Acer AT4230B LCD TV Service Guide

Service guide files and updates are available on the ACER/CSD web. For more information, please refer to http://csd.acer.com.tw

Revision History

Please refer to the table below for the updates of LCD TV AT4230B service guide.

Date	Chapter	Updates
2007/7/20	Chapter 1 ~ 4	1st edition

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Conventions

The following conventions are used in this manual.

SCREEN MESSAGES	Denotes actual messages that appear on screen.
NOTE	Gives bits and pieces of additional information related to
NOTE	the current topic.
WADNING	Alerts you to any damage that might result from doing
WARNING	or not doing specific actions.
CALITION	Gives precautionary measures to avoid possible
CAUTION	hardware or software problems.
	Reminds you to do specific actions relevant to the
	accomplishment of procedures.

Preface

Before using this information and the product it supports, please read the following general information.

- This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
- 2. Please note WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reason, if a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

System Specification

Specification

LCD Panel

Max. resolution: 1366 x 768 Display color: 16.7 M colors Life Time: 60,000 Hours Input Signal: 1-ch LVDS Contrast ratio: 1000:1 (Min) Brightness: 400 Cd/m² (Min) Response Time: Gray to Gray Tr = Tf = 8 ms Viewing angle: 89° (L) / 89° (R), 89° (U) / 89° (D)

I/O functions

RCA jack (YUV and CVBS) for YPbPr, YCbCr, Video and Audio 4 pin S-DIN for S-Video 15 pin D-Sub for VGA 19 pin HDMI connector DIN45325 (IEC169-2) Terminal for TV / CATV input DIN45325 (IEC169-2) Terminal for DVB-T input 3.5 mm Earphone jack for Audio Line input

Video Functions

Support PAL / NTSC / SECAM video format Support 480i/576i, 480p/576p, 1080i and 720p format Build in Teletext functions Build in Dynamic adaptive smoothing filter Build in Dynamic temporal frame-filtering Noise Reduction Build in Dynamic motion and edge adaptive De-interlacing Film mode 3:2 & 2:2 pull down Screen display model 16:9 / 4:3 / panorama / Letterbox1/ Letterbox2/ Letterbox3

Mechanical

VESA mounting holes

Compatibility

Multi-Sound system

NICAM

FM Stereo (A2)

Power Source

Input voltage:	90 ~ 264 V, 47 ~ 63 Hz
Power consumption:	291 Watts
Stand-by:	5 Watts Max.

Remote controllers

Multi-function remote controller

Speaker

Internal speaker:	10 W x 2
Amplifier:	8 W x 2 stereo, volume adjustable

Others

On screen display adjustment function

ISP (In System Programming) function available for revising driver easily

System Block & Wiring Diagram



LCD Main Board Block Diagram



Remote Control



Key Functions

Remote Function description					
R/C for Australia	Key Functions	Remark (for cardreader)			
Power	Power On/Off				
Display	Display Channel and Input Source				
Mute	Mute On/Off				
TV	Analogue TV / Digital TV				
Component	Component1/Component2				
AV	AV1/AV2/AV3/HDMI1/HDMI2				
PC	VGA				
Sleep	Sleep Timeer Off 15/30/45/60/90/120				

Wide	Scaling Mode (4:3 /16:9 /Panorama /Letterbox)	
Menu	Open Menu or leave Menu	
	In digital TV mode, press the key to launch EPG main	
EPG	page	
	Enable in Digital TV mode only.	
	1. In Digital TV mode, Press the key to launch ch list main	
	page.	
	2. In Non Digital TV source, Press this key will show	
CH List	"This function is only use in DTV source message"	
Four way direction key		
	Navigate up in the OSD,	
	ATV: next page or sub page in teletext mode	
up	DTV: next page in teletext mode	
	Navigate down in the OSD,	
	ATV: previous page or sub page in teletext mode	
down	DTV: previous page in teletext mode	
	Navigate left in the OSD,	
left	DTV: previous sub page in teletext mode	
	Navigate right in the OSD,	
right	DTV: next sub page in teletext mode	
ОК	Selection Confirm	
1	Number key 1	
2	Number key 2	
3	Number key 3	
4	Number key 4	
5	Number key 5	
6	Number key 6	
7	Number key 7	
8	Number key 8	
9	Number key 9	
0	Number key 0	
Recall	Return to previous channel	
Enter	Enter to confirm channel selection by number key	
Channel UP	Channel up	
Channel Down	Channel down	
MPX	NICAM	
	STEREO Broadcast : Stereo/Mono	
	BILIGUAL Broadcast : Sound 1 / Sound 2	
	MONAURAL Broadcast: Mono	
	FM-FM	
	STEREO Broadcast: Stereo/Mono	

	BILINGUAL Broadcast : Sound 1 / Sound 2	
	DTV multi-audio selection	
Volume up	Volume up	
Volume down	Volume down	
Teletext/Mix	Teletext on -> Mixed mode on ->Teletext off	
Index	Go to index page (usually page 100) in teletext mode	
	ATV: Enter/Leave subpage mode	
	DTV: Simulated as Right key operation to change sub	
Subpage	page in teletext mode.	
Reveal	Display Hidden Information	
	1. When in teletext pages, press this button temporarily	
	holds the current teletext page	
	2. When in the TV Mode, pressing Hold key do freeze	
Hold	function on active video	
	When in teletext pages, this key Zoom page toggle 1X/2X	
	and page selection by Up-arrow and Down-arrow	
	HDMI1/HDMI2	
Size	Select Scan mode Auto -> Underscan -> Overscan	
Subtitle	Show subtitle on the screen	
R	Colour button to operate the teletext	Functionalities of color keys
G	Colour button to operate the teletext	vary in different
Υ	Colour button to operate the teletext	screens/modes, which could
		specified on individual
C	Colour button to operate the teletext	seroon
<u> </u>		3010011

Hardware Specification and Configuration

Electro/Optical

Model	AT4230B			
Panel specification				
Resolution(pixels)	1366x768			
Brightness(min.)	400 cd/m ²			
Contrast ratio(min.)	1000:1			
Display color	16.7 M			
Viewing angle	178(H)/178(V)			
Response(typ.)	8ms			
Power supply				
Input	90-264 V, 47-63 Hz			
Max. power Consumption	175W			
Power saving	5W			
Mechanical				
Dimensions(WxHxD mm)	983.0x576.0x52.7			
Weight(Kg)	15			
Analog TV system				
TV color system	PAL/SECOM			
Sound system	Sound 1 and Sound 2			
Stereo system	NICAM and FM Stereo (A2)			
Analog TV-tuner Quantity	1			
Terminal				
RF	75Ω DIN45325 (IEC169-2) Type			
RF (DVB-T)	75Ω DIN45325 (IEC169-2) Type			
AV 1	RCA Jack for CVBS, S-Video and Audio			
AV 2	RCA Jack for CVBS, S-Video and Audio			
AV 3	RCA for YPbPr or CVBS and Audio R/L			
Component 1	RCA Jack for YUV and Audio			
Component 2	RCA Jack for YUV and Audio			
PC Analog Port	D-Sub 15 pin VGA			
PC Stereo input	3.5 mm Earphone Jack			
HDMI 1	19 pins HDMI single link			
HDMI2	19 pins HDMI single link			
Service Port	ISP through D-Sub			
Audio system				

Firmware Specifications

Preset Mode for VGA Input

16 factory pre-set modes for VGA inputs are saved during the manufacturing process.

Preset	Pixel Format	Hor. Freq.	Hor. Polarity	Vert. Freq.	Vertical	Standard
mode		(KHZ)		(HZ)	Polarity	
1	720*400	31.47	-	70	+	VGA
2	640*480	31.47	-	60	-	VGA
3	640*480	37.861	-	72	-	VESA
4	640*480	37.5	-	75	-	VESA
5	640*480	43.4	-	85	-	VESA
6	800*600	35.156	-	56	+	VESA
7	800*600	37.879	+	60	+	VESA
8	800*600	48.077	+	72	+	VESA
9	800*600	46.875	+	75	+	VESA
10	800*600	53.7	+	85	+	VESA
11	1024*768	48.363	-	60	-	VESA
12	1024*768	56.476	-	70	-	VESA
13	1024*768	60.023	+	75	+	VESA
14	1024*768	68.7	+	85	+	VESA
15	832*624	49.7	-	75	-	MAC
16	1024*768	60.2	-	75	-	MAC

Please press "Volume-" + "Channel+" + "POWER" to enter the LCD TV factory mode.

Preset Mode for HDMI Input

16 factory pre-set modes for DVI inputs are saved during the manufacturing process.

Preset	Divel Format	Hor. Freq.	Hor Delarity	Vert. Freq.	Vertical	Standard
mode	PixerFormat	(kHz)	HOL: POLATICY	(Hz)	Polarity	Standard
1	640*480 60	31	-	60	-	VGA
2	640*480 72	37	-	72	-	VESA
3	640*480 75	37	-	75	-	VESA
4	640*480 85	43	-	85	-	VESA
5	800*600 56	35	+	56	+	VESA
6	800*600 60	37	+	60	+	VESA
7	800*600 72	48	+	72	+	VESA
8	800*600 75	46	+	75	+	VESA
9	800*600 85	53	+	85	+	VESA
10	1024*768 60	48	-	60	-	VESA
11	1024*768 70	56	-	70	-	VESA
12	1024*768 75	60	-	75	-	VESA

13	1024*768 85	68	+	85	+	VESA
14	1280x768 60	48	-	60	+	VESA
15	1360x768 60	48	+	60	+	VESA

This LCD TV shall have 10 or more user modes for user to creat own timing.

Power Saving

While VGA is selected to be input, this LCD TV is equipped with a power-management according to VESA DPMS. There is a delay of 30 seconds before the transition from On-state to power saving state to avoid unintentionally entering of a power saving state during display resolution and timing mode changes. During the period of delay, the LED shall indicate green color and OSD will show " NO VGA CONNECTION ". Transition from any power saving state to another can be instantaneous. The recovery from Off-state requires no manual power on.

Mode	Hsync	Vsync	Video	Power	Indication	Recovery time
Power-On	On	On	Active	< 291W	Green	
Stand-by	Off	On	Off	< 5W	Red	<5s
Suspend	On	Off	Off	< 5W	Red	<5s
Off-state	Off	Off	Off	< 5W	Red	<5s
Power off	×	×	×	< 5W	Dark	Turn on < 5s

Sync on means: normal operation

Sync off means: Hsync: f < 1 KHz, duty cycle > 25 %, Vsync: f < 10 Hz, duty cycle > 25 %

The power-consumption is valid over the specified voltage and frequency range.

Power comsuption is measured from AC source.

There are no power saving modes for TV, AV1, AV2 or AV3, compoment 1/2 and HDMI 1/2 inputs.

Performance Specifications

The performance shall be check at 25°C environment.

White Balance and Uniformity

Set contrast and brightness Contrast=50 Brightness=50.

Inspection tolerance for 76PA as below: Brightness 325~425 nits

Cold:14000 degree K(x=0.266,y=0.270)±0.015, on x and y value.

Standard:9300 degree $K(x=0.285,y=0.293) \pm 0.015$, on x and y value.

Warm: 6500 degree $K(x=0.314,y=0.324) \pm 0.015$, on x and y value.

Display Area, Phase, Center and Tilt

Display Area: 32 inches diagonal

H-Phase: A-B Less than 1.5mm

V-Center: C-D Less than 1.5mm

Tilt: E-F Less than 1.5mm, but non-active area must be larger than zero for four sides.



Max. Brightness

The brightness should exceed 400 Cd/m² while set both of contrast and brightness to max. and color temperature of Standard is selected. (Typical value would be 500 Cd/m²).

Power Supply Electrical Specifications

The power supply for this product is an internal converter, with a non-replaceable fuse internally. This converter shall be well designed to meet CE mark requirement.

Input Voltage and Frequency Range

The operating range of line voltage shall be: AC 100 volts to 240 volts, 50 Hz to 60 Hz. Power comsuption shall be under 291 Watts. Variation of the line voltage throughout the applicable operating range shall not result in any visible image anomalies such as image movement, changes in light output, nor changes in image stability or quality.

Line Fuse

The AC input shall be fused and become electrically open as a result of an unsafe current condition. This fuse is inside the power supply converter and is not user replaceable, and must be returned for replacement. This fuse shall be well selected to handle inrush current for all combinations of line voltage and frequency.

Hot plug and power on/off sequence

Once hot plug occurs, at the very first time, the initial current should be limited at 2.3 amps or lower when power off. Current will stay below 100 m amps while power on, then ramp up to full power (about 2.3 amps at AC 120 volts) within 5 seconds when power-up signal is triggered. For the shut down sequence, the current will stay at full power for about 150 m seconds or less, then ramp down to 100 m amps within 1

second.

Power on LED Location and Type

Power on indicator shall be easily visible from the front of the display.

Inverter

The inverter which is used to light up back-light of LCD panel shall be well designed to meet requirement of panel's specification.

Overall Dimensions

Width: 1071 mm

Depth: 311 mm





Environmental Requirements

This display shall meet the following environmental requirements under normal operating conditions.

Operating

 $25^{\circ} \pm 5^{\circ}$ for Purity, White Point, Mis-convergence, Luminance measurements and White uniformity measurement

Operating temperature: 0°C to 35°C

Operating humidity: 10 % to 90 % (non-condensing)

Storage and Shipping

Storage temperature:-20°C to 60°CShipping temperature:-20°C to 60°CStorage humidity:10 % to 90 % (non-condensing)Shipping humidity:10 % to 90 % (non-condensing)

Altitude

Units tested at an altitude up to 12,000 feet must operate at normal conditions without exhibiting abnormal behavior such as arcing or shutdown.

Operating altitude:0 to 12,000 feet

Shipping altitude: 0 to 40,000 feet

Storage altitude: 0 to 40,000 feet

Vibration Test

The packaged display shall be capable of passing sinusoidal vibration test as specified in follows.

A. Test condition as below :



- B. The unit under test shall be run for a duration of 30 minute in each of following orientations :
- a. Top and bottom side (z axis).
- b. Left and right side (x axis).
- c. Front and rear side (y axis).

The unit shall suffer no visible cosmetic damage and should operate no degradation indisplay quality after test.

Additionally, prior to production and prior to implementation of any design or manufacturing change that might affect vibration performance, an minimum of 2 units shall be demonstrated to meet the requirements of specification.

Drop Test

The packaged display shall be capable of passing drop test as specified in following specification without any measurable degradation in performance or detectable mechanical or cosmetic damage.

Filter:330 HzDropping way:1 corner, 3 edges, 6 flatsDropping Height:follow the below table

Weight(kg)	Corner, edge, F, R,	L, R, Up side(cm)			
	Btm(cm)				
0~9	76	76			
9~17	61	61			
18~27	46	46			
27~45	31	20			
45~100	25	15			

Additionally, prior to production and prior to implementation of any design or manufacturing change that might affect vibration performance, a minimum of 2 units shall be demonstrated to meet the requirements of specification.

VESA DDC

The VGA/HDMI inputs shall be capable of continuously transmitting its Extended Display Identification (EDID) information using Display Data Channel. It shall automatically switch to DDC2 mode if a DDC2 capable host is detected in accordance with the VESA DDC standard.

In addition, the display can respond to a request for EDID, to be transmitted using DDC2, level B commands. If a DDC2 capable host is detected by the display, the display shall switch to DDC2 communication.

The EDID shall contain the manufacture name code QCI, product code, date of manufacture, and serial number.

For complete EDID data structure, please refer to VESA Extended Display Identification Data Standard.

Hardware implementation may be either integrate into micro-controller or be a separate electrical component. EDID memory must be protected against writing or other corruption through customer-accessible electrical connection and required communication channels. Password protection, use of an unpublished enable register, or use of direct electrical connection is acceptable levels of protection provided that the power-on Default State is that disabling writing. The serial number fields in the EDID must contain a unique identifying numbers among units of the same model. EDID Table is defined as below:

For VGA input:

																_
Product										_	_	_				
Revision																
	0	1	2	3	4	5	6	7	8	9	A	В	С	D	E	F
0	00	FF	FF	FF	FF	FF	FF	00	04	72	02	32	00	00	00	00
1	2D	DF	01	03	68	46	28	78	E8	DC	10	A2	58	45	9C	25
2	13	49	4B	AF	EE	00	31	40	45	40	61	40	00	00	00	00
3	00	00	00	00	00	00	69	21	50	BO	51	00	1B	30	40	70
4	36	00	02	90	31	00	00	1E	00	00	00	FD	00	32	55	1E
5	50	80	00	0A	20	20	20	20	20	20	00	00	00	FF	00	30
6	30	30	30	30	0A	20	20	20	20	20	20	20	00	00	00	FC
7	00	61	63	65	72	20	41	54	33	32	30	32	0A	20	00	5A

For HDMI input (Optional)

Proc	duct															
Revision																
	0	1	2	3	4	5	6	7	8	9	А	В	С	D	Е	F
0	00	FF	FF	FF	FF	FF	FF	00	04	72	04	27	01	01	01	01
1	00	OF	01	03	80	3C	22	78	2A	3B	90	A7	54	46	98	24
2	10	49	4B	20	00	00	01	01	01	01	01	01	01	01	01	01
3	01	01	01	01	01	01	01	1D	80	18	71	1C	16	20	58	2C
4	25	00	C4	8E	21	00	00	9E	00	00	00	FD	00	32	55	1E
5	50	0B	00	0A	20	20	20	20	20	20	00	00	00	FF	00	31
6	32	33	34	0A	20	20	20	20	20	20	20	20	00	00	00	FC
7	00	41	63	65	72	20	41	54	32	37	30	34	0A	20	01	41

Machine Disassembly and Replacement

General Information

This chapter contains step-by-step procedures on how to disassemble the AT4220 series for maintenance and troubleshooting. To disassemble the TV, you need the following tools:

Wrist grounding strap and conductive mat for preventing electrostatic discharge Small Philips screwdriver Philips screwdriver Hexagonal screwdriver Tweezers

Note:

The screws for the different components vary in size. During the disassembly process, please group the screws with the corresponding components to avoid mismatch when doing assembly. When you remove the boards, please be careful not to scrape them.

Warning!

The module is drived by high voltage. If you need to handle the module during operation or just after powered off, you must take proper precautions against electric shock and must not touch the drive circuit portion and metallic part of module within 10 minutes. The capacitors in the drive circuit portion remain temporarily charged even after the unit is powered off. If the residual voltage is strong enough, it could result in electric shock. Thus, we strongly suggest that you put on the wrist ground strap and put the component on the conductive mat or bag. Besides, please keep the unit grounded during the whole process of disassembly and assembly.

Before You Begin

Before you proceed with the disassembly procedure, make sure that you do the following steps:

- 1 Turn off the power to the TV and all peripherals.
- 2 Unplug the AC adaptor and all power and signal cables from the TV.



1. Lay down LCD TV, all tool prepared.



3. Remove 10pcs screws from rear cover and take off stand cover.



5. Remove 6pcs screws from stand bracket.





7. Remove 2pcs screws from HDMI joint and tear off the tapes.



2. Remove 6pcs screw from base and stand cover.



4. Remove 10pcs screws from rear cover and take off it.



6. Remove 2pcs IO NUT from VGA joint and 7pcs screws from IO/B joint.



8. Remove 6pcs screws from shielding and take off the conductive fabric.





9. Remove 8pcs screws from shielidng and take off 2pcs cable fasten.



10. Remove 4pcs screws from left speaker.







14. Remove 2pcs IO NUT from CPU/B.



11. Remove 4pcs screws from right speaker.



13. Remove 3pcs IO NUT from IO/B.



15.Remove 2pcs screws from IR/B.



16. Remove 3pcs screws from KEYPAD/B.



18. Remove 7pcs screws from M/B and P/B, then take off them.







22. Remove 6pcs screws from panel, then separate panel and bezel.



17. Remove 3pcs screw from P/B and M/B, then remove 3pcs screws from the IO/B bracket.



19. Remove 4pcs GND screws from P/B, M/B, IR/B and BTN, then take off it.



21. Remove 5pcs screws from panel.



23. Remove 4pcs screws from EMI GASKET DOWN.



24. Remove 4pcs screws from EMI GASKET UP, then take off them.

Troubleshooting

Use the following procedure as a guide for Acer LCD TV AT4220 series problems.

Note: The diagnostic tests are intended to test this model. Non-Acer products, prototype cards, or modified options could occur false errors and invalid system responses.

- 1. Duplicate symptom and obtain the failing symptoms in as much detail as possible.
- 2. Distinguish symptom. Verify the symptoms by attempting to re-create the failure by running the diagnostic test or by repeating the same operation.
- 3. Disassemble and assemble the unit without any power sources.
- 4. If any problem occurs, you can perform visual inspection before you follow this chapter's instructions. You can check the following:
 - Power cords are properly connected and secured;
 - There are no obvious shorts or opens;
 - There are no obviously burned or heated components;
 - All components appear normal.
- 5. Use the following flow chart determine which part to be replaced.

Problem List 1







LCD No Back Light





Button Key no function



RF no Display



Component 1, 2 no Display







VGA no Display



HDMI no Display











FRU (Field Replaceable Unit) List

This section gives you the FRU (Field Replaceable Unit) list in global configurations of AT4230B series. Please refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization). Please note that WHEN ORDERING FRU PARTS, you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will NOT be noted on the service guide. For Acer authorized service providers, your Acer office may have a different part number code from those given in the FRU list of this printed service guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

Note: To scrap or to return the defective parts, you should follow the local government ordinance or regulations on how to dispose it properly, or follow the rules set by your regional Acer office on how to return it.

PARTS

Part Name	Description	TVF Part No	Acer Part No
Accessory			
REMOTE	REMOTE CONTROLLER (FURT54B006) GP	D0754B00600	25 M4307 001
BATTERY	BATTERY I R03GW/2SK (ALKALINE 1.5V) GP	AHDALR03006	
IO LABEL	IO LABEL AU+DTV HV4(HCHV4009, REV3A) GP	HCHV4009010	40.M4307.001
BOARD			
MAIN/B	HV4E M/B ASSY(FOR 74PA)AU GP	21HV4MB0020	55.M4307.001
IO/B	HH6A IO/B ASSY(PAL-AUSTRALIA) GP	22HH6IB0029	55.M12V7.005
TUNER/B	HH2 DVB-T TUNER/B ASSY(FOR 72PA) GP	29HH2TTB005	
CPU/B	VWA7 CPU/B ASSY(FOR74PA)HD DVB-T AUS-A G	32VWACB0010	55.M4307.002
IR/B	JL7 IR/B ASSY(FOR HV7) GP	33JL7IB0014	55.M25V7.003
KEYPAD/B	JL7 KEYPAD/B ASSY GP	34JL7KB0001	55.M25V7.002
POWER/B	PWR 291W, DPS-291AP A(90~264VAC) GP	AF291B00007	55.M34V7.001
Cable			
CABLE LVDS-AUO	CABLE 74PA LVDS-AUO(50P/30P,REV1A)GP	DD74PATH000	50.M4307.001
CABLE INV	CABLE INV AU(14P/10P/4P,1A)JL4 GP	DD0JL4IV102	50.M4307.003
CABLE INV-PANEL	CABLE INV-PANEL AUO(12P/10P,1A)JL4 GP	DD0JL4IV005	50.M4307.003
CABLE P/MB	CABLE P/MB/DT(14P/10P/8P,R1A)HX7 GP	DD0HX7TH106	50.M3507.004
CABLE MB/DT	CABLE MB/DT(80MM,36P/36P,3A)HV4E GP	DDHV4ETH301	50.M3507.005
CABLE MB/IR	CABLE MB/IR/BTN(10/9/8P,R1A)HV4A GP	DD0HV4IR001	50.M34V7.004
CABLE SPEAK	CABLE SPEAK(660MM,2P/3P,4P),HH2 GP	DD0HH2EP101	50.M12V7.005
CABLE AUDIO/PWR	CABLE AUDIO/PWR(8P/7P,R1A)HV4A GP	DD0HX4AB003	50.M34V7.005
CABLE GND	CABLE ASSY HV9 GND(1P/1P,2A) GP	DD0HV9TH108	50.M26V7.004
CABLE CLIP	CABLE CLIP FAA-51 VV3(EBVV3004,REV3A)GP	EBVV3004011	
PWR CORD	PWR CORD SP-502B+IS-14 3P 1.8M(AUST)B GP	DM333181T91	27.M12V7.001
Case/Cover/Bracket/Asser	nbly		
LCD BEZEL ASSY	HV4 LCD-BEZEL ASSY GP	36HV4LBTN04	60.M34V7.001
BACK COVER	AH4T BACK COVER ASSY GP	47AH4BC0I06	60.M34V7.002
STAND ASSY	HV4 STAND ASSY GP	27HV4SATN07	60.M34V7.003
STAND BASE	STAND BASE HV4(EAHV4002,REV3A) GP	EAHV4002014	
STAND BRACE	STAND BRACE HX4(FAHX4009,REV3C) GP	FAHX4009014	
STAND BKT	STAND BKT HX4(FAHX4008,REV3A) GP	FAHX4008018	33.M34V7.001
STAND COVER	STAND COVER HX4(EAHX4004,REV3B) GP	EAHX4004012	42.M34V7.001
STANDOFF	STANDOFF M3L6.5 AH2(FBAH2007,REV3A) GP	FBAH2007016	86.M3507.001
STANDOFF	STANDOFF M3L29.4 AH2(FBAH2008,REV3A) GP	FBAH2008012	86.M3507.002
STANDOFF	STANDOFF M3L37.5 AH2(FBAH2009,REV3A) GP	FBAH2009019	86.M3507.003
PANEL BKT AUO R	PANEL BKT AUO R HX4(FAHX4004,REV3D) GP	FAHX4004012	33.M34V7.003
PANEL BKT AUO L	PANEL BKT AUO L HX4(FAHX4005,REV3D) GP	FAHX4005019	33.M34V7.002
D-TUNNER BKT	D-TUNNER BKT AH2(FBAH2001,REV3A) GP	FBAH2001018	33.M3507.003
WIRE SADDLE CHA-4	WIRE SADDLE CHA-4 VV3(EBVV3006,REV3A) GP	EBVV3006014	42.M03V7.012
WIRE SADDLE MWS-7	WIRE SADDLE MWS-7 VV3(EBVV3010,REV3A) GP	EBVV3010011	42.M03V7.013
LCD			
LCD	LCD 42" T420XW01 V3 1366*768(STN B/S)GP	AA0420XW002	
LCD	LCD 42" T420XW01 V3 STN(QCI-CON)GP	AA0420XW025	
SPEAKER		. <u></u>	
SPEAKER ASSY	SPEAKER ASSY HX4E(FS-0000085AB) GP	DN0085AB004	23.M34V7.001
SPEAKER ASSY	SPEAKER ASSY HX4E (FS-0000085AA) GP	DN0085AA008	23.M34V7.002
LABEL			
LABEL (BUTTONS) HV9	LABEL (BUTTONS) HV9(HCHV9006,REV3B) GP	HCHV9006010	
LABEL (POWER) HV4	LABEL (POWER) HV4(HCHV4001,REV3A) GP	HCHV4001010	

IO LABEL	IO LABEL AU+DTV HV4(HCHV4009,REV3A) GP	HCHV4009010	40.M4307.001
RTG LABEL	RTG LABEL HV4(HCHV4002,3B)ACER AT4220 GP	HCHV4002016	
BOX LABEL	BOX LABEL(130WX150L)VT1(HCVT1004,R3A) GP	HCVT1004017	
MISCELLANEOUS			
CLAMP AUO-R/L HX4	CLAMP AUO-R/L HX4(FBHX4002,REV3A) GP	FBHX4002011	47.M34V7.001
CLAMP AUO-D HX4	CLAMP AUO-D HX4(FBHX4003,REV3A) GP	FBHX4003017	47.M34V7.002
EMI CONTACT PAD HX4	EMI CONTACT PAD HX4(JXHX4001,3A) GP	JXHX4001015	47.M34V7.003
EMI GASKET LVDS HX4	EMI GASKET LVDS HX4(GBHX4002,3A) GP	GBHX4002011	47.M34V7.004
EMI GASKET UP HX4	EMI GASKET UP HX4(GBHX4003,3A) GP	GBHX4003017	47.M34V7.005
EMI GASKET DOWN HX4	EMI GASKET DOWN HX4(GBHX4004,3A) GP	GBHX4004013	47.M34V7.006
EMI GASKET POWER HX4	EMI GASKET POWER HX4(GBHX4005,3A) GP	GBHX4005010	47.M34V7.007
GASKET 385X15X14 HV4E	GASKET 385X15X14 HV4E(GBHV4004,3A) GP	GBHV4004018	
SCREW			
SCREW	SCREW M4.0*6.0-B(NI)GP	MM40060BBJ5	86.M08V7.005
SCREW	SCREW T4*12-B(BNI) GP	ME40120BJ24	86.M25V7.003
SCREW	SCREW M3*6-B(BNI) GP	MM30060BJ25	86.M08V7.003
SCREW	SCREW T3*12-P(BNI+WASHER) GP	MS30120PCT3	86.M3507.004
SCREW	SCREW T3*12-P(BNI+WASHER)	M30120PCT	
SCREW	SCREW M4*6 P (NI) GP	MM40060PCE2	86.M01V7.002
SCREW	SCREW M4*22-B(BNI+WASHER+SPRING) GP	MM40220BK82	86.M34V7.002
SCREW	SCREW F3.0*6-B(NI)GP	MF30060BBJ6	86.M25V7.002
SCREW	SCREW T3*8-B(BNI) GP	MT30080BJ20	86.M08V7.007
SCREW	SCREW M3*6-B(BNI) GP	MM30060BJ25	86.M08V7.003
SCREW	SCREW F3.0*6-B(NI)GP	MF30060BBJ6	86.M25V7.002
SCREW	SCREW M4.0*8-B(NI)GP	MM40080BBJ4	
SCREW	SCREW T4*12 B (NI) GP	MT40120BBJ6	
NUT IO EA1	NUT IO EA1(MBEA1001,REV3D)GP	MBEA1001012	

Exploded parts list

ITEM	PART NAME	DESCRIPTION	ACER PART NO.	ΟΤΥ
1	LCD BEZEL ASSY	HV4 LCD-BEZEL ASSY GP	60.M34V7.001	1
2	LCD BACK COVER ASSY	AH4T BACK COVER ASSY GP	60.M34V7.002	1
3	LCD STAND ASSY	HV4 STAND ASSY GP	60.M34V7.003	1
4	LCD STAND COVER	STAND COVER HX4(EAHX4004,REV3B) GP	42.M34V7.001	1
5	FUNCTION KEY	FUNCTION KEY HV7E(EBHV7001,REV3A)GP	42.M25V7.001	1
6	WIRE SADDLE	WIRE SADDLE CHA-4 VV3(EBVV3006,REV3A) GP	42.M03V7.012	1
7	WIRE SADDLE	WIRE SADDLE MWS-7 VV3(EBVV3010,REV3A) GP	42.M03V7.013	6
8	CHASSIS	CHASSIS HX4(FAHX4001,REV3B) GP	33.M34V7.004	1
9	SHIELDING	SHIELDING AU HX4(FAHX4013,REV3E) GP	?	1
10	PANEL BKT	PANEL BKT AUO R HX4(FAHX4004,REV3D) GP	33.M34V7.003	1
11	PANEL BKT	PANEL BKT AUO L HX4(FAHX4005,REV3D) GP	33.M34V7.002	1
12	STAND BKT	STAND BKT HX4(FAHX4008,REV3A) GP	33.M34V7.001	2
13	D-TUNNER BKT	D-TUNNER BKT AH2	33.M3507.003	1
14	STANDOFF	STANDOFF M3L6.5 AH2	86.M3507.001	2
15	STANDOFF	STANDOFF M3L29.4 AH2	86.M3507.002	2
16	STANDOFF	STANDOFF M3L37.5 AH2	86.M3507.003	1
17	CLAMP	CLAMP AUO-R/L HX4(FBHX4002,REV3A) GP	47.M34V7.001	4
18	CLAMP	CLAMP AUO-D HX4(FBHX4003,REV3A) GP	47.M34V7.002	1
19	GASKET	GASKET 385X15X14 HV4E(GBHV4004,3A) GP	?	2
20	GASKET	EMI GASKET LVDS HX4(GBHX4002,3A) GP	47.M34V7.004	1
21	GASKET	EMI GASKET UP HX4(GBHX4003,3A) GP	47.M34V7.005	3
22	GASKET	EMI GASKET DOWN HX4(GBHX4004,3A) GP	47.M34V7.006	1
23	GASKET	EMI GASKET POWER HX4(GBHX4005,3A) GP	47.M34V7.007	1
24	GASKET	GASKET TUNER ESD HX7E	?	2
25	LABEL	LABEL (POWER) HV4(HCHV4001,REV3A) GP	40.M34V7.001	1
26	CONTACT PAD	EMI CONTACT PAD HX4(JXHX4001,3A) GP	47.M34V7.003	1
27	NUT IO	NUT IO EA1(MBEA1001,REV3D)GP	?	1
28	SCREW	SCREW T4*12-B(BNI) GP	86.M25V7.003	39
29	SCREW	SCREW F3.0*6-B(NI)GP	86.M25V7.002	3
30	SCREW	SCREW M3*6-B(BNI) GP	86.M08V7.003	39
31	SCREW	SCREW M4.0*6.0-B(NI)GP	86.M08V7.005	8
32	SCREW	SCREW M4*6 P (NI) GP	86.M01V7.002	3
33	SCREW	SCREW M4*22-B(BNI+WASHER+SPRING) GP	86.M34V7.002	10
34	SCREW	SCREW T3*12-P(BNI+WASHER) GP	86.M3507.004	8
35	SCREW	SCREW T3*8-B(BNI)	86.M08V7.007	8

