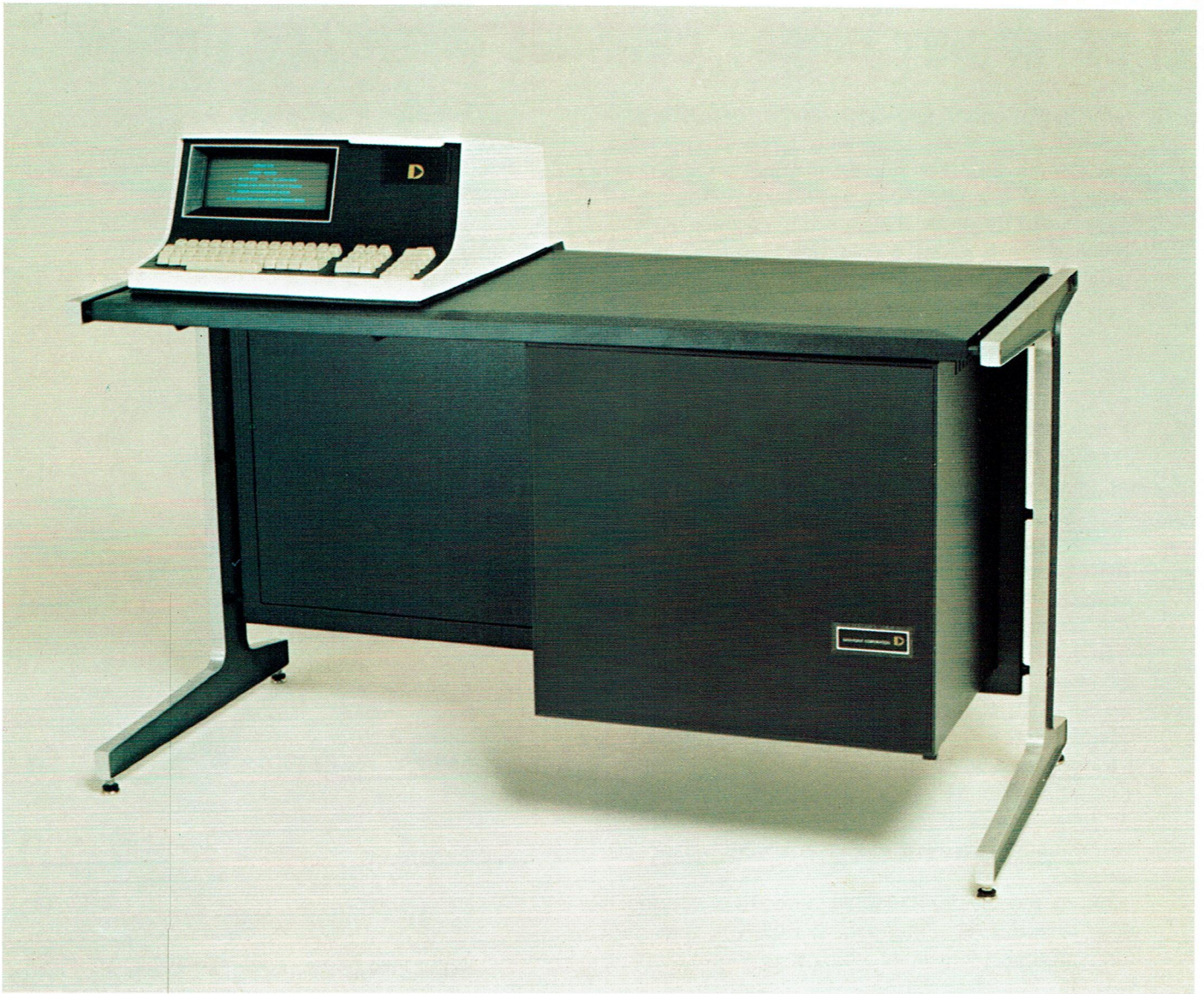


# DATAPoint DIRECT CHANNEL INTERFACE OPTION



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A revolutionary approach to the problem of linking small computers with large mainframes, the Direct Channel Interface Option (DCIO) is a feature of the Datapoint Attached Resource Computer™ System. This option enables IBM computers to share a common database along with a large array of Datapoint processors, for use in an endless variety of applications.

With DCIO, an IBM System/360 or System/370 may be used as one of the ARC™ System's Applications Processors. The IBM mainframe can thus execute application programs in COBOL, BASIC, RPG II, PL/1, and other languages, while utilizing data stored in the ARC database. The IBM computer may continue to operate independently of an ARC system; however, when access to the common database is required, it communicates its requests at high speed through the Direct Channel Interface.

DCIO is a combination of hardware and software that appears to the IBM mainframe as up to eight full-duplex unit record devices. It consists of a dedicated 6000-series Attached Processor, a Resource Interface Module (RIM) for connection to an ARC system, and a Channel Adapter. These three components work together to communicate over the IBM's multiplexer channel.

When the System/360-370 submits a request for data to the ARC database, it receives that data in the "apparent" form of standard, 80-column EBCDIC punched cards. Any output from the application program is returned to the ARC file processors in the same way -- i.e., as "apparent" punched cards or 132-column printout.

The DCIO processor monitors and regulates all requests to an ARC system from the IBM computer, including EBCDIC-ASCII conversions. When not being used for ARC-IBM communications, this processor can be employed as another applications processor on the ARC system, performing a wide variety of data processing tasks.

DCIO communication between the systems is transparent to users of both the IBM computer and to other ARC system users. It proves to be extremely useful for any application where a direct IBM-Datapoint interface is needed.

## Functional Characteristics

### Processor:

Datapoint 6000-series Attached Processor  
60K byte user memory  
0.6 microsecond cycle time  
Parity checking  
Parity bit  
Memory allocation and protection  
Standard typewriter keyboard, 55 keys  
11-key numeric pad  
5 control keys  
Audio tones  
80 columns by 12 rows video display

### Emulation:

Emulates up to 8 IBM full duplex  
unit-record I/O devices

### Channel Capabilities:

Byte Multiplexer Channel

### Data Transfer Rate:

40K bytes/second

## Physical Characteristics

### Equipment Dimensions:

Width: 53 in. (134.6 cm.)  
Height: 37 in. (94 cm.)  
Depth: 24 in. (61 cm.)  
Weight: 192 lbs. (87.3 kg.)

### Power Requirements:

115 or 230 VAC, 50 or 60 Hz

### Environment:

50 to 100 degrees F  
10 to 38 degrees C  
20 to 90% relative humidity, non-condensing

## Model Codes

4645 Direct Channel Interface Option  
5163 230 VAC, 50 or 60 Hz Power Option