

Service Manual

RC9001 /A1S/F S/N1S/T1S/U1S

Touch Screen Remote Control

RC9001



DS9001



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Please use this service manual with referring to the user guide (D.F.U.) without fail.
修理の際は、必ず取扱説明書を準備し操作方法を確認の上作業を行ってください。

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RC9001

Part no. 90M28CW855010
First Issue 2007.07
MZ

RC9001

MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or Agent.

ORDERING PARTS :

Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order :

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature : any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

USA

MARANTZ AMERICA, INC
100 CORPORATE DRIVE
MAHWAH, NEW JERSEY 07430
USA

EUROPE / TRADING

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CANADA

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1578 NANJING (WEST) ROAD SHANGHAI
CHINA
TEL : 021 - 6248 - 1064
FAX : 021 - 6248 - 3565

The exchange of the Rechargeable Lithium Polymer battery (Pos. No. : 251).

CAUTION



Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type.

充電式リチウムイオン電池（リチウムポリマー電池）(Pos. No. : 251) の交換について


注意

電池を誤って交換すると爆発する危険があります。
同一又は同等の型のものにのみ交換してください。

NOTE ON SAFETY :

Symbol  Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol  . Any other component substitution (other than original type), may increase risk of fire or electrical shock hazard.

安全上の注意 :

 がついている部品は、安全上重要な部品です。必ず指定されている部品番号のものを使用して下さい。

SHOCK, FIRE HAZARD SERVICE TEST :

CAUTION : After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins (with unit NOT connected to AC mains and its Power switch ON), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

In case of difficulties, do not hesitate to contact the Technical Department at above mentioned address.

1. TECHNICAL SPECIFICATIONS

Display	3.7 inch TFT color display with touch screen VGA (640 x 480 pixels) resolution landscape LCD 65,536 colors
Interface	USB 2.0 port connector
Infrared (IR)	<ul style="list-style-type: none"> • Operating distance = max 12 m (36 ft) • Learning distance = 100-150 mm (3,9 – 5,9 inch) at 0-40 degrees • Operating angle= 45° at max 5 m (15 ft) • Operating/ learning frequency range = 17 kHz – 1 MHz carrier freq
Wireless System	WiFi based technology operating at 2.4 GHz
Memory	64 MB SDRAM 64 MB NAND Flash
Power Management	<ul style="list-style-type: none"> • Power on by tilting, tapping the screen, pressing the backlight button or tapping the keys • Power off automatically by time out • Battery status indication
Dimensions	Control Panel: 166,4 x 100 x 32 mm (6.6 x 3.9 x 1.3 inch) Docking Station: 130.5 x 98.7 x 61.3 mm (5.1 x 3.9 x 2.4 inch)
Operating Temperature	5° C – 45° C (41° F – 113° F)
Storage temperature	-25° C – 70° C (-13° F – 158° F)
Battery	Lithium Polymer battery, 2100 mAh
Power Adapter	100 V-240 V AC / 50-60 Hz Power adapter (5 V DC/2A output)
Accessories	<ul style="list-style-type: none"> • USB cable . Power adapter • Docking station • CD-ROM with Wizz.it Ex, User Guides for the Control Panel and Extenders (PDF), Acrobat Reader • 1 User Guide, "Installing and Configuring" • Warranty certificate (For USA/Canada only)
Wizz.it Ex	Supported operating systems : <ul style="list-style-type: none"> • Windows 2000 • Windows XP • Windows Vista Minimum requirements: <ul style="list-style-type: none"> • 500 MHz Intel Pentium III workstation or equivalent • 256 MB physical memory • 250 MB of free disk space Recommended requirements: <ul style="list-style-type: none"> • 1.2 GHz Intel Pentium IV workstation or equivalent • 512 MB physical memory • 500 MB of free disk space
IR code database information	Designed with UEI Technology Licensed under U.S. Patent 5,689,353 Portions © UEI 1999

ディスプレイ	3.7インチ TFT カラー・タッチスクリーン・液晶ディスプレイ 解像度：640 x 480 ピクセル横画面 (VGA)、65536色
インターフェイス	USB2.0ポートコネクタ
赤外線(IR)	到達可能距離：12m(最大) 学習可能距離：100～150mm(0～40°時) 到達可能角度：45°(5m時) 学習可能キャリア周波数：17kHz～1MHz
ワイヤレスシステム	使用周波数：2.4GHz WiFi(IEEE802.11b/g準拠)
内蔵メモリ	64MB SDRAM 64MB NANDフラッシュメモリ
パワーマネージメント	<ul style="list-style-type: none"> • バッテリーセーブ • チルト(傾き)センサー、スクリーンへのタッチ、バックライトボタンまたはボタン入力による電源オン。設定経過時間後の自動電源オフ • 充電電池の残量表示
外径寸法	リモートコントローラー：166.4 x 100 x 32mm ドッキングステーション：130.5 x 98.7 x 61.3mm
動作温度	5° C～45° C
保管温度	-25° C～70° C
電池	リチウムイオン電池(リチウムポリマー電池)、2100mAh
電源アダプター	100V AC / 50～60Hz(5V DC / 2A出力)
付属品	<ul style="list-style-type: none"> • USBケーブル • ACアダプター • ドッキングステーション • CD-ROM • 取扱説明書 • 保証書
Wizz.it Ex	サポートするオペレーティングシステム： <ul style="list-style-type: none"> • Windows 2000 • Windows XP • Windows Vista 最小システム要件： <ul style="list-style-type: none"> • 500MHzのIntel Pentium IIIワークステーションまたは同等品 • 256MBの物理メモリ • 250MBの空き容量 推奨システム要件： <ul style="list-style-type: none"> • 1.2GHzのIntel Pentium IVワークステーションまたは同等品 • 512MBの物理メモリ • 500MBの空き容量
IRコードデータベース情報	UEI Technology ライセンス取得：米国特許 5,689,353 © UEI 1999

Reset (The Control Panel behaves erratically)

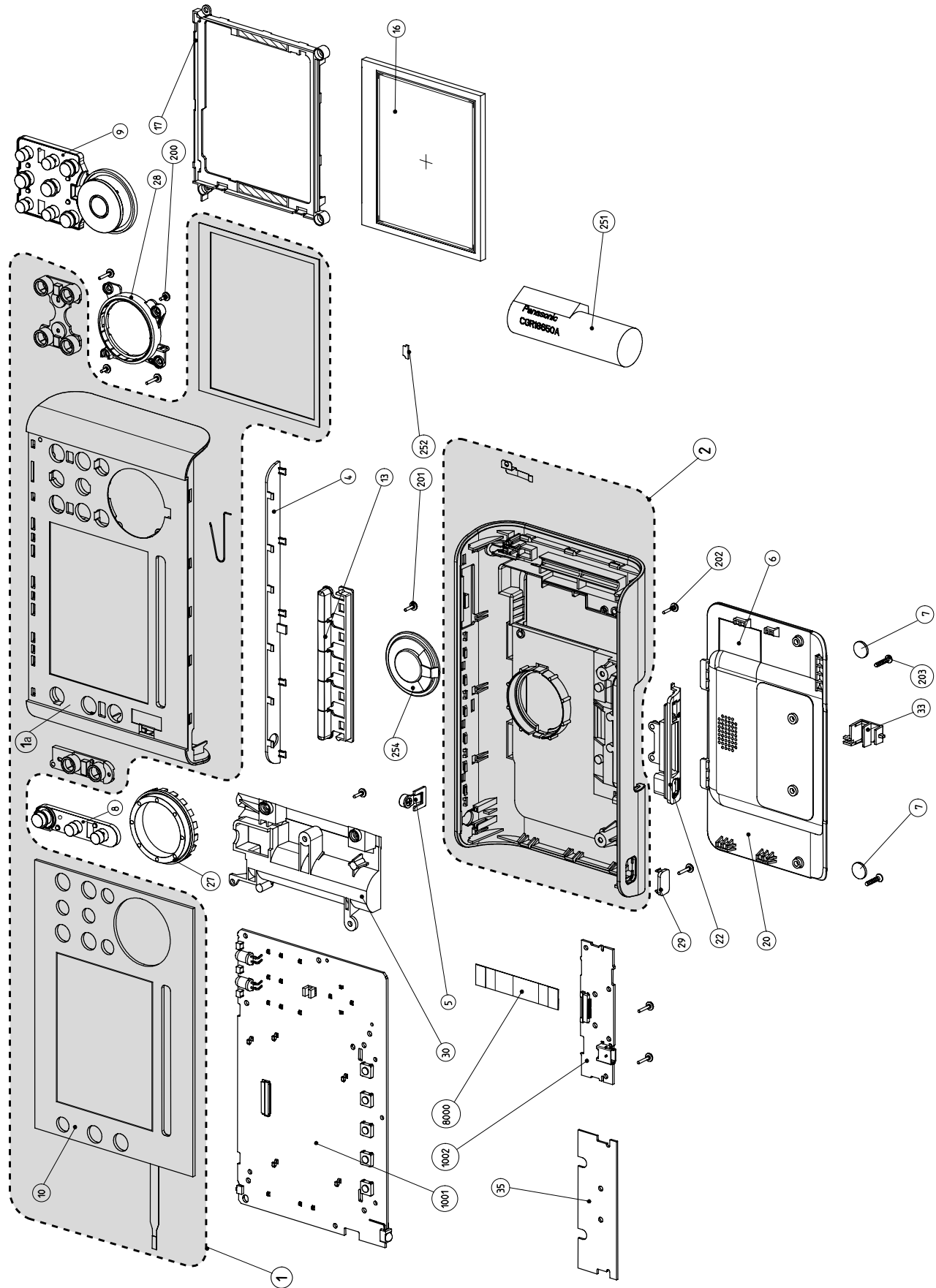
Normally, resetting the Control Panel is not necessary. However, if the touch screen freezes or if you notice unusual behavior, you need to perform a reset to get it running again. You reset the Control Panel by switching the Power switch to 0, waiting a few seconds and switching the Power switch back to 1.

リセットの方法

通常、本機のリセットは必要ありません。ただし、タッチスクリーンがフリーズした場合や、異常な挙動がみられる場合は、リセットしてください。

本機のリセットは、電源スイッチを「0」に切り替え、数秒後に、電源スイッチを「1」に戻します。再起動後、画面の「please wait ...」表示が消えるまで、何もしないでください。

2. EXPLODED VIEW



3. MECHANICAL INSTRUCTIONS & SET DISASSEMBLY



Remove rubber feet ITEM 7 to make the screw accessible.



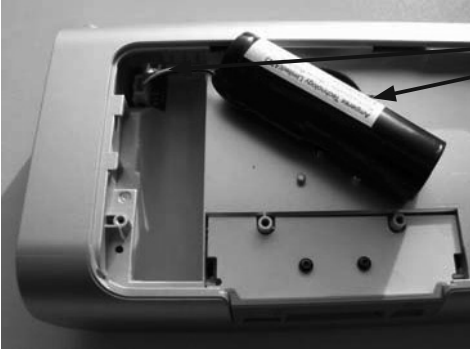
Remove screw ITEM 203 (Torx screw M2x10).



Remove the bottompart cover assy ITEM 20 by sliding it open



Location of adhesive damper ITEM 6 to prevent rattling of battery pack

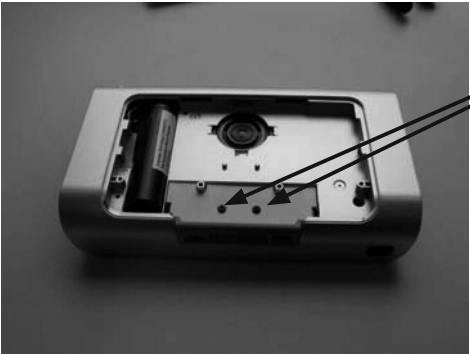


Take the battery out, ITEM 251, disconnect battery connector

NOTE: To close the unit go to P....

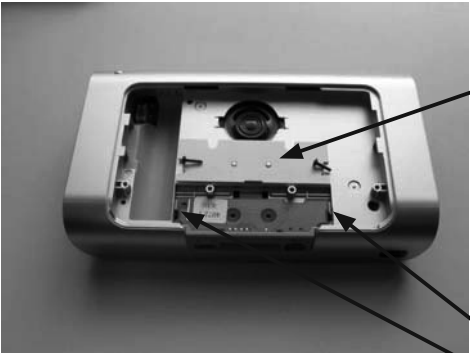
Battery replacement set:
ITEM 251 (1x) battery
ITEM 7 (2x) rubber feet

5



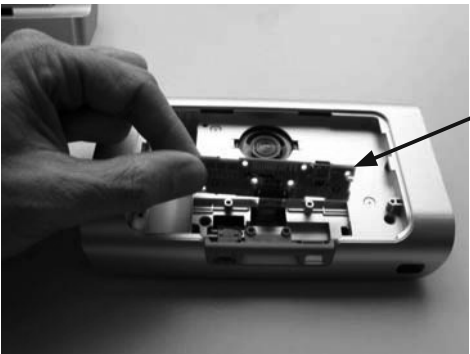
Remove screw M2x8 ITEM 202

6



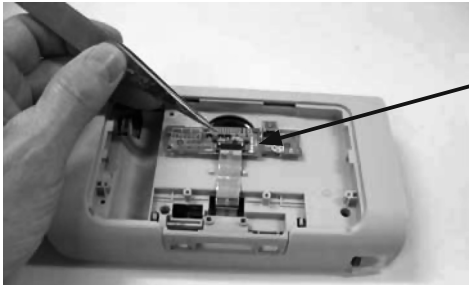
Take away 2 screw M2x8 ITEM 202 and pwb cover ITEM 35

7



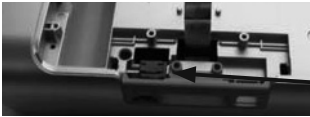
Release two snaphooks and take the SUB PWB ITEM 1002

8

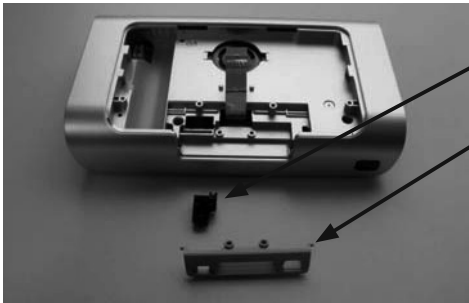


Disconnect SUB PWB ASSY ITEM 1002 to release the flex-cable (unlock connector 1003 with the help of a pincet).

9

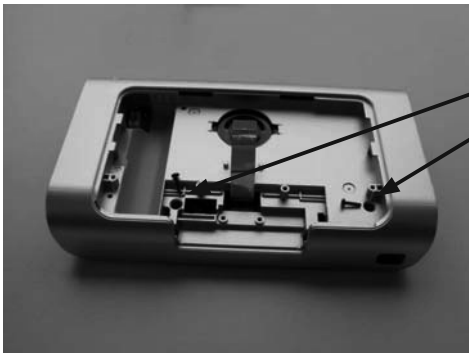


On-off switch ITEM 33 take out of the bottom



Docking insert assy ITEM 22 take out of the bottom

10



Remove 2 screw ITEM 202 (Torx screw M2X8) on the position as shown in the picture

11



Release bottompart (item 02) from toppart (item 01) and goes from the rightside to the leftside.

Very important is to start up with one of the "sides" as shown in the picture (Photo 13-15).

- Put a sharp knife between toppart and bottompart and use this as a lever to separate the two parts.
- Important: push up the bottompart compared with the toppart to unlock the plastic snaps in the holes (bottompart).

12



13



14



15

Overview of different snapholes in toppart assy (for information only)



16

Take the toppart assy and place it on the table



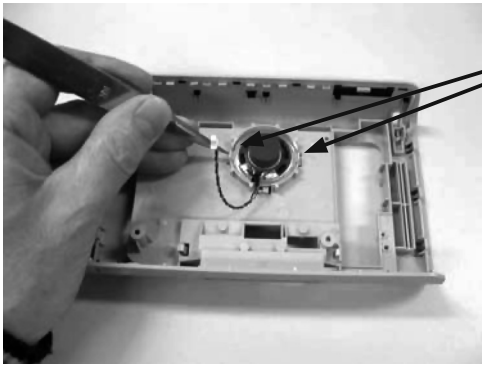
Open the bottompart assy from the toppart and place it also on the table, see next picture

17



Disconnect the speaker plug (connector 1601)

18



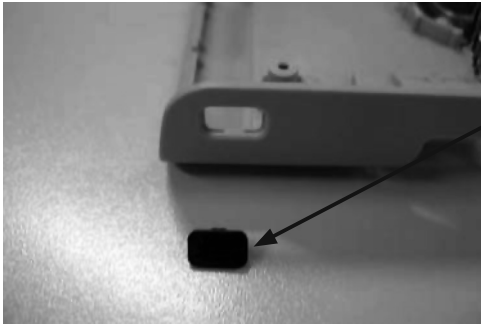
Lift the 2 snaphooks fom the speaker

19



20

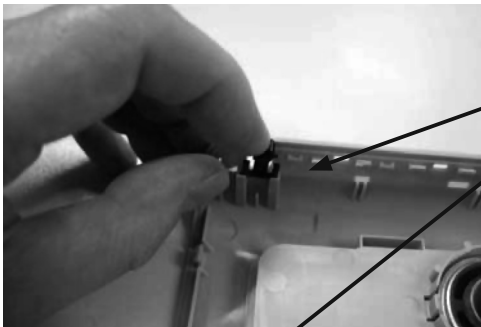
IR-WINDOW



Remove IR- Window

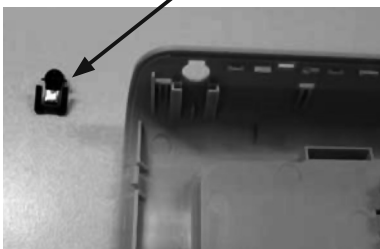
21

BACKLIGHT BUTTON

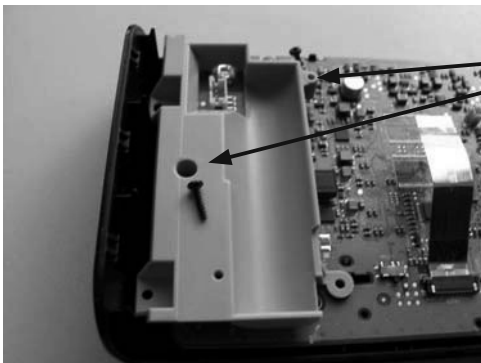


Remove backlight button

22



23



Remove 2 screw M2X8 ITEM 202

24



Touchpad connector ITEM 10 to release the flexcable
(unlock connector with the help of a pincet)

Click two times from left side to right side

25



Remove 3 screw M2X8 ITEM 202

26



Remove MAIN PWB assy ITEM 1001

27

***Remove the following components from the
toppart sub assy ITEM 1***



Keymat stand by assy ITEM 8

Keymat cursor assy ITEM 9

Lower keyhinge assy ITEM 13

28



Be carefully: ITEM 1a + ITEM 10
Toppart sub assy + tochsreen preserve this subsam assy
for the rest untouched !! Don't remove anything else as
mentioned in this list

Remove cursor ring assy ITEM 27

Remove cursor holder ITEM 28

Remove screw M2x4 ITEM 200

Overview mechanical toppart components

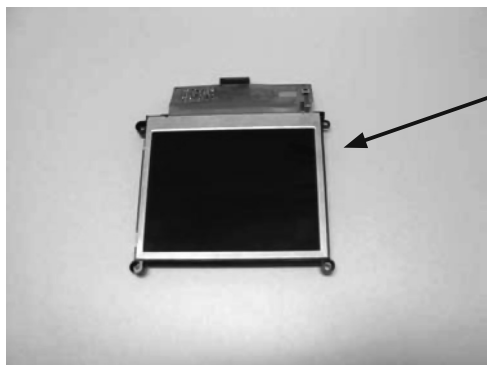


Overview mechanical components



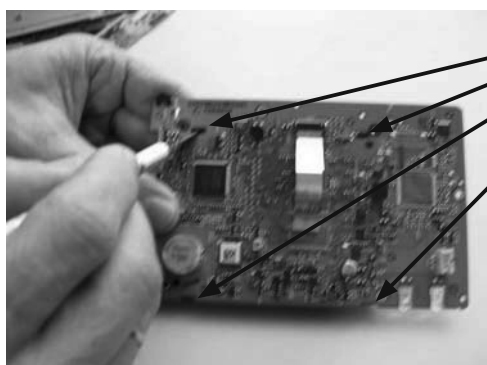
31

4. MECHANICAL INSTRUCTIONS & SET RE-ASSEMBLY



ITEM 17 LCD bezel + ITEM 16 LCD module

32



Release the LCD bezel ITEM 17 from PB 1001, push downwards to unlock the 4 plastic snaps in the snap holes

33



Release the flex cable from LCD ITEM 16 to unlock the connector 1401 by till up the lid from connector 1401 (90 degrees), and take the LCD module out the LCD bezel ITEM 17

For LCD re-assembling use the opposite sequence order and finally lock connector 1401 by pushing the lid from connector 1401 down again

34



LCD module ITEM 16

LCD bezel ITEM 17

35

SUBSAM TOUCHSCREEN SERVICE

For service people, the toppart (item 01) same with the touchscreen (item 10) is already prepared as "subsam part" and can be ordered under the codenumber 3104 207 15770. In case of replacement follow the instructions Set Re-assembly on page 3-1.



36



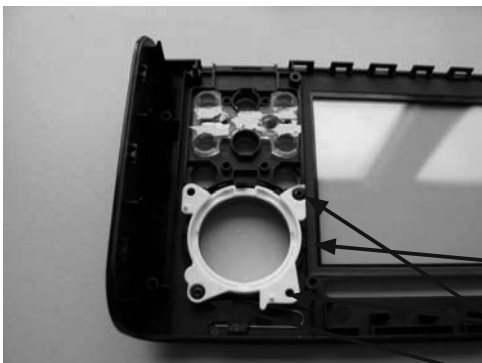
37

ASSEMBLE INSTRUCTIONS

Toppart

1. Cursor placement

1. Take toppart assy ITEM 01
2. Mount Cursor ring ITEM 27
3. Mount Cursor holder ITEM 28
4. Add 2 screw (Torx M2X4) on the position as shown on the picture



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Cursor ring assy ITEM 27

Cursor holder ITEM 28

2 screw M2X4 ITEM 200

2. Key placement



Keymat cursor ITEM 9

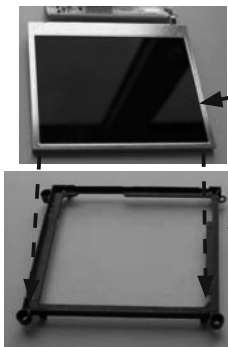
Keymat stby ITEM 8

Lower key hinge ITEM 8

(Spring cursor ring)

39

3. LCD + Bezel placement

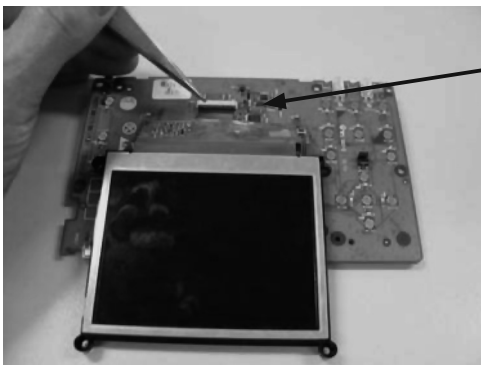


ITEM 16 LCD module

ITEM 17 LCD bezel

40

4. LCD flex placement

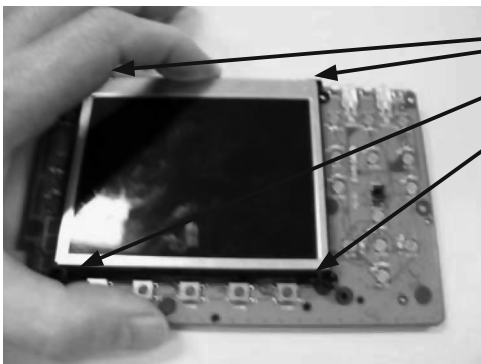


Place the flex of the LCD perfectly into the connector and close them

41

5. LCD placement

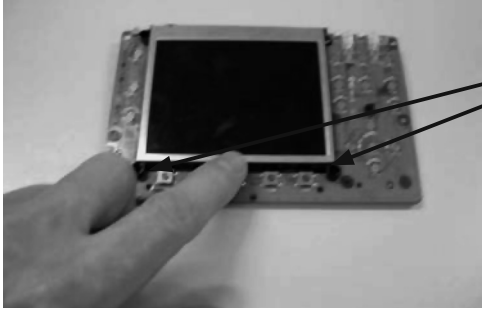
Mount the 4 snaphooks of the LCD on the hole of the MAIN PWB ASSY



42



43



Push with your finger the left and the right snaphooks into the pwb assy

44



Mount 3 screw M2x8 ITEM 202

45

6. Flex placement

Place the flex into the connector and close them with a pincet



46

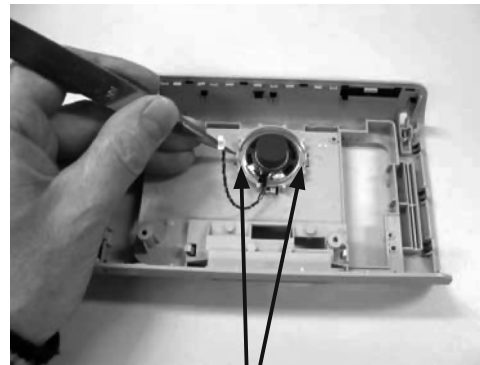


47

2. Bottompart

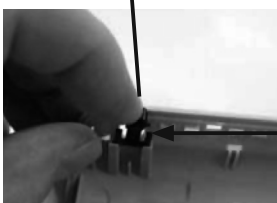


48



49

Mount speaker into the bottom and click on the two snaphooks



Backlight key ITEM 5

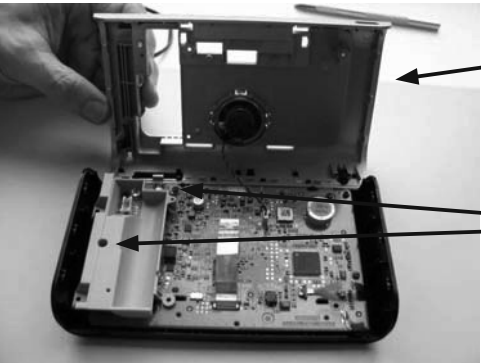
3. Toppart + Bottompart

Click the connector of the speaker on the MAIN PWB assy



50

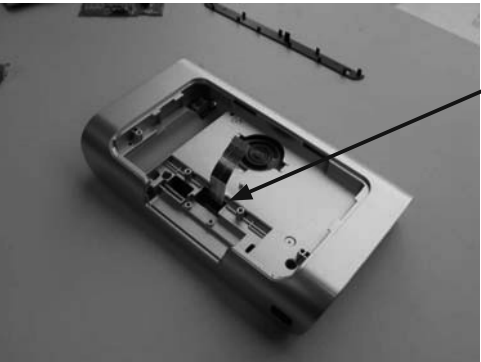
Place the bottom on the top don't forget the flex



51

Place the 2 screw M2X8 ITEM 202

Place the flexcable into the hole of the bottom



52

Click the bottom on the top



53



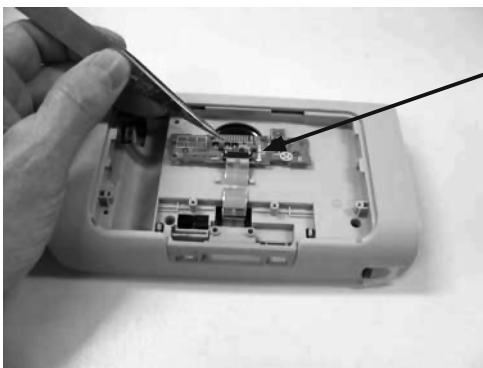
Place the On-off switch

54



Place the docking insert assy

55



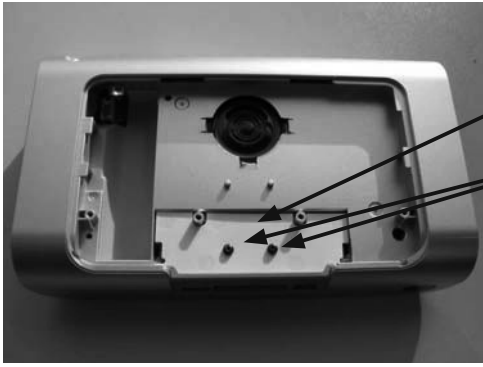
Place the flex into the connector and close them with a pincet

56



Place the pwb into the bottom Push the flex into the hole
Click the SUB PWB ASSY into the two snaphooks

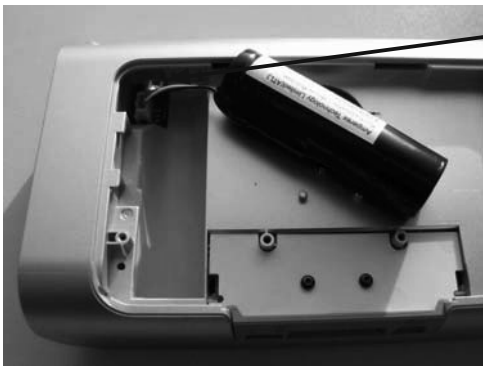
57



Place the SUB PWB cover ITEM 35

Place screws M2x8 ITEM 202

58



Place the connector on the MAIN PWB ASSY and put battery pack into the hole

59



Place the Bottom cover assy

60



Place the screw M2x10 ITEM 203

61



Place the new rubber feet ITEM 7

62



Place IR-window assy ITEM 4 and push it into the different clickhooks

63



Place pen assy ITEM 93 into the hole

64

5. PARTS LIST

P.C.B. NAME	POS. NO.	VERS. COLOR	PART NO. (FOR EUR)	PART NO. (MZ)	PART NAME	DESCRIPTION
	1		00M28CW064510	00M28CW064510	CASE ASSY	SUBSAM TOUCHSCREEN SERV_RC9001 310420715771
	2		00M28CW064520	00M28CW064520	CASE ASSY	BOTTOMPART ASSY_RC9001 310420782302
	4		00M28CW158020	00M28CW158020	WINDOW	IR WINDOW ASSY_RC9001 310420782392
	5		00M28CW270060	00M28CW270060	BUTTON	BACKLIGHT KEY ASSY_RC9001 310420782310
	6		00M28CW056410	00M28CW056410	BUFFER	DAMPER 310420412561
	7		00M28CW057410	00M28CW057410	LEG	RUBBER FEET 313922420711
	8		00M28CW270510	00M28CW270510	BUTTON	KEYMAT STDBY ASSY_RC9001 310420782322
	9		00M28CW270520	00M28CW270520	BUTTON	KEYMAT CURSOR ASSY_RC9001 310420782332
	13		00M28CW270050	00M28CW270050	BUTTON	LOWER KEY HINGE ASSY_RC9001 310420782351
	16		90M-KZ000080R	90M-KZ000080R	LCD KIT	LCD MODULE LS037V3DX01 (SRPJ)Y 932223258682
	17		00M28CW271420	00M28CW271420	HOLDER	LCD BEZEL 310420421944
	20		00M28CW257010	00M28CW257010	LID	BOTTOMPART COVER ASSY_RC9001 310420782362
	22		00M28CW053010	00M28CW053010	COVER	DOCKING INSERT ASSY_RC9001 310420782371
	27		00M28CW355410	00M28CW355410	RING	CURSOR RING ASSY_RC9001 310420782381
	28		00M28CW271410	00M28CW271410	HOLDER	CURSOR HOLDER 310420421934
	29		00M28CW158030	00M28CW158030	WINDOW	IR WINDOW_RC9001 310420422481
	30		00M28CW271010	00M28CW271010	HOLDER	BATTERY PACK HOLDER_RC9001 310420422501
	33		00M28CW154010	00M28CW154010	KNOB	ON-OFF SWITCH_RC9001 310420422461
	35		00M28CW120010	00M28CW120010	INSULATOR	PWB COVER_RC9001 310420422271
	93		00M28CW254010	00M28CW254010	STYLUS PEN	PEN ASSY_RC9001 310420782412
	251		90M-ZF000050R	90M-ZF000050R	BATTERY	BAT PACK LIP 3V7 2200MAH Y 242252600183
	254		90M-QK000300R	90M-QK000300R	SPEAKER	LSP 8R 0W5 OPN FULLR R32 Y 242226400594
	676		00M28CW861410	00M28CW861410	LABEL	APPROB. STICKER_RC9001 310420007201
	999		90M-ZK000730R	90M-ZK000730R	UNIT KIT	DOCKING STAT. MAR SERV_DS9001 310420715801
	1001		90M-ZZ004680R	90M-ZZ004680R	PWB ASSY	PWB ASSY MAR MAIN SERV_RC9001 310420715781
	1002		90M-ZZ004690R	90M-ZZ004690R	PWB ASSY	PWB ASSY MAR SUB SERV_RC9001 310420715791
	8000		nsp	90M-YU003040R	FPC	FFC20P/50/20P/0.5 B 310420052601
PACKING						
	001T	/A1S	nsp	00M28CW851250	USER GUIDE	USER GUIDE RC9001 U A 310420534381
	001T	F S	nsp	00M28CW851110	USER GUIDE	USER GUIDE RC9001 F -
	001T	/N1S	00M28CW851250	00M28CW851250	USER GUIDE	USER GUIDE RC9001 U A 310420534381
	001T	/T1S	00M28CW851250	00M28CW851250	USER GUIDE	USER GUIDE RC9001 U A 310420534381
	001T	/U1S	nsp	00M28CW851250	USER GUIDE	USER GUIDE RC9001 U A 310420534381
	005T	/N1S	00M28CW851310	00M28CW851310	USER GUIDE	USER GUIDE RC9001 N T 310420534391
			00M28CW851010	00M28CW851010	USER GUIDE	MULTI LANGUAGE USER GUIDE CD-ROM 310420910331
		/A1S	nsp	90M-AA000160R	AC ADAPTOR	AC/DC ADAPTOR AY3192/10 A1S 314017830062
		F S	nsp	90M-AA000150R	AC ADAPTOR	AC/DC ADAPTOR AY3192/17 JAPAN & US 272201200635
		/N1S	90M-AA000130R	90M-AA000130R	AC ADAPTOR	AC/DC ADAPTOR AY3192/00 N1S 314011833803
		/T1S	90M-AA000140R	90M-AA000140R	AC ADAPTOR	AC/DC ADAPTOR AY3192/05 T1S 314011833812
		/U1S	nsp	90M-AA000150R	AC ADAPTOR	AC/DC ADAPTOR AY3192/17 JAPAN & US 272201200635

NOTE : "nsp" PART IS LISTED FOR REFERENCE ONLY, MARANTZ WILL NOT SUPPLY THESE PARTS.

For reference only

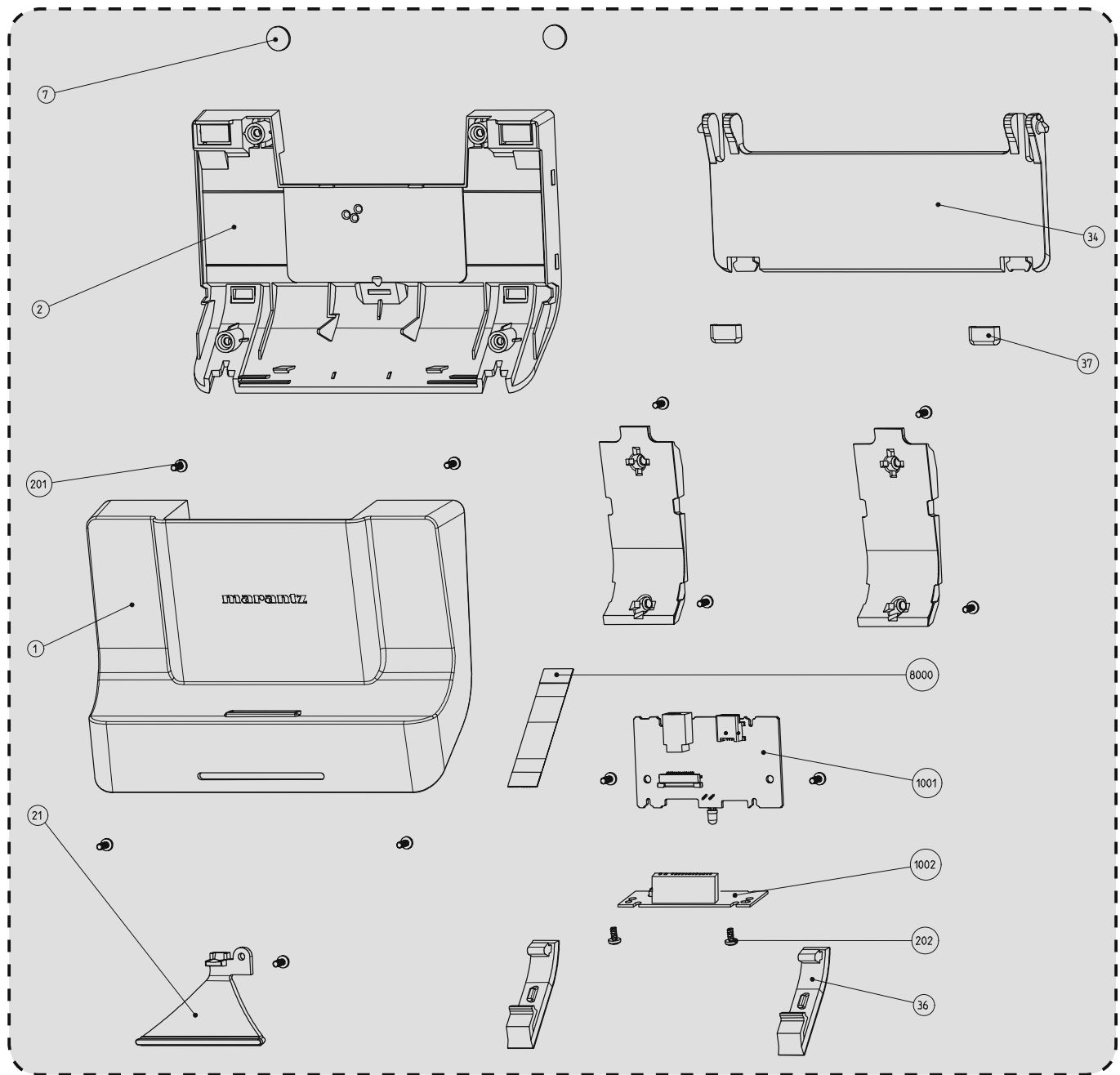


POS. NO. 999 PART NO. 90M-ZK000730R UNIT KIT

EXPLODED VIEW

The following parts are not supplied as service parts.

下記部品のサービス部品供給はありません。



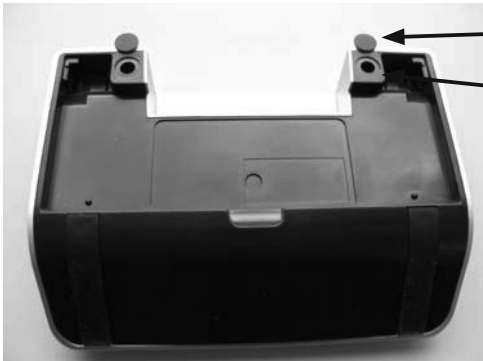
MECHANICAL INSTRUCTIONS & SET DISASSEMBLY



Docking station



ITEM 34: Push on the left side to the standplate and remove it



Remove rubber foot to make the screws accesible ITEM 7

Remove screw ITEM 201



ITEM 36 Go with a pincer to the rubberstrip and the plastic and remove them



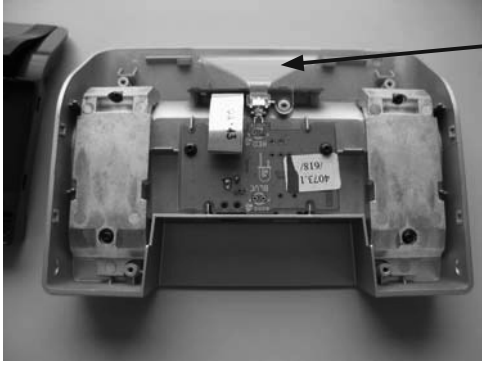
Remove screw ITEM 201 and take away the rubber strip



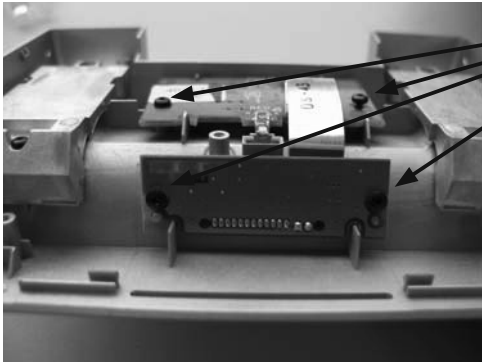
Remove screw ITEM 201 and take away the rubber strip



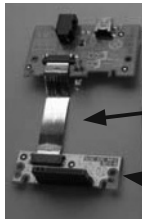
Release bottompart from the toppart



Remove the lightguide ITEM 21



Remove screw ITEM 0201



PWB ASSY ITEM 1001

FLEXCABLE ITEM 8000

PWB ASSY ITEM 1002