



2712 Remote Multiplexor

The 2712 Remote Multiplexor provides a means of receiving information on multiple low-speed lines and concentrating the data so that it can be transmitted on a single high-speed line. Optimum location of the 2712 relative to the remote terminals and the central processing facility provides the communications network user with an effective method of reducing communications line charges without a reduction in systems throughput or efficiency. The 2712 scans multiple lines from remote low-speed terminals and places the bits, one from each line, on a high-speed line in a word form. This word is then transmitted to an adapter at the central processing facility. The adapter separates the word into its respective low-speed inputs. Entry of this data into the central processing unit is under program control.

When data is being transmitted to the remote terminals, the adapter at the central processing facility develops the high-speed word. The 2712 then directs the data on the high-speed line to the proper low-speed line.

The 2712 is available in two models:

Model 1

Ten low-speed input lines that operate at 134.49 baud (1050 and 1060).

Model 2

Fourteen low-speed input lines that operate at 74.2 baud (telegraph terminals).

Features

- A sync bit is transmitted on the high-speed line to keep the 2712 and the transmission unit at the central processing facility in synchronism.
- Card mounted magnetic cores are used for storage and logic control.
- Two bits of storage are provided for each line so that the low-speed line bit can be synchronized to its time slot on the high-speed line.
- The high-speed full-duplex communications line can operate processor-to-terminal and terminal-to-processor simultaneously. This permits some low-speed terminals to be in transmit mode, while others, using the same 2712, are in receive mode.
- The high-speed lines between the 2712 and the central processing facility interface to a Western Electric Data Set 202D or equivalent.
- The low-speed lines at the 2712 interface to: a Local Adapter for direct terminal connection, common carrier data sets, or their equivalents, IBM Line Adapters, or telegraph lines.
- The central processing facility has the manual capability to loop the high-speed send data line to the high-speed receive data line, either at the output of the central processing facility or the 2712. This feature assists in defining trouble areas.

Checking

Out of Sync:

Indicates an out-of-sync condition—The 2712 and the central processing facility are synchronous, and automatically re-sync if an out-of-sync condition occurs.

Address Counter Check:

Indicates that more than one position of memory is being addressed.

Receive Distributor Check:

Checks to ensure that the high-speed receive data is being directed to one low-speed line.

Clock Check:

Indicates an illegal memory-clock sequence.

Diagnostic Features

- Storage register output indicators
- Machine-check indicators
- Machine operation indicators
- Data-entry toggle switches
- Diagnostic panel lamp test
- Check stop—stops machine operation on an error condition, retaining error information.

CE Diagnostic Mode Switch:

1. Enter data into selected memory positions.
2. Display selected memory positions.
3. Scan—Controls the low-speed input lines and cycles machine.
4. Line Cycle—Recycles on any selected line.