

# **Product Information Bulletin**

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### PIONEER INDUSTRIAL LASERDISC PLAYER MODEL #

FEATURES	LD-V8000	LD-V4400	CLD-V2600	CLD-V2400
I. Interactivity		I	1	
Level I <sup>1</sup> Remote Control Unit (RCU)	Wired or Wireless Optional RU-V6000T RU-V103 (CU-V102; CU-V113)	Wireless Optional RU-V103 <sup>2</sup>	Wireless CU-V113 Included; RU-V103 Optional	Wireless CU-V113 Included; RU-V103 Optional
Barcode Capabilities <sup>3</sup>	LB as of 1 /91 <sup>4</sup> LB2 w/ DWY 1202, 1194+	LB2	LB2 & Barcode CD	LB, LB2 & Barcode CD
Barcode Compatibility	UC-V108BC UC-V109BC UC-V104BC <sup>5</sup>	UC-V1088C UC-V1098C UC-V1048C <sup>5</sup>	UC-V108BC UC-V109BC UC-V104BC <sup>5</sup>	UC-V108BC UC-V109BC UC-V104BC <sup>5</sup>
Front Panel Motion Keys	Yes	Yes	Yes	Yes
Level II <sup>6</sup> Programmable Memory     Capacity	7K	N/A	N/A	N/A
Battery Back-Up	Yes	N/A	N/A	N/A
Execute Program from from Memory or Disc	Yes	N/A	N/A	N/A
Special Level II Features CLV <sup>7</sup>	Yes/Frame Acc.	N/A	N/A	N/A
Video Memory	Yes	N/A	N/A	N/A
Level III <sup>8</sup> Cable Interface for External Computer <sup>9</sup>	CC-03, CC-04, CC-12, CC-13, CK-15P	CC-03, CC-04, CC-12, CC-13, CK-15P	CC-03, CC-04, CC-12, CC-13, CK-15P	CC-03, CC-04, CC-12, CC-13, CK-15P
Command Set	Mnemonic	Mnemonic	Mnemonic	Mnemonic
l. Disc Access				
• Disc Type <sup>10</sup>	CAV, CLV	CAV,CLV	CAV, CLV CD, CDV	CAV, CLV CD, CDV
Access Speed     CAV (Worst Case)	0.5 Sec.	After initialization 1 Sec.	5 Sec.	5 Sec.
CLV (Worst Case) (5 mln 55 mln.)	Less than 4 Sec.	Less than 6 Sec.	Less than 10 Sec.	Less than 10 Sec.
• Searches By Frame #	CAV	CAV	CAV	CAV
By Chapter #	CAV/CLV	CAV/CLV	CAV/CLV	CAV/CLV
By Time #12	Hr. Min. Sec. Fr.	Hr. Min. Sec. Fr. 13	Hr. Min. Sec. Fr. 14	Hr. Min. Sec. Fr. 14
Special Searches	Frame Accur. CLV "Seamless Search" Track Jump	Frame Accur. CLV Track Jump	CD Searches: Track, Index, Time, Block	CD Searches: Track, Index, Time, Block
Multi-Speed     Forward & Reverse	CAV/CLV	CAV	CAV	CAV

	Discontinued	Discontinued	Discontinued	Olacontinued
LC-V330	LD-V2000	LD-V2200	LD-V4200	LD-V6000A
Optional RU-V103 Requires LBA/15	Wireless CU-V102 Included; RU-V103 Optional	Wireless CU-V113 Included; RU-V103 Optional	Wired Optional RU-V101; Opt. RU-V103 Requires LBA/15	Wired or Wireless Optional RU-V6000T; Opt. RU-V103 Requires LBA/25
LB	LB	LB	LB	LB
Adepter Reg'd LBA/15 Pioneer BC Readers w/ LBA/15	(w/UC-V1048C - Mode 1) only UC-V104BC (in mode 1)	UC-V108BC UC-V109BC UC-V104BC	Adapter Req'd LBA/15 Pioneer BC Readers w/LBA/15	Adapter Req'd LBA/15 Pioneer BC Readers W/ LBA/15
No	No	Yes	Yes	No
N/A	N/A	N/A	N/A	7K
N/A	N/A	N/A	N/A	Yes
N/A	N/A	N/A	N/A	Yes
N/A N/A	N/A N/A	N/A N/A	N/A N/A	No No
CC-03, CC-04, CC-12, CC-13, doesn't work with INFO Window	Avail. 3rd Party	CC-03, CC-04, CC-12, CC-13, CK-15P	CC-03, CC-04, CC-12, CC-13, CK-15P	CC-05, CK-232
Mnemonic	Pioneer SR (System Remote)	Mnemonic	Mnemonic	ASCI-HEX Binary
CAV, CLV	CAV,CLV	CAV, CLV	CAV, CLV	CAV, CLV
3 Sec. <sup>10</sup>	8 sec.	5 Sec.	3 Sec.	2 Sec.
Less than 10 Sec.		<del></del>	Less than 10 Sec.	Less than 12 Sec.
CAV	CAV	CAV	CAV	CAV
CAV/CLV	CAV/CLV	CAV/CLV	CAV/CLV	GAV/CLV
Hr. Min. Sec.	Hr. Min. Sec.	Hr. Min. Sec.	Hr. Min. Sec.	Hr. Min. Sec.
N/A	N/A	N/A	"Blinkless" ±100 Frames	Track Jump
CAV	CAV	CAV	CAV	CAV

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	1		THOUSE IT
LD-V8000	LD-V4400	CLD-V2600	CLD-V2400
Selectable	Selectable	Selectable	Selectable
Selectable	Selectable	Selectable	Selectable
Selectable	Selectable	Selectable	Selectable
On Screen Parameter Settings	On Screen Parameter Settings	4 Switches Rear of Player	2 Switches Rear of Player
12 lines x 20 char	12 lines x 20 char	12 lines x 20 char	10 lines x 20 char
eristics			
		<del></del>	
No	No	Yes	No
Yes	Yes	Yes	Yes
Buttons	Buttons	2 Speed Dial	Buttons
No	No	Yes	No
External Control Jack	Barcode Jack	Barcode Jack	Barcode Jack
- 554			
			1-RCA
			No
No			Adapter Provided
4 Channels 2-Digital and 2- Analog	2 Channels 2-Digital or 2-Analog	2 Channels 2-Digital or 2-Analog	2 Channels <sup>17</sup> 2-Digital or 2-Analog
Yes, as of 1/91	No	No	No
Yes	No	No	No
in & Loop-through	in & Loop-through	No	No
No	No	No	No
Yes	Yes	Yes	Yes
Auto	Auto	Auto	Auto
17" x 6" x 18"	16.5° x 5° x 17°	16.5" x 5" x 15.5"	16.5" x 5" x 16.25"
35 lbs.	28 lbs.	17 lbs.	16 lbs. 12 oz.
Yes with DA-V1000	Yes with Optional board Model #UK-V112	No	No
	Selectable Selectable Selectable On Screen Parameter Settings 12 lines x 20 char  Parisites  No Yes Buttons No External Control Jack  2-RCA No No 4 Channels 2-Digital and 2- Analog Yes, as of 1/91 Yes In & Loop-through  No Yes Auto 17" x 6" x 18" 35 lbs.	Selectable Selectable Selectable Selectable Selectable Selectable Selectable Selectable On Screen Parameter Settings 12 lines x 20 char  12 lines x 20 char  12 lines x 20 char  Parameter Settings 12 lines x 20 char  13 lines x 20 char  14 lines x 20 char  15 lines x 20 char  15 lines x 20 char  16 lines x 20 char  17 x 6 x x 15 x 17 x 1000  Selectable Selectabl	Selectable Selectable Selectable Selectable Selectable Selectable Selectable Selectable Selectable On Screen Parameter Settings Parameter Settings Rear of Player 12 lines x 20 char 12 lines x 20 char 12 lines x 20 char  Presides  No No Yes Yes Yes Buttons Buttons 2 Speed Dial No No Yes External Control Jack  No No No Yes  External Control Jack  1-BNC, 1-RCA 1-RCA No No No Built-in 4 Channels 2-Digital and 2-Digital or 2-Analog Yes, as of 1/91 No No Yes No No No No In & Loop-through  No No No No No No Yes No

N/A	Page 2 - Part 2	Discontinued	Discontinued	Discontinued	Discontinued
N/A	LC-V330	LD-V2000	LD-V2200	LD-V4200	LD-V6000A
N/A					
N/A	N/A	Automatic	Selectable	Selectable	Selectable
1-RCA	N/A	Automatic	Selectable	Selectable	No
Inside Front Panel	N/A	Automatic	Automatic	Selectable	
No		None			2 sets of Switches - 6 & 10 Switches - Rear of Player
No	8 lines x 20 char	None	11 lines x 20 char	11 lines x 20 char	9 lines x 20 char
No					
None	No	No	No	No	No
No	No	Yes	Yes	Yes	Yes
None	None	None	Buttons	None	None
1-RCA	No	No	No	No	No
No	None			None	Control
No	1-RCA	1-RCA	1-RCA	1-RCA	1-BNC
2 Channels         2 Chanles         2 Chanles         2 Chanles         2 Chanles<	No	No	No	No	No
2- Analog         2 Digital w/ DA-V1000 18         2 Digital w/ DA-V1000 18         Yes         Yes         Yes         Yes         Yes         Yes         Yes         Yes         No         No         No         No         No         No         In & Loop-through         Loop-through         Yes         Yes </td <td>No</td> <td>Built-in</td> <td>Yes</td> <td>No</td> <td>Yes</td>	No	Built-in	Yes	No	Yes
No         No         No         No         No         No         In & Loop-through           No         No         No         No         In & Loop-through           No         No         No         In & Loop-through           Yes         Yes         Yes         Yes           Manual         Auto         Auto         Auto         Manual           28.75"x 41.75" x 24.75"         17" x 4" x 16"         17" x 5" x 18"         17" x 4" x 16"         17" x 5" x 16"           255 lbs. 11 oz.         19 lbs.         21 lbs.         21 lbs.         31 lbs.				2- Angled	
No         No         No         No         In & Loop-through           No         No         No         In & Loop-through           Yes         Yes         Yes         Yes           Manual         Auto         Auto         Manual           28.75" x 41.75" x 24.75"         17" x 4" x 16"         17" x 5" x 18"         17" x 4" x 16"         17" x 6" x 16"           255 lbs. 11 oz.         19 lbs.         21 lbs.         21 lbs.         31 lbs.	No	No	No	Yes	Yes
No         No         No         No         In & Loop-through           Yes         Yes         Yes         Yes         Yes           Manual         Auto         Auto         Auto         Manual           28.75" x 41.75" x 24.75"         17" x 4" x 16"         17" x 5" x 18"         17" x 4" x 16"         17" x 6" x 16"           255 lbs. 11 oz.         19 lbs.         21 lbs.         21 lbs.         31 lbs.	No	No	No	No	No
Yes         Yes         Yes         Yes         Yes           Manual         Auto         Auto         Auto         Manual           28.75" x 41.75" x 24.75"         17" x 4" x 16"         17" x 5" x 18"         17" x 4" x 16"         17" x 6" x 16"           255 lbs. 11 oz.         19 lbs.         21 lbs.         21 lbs.         31 lbs.	No	No	No	No	
Manual         Auto         Auto         Auto         Manual           28.75" x 41.75" x 24.75"         17" x 4" x 16"         17" x 5" x 18"         17" x 4" x 16"         17" x 5" x 16"           255 lbs. 11 oz.         19 lbs.         21 lbs.         21 lbs.         31 lbs.	No	No	No	No	
28.75" x 41.75" x 24.75" 17" x 4" x 16" 17" x 5" x 18" 17" x 4" x 16" 17" x 5" x 16" 255 lbs. 11 oz. 19 lbs. 21 lbs. 21 lbs. 31 lbs.	Yes	Yes	Yes	Yes	Yes
255 lbs. 11 oz. 19 lbs. 21 lbs. 21 lbs. 31 lbs.	Manual	Auto	Auto	Auto	Manual
	28.75" x 41.75" x 24.75"	17" x 4" x 16"	17" x 5" x 18"	17" x 4" x 16"	17" x 6" x 16"
No No No Yes Yes With optional DA-V1000 with optional DA-V1000	255 lbs. 11 oz.	19 lbs.	21 lbs.	21 lbs.	31 lbs.
No No No Yes Yes With optional DA-V1000 with optional DA-V1000					
	No	No	No		Yes with optional DA-V1000

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## **Notes and Product Information**

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- In Level I the player is controlled in a most basic way, with the front panel buttons or by sending direct player commands from the Remote Control Unit or from a LaserBarcode Reader. This level is used most often for linear play or playing selected segments or frames.
- <sup>2</sup> The RU-V103, CU-V113 and CU-V102 wireless remote control units can be connected to the LaserBarcode Terminal of the players via wired connection,

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This logo denotes Barcode CD compatibility. It is a trademark of SONY Corp.

The LaserBarcode 2 standard includes all of the "original" LaserBarcode commands as well as 15 "extended" commands that make possible barcode access of CLV discs, CAV multi-speed playback and Digital Audio playback. UC-V108BC, UC-V109BC are Pioneer Barcode Readers (UC-V104BC is a discontinued Pioneer reader). For details about Barcodes, see Product Information Bulletins #1E - LaserBarcode, LaserBarcode 2 & Barcode CD Player Control; #2D - Bar'N'Coder; #3C - The LaserDisc Controller; #4 - LaserBarcode Adapters; #7B - Pioneer Barcode Reader UC-V104BC (Discontinued); #14B - Pioneer Autoscanning Barcode Reader UC-V108BC; #15A - Pioneer Barcode Reader UC-V109BC & #16A - Pioneer Barcode-Compatible Industrial LaserDisc Players; #20 - BarKoder for Windows. For more information see: Tech Bulletin #132B - LB2 Standard Commands and Logo; Tech Bulletin #140A - Barcode CD and CLD-V2400.

- 4 EPROM Upgrade Kits providing LaserBarcode capability, Level II Video Memory and and Audio Sync Lock Option are available for LD-V8000s manufactured before 1/91.
- 5 The barcode reader UC-104BC is discontinued.
- In Level II, program data is sent to 7K memory in the Pioneer LD-V8000 or the LD-V6000A. Level II programs are loaded into memory from data encoded onto audio track 2 of the videodisc, or by commands sent from the remote control unit, or by commands sent from an external computer. Level II provides for a high degree of interactivity without a requiring a computer to be connected to each player while the application is running.
- 7 There are certain restrictions when using CLV discs with Level II programming. Call PNT Engineering for more information.
- 8 In Level III, commands are sent from an external computer to control the player.
- <sup>9</sup> See Product Information Bulletin #6, Cable Interface Chart, for cables to use with specific computers.

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- 10 CAV Constant Angular Velocity discs; CLV Constant Linear Velocity discs; CDs Compact Disc Audio; CDV Compact Disc Video.
- 11 The LC-V330 searches to any of 72 video discs in the system in less than 25 seconds.
- All Pioneer Industrial Players will search to frame numbers on all CAV Discs. They will search to Chapter numbers on CAV or CLV discs that have chapter numbers encoded on them. All players will search to Hrs. and Mins. and Secs. if a CLV disc is encoded with Extended 24-bit Laserdisc Code. The LD-V8000, the LD-V4400, the CLD-V2400, and the CLD-V2600 can access Hrs., Min., Sec., and Frames. The LD-V8000 holds a still frame after completing the CLV frame-accurate search; the LD-V4400 immediately plays. The CLD-V2400 and the CLD-V2600 pause after completing the CLV frame search.
- 13 The LD-V4400 will search to a frame number and immediately begin playing. It will not hold a still frame on CLV discs. All Pioneer LaserDisc Players hold a still frame on CAV discs.
- 14 The CLD-2600 and the CLD-V2400 will search to a CLV frame number and pause the disc. These players will not display the CLV frame number on screen, but it can be verified by issuing a "?F" command.
- Power-On Start: When power is turned on and there is a disc in the drawer, playback is started automatically.
- 16 Load-Start: When a loaded disc tray is pushed in, playback is started automatically.
- 17 The CLD-V2600 also includes a front panel headphone jack with volume control.
- 18 The DA-V1000 is an LD-ROM Adapter Box; it also decodes digital audio. The DA-V1000 is discontinued.
- 19 CX Decoding is a noise reduction system used to reduce noise which may be caused during recording of the disc. It improves signal-to-noise ratio, CX is a trademark of CBS Inc.
- For player dimensions to 1/32nd of an inch, refer to Player Specifications or contact PNT Engineering Support.
- LD ROM is a combination of LaserDisc and CD-ROM technology. A CAV LD-ROM disc holds 270Mb of digital data and a one-half hour of full-motion video per side. A CLV LD-ROM disc holds 540Mb of digital data and one-hour of full-motion video per side.