

OPTIMIZING YOUR CD PLAYBACK SYSTEMS

Since the introduction of the compact disc in 1982, heralded as the “perfect medium forever”, audiophiles worldwide have been blaming its inferior sound quality compared with the analogue LPs – piercing treble, shifted imaging, distorted perspective, etc. Extensive studies of behaviour of CD players and transports with the medium conducted by distinguished audiophiles and musicians in Hong Kong actually began as early as 1987 to uncover the myriads of anomalies having arisen. They were shocked to find an article in the Gramophone written some time earlier by Professor John Borwick, whose findings with the recording industry inspired and further enabled them to categorize commercially available CD’s by time-bases, i.e. 16-bit/44.1kHz and 18-bit/44.075kHz time-bases! It was later discovered that CD transports and players could be thus categorized.

The following table will enable you to identify these time-bases with ease:

44.1kHz time-base CD transports / players	44.075kHz time-base CD transports / players
Audio Synthesis (jitter pattern selectable, nla)	
Accuphase - <i>Sony mechanism</i> (nla)	DCS
* Audio Research	* Goldmund
* Naim	Krell (nla)
Mark Levinson <i>by Madrigal</i>	Proceed <i>by Madrigal</i> (nla)
* AVM	* Sony
* Burmester	* Copland
CEC	TEAC / Esoteric
Classe Audio (nla)	Wadia
Jadis	Metronome
Enlightened Audio Designs (nla)	* Micromega
Ensemble	* Myryad
Forsell (nla)	* Arcam
* Denon (CD transport nla)	* Cambridge
* Luxman	* Marantz / Philips
MBL	Accoustic Arts
* Meridian	/
* Oracle	
P S Audio (nla)	
* Linn Sondek	
* Roksan	
Sonic Frontiers (nla)	
Theta (nla)	
* Gryphon	
Barclay (nla)	
* Audiolab	

(nla) = no longer available

* integrated CD player

44.1kHz CD labels	44.075kHz CD labels
EMI / Toshiba / Melodya	Decca / London (-ve) / L'oiseau Lyre (-ve) / Argo
Virgin Classics (-ve)	<i>DGG (-ve) / Archiv Produktion (-ve)</i>
Denon	Philips / Philips (pop music, -ve)
HDCD's	CD layer of SACD's
Telarc (Soundstream system) * See accompanying booklet.	<i>Telarc</i> (Sony system) * See accompanying booklet.
Warner Brothers (WB logo)	<i>Warner / Time Warner / Warner Music</i>
Harmonia Mundi	<i>Deutsche Harmonia Mundi (-ve) / BMG / RCA / Eurodisc</i>
Reference Recording	<i>Capitol</i> (pop, jazz)
Erato	<i>Chandos</i>
BIS	<i>Victor / JVC</i>
Opus 3	<i>CBS / Sony</i>
Naxos	<i>Polygram (-ve) / Polydor (-ve) / Phonogram</i>
Proprius	<i>Capriccio (-ve)</i>
DMP	<i>Sheffield Lab</i>
XrCD by (FIM)	<i>XrCD</i> (by JVC)
Hugo	<i>Cenepoly</i>
UFO	<i>A & M</i>
	<i>TIS</i>
	<i>GRP</i>
	<i>Teldec (-ve)</i>
	<i>King Record / London</i> (Japan)
	<i>Lyrity</i>
	<i>Verve</i>
	<i>Hyperion (-ve)</i>
	<i>Hong Kong Records</i>
	<i>Chesky (-ve)</i>
	<i>Mercury</i>
	<i>Arista</i>
	<i>Pope Music</i>
	<i>Reprise</i>
	<i>Rock Music</i>
	<i>Opus 111</i>
	<i>Top Music</i>

Owing to jitter patterns inherent of CD mastering machines used, most CD labels confirming to 44.075kHz (those in *italics*) can only be played back correctly via optical transmission.

(-ve): phase inverted