Technovision Interactive

TecCD USER MANUAL

Revision A

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MP3SA Industrial MP3 player with optional RS232 control.PC2 multimedia controller.V74BC button controller for Pioneer Industrial DVD players and many more...

TECHNOVISION INTERACTIVE INC

1845 Sandstone Manor, Unit 2 Pickering, Ontario L1W 3X9 CANADA P: 905-420-5153 F: 905-420-0753 www.technovision.com

What is a TecCD Player?

The TecCD from Technovision® is an industrial CD player based on a heavy duty CDROM drive and power supply. It provides the capability of AUTOMATICALLY repeating specific tracks (1..15) or the entire CD through DIP switch settings. Users can also sample specific tracks through external button selections. The TecCD can also be triggered by motion sensors, computers or multimedia controllers like the PC2 or KPC1.

- Dipswitch selectable disc or track repeat (Tracks 1 to 15).
- Built in 5-watt amplifier with mono output (channel selectable) and volume control.
- Speaker connectors.
- Stereo line output on 3.5mm connector.
- RS232 control on a DB25F connector.
- SR compatible with Pioneer PD-103 consumer CD player.
- 4x4 matrixed keypad port with DIPswitch selectable lockout.
- Track indicator outputs (1x8 or 4x4 modes) with DIPswitch selectable flashing mode.

CDROM Drive Specifications:

- Long life brushless motor.
- 100,000 POH (Duty 20%) MTBF.
- Powered tray loading.
- Double shell dust-sealed mechanism.

INSTRUCTIONS



Do not turn the unit on until the following has been set.

- 1. Attach the Line Audio Out (LINE) to amplifier or attach speaker to Speaker Out.
- 2. <u>**DIPswitches**</u> must be set to your mode settings.

Switches 1-4 TRACK VALUE (0= ENTIRE DISC)

The first 4 DIPswitches set the track value. DIP 1 has a value of 1, DIP 2 has a value of 2, DIP 3 has a value of 4 and DIP 4 has a value of 8.





Examples

If you are selecting the entire disc, you would set the track value to 0. Meaning DIP 1 thru 4 are off, and if you want to keep repeating this mode you set DIP6 on (repeat).



If you need to repeat track 10, you would turn DIP 2(value 2) and DIP 4(value 8) on. Value 2 + Value 8 = TRACK 10. You would also have to turn DIP6 on for repeat.

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If you need to repeat track 15, you would turn DIP 4(value 8), DIP 3(value 4), DIP 2(value 2) and DIP 1(value 1). Value 8+4+2+1=15.



Switch 5 – INDICATOR MODE

With DIPswitch 5 OFF, the indicator mode for the track indicator is "linear" – one output representing the track playing (1..8). With DIPswitch 5 ON, the mode is set to "matrix" – a 4x4 configuration to represent the track playing (1...16).

Linear Mode:

The TecCD has track indicators on the EXTERNAL CONTROL connector.

| Track Playing | 5 volt output on pin (25ma) |
|---------------|-----------------------------|
| 1 | 6 |
| 2 | 19 |
| 3 | 7 |
| 4 | 20 |
| 5 | 8 |
| 6 | 21 |
| 7 | 9 |
| 8 | 22 |
| Ground | 10 and 18 |

See Button/LED Indicator Diagram for additional notes on Matrix Mode.

Switch 6 – REPEAT MODE

With DIPswitch 6 ON, the track designated by DIPswitches 1 to 4 will repeat continuously. After the playing of a button activated track, the system will continue repeating the track value specified.

Switch 7 – FLASH MODE

There are 8 TTL outputs on the EXTERNAL CONTROL connector that identify the current track that is playing. With DIPswitch 7 in the ON position, the outputs will flash rather than remain on solid.

Switch 8 – BUTTON LOCKOUT

With DIPswitch 8 in the ON position, subsequent button inputs will not interrupt a button-activated track. A track that is repeating is not affected by this setting.

EXTERNAL CONTROL Connector (DB25 female)

The EXTERNAL CONTROL connector has two main functions.

- 1. First function is to connect external push buttons. Refer to pushbutton example below
- 2. Second function serves as the output for the track indicator.

Push Button Example

| Pins on EXTERNAL (| CONNECTOR |
|--------------------|-----------|
|--------------------|-----------|

| | 16 | 4 | 17 | 5 |
|----|----------|----------|----------|----------|
| 14 | Track 1 | Track 2 | Track 3 | Track 4 |
| 2 | Track 5 | Track 6 | Track 7 | Track 8 |
| 15 | Track 9 | Track 10 | Track 11 | Track 12 |
| 3 | Track 13 | Track 14 | Track 15 | Track 16 |

<u>TecCD Button/LED Indicator Diagram</u>



For Example: Button 1 (B1) will play track1 and would be connected to return 0 (R0) and scan 0 (S0). These are pins 14 and 16 on the DB25 female connector.

Control (SR) in

External control connector for Pioneer's SR Protocol.

RS232 Command Set

Commands are transmitted at 9600 baud, 8 bits, no parity and 1 stop bit and is terminated with a carriage return.

The TecCD received the RS232 data on pin 23 and transmits data on pin 11 of the DB25 female connector. Data ground is pin 10 or 24.

| Command | Description | Additional Comments |
|---------|--|---|
| ? | Inquiry | Responds with 4 bytes - see Note 1 below |
| Dx | Play Disc - conditional x commands are: x = R: Repeat disc | SR & RS232 |
| | x = P: Play disc once | |
| Kxx | Play Key Track x | SR & RS232 |
| NE | Prevent Medium Removal (No Eject) | SR & RS232 |
| NT | Next Track/Track Forward | SR & RS232 |
| PA | Pause – cycles through modes | SR & RS232 |
| PG | Program Mode | SR & RS232 |
| PL | Play | SR & RS232 |
| PT | Previous Track/Track Reverse | SR & RS232 |
| P10 | Plus Ten | SR & RS232 |
| RE | Repeat (Toggle to next mode) | SR & RS232 |
| RE0 | Repeat Off | RS232 |
| RE1 | Repeat Track | RS232 |
| RE2 | Repeat Disc | RS232 |
| ST | Stop | SR & RS232 |
| Txx | Play Track xx | SR & RS232 |

- 1...General Error
- 2...Out of range
- 3...Data Error

Version 3.4 Additions

| PA0 | Pause OFF | RS232 |
|-----|---|-------|
| PA1 | Pause (same as PA) | RS232 |
| PA2 | At the end of the current track, search back to the beginning and pause. Sets the mode only – does not pause the player | RS232 |
| Р | Play | RS232 |

Can now put the player into PAUSE mode when stopped. Kxx clears the PAUSE flag.

Note 1: Bytes 1 & 2 are the dual digit track number. Byte 3 is the repeat mode (0 = Off, 1 = Track, 2 = Disc). Byte 4 is the play mode (0 = Stop, 1 = Play, 2 = Pause).