

# EBOX-3100-VGA

## User's Guide



## Copyright

The information in this manual is subject to change without notice for continuous improvement in the product. All rights are reserved. The manufacturer assumes no responsibility for any inaccuracies that may contain in this document, and makes no commitment to update or to keep current information contain in this manual.

No part of this manual may be reproduced, copied, translated or transmitted, in whole or in part, in any form or by any means without the prior written permission of the DMP Electronics Inc.

©Copyright 2018 DMP Electronics Inc.

## **Special Notice to Users**

DMP Electronics Inc. provides no warranty with regard to this manual, the software, or other information contained herein and hereby expressly disclaims any implied warranties of merchantability or fitness for any particular purpose with regard to this manual, the software, or such other information. In no event shall DMP Electronics be liable for any incidental, consequential, or special damages, whether based on tort, contract, or otherwise, arising out of or in connection with this manual, the software, or other information contained herein or the use thereof.

DMP Electronics reserves the right to make any modification to this manual or the information contained herein at any time without notice. The software described herein is governed by the terms of a separated user license agreement or label sticker.

This product contains software owned by DM&P and licensed by third parties. Use of such software is subject to the terms and conditions of license agreements enclosed with this product. Software specifications are subject to change without notice and may not necessarily be identical to current retail versions.

Updates and additions to software may require an additional charge. Subscription to online service providers may require a fee and credit card information. Financial services may require prior arrangements with participating financial institution.

## **Trademarks Acknowledgment**

**DMP** is the registered trademarks of DMP Electronics Inc.

Other brand names, product names or trade names appearing in this document are the properties and registered trademarks of their respective owners. All names mentioned herewith are served for identification purpose only.

## **Safety Information**

## WARNING

- > Do not expose EBOX to rain or moisture, in order to prevent shock and fire hazard.
- Never install EBOX in wet locations.
- Do not open the cabinet to avoid electrical shock. Refer to your nearest dealer for qualified personnel servicing.
- Never touch un-insulated terminals or wire unless your power adaptor and display monitor are disconnected.
- Locate EBOX as close as possible to the socket outline for easy access and to avoid force caused by entangling of your arms with surrounding cables from the EBOX.
- When using EBOX, avoid using or installing the modern to the serial port during a storm or a lightning.
- > Do not use the modem or a telephone to report a gas leak in the vicinity of the leak.
- USB connectors are supplied with Limited Power Sources.

DO NOT ATTEMPT TO OPEN OR TO DISASSEMBLE THE CHASSIS (ENCASING) OF THIS PRODUCT. PLEASE CONTACT YOUR NEAREST DEALER FOR SERVICING FROM QUALIFIED TECHNICIAN.

# Regulatory

### FCC Class A Note

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference in which case the user will be required to correct the interference at his own expense. Testing was done with shielded cables. Therefore, in order to comply with the FCC regulations, you must use shielded cables with your installation.

## WARNING

This product complies with EN55022 class A. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus as set out in the interference - causing equipment standard entitled "Digital Apparatus", ICES-003 of the Department of Communications.

## Manufacturer's Declaration of Conformity

This equipment has been tested and found to comply with the requirements of European Community Council Directives 89/336/EEC and 73/23/EEC relating to electromagnetic compatibility and product safety respectively.

## Attention

This product has been designed and certified to comply with certain regulatory requirements pertaining to Information Technology Equipment. This product has not been designed for use as a medical device. Without limitation of the foregoing, this product is not intended and has not been certified for use in a hospital or clinical environment to diagnose, treat, or monitor patients under medical supervision, and is not intended and has not been certified to make physical or electrical contact with patients, nor to transfer energy to or from patients or to detect such energy transfer to or from patients.

## **Purchase Agreement**

### Purpose:

In accordance to the general commercial conduct of Trust and Fair Trade, herewith below is the agreement for the protection for both parties, DMP and Users in pursuant of trading.

## **Product Description:**

With this product, herewith also known as EBOX-3100-VGA, which is a simplified & an economical design of an embedded device for Special Purpose Personal Computing. The basic specification of this product is comprised of the x86 technology, design, and with onboard 512 MB DDR3 memory, VGA display, USB, COM ports and LAN Interfaces.

### **Distribution Convention:**

- This Product includes a gift box, an inner case, a PC, a Power adaptor (Optional). Upon receiving this product, kindly please refer to the User' Manual to check for the contents and appearance of this product; contact immediately your nearest dealer or DMP office for any defective or missing parts. The supplier will not be responsible for any reported discrepancy there after the expiration period of 3-days from the received date.
- In consideration of transportation and the cost of storage, the supplier provides to the distributors a warranty of 12 months. This warranty covers the failure caused by hardware breakdown (excluding hard drives), but does not cover the act of misuse and mishandling.
- 3. The supplier will not accept unknown post, therefore if you wish to repair or to return your goods kindly please contact your nearest dealer to make your declaration, and at the same time, apply for an RMA number (RMA stands for Return Merchandise Authorization please ask for RMA form and fill-up for authorization).
- 4. The freight for return goods for repair will follow the International customary practice and convention: Both parties is to pay for freight of one shipment each. The shipper is required to prepay the freight from the place of origin (This means that the returnee (user) covers the freight for return goods, while the Supplier covers the freight for goods after the repair).
- 5. Obsolete warranty is referred to as: (1) Expiration of warranty or (2) Damage due to misuse within warranty. The Supplier will be taken into consideration of the circumstances, to provide repair service with charges expense for obsolete warranty. This expense includes the cost of material and the cost of labor.

**Note:** If there is other particular issue, not listed in the above conditions, both parties agreed to follow the General Law of Commerce with fair and reasonable discussion in handling and resolving the argument.

# Contents

### Chapter 1

02 Unpacking your EBOX Mini PC

## Chapter 2

- 05 EBOX-3100-VGA Overview
- 06 System Specifications
- 07 Peripherals Connecting

## Chapter 3

- 09 BIOS Reconfiguring
- 09 Linux Installation Guide

## Chapter 4

17 Technical Specifications

## Chapter 5

- 19 Onboard Connectors Summary
- 20 Pin Assignments

## Chapter 6

- 22 Taking Care Your EBOX VESA PC
- 24 Troubleshooting

## Chapter 7

- 26 Terms and Condition
- 26 Warranty
- 26 Service and Support
- 26 Return Merchandise Authorization (RMA) Policy
- 26 Shipping Policy



# Unpacking Your EBOX-3100-VGA Mini PC

Congratulation! You have just acquired EBOX-3100-VGA, please check the following item:

## Packing List:

Item No.	Description	Q'ty
1	EBOX-3100-VGA Mini PC	x1

Note: The accessories are subject to change without immediate notice.

## **Check Before Use**



## Preface EBOX-3100-VGA Mini PC



The EBOX-3100-VGA is a revolutionary device which is especially designed for limited physical space and temperature concerns. No matter you are in a jammed office, a crowded place, or public transportation, it can be easily integrated with a VESA LCD to bring you EBOX-3100-VGA access at any time.

It can attach to any VESA mounting fixture; allowing it to be securely mounted onto desks, walls, or buildings, and thereby optimizes your work area. It can also attach directly to any size LCD for a mobile system for the use at trade shows, presentations, promotions, etc. Unlike traditional portable laptop design, the EBOX-3100-VGA can be used with a large size LCD. Furthermore, with FANLESS design, EBOX-3100-VGA is ideal to be used in the environment where temperature demand is critical.

If you are looking for a device that is able to provide with more mobility & space, and at the same time uses less power consumption, EBOX-3100-VGA will be surely meet your need.

The VESA® FDMI<sup>™</sup> Standard defines mounting interfaces, hole patterns and associated cable/ power supply locations for LCD monitors, plasma displays and other flat panel devices. EBOX-3100-VGA is designed to fit this standard to make monitor attachment quickly and easily.



## **EBOX-3100-VGA Overview**



#### Front Panel

A: Power LED The power LED lights up when the system is turned on.

**B: Audio Line Out** Audio output to speaker.

C: Audio Mic In For Microphone input.

D: USB 2.0 port Connection for external USB devices.

E: SD Card Slot For the storage SD card, the system is bootable from SD card.



#### **Back Panel**

- G: VGA port D-Sub 15-pin
- H: RJ-45 LAN Jack
- I: Power switch
- J: Micro 5pin USB Power Jack

## **System Specification**

#### <u>CPU</u>

Vortex86EX (400MHz)

#### Main Memory

512MB DDR3 (32-bit DRAM bus)

#### **BIOS**

SeaBIOS

#### <u>VGA</u>

Resolution up to 1024 x 768 High Colors

#### **Peripheral**

- 1. USB 2.0 x 2 (2 at front)
- 2. SD Card slot x 1
- 3. Audio port (Mic in x1 & Line out x 1)

#### **Dimension & Weight**

78 x 78 x 28mm/ 208g

#### Power consumption

DC +5V@0.57A

#### Supported Operating System

Windows XP Windows XP Embedded Windows Embedded CE

#### Supported Linux Distribution list:

- 1. Gentoo 4.2
- 2. Ubuntu 8.04
- 3. Ubuntu 8.10
- 4. Ubutnu 9.04
- 5. Ubuntu 10.04
- 6. Debian 4.0
- 7. Debian 5.0
- 8. Debian 6.0
- 9. Debian 7.0
- 10. OpenSUSE 11.4
- 11. Fedora Core 5
- 12. Fedora 10
- 13. WattOS warp30 (Ubuntu 8.10 base)
- 14. CentOS 5.5

※ CentOS 5.5: Please use regular PC to install the OS into SD card, then, remove the SD card onto the EBOX units.

# Peripherals

### **Connecting the Power Adaptor**



## **Connecting the Monitor**



## **Connecting the USB**

#### A: Micro 5pin USB Power Jack

To use EBOX-3100-VGA please attach the USB cable or spec in +5V@2A AC adapter for the power source.

#### Note:

With the Auto Power On support function, the system then will be turned on automatically.

#### **B: VGA Connection**

Connect your LCD display Monitor with VGA cable (Not included in EBOX console bundles) to the 15-pin D-Sub VGA port.

EBOX-3100-VGA provides 2 external USB ports (two at the front).



## **Connecting the LAN**



#### C: USB 2.0 port

Connection for external USB devices.

#### D: Microphone/ Earphone

The EBOX-3100-VGA supports Microphone Input and Speaker Output.

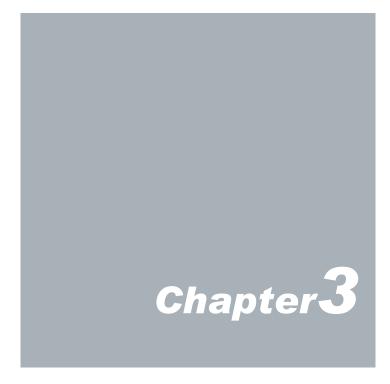
#### E: SD Card Slot

For the storage SD card, the system is bootable from SD card.

#### F: RJ-45 LAN

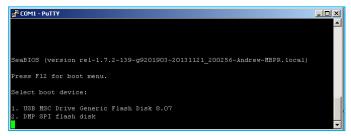
RJ-45 LAN jack for Ethernet connection.

DMP Electronics Inc.



# **BIOS Reconfiguring**

SeaBIOS is used in the EBOX-3100-VGA. To reconfigure the EBOX-3100-VGA, press or hit the <F12> key to enter your BIOS setup main menu as below.



(SeaBIOS Setup menu)

## Linux installation For Debian7.0/ Ubuntu10.04

Regarding the system installation of Debian7.0/ Ubuntu10.04, please follow the steps and suggestions to complete the system installation on the EBOX-3100-VGA platform. There we provided is a brief instruction to assist clients, but you can configure it by yourself with system's asking.

## 1. Basic system installation

 For Debian7.0, after booting from the installation CD, moving straight to install system would get a text only system, please choose Graphic Install if GUI is necessary for your application.



- The system would start to ask questions for basic configuration. Such as the language, keyboard map and time zone, etc.
- Then the system information appears for something about the detecting of network hardware, system requires users to load the firmware files for network device rtl8168, just answer no for this inquiry and move forward.
- Then the system would inform you that multiple network interfaces were detected on the EBOX-3100-VGA, and the user to choose the one as primary network interface, both of them all could be chosen. And the Ethernet cable must be plugged in this period.

Configure the network	
Please enter the hostname for this system.	
The hostname is a single word that identifies your system to the network. If you don't know what your hostname should be, consult your network administrator. If you are setting up your own home network, you can make something up here.	
Hostname:	
debian	

 As installation processing, the system would need you to make decisions about how the partitions your disk for the system? Following default option is using entire disk for the beginner. Choose "all files in one partition". Other allocation is also available, depends on customers' needs.

Partition disks
The installer can guide you through partitioning a disk (using different standard schemes) or, if you prefer, you can do it manually. With guided partitioning you will still have a chance later to review and customise the results.
If you choose guided partitioning for an entire disk, you will next be asked which disk should be used. Partitioning method:
Guided - use entire disk
Guided - use entire disk and set up LVM
Guided - use entire disk and set up encrypted LVM
Manual

In the final, remember to write the change to disk.

Partition disks
If \$ou continue, the changes listed below will be written to the disks. Otherwise, you will be able to make further changes manually.
The partition tables of the following devices are changed: SCSI3 (0,0,0) (sda)
The following partitions are going to be formatted: partition #1 of SCSI3 (0,0,0) (sda) as ext4 partition #5 of SCSI3 (0,0) (sda) as swap Write the changes to disks?
() No
© [ <u>Yes</u> ]

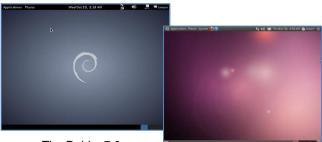
- Then the system would keep asking you few questions for configuration, suggestions were attached as follow.
- When system asking you to choose the software to install for system, you can remark both the Debian desktop environment and standard system utilities, then to continue following procedure. It would start the package installation, around hundred packages would be installed, please be patient until system informed you for the next step.

Software selection				
At the moment, only the co choose to install one or mo Choose software to install:	re of the system is installed. To tune the system to your needs, you can re of the following predefined collections of software.			
🗹 Debian desktop enviror	ment			
✓ Standard system utilitie	is is a second se			

• The next question is about the agreement of the installation of the GRUB boot loader to the MBR area? Answer YES and wait system to complete the installation as last procedure.

Install the GRUB boot loader on a hard disk		
It seems that this new installation is the only operating a to install the GRUB boot loader to the master boot record Warning; if the installer failed to detect another operatin modifying the master boot record will make that operatin can be manually configured later to boot it.	f of your first hard drive. Ing system that is present on your computer,	
Install the GRUB boot loader to the master boot record? No Ves	Finish the installation Installation complete Installation media (CAROM, floppies), so restarting the installation.	oot into your new system. Make sure to remove the that you boot into the new system rather than

 When it's completed, the disc tray will eject and inform you, then press continue to restart and be ready to enjoy the new system!



#### The Debian7.0

The Ubuntu10.04

## 2. Kernel and graphic driver installation

Install the Kernel Package (Console mode)

- For Debian7.0, you can skip this procedure for kernel installation; Because system could work with default kernel version (3.2.0).
- Clicking the icon of the terminal from the application. And download the kernel 2.6.32-21 from below link then to store the kernel package.



 Follow the instructions to complete the kernel installation, get into the folder that kernel file stored, and switching as the root before command executed.

# dpkg -i linux-image-2.6.32-21-vortex86\_2.6.32-21.32\_i386.deb

Kernel Package (click 2.6.32-21-Vortex86)

 When download completed, restart the system and to choose the kernel 2.6.34.10 to boot when GRUB boot loader was loaded. You can keep pressing the key "Shift" when the system from booting, then the boot loader would show the option of kernel for you. Then find the "Ubuntu, With Linux 2.6.32-21-vortex86" to execute.



- Or you can remove the default kernel 2.6.32-??-generic that be arranged as a higher priority than the kernel we installed for the EBOX-3100-VGA platform, with the instruction below through the terminal.
- First, check what version be installed as default in the system:

# grep -w linux-image-2.6.32 /var/log/dpkg.log

- To find the last two numbers as location of question marks that the system shows on screen "linux-image-2.6.32-??
- Then execute it with the correct numbers that you found in previous, and to replace the question mark with correct version numbers shown below.

# apt-get remove linux-image-2.6.32-??-generic

• Then you would see only one kernel on the GRUB list.



## Install the VGA driver (Console mode)

 Switch to console mode by pressing key <Ctrl> + <Alt> + <F1>, then copy the VGA driver rdc\_drv.so to the driver folder /usr/lib/xor/modules/drivers/, before that, you can download the driver from links below for Debian7 and Ubuntu10.04 individually.

The Ubuntu10.04 Xorg Version is **1.7.6** The Debian 7.0 Xorg Version is **1.12.4** 

VGA Driver (click M2012\_R0.04 to download) for Ubuntu 10.04

VGA Driver (click M2012\_T0.0.9.1 to download) for Debian 7.0

• Follow instruction below to execute.



%Please click <u>xorg.conf</u> to download for your system, if the display is out of range.

Reboot and make sure all the display is normal then set the resolution as requested.

😣 Monitor Preferences				
		Monitor: Unk	nown	
		💿 On 🕚 Off		
		Resolution:	1024 x 600 (16:9)	▼
Unknown		Refresh rate:	60 Hz	•
		Rotation:	Normal	•
Same image in all monitors Detect monit	ors			
Panel icon  Show monitors in panel				
			Apply Close	

The supported resolutions:

1024x768 (4:3)

800x600 (4:3)

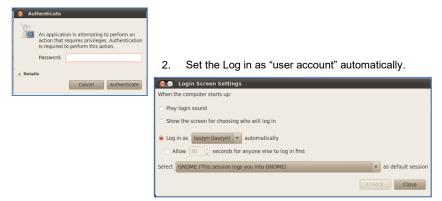
640x480 (4:3)

## 4. The system configuration

#### Enable the Auto login

### System / Administration / Login Screen

1. Execute the utility "Login Screen" and enter the password to process it.



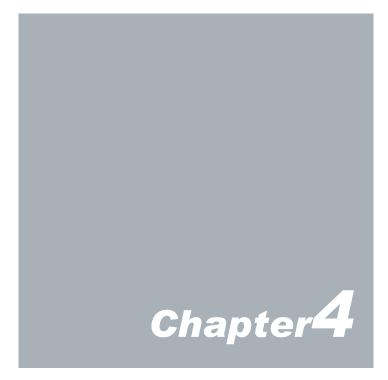
### Disable the power saving mode when system idle,

### System / Preference / Screensaver

Unmarked the option "Active the screensaver when computer is idle".

Screensaver Pre	eferences				
Screensaver theme:					
Blank screen					
Random					
AntSpotlight					
Cosmos					
Fiberlamp					
Floating Feet					
Floating Ubuntu					
F-Spot photos					
FuzzyFlakes					
GLEBIUF					
v v					
Preview					
					2 hours
Regard the computer a	is idle after:				
<ul> <li>Activate screensave</li> </ul>	er when compute	er is idle			
Lock screen when s	creensaver is act	tive			
	1				
Help			Power Management	Close	

Now, it is a workable Linux system for your EBOX-3100-VGA unit.

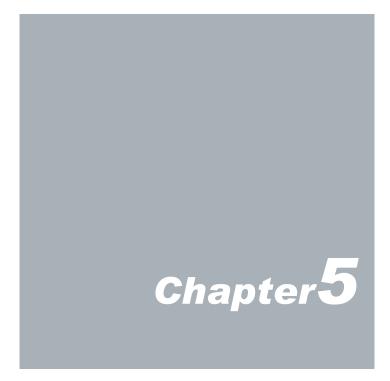


# **Technical Specification**

Model Type		EBOX-3100-VGA
Processor		Vortex86EX (400MHz)
E	BIOS	SeaBIOS
Me	emory	Onboard 512MB DDR3
١	/GA	Integrated A9160 PCIe VGA Chip/ D-sub 15-pin
Maximur	n Resolution	1024 x 768 pixels
Ethernet		10/100 Mbps LAN x 1 (RJ-45 connector, Built-in PXE diskless boot)
US	SB 2.0	External: 2 ports (Front x 2)
A	vudio	Mic in and Line out
I/O	SD slot	1x
Auto F	Power On	Yes
Р	ower	DC +5V@2A
Dim	ensions	78 x 78 x 28mm
Unit Net Weight		208g
Operation Temp.		5∼50°C
Certifications		CE, FCC, VCCI
Op	Optional Internal SD Card slot	

#### Note:

SD Card Slot x 1 (Bootable but hot-swappable not support).



Г

# **Onboard Connectors Summary**

Summary Table for CPU Board					
Nbr	Description	Type of Connections	Pin nbrs.		
J1	SODIMM200P-EX	SODIMM socket 200 Pin	200-pin		
J2	Power Switch	Power Switch	4-pin		
J3	DC +5V Input	Micro USB B Type	1-pin		
J4	USB (Front)	USB Connector	8-pin		
J5	SD card slot	Standard: 32.0 × 24.0 × 2.1mm	9-pin		
J6	USB (Front)	USB Connector	8-pin		
J7	Ethernet LAN	RJ-45	8-pin		
J9	Line-Out	Audio Jack	2-pin		
J10	Mic-In	Audio Jack	2-pin		
J12	VGA port	D-Sub connector	15-pin		

## Front Connectors Outline



EBOX-3100-VGA FRONT LOOK

### Rear Connectors Outline



EBOX-3100-VGA REAR LOOK

G: VGA H: RJ-45 LAN I: Power switch J: Micro 5pin USB DC Power Jack

A: Power LED B: Line out

C: Mic in

D: USB 2.0 E: SD Card Slot

# **Pin Assignments**

#### J2: Power SW – Push Button Switch

Switch	Status
Right	ON
Left	OFF

#### J3: DC-IN (15V) – 2pin Jack

	Pin #	Signal Name
n 54321 n	1	+5 V Input
	2	Data -
Micro-B	3	Data +
	4	ID
	5	GND

#### J4, J6: USB 2.0 (180°) -- 4pin USB Type 1 Connector (Horizontal Type)

	Pin #	Signal Name
4 3 2 1 Type A	1	VCC
	2	Data -
	3	Data +
	4	GND

#### LEDS: POWER ON / OFF & HDD R/W

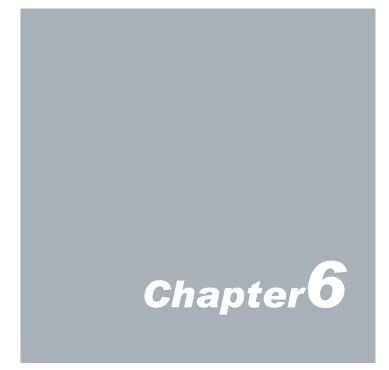
•	LED Color	State	
	Green	Power On	
	Green	HDD R/W	
	Flashes		

#### J7: LAN: RJ-45 connector

	Pin #	Signal Name	Pin #	Signal Name
	1	FTXD+	2	FTXD-
ا الممممممما	3	FRXIN+	4	NC
0 0 1	5	NC	6	FRXIN-
0 Z, I	7	NC	8	NC

#### J3: VGA - 15-pin D-Sub connector

	Pin #	Signal Name	Pin #	Signal Name	Pin #	Signal Name
5 1	1	MR	6	GND	11	NC
6 00000 6	2	MG	7	GND	12	VCC
15 11	3	MB	8	GND	13	HYSYNC
	4	NC	9	NC	14	VSYNC
	5	GND	10	GND	15	VCC



# Taking Care of your EBOX

This section gives you guidelines on using EBOX-3100-VGA - Safe using, Storing and Handling.

## Storing

Do not place EBOX-3100-VGA in a location that is subject to:

- Heating sources, such as stove, oven, heater, radiator or air duct.
- Direct contact from sunlight.
- Rain or moisture area.
- Excessive dust accumulation area.
- High humidity place.
- Constant or occasional mechanical movement, vibration or shock.
- Strong magnets or magnetic fields or magnetically unshielded speakers.
- Out of the operating temperature range from 5°C to 50°C

Do not place other electronic device or electrical equipment near EBOX-3100-VGA. The electromagnetic field of the EBOX-3100-VGA may cause interference subjecting to malfunction.

Provide adequate air ventilation (circulation) to prevent internal buildup of heat. Do not place EBOX-3100-VGA near the wall, behind the curtains or draperies, in between two books that block its ventilation slots. Leave a space of at least 8 inches (20cm) behind the sides and back panel of the EBOX-3100-VGA.

Change of environmental temperature: Problems may occur when there is a sudden change of environmental temperature, or if the EBOX-3100-VGA is brought directly from a cold location to a warm one, moisture may condense inside EBOX-3100-VGA. Turn off the device, and contact your nearest dealer.

Check the surrounding appliance(s) before using EBOX-3100-VGA. Since the EBOX-3100-VGA uses high-frequency radio signal and may interface with radio or TV reception causing interference or poor signal display. When this happens, relocate the EBOX-3100-VGA by a suitable distance away from it.

Do not drop the EBOX-3100-VGA from working table nor place heavy objects on top of it.

## **Cleaning Your VESA PC**

- Clean the VESA PC with a soft, dry cloth or a soft cloth lightly moistened with a mild detergent solution.
- Do not use any type of abrasive pad, scouring powder, or solvent such as alcohol or benzene, as these may damage the finish of EBOX.
- When a solid object falls or a liquid spills onto the EBOX, turn off the EBOX immediately and unplug the LAN and power cables. Contact a qualified person or your dealer to check the EBOX before you use it again.
- Always disconnect the power cord from the power source before cleaning the EBOX.

# Troubleshooting

This section describes the techniques of resolving some basic problems that you encounter when using EBOX-3100-VGA Series. For more troubleshooting guidelines, please contact your nearest dealer for technical support.

## **Troubleshooting Your VESA PC**

#### A. VESA PC does not start -

- Make sure the EBOX-3100-VGA Series is properly secured and plugged into a power source before it is turned on. Make sure the power indicator shows the power is on. See section 2 for more information about "EBOX-3100-VGA Overview".
- When the EBOX-3100-VGA is plugged into a power strip or the UPS (Uninterruptible Power Supply), make sure the power strip or UPS is turned on and working normally.

Check if your VGA or LCD monitor is properly plugged into a power source and turned on. Make sure the brightness and contrast controls are adjusted correctly. See the manual that came with your display (monitor) for details.

Check if your power control button does not function, by removing the AC adaptor. Wait for one minute, and then reattach all power connection before pressing the power button.

Condensation may cause the EBOX-3100-VGA to malfunction for a while. If this happens, do not use the EBOX-3100-VGA for at least one hour.

- When you have checked all the above guidelines and the EBOX-3100-VGA does not work. Remove the power adaptor from the EBOX-3100-VGA Series, unplug the power supply, and plug it in again. Then turn on the power.
- If you have just connected EBOX-3100-VGA to a CD/ DVD or USB Drivers, remove these peripherals. And restart to confirm that the Windows operating system starts properly. If EBOX-3100-VGA continues to display the message "Operating system not found," and Windows does not start, please contact your nearest dealer for servicing.

### B. "Operating System Not Found" -

# A message indicating that "Operating system not found" appear when the VESA PC starts

Enter the BIOS setup main menu by pressing <F12> key, be sure that the correct boot drive is enabled.

If the operating system does not start, follow these steps to initialize the BIOS:

- 1. Turn off the EBOX-3100-VGA unit.
- 2. Remove any peripheral devices connected to the EBOX.
- 3. Restart the EBOX-3350 Series Unit.
- 4. Press <F12> to enter BIOS Setup main menu window.
- 5. Select the boot up storage (SD card or the USB drive).



# **Terms and Conditions**

### Warranty

The warranty terms for EBOX-3100-VGA are twelve (12) months from the shipped month. During the warranty period, DMP Electronics Will repair replace the product covered under this limited warranty.

## Service and Support

DMP Electronics Inc. provides the technical support for hardware problems with your system throughout the warranty period. The technical support service is limited to configuration and operation of EBOX-3100-VGA sold by DMP Electronics Inc. The technical support service does not offer software tutoring or training.

## Return Merchandise Authorization (RMA) policy

If the DMP staff or dealer determines that a part is defective. Purchaser must call our technical support service to obtain an RMA number before attempting to return any part. Please refer to your nearest dealer for :

To obtain an RMA number, Purchaser must follow procedures as below :

- 1. Complete the DMP Electronics Inc. standard RMA Form and fax back to the RMA Department.
- 2. The RMA Number must be used within 7 DAYS.
- 3. The RMA Number must be shown clearly on your shipping label.
- 4. DMP Electronics Inc. must receive all Returns before a replacement will be sent.
- 5. The repair cost depends on the parts, the damage reasons, and whether under warranty period...etc. The Seller will charge the Purchaser in a reasonable price.
- 6. A copy of the invoice for the RMA product(s) will also be shipped to Purchaser.
- 7. The freight of return to DMP Electronics Inc. is charged to the Purchaser's account and accompanied by an RMA number. Any Returns with freight collect will be refused and returned to you. After Repairing, the cost of freight will be paid by Seller.
- 8. DMP Electronics Inc. must receive all returned goods within the warranty period.

## **Shipping Policy**

The Purchaser must pre-pay shipping for any defective system or parts returned under the warranty. DMP Electronics Inc. shall not be liable for risk of loss or damage during shipment of your returned system or parts if you fail to insure the shipment.

All products must be shipped back to DMP Electronics Inc. in original or equivalent packaging. DMP Electronics Inc. will ship the repaired or replacement product(s) to the Purchaser by freight prepaid. Purchaser assumes the risk of loss. DMP Electronics Inc. shall not be responsible for failure of the delivery service to make on-time delivery.