

PRODUCT DATA SHEET

INTRODUCTION

The Model 2230MXA-1/MXB-1 disk multiplexer permits several 2200 Series CPUs to share a single Model 2260BC or 2270A disk drive unit. Data on the disk drive is thus made simultaneously available, on-line, to all the CPUs. The multiplexer controller boards allocate disk time to any combination of two, three, or four system CPUs. Participating systems are sequentially polled on an equal priority basis by the multiplexer, until a system is detected attempting to access the disk. At that point, control of the disk is passed to the inquiring system, which is permitted to execute a single disk statement or command. (Multisector transfers may be made by a single statement.) When execution of the single-disk operation is completed, disk control reverts to the multiplexer, which resumes its sequential polling of the system.

DISK MULTIPLEXER CONFIGURATION

The Model 2230MXA-1/MXB-1 multiplexer configuration consists of two, three, or four special multiplexer controller boards and several 12-foot (3.7-meter) connector cables. Extension cables are available if the distance between systems is greater than 12 feet. The multiplexer electronics are contained on special controller boards. The controller boards, which contain the multiplexer electronic elements, can be installed directly in each CPU, where they serve in place of the disk controller boards. The CPUs are linked by special cables that connect with the controller boards.

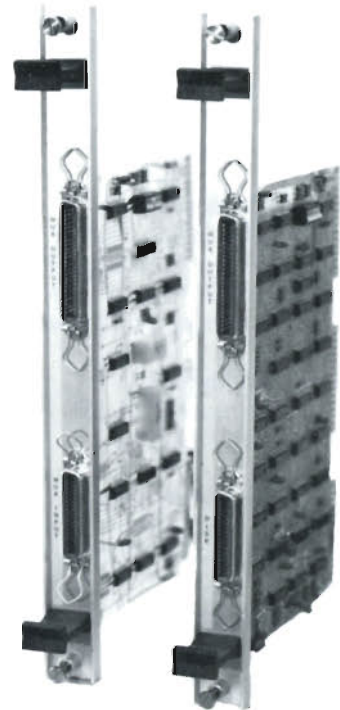
There are two types of multiplexer controller boards: the 2230MXA-1 master controller board (one per configuration) and the 2230MXB-1 slave controller board (one, two, or three per configuration). The master board oversees and controls the entire multiplexing operation. The master CPU (i.e., the CPU with the 2230MXA-1 master board) must be located at one end of the chain and must be connected directly to the disk drive. (It is the only system directly connected to the disk drive.) The 2230MXA-1 master board has a 36-pin connector that receives the disk I/O cable.

Each 2230MXB-1 slave board has one 36-pin input connector to receive the cable from the previous CPU in the chain, and a 50-pin output connector for the cable connecting it to the next CPU in the chain. Figure 1 shows a typical 4-system configuration.

2200

MODEL 2230 MXA-1/MXB-1

- Up to Four CPUs Can Share a Disk
- Up to 536 Feet between the Disk Drive and the Last CPU in the Chain
- Supports Exclusive Use of the Disk Drive by Individual Systems



MXB-1

MXA-1

WANG

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PROGRAMMABLE HOG MODE

Some disk operations, such as the on-line updating of a commonly shared file, require that one system have a period of exclusive and uninterrupted access to the disk. For such operations, a programmable Hog mode feature is provided. In Hog mode, one system temporarily monopolizes the disk, locking out all other systems. Critical file maintenance operations can then be carried out by the privileged system without danger of interruption.

EXTENSION CABLES

A standard 12-foot connector cable is provided with each multiplexer controller board. Additional extension cables are available in lengths of 50, 100, and 200 feet. An extension cable is coupled with a standard connector cable so that there can be an increased distance between successive systems in the chain. Extension cables can be coupled together. In a 2-station configuration, the maximum possible distance between the two systems in the multiplexer chain is 512 feet (two 200-foot extension cables, one 100-foot extension cable, and one standard 12-foot connector cable). If additional stations are added to the multiplexer chain, the maximum distance permitted between consecutive stations is reduced. The maximum distance between

CPU 1 and CPU 4 in a 4-station configuration is 536 feet (two 200-foot extension cables, one 100-foot extension cable, and three standard 12-foot cables). The disk I/O cable connecting the disk to CPU 1 (the CPU containing the 2230MXA-1 master board) cannot be extended; the maximum distance between CPU 1 and the disk is 12 feet.

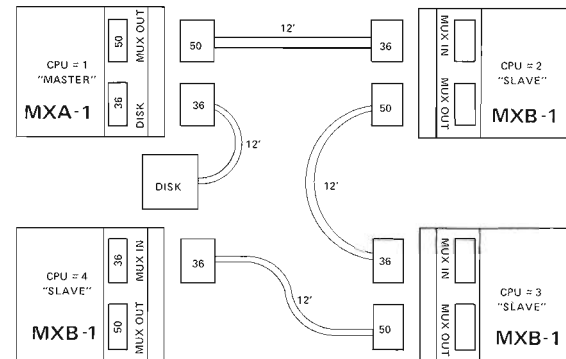


Figure 1
2230MXA-1/MXB-1 Multiplexer
Daisy Chain Configuration
(Four Systems)

SPECIFICATIONS

Standard Equipment

One 2230MXA-1 master controller board and one, two, or three 2230MXB-1 slave controller boards. A standard 12-foot (3.7-meter) connector cable is provided with each 2230MXB-1 slave board.

Optional Equipment

Extension cables of 50, 100, and 200 feet (15.3, 30.5, and 61 meters)

System/Disk Compatibility

2200VP or 2200MVP can be multiplexed with either the 2260BC or 2270A disk drive.

Power Requirements

Multiplexer boards operate off the CPU central power supply

Operating Environment

50° to 90° F (10° to 32° C)

30% to 80% relative humidity, noncondensing

ORDERING SPECIFICATIONS

A disk multiplexer capable of allocating disk time among several independent systems. It must be possible to multiplex Wang 2200 Systems that have disk capability with 2200 Series disk units. The multiplexer must be capable of interfacing a minimum of four separate systems to the same disk. Extension cables must be available in lengths of 50, 100, and 200 feet (15.3, 30.5, and 61 meters) to supplement the standard 12-foot (3.7-meter) connector cables.

Standard Warranty Applies

*Wang Laboratories reserves the right to change specifications without prior notice.
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