791 Model 1
with printer

3793

3791 Model 2
with printer

3792
with printer

3277

3792 Description

The IBM 3792 Auxiliary Control Unit provides for the attachment of 3793 Keyboard-Printers, communication lines for 2741 Communications Terminals and, as a feature, a line printer. The 3792 can be attached to the 3791 at a distance of up to 2000 feet.

3792 Basic Features

- Operator panel providing function selection and data display using a rotary switch and hexidecimal LED display.

3792 Special Features

- Communications Multiplexer provides dial-in capability for one or two IBM 2741 Communications Terminals using either integrated line adapters or EIA modem interface.
- Attachment of up to four IBM 3793 Keyboard Printers.
- Line printer provides up to 120 LPM, up to 132 print positions and up to 96 character font (128 character font katakana feature.)

3793 Description

The IBM 3793 Keyboard Printer is a modified 72 I/O II device with special indicators and keys provided for customized applications.

3793 Special Features

- Pin Feed
- Power Line Keylock

SYSTEM PROGRAM SUPPORT

The 3790 Communications System will be supported by Synchronous Data Link Control (SDLC)

- Switched line
- Leased line
- 3704/3705 with Network Control Program
- Host support is DOS/VS VTAM, OS/VS 2 VTAM or OS/VS1 VTAM.

Programs which operate in the host System/370 and complement the 3790 Communications System are:

- Function Support Program
- Subsystem Support Services
- User Application Program Support

The subsystem support services provide facilities to enable the customer to:

- Create operational 3790 system functions.
- Transmit the 3790 system functions from the host to the 3791 controller.
- Maintain the 3790 system functions.

The user application program support will be used to by the customer to write industry oriented application programs. These application programs are transmitted to the 3791 controller where they are made operational through interpretive routines.

The Function Support Program will be used to exercise and test the compiled programs on the host system prior to transmission and loading into the 3791 controller.

SYSTEM SERVICEABILITY

The 3790 system incorporates the latest service techniques and intergrated service approach. Serviceability features and documentation, in conjunction with spare field replaceable units (FRU's), have been designed to complement each other in affecting rapid fault isolation and repair.

Serviceability features include:

- Rapid removal, replacement, and adjustment of all FRU's.

- Large Scale Integration (LSI) functionally packaged for minimum FRU's.

- Integrated service manual provides a complete service library.

- Problem Recovery Procedures which will assist the customer in identifying the failing unit within the system.

- MAP charts.

- Resident Unit Exercisers.

- Automatic checkout routines verify controller operation at each Initial Program Load (IPL).

- Error recording.

- Error messages displayed on 3793 or 3277.

- Communication wrap tests.

- Off-line diagnostic package.
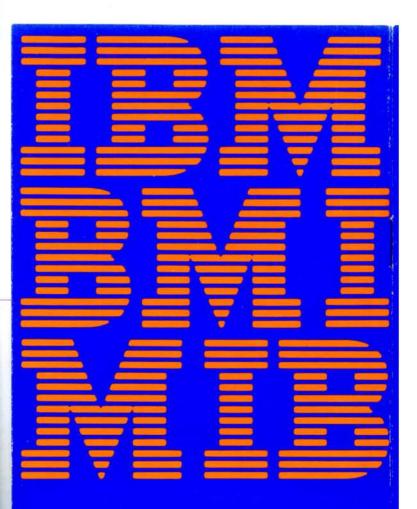
System Reliability

- Soft error recovery on data transmissions to and from the controller.

- Error checking of data transmissions to and from the controller.

System Technology

- VTL/TTL

- Field Effect Transistor (FET)

- Belt Printer

CE Career Path

The 3790 system is a ''Data Recording'' CE career path product.

IBM
BMI
MIB