

Portable CD Player



Atrac3plus

“WALKMAN”

Sony Corporation



Sony Corporation

D-NE1



가

- 가
-

CE) EEA (

ATRAC CD Walkman

!

ATRAC CD	!	4
CD		6
ATRAC3plus	ATRAC3	6
MP3		6
ATRAC3plus/ATRAC3	MP3	8

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CD ATRAC3plus/ ATRAC3/MP3

1. CD		13
2. CD		13
3. CD		14

() 19

()
(ATRAC CD/MP3 CD) 19

가
() 20

(m3u
) (MP3 CD) 21

(PGM) 22

G-PROTECTION 23

CD
(CD) 23

ATRAC CD, MP3 CD
..... 24

(SOUND) 24

(AVLS) 25

(HOLD) 25

..... 26

LCD 26

CD

..... 27

..... 28

..... 31

..... 32

가

..... 33

..... 34

? 35

..... 38

..... 39

D-NE1

“ATRAC CD Walkman”

CD Walkman “ATRAC CD”

ATRAC CD

!

ATRAC CD

1, 2, 3

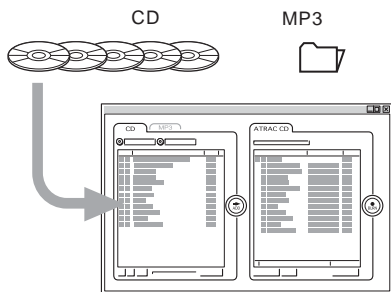
1

SonicStage Simple
Burner



2

PC
CD-R/RW



SonicStage Simple Burner

“SonicStage Simple Burner”

ATRAC CD

?

ATRAC CD 30 ATRAC3plus/ATRAC3 CD CD-R/RW

ATRAC3 MP3

* 1 CD()

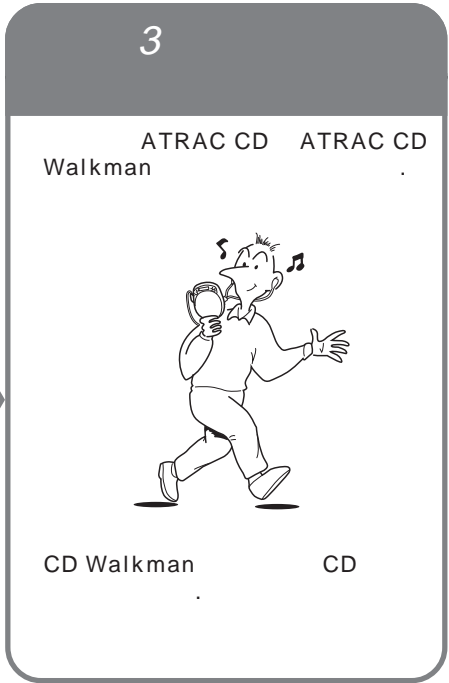
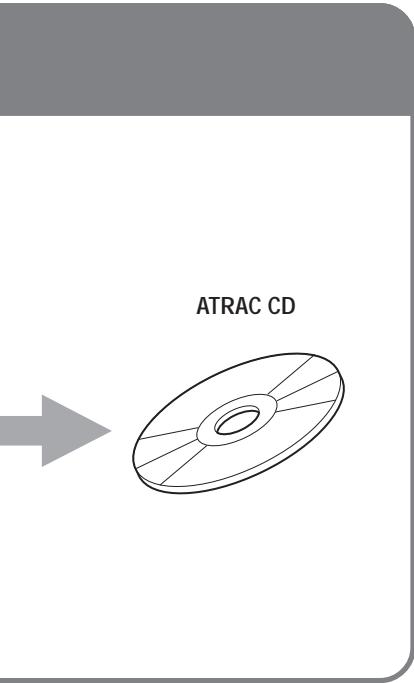
60 가

ATRAC3plus

48kbps

700 MB CD-R/RW

CD-R/RW
ATRAC3plus/



ATRAC3plus/ATRAC3

?

6-8

CD

- CD 37가 :
- CD
 - ATRAC3plus/ATRAC3
 - MP3

ISO 9660 Level 1/2, Joliet , .

ATRAC3plus ATRAC3

“ATRAC3plus” “Adaptive Transform Acoustic Coding3plus” ATRAC3
. ATRAC3plus
1/20 . 64kbps
48kbps가 .

“ATRAC3” “Adaptive Transform Acoustic Coding3”
. ATRAC3
1/10 . 132kbps,
105kbps, 66kbps가 .

가

- : 255
- : 999

“SonicStage Simple Burner” .

ATRAC3plus/ATRAC3
.

MP3

MP3 MPEG-1 Audio Layer3 ISO()
Motion Picture Experts Group
1/10 . MP3
가 / 가
MP3 .

- 가 : 8
- / :
- A-Z, a-z, 0-9, _()
- MP3 "mp3"
- ID3 * (, , 가) 가
- *ID3 MP3

- 가
- : 100
- : 400
- CD MP3 : 16-320kbps
- MP3 : 32/44.1/48kHz. 가 (VBR) "44.1kHz", "128kbps",
- "halting of writing"
- "Disc at Once"
- MP3
- CD
- 가
- 가

ATRAC3plus/ATRAC3 MP3

ATRAC3plus/ATRAC3
“ ” CD “ ” “ ” “ ”
“ ” 가 (“ ” “ ”).
CD MP3 가 “ ” ATRAC3plus/ATRAC3
MP3 CD-R/RW

ATRAC3plus/ATRAC3 MP3 CD CD
, 가 , . CD ID3 * 1.1/2.2/2.3

- CD CD-R/RW
- ATRAC3plus/ATRAC3 CD-R/RW
- 가 가

CD ()

1 (▶▶| (/)
◀◀/▶▶| (AMS/))
(13, 14, 20-22)

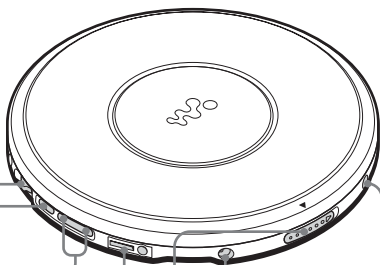
2 ■ ()/CHARGE
CHARGE
(14, 25, 26, 28, 29)

3 VOL () +* / -
(14)

4 Ω ()
(13)

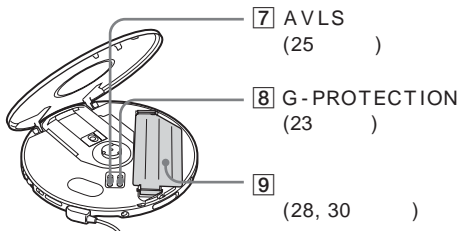
5 OPEN
(13)

6
(28, 34)



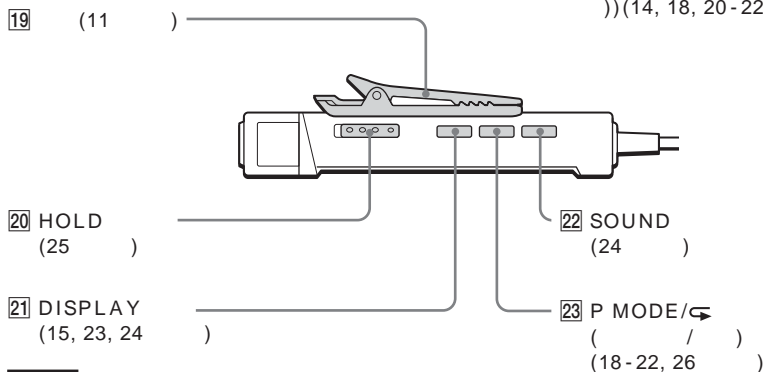
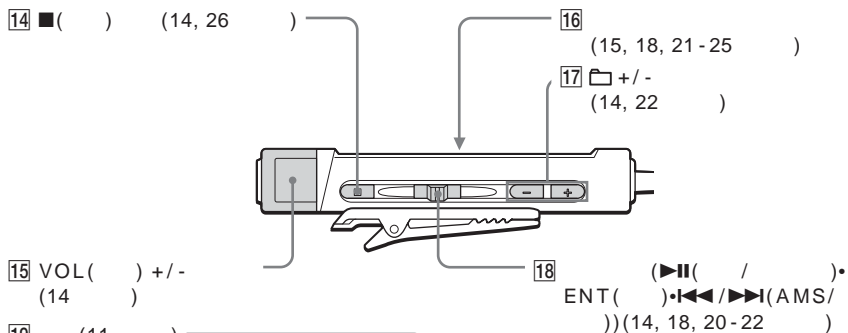
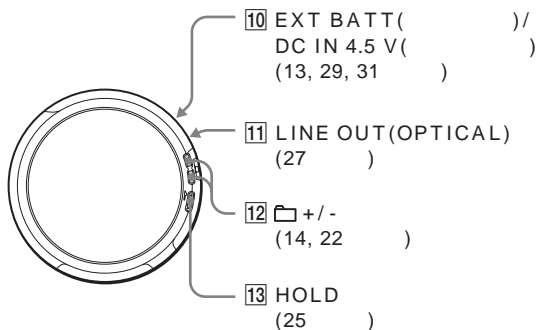
*

CD ()



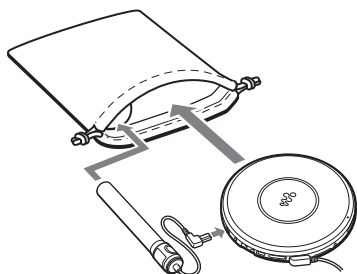
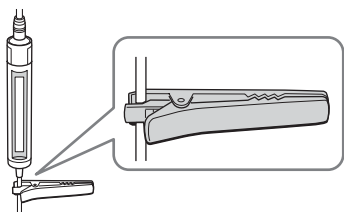
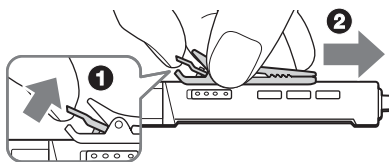
()

CD ()



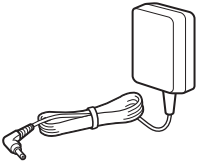
CD

CD

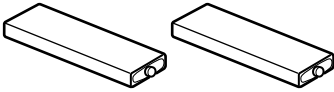


AC

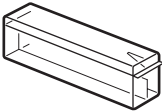
(1)



(2)



(1)

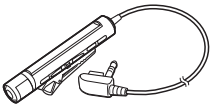


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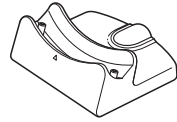
(1)



(1)



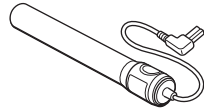
(1)



(1)



(1)



AC (1)*
 CD-ROM(SonicStage Simple Burner)
 (1)
 SonicStage Simple Burner 가
 (1)
 * JEB

CD ATRAC3plus/ATRAC3/ MP3

1. CD

① AC

② /

AC 가

AC 가 AC

AC

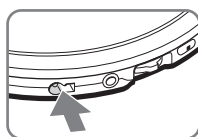
• /

• /

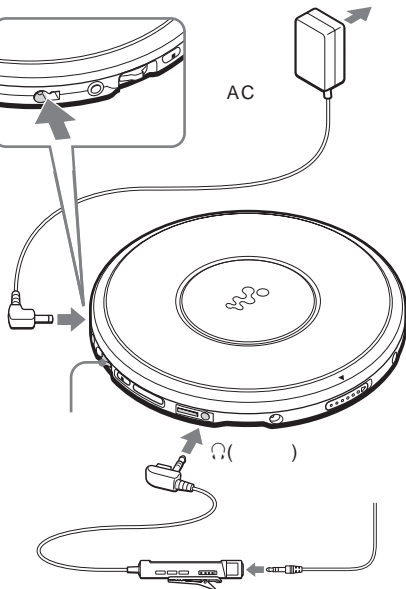
가

EXT BATT/DC IN 4.5 V

AC



AC

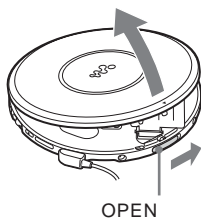


CD ATRAC3plus/ATRAC3/MP3

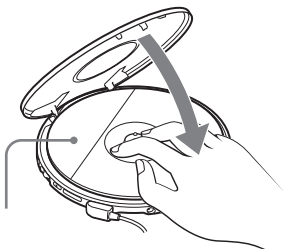
2. CD

① OPEN

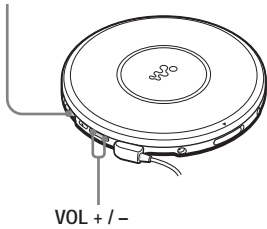
CD



② CD

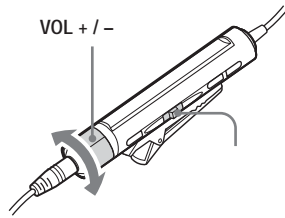


3. CD



1

2 VOL +



1

2 VOL +/-

()

() CD

/

	■(CD	■/CHARGE)	*2
(AMS*1)	⏮	가	*2
(AMS)	⏮	가	*2, *3
(AMS)	⏭	가	*2, *3
(AMS)	⏭	가	*2, *3
	⏮	가	*2
	⏭	가	*2
*4	📁+		
*4	📁-		

*1 Automatic Music Sensor()

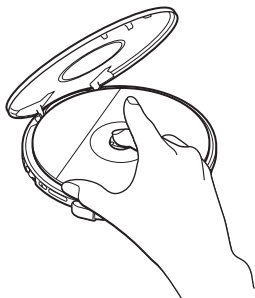
*2

*3 가 가 ⏭ 가 ⏮ 가

*4 ATRAC CD MP3 CD

CD

CD



CD-R/RW

CD

CD-DA*

CD-R/RW

가

가

* CD-DA Compact Disc Digital Audio

CD

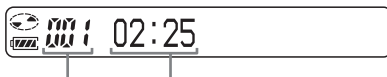
(CD)

CD

CD DISPLAY 가)

가 (23 24

CD



CD 가 CD



ATRAC3plus/ATRAC3/MP3

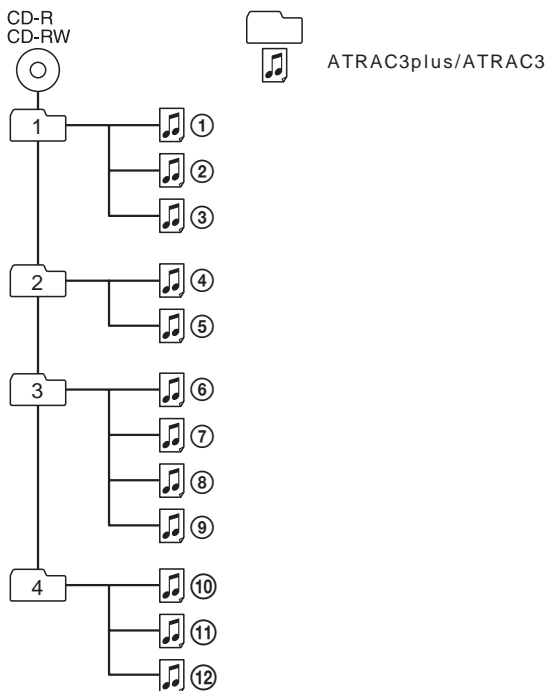


• CD A-Z, a-z, 0-9, _
• CD CD 가

가 ()

“READING”

ATRAC3plus/ATRAC3

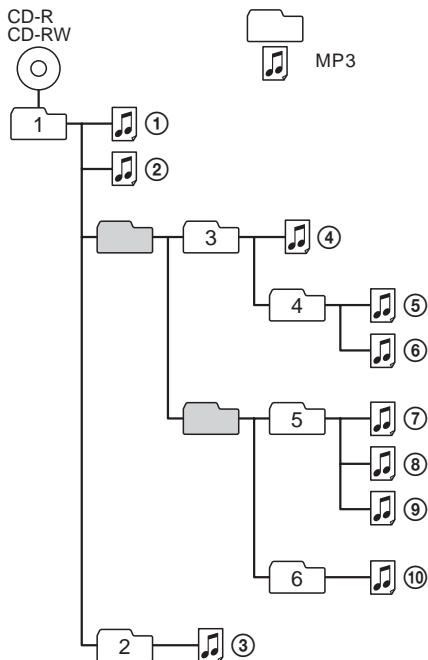


()
 ①, ②, ③...⑩, ⑫ ATRAC3plus/ATRAC3
 (P MODE/↔ " " (18))
 ATRAC3plus/ATRAC3



- : 255
- : 999
- ATRAC CD " " " " " " " "

(MP3 CD)



()

①, ②, ③...⑨, ⑩ MP3

(P MODE/←

“ ”

(18)

MP3

(: 3

CD

④

4

CD

⑤

⑥

).

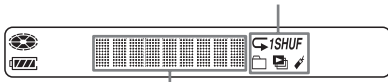
• MP3

• : 100
• : 400

• : 8

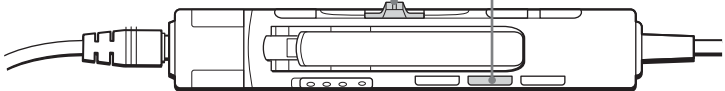
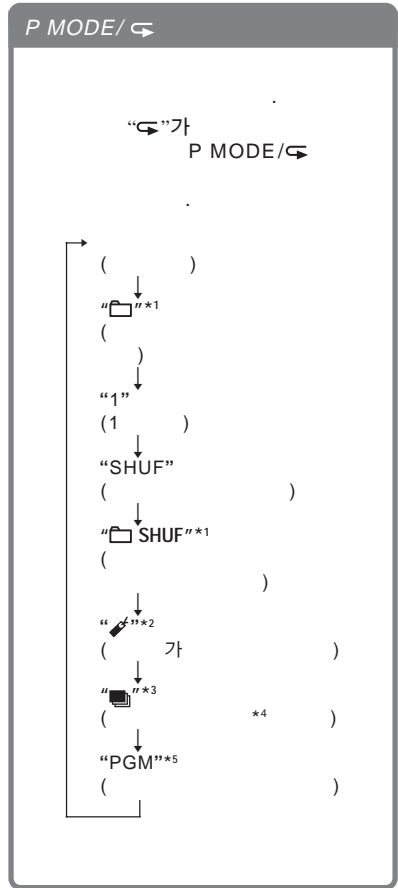
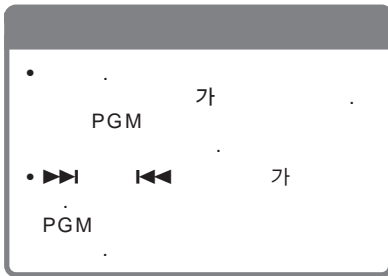
• MP3 CD “ ” “ ” “ ” “ ” “ ” “ ”

P MODE/↵ (/)



CD , ATRAC3plus/
ATRAC3/MP3

- *1 ATRAC CD/MP3 CD
- *2 / 가 가
- *3 MP3 CD
- *4 MP3 CD (m3u)
- *5



()

“SHUF”
CD

P MODE/↵
CD

.

.

.

.

.

()

(ATRAC CD/MP3 CD)

“ SHUF”
CD

P MODE/↵

.

.

가 ()

CD

CD 99 가 (10 CD).

ATRAC CD

CD 999 가 (5 CD).

MP3 CD

CD 400 가 (10 CD).

가

1 가 “()”가

가

2 1 가 “”가

가

1 “”가 P MODE/

2 “”가 가

“”가

“”가



• 가 가
• 11 CD(ATRAC CD 6 CD) 가
• CD

• 가
• “Lobatt”가 CD

가

(m3u) (MP3 CD)

* "m3u" MP3 가 CD-R/RW MP3 m3u

1 " "가 P MODE/



2 << >> 가



3



CD

2

(PGM)

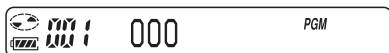
CD 64

1 DISPLAY 가 “PGM” P

MODE/↵

CD

ATRAC CD/MP3 CD



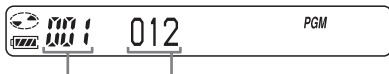
2 >>> <<< 가

ATRAC CD/MP3 CD

☞+

CD

ATRAC CD/MP3 CD



3 가 가

CD

ATRAC CD/MP3 CD



4 2 3

5 PGM

5

DISPLAY

가

“PGM”

P MODE/↵

가

- 3 64 (MP3 CD)
- 64

(CD)/ (ATRAC CD/

G-PROTECTION

G-PROTECTION

CD G-PROTECTION
"2" G-PROTECTION
"1"

CD G-PROTECTION
CD
G-PROTECTION

"1"

"2"



- CD

가

가 :

-

CD

-

CD-R/RW

CD

(CD)

DISPLAY

CD

CD



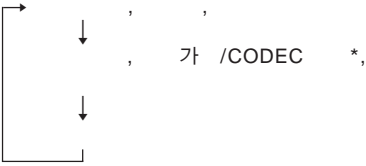
*

ATRAC CD, MP3 CD

DISPLAY ATRAC CD/MP3
CD

ID3 가

DISPLAY



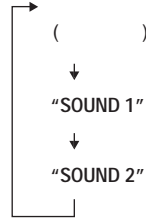
*가



- 가 "ROOT"
- ID3 가
- "-----"가

(SOUND)

SOUND "SOUND 1"
"SOUND 2"



가

"SOUND 2" "SOUND 1"


SOUND

(AVLS)

AVLS(Automatic Volume Limiter System,)

AVLS() "LIMIT"

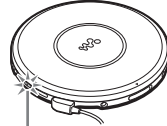
AVLS

AVLS
AVLS "NORM"

(HOLD)

CD 가

HOLD



HOLD

CHARGE

가

HOLD CD

가

HOLD
CD

HOLD

HOLD
"HOLD"

CD /

1 CD (AC)

2 ■(CD ■/CHARGE)

■/CHARGE ■

LCD

LCD
5

1 CD

2 P MODE/↵

LCD

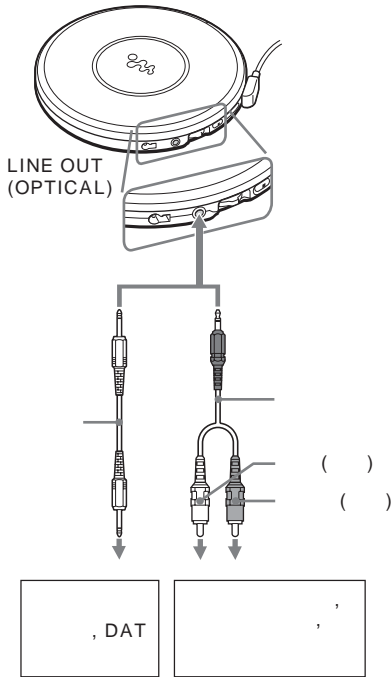
가 P MODE/↵

LCD

AC

LCD

CD
CD



- CD 가
- AC 가 가
- 가
- CD Serial Copy Management System ATRAC CD/MP3 CD
- CD VOL +/-
- 가
- CD , DAT CD
- G-PROTECTION SOUND CD
- CD G-PROTECTION "1"
- SOUND (OPTICAL) LINE OUT



- AC (" CD ATRAC3plus/ATRAC3/MP3 ")
- LR6(AA) ()

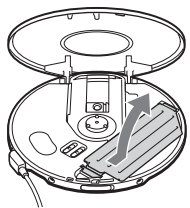
" "



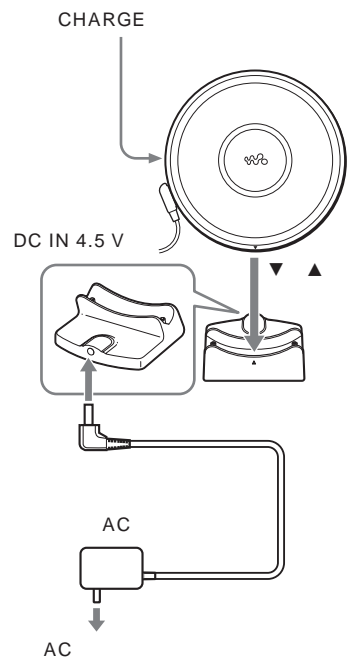
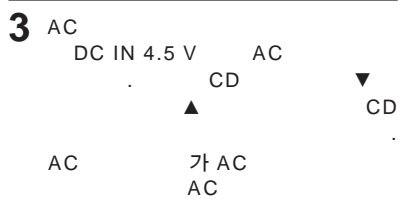
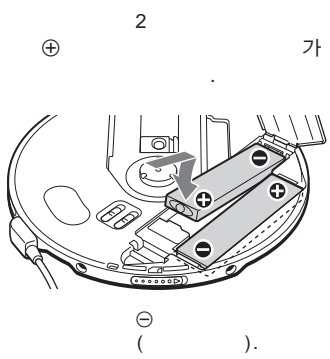
. CD


- NH-14WM(A)()

1



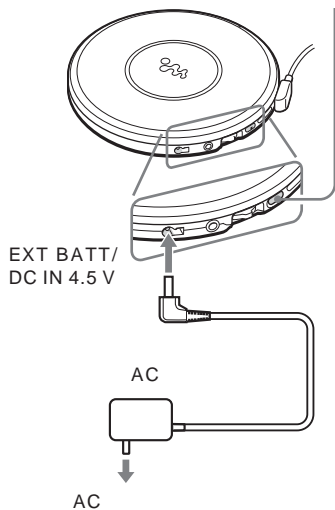
2



 "Charging" 가
 CHARGE 가 . CD
 가
 CHARGE 가

AC CD EXT
 BATT/DC IN 4.5 V AC
 ■/CHARGE

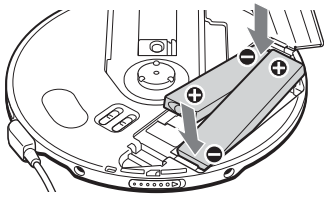
■/CHARGE
 ●CHARGE



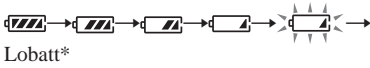
.
 . CD 가
 .
 . CD
 . CD
 . CD ▼ ▲ . CD
 CHARGE 가
 가

()

⊖



“ ”가



*



- 

.1

4 1

- 가 

가

CD

CHARGE
가
“Lobatt”가

가
가
)

가

CD

NH - 14WM(A)

CD

가

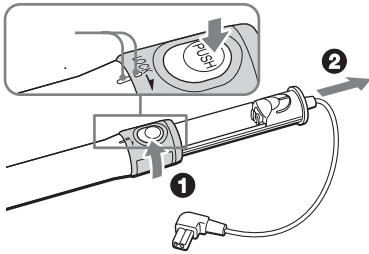
가

가

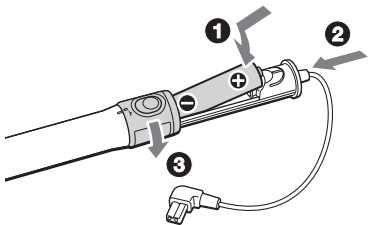
CD

• LR6(AA)

1 PUSH
PUSH



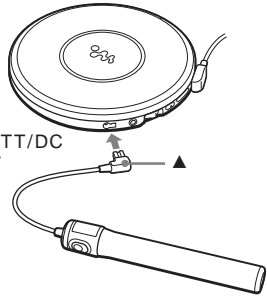
2 ⊕
LR6(AA) LOCK



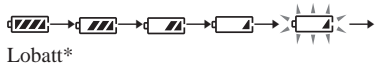
3

CD

EXT BATT/DC
IN 4.5 V



“ ”가



*

가

CD



-
-

AC

CD

AC

- AC
CD
AC-E45HG AC AC



- AC
- AC AC AC AC

-
-
-
- 가

-
-
- 가
-

-
- 가

▶ 가

• CD

• DC IN 4.5 V()

CD

• CD 가 / 가
CD 가

• CD CD가

• CD 가 , 가 , 가

• CD 가 가 CD

• CD (,
) CD 가
가

CD
• CD 가

• CD

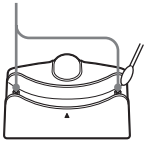
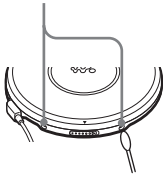


• CD
CD

가



가 CD 가



?

가 가 Sony

VOL+/-	+	→ AVLS	“NORM”	.(25)
VOL+	(CD	→ /	LINE OUT(OPTICAL)	
)	가	Ω()		.(13)
		→ /	LINE OUT(OPTICAL)	
		Ω()		.(13)
가		→ /		.(13)
		→ 가	/	
		→ CD		.(6)
		→ 가		
		→ .(31)		
		→ LR6(AA)		
		→ .(31)		
		→ (28- 30)		
“Lobatt”가		→ 가		
CD가		→ .(28)		
		→ LR6(AA)		
		→ .(31)		
“HI dc In”		→	가 AC	
		→	AC	“
		→		.(38,
		→ 39)		

가

()

CD	CD가	CD	→		HOLD	
		"No disc"가	→	CD가	.(25)	.(33)
			→	CD		
			→	(13)		
			→	CD		.(28)
			→	(28, 31)		
			→	AC	AC	
			→	(13)		
			→	AC	1	
			→	CD-R/RW		
			→	CD-R/RW		가
			→	CD-R/RW		.(7)
			→			
CHARGE	CD	가	→		HOLD	
CD가					.(25)	
CD	VOL +/-		→	CD	가	.(27)
			→		, DAT	
	가		→		.(27)	
			→			.(27)
			→	CD	가	
			→	CD가		
			→		가 CD	
			→	CD	가	
			→		CHARGE	가
			→		.(28)	
			→			
			→		CD	
			→		가	
			→		AC	
			→		.(13, 28, 31)	
CD			→			.(28)
			→	CD		.(27)
	가	가	→			
			→			

ATRAC CD	MP3 CD CD가	→ CD	ATRAC CD	MP3 CD
----------	---------------	------	----------	--------

“NO FILE”	CD	→ CD	ATRAC3plus/ATRAC3/MP3 CD-RW
		→	
		→	CD가

CD		→ CD	가 CD
CD가			

	CD	→ CD
가		

LCD		→ CD	(40°C)	가	(0°C)
-----	--	------	---------	---	--------

“ ”가	→ CD	P MODE/↵
	“ ”가	

: GaAlAs
 : $\lambda = 780 \text{ nm}$
 :
 : $44.6 \mu\text{W}$
 (가 7 mm
 200 mm
 .)

D-A
1

20-20 000 Hz $^{+1}_{-2}$ dB(JEITA CP-307
)

(4.5 V)
 ()
 47 k Ω 0.7 V rms
 10 k Ω

()
 16 Ω 5 mW + 5 mW
 ()
 : -21 ~ -15 dBm
 : 630 ~ 690 nm

- Sony NH-14WM(A) 2 :
1.2 V DC \times 2
- LR6(AA) 2 : 1.5 V DC \times 2
- AC (DC IN 4.5 V):
U, U2, CA, CA2, E92, MX2, TW2,
CA2/C : 120 V, 60 Hz
CED, CED/4, CE7, CE7/C, EE, EE1, E,
E13, E13/2 : 220-230 V, 50/60 Hz
CEK : 230 V, 50 Hz
AU2 : 240 V, 50 Hz
EU8, EU8/C, JE.W, E18, KR4, EE8 :
100-240 V, 50/60 Hz
HK4 : 230 V, 50 Hz
CNA : 220 V, 50 Hz

*1()
 (CD)
 CD

2 NH-14WH(A) (5 *2)		G-PROTECTION	
		"1"	"2"
CD		35	32
ATRAC3plus	*3	55	55
MP3	*4	50	50

2 *5)		G-PROTECTION	
		"1"	"2"
CD		55	50
ATRAC3plus	*3	95	95
MP3	*4	85	85

NH-14WM(A) () 2 *5)		G-PROTECTION	
		"1"	"2"
CD		90	82
ATRAC3plus	*3	150	150
MP3	*4	135	135

*1 JEITA(Japan Electronics and Information
Technology Industries Association)

*2

*3 48 kbps 64 kbps

*4 128 kbps

*5 Sony LR6(SG) ()

5°C - 35°C

((w/h/d))
135.4 × 135.4 × 15.8 mm
()
179 g

가 Dolby Laboratories

가

AC	AC - E45HG
	SRS - Z1
	DCC - E345
	DCC - E34CP
	CPA - 9C
	MDR - E848SP
	MDR - EX71SL
	MDR - Q55SL

가

가

<http://www.sony.net/>

Sony Corporation Printed in Malaysia



* 3 2 5 3 6 0 4 7 3 * (1)