Acer AL1512 Service Guide

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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 the current topic.
Warning	Alerts you to any damage that might result from doing or not doing specific actions.
Caution	Gives precautionary measures to avoid possible hardware or software problems.
Important	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 BASICCONFIGURATION 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.
- please not WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, 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.

WARNING: (FOR FCC CERTIFIED MODELS)

NOTE: this equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, Which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1. Reorient or relocate the receiving antenna.
- 2. Increase the separation between the equipment and receiver.
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- 4. Consult the dealer or an experienced radio/TV technician for help.

WARNING

Use only shielded signal cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

As an ENERGY STAR[®] Partner our company has determined that this product meets the ENERG STAR[®] guidelines for energy efficiency.

WARNING:

To prevent fire or chock hazard, do not expose the monitor to rain or moisture. Dangerously high voltages are present inside the monitor. Do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTIONS

- Do not use the monitor near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, Swimming pool or in a wet basement.
- Do not place the monitor on an unstable trolley, stand, or table. If the monitor falls, it can injure a
 person and cause serious damage to the appliance. Use only a trolley or stand recommended by the
 manufacture or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit
 approved by the manufacture and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet area provided for ventilation. To ensure
 reliable operation of the monitor and to protect it from overheating, be sure these openings are not
 blocked or covered. Do not place the monitor on a bed, sofa, rug or similar surface. Do not place the
 monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet
 unless proper ventilation is provided.
- The monitor should be operated only from the type of power source indicated on the label. If you are
 not sure of the type of power supplied to your home, consult your dealer or local power company.
- The monitor is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. This
 plug will fit only into a grounded power outlet as a safety feature. If your outlet does not accommodate
 the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the
 appliance safely. Do not defeat the safety purpose of the grounded plug.
- Unplug the unit during a lightning storm or when it will not be used for long periods of time. This will
 protect the monitor from damage due to power surges.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Never push any object into the slot on the monitor cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the monitor.
- Do not attempt to service the monitor yourself; opening or removing covers can expose you to dangerous voltages and other hazards. Please refer all servicing to gualified service personnel.
- To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100-240V AC, Min. 3.5A.
- The wall socket shall be installed near the equipment and shall be easily accessible.
- For use only with the attached power adapter (output 12V DC) which have UL,CSA listed license

SPECIAL NOTES ON LCD MONITORS

The following symptoms are normal with LCD monitor and do not indicate a problem.

NOTES

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness in the screen depending on the desktop pattern you use.
- The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image, when the same image is displayed for hours. In this case, the screen is recovered slowly by changing the image or turning off the Power Switch for hours.

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Monitor Features

1.1 Test Conditions

Item	Condition		
Temperature	Normal room temperature (25±2)		
Humidity	50±10%		
AC input voltage	100V±2V, 120±2V, 60Hz / 230±2V, 50Hz		
Signal Level	0.7Vр-р		
Brightness	Maximum with OSD setting		
Contrast	Middle with OSD setting		
Resolution setting	1024 x 768 @60HZ		
Color temperature	With OSD setting		
Measuring instrument	Topcon luminance colorimeter BM-5A or equivalent		
Others	Before measuring, "Auto Config" & "Auto Balance" must be done in		
	advance		

1.2 Features

- 15" XGA TFT LCD Panel •
- TN Mode Liquid Crystal •
- D-SUB Input
- Audio Function (Optional)
- Support to 75Hz Refresh Rate
- •
- Support VESA-DCC 2B plug & play function Support VESA-DPMS Power Management Function •
- Wide Viewing Angle
- **High Brightness**
- High Brightness & Contrast Angular Dependent •
- Fast LC Response Time •
- Light Weight •

1.3 LCD panel Specification

1.3.1 Optical Specifications

The relative measurement methods of optical characteristics are shown in 4.2. The following items should be measured under the test conditions described in 4.1 and stable environment shown in Note (4).

Item		Symbol	Condition	Min.	Тур.	Max.	Unit	Note
Contrast Ratio		CR		300	450	-	-	(2), (4)
Deenense Tin		T _R	$\theta_x = 0^\circ, \ \theta_Y = 0^\circ$		6	10	ms	(2)
Response I in	lie	Τ _F	Normal Angle		17	25	ms	(3)
Luminance of	center point	L		250	350	-	cd/ m ²	(2), (4)
Luminance(An	gular dependent)	L _R		-	1.5	1.7	-	(2), (5)
Contrast (Ang	ular-dependent)	Cm		0.5	0.9	-	-	(2), (6)
Brightness Ur	niformity	Uni.		-	1.1	1.3	-	(2), (4)
	Red	Rx		0.603	0.633	0.663	-	
		Ry		0.322	0.352	0.382	-	
	Green	Gx		0.268	0.298	0.328	-	
Color		Gy		0.558	0.588	0.618	-	(2)
Chromaticity	Blue	Bx		0.115	0.145	0.175	-	(2)
		Ву		0.069	0.099	0.129	-	
	White	Wx		0.281	0.311	0.341	-	
		Wy		0.300	0.330	0.360	-	
Viewing	Horizontal	θ_x +		50	60	-	Deg.	
	HUHZUHIAI	θ _x -	- CR≥10	50	60	-		(1) (4)
Angle	Vortical	θ_{Y} +		40	50	-		(1),(4)
	Vertical	θ γ-		50	60	-		

Note (1) Definition of Viewing Angle ($\theta x, \theta y$):



Note (2) Definition of Contrast Ratio (CR):

The contrast ratio can be calculated by the following expression and figure below.

Contrast Ratio (CR) = L255 / L0 L255: Luminance of gray level 255 L 0: Luminance of gray level 0 CR = CR (5) CR (X) is corresponding to the Contrast Ratio of the point X at Figure in Note (5).

Definition of luminance measured points and Brightness Uniformity:



Horizontal Line Number [pixel]

Luminance of center point: L=L(5) Brightness Uniformity Measurement points: Five specified points 1-5 Formula: Maximum [L (1), L (2), L (3), L (4), L (5)]/Minimum [L (1), L (2), L (3), L (4), L (5)]

Note (3) Definition of Response Time (T_R, T_F):



Note (4) Measurement Setup:

The LCD module should be stabilized at given temperature for 20 minutes to avoid abrupt temperature change during measuring. In order to stabilize the luminance, the measurement should be executed after lighting Backlight for 20 minutes in a windless room.



1.4 Connector Pin Assignment

1.4.1 D-sub mini 15pin Connector



Pin No.	Pin Function	Pin No.	Pin Function
1	Red video input	9	NC
2	Green video input	10	Ground
3	Blue video input	11	NC
4	NC	12	(SDA)
5	Ground	13	Horizontal synchronization (Composite sync)
6	Red video ground	14	Vertical synchronization
7	Green video ground	15	(SCL)
8	Blue video ground		

1.4.2 DC Connector

DC Power Jack, d=2.0mm

Please refer to Chapter 5 for more detail regarind the DC Connector

1.4.3 Audio Connector (Optional) Phone Jack, d=3.5mm

Electi (Notes 7, The follow	rical Characteristics for I 10) ving specifications apply for V _{DD} = 5V uni	Entire IC less otherwise noted. Limits apply for T_A	= 25°C.		
	LM4838				
Symbol	Parameter	Conditions	Typical (Note 14)	Limit (Note 15)	(Limits)
VDD	Supply Voltage			2.7	V (min)
				5.5	V (max)
I _{DD}	Quiescent Power Supply Current	V _{IN} = 0V, I _O = 0A	15	30	mA (max)
Isp	Shutdown Current	V _{shutdown} = V _{DD}	0.7	2.0	μA (max)
VIH	Headphone Sense High Input Voltage			4	V (min)
VIL	Headphone Sense Low Input Voltage			0.8	V (max)

Electrical Characteristics for Volume Attenuators

(Notes 7, 10) The following specifications apply for V_{DD} = 5V. Limits apply for T_A = 25°C.

			LM4838		Unite
Symbol	Parameter	Conditions	Typical (Note 14)	Limit (Note 15)	(Limits)
CRANGE	Attenuator Range	Gain with V _{DCVol} = 5V, No Load		±0.75	dB (max)
		Attenuation with V _{DCVol} = 0V (BM & SE)		-75	dB (min)
A _M	Mute Attenuation	V _{mute} = 5V, Bridged Mode (BM)		-78	dB (min)
		V _{mute} = 5V, Single-Ended Mode (SE)		-78	dB (min)

Electrical Characteristics for Single-Ended Mode Operation

(Notes 7, 10) The following specifications apply for $V_{\rm DD}$ = 5V. Limits apply for $T_{\rm A}$ = 25°C.

			LM4	Unite	
Symbol	Parameter	Conditions	Typical (Note 14)	Limit (Note 15)	(Limits)
Po	Output Power	THD = 1.0%; f = 1kHz; R_L = 32 Ω	85		mW
		THD = 10%; f = 1 kHz; R_L = 32 Ω	95		mW

Chapter 2

Operating Instructions

2.1 Function Names



No.	Name		Descriptions		
1	Power Switch	Power On/Off			
2	LED Indicator	Green	Normal operation		
		Orange	Power management		
3	MENU	OSD control MENU button			
4	>	Right selection/ Volume button (AL1512m)			
5	<	Left selection/ Volume button (AL1512m)			
6	AUTO	Adjust Clock, Phase, H Position and V Position automatically			
7	Speaker	1.5W x 2			

2.1.2 Back



No.	Name	Descriptions
8	AUDIO-IN	d=3.5mm stereo mini Jack
9	VGA-IN	D-sub mini 15pin Connector
10	DC-IN	DC Power Jack, d=2.0mm.
11	Lock hole	Kinglock

2.2 OSD Menu Description

- Power : Press this key to control power ON/OFF of the Monitor. Green: Power is on and normal . Orange: Power off. Orange Sleep status in the energy-saving mode.
- 2. Menu: Press this button to enter OSD. Press it again to exit OSD.
- 3. > / Plus and < / Minus : Press this button for selection or adjustment when OSD is shown. Press this button and click < and > to adjust volume when OSD is not shown (for the model with speakers only)
- 4. **Auto :** Press this button to exit the manual when OSD is shown. Press this button for the display to optimize the position, phase and clock pulse automatically when OSD is not shown.



2.3 OSD Operation

- Click MENU to display the OSD window as shown in the following figure.
- Click < or > to select the function to be adjusted as shown in the following figure.
- Click the MENU to select the function to be adjusted.
- Click < or > to change current settings.
- To exit OSD, select "imi" to close the OSD window and save changes.
 To change other settings repeat steps 2-4.



Bright/Contract Adjustment

Phase/Clock pulse Adjustment Horizontal/Vertical Adjustment

Color Temp. Adjustment Language Selection

2.4 OSD function definition

Primary Directory	Secondary Directory	Secondary Directory Items	Description
Symbol	Symbol	Contrast	Adjust the contrast between the foreground and
**			background of an image on the screen
<u> </u>	×	Brightness	Adjust the background brightness of the screen
		Phase	Adjust the focus of the image (for analog input adjustment only)
		Clock Pulse	Adjust the clock pulse of the image (for input adjustment only)
e		Horizontal	Move the image left and right on the screen (for input adjustment only)
	0	Vertical	Move the image up and down on the screen (for input adjustment only)
	N/A	Warm Color Temp.	Set up the color temp. to be warm white color
	N/A	Cold Color Temp.	Set up the color temp. to be cold white color
	R	User Definition/Red	
	G	User Definition/Green	Adjust red/green/blue gain
	В	User Definition/Blue	
	N/A	English	Select the language you want
Ð	N/A	繁體中文 (Complex	
		Chinese)	
	N/A	Deutsch	
	N/A	Français	
	N/A	Español	
	N/A	Italiano	
	N/A	简体中文 (Simplified Chinese)	
	N/A	日本語 (Japanese)	
โกรก	ţ	Horizontal	Move OSD left and right
0.00	÷	Vertical	Move OSD up and down
	C	OSD Time Display	Adjust OSD time display settings
	N/A	Auto Adjustment	Set up horizontal, vertical, sequence and focus automatically

(for analog input only)			
0	N/A	Message	Display resolution, H/V frequency and the input port used for current input timing function.
R∙	N/A	Restore	Restore to factory settings
	N/A	Exit	Close the OSD window and save changes.

2.5 Plug and Play

- The product provides the latest VESA *plug and play* function to prevent complicated and time-consuming installation procedures. The *plug and play* function allows your computer system to identify the LCD display easily and set up the functions of the LCD display automatically.
- The LCD display transfers the *Extended Display Identification Data* (EDID) to your computer system via the *Display Data Channel* (DDC), so that your computer can use the self-setting function of the LCD display.

2.6 Power Saver

- The LCD display has a built-in Power Control System (*Power Saver*).
- When the LCD display is not operated during a certain time, the Power Control System will brings the LCD display into low voltage status automatically to save power. Move the mouse slightly or press any key to return to the normal operation.
- The Power Saver function can only be operated by the display card of the computer system. You can set up this function from your computer.
- The LCD display is compatible with EPAENERGY STAR NÜTEK when used with VESA DPMS
- To save power and extend the life of the product, turn off the LCD display power supply when it is not used or when remaining idle for a long time.

Dissassembly and Reassembly

3.1 Disassembly Procedures

Picture	Description
	Push the hooks and stand bottom away
and a second second	
	Remove Hinge Cover
	Loosen and remove 6 screws to remove Stand Assy
	Loose and remove 5 screws.
	Separate Bezel hooks to take Bezel and Rear Cover apart.
	Lift up Rear Cover

	Pull out FFC from connectors at Switch Board and AD PCBA
	Loose and remove 2 Stand-Off screws Stand-Off Part No : 42A9940007
	Loose and remove 1 screw
	Loosen & Remove 3 screws
	Open & Separate Metal Cover (PCB-X)
	Remove the Cover of main board
8	Remove 3 Backlight wires.
0	Loose and remove 3 screws

	Lift up Inverter slightly, and Separate its head from the housing at AD PCBA
	Remove the taps on X-board FPC.
	Pull out the X-Board FPC
000	Loose and remove 4 screws
	Remove AD PCBA
	Disassembly PCBA complete.
	Lift up LCD module and remove bezel.
10 2	Separate both Audio Cable.

Loose and remove 2 screws.
Take Function PCBA apart completed

3.2 Reassembly Procedures

	Place Function PCBA.
	Fasten 2 screws
200	Insert Audit Cable to connectors .
	Bezel assembly complete.
	Place LCD module.

	Place new AD PCBA
000	Fasten 4 screws
	Insert FPC to connector
	Shift Inverter with care ; plug its head into the housing at AD PCBA
	Fasten 3 fixed screws.
8	Insert 3 Backlight wires
AR DE	Place Metal Cover (AD/Power-PCB)
	Place Metal Cover (PCB-X)

	Push the metal Cover (PCB-X) andforward to have the hook latched.
	Fasten 3 screws
	Fasten the screw
	Fasten 2 Stand-Off screws
	Place Rear Cover
	Join hooks of Rear Cover with Bezel
	Fasten 5 screws
- The	Place Stand Assy. Fasten 6 screws

Taniniaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa	Insert Stand Cover
	Have the hook latched

Troubleshooting



4.1 Abnormal Display Troubleshooting





4.2 Abnormal (ON/OFF, LCD display, Keyboard) Troubleshooting

4.3 Abnormal (BIOS, OSD, Other Display) Troubleshooting



4.4 Audio Abnormal Troubleshooting



Chapter 5

Connector Information

5.1 Function block Diagram



5.2 Connector Location



5.3 Main Board Pin Assignment Introduction

5.3.1 CN2 Pin assignment

Pin No.	Symbol	Description
1	STV1	SCAN IC START PULSE
2	OE	SCAN DATA OUTPUT ENABLE
3	CKV	SCAN IC CLOCK
4	GND	GROUND
5	STH1	SHIFT START PULSE I/O
6	REV1	DATA INVERSION INPUT
7	REV2	DATA INVERSION INPUT
8	POL	POLARITH INVERTING
9	STB	DATA LATCH
10	GND	GROUND
11	СКН	DATA CLOCK INPUT
12	GND	GROUND
13	GMA1	GAMMA VOLTAGE
14	GMA2	GAMMA VOLTAGE
15	GMA3	GAMMA VOLTAGE
16	GMA4	GAMMA VOLTAGE
17	GMA5	GAMMA VOLTAGE
18	GMA6	GAMMA VOLTAGE
19	GMA7	GAMMA VOLTAGE
20	GMA8	GAMMA VOLTAGE
21	GMA9	GAMMA VOLTAGE
22	GMA10	GAMMA VOLTAGE
23	GND	GROUND
24	VCOM	PANEL COMMOM VOLTAGE
25	VCOM	PANEL COMMOM VOLTAGE
26	VCOM	PANEL COMMOM VOLTAGE
27	VCOM	PANEL COMMOM VOLTAGE
28	VCOM	PANEL COMMOM VOLTAGE
29	VSA	DRIVER SUPPLY VOLTAGE
30	VSA	DRIVER SUPPLY VOLTAGE
31	VSA	DRIVER SUPPLY VOLTAGE
32	VSA	DRIVER SUPPLY VOLTAGE
33	VSA	DRIVER SUPPLY VOLTAGE

34	VSD	DATA IC VOLTAGE
35	VSD	DATA IC VOLTAGE
36	VSD	DATA IC VOLTAGE
37	VDDY	DRIVER SUPPLY VOLTAGE
38	VDDY	DRIVER SUPPLY VOLTAGE
39	DRESTOUT	OUTPUT ALL-ON CONTROL
40	PANEL VGL	PANEL DRIVING VOLTAGE
41	PANEL VGL	PANEL DRIVING VOLTAGE
42	GND	GROUND
43	PANEL VGH	PANEL DRIVING VOLTAGE
44	PANEL VGH	PANEL DRIVING VOLTAGE
45	GND	GROUND

5.3.2 CN3 Pin assignment

Pin No.	Symbol	Description
1	GND	GROUND
2	GND	GROUND
3	ER0	EVEN PATH RED DATA BIT
4	ER1	EVEN PATH RED DATA BIT
5	ER2	EVEN PATH RED DATA BIT
6	ER3	EVEN PATH RED DATA BIT
7	ER4	EVEN PATH RED DATA BIT
8	ER5	EVEN PATH RED DATA BIT
9	GND	GROUND
10	EG0	EVEN PATH GREEN DATA BIT
11	EG1	EVEN PATH GREEN DATA BIT
12	EG2	EVEN PATH GREEN DATA BIT
13	EG3	EVEN PATH GREEN DATA BIT
14	EG4	EVEN PATH GREEN DATA BIT
15	EG5	EVEN PATH GREEN DATA BIT
16	GND	GROUND
17	EB0	EVEN PATH BLUE DATA BIT
18	EB1	EVEN PATH BLUE DATA BIT
19	EB2	EVEN PATH BLUE DATA BIT
20	EB3	EVEN PATH BLUE DATA BIT
21	EB4	EVEN PATH BLUE DATA BIT
22	EB5	EVEN PATH BLUE DATA BIT
23	GND	GROUND

24	OR0	ODD PATH RED DATA BIT
25	OR1	ODD PATH RED DATA BIT
26	OR2	ODD PATH RED DATA BIT
27	OR3	ODD PATH RED DATA BIT
28	OR4	ODD PATH RED DATA BIT
29	OR5	ODD PATH RED DATA BIT
30	GND	GROUND
31	OG0	ODD PATH GREEN DATA BIT
32	OG1	ODD PATH GREEN DATA BIT
33	OG2	ODD PATH GREEN DATA BIT
34	OG3	ODD PATH GREEN DATA BIT
35	OG4	ODD PATH GREEN DATA BIT
36	OG5	ODD PATH GREEN DATA BIT
37	GND	GROUND
38	OB0	ODD PATH BLUE DATA BIT
39	OB1	ODD PATH BLUE DATA BIT
40	OB2	ODD PATH BLUE DATA BIT
41	OB3	ODD PATH BLUE DATA BIT
42	OB4	ODD PATH BLUE DATA BIT
43	OB5	ODD PATH BLUE DATA BIT
44	GND	GROUND
45	GND	GROUND

5.3.3 CN4 Pin assignment

Pin No.	Symbol	Description
1	INV_ADJ	Brightness Adjustment
2	INV_ON/OFF	Inverter enable
3	GND	Ground
4	GND	Ground
5	VIN_12V	Input source
6	VIN_12V	Input source

5.3.4 CN5 Pin assignment

Pin No.	Symbol	Description	
1	NC		
2	AUTO_ADJ	AUTO ADJUSTMENT	
3	NC		
4	EXIT	EXIT KEY	
5	MENU	MENU KEY	
6	GND	GROUND	
7	UP	UP KEY	
8	LED OR	ORANGE LED	
9	LED GR	GREEN LED	
10	POWER_KEY	POWER KEY	
11	NC		
12	HP_Detector	HEADPHONE DETECT	
13	DOWN	DOWN KEY	
14	NC		
15	AUDIO/R-	AUDIO OUTPUT	
16	AUDIO/R+	AUDIO OUTPUT	
17	AUDIO/L-	AUDIO OUTPUT	
18	AUDIO/L+	AUDIO OUTPUT	

5.3.5 JP1 Pin assignment

Pin No.	Symbol	Description	
1	GRAI	RED INPUT	
2	GGAI	GREEN INPUT	
3	GBAI	BLUE INPUT	
4	NC		
5	GND	GROUND	
6	RGND	RED INPUT GROUND	
7	GGND	GREEN INPUT GROUND	
8	BGND	BLUE INPUT GROUND	
9	VGA_5V	VGA INPUT 5V	
10	GND_ANA	GROUND	
11	NC		
12	DSUB-SDA	I2C	
13	G_HSYNC	H-SYNC	
14	G_VSYNC	V-SYNC	
15	DSUB SCL	I2C	

FRU (Field Replaceable Unit) List

Part List

Picture	Partname	Description	Vendor Part No.
HIRE CONTRACTOR	Adapter	Adaptor(AC/DC),40W,12 V,3.33A,UP04081120- 01W	2719040122
	FUNCTION BUTTON BOARD	PCBA ,Rigid,201-0M	35A15K0218
	INVERTER BOARD	DC/AC INVERTER,TWS-444- 936, TYP.2400V/5MA	2714000001
	Main Board	PCBA ,Rigid,203-03	35A15S0236
HIMANNER	CABLES	FFC AD_OSD_GROUNDING, TennRich,121.5*9.5mm	3241500004
	AUDIO CABLE	28AWG,180 cm	32F2818001

	MONITOR CABLE	427C,30AWG,180cm	32F3018001
C	STAND BASE	Seat Assy,	40A15929D3
	LCD FRONT BEZEL	Bezel Assy	40A1529947
	LCD BACK COVER	Rear Assy	40A15929C4
	Hinge Cover	Cover Hinge	40A15929D5
	MAINBOAR D COVER	Cover_pcb_ad, D-Sub Only	41A1599115
	LCD BRACKET	METAL COVER PCB-X,	41A1599116

Explosion Diagram



1.BEZEL_W/_SPEAKER_ASSY 2.OSD PCBA 3.SCREW **4.PANEL ASSY** 5.PET_FILM_METAL_FRAM_R EAR **6.INVERTER 7.SMART PCBA** 8.FFC AD_OSD 9.SCREW **10.PET ISOLUTION FILM 11.METAL COVER SMART** 12.STAND-OFF 13.REAR_ASSY 14.SCREW 15.SEAT_ASSY 16.STAND_ASSY 17.SCREW 18.STAND HINGE_COVER

Chapter 7

Schematic Diagram

Main Board



















