

Philips Firmware Upgrade Information

Upgrade for type:	PBDV1640B/00 PBDV1640G/00 PBDV1640B/35 PBDV1640G/35	→ Drive type number on label.
Upgrade for string:	PBDV1640P	→ Drive name as seen in Windows™
From firmware:	B2.0 B2.1 B2.2 B2.4 B2.5 B3.0	
To new firmware	B3.2	
Date:	13 January 2005	

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Warning:
Please close all running software application and eject any discs from the drive you want to upgrade.
Philips does not and can not warrant the performance of/the results you may obtain using this software. At no time, we can held liable for any damages including (but not limited to) lost profits or consequential damages or for any claim by any other party.
Do not try to upgrade other then foreseen drives.

1. Changes

First version is B2.0

Changes from firmware B2.0 to B2.1

- Improved writing quality on DVD+R discs.
- Improved writing quality on DVD+R Double Layer discs.

Changes from firmware B2.1 to B2.2

- Improved writing quality on DVD+R discs.
- Improved writing quality on DVD+R Double Layer discs.
- Reduced write speed on DVD+R 8x ("PHILIPS C08") disc from 12x to 8x to ensure high and stable write quality.

Changes from firmware B2.2 to B2.4 (B2.3 does not exist)

- Improved stability of writing on DVD+R Double Layer.
- Improved writing on 4x (low speed) CD-RW media.
- Improved read performance on DVD+R Double Layer.
- Improved writing quality on DVD+R Double Layer discs.
- Improved writing quality on DVD+R 4x and 8x discs.
- Improved writing on Taiyo Yuden CD-Recordables.
- Fixed the possible hang/crash on some motherboards with an nVidia nForce Chipset in combination with Windows XP Service Pack 2.
- Plays the CD part of SACD (Super Audio CD).

Changes from firmware B2.4 to B2.5

- Improved writing quality on DVD-R 8x "DAXON008S".

Changes from firmware B2.5 to B3.0

- Increased write speed on DVD+R Double Layer disc "MKM001" from 2,4x to 4x.
- Increased write speed on DVD-R up to 16x (on selected media).
- Microsoft™ WHQL ID: 916235

Changes from firmware B3.0 to B3.2

- Improved write quality on DVD+R Double Layer discs.
- Microsoft™ WHQL ID: 929851

2. Supported DVD disc lists

The "ADIP"-code (for "+" media) and the "Pre Recorded Info in Lead In"-code (for "-" media) do indicate the manufacturer of the disc. This code will allow the drive to recognize the disc and with this information the drive will choose the best possible write strategy so that the discs are written in the best possible way.

This information can easily be obtained using e.g DVD Identifier (download from <http://dvd.identifier.cdfreaks.com>). Please note that this is 3rd party software for which Philips can not take any responsibility.

Several discs are written at a higher or a lower speed then specified by the manufacturer. The difference with the specification from the manufacturer is chosen to give the highest possible write speed together with the highest possible write quality.

Please also note that Philips can not guarantee that discs which are not in the list are well written.

2.1. Supported DVD+R discs



DVD+R 2,4x discs

ADIP code											
O	P	T	O	D	I	S	C	O	P	2	
R	I	T	E	K				R	0	1	
C	M	C		M	A	G		R	0	1	
M	C	C						0	0	1	
P	R	O	D	I	S	C		R	0	1	
R	I	C	O	H	J	P	N	R	0	0	

DVD+R 4x discs

ADIP code											Remark
A	M	L						0	0	1	
B	e	A	I	I	0	0	0	P	4	0	
C	M	C		M	A	G		F	0	1	Written at 8x
D	D	T	0	1				0	0	1	
D	T	-	D	0	2			0	2		
G	S	C	5	0	2			0	0	2	
I	N	F	O	D	I	S	C	R	1	0	
I	S	0	1					0	0	1	
M	A	X	E	L	L			0	0	1	Written at 8x
M	B	I	P	G	1	0	1	R	0	3	
M	C	C						0	0	2	Written at 8x
M	P	O	M	E	D	I	A	0	4	0	
M	U	S	T					0	0	2	
N	A	N	Y	A				R	J	B	
O	P	T	O	D	I	S	C	O	R	4	
P	O	M	S	C	0	0	1	0	0	2	
P	R	O	D	I	S	C		R	0	2	
R	I	C	O	H	J	P	N	R	0	1	Written at 8x
R	I	T	E	K				R	0	2	Written at 8x
R	I	T	E	K				M	0	2	Written at 8x
T	D	K						0	0	1	Written at 8x
Y	U	D	E	N	0	0	0	T	0	1	Written at 12x

DVD+R 8x discs

ADIP code											Remark
A	M	L						0	0	2	Written at 12x
B	E	A	L	L	0	0	0	P	8	0	Written at 12x
C	M	C		M	A	G		E	0	1	
D	A	X	O	N				A	Z	2	Written at 16x
D	D	D	e	s	s	a	u	V	3	0	Written at 12x
D	T	-	D	0	3			0	0	4	Written at 12x
E	M	D	P					0	0	0	
G	S	C	5	0	3			H	0	1	
I	N	F	O	D	I	S	C	R	2	0	Written at 12x
I	N	F	O	M	E			R	2	0	Written at 12x

I	S	O	1					0	0	2	
I	S	S	M					0	0	1	
L	D							S	0	3	Written at 16x
L	O	N	G	T	E	N		0	0	2	
M	A	M	M	O	2						
M	A	X	E	L	L			0	0	2	Written at 12x
M	B	I	P	G	1	0	1	R	0	4	Written at 12x
M	J	C						0	0	3	Written at 12x
M	C	C						0	0	3	Written at 12x
M	P	O	M	E	D	I	A	0	8	0	
M	U	S	T					0	0	2	
N	A	N	Y	A				C	L	X	Written at 12x
N	A	N	Y	A				C	H	X	Written at 12x
I	M	C		J	P	N		R	0	1	Written at 16x
O	P	T	O	D	I	S	C	O	R	8	
P	H	I	L	I	P	S		C	0	8	
P	H	I	L	I	P	S		0	8	1	Written at 12x
P	L	A	S	M	O	N	1	C	0	1	Written at 12x
P	O	S						R	0	1	
P	R	O	D	I	S	C		R	0	3	
R	I	C	O	H	J	P	N	R	0	2	Written at 16x
R	I	T	E	K				R	0	3	Written at 12x
R	I	T	E	K				R	0	3	Written at 12x
S	K	Y	M	E	D	I	A	R	0	3	
S	O	N	Y					D	1	1	Written at 16x
T	D	K						0	0	2	Written at 16x
U	L	T	R	A	N			2	0	2	
V	A	N	G	U	A	R	D	0	0	1	
V	D	S	P	M	S	A	B	0	0	2	
V	I	V	A					0	0	2	
W	F	K	A	1	1			2	1	1	
W	I	N	G	S	H	I	N	0	0	1	Written at 12x
Y	U	D	E	N	O	O	O	T	0	2	Written at 16x

DVD+R 16x discs

ADIP code										Remark	
B	e	A	I	I				P	G	0	
C	M	C	M	A	G			M	0	1	
D	A	X	O	N				A	Z	3	
D	A	X	O	N				C	Y	3	
E	M	D	P	A	Z	0	1	0	0	0	Written at 4x
G	S	C	5	0	3			H	0	1	
I	N	F	O	M	E			R	3	0	
I	S	S	M					0	0	2	
V	D	S	P	M	S	A	B	0	0	4	
L	D							M	0	4	
L	G	E	P	1	6			0	0	1	
M	A	X	E	L	L			0	0	3	
M	B	I	P	G	1	0	1	R	0	5	
M	C	C						0	0	4	
M	U	S	T					0	0	6	
M	A	M						M	0	4	
N	A	N	Y	A				F	L	X	
N	S	D						R	4	0	
O	P	T	O	D	I	S	C	R	1	6	
O	P	T	O	D	I	S	C	F	1	6	
P	H	I	L	I	P	S		C	1	6	
P	I	a	s	m	o	n	2	C	0	1	
P	O	S						R	0	5	
P	R	O	D	I	S	C		R	0	4	
P	R	O	D	I	S	C		R	0	5	
R	I	C	O	H	J	P	N	R	0	3	
R	I	T	E	K				R	0	4	
S	O	N	Y					D	2	1	
T	D	K						0	0	3	
Y	i	J	h	a	n			0	0	4	Written at 8x
Y	U	D	E	N	0	0	0	T	0	3	

2.2. Supported DVD+R Double Layer discs



DVD+R Double Layer 2,4x discs

ADIP code										Remark
M	K	M					0	0	1	Written at 4x
P	H	I	I	I	P	S		C	D	2
R	I	T	E	K				D	0	1

2.3. Supported DVD+RW discs



DVD+RW 2,4x discs

ADIP code										
I	N	F	O	D	I	S	C	A	0	1
M	B	I	P	G	1	0	1	W	0	3
S	E	N	T	I	N	E	L	W	0	1
C	M	C		M	A	G		W	0	1
M	C	C						A	0	1
O	P	T	O	D	I	S	C	O	P	1
P	R	O	D	I	S	C		W	0	1
R	I	C	O	N	J	P	N	W	0	1
R	I	T	E	K				0	0	1

DVD+RW 4x discs

ADIP code										
C	M	C		M	A	G		W	0	2
D	A	X	O	N				D	4	2
I	N	F	O	D	I	S	C	A	1	0
M	B	I	P	G	1	0	1	W	0	4
M	K	M						A	0	2
N	A	N	Y	A				D	R	W
O	P	T	O	D	I	S	C	O	P	4
P	H	I	L	I	P	S		0	4	1
P	R	O	D	I	S	C		W	0	2
R	I	C	O	H	J	P	N	W	1	1
R	I	T	E	K				0	0	4
R	I	T	E	K				0	0	4
S	E	N	T	I	N	E	L	W	0	2
S	O	N	Y					S	1	1

2.4. Supported DVD-R discs



Please note that 1x DVD-R discs are not supported.

DVD-R 2x discs

Pre Recorded Info In Lead In Code												
B	e	A	I	I		G	0	0	0	0	1	
M	C	C		0	0	R	G	2	0	0		
M	X	L			R	G	0	1				
P	R	O	D	I	S	C	G	0	2			
R	I	T	E	K	G	0	3					
S	O	N	Y									
T	A	I	Y	O	Y	U	D	E	N			
T	D	K	G	0	2	0	0	0	0	0	0	0

DVD-R 4x discs

Pre Recorded Info In Lead In Code												
4	M		S	Y	S		2	0	2	C	1	
B	e	A	I	I		G	4	0	0	0	1	
D	A	T	A		T	R	A	C	K			
D	A	X	O	N	0	0	4					
F	U	J	I	F	I	L	M	0	2			
I	N	F	O	D	I	S	C	-	R	0	1	
I	S	S	M						0	1		
M	A	M	4	X	G	0	2					
M	A	M	4	X	G	0	1					
M	B	I		0	1	R	G	2	0			
M	C	C		0	1	R	G	2	0			
M	U	S	T		0	0	1					
M	X	L			R	G	0	2				
O	P	T	O	D	I	S	C	R	0	0	4	
R	I	T	E	K	M	0	2					
S	O	N	Y	0	4	D	1					
T	T	G	0	1								
T	Y	G	0	1								
V	A	N	G	U	A	R	D					
W	F	I			A	4	0	0	0	1		
W	I	N	G	S	H	I	N	G	0	4		

DVD-R 8x discs

Pre Recorded Info In Lead In Code												Remark
B	e	A	I	I		G	4	0	0	0	1	Written at 12x
C	M	C		M	A	G	.		A	E	1	Written at 12x
D	A	X	O	N	0	0	8	S				Written at 16x
D	v	s	n	-	8	0						
F	U	J	I	F	I	L	M	0	3			
G	S	C	0	0	3							
I	M	C		J	P	N	R	0	1			
I	N	F	O	D	I	S	C	-	R	2	0	
I	N	F	O	M	E	D	I	A	R	2	0	
I	N	F	O	S	M	A	R	T	0	1		
I	S	S	M	R	0	1						
L	E	A	D	D	A	T	A		S	0	3	
L	G	E	0	8								
M	B	I		0	3	R	G	3	0			Written at 12x
M	C	C		0	2	R	G	2	0			
M	J	C		M	E							
M	X	L			R	G	0	3				Written at 12x
O	P	T	O	D	I	S	C	R	0	0	8	
P	I	a	s	m	o	n	1	A				
P	O	M	S	3	A							
P	O	M	S	I	0	0	2					
P	r	o	d	i	s	c	S	0	4			Written at 12x

P	r	o	d	i	s	c	F	0	1			Written at 12x
R	I	T	E	K	G	O	6					Written at 12x
S	K	C		M	8	O	1					
S	O	N	Y	0	8	D	1					Written at 16x
T	A	R	O	K	O	M	X	8				
T	T	G	O	2								
T	T	H	O	1								Written at 12x
T	Y	G	O	2								Written at 16x
V	A	N	G	U	A	R	D	0	1			
W	I	N	G	S	H	I	N	G	0	8		

DVD-R 16x discs

Pre Recorded Info In Lead In Code												Remark
B	e	A	I	I		G	1	6	0	0	1	Written at 4x
C	M	C		M	A	G	.		A	M	3	Written at 12x
D	A	X	O	N	0	1	6	S				
F	U	J	I	F	I	L	M	0	4			Written at 12x
M	B	I		0	3	R	G	4	0			
M	C	C		0	3	R	G	2	0			
M	X	L				R	G	0	4			Written at 8x
N	A	N	Y	A		F	0	2				Written at 12x
O	P	T	O	D	I	S	C	R	0	1	6	Written at 8x
P	r	o	d	i	s	c	F	0	2			
P	r	o	d	i	s	c	S	0	5			
S	O	N	Y	1	6	D	1					
T	T	H	O	2								
T	Y	G	O	3								

2.5. Supported DVD-RW discs



Please note that 1x DVD-RW discs are not supported.

DVD-RW 2x discs

Pre Recorded Info In Lead In Code											
C	M	C	W	0	2						
D	A	X	O	N	—	R	W	2	X	0	1
I	N	F	O	D	I	S	C				
J	V	C	—	V	i	c	t	o	r	W	7
M	C	C		0	1	R	W	1	1	n	9
O	P	T	O	D	I	S	C	W	0	0	2
P	r	o	d	i	s	c		D	W	0	4
R	I	T	E	K	W	0	1				
T	D	K	5	0	2	s	a	k	u	M	3

DVD-RW 4x discs

Pre Recorded Info In Lead In Code											
C	M	C	W	0	3						
J	V	C	0	V	i	c	t	o	r	D	7
M	C	C		0	1	R	W	4	x		
O	P	T	O	D	I	S	C	W	0	0	4
P	R	O	D	I	S	C	D	W	0	6	
R	I	T	E	K		W	0	4			
T	D	K	6	0	1	s	a	k	u		