

Issued Date	04. 19. 2012	GH24NS95		1/21
Revised Date	05. 15. 2012		Rev T1.1	

SPECIFICATIONS
OF
SUPER MULTI DVD REWRITER
Model GH24NS95
For LG-Brand

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** This specifications can be changed for improvement without prior notice.*

Hitachi-LG Data Storage, Inc.

Issued Date	04. 19. 2012	GH24NS95		2/21
Revised Date	05. 15. 2012		Rev T1.1	

Revision History

No.	Date	Brief description	Note
1	2012 04.19	1 st Release	T1.0
2	2012 05.15	2 rd Release	T1.1

Issued Date	04. 19. 2012	GH24NS95		3/21
Revised Date	05. 15. 2012		Rev T1.1	

Table of contents

- 0. Attention
- 1. Features
 - 1.1 General
 - 1.2 Supported disc formats
 - 1.3 Supported write method
 - 1.4 Performance
 - 1.5 Audio
- 2. General description
 - 2.1 Applicable disc formats
 - 2.2 Writing method
 - 2.3 Disc diameter
 - 2.4 Data capacity
- 3. Drive performance
 - 3.1 Host interface
 - 3.2 Write speed
 - 3.3 Read speed
 - 3.4 Burst Data transfer rate
 - 3.5 Access time (Random Access)
 - 3.6 Data error rate
 - 3.7 Spin up, Load time
 - 3.8 Data buffer capacity
- 4. Environmental conditions
 - 4.1 Ambient temperature
 - 4.2 Temperature gradient
 - 4.3 Relative humidity
 - 4.4 Dew point temperature restrictions
 - 4.5 Altitude
 - 4.6 Vibration
 - 4.7 Shock
 - 4.8 Drop impact
- 5. Quality and Reliability
 - 5.1 MTBF
 - 5.2 Tray cycle test
 - 5.3 Actuator mechanism
 - 5.4 MTTR (Mean Time To Repair)
 - 5.5 Component life

Issued Date	04. 19. 2012	GH24NS95		4/21
Revised Date	05. 15. 2012		Rev T1.1	

Table of contents

- 6. Electro Static Discharge susceptibility (ESD)
 - 7. Power requirements
 - 7.1 Source voltage
 - 7.2 Current
 - 7.3 Standby
 - 8. Acoustic noise
 - 9. Dimensions
 - 10. Mass
 - 11. Mechanical
 - 11.1 Disc loading
 - 11.2 Mounting requirements
 - 12. Front Design of Front side
 - 12.1 Front side (Front Design)
 - 13. Connector Pin define
 - 13.1 Front side
 - 13.2 Rear side
 - 14. Connector Pin define
 - 15. Mechanical dimensions
 - 16. Supported Command List
 - 16.1 ATA Commands
 - 16.2 ATAPI Packet Commands
 - 17. Regulations and Standards
 - 17.1 Safety
 - 17.2 EMC / EMI
 - 17.3 Laser safety
 - 18. Supporting Operating System & Application Software
 - 18.1 Operating System
 - 18.2 Application Software
- Appendix 1. Front design, RPC, and others
Appendix 2. Caution
Appendix 3. Packaging Spec

Hitachi-LG Data Storage, Inc.

Issued Date	04. 19. 2012	GH24NS95		5/21
Revised Date	05. 15. 2012		Rev T1.1	

0. Attention -To export this product-

*The Shipment of this product is limited by the rules of export in each country.
The proper procedures should be taken when exporting this product.*

1. Features

1.1 General

- (1) Half-height Internal Super Multi Drive
- (2) CD-R/RW, DVD-R/RW/RAM/ +R/RW +/-R DL M-DISC/+M SL read and write compatible, CD Family and DVD-ROM read compatible
- (3) Enhanced IDE (ATAPI) interface : SATA interface
- (4) Large buffer memory 0.75MB
- (5) Buffer Under-run prevention function embedded
- (6) Power loading and power eject of a disc. Bare media loading
- (7) MTBF: 100,000 POH
- (8) Vertical and Horizontal installable
- (9) Compliance with RoHS/ Pb Free production

1.2 Supported disc formats

- (1) Reads data in each DVD-ROM, DVD-R(Ver. 2.0 for Authoring) and DVD-RAM(Ver.1.0)
- (2) Reads and writes in each DVD-R(Ver. 2.1 for General), DVD-R DL(Dual Layer),DVD-RW, DVD-RAM(Ver.2.2), DVD+R, DVD+R DL(Double Layer) and +RW
- (3) Reads data in each CD-ROM, CD-ROM XA, CD-I, Video CD, CD-Extra and CD-Text
- (4) Reads data in Photo CD (Single and Multi session)
- (5) Reads standard CD-DA
- (6) Support to read Super Audio CD (Compatible layer in Hybrid type)
- (7) Reads and writes CD-R discs conforming to "Orange Book Part 2"
- (8) Reads and writes CD-RW discs conforming to "Orange Book Part 3"
- (9) Reads DVD-R / RW / RAM with CPRM
- (10) Reads and writes in M-DISC/+M (Archival)

1.3 Supported write method

- (1) DVD-R: Disc at Once and Incremental Recording
- (2) DVD-R DL: Disc at Once, Format 4 (Layer Jump Recording)
- (3) DVD-RW: Disc at Once, Incremental Recording and Restricted Overwrite
- (4) DVD-RAM: Random Write
- (5) DVD+R: Sequential Recording
- (6) DVD+R DL: Sequential Recording
- (7) DVD+RW: Random Write
- (8) CD-R/RW: Disc at Once, Session at Once, Track at Once and Packet Write

Hitachi-LG Data Storage, Inc.

Issued Date	04. 19. 2012	GH24NS95		6/21
Revised Date	05. 15. 2012		Rev T1.1	

1.4 Performance

- (1) Average access time: DVD-ROM 145 ms
(Random) CD-ROM 125 ms
- (2) Write speed:
- DVD-R 2x, 4x CLV, 8x PCAV, 16x, 24x CAV
 - DVD-R DL 4x CLV, 8x ZCLV
 - DVD-RW 2x, 4x, 6x CLV
 - DVD-RAM 2x, 3x 5x PCAV,
 - DVD+R 2.4x CLV 4x CLV, 8x PCAV, 16x, 24x CAV
 - DVD+R DL 2.4x, 4x CLV, 8x ZCLV
 - DVD+RW 2.4x, 4x, 6x CLV, 8x ZCLV
 - CD-R 16x CLV, 32x PCAV, 40x CAV, 48x CAV
 - CD-RW 4x, 10x, 16x CLV, 24x ZCLV
 - M-DISC/+M 4x CLV
- (3) Read speed:
- DVD-R/RW/ROM(SL/DL) 16x/13x/16x/12x max.
 - DVD-R DL 12x max.
 - DVD-RAM (Ver.1.0/2.2) 2x, 3x 5x PCAV, 6x CLV,
 - DVD- Video (CSS Compliant Disc) 6x max.
 - (Single/Dual layer)
 - DVD+R/+RW 16x / 13x max.
 - DVD+R DL 12x max.
 - CD-R/RW/ROM 48x/40x/48x max.
 - CD-DA (DAE) 40x max.
 - 80 mm CD 22x max.
 - M-DISC/+M 12x CAV
- (4) Sustained Transfer rate: DVD-ROM 22.16 Mbytes/s
(16x) max.
max. CD-ROM 7,200 kB/s (48x)
- (5) Burst Transfer rate: SATA, Ultra DMA Mode 5
Multi word DMA Mode 2, PIO Mode 4
- (6) Multimedia MPC-3 compliant

1.5 Audio

- (1) 16 bit digital data output through ATA interface

*Definition Transfer Rate: 1x (DVD) = 1.385 Mbytes/s, Mbytes/s = 10⁶ bytes/s
1x (CD) = 150 kB/s, kB/s = 2¹⁰ bytes/s
Capacity: MB = 2²⁰ bytes, kB = 2¹⁰ bytes

Issued Date	04. 19. 2012	<b style="font-size: 2em;">GH24NS95		7/21
Revised Date	05. 15. 2012		Rev T1.1	

2. General description

2.1 Applicable disc formats

DVD	DVD-ROM: 4.7GB (Single Layer) 8.5GB (Dual Layer)
	DVD-R: 4.7GB (Ver. 2.0 for Authoring: read only) 4.7GB (Ver. 2.1 for General: read & write) (DL) 8.5GB (Ver. 3.0)
	DVD-RW: 4.7GB (Ver. 1.2/ Rev 1.0, 2.0, 3.0)
	DVD-RAM: 2.6GB/side (Ver. 1.0: read only) 1.46GB/side, 4.7GB/side (Ver. 2.2)
	DVD+R: 4.7GB (Ver. 1.3) (DL) 8.5GB (Ver. 1.1)
	DVD+RW: 4.7GB (Vol. 1/Ver.1.3, Vol. 2/Ver.1.0)
Archival	M-DISC/+M 4.7GB
CD	CD-ROM Mode-1 data disc CD-ROM Mode-2 data disc CD-ROM XA, CD-I, Photo-CD Multi-Session, Video CD CD-Audio Disc Mixed mode CD-ROM disc (data and audio) CD-Extra CD-Text CD-R (Conforming to "Orange Book Part 2": read & write) CD-RW (Conforming to "Orange Book Part 3": read & write)

2.2 Writing method

(1) DVD-R/RW	Disc at Once Incremental Recording Restricted Overwrite (DVD-RW only)
(2) DVD-R DL	Disc at Once (DAO), Format4(Layer Jump Recording)
(3) DVD-RAM/+RW	Random Write
(4) DVD+R	Sequential Recording
(5) DVD+R DL	Sequential Recording
(6) CD-R/RW	Disc at Once (DAO) Session at Once (SAO) Track at Once (TAO) Packet Writing

2.3 Disc diameter

120 mm
80 mm

2.4 Data capacity

User data / Block	DVD-ROM/R/RW/RAM /+R/+RW 2,048 bytes/block
	CD (Yellow Book) 2,048 bytes/block (Mode1 & Mode2 Form1) 2,336 bytes/block (Mode2) 2,328 bytes/block (Mode2 Form2) 2,352 bytes/block (CD-DA)

Hitachi-LG Data Storage, Inc.

Issued Date	04. 19. 2012	GH24NS95		8/21
Revised Date	05. 15. 2012		Rev T1.1	

3. Drive performance

3.1 Host interface T13 ATA/ATAPI-7, MMC-6, INF-8090i v7

3.2 Write Speed

<Write>	Media (Media Speed)	Writing Speed	Transfer rate (DVD: Mbytes/s, CD: kB/s)
	DVD-R (1-2x)	2x CLV	2.77 Mbytes/s
	-R (1-4x)	4x CLV	5.54
	-R (1-8x)	4x CLV, 6-8x PCAV	5.54, 8.31-11.08
	-R(1-16x)	7-8x PCAV, 7-16x CAV	9.9-11.08, 9.9-22.16
		10-24x CAV	13.85-33.24
	-R (8cm)	4x CLV	5.5
	DVD-R DL (2-4x)	4x CLV	5.54
	-R DL (2-8x)	4x CLV, 4+6+8x ZCLV	5.54, 5.54+ 8.31+11.08
	-R DL (8cm)	4x CLV	5.54
	DVD-RW (2x)	2x CLV	2.77
	-RW (2-4x)	4x CLV	5.54
	-RW (2-6x)	4x, 6x CLV	5.54, 8.31
	-RW (8cm)	2x CLV	2.77 (w/o Verify)
DVD-RAM (Ver.2.2)	(2x)	2x CLV	2.77 (w/o Verify)
	-RAM (3x)	3x CLV	4.16 (w/o Verify)
	-RAM (5x)	3-5x PCAV	4.16-6.93 (w/o Verify)
	-RAM (8cm)	2x CLV	2.77 (w/o Verify)
DVD+R (2.4x)		2.4x CLV	3.32
	+R (2.4-4x)	4x CLV	5.54
	+R (2.4-8x)	4x CLV, 6-8x PCAV	5.54, 8.31~11.08
	+R (2.4-16x)	7.1-8xPCAV, 7.1-16x CAV	9.9-11.08, 9.9-22.16
		10-24x CAV	13.85-33.24
DVD+R DL (2.4x)		2.4x CLV	3.32
	+R DL (2.4-8x)	4x CLV,4+6+8xZCLV,	5.54, 5.54+8.31+11.08,
DVD+R DL (8cm)		2.4x CLV	3.32
DVD+RW (2.4x)		2.4x CLV	3.32
	+RW (2.4-4x)	4x CLV	5.54
	+RW (2.4-8x)	6x CLV, 6+8x ZCLV	8.31, 8.31+11.08
DVD+RW (8cm)		4x CLV	5.54
	CD-R	16x CLV,	2,400 kB/s
		16-32x PCAV	2,400-4,800,
		40x, 48x CAV	6,000, 7,200
	CD-R (8cm)	16x CLV,	2,400 kB/s
CD-RW (MS:1,2,4x)		4x CLV	600
	-RW(HS:4-10x)	10x CLV	1,500
	-RW (US:8-24x)	16x CLV, 16+24x ZCLV	2,400, 2,400+3,600
	-RW(US+:8-32x)	16x CLV,	2,400
		16+24x ZCLV	2,400+3,600
	CD-RW (8cm)	10x CLV,	1,500 kB/s

Hitachi-LG Data Storage, Inc.

Issued Date	04. 19. 2012	GH24NS95		9/21
Revised Date	05. 15. 2012		Rev T1.1	

3.3 Read Speed

<Read>	Media (Media Speed)	Read Speed	Transfer rate	Rotational speed
			(DVD: Mbytes/s, CD: kB/s)	(Approx. r/min)

3.3.1 Data

DVD-ROM (SL)	6.6 - 16x CAV	9.17- 22.16 Mbytes/s	9,440 r/min
(DL)	5.0 - 12x CAV	6.88- 16.62	7,790
DVD-R	6.6 - 16x CAV	9.17- 22.16 Mbytes/s	9,440
DVD+R	6.6 - 16x CAV	9.17- 22.16 Mbytes/s	9,440
DVD-R DL	5.0 - 12x CAV	6.88- 16.62	7,790
DVD+R DL	5.0 - 12x CAV	6.88- 16.62	7,790
DVD-RW	5.4 - 13x CAV	7.43- 18.00	7,670
DVD+RW	5.4 - 13x CAV	7.43- 18.00	7,670
DVD-RAM *3(Ver. 1.0)	2x CLV	2.77	4,780-2,020
-RAM (Ver. 2.2)	3 - 5x PCAV	4.16- 6.93	4,880-3,450
-RAM (8cm)	2x CLV	2.77	4,780-2,020
CD-R/ROM*1	20 - 48x CAV	3,000- 7,200 kB/s	9,710
CD-RW	17 - 40x CAV	2,590- 6,000 kB/s	8,460
(8cm)	13.8 - 22x CAV	990 - 1,500 kB/s	2,120
M-DISC/+M	5.0 - 12x CAV	6.88- 16.62	7,790

3.3.2 DVD-Video, Video Format and CD-DA

DVD-Video*2 (SL/DL)	2.0 - 6x CAV	2.29- 5.54	2,830
DVD-R	2.0 - 6x CAV	2.29- 5.54	2,830
DVD+R	2.0 - 6x CAV	2.29- 5.54	2,830
DVD-R DL	2.0 - 6x CAV	2.29- 5.54	2,830
DVD+R DL	2.0 - 6x CAV	2.29- 5.54	2,830
DVD-RW	2.0 - 6x CAV	2.29- 5.54	2,830
DVD+RW	2.0 - 6x CAV	2.29- 5.54	2,830
DVD-RAM *3	ditto	Same as the speed of Data above	
CD-DA(DAE)*4	17 - 40x CAV	2,590- 6,000 kB/s	8,460 r/min
CD-DA (Audio Play)*4	4.3 - 10x CAV	650- 1,500	2,120

*1) Fully recorded CD-R should be used.

*2) DVD-Video: CSS compliant discs.

*3) DVD-RAM: Read speed of Data and Video Format are same as above.

*4) Read speed of CD-R/RW/ROM are same as above.

* Rotational speed (CLV, ZCLV)

DVD-R/RW/ROM, +R/RW 1x: Approx. 1,390 (Inside) - 580 r/min (Outside)

DVD-RAM Ver. 1.0 1x: Approx. 2,390 (Inside) - 1,010 r/min (Outside)

Ver. 2.2 2x: Approx. 3,250 (Inside) - 1,380 r/min (Outside)

CD-R/RW/ROM 1x: Approx. 500 (Inside) - 210 r/min (Outside)

*1) "+": change by step for ZCLV *2) "-": continuous change, for CAV, PCAV

Hitachi-LG Data Storage, Inc.

Issued Date	04. 19. 2012	GH24NS95	Rev T1.1	10/21
Revised Date	05. 15. 2012			

3.4 Burst transfer rate

SATA Gen.1 1.5 G bps

3.5 Access time (Random)

DVD-ROM	145 ms typ. (190ms Limit) * (Note 1)
DVD-ROM DL	220 ms typ. (300ms Limit) * (Note 1)
CD-ROM	125 ms typ. (180ms Limit) * (Note 1)
DVD-RAM (Ver.2.2)	270 ms typ. (400ms Limit)

Note :

1) Average access time is the typical value of more than 50 times including latency and error correction time.

Test Disc: DVD-ROM: ALMEDIO TDV-520 / TDR-820
DVD-ROM DL: ALMEDIO TDV-540 / TDR-840
CD: ALMEDIO TCDR-701 / HITACHI HCD-1

*) *Typical value defines a measured value in normal temperature (20 °C) and horizontal position.*

3.6 Data error rate (Measured with 5 retries maximum)

DVD-R/RW/ROM/RAM	<10 ⁻¹²
DVD+R/+RW	<10 ⁻¹²
CD-R/RW/ROM	<10 ⁻¹² (Mode-1)
	<10 ⁻⁹ (Mode-2)

Condition: It is assumed that the worst case raw error rate of the disc is 10⁻³

3.7 Spin up, Load time without Multi-session

Spin up time (Time to drive ready mode from standby mode)
5 s typ.

Load time (Time to drive ready mode from tray loading)

DVD-ROM	8 s typ.
DVD-R	22 s typ. (Disc At Once, Ver. 2.0 for General)
DVD-RW	22 s typ. (Disc At Once, Ver. 1.2)
DVD-RAM	40 s typ. (60 s Limit)
DVD+R/RW	22 s typ.
CD-ROM	9 s typ.
DVD±R DL	30 s typ.

3.8 Data buffer capacity 0.75MB

Hitachi-LG Data Storage, Inc.

Issued Date	04. 19. 2012	GH24NS95	Rev T1.1	11/21
Revised Date	05. 15. 2012			

4. Environmental conditions

4.1 Ambient temperature

Operating 5 to 40 °C

Storage / Transportation -30 to 60 °C

4.2 Temperature gradient 10 °C/h

4.3 Relative humidity

Operating 15% to 85% (Non-Condensing)

Storage / Transportation 10% to 90% (Non-Condensing)

4.4 Dew point temperature restrictions Less than 29 °C

4.5 Altitude

Operating 0 to 3,000 m

Non-operating 0 to 12,000 m

4.6 Vibration

(1) Operating

Read: Audio: 3.43 m/s² (0.35G) No unrecoverable error
Data: 3.43 m/s² (0.35G) No unrecoverable error
10 - 500Hz sine wave sweep, 1 oct./min at each of 3 directions¹⁾

Write: DVD: 0.98 m/s² (0.1G) No recording stop
CD-R/RW: 2.94 m/s² (0.3G) No recording stop
10 - 500Hz sine wave sweep, 1 oct./min at each of 3 directions¹⁾

(2) Non-Operating: 19.6 m/s² (2G) No damage must result
10 - 500Hz sine wave sweep, 1 oct./min at each of 3 directions¹⁾
for 40 minutes.

* ¹⁾ 3 direction : X (left and right), Y (back and front), Z (top and bottom) axis

4.7 Shock

(1) Operating

Read: Audio: 19.6 m/s² (2G) No unrecoverable error
Data: 58.8 m/s² (6G) No unrecoverable error
11ms, Half sine wave (5 time shocks, 6 s between shocks.)
at each of 3 directions¹⁾

Write: DVD: 4.9 m/s² (0.5G) No recording stop
CD-R/RW: 9.8 m/s² (1G) No recording stop
11 ms, Half sine wave (5 time shocks, 6 s between shocks.)
at each of 3 directions¹⁾

(2) Non-Operating 1,372 m/s² (140G) No damage after shock
2 ms Half sine wave at each of 3 directions¹⁾

* ¹⁾ 3 direction : X (left and right), Y (back and front), Z (top and bottom) axis

4.8 Drop impact

Less than 60 cm, No performance and physical damage

Note: Bulk package, 1 corner, 3 edges, 6 faces.

Issued Date	04. 19. 2012	GH24NS95		12/21
Revised Date	05. 15. 2012		Rev T1.1	

5. Quality and Reliability

5.1 MTBF

100,000 Power On Hours (POH)

- Assumption : Used in a normal office environment at room temperature.
- POH per year : 3,000
- ON / OFF cycles per year : 600
- Operating duty cycle : 20 % of power on time (Seek: 5 % of operating time)

5.2 Tray cycle test

: 30,000 times
 No degeneration in the mechanical part after test
 (1cycle ; one loading and one ejecting)

5.3 Actuator mechanism

: 1,000,000 full stroke seek

5.4 MTTR (Mean Time To Repair)

: 0.5 h

5.5 Component life

: 5 years or 2,000 h of Laser radiating time
 Assumption: Used in a normal office environment

6. Electro Static Discharge susceptibility (ESD)

- 0 to 5 kV : With no user detectable data read errors
- From 5 kV to 8 kV : No catastrophic failure or damage
- * Test conditions : C = 150 pF, R = 330 ohms, 50 times discharge except connector

7. Power requirements

7.1 Source voltage

- + 5 V +/- 5 % tolerance, less than 100 mVp-p Ripple voltage
- +12 V +/- 10 % tolerance, less than 100 mVp-p Ripple voltage
 (when DVD+/-R 22x write, +12V +/- 5% tolerance less than 100 mVp-p Ripple voltage)

7.2 Current

Idle (Hold track state)	+ 5 V DC	0.9 A typ.	< 1.0 A max.
	+12 V DC	0.5 A typ.	< 1.0 A max.
Write (Active)	+ 5 V DC	1.3 A typ.	< 2.0 A max.
	+12 V DC	1.5 A typ.	< 2.5 A max.
Read (Active)	+ 5 V DC	1.2 A typ.	< 1.5 A max.
	+12 V DC	0.9 A typ.	< 1.5 A max.
Seek (Access)	+5 V DC	1.0 A typ.	< 1.5 A max.
	+12 V DC	1.2 A typ.	< 2.0 A max.

7.3 Standby

Sleep mode (No disc) : 1.0 W typ.

Issued Date	04. 19. 2012	<b style="font-size: 2em;">GH24NS95		13/21
Revised Date	05. 15. 2012		Rev T1.1	

8. Acoustic noise

Less than 50 dB, A scale, at 0.5 m away from bezel and 0.45m height away

Note : 1. Disc : Less than imbalance 0.3×10^{-4} Nm

2. Installation : Horizontal (In system)

3. Ambient temperature : Normal temperature

4. Except loading, unloading and seek

5. ISO7779 Seated operator position

9. Dimensions

External dimensions (W x H x D)

146 x 41.3 x 165 mm (W/O Bezel, Refer to Section 15.)

Front bezel (W x H x D)

148 x 42 x 5 mm

10. Mass

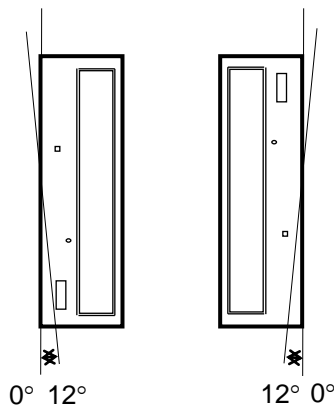
Max 700 g

11. Mechanical

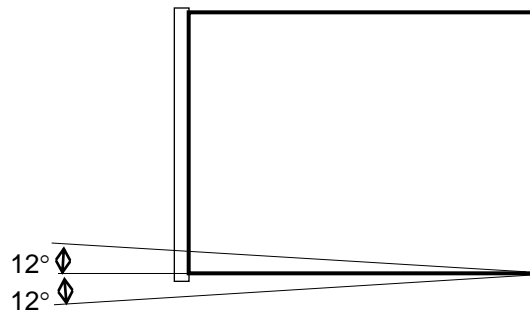
11.1 Disc loading

Tray type, Auto loading

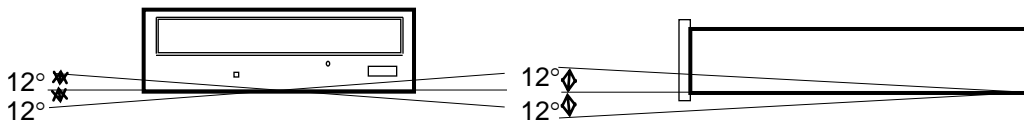
11.2 Mounting requirements



Vertical



Horizontal



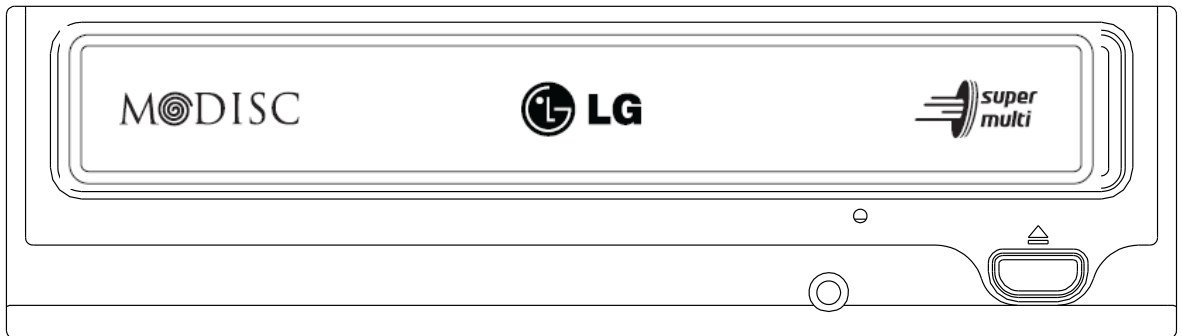
-Note-

Operation with postures other than the above drawings is not guaranteed.

Issued Date	04. 19. 2012	GH24NS95	Rev T1.1	14/21
Revised Date	05. 15. 2012			

12. Front Design of Front side

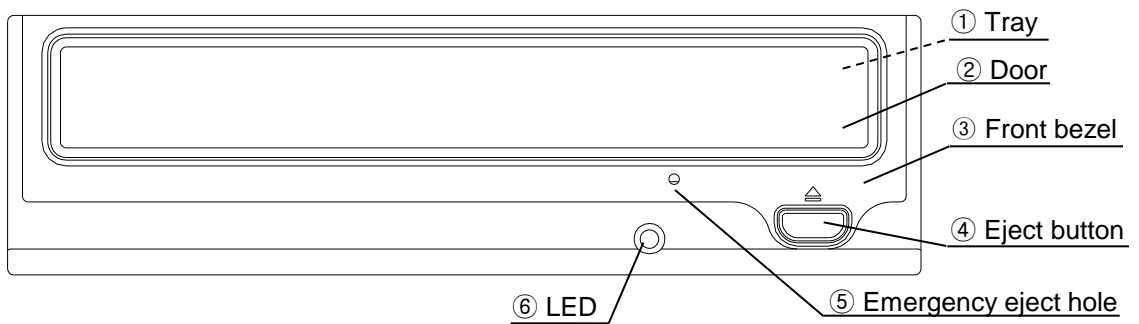
12.1 Front side (Front Design)



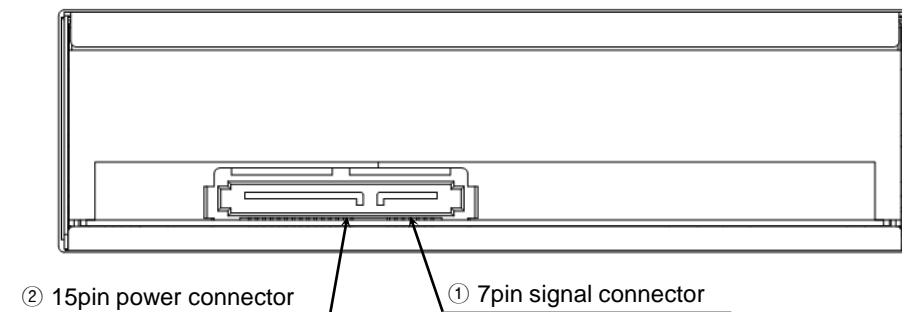
13. Controls and Functions

13.1 Front side

Refer to Appendix 1. for Front design (Logo, color, material, etc.)



13.2 Rear side



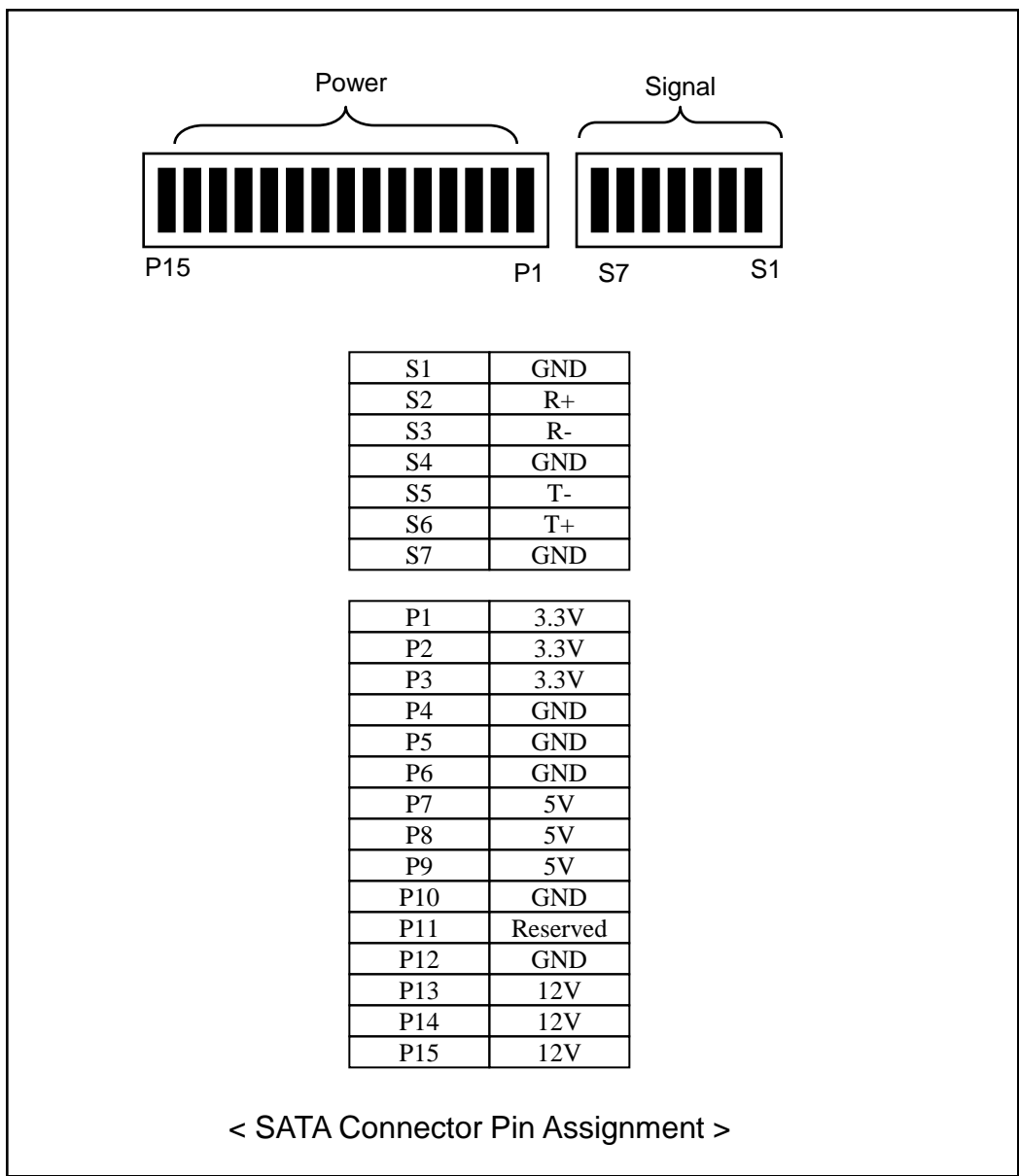
< Rear view >

Issued Date	04. 19. 2012	GH24NS95		15/21
Revised Date	05. 15. 2012		Rev T1.1	

14. Connector Pin define

SATA Drive consist of two connector .
 First , Power connector supply 5V and 12V Power .
 3.3V was not supplied .

Second , Signal Connector has 2 pairs .



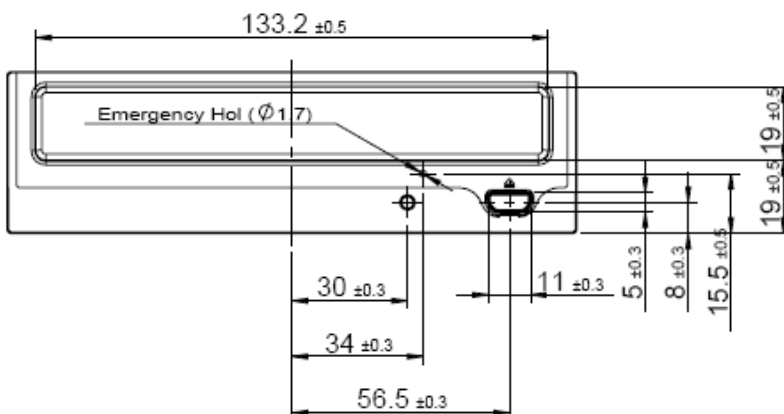
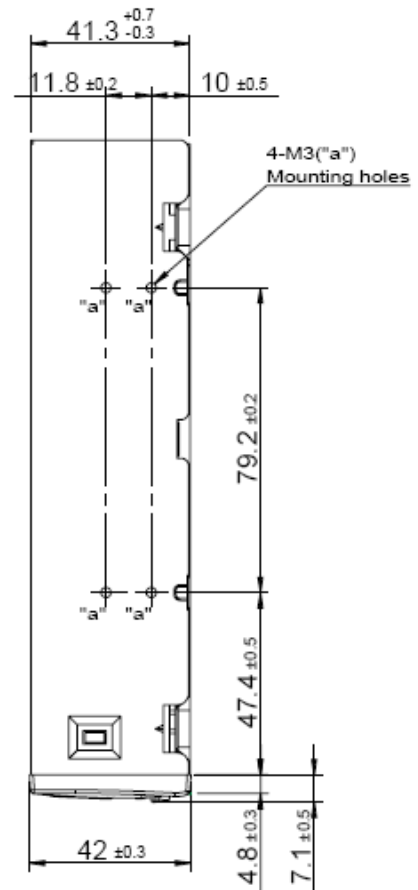
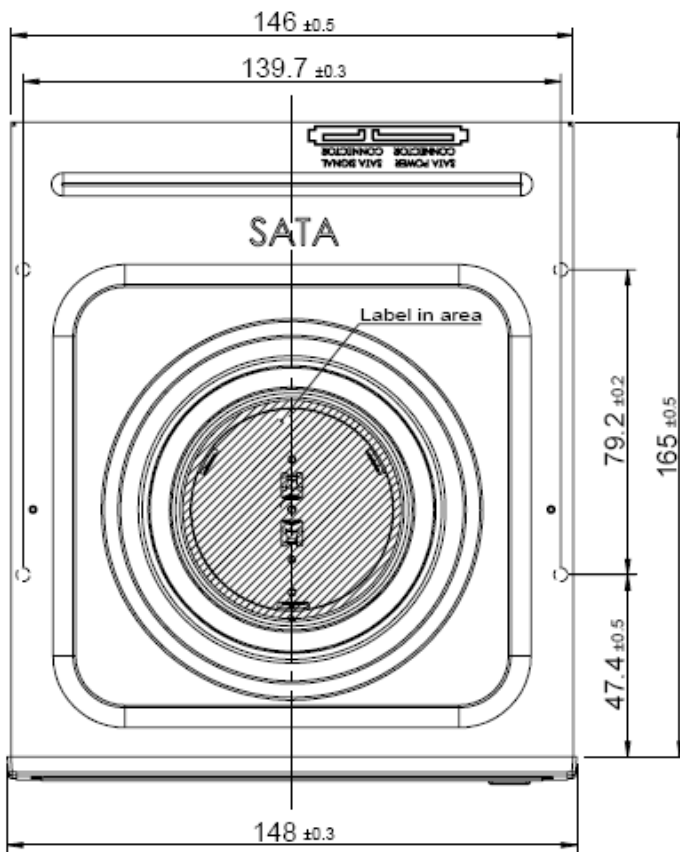
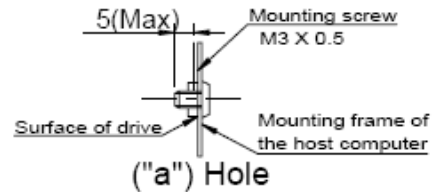
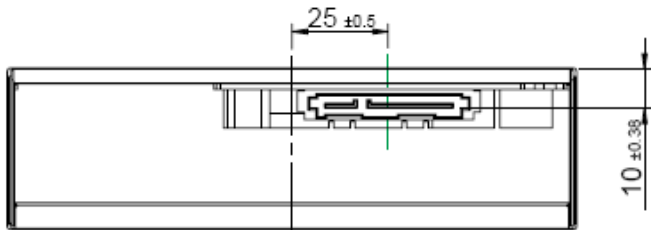
Issued Date	04. 19. 2012	<h1 style="margin: 0;">GH24NS95</h1>	<h2 style="margin: 0;">Rev T1.1</h2>	<h3 style="margin: 0;">16/21</h3>
Revised Date	05. 15. 2012			

15. Mechanical dimensions

Mechanical Drawing (Front & Back of Drive)

Unit: mm Allowance: +/- 0.5 unless otherwise stated

Host bracket recommend holes size: 3.2~3.5mm
 Torque spec.
 MIN. 4Kgf, Max. : 7Kgf
 Recommend spec: 5~6Kgf.cm



Issued Date	04. 19. 2012	GH24NS95		17/21
Revised Date	05. 15. 2012		Rev T1.1	

16. Supported Command List

16.1 ATA Commands

< Command >	< Code >
(1) ATAPI Packet Command	A0h
(2) ATAPI Soft Reset	08h
(3) Check Power Mode	E5h
(4) Execute Drive Diagnostics	90h
(5) Flush Cache	E7h
(6) Identify Packet Device	A1h
(7) Idle Immediate	E1h
(8) Set Features	EFh
(9) Sleep	E6h
(10) Standby Immediate	E0h

16.2 ATAPI Packet Commands

< Command >	< Code >
(1) BLANK	A1h
(2) CLOSE TRACK/RZONE/SESSION/BORDER	5Bh
(3) FORMAT UNIT	04h
(4) GET CONFIGURATION	46h
(5) GET EVENT STATUS NOTIFICATION	4Ah
(6) GET PERFORMANCE	ACh
(7) INQUIRY	12h
(8) MECHANISM STATUS	BDh
(9) MODE SELECT (10)	55h
(10) MODE SENSE (10)	5Ah
(11) PREVENT ALLOW MEDIUM REMOVAL	1Eh
(12) READ (10)	28h
(13) READ (12)	A8h
(14) READ BUFFER	3Ch
(15) READ BUFFER CAPACITY	5Ch
(16) READ CAPACITY	25h
(17) READ CD	BEh
(18) READ CD MSF	B9h
(19) READ DISC INFORMATION	51h
(20) READ DVD STRUCTURE	ADh
(21) READ FORMAT CAPACITIES	23h
(22) READ HEADER	44h
(23) READ SUB-CHANNEL	42h
(24) READ TOC/PMA/ATIP	43h
(25) READ TRACK/RZONE INFORMATION	52h
(26) REPORT KEY	A4h
(27) REQUEST SENSE	03h
(28) RESERVE TRACK/RZONE	53h
(29) REZERO UNIT	01h
(30) SEEK	2Bh
(31) SEND CUE SHEET	5Dh
(32) SEND DVD STRUCTURE	BFh
(33) SEND KEY	A3h
(34) SEND OPC INFORMATION	54h

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Issued Date	04. 19. 2012	GH24NS95		18/21
Revised Date	05. 15. 2012		Rev T1.1	

< Command >	< Code >
(35) SET CD SPEED	BBh
(36) SET READ AHEAD	A7h
(37) SET STREAMING	B6h
(38) START/ STOP UNIT	1Bh
(39) SYNCHRONIZE CACHE	35h
(40) TEST UNIT READY	00h
(41) VERIFY(10)	2로
(42) WRITE(10)	2Ah
(43) WRITE(12)	AAh
(44) WRITE AND VERIFY(10)	2Eh
(45) WRITE BUFFER	3Bh

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Issued Date	04. 19. 2012	GH24NS95		19/21
Revised Date	05. 15. 2012		Rev T1.1	

17. Regulations and Standards

17.1 Safety

The product will satisfy the safety standards outlined below.

UL:	UL 60950-1 Second Edition
CSA:	CSA C22.2 No. 60950-1-07
TÜV:	EN 60950-1 / EN60825-1
SEMKO:	EN 60950-1 / EN60825-1

17.2 EMC / EMI

The product complies with applicable technical requirements as specified below

FCC Part15 Class B
CE Marking,
C-Tick Mark
Taiwan EMC (BSMI)
VCCI

17.3 Laser safety

The product will satisfy all the requirements for the laser specified below.

Class 1 laser product comply with DHHS rules 21 CFR Subchapter J
Class 1 laser product to EN60825-1 / IEC 60825-1

18. Supporting Operating System & Application Software

18.1 Operating System

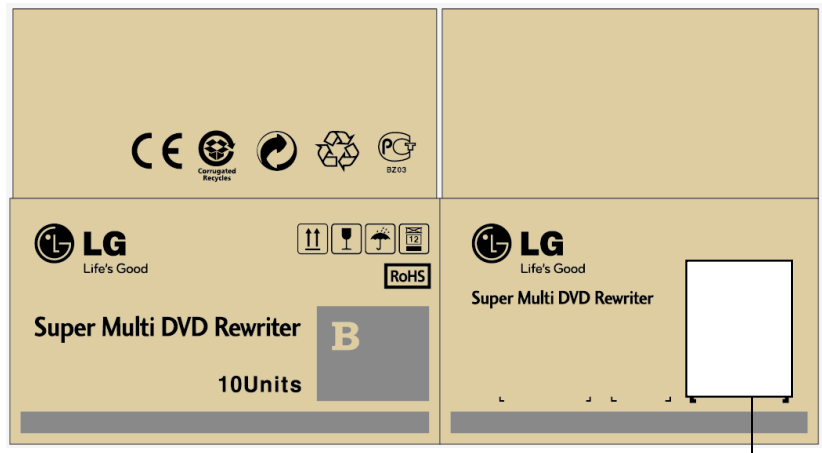
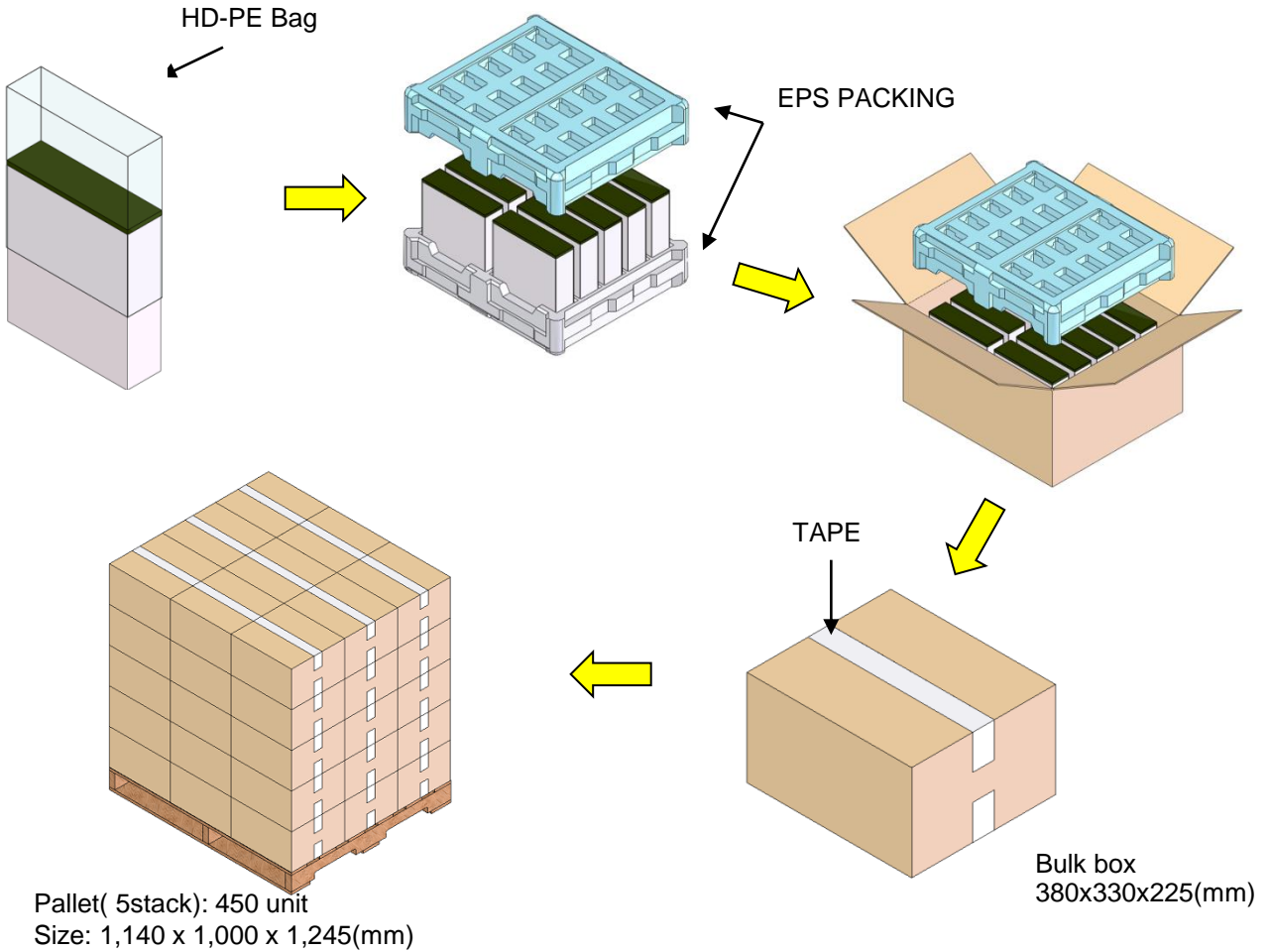
Windows XP (Home/Professional/Media Center Edition) with SP2 or higher,
Windows Vista™(X86,X64)
Windows 7 x86/x64

18.2 Application Software

(1) Power2Go

Issued Date	04. 19. 2012	GH24NS95	20/21
Revised Date	05. 15. 2012		

Appendix 1. Packaging Spec



Area of box label
-P/N:3850H-1392A(90*120)

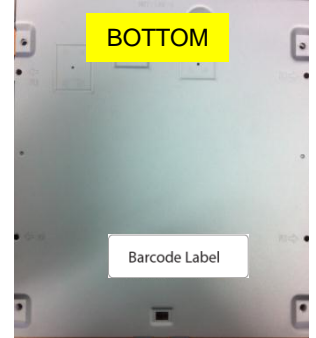
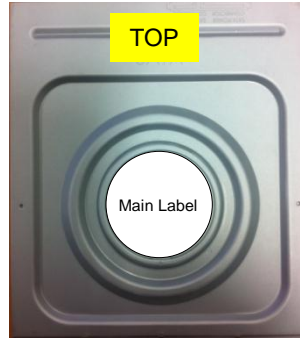
Hitachi-LG Data Storage, Inc.

Issued Date	04. 19. 2012	<h1 style="font-size: 2em;">GH24NS95</h1>	<h2 style="font-size: 1.5em;">Rev T1.1</h2>	<h2 style="font-size: 1.5em;">21/21</h2>
Revised Date	05. 15. 2012			

Appendix 2. Label Information

Attachment position of the label

LGE LABEL INFORMATION



Standard Label



LABEL SIZE : Ø57 x 0.1(t)
Label P/N : MEZ64307701

Barcode Label



LABEL SIZE : 66.5(W) x 20(H) x 0.12(t)
Printing Information : Blue, Red Part
MEZ61849801

* Barcode Label Detail Printed Information *

- Product Name : Super Multi DVD Rewriter**
- Model name : MODEL : GH24NS95**
- Ampere : 5 V / 12 V = 2.0 A / 2.5 A**
LGE MS ONLY : 5 V / 12 V = 2,0 A / 2,5 A
You must have A SPACE before the "SI UNIT". → Voltage, Ampere, Hz
Ex > X.X A / X.X A
- 製造日期 (YEAR, MONTH, DATE) : 2012 01 10**
- Barcode of Information (39Code)**
S/N : YMMFLX000001
- **Y** : Year (2010 : 0, 2011 : 1, 2012 : 2...)
- **MM** : Month
- **FL** : Factory Line Code
- **XX** : Secret Code
- **000001** : Serial Number
- ROM VER. : XXXX**
DO NOT PRINT "XXXX" ON MAIN LABEL.
Please refer to the F/W section or SR PAGE.
- MANUFACTURED : JANUARY 2012**
- RoHS**