



IBM PC® COMPATIBLE
4 CHANNEL D/R-D/S CONVERTER CARD

DESCRIPTION

The DSC-36022 is a versatile, full size IBM PC® card designed to provide one to four channels of Digital-to-Synchro/Resolver conversion. The card is equipped with sockets and can accommodate either the DSC-544 or DSC-644 Series converter modules (or both) in any socket position. The DSC-544 Series can provide up to 4.5 VA of 90V synchro output, and the DSC-644 can provide 1.5VA of synchro or resolver, 90V or 11.8V.

The DSC-36022 circuit card assembly provides the interface to mount(plug-in) the modules.

All binary angular information needed to control the Digital-to-Synchro/Resolver converter is presented to the DSC-36022

card through switch selectable I/O address space.

Demonstration software which illustrates the DSC-36022's capabilities, is available upon request.

APPLICATIONS

The multichannel DSC-36022 is designed for use in test systems, high-performance simulation systems, and control systems. With the two types of drive capability available, a mix of converters can be utilized to accommodate many applications including antenna positioning, process control, automated test systems, and simulation systems.

FEATURES

- Accuracy to ± 4 Minutes of Arc
- $\pm 0.1\%$ Scale Factor Variation
- Generates Synchro or Resolver Output Signals
- 1 to 4 Channels of Converters per Card
- 1.5 VA or 4.5 VA Output Drive Capability
- Transparent Double Buffered Latches for Data Input

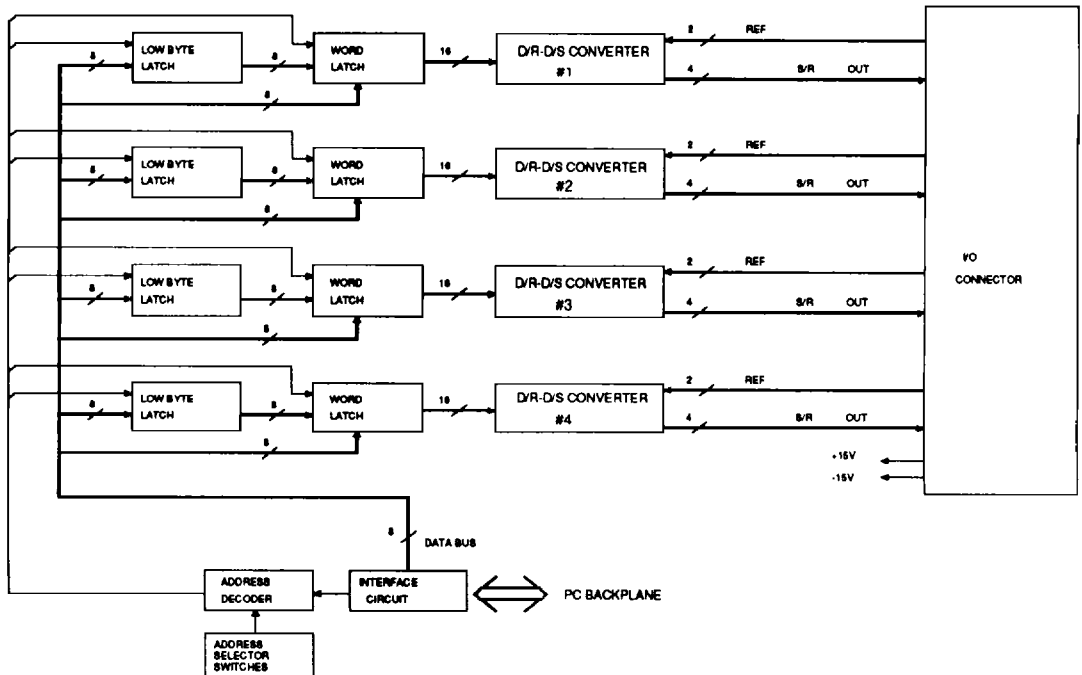


FIGURE 1. DSC-36022 BLOCK DIAGRAM

® IBM PC is a registered trademark of International Business Machines.

TABLE 1. DSC-36022 SPECIFICATIONS		
HARDWARE REQUIREMENTS		
IBM PC/XT/AT or compatible.		
PARAMETER	UNITS	VALUE
POWER SUPPLY (+5V)		
Current Drain		
■ Without Any Converters	mA	350 max
■ With One (1) DSC-544 Module	mA	370 max
■ With Four (4) DSC-544 Modules	mA	430 max
■ With One (1) DSC-644 Module	mA	355 max
■ With Four (4) DSC-644 Modules	mA	370 max
TEMPERATURE RANGE		
Operating	°C	0 to +50
Storage	°C	-25 to +85
PHYSICAL CHARACTERISTICS		
Size (Full size IBM PC card)	in (cm)	3.9 x 13.3 x [note 2] (9.9 x 33.8 x [note 2])

Notes for TABLE 1:

- Specifications for the DSC-544 and DSC-644 Series are detailed in the individual data sheets. The user must supply reference voltage.
 The DSC-644 also requires ±15Vdc.
- Component height:
 with DSC-644 modules installed, 0.565" (14.4mm) max;
 with DSC-544 modules installed, 0.865" (22mm) max.
This card requires 2 card slots.
- Cut modules leads to 0.195" (4.95mm)
- J1 is a DB37 jack, with male pins.

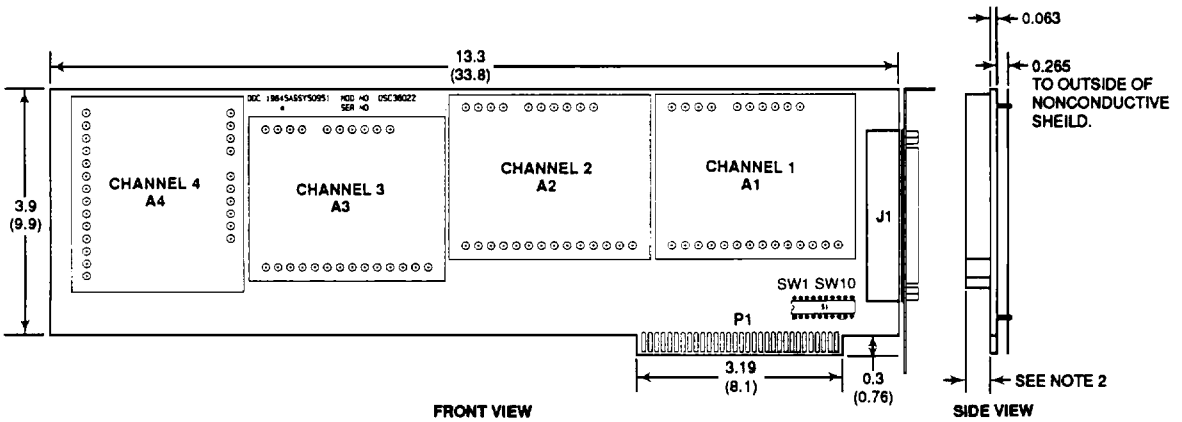


FIGURE 2. DSC-36022 MECHANICAL OUTLINE

ORDERING INFORMATION

CARD ASSEMBLY:

DSC-36022

CONVERTERS:

DSC-544

DSC-644

- Notes:
- The DSC-36022 is a standard, full-size IBM PC/XT/AT card 3.9"(9.9cm) x 13.3"(33.8cm) x [note 2]
 - Component Height: with DSC-644 modules installed, 0.565"(14.4mm) max; with DSC-544 modules installed, 0.865"(22mm) max.
 - Cut modules leads to 0.195"(4.95mm).
 - Modules are ordered separately as listed above and installed by the user.
- Sockets are included on the DSC-36022.
- A mating connector is supplied with the DSC-36022. The connector is part of Positronic's MD 37F 20Y00 kit.

Positronic's address is 423 N. Cambell Ave., Springfield, Missouri 65801

For additional information, please contact the Synchro Applications Group at 516-567-5600 ext. 7413 or 7389.