Operating Guide for the Technovision PC-2

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### Connector Specifications: (See page 3 for descriptions)

Keypad Port (DB9 FEMALE)					
Pin #	SIGNAL NAME	Pin#	SIGNAL NAME		
1	GROUND	6	SCAN 0		
2	RETURN 0	7	SCAN 1		
3	RETURN 1	8	SCAN 2		
4	RETURN 2	9	SCAN 3		
5	RETURN 3				

Parallel Port (DB25 MALE)					
Pin #	SIGNAL NAME	Pin #	SIGNAL NAME		
1	GROUND	14	VCC (5 VDC)		
2	no connection	15	PORTA-7		
3	PORTA-6	16	PORTA-5		
4	PORTA-4	17	PORTA-3		
5	PORTA-2	18	PORTA-1		
6	PORTA-0	19	PORTB-7		
7	PORTB-6	20	PORTB-5		
8	PORTB-4	21	PORTB-3		
9	PORTB-2	22	PORTB-1		
10	PORTB-0	23	PORTA-2		
11	PORTA-1	24	PORTA-0		
12	FUTURE USE	25	VCC (5 VDC)		
13	GROUND				

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Communications Port (DB25 FEMALE)					
Pin #	SIGNAL NAME	Pin #	SIGNAL NAME		
1	no connection	14	TX-1		
2	TX-0	15	RX-1		
3	RX-0	16	TX-3		
4	TX-2	17	RX-3		
5	RX-2	18	GROUND		
6	GROUND	19	GROUND		
7	GROUND	20	GROUND		
8	GROUND	21	GROUND		
9	GROUND	22	DATA-1		
10	DATA-0	23	ACK-1		
11	ACK-0	24	DATA-3		
12	DATA-2	25	ACK-3		
13	ACK-2				

# SYSTEM OVERVIEW

The Technovision PC-2 is a standalone microprocessor capable of controlling a number of devices. Please check your package for the following: SCAN 0

- PC-2 Controller
- Power Supply
- Optional Program Card
- Optional Control cable(s)

## \*\*\*\*\*\* CAUTION \*\*\*\*\*\*

Please make sure the power supply to the PC-2 is unplugged before attaching peripherals. Static discharge into the PC-2 through any of its connectors may damage the controller.

### **INSTALLATION**

- 1. When attaching optional buttons, motion sensors or keypads to the keypad port make sure the cable does not exceed 10 feet. Line amplifiers are available for longer cables.
- 2. Connect control cable between the DVD player and PC-2.
- 3. Make sure the baud rate is set correctly on the player. The baud rate for the player is outlined in the software guide.
- 4. Insert program card (label facing up).
- 5. Plug in the power supply to the PC-2.
- 6. Power must be supplied to the controller after or at the same time as the power to the DVD player. You may also reset the controller at any time by pressing the RESET button on the back of the PC-2.

If the DVD player does not start up then go to page 2.

The program card determines the operation of the controller. For a description of the actual operation you must refer to the Program Guide that is included with the card.

## STARTUP SEQUENCE FOR AN INDUSTRIAL DVD PLAYER

The PC-2 and the player should be connected to the same powerbar. When the system is powered up you will hear the DVD player start to spin up within 6 seconds. If the DVD player does not start up then check the following:

- 1. Program card is firmly inserted with the label facing up.
- 2. Power supply is plugged in.
- 3. Control cable is plugged into the PC-2 and DVD payer.
- 4. Refer to the Operating Guide for the software being used for setting the baud speed on the DVD player.
- 5. The standard baud rate for Pioneer DVD players is 4800 baud. See your DVD operations guide for setting the correct baud speed.

A more detailed troubleshooting guide (PC2-TROB) is available for the PC-2. There is also a test kit available for the PC-2, which includes a program card and two test connectors. This kit is available for U\$70.

DESCRIPTION OF CONNECTORS (see page 4 for specifications)

#### Power

The PC-2 comes standard with a 9VDC (500 ma) **center positive** 120 VAC power adapter. The connector is a 5.5/2.5 mm coaxial.

### Keypad port:

The return lines on the PC-2 are pulled high (5 volts) within the controller. The scan lines are set low one at a time during the reading of the keypad port. Closing of a scan and a return line forces the return line to go low which determines which button was pressed.

#### Parallel Port:

Each of the 16 I/O lines (PORTA-0 to A-7 and PORTB-0 to B-7) can be initialized as an input or output line. As an input it can sense if an incoming signal is high (5 volts) or low (0 volts). As an output, the line can be set high or low through software. The Parallel Port also contains 2 pins to supply VCC (regulated 5 volts) and 2 pins for ground. Maximum sourced current per I/O line is 35 ma and maximum sinked current is 20 ma. VCC is rated at 200 ma. **The total soured current from the Parallel Port cannot exceed 200 ma.** 

#### Communications Port:

The TX (transmit) lines are RS-232 outputs and the RX (receive) lines are RS-232 inputs. The PC-2 can be programmed to transmit on any combination of the 4 TX lines (even at the same time) but can receive data from only one RX line at a time.

The DATA (transmit) lines are TTL outputs and the ACK (acknowledge/receive) lines are TTL inputs. The PC-2 can be programmed to transmit on any combination of the 4 DATA lines (even at the same time) but can receive data from only one ACK line at a time.

For more information contact: Technovision Interactive Inc. www.technovision.com Mondays through Fridays (9:00 AM to 5:00 PM EST)