EBOX-333x series

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.

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

The EBOX-333x series is the registered trademarks of DMP Electronics Inc. Microsoft®, Windows®, and AMI are registered trademarks of Microsoft Corporation and American Megatrends Inc. in the United States and/or other countries respectively.

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 adapter 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 modem 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 and/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-333x series, 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 1GB DDR2 System memory, VGA display, USB, COM ports, and LAN Interfaces.

Distribution Convention:

1. This Product includes a gift box, an inner case, a PC, a Power adaptor, and SATA cable. 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.

2. 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

Chapter1

Unpacking Your EBOX Mini PC

Congratulation! You have just acquired EBOX-333x series, please check the following items:

Packing List:

Item No.	Description	Q'ty
1	EBOX-333x series VESA PC	x 1
2	Max. 22.5 watts External Power Adaptor, Vin: 100~240VAC 50/60Hz, Volt: +15VDC @ 1.5A Max.	x 1

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

Check Before Use

1.EBOX-333x series Unit   2. AC Power Adaptor

Preface

EBOX-333x series: VESA PC

The EBOX-333x series 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, the EBOX-333x can be easily integrated with a VESA LCD to bring it to access at any time.

It can be attached 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 be attached 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-333x series can be used with a large size LCD. Furthermore, with FANLESS design, the EBOX-333x series is ideal to be used in the environment where temperature demand is critical.

So, if you are looking for a device that is able to provide you with more mobility & space but at the same time uses less power consumption, then the EBOX-333x series will be surely meet your need.

The VESA® FDMI™ Standard defines mounting interfaces, hole patterns and associated cable/power supply locations for LCD monitors, plasma displays and other flat panel devices. The EBOX-333x series is designed to fit this standard to make monitor attachment quickly and easily.

Chapter**2**

EBOX-333x series Overview

Front Panel

A: <u>Power LED</u>
The power LED lights up when the system is turned on.

B: <u>SD card LED</u>
LED flashes when the system is accessed SATA storage or SD card.

C: <u>Audio Line Out or Mic In</u>
For EBOX-333x VGA version, the original setting is Audio Line out x 1.

For EBOX-333x HDMI version, the original setting is Mic Input x 1.
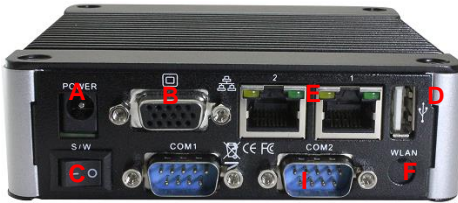
Mic in or Line out can be optional.

D: <u>USB 2.0 ports</u>
For connection to devices with USB interface (HDD, CD/DVD-ROM, Memory Stick, etc.)

E: <u>SD card Slot</u>
This system is bootable from SD card.

F: <u>COM port</u>
COM3 & COM4 are optional for RS-232 ports.

Back Panel

A: DC Power Jack

B: VGA port
For EBOX-333x Series VGA version only.

C: Power switch

D: USB v2.0 ports

E: RJ-45 LAN Jack
LAN1 is 10/100 Mbps.
LAN2 is 1Gbps.(Optional)

F: Wireless Antenna connector (optional)

G: HDMI port
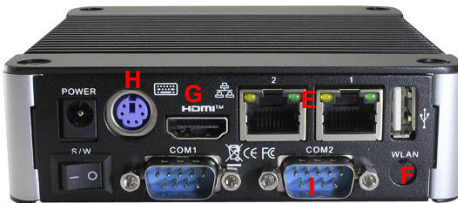For EBOX-333x Series HDMI version only.
(Product number ended with DMI)

H: PS/2 Keyboard or Mouse (6-pin)
This PS/2 Port is shared for connecting
Keyboard and/or Mouse by using Split
Y-Cable (not included).

Note: EBOX-333x series HDMI version is with
PS2 designed, but VGA version is without the
PS2 port.

I: COM port
COM1 & COM2 are optional for RS-232 ports,
RS-485 ports, or RS-422 ports.

6

System Specifications

CPU

Vortex86DX2 (933MHz)

Main Memory

1GB DDR2 (32-bit DRAM bus, EBOX-3330 series)

2GB DDR2 (32-bit DRAM bus, EBOX-3332 series)

※ For Windows 7 users, EBOX-333x series support 32bit version only, 64bit version does not support.

BIOS

AMI BIOS

VGA

Resolution up to 1920 x 1440 High Colors

HDMI

Resolution up to 1280 x 720 High Colors (720P)

Keyboard and Mouse

PS/2 Keyboard and Mouse (HDMI version only)

For the single PS2 port, you may use PS2 keyboard and plug directly. For PS2 mouse, you'll need a PS2 Y-cable for extension to use PS2 Mouse.

On-Board SATA

SATA 2.0 connector x1

On-Board mPCIe

mPCIe port x 1 (available for mPCIe version)

Peripheral

1. USB 2.0 x 3

2. SD card slot x 1

3. Serial ports x 4 (available for some listed models)

4. GPIO ports x 2 (available for GPIO version)

5. Audio (VGA version with Line out as standard , HDMI version

   with Mic in as standard)

Dimension & Weight

115 x 115 x 35 mm / 500g ~ 510g

Operating System

Windows 7 Home/ Pro.

Windows 7 Embedded

Windows XP Home/ Pro.

Windows XP Embedded

Windows Embedded CE

Linux OS (click Linux Support List for details)

Peripherals
Connecting the Power Adaptor

A: DC Power Jack

To use EBOX-333x series immediately, please attach the supplied adapter for the power source. See the left diagram for visual connection.

Connect the DC power jack of the power adaptor to the DC Input of EBOX-333x series.

B: Turning ON EBOX-333x series

Switch on power as indicated on your left-side figure, the system will start .

Note: With the Auto Power On supported function, when power & switch on, the system will be turned on automatically.

Connecting the Monitor

C: VGA out Connection

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

D: HDMI out Connection

You can connect to the LCD or plasma TV display via the HDMI port by using the HDMI Cable (Not included in EBOX console bundles).

**Note:** HDMI-out only, not support HDMI-in.

8

Chapter3

BIOS Reconfiguring

1. AMI BIOS is used in the EBOX-333x series. To reconfigure the EBOX-333x series, press or hit the <Del> key to enter your BIOS setup main menu as below:
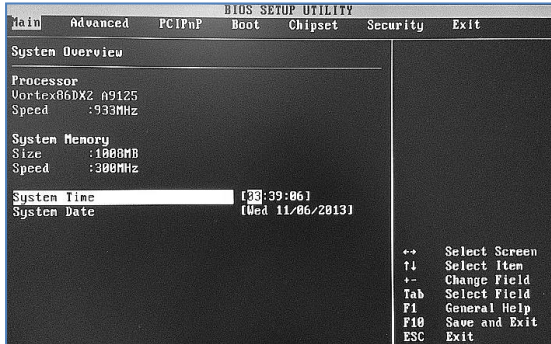
2. Select from the menu, the desired setup for change.
3. Press <Esc> to go back to main menu.
4. Press <F9> to load factory default setting
5. Press <F10> to and select "Save Settings and Exit", press "Y" to save the changes that you just made. EBOX-333x series will restart accordingly to your new setup.
6. For Windows XP, Windows XP Embedded, and Windows Embedded CE OS platform please set ACPI Configuration to "No".
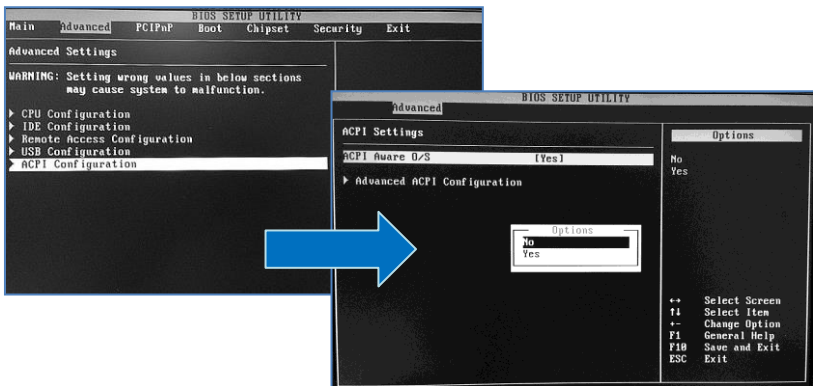
7. Remark : If you used the SD card as main storage to boot Windows 7 OS or Windows 7 Embedded OS, please set the BIOS as below:
   1. IDE Operating mode => Legacy mode
   2. Primary IDE Pin Select => SD Card
   3. Standard IDE Compatible => Disabled

INSTALL THE DRIVER:

Under the Windows series OS, the following drivers need to be installed manually.
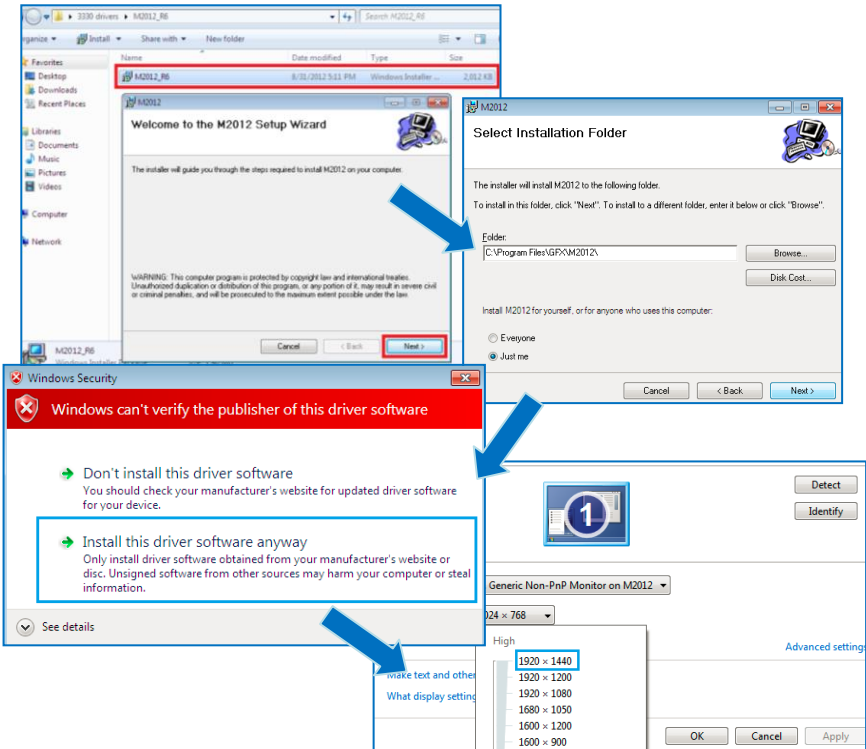1.   VGA driver
2.   Ethernet driver
3.   Wireless USB wifi Dongle driver (Optional)
4.   Audio driver (for windows XP only)

Note:
1.   Please find the mating drivers from EBOX support page .
2.   For Windows 7 or Windows 7 Embedded OS, install the XMPlay for audio player download here.

VGA DRIVER:

Unzip the downloaded file and double click the setting .exe file then "Next"as below to install:

After VGA driver installation completed, you will have to restart the computer. Then you will be able to select the resolution up to 1920 x 1440 pixels.

ETHERNET DRIVER:

1. Find the yellow question mark of Ethernet in the Device Manager under the control panel/ system.
2. Select "Update Driver Software" and choose the right path, then click " Install this driver software anyway " when Windows Security popped out.
3. After installation completed, the Device Manager will update and show the correct device.

Note: For 2 LAN version, the 1st question mark need to be installed 1G LAN driver.
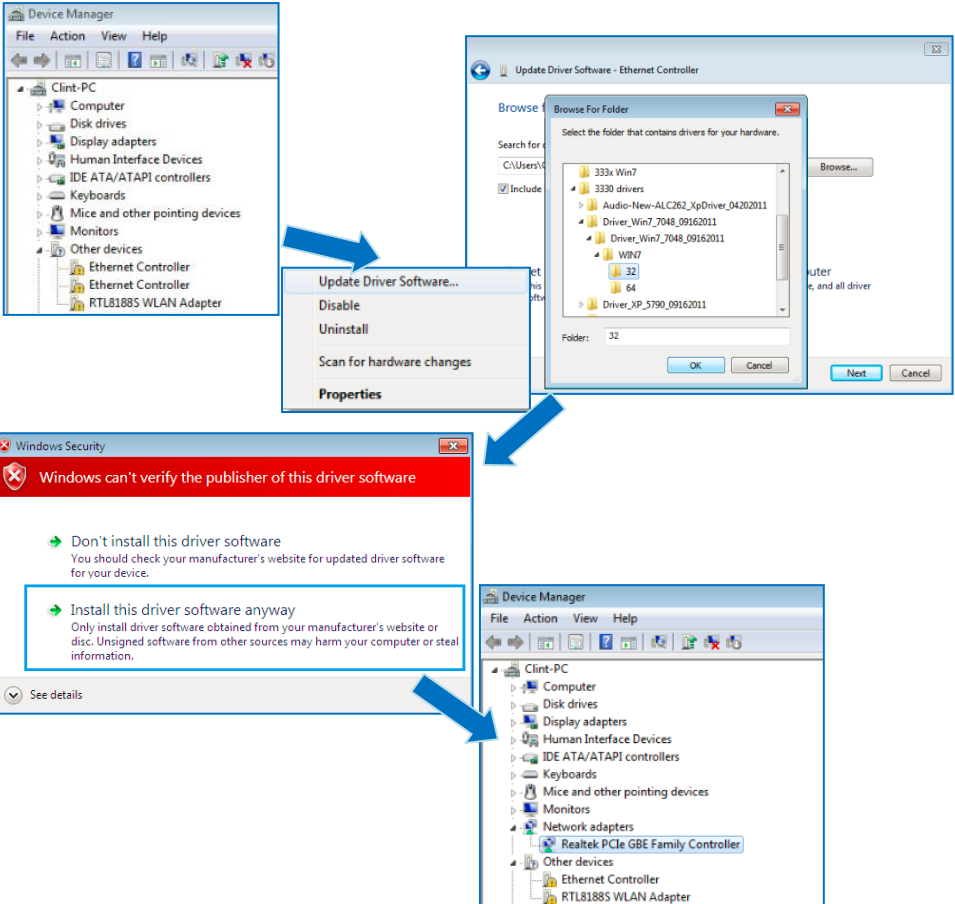
AUDIO DRIVER:

Unzip the downloaded file and double click the setting .exe file, then "Next" as below to install. After the installation completed, the Device Manager will update and show the correct device.
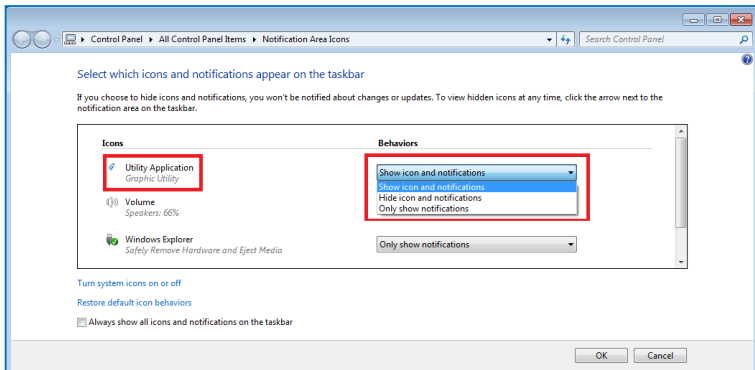
Additional information:

Screen rotation:
1. After VGA driver installation completed, type "Customize icons" in search bar.
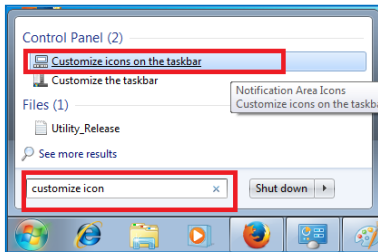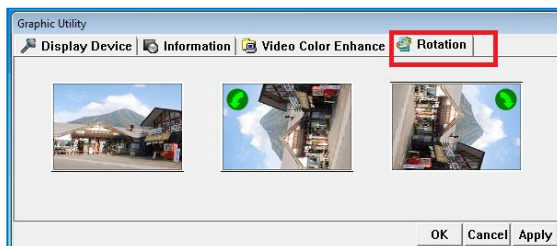

1. Adjust Utility Application to "Show icon and notifications".

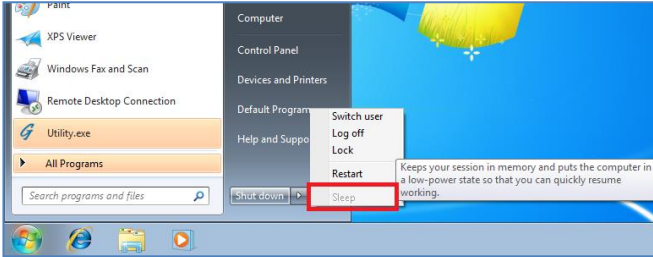2. A blue icon = Graphic Utility appears on screen, double click it.

3. In Graphic Utility, go to Rotation section. Select the direction of rotation then press Apply to test and OK to save the changes.

14

Enable the sleep function:

For Windows 7 OS or Windows 7 Embedded OS, the sleep function is hidden if you selected from the start menu.

To customize the settings, first go to **Start** > **Control Panel** > **Power Options**, or simply search for "**Power Options**" (without quotes). You will see a list of different power plans on your computer.
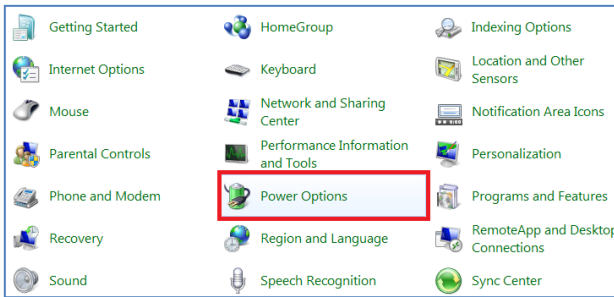
The plan currently in use has a blue dot in front of it. Click "**Change Plan Settings**" next to the power plan currently in use. Click on the drop-down menu list, that is exactly next to "Put the Computer to sleep:". From the options, you can set the amount of idle time before entering sleep mode.
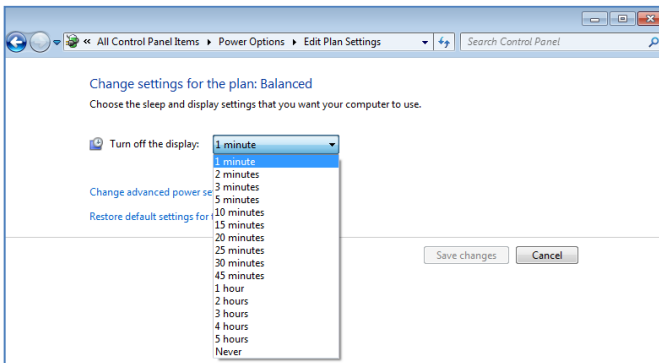
PXE Diskless boot setting:

1. Boot up EBOX unit and press <Del> to get into BIOS menu.

2. Select "Chipset" then move to "SouthBridge Configuration" and press ENTER.
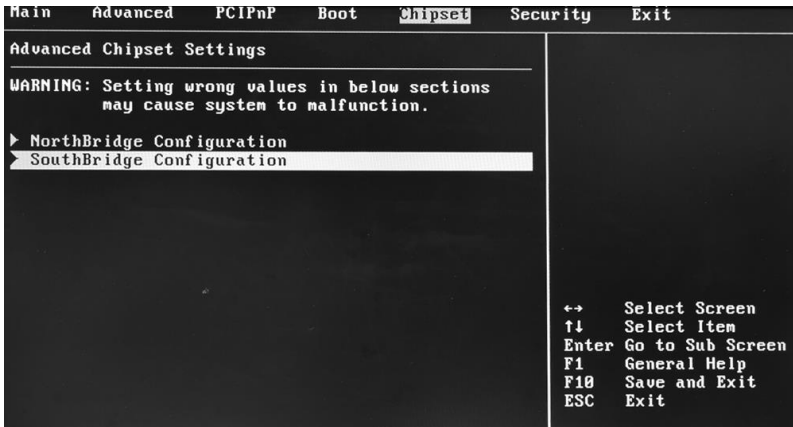
3. Move to "LAN Configuration" and enter "SB LAN Boot" to choose "Used INT 19h".

4. Press "F10" to save the setting and exit.

Linux installation guide 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-333x Series platform. The following is a brief instruction, users may configure it according to their specific needs.

1. Configuration of BIOS

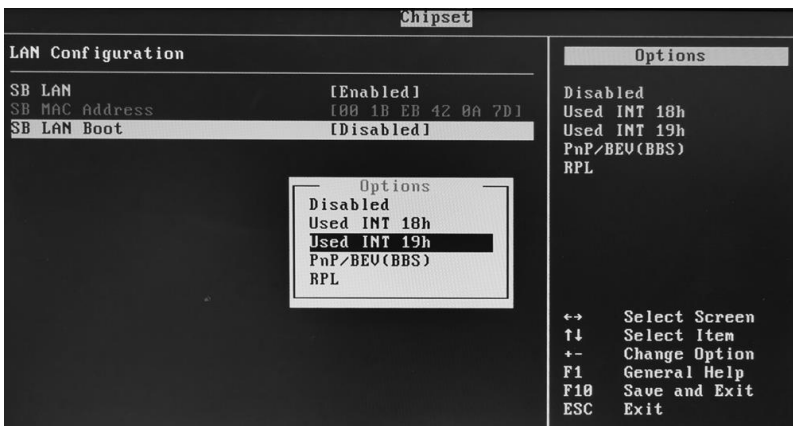- The first step is to ensure BIOS has correctly configured that necessary function was enabled for IDE device. (for Debian7.0 especially)

```
         Advanced
*******************************************************************************
* IDE Configuration                                      *        Options
*********************************************************** *
* OnBoard PCI IDE Controller      [Both]                 * Disabled
*                                                        * Enabled
* * Primary IDE Master            [Not Detected]         *
* * Primary IDE Slave             [Not Detected]         *
* * Secondary IDE Master          [Not Detected]         *
* * Secondary IDE Slave           [Not Detected]         *
*                                                        *
* Hard Disk Write Protect         [Disabled]             *
* IDE Detect Time Out (Sec)       [35]                   *
* ATA(PI) 80Pin Cable Detection   [Host & Device]        *
* IDE Operate Mode                [Legacy Mode]          *
* PCI IDE BusMaster               [Enabled]              * **   Select Screen
* Primary IDE Pin Select          [Parallel IDE]         * **   Select Item
* Hard Disk Delay                 [2 Second]             * +-   Change Option
* Standard IDE Compatible         [Enabled]              * F1   General Help
* IDE Compatible Selection        [808624DB]             * F10  Save and Exit
*                                                        * ESC  Exit
*                                                        *
*******************************************************************************
         v02.69 (C)Copyright 1985-2010, American Megatrends, Inc.
```

- Keep pressing the key <Del> can assist entering BIOS when the power turned on. The BIOS functions you need to check locate Advanced \ IDE Configuration \ Standard IDE Compatible. Set as Enabled.

17

2. Basic system installation

- For Debian7.0, after booting from the installation CD, moving straight to install system would get a text mode system only, please choose Graphic Install for Graphical User Interface OS installation.
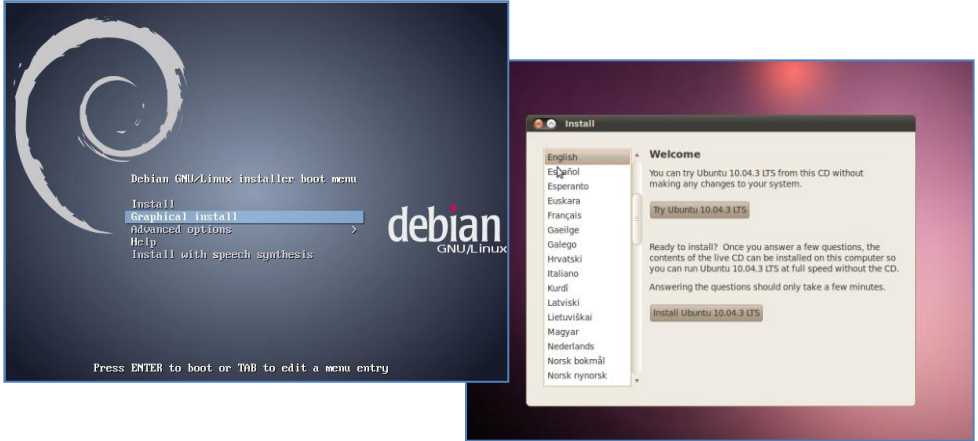
- Set basic configuration such as language, keyboard map and time zone, etc. steps by steps.

- Then the system will detect the network hardware, and requires users to load the firmware files for network device rtl8168, just answer no for this inquiry and move forward.

- Next the system will detect multiple network interfaces on the EBOX-336x Series, and users have to decide the primary network interface, both of them could be chosen. Note: the Ethernet cable must be plugged in during this period.
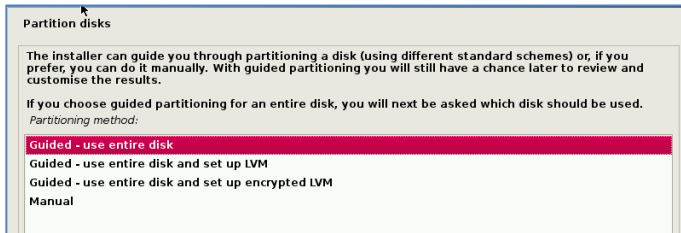
- During the installation process, the system would ask users to create partitions for the operating system. Following example is using entire disk for the beginner. Choose "Guided - use entire disk".

- Select "Yes" to create the partition.
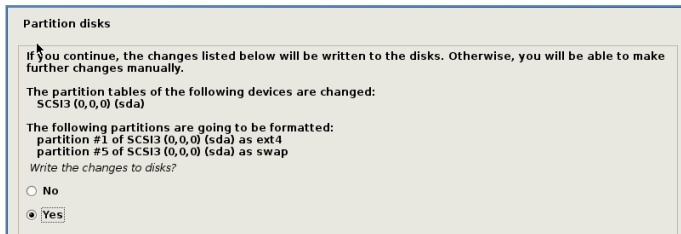
- Then the system would keep asking you few questions for configuration, suggestions were attached as follow.

- Then the system would keep popping out questions for configuration, suggestions as below:

For Software selection:
Please remark both the Debian desktop environment and standard system utilities, then click to continue. It would start the package installation, and around hundred packages would be installed, after installation completed, the next indicatation message would pop up.
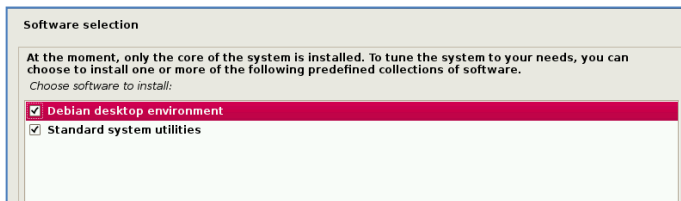
For Install the GRUB boot loader on a hard disk:
Answer YES to complete the installation as last procedure.

Install the GRUB boot loader on a hard disk

It seems that this new installation is the only operating system on this computer. If so, it should be safe to install the GRUB boot loader to the master boot record of your first hard drive.

Warning: If the installer failed to detect another operating system that is present on your computer, modifying the master boot record will make that operating system temporarily unbootable, though GRUB can be manually configured later to boot it.

Install the GRUB boot loader to the master boot record?

○ No
◉ Yes

Finish the installation

Installation complete
Installation is complete, so it is time to boot into your new system. Make sure to remove the installation media (CD-ROM, floppies), so that you boot into the new system rather than restarting the installation.

- When it's completed, the disc tray will eject with pop-up message, press continue to restart and be ready to enjoy the new system!

The Debian7.0

The Ubuntu10.04

20
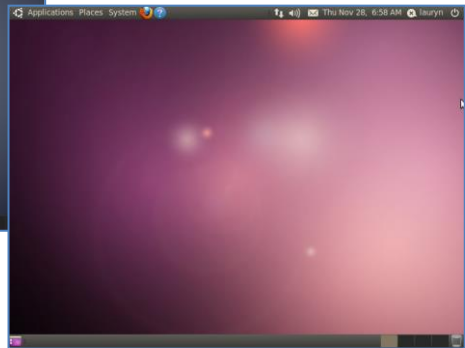
3. Install the VGA driver (Console mode)

- 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/, please refer to Linux support page for most updated drivers.
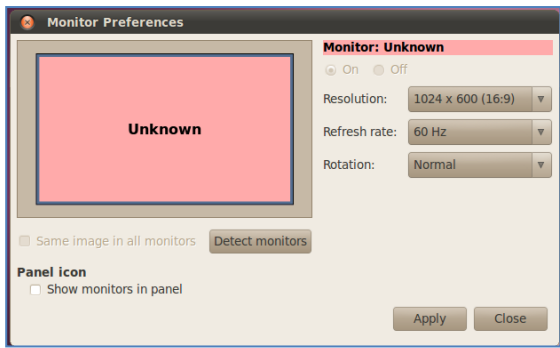
- Follow instruction below to execute.

```
#/etc/init.d/gdm stop
#X –configure
#cp /root/xorg.conf.new /etc/X11/xorg.conf
#/etc/init.d/gdm restart
```

※Please click xorg.conf 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.

The supported resolutions:

1920x1200 (16:10)	1400x960	1280x768 (16:10)
1920x1080 (16:9)	1280x1024 (5:4)	1280x720 (16:9)
1600x1200 (4:3)	1440x900 (16:10)	1024x768 (4:3)
1680x1050 (16:10)	1280x960 (4:3)	800x600 (4:3)
1400x1050 (4:3)	1366x768 (16:9)	640x480 (4:3)
1440x960 (3:2)	1360x768 (16:9)	

4. The system configuration:

Enable the Auto login
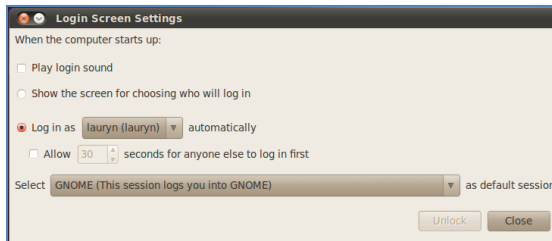**System / Administration / Login Screen**

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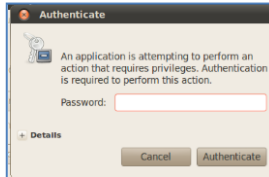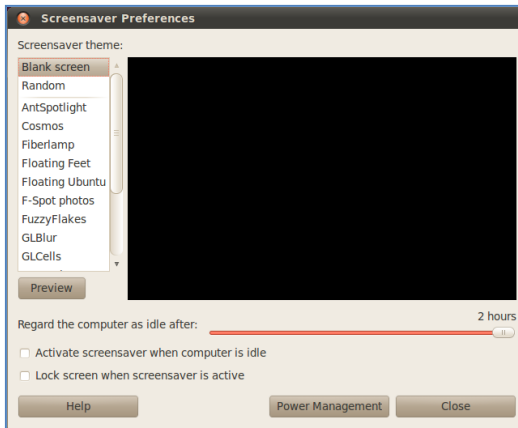

Set the Log in as "user account" automatically.

Disable the power saving mode when system idle,
System / Preference / Screensaver

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

Click close to complete the system configuration.

Chapter4

Onboard Connectors Summary

	Summary Table for CPU Board		
Nbr	**Description**	**Type of Connections**	**Pin nbrs.**
J1	SODIMM-SOC-200P-1.8V	SODIMM socket 200 Pin	200-pin
J3	SATA	SATA socket	7-pin
J5	USB1 (Front)	USB connector	6-pin
J6	USB2 (Front)	USB connector	6-pin
J7	USB3 (Back)	USB connector	6-pin
J8	USB4 (Inside)	USB connector	6-pin
J9	Ethernet LAN	RJ-45	8-pin
J10	Ethernet LAN	G-LAN, RJ-45	8-pin
J11	COM1 port (Back)	Box Header 5x2 2.0mm	9-pin
J12	COM2 port (Back)	Box Header 5x2 2.0mm	9-pin
J13	COM3 Port (Front)	Box Header 5x2 2.0mm	9-pin
J14	COM4 Port (Front)	Box Header 5x2 2.0mm	9-pin
J15	DC 15V Input	DC-JACK	1-pin
J16	Power Switch	Power switch	4-pin
J17	HDMI	HDMI connector	19-pin
J18	VGA	D-Sub connector	15-pin
J19	PS/2 connector	Mini Din connector	6-pin
J20	Line-Out/ Mic-In	Audio jack	2-pin
J26	mPCIe	mPCIe Slot	52-pin

▶ **Front Connectors Outline**

A: SD Slot   **B**: USB   **C**: Min In/ Line Out   **D**: COM ports   **E**: Power & HDD LED

*EBOX 333x Models all with Auto Power On feature, do NOT have front Reset Button

▶ Rear Connectors Outline

A: DC Power Jack   **B**: VGA   **C**: RJ-45 LAN 1   **D**: USB

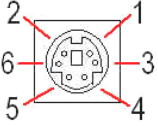**E**: Power Switch   **F**: GPIO ports or COM ports

G: PS/2 KB/Mouse   **H**:HDMI   **I**: G-LAN, RJ-45 LAN2

Pin Assignments

J19: PS/2 Keyboard or Mouse – 6pin Mini-Din Connector (Available in HDMI version only)

Pin #	Signal Name
1	KBCLK
2	PMCLK
3	GND
4	KBDAT
5	PMDAT
6	SB5V
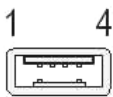
J16: Power SW – Push Button Switch

Pin #	Status
I	ON
O	OFF
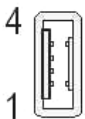
J15: DC-IN (15V) – 2pin Jack

Pin #	Signal Name
1	+15V Input
2	GND

J5, J6, J8: USB2.0 (180°) : 4pin USB Type 1 Connector (Horizontal Type)

Pin #	Signal Name
1	VCC
2	USB2-
3	USB2+
4	GND
5	NC
6	NC

J7: USB2.0 (90°) – 4pin USB Type 1 Connector (Vertical Type)

Pin #	Signal Name
1	VCC
2	USB0-
3	USB0+
4	GND
5	GGND
6	GGND

LEDS: POWER ON / OFF & SD card R/W

LED Color	State
Green	Power On
Green	SD card On
Green Flashes	SD card R/W

J17: HDMI – 19pin HDMI Connector (Available in HDMI version)
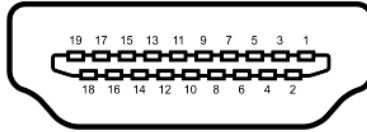
Pin #	Signal Name	Pin #	Signal Name	Pin #	Signal Name
1	TMDS Data2+	8	TMDS Data0 Shield	15	SCL
2	TMDS Data2 Shield	9	TMDS Data0–	16	SDA
3	TMDS Data2–	10	TMDS Clock+	17	DDC/CEC Ground
4	TMDS Data1+	11	TMDS Clock Shield	18	+5 V Power
5	TMDS Data1 Shield	12	TMDS Clock–	19	Hot Plug Detect
6	TMDS Data1–	13	CEC		
7	TMDS Data0+	14	Reserved (N.C. on device)		

J18: VGA – 15pin D-Sub Connector

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

J11 : GPIO P4 - 9pin D-Sub Connector (Available in GPIO version)

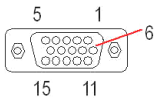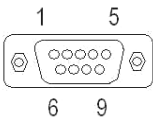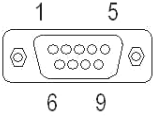| Pin #	Signal Name	Pin #	Signal Name
1	PORT 40	2	PORT 44
3	PORT 41	4	PORT 45
5	GND	6	PORT 46
7	PORT 42	8	PORT 47
9	PORT 43	- -	- -

J12 : GPIO P5 - 9pin D-Sub Connector (Available in GPIO version)
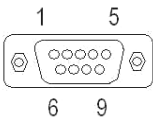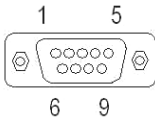
Pin #	Signal Name	Pin #	Signal Name
1	PORT 50	2	PORT 54
3	PORT 51	4	PORT 55
5	GND	6	PORT 56
7	PORT 52	8	PORT 57
9	PORT 53	- -	- -

J11, J12 : COM - 9pin D-Sub Connector (RS-485/ RS422 optional)

Pin #	Signal Name	Pin #	Signal Name
1	DCD/ RS-485- / 422TX-	2	RXD/ RS485+ / 422TX+
3	TXD/ 422RX+	4	DTR1/ 422RX-
5	GND	6	DSR
7	RTS	8	CTS
9	RI	--	--

J13, J14 : COM - 9pin D-Sub Connector

Pin #	Signal Name	Pin #	Signal Name
1	DCD	2	RXD
3	TXD	4	DTR
5	GND	6	DSR
7	RTS	8	CTS
9	RI	- -	- -

J9, J10: LAN: RJ-45 Connector

Pin #	Signal Name	Pin #	Signal Name
1	FTXD+	2	FTXD-
3	FRXIN+	4	NC
5	NC	6	FRXIN-
7	NC	8	NC

28

Chapter5

Taking Care of your EBOX

This section gives you some guidelines on using EBOX-333x series **–** Safe using, Storing and Handling.

Storing

▶ Do not place EBOX-333x series 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-333x series. The electromagnetic field of the EBOX-333x series may cause interference subjecting to malfunction.

▶ Provide adequate air ventilation (circulation) to prevent internal buildup of heat. Do not place EBOX-333x series 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-333x series.

▶ Change of environmental temperature: Problems may occur when there is a sudden change of environmental temperature, or if the EBOX-333x series is brought directly from a cold location to a warm one, moisture may condense inside EBOX-333x series. Turn off the device, and contact your nearest dealer.

▶ Check the surrounding appliance(s) before using EBOX-333x series. Since the EBOX-333x series 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-333x series by a suitable distance away from the set.

▶ Do not drop the EBOX-333x series from the working table nor place heavy objects on top of it.

Using Cables for Connection

▶ To avoid the problem, use only the specified interface cables in your accessory bag. The supplier will not be responsible for the connection arising from the other unspecified peripheral equipment.

▶ Do not use cut or damaged cables for connection.

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-333x 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-333x 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-333x series Overview".

▶ When the EBOX-333x series 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-333x series to malfunction for a while. If this happens, do not use the EBOX-333x series for at least one hour.

▶ When you have checked all the above guidelines and the EBOX-333x series does not work. Remove the power adaptor from the EBOX-333x series, unplug the power cord, and plug it in again. Then turn on the power.

B. BIOS Error Message –

BIOS error message appears when my VESA PC starts

If the BIOS error message appears, press any key to resume or, hit <DEL> to enter the BIOS setup main menu, follow these steps:

1. Press <DEL>, and the BIOS Setup main menu appears, check if HDD is detected. If it is not detected, use Direction keys <↑↓> to choose "AUTO" and then go back to the main menu by pressing <ESC>. Move your cursor down with Direction keys <↓>, and choose "Save Settings and Exit", a message dialog appears as seen below, hit <Enter>.

    "Save current settings and exit (Y/N)? Y"

2. Go to "Exit" menu using the Direction keys <↑↓> and choose the option "Load Optimal Defaults", then press <Enter>. A message dialog appears as seen below, hit "Y" key and presses <Enter> to save and recover to the factory setting.

    "Load Optimal Defaults (Y/N)? Y"

```
                           BIOS SETUP UTILITY
 Main    Advanced    PCIPnP    Boot    Chipset    Security    Exit

 Exit Options

 Save Changes and Exit
 Discard Changes and Exit
 Discard Changes

 Load Optimal Defaults
 Load Failsafe Defaults

 Save Custom Defaults
 Load Custom Defaults


                                      ←→     Select Screen
                                      ↑↓     Select Item
                                      Enter  Go to Sub Screen
                                      F1     General Help
                                      F10    Save and Exit
                                      ESC    Exit
```
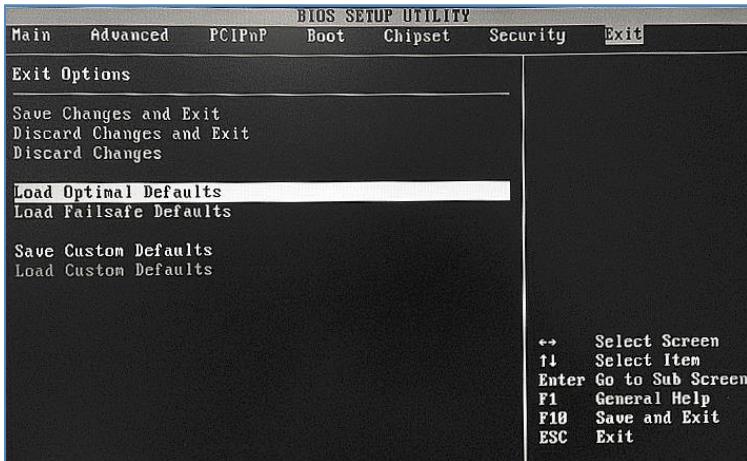
(BIOS Setup menu "Exit")

C. "Operating System Not Found" –

A message indicating that "Operating system not found" appear when the VESA PC starts (Windows won't start)

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

▶ If Windows still does not start, follow these steps to initialize the BIOS:
1. Turn off the EBOX-333x series.
2. Remove any peripheral devices connected to the EBOX-333x series.
3. Restart the EBOX-333x series.
4. Press <**DEL**> to enter **BIOS Setup main menu** window.
5. Follow the steps as written in item **B. BIOS** error message.

▶ If you have just connected EBOX-333x series to a CD/DVD or USB Drivers, remove these peripherals. And restart to confirm that the Windows operating system starts properly. If EBOX-333x series continues to display the message "Operating system not found," and Windows does not start, please contact your nearest dealer for servicing.

33

Chapter6

Terms and Conditions

Warranty

The warranty terms for EBOX-333x series 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-333x series 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.