Web Cash

Explor@ VX

SERVICE MANUAL

Code XZAC8717

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FOREWORD

This publication is aimed at service technicians responsible for installing and servicing Explor@ VX systems. The purpose of this manual is to provide all the information necessary for correct maintenance of the product.

SUMMARY

This manual consists of the following chapters:

- Chapter 1 provides general systems information.
- Chapter 2 describes the installation procedures.
- Chapter 3 describes the disassembling and reassembling procedures necessary for carrying out maintenance interventions.

PRE-REQUISITES

The approach adopted in dealing with the subjects in this manual assumes familiarity with similar products.

REFERENCES

Explor@ VX Spare Parts Catalogue - code XZAC8426

Explor@ VX Product Maintenance Plan - code XZAC8748

DISTRIBUTION: General

FIRST EDITION: September 2009

1. OVERVIEW

1.1 INTRODUCTION

Explor@ VX is the new touchscreen multifunction integrated POS, specifically designed for the hotel and restaurant sector. It provides ample operational flexibility thanks to its tilt-adjustable monitor, USB connections, cash drawer management and reduced footprint.

It is available in 2 versions, the first a more sophisticated one with active cooling, the second a fanless version (which is extremely silent).

The new compact design with an elegant vertical line allows Explor@ VX to be a very versatile product, that can be easily adapted to any environment and use.

The typical operating environment is characterised by a signficant need for personalisation of both sales and management activities that generally requires the configuration of devices to be highly flexibility to permit their insertion into the management system.

The system uses a PC-type architecture, with a standard operating system, designed for the use of specialised front-store or back-office products. This module is responsible for managing the operator interface, both with regards to setting up how sales commands are sent to the fiscal module (if present) and how management operations are executed and data is transferred to auxiliary devices, whether integrated or external to the product. In the basic configuration, the operator interface consists of an integrated LCD with a touchscreen device. Depending on the type of use required in the specific environment, other peripherals or I/O devices can be integrated.

Figure 1-1

Figure 1-2

1.2 OPTIONS AVAILABLE

The following options are available and can also be added in the field:

1. Customer display VFD 2x20
2. Second LCD monitor of 10.4” / 12.1” / 15”
3. Badge Reader in basic version. Other versions include readers for Smart Card, Finger Module and iButton Module (see Paragraph 1.7)
4. Cash drawer DRW 610.

1.3 SYSTEM

The Explor@ VX system is composed as follows:

- Motherboard, including RAM and connectors for I/O ports located on the rear of the system (Figure 1-3).
- Hard Disk located on the front part, accessible only by removing the door serving to close the bay.
- Video and touchscreen control card located behind the video panel. This card also supports two I/O ports of USB type. In the same area are located also an inverter card and an interface connection card for the Badge reader (Figure 1-4).

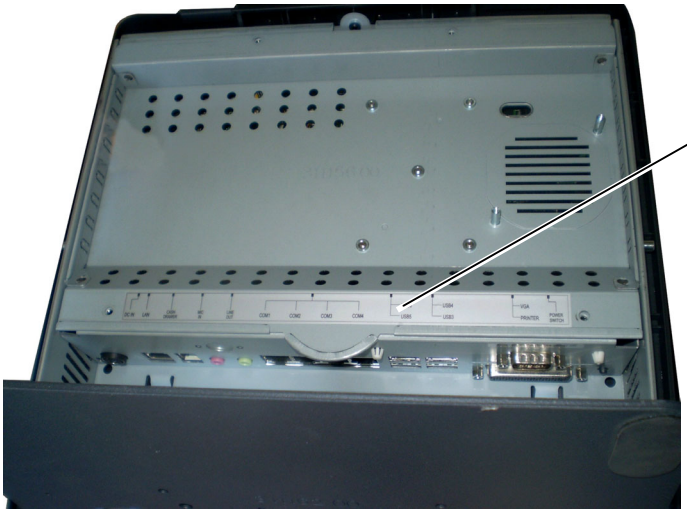
Figure 1-3

Figure 1-4

1.3.1 System – I/O Connections on Upper Side

Figure 1-5

1.3.2 System – I/O Connections on Lower Side



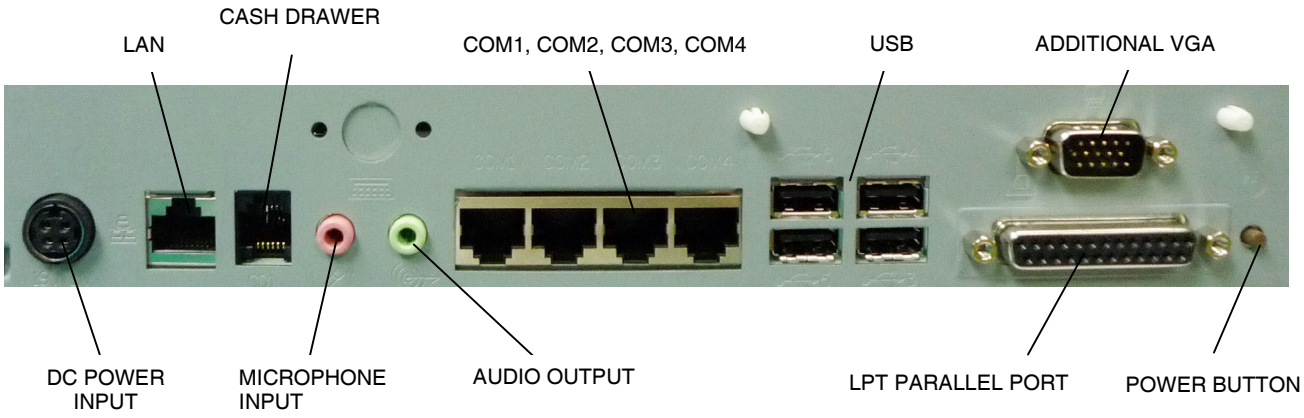


Figure 1-6

1.4 MOTHERBOARD

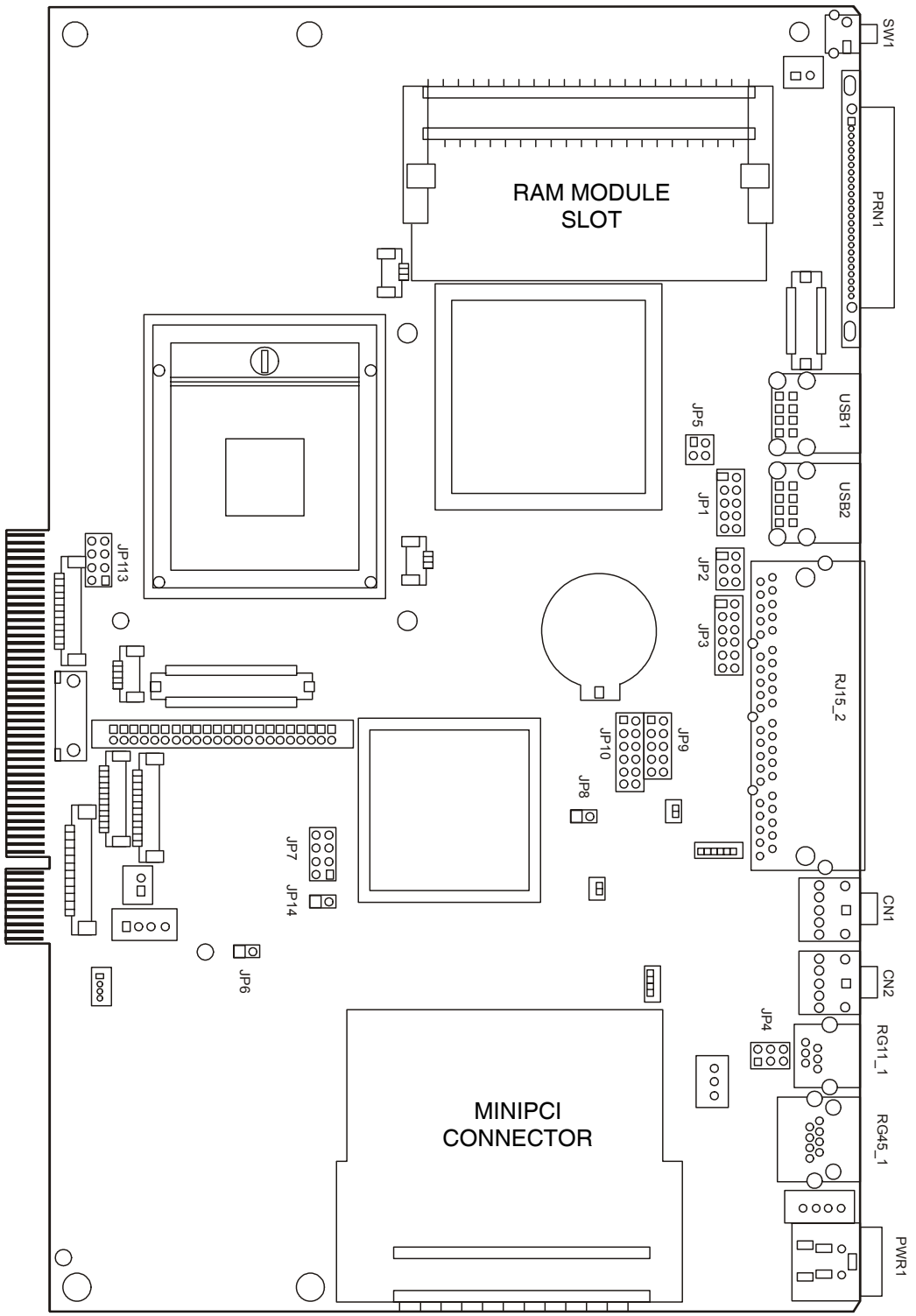


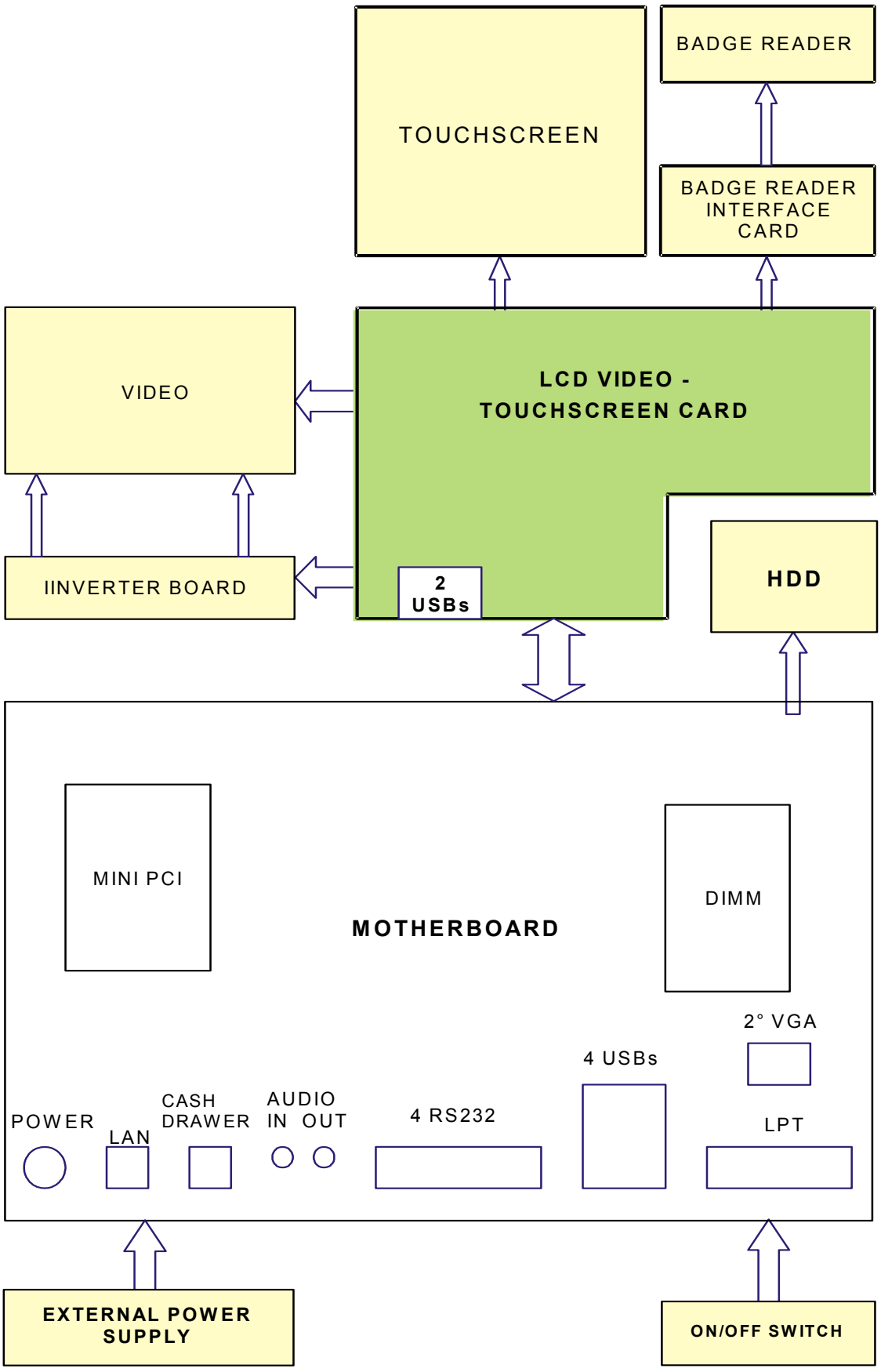
Figure 1-7

1.4.1 Motherboard Connectors

Connectors not mentioned in the following table are not supported.

Connector	Function
BAT1	CMOS base battery (CR2023)
CN1	Audio output (Line out)
CN2	Microphone input (Micr in)
CN3	Internal power button
CN4	Speakers and microphone connector
CN9	CD input connector (CD-in)
CN11	Power supply connector for 3.5" HDD
CN13	COM5 for Touch
CN15	CPU fan connector
CN1 6	Hardware reset
CN18	USB2
CN19	LCD interface connector
CN20	Inverter connector
CN21	Card reader connector
CN22	Cooling system connector
CN23	IrDA connector
CN24	FT status interface
CN26	Internal power connector
CN27	Internal LPT connector
CN28	Internal connector for PCI output reset
IED1	Secondary IDE connector (Pitch = 2.0mm)
PRN1	Parallel port
PWR1	+19V Power adaptor
RJ11_1	External cash drawer connector
RJ45_1	LAN (on board)
RJ45_2	COM1, COM2, COM3, COM4
SATA1	SATA Connector
USB1	USB3, USB4
USB2	USB5, USB6
JP1	VGA Port
JP2	VGA Power supply

1.4.1.1 Motherboard Connector Block Diagram



1.4.2 Motherboard Jumpers

1.4.2.1 JP9 / JP10 Jumper – COM2 RS232/485/422

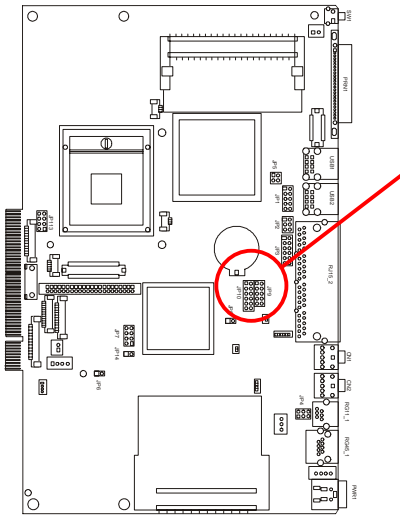
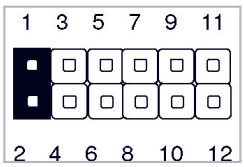
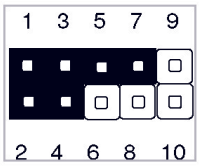
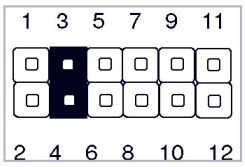
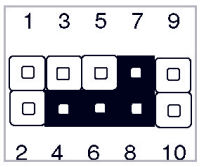
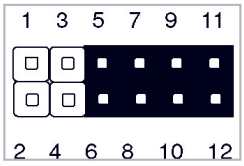
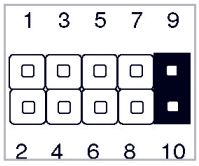


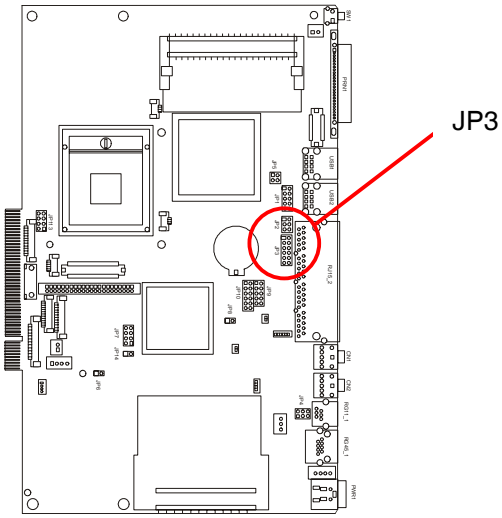
Figure 1-8

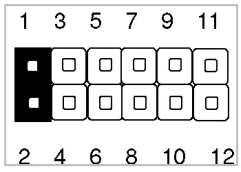
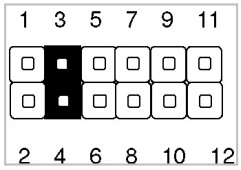
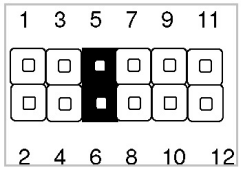
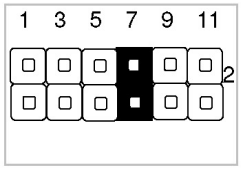
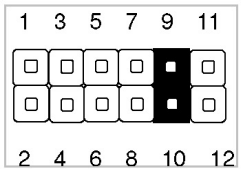
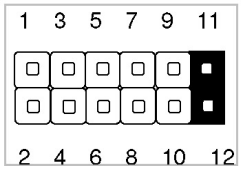
Function	JP10 (1-2) (3-4) (5-6) (7-8) (9-10) (11-12)	JP9 (1-2) (3-4) (4-6) (5-7(7-8) (9-10)
◎ **RS232**		
RS485		
RS422		

◎ Default Settings

RJ45 Pin	RS_232	RS_485	RS_422	DB9 Pin
1	---	NC	NC	---
2	DCD#	RS485_TXRX-	RS422_TX-	1
3	DSR#	NC	NC	6
4	RX#	RS485_TXRX+	RS422_TX+	2
5	RTS#	NC	NC	7
6	TX#	NC	RS422_RX+	3
7	CTS#	NC	NC	8
8	DTR#	NC	RS422_RX-	4
9	GND	GND	GND	5
10	RI#	NC	NC	9

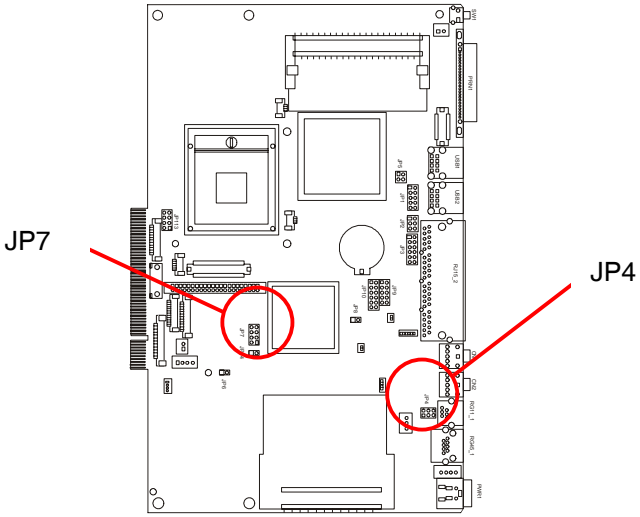
1.4.2.2 JP3 Jumper – COM3 & COM4 Power Setup



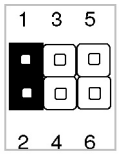
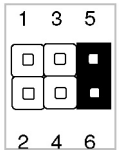
Function	JP3 (1-2) (3-4) (5-6) (7-8) (9-10) (11-12)	
COM3 Pin10	◎ RI	
	+5V	
	+12V	
COM4 Pin10	◎ RI	
	+5V	
	+12V	

◎ Default Settings

1.4.2.3 JP4 and JP7 Jumper – External Drawer Power Supply Setup and LCD ID Setup

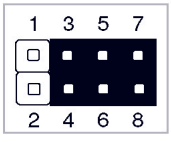
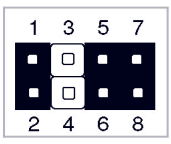


External Drawer Power Supply Settings

Function	JP4 (1-2) (3-4) 5-6)
+12V	
◎ +19V	

◎ Default Settings

LCD ID Settings

Panel #	Resolution			LVDS		JP7 (1-2) (3-4) (5-6) (7-8)
				Bits	Channel	
1	1024	x	768	24	Single	
2	1024	x	768	24	Single	

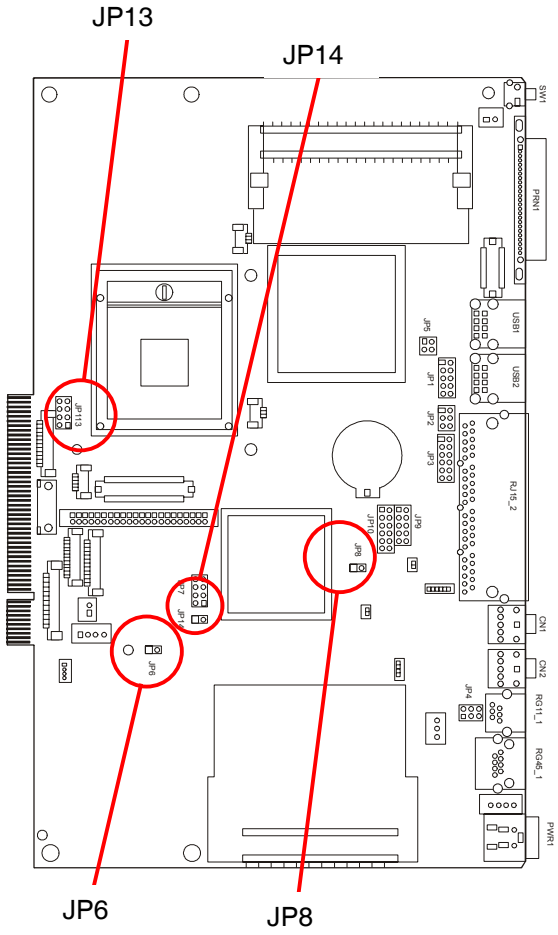
Note:
1 Settings for LCD video panel of type SVA-NEC
2 Settings for other types of LCD video panels

1.4.2.4 JP6, JP8, JP13 and JP14 Jumpers – Power Mode Setting, CMOS Operation, USB and System Indicators

JP6 – Power Mode Setting

Function	**JP6** (1-2)
◎ ATX Power	
AT Power	

◎ Default Settings



JP8 – CMOS Operation Mode

Function	**JP8** (1-2)
◎ CMOS Normal	
CMOS Reset	

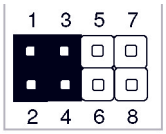
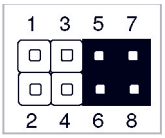
◎ Default settings

JP14 –USB Path Settings (not modifiable)

Function	**JP14** (1-2)
To docking	
◎ To motherboard	

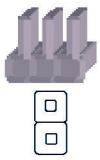
◎ Default Settings

JP13 – System Indicator Function (not modifiable)

Function	**JP13** (1-2) (3-4) (5-6) (7-8)
◎ Disabled	
Enabled	

◎ Default Settings

Note: **Open** **Closed**

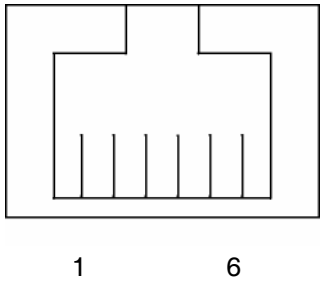


1.4.2.5 RJ11_1– External Cash Drawer Connector

An external cash drawer can be installed via the RJ11 connector. Before proceeding with the installation make sure that the pin setup corresponds.

Note:
The Explor@ VX, like all models in the line, supports exclusively the cash drawer model Olivetti DRW 610 (random code B9528).

Pin Assignment

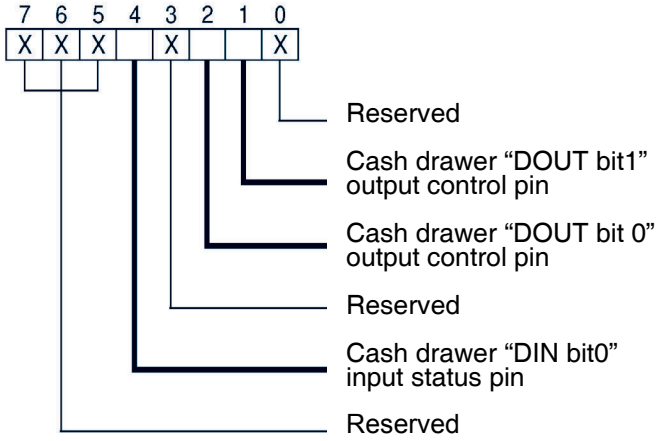


Pin	Signal
1	GND
2	DOUT bit0
3	DIN bit0
4	12V / 19V
5	DOUT bit1
6	GND

Register Controller
The controller for the cash drawer uses a series of I/O addresses.

Register Location : 4B8h
Attributes: Read /Write **Size:** 8-bit

BIT	BIT7	BIT6	BIT5	BIT4	BIT3	BIT2	BIT1	BIT0
Attribute	Reserved			Read	Reserved	Write		Reserved



Note:
To use the cash drawer, you must program the control signals according to the indications given above.

Bit 7: Reserved
Bit 6: Reserved
Bit 5: Reserved
Bit 4: Cash drawer “DIN bit0” input status pin
= 1: Cash drawer closed or absent
= 0: Cash drawer open
Bit 3: Reserved
Bit 2: Cash drawer “DOUT bit0” output control pin
= 1: Opens cash drawer
= 0: Closes cash drawer
Bit 1: Cash drawer “DOUT bit1” output control pin
= 1: Opens cash drawer
= 0: Closes cash drawer
Bit 0: Reserved

Example of Programming Cash Drawer

Use the **debug.exe** program in the MS-DOS environment or in the Windows 98 environment.

Command	**Cash Drawer**
O 4B8 04	Open
O 4B8 00	Closed
Set the I/O address 4B8h bit2=1 to open the Cash drawer using “DOUT bit0” control pin. Set the I/O address 4B8h bit2=0 to close the Cash drawer again.	

Command	**Cash Drawer**
I 4B8	Verifies status
Set the I/O address 4B8h bit4=1 for cash drawer closed or absent. Set the I/O address 4B8h bit4=0 for cash drawer open.	

1.5 VIDEO - TOUCHSCREEN CONTROL CARD

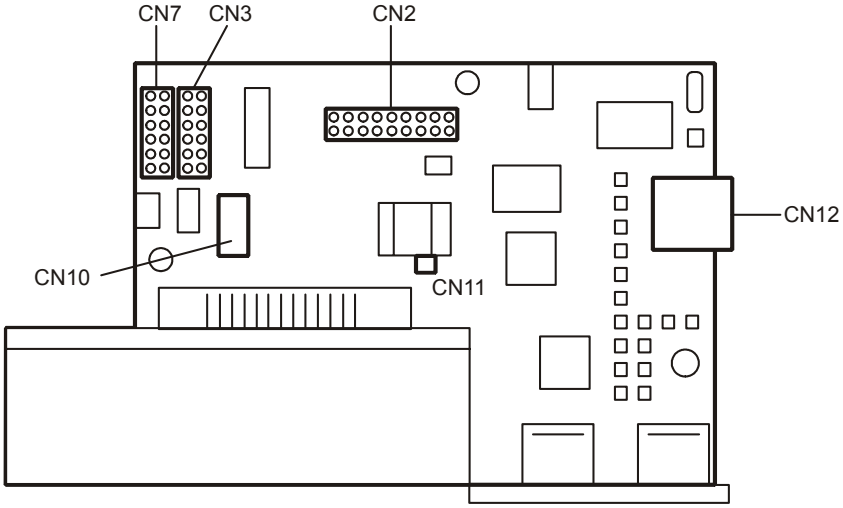


Figure 1-9

1.5.1 Touchscreen Card Connectors

Connector	Function	Connector	Function
CN7	Badge reader interface connection	CN11	LED on/off connection
CN12	Touchscreen connection	CN3	Inverter card connection
CN2	LCD video panel connection	CN10	Finger Print (function integrated in Badge reader)

1.6 INVERTER CARD

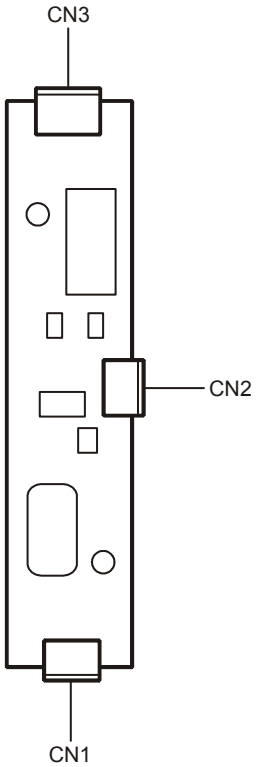


Figure 1-10

1.6.1 Inverter Card Connectors

Connector	Function
CN2	Motherboard connection
CN1 / CN3	LCD video panel back-lighting bulb connection

1.7 BADGE READER INTERFACE CARD

Two different types of card exist.

The first type, mounted by default, allows connection of a basic Badge reader. It can be combined with a Smart Card reader or the Finger module.

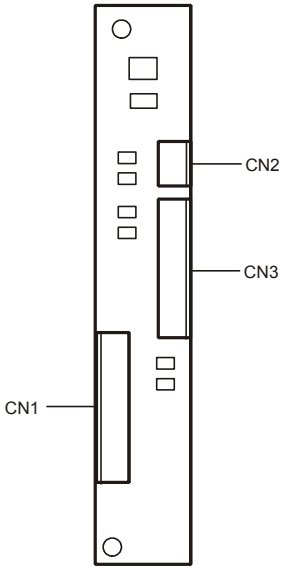


Figure 1-11

Badge Reader Interface Card Connectors

Connector	Function
CN1	Motherboard connection
CN2	Smart card connection
CN3	Badge reader connection

The second type is specially for connecting Badge readers including also iButton readers.

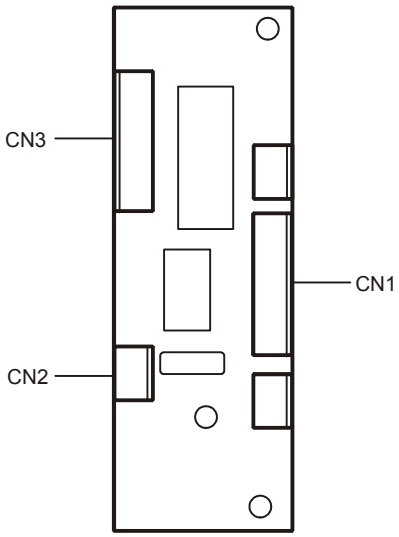


Figure 1-12

Badge Reader with iButton Interface Card Connectors

Connector	Function
CN1	Motherboard connection
CN2	Smart card connection
CN3	Badge reader connection

The following summary indicates how the interface cards can be coupled with the various types of Badge reader:

	Interface Card	
Badge Reader Type	**Spare Part Code**	**Part Number**
Base (Figure 1-11)	XYAB6258◎	522152V11000◎
2 in 1 with Smart Card reader (Figure 1-12)	XYAB6258◎	522152V11000◎
2 in 1 with Smart Card and Finger module reader (Figure 1-13)	XYAB6258◎	522152V11000◎
2 in 1 with iButton reader (Figure 1-14)	XYAB6259	522212V10002
3 in 1 with Smart Card and iButton reader (Figure 1-15)	XYAB6259	522212V10002

◎ Type of card mounted by default.
The cards can be ordered as spare parts by referring to the Spare Parts Manual.

Figure 1-13

Figure 1-14

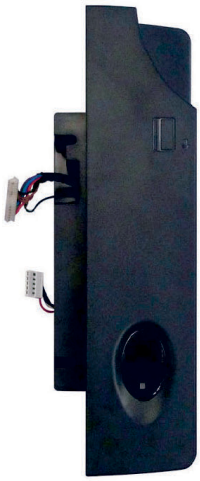


Figure 1-15

Figure 1-16

Figure 1-17

1.8 SPECIFICATIONS

Model Name	Explor@VX Fanless	Explor@VX Fan
Motherboard	**B78 v2.2**	
CPU supported	Intel Celeron M ULV 1.0GHz (BGA)	Intel Celeron M 1.5GHz / Pentium M 1.8GHz (Socket)
Chipset	Intel 852GM + ICH4 FSB 400MHz	
System memory	1 x DDR SO-DIMM Slot supports up to 1GB	
Graphical memory	Shared system memory up to 64MB	
LCD with Touchscreen Panel		
LCD dimensions	15” TFT LCD	
Brightness	250nits	
Maximum resolution	1024 x 768	
Touchscreen type	Resistive	
Tilt angle	0° ~ 80°	
Storage		
Internal hard disk	One 3.5 SATA HDD	
Expansion		
Mini-PCI slot	1	
External I/O Ports		
Front I/O		
USB	2 ports (V2.0)	
Rear I/O		
USB	4 ports (V2.0)	
Serial / COM	4 x COM ports with RJ-45 connectors: COM1 standard RS-232; COM2 RS-232/RS-422/RS485 selectable via jumpers on motherboard; COM3 & COM4 pin10 with 5V /12V power via jumper	
Parallel	1	
LAN (10 /100 / 1000)	1 x RJ45	
DC jack	1	
2nd VGA	1	
Cash drawer port	1 x RJ 11 (12V /19V)	
Audio jack	1 x Line-out, 1 x MIC-in	
Audio		
Built-in speakers (optional)	2 x 2W Speakers	
Power		
Power adaptor	19V, 90W	

Controls	
Power button	1
LED Indicator	1
Peripherals	
Badge reader	3 Tracks MSR (PS/2)
2-in-1 Badge reader	MSR (PS/2) + Finger Print (USB) / MSR (PS/2) + iButton (PS/2) *(see note **)*
3-in-1 Badge reader	MSR (PS/2) + Smart IC Card (USB) + iButton (PS/2) Reader Module *(see note **)*
Additional display	Optional 10.4" / 12.1" / 15" 2nd display without touchscreen
User display	Flush mount VFD display 2 x 20 characters (COM)
Connections	
Wireless LAN	802.11 a/b/g wireless LAN card & antenna
Environment	
EMC & Safety	FCC, Class A, CE, LVD
Operating temperature	5°C ~ 35°C (41°C ~ 95°C)
Storage temperature	- 20°C ~ 55°C (- 4°C ~ 140°C)
Operating humidity	20% ~ 80% RH no condensation
Storage humidity	20% ~ 85% RH no condensation
Dimension (W x D x H)	LCD 90 degrees: 355 x 145 x 363 mm
Weight (N.W./G.W.)	8kgs / 9kgs
Operating systems supported	Windows XP, WEPOS, XP Embedded, XP Professional Embedded, Windows 2000 Professional Embedded, Linux

** Installation of a module with iButton requires the presence of interface connection board p.n. 522212V10002 (see Paragraph 2.6.3)

1.9 TROUBLESHOOTING

1.9.1 System Errors

Problem	Solution
The system is not powered	• Verify the power +5Vsb and ensure that the power cable is connected correctly. • Verify that the power button functions correctly.
The system does not start	• Verify the insertion of the RAM or replace it. • Reinsert or replace the CPU. • Check all the connections. • Check the BIOS parameters.
CMOS error or loss of CMOS data	• Load the optimised settings for the BIOS. • Reset the CMOS via the jumper and load the optimised settings for the BIOS.
Bootstrap failure or bootstrap takes too long to detect a device	• If the system does not detect the IDE interface or takes too long to detect it, reconnect the IDE cable or replace the hard disk and IDE cable. • Replace the RAM.
The system blocks during start up / blue screen	• Check the RAM. • Check the hard disk. • Reinstall the operating system.
The system blocks for no particular reason	• When it is installed, verify that the fan is working correctly. • Check the IDE interface. • Verify the correct operation of the RAM. • Reinstall the operating system.
Absence of video signal or incorrect video colours	• Verify that the LCD video cable is connected correctly. • Replace the LCD video. • Verify that the Inverter card is connected correctly or replace the Inverter card. • Verify the jumpers settings for the LCD JP7.
The fan (where installed) is not working	• Check that the power cable of the fan is connected correctly. • Replace the fan.

1.9.2 Device Errors

Problem	Solution
Audio	• Verify that the Audio cable is connected correctly or replace the speakers.
RS 232 COM	• Verify that the connectors of the peripherals are inserted correctly. • If used, verify the correct insertion of the adaptor cables supplied with the system. • Verify that the jumpers of the COM portsJP3, 9, 10 are set correctly. • Verify that the motherboard is working properly.
USB COM	• Verify that the connectors of the peripherals are inserted correctly. • Verify that the motherboard is working properly. • Verify the correct operation of the video – touchscreen control card if the problem relates to the USB ports located under the video.
LAN	• Verify that the LAN cable is connected correctly. • Verify the LAN ID code. • Verify that the motherboard is working properly.
The touchscreen does not work	• Verify that the touchscreen is connected correctly. • Verify the correct installation of the drivers. • Replace the touchscreen. • Verify the correct operation of the video-touchscreen control card. • Verify that the motherboard is working properly.
Touchscreen bad definition	• Calibrate the touchscreen
Customer display (optional)	• Verify the correct operation of the display. • Verify the operation and correct insertion of the cable to the display and motherboard. • Verify that the motherboard is working properly.
2nd LCD video (optional)	• Verify the correct operation of the LCD video. • Verify the operation and correct insertion of the cable to the video and to the motherboard. • Verify that the motherboard is working properly.
Badge reader (optional)	• Verify that the reader is connected correctly or replace it. • Verify the correct operation of the interface card. • Check the interface card cable.

2. INSTALLATION

2.1 INTRODUCTION

This chapter provides all the information necessary for the correct installation of the system by a skilled technician.

2.1.1 General Warnings

This paragraph provides a series of instructions which should be followed to ensure that the system is used correctly and in complete safety.

1. Before connecting the system to the electrical power supply, make sure that the voltage corresponds to that required by the system.
2. To connect to the power supply use the cable provided.
3. Do not install the system in environments that are dusty, damp, subject to vibrations of a mechanical nature, close to heat sources or sources of strong electromagnetic interference.
4. When a fan is present, make sure that its air vent is free from obstacles.
5. Do not use abrasive substances or solvents to clean the system.

2.2 UNPACKING THE SYSTEM

The system is provided in a single package comprised of the following components:

1. System module
2. External power supply
3. Power cable
4. 2 cables for serial ports with Canon 9-wire connectors
5. CD containing system drivers
6. Recovery DVD (available only for Explor@ VX with preinstalled Operating System)
7. Installation Manual.

2.3 HARDWARE INSTALLATION

This paragraph provides the information necessary for setting up connections.

CAUTION! *The system is ready for use as soon as the power cable is connected.*
To enter information useful for completing the Operating System installation, on first powering on either a mouse or a keyboard is required.

2.3.1 Motherboard I/O Connections

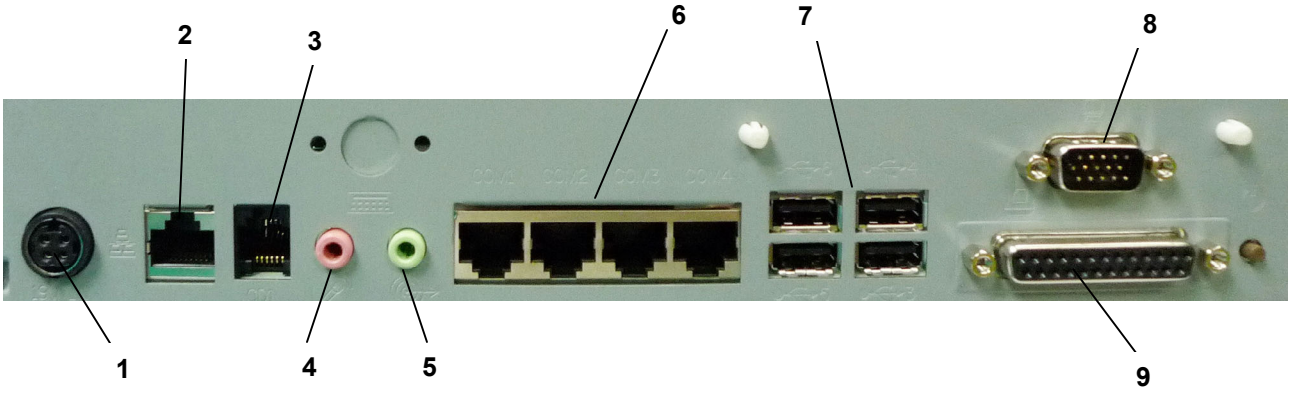


Figure 2-1

1. Power socket
2. LAN cable connector
3. DRW 610 Cash drawer cable connector
4. Microphone jack
5. Earphones jack
6. 4 serial port connectors
7. 4 USB connectors
8. 2nd LCD video connector (optional)
9. Parallel port connector.

2.3.2 Upper Side Connections

Figure 2-2

1. 2 USB connectors

2.4 INSTALLING THE CUSTOMER DISPLAY (FIELD OPTION)

1. The user display of VFD type comprises the components shown in the figure.

Figure 2-3

2. Remove the screws **A** attaching the rear cover.

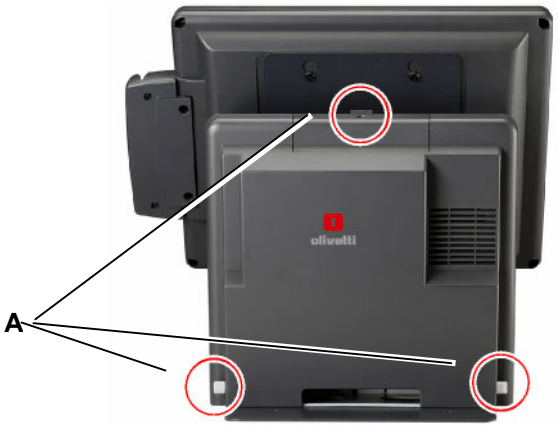


Figure 2-4

3. Insert the User Display into the metal support holes present on the upper cover.

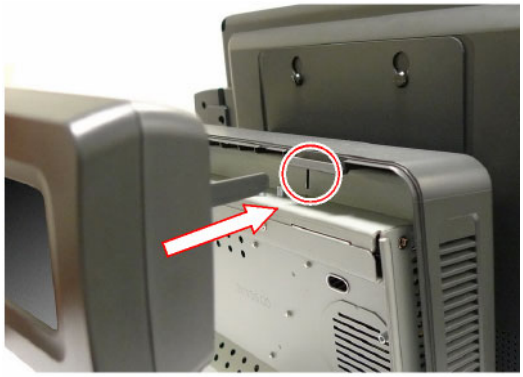


Figure 2-5

4. Fix the metal support of the user display to the system using screws **B**.

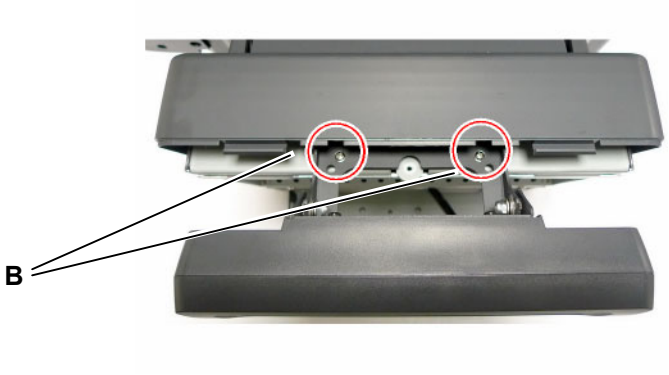


Figure 2-6

5. Insert the cover of the user display as illustrated in the figure using the screws.

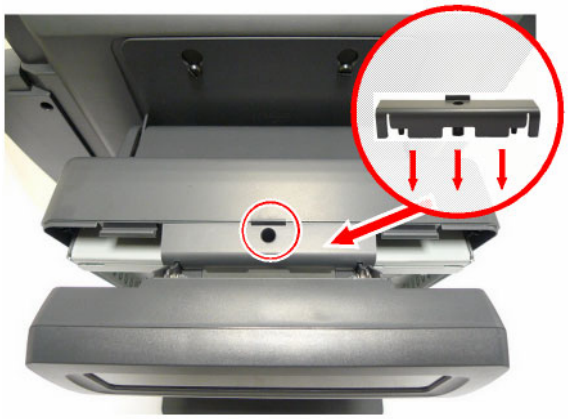


Figure 2-7

6. Connect the RJ45 connector of the user display to the system and insert the rear cover, sliding it from the top of the system downwards and secure it in place using screws **C**.

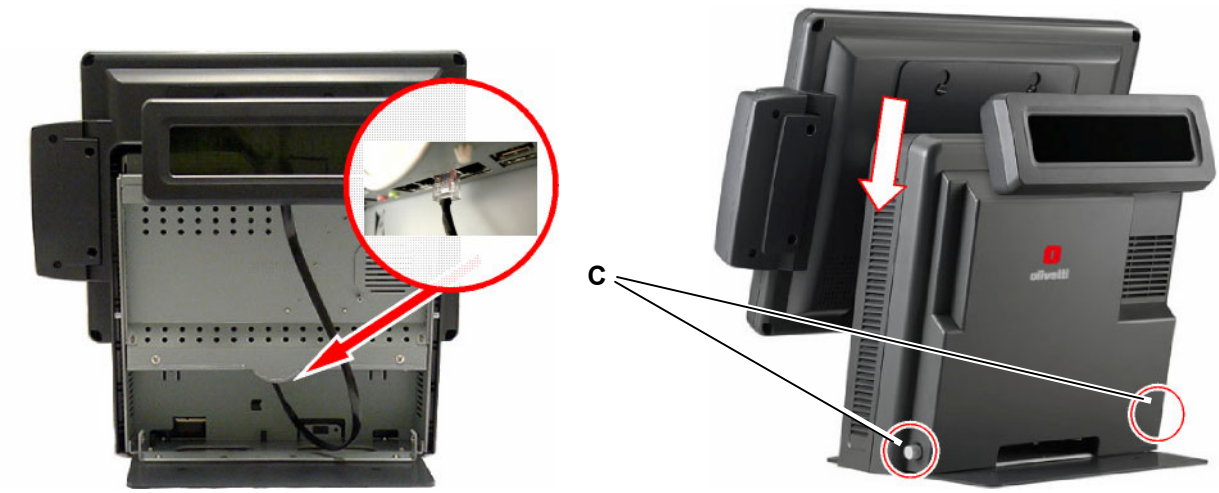


Figure 2-8

2.5 INSTALLING THE ADDITIONAL DISPLAY (FIELD OPTION)

1. The additional display is composed of the components shown in the figure.

Figure 2-9

2. Remove the screws **A** that fix the rear cover.

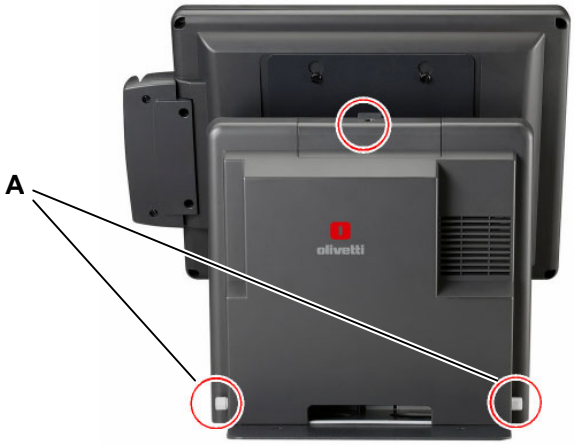


Figure 2-10

3. Insert the supports for mounting the additional display into the support holes on the metal cover.

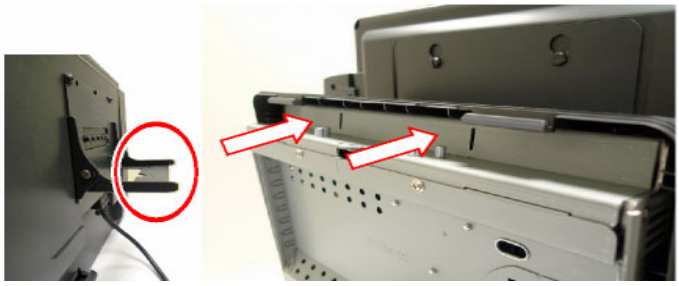


Figure 2-11

4. Insert screws **B** to fix the user display to the system.

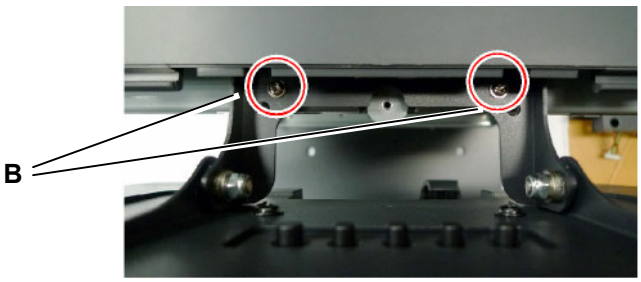


Figure 2-12

5. Install the display as shown in the figure and fix it using screw **C**.

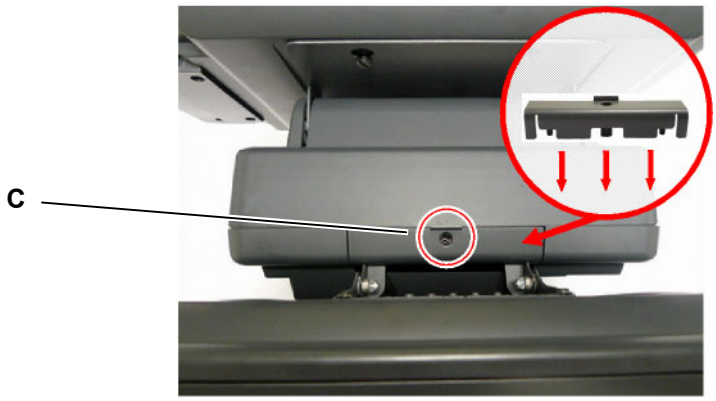


Figure 2-13

6. Connect the VGA cable of the additional display to the system.

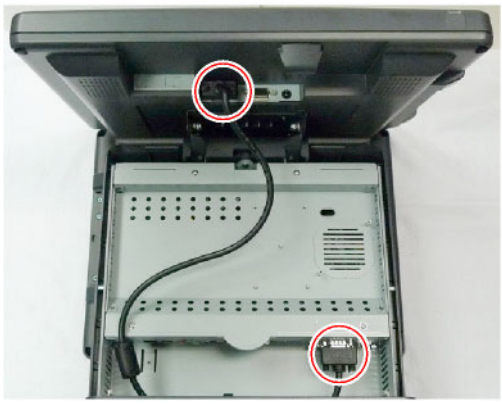


Figure 2-14

7. Insert the rear cover, sliding it from the top of the system downwards and fix it in place using screws **D**.

Figure 2-15

2.6 INSTALLING THE (MSR) BADGE READER (FIELD OPTION)

Different types of badge reader are available as described in Paragraph 1.7.
The system is able to recognise automatically the type of reader that has been installed and so no change to the system settings is necessary.

2.6.1 Installing the Badge Reader and Smart Card Reader Module

The procedure for installing the 2-in-1 or 3-in-1 optional modules are similar.

1. The module is composed of a box, as shown in the figure, equipped with a signal connector **A** and a grounding cable connector **B**. Connectors **A** and **B** must be connected as indicated in the figure.

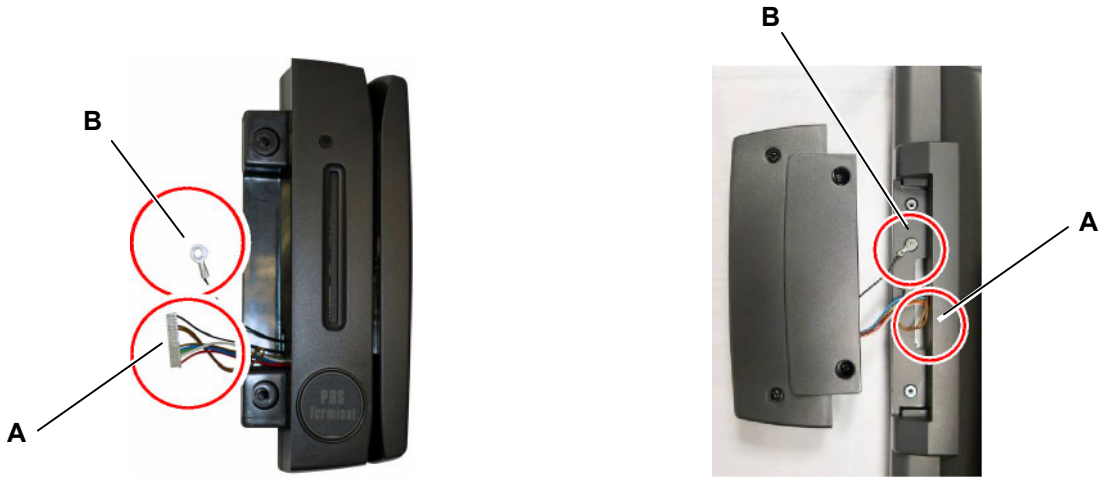


Figure 2-16

- Make sure that the module is aligned correctly with the system guides so as to make insertion easy. Slide the module to its correct position in the bay. At the end, fix the module with screws **C**. Finally, make sure that the module has been installed correctly as indicated in the figure.

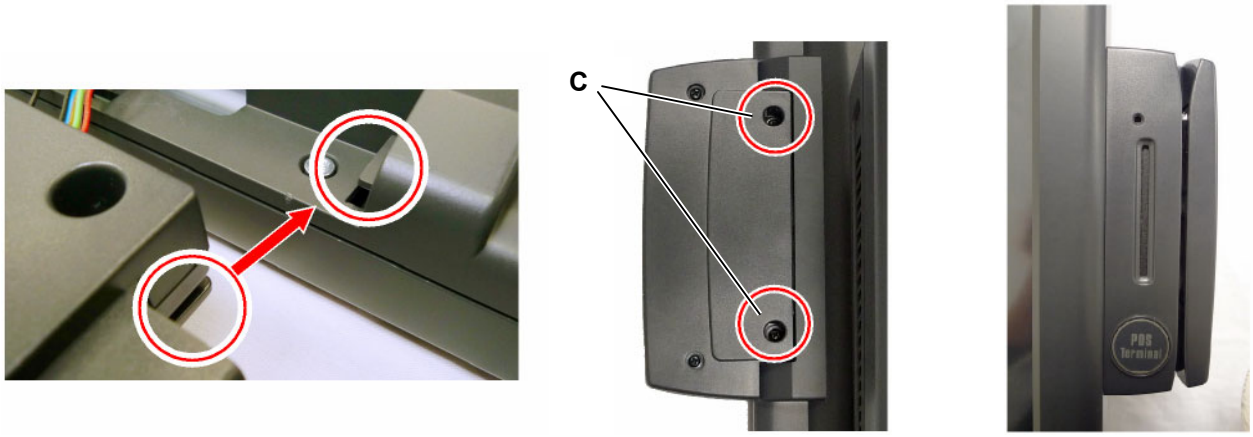


Figure 2-17

2.6.2 Installing the Badge Reader Module and Finger Print Module

The procedure for installing the 2-in-1 or 3-in-1 optional modules are similar.

1. The module is composed of a box, as shown in the figure, equipped with a grounding cable connector **A,** a signal connector **B** and a printer signal connector **C**. Connectors **A, B** and **C** must be connected to the system as indicated in the figure.

Figure 2-18

- Make sure that the module is aligned correctly with the system guides so as to make insertion easy. Slide the module to its correct position in the bay. At the end, fix the module with screws **D**. Finally, make sure that the module has been installed correctly as shown in the figure.

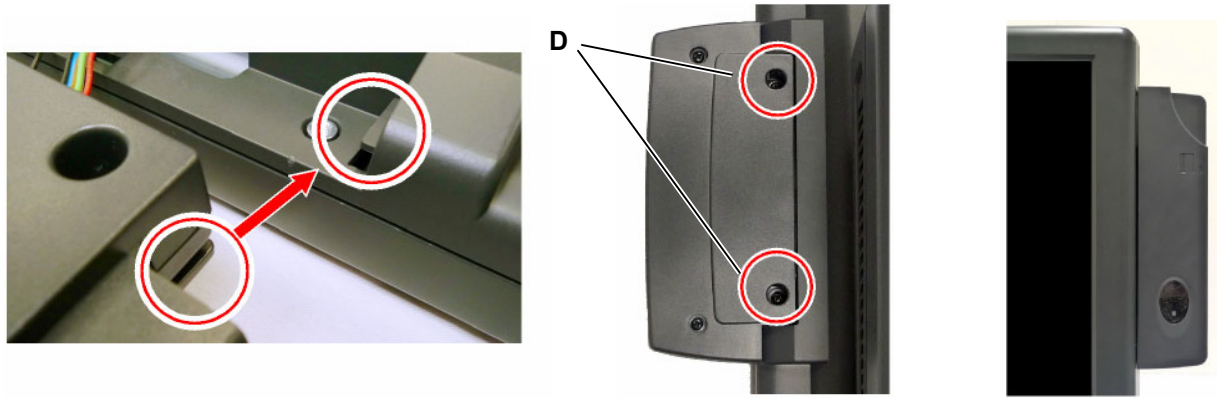


Figure 2-19

2.6.3 Installing the Badge and iButton Reader Module

The procedure for installing the 2-in-1 or 3-in-1 optional modules is similar.

Note: To install the Badge/iButton reader module, you must replace a connector on the internal card of the Explor@ VX.

1. The module is composed of a box, as shown in the figure, equipped with an iButton signal connector **A**, a grounding cable connector **B** and a signal connector **C**. Connectors **A, B** and **C** must be connected to the system as indicated in the figure.

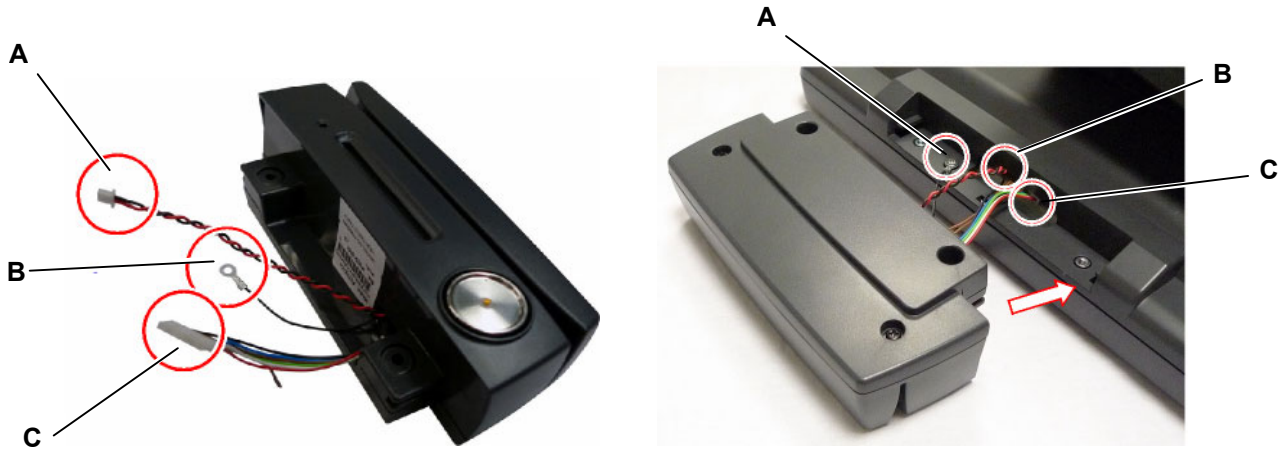


Figure 2-20

- Make sure that the module is aligned correctly with the guides of the system so as to make insertion easy. Slide the module up to its correct position in the bay. At the end, fix the module with the screws **D**. Finally, make sure that the module has been installed correctly as indicated in the figure.

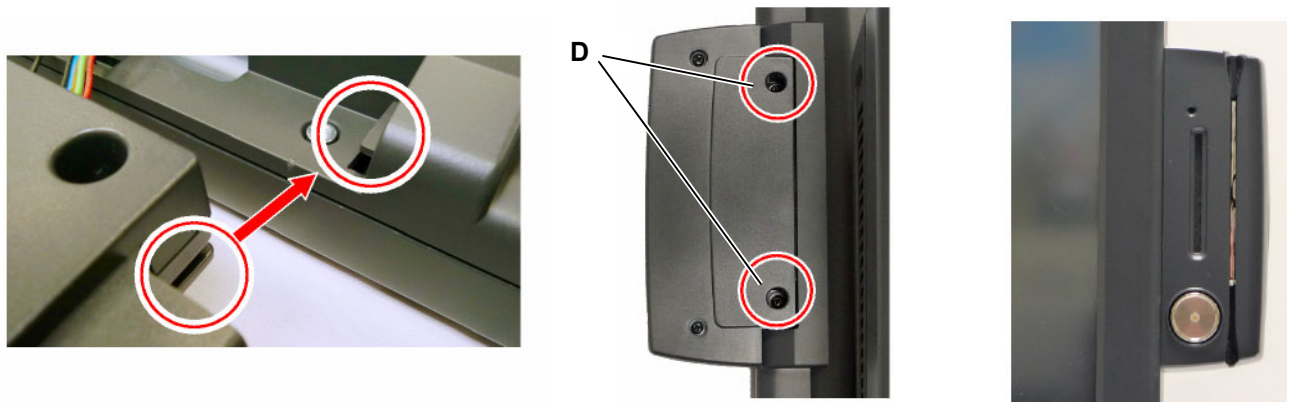


Figure 2-21

2.7 DRIVER INSTALLATION

Depending on the customer's requirements, the Explor@ VX system can be provided either with a preinstalled Microsoft Windows XP Professional operating system or otherwise with the Microsoft Windows WEPOS operating system. The Explor@ VX system can also be acquired without an operating system.

In the case of a pre-installed operating system, no driver installation is required when you first start the machine.

Note: In the case of re-installing the operating system from the DVD supplied in the package, an external optical disk reader is required.
Also installation of the drivers from the CD-ROM supplied in the package requires an external optical reader.

2.7.1 List of Drivers Available

WARNING! *For easy installation of the system drivers, use of a mouse and a keyboard is recommended.*

Insert the CD containing the drivers for the Explor@ series models into the external optical disk reader.
The screen containing the list of all the drivers available for the Explor@ models is displayed in auto-run mode.

The Explor@ VX drivers are listed in the table:

Folder/File	File Description
<CD>:\Olivetti_all.htm	Driver List
<CD> :\COMMON\INTEL\Chipset	Chipset Driver
<CD>:\COMMON\INTEL\USB20	USB 2.0 Driver
<CD>:\COMMON\INTEL\VGA\i85x	VGA Driver
<CD>:\COMMON\Ac97_codec\Realtek\ALC202A	Audio Driver
<CD> :\COMMON\ELO_Touch	ELO Touch Driver
<CD>:\COMMON\Lan_driver\Realtek_PCI	10/100/1000MB LAN Driver

The installation procedure for the motherboard components is described below, subdivided by:

1. Motherboard chipset
2. USB connections
3. VGA video card
4. Audio card
5. LAN 10/100/1000MB network card
6. ELO touchscreen.

Note: The procedures described below refer to the Windows 2000/XP environment however they are similar also for the other operating systems.

2.7.2 *Installing the Motherboard Chipset*

1. Click the "Chipset" option in the Explor@ Driver List menu.

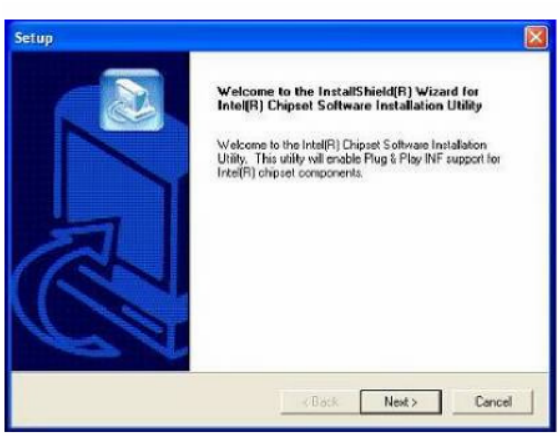
Model name (Motherboard)	Function	OS	Note
EXPLOR@100	Chipset		
EXPLOR@200XS	USB 2.0	Win9X, ME	
		Win2K	
EXPLOR@300XS	VGA	WinNT4	
		Win9X, ME	
EXPLOR@VX		Win2K, XP	
		Linux	
	Audio	WinNT4	
		Win9X, ME, 2K, XP	
		Linux	
	Touch Screen	DOS	
		Win9X	
	• ELO	WinNT4	
		Win2K, XP	Ver.: 4.63
		Linux	

Figure 2-22

2. Double-click the file “infinst_enu_6.0.1 .1 002.exe” in the **My Computer** window.

Figure 2-23

3. Click the **Next** button to continue with the installation and click the **Yes** button to confirm that you accept the Windows User License Agreement.



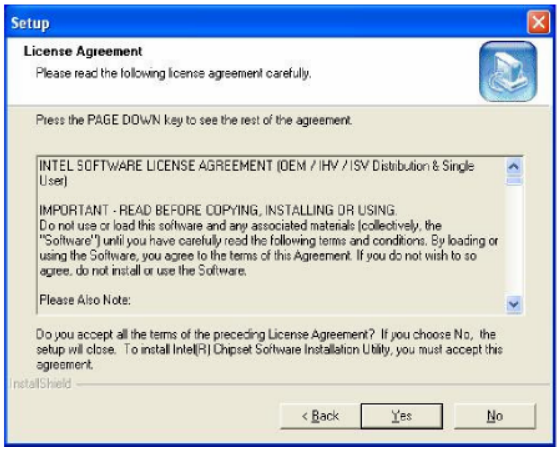


Figure 2-24

4. Click the **Next** button to read the information and confirm termination of installation by clicking the **Finish** button.

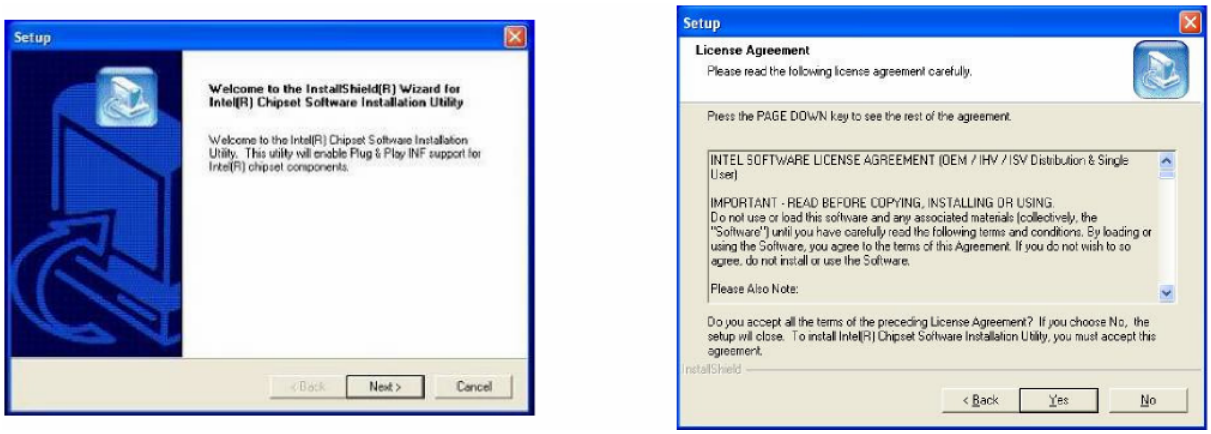


Figure 2-25

2.7.3 Installing USB Connections

How to use USB connections varies according to the operating system installed and the version of the Service Pack present.

Operating System	USB 2.0 Requirements
Windows XP	USB 2.0 drivers are provided in Service Pack 1 (SP1) for Windows XP. They can also be obtained through the Windows Update system.
Windows 2000	USB 2.0 drivers can be obtained through Windows Update or Service Pack 4.
Windows 98SE/ME	USB 2.0 drivers are available on the Intel developer manufacturer's site.
Windows 98 (Retail version)	If the device is not recognised by the version of Windows 98 commercially-available, contact the device manufacturer. If the USB 2.0 driver is not available, the device will operate at the speed supported by the USB 1.1 port.
Linux	USB 2.0 is supported by kernel version 2.4.19 or later.

1. From the Windows desktop, right-click **My Computer** and select **Properties**. Then select **Hardware > Device Manager**.

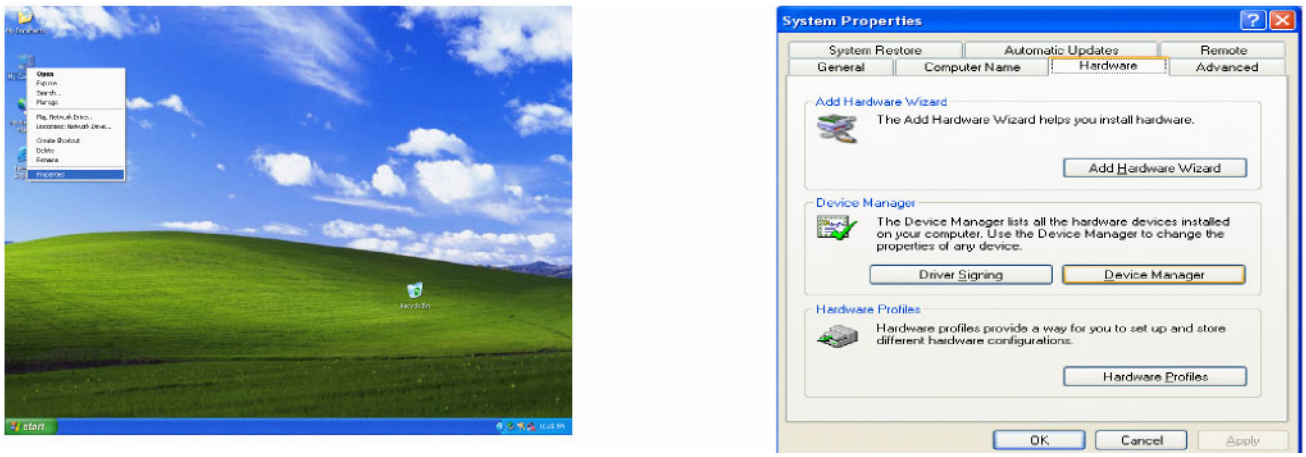


Figure 2-26

2. From **Device Manager,** select **Other Devices > Universal Serial Bus (USB) Controller > Properties.**

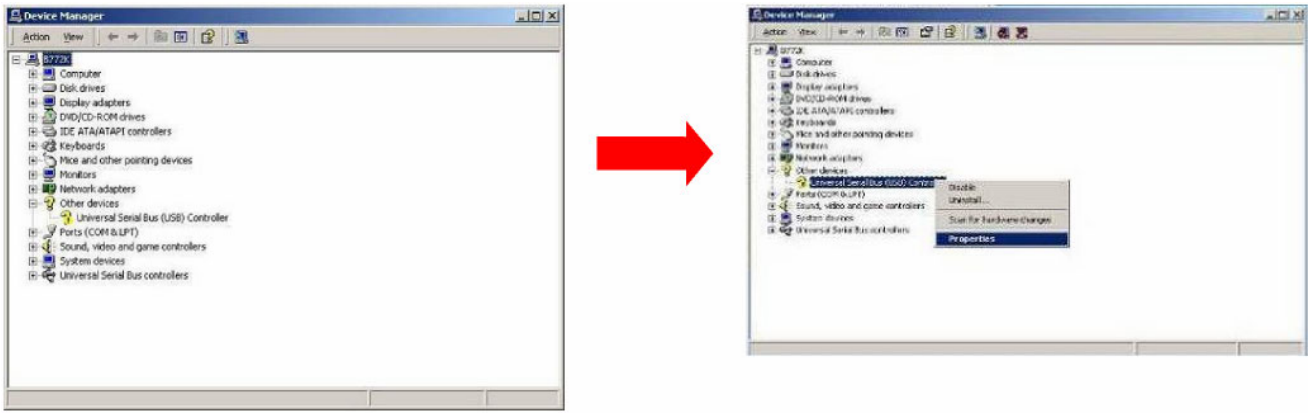


Figure 2-27

3. Select **Device > Update Driver** and then, in the Welcome window, click **Next**.

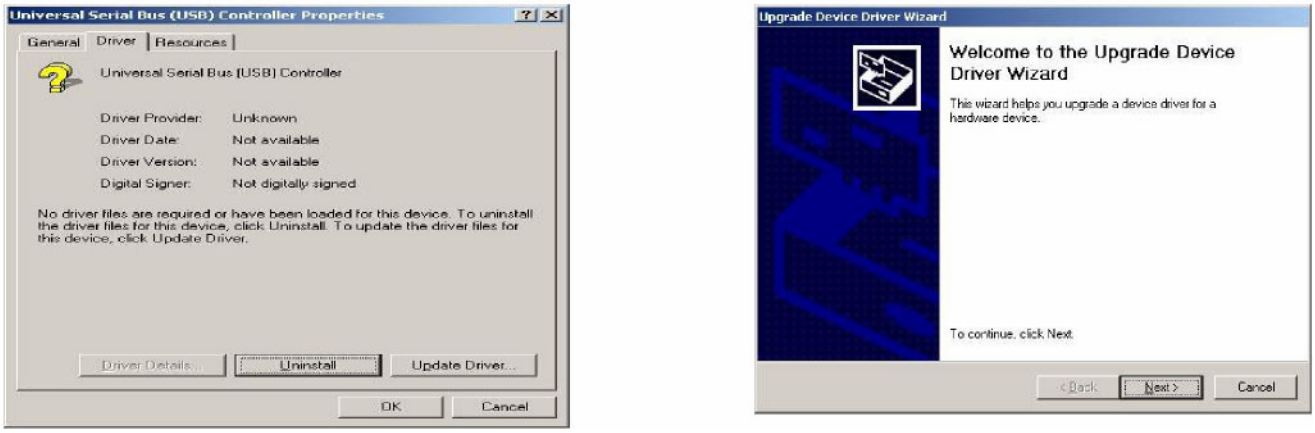


Figure 2-28

4. Select **Search for a suitable...** then, in the **Hardware Device Drivers** window, select **Specify a location** and click **Next** to search for the file related to the specific driver.

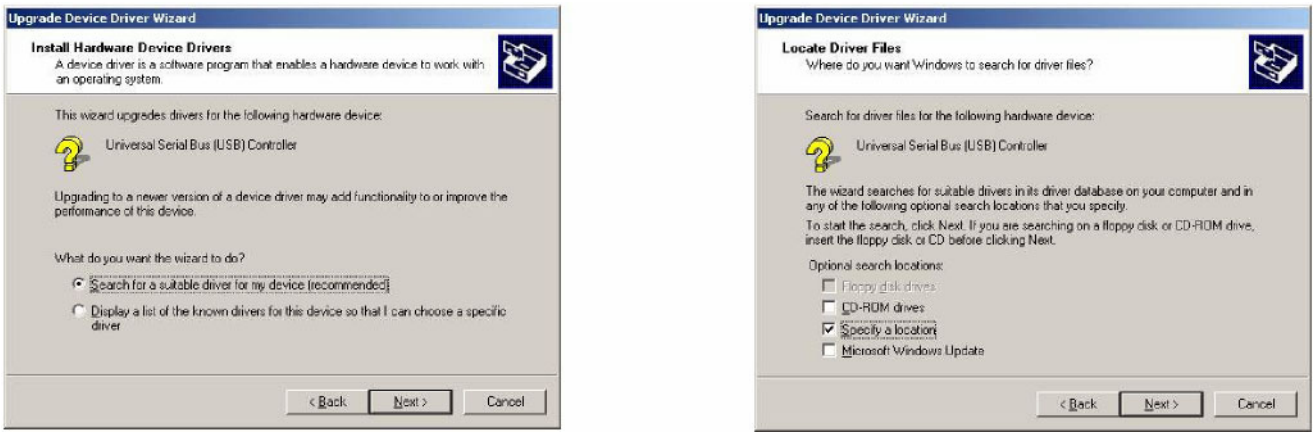


Figure 2-29

5. Click **Browse** to select the driver, then click **OK** to go to the next page. Click **Next** in the Driver Files Search Results window.

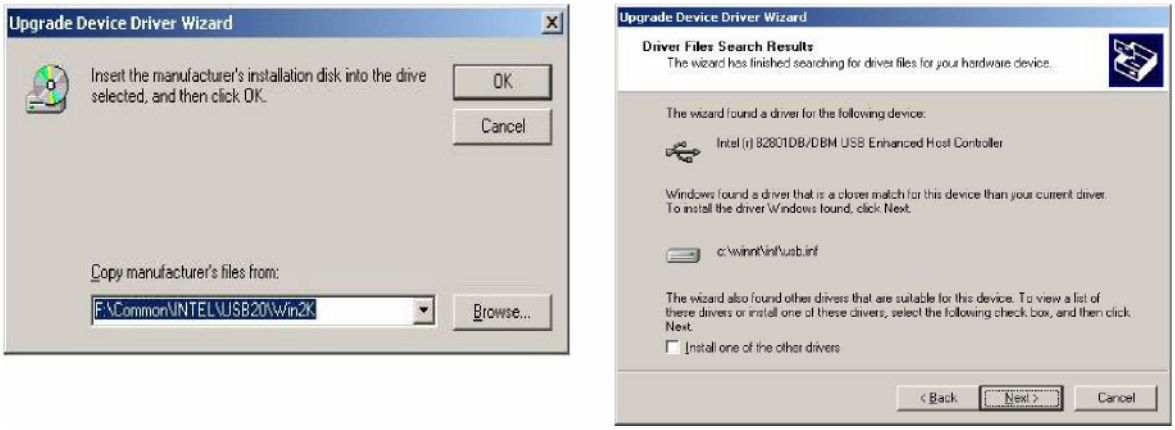


Figure 2-30

6. Click **Finish** to end the installation. The new device will appear in the list of hardware drivers installed.

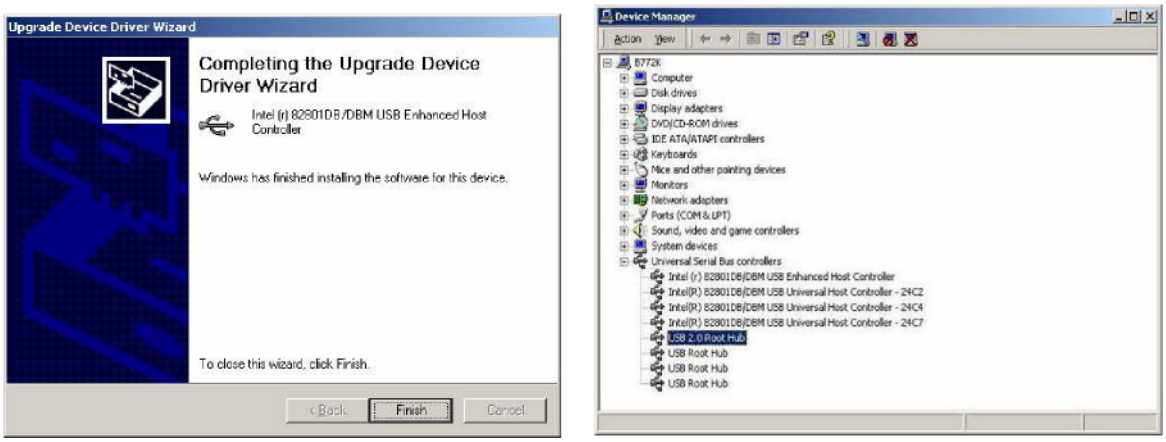


Figure 2-31

2.7.4 Installing the VGA Video Card

1. From the Explor@ Driver List menu, click the “Win2K_XP” option in the VGA section.

Model name (Motherboard)	Function	OS	Note
EXPLOR@100	Chipset		
EXPLOR@200XS	USB 2.0	Win9X, ME	
		Win2K	
		WinNT4	
EXPLOR@300XS	VGA	Win9X, ME	
		Win2K, XP	
EXPLOR@VX		Linux	
	Audio	WinNT4	
		Win9X, ME, 2K, XP	
		Linux	

Figure 2-32

2. From **My Computer**, double-click the file “win2K_xp1 41 950.exe”.

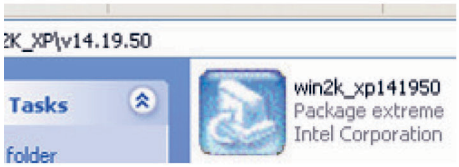


Figure 2-33

- Click **Run** and when the **File Download – Security Warning** message appears, confirm by clicking **Next** to perform a guided installation of the driver for the Intel ® graphics chipset.

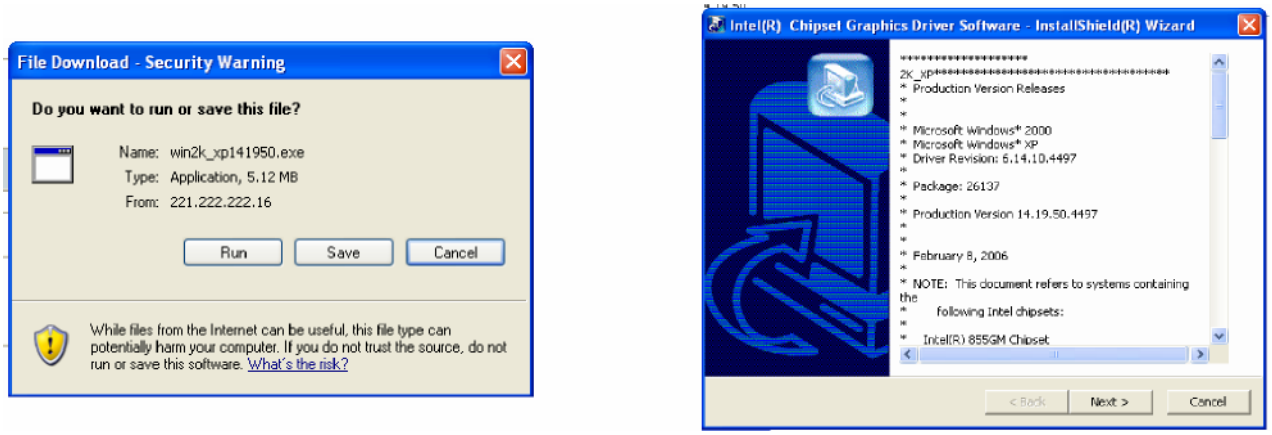


Figure 2-34

3. Click **Next** in the Intel ® Graphics Media Accelerator window. Click **Yes** to confirm acceptance of the User License Agreement.

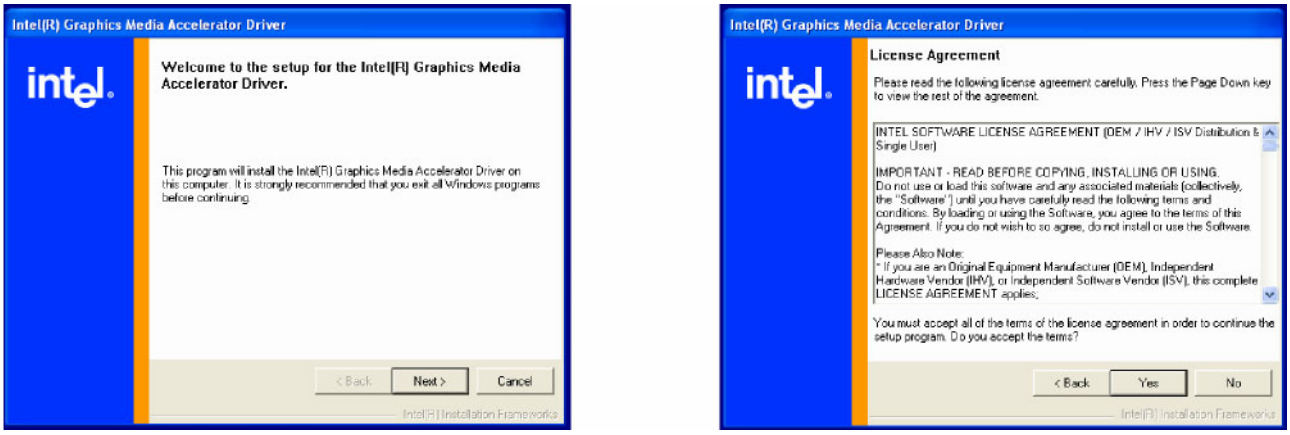


Figure 2-35

4. Click **Yes, I want to restart my computer now** and then click **Finish** to complete installation of the driver.

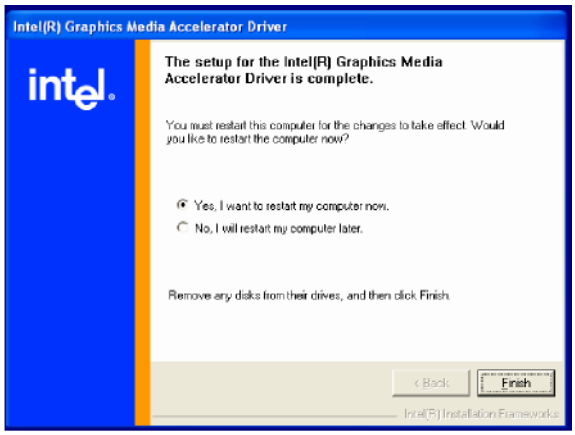


Figure 2-36

2.7.5 Installing the Audio Card

1. From the Explor@ Driver List menu, click the option "Win9X,ME,2K_XP" in the Audio section.

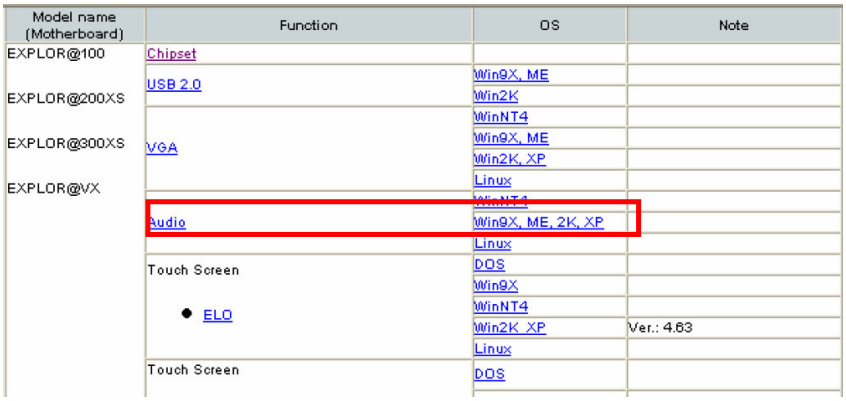


Figure 2-37

2. From **My Computer** with a double-click open the folder “A3.71”, then double-click "wdm_a371.exe".

Figure 2-38

- Click **Next** in the window relative to installation of the Realtek AC’97 audio driver, and confirm the request for a digital signature by clicking **Yes.**

Figure 2-39

- Click **Finish** to end the installation.

2.7.6 Installing 10/100/1000MB LAN Boards

1. From the Explor@ Driver List menu, click "Win9X, ME, 2K, XP" in the PCI 1000MB LAN for Realtek RTL8110 section.

Figure 2-40

2. Double-click "v709" to open the folder. Double-click “setup.exe” and, at the end, click **Finish**.

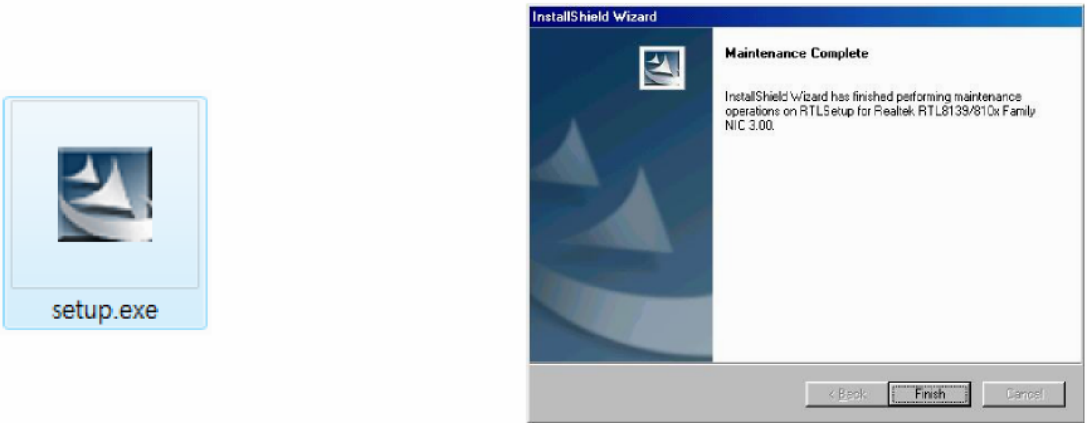


Figure 2-41

3. When the prompt appears to restart the system, click **OK** to end the installation.

2.7.7 Installing the ELO Touchscreen

1. From the Explor@ Driver List menu, click "Win2K, XP" in the section for the ELO option. .

Figure 2-42

2. Double-click the folder "v463" to open it. Double-click “Elo_v463.exe” and, at the end, click **OK**.

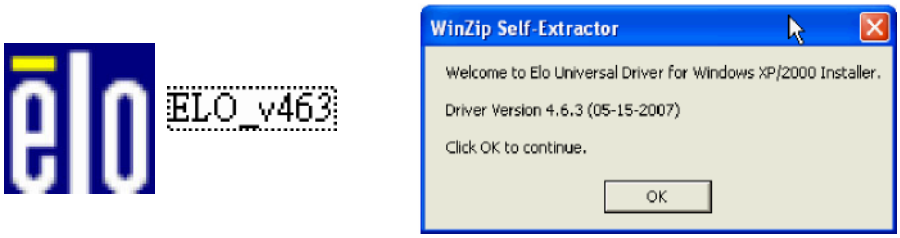


Figure 2-43

3. Click **Browse** to search the disk and select the destination folder to which to extract the files contained in the compressed archive. At the end, confirm with **OK**.

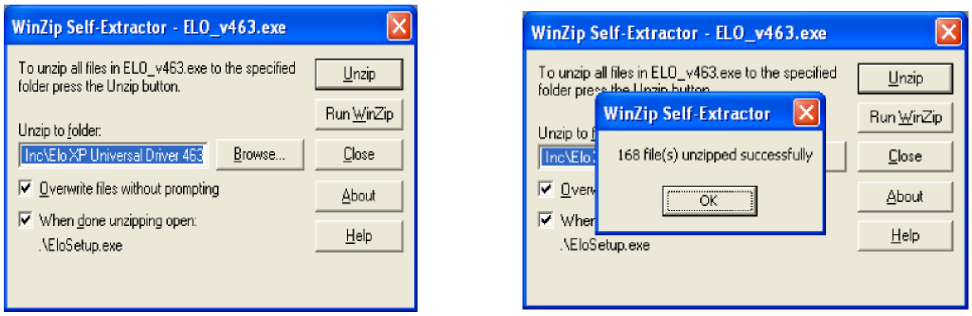


Figure 2-44

4. Click **Next**. Make sure that **Install Serial Touchscreen** is checked, then click **Next**.

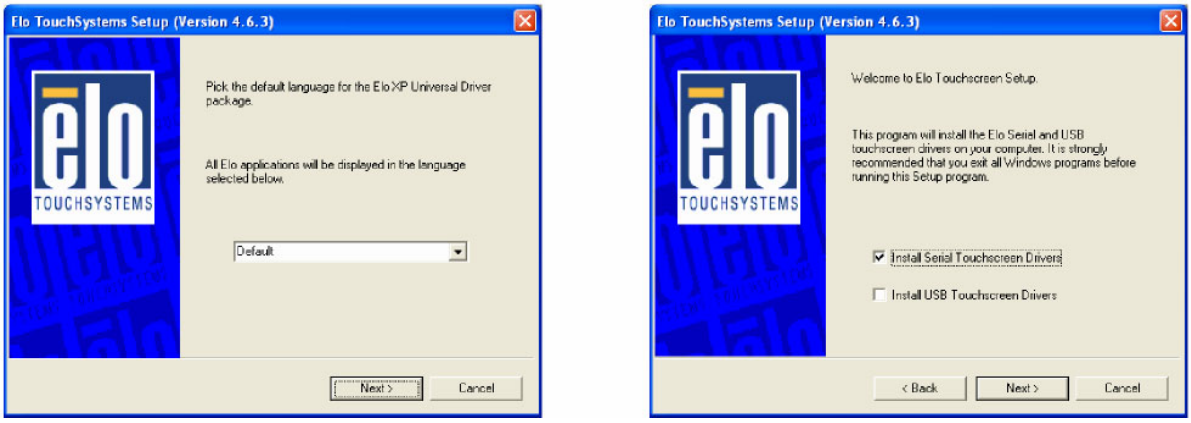


Figure 2-45

5. Click **Yes** to accept the "End User License Agreement". The system analyses the availability of serial ports on the computer.

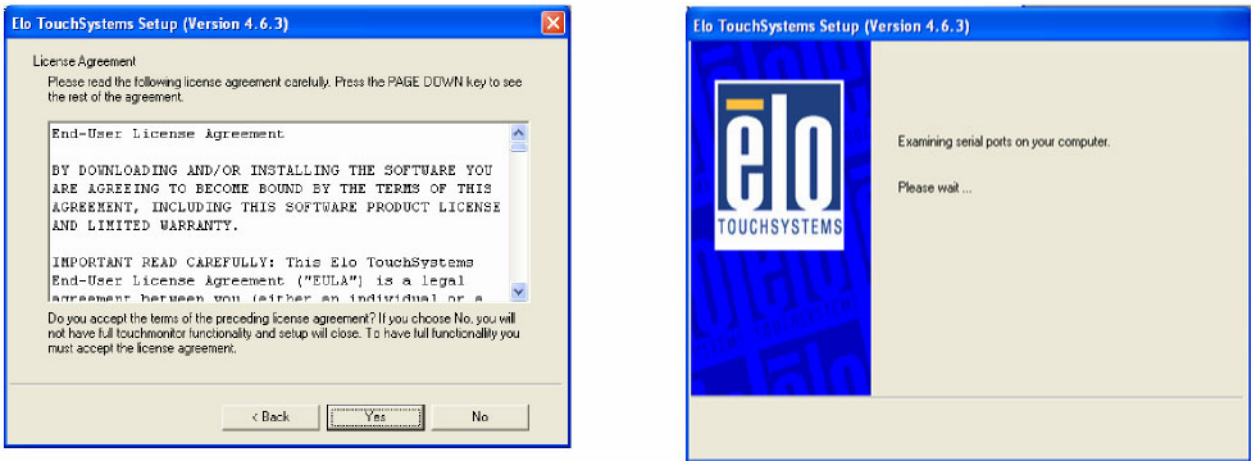


Figure 2-46

6. Check the **Auto-detect Elo Devices** check-box and, at the end, click **Next**. The installation program searches for the presence of an ELO Touchscreen monitor.

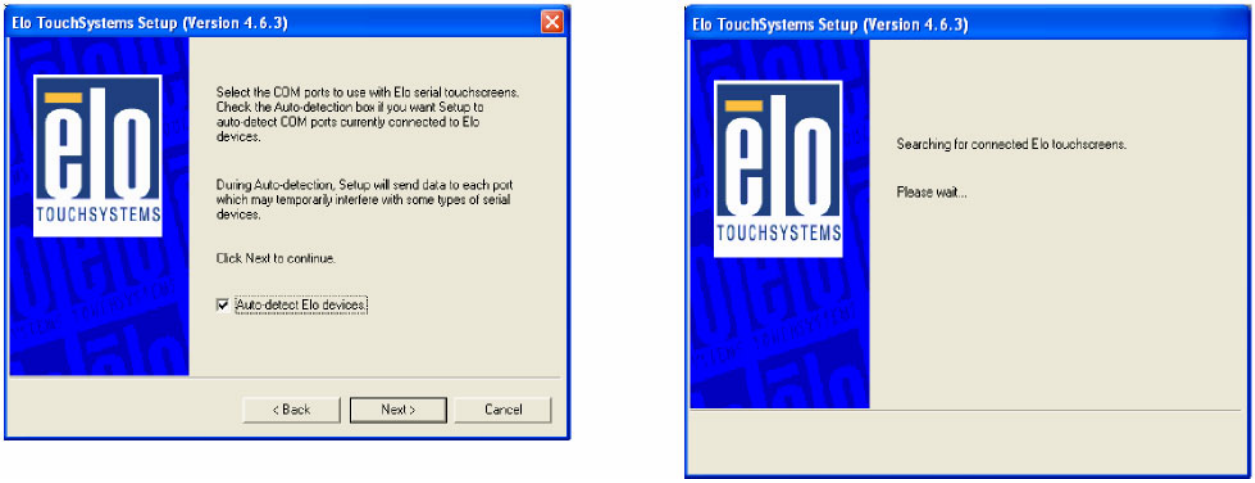


Figure 2-47

7. On termination, the serial ports present on the system are listed and the COM port associated with the ELO Touchscreen device is checked. Click **Next** to complete the installation.

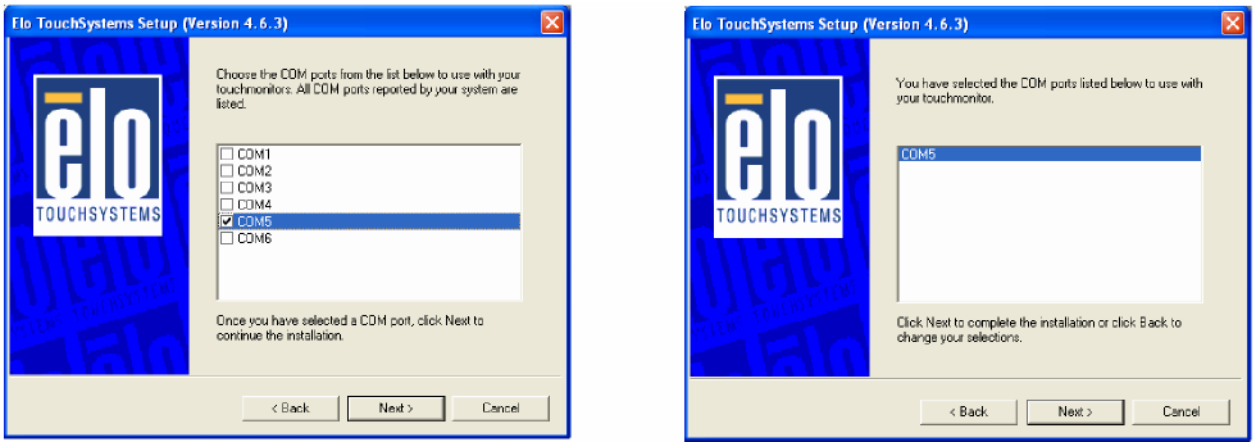


Figure 2-48

8. The driver is installed on the system and, when you click **Finish**, installation completes and you are given automatic access to calibrate the Touchscreen device.

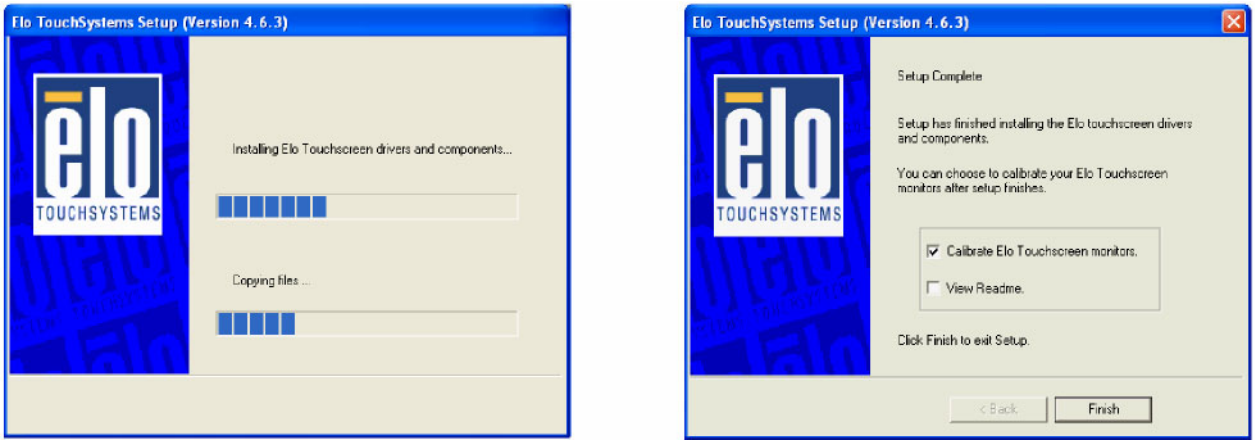


Figure 2-49

9. Follow the instructions provided on the screen to carry out the calibration.

Figure 2-50

10. Make sure that the touchscreen monitor is working correctly by moving your finger on the screen. The mouse cursor present on the screen should move correctly, following the movements of your finger. To end, touch the green tick on the screen with your finger to save the calibration and exit from the program.

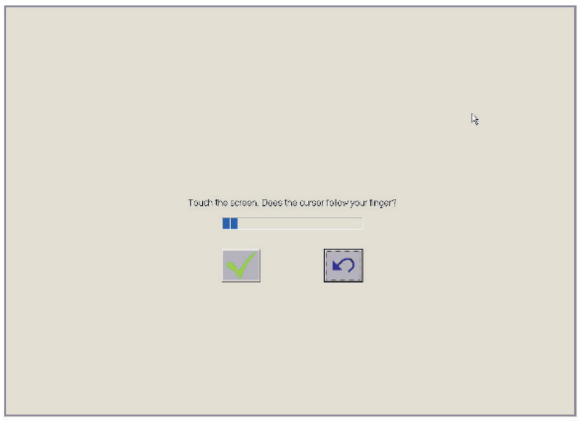


Figure 2-51

2.8 SYSTEM BIOS SETTINGS

2.8.1 BIOS Setup Utility

The BIOS setup defines how the system is configured. You need to access this program only during the configuration phase the first time you start the product, or when you want to change how the original configuration was set up.

2.8.2 Starting the BIOS Setup

1. Power on the system or restart it.
2. Press the **DEL/Cancel** key immediately after powering on the system or as soon as the first messages appear during the POST (Power On Self-Test) phase.
   The main menu for the BIOS Setup is displayed.
3. If a password has been set , enter it and confirm with **Enter**.

2.8.3 When a Problem Occurs

If, after making the changes you require and saving them with **Save and Exit Setup**, the system does not start or starts slowly, access the BIOS settings and select **Load Optimised Defaults**.

2.8.4 BIOS Main Menu

When the BIOS main menu is displayed on the screen, the list of options that can be modified is displayed. You can select options using the UP/DOWN/LEFT/RIGHT arrow keys followed by the **Enter** key.

Note: The items displayed in the BIOS can vary and depend on the version is installed.

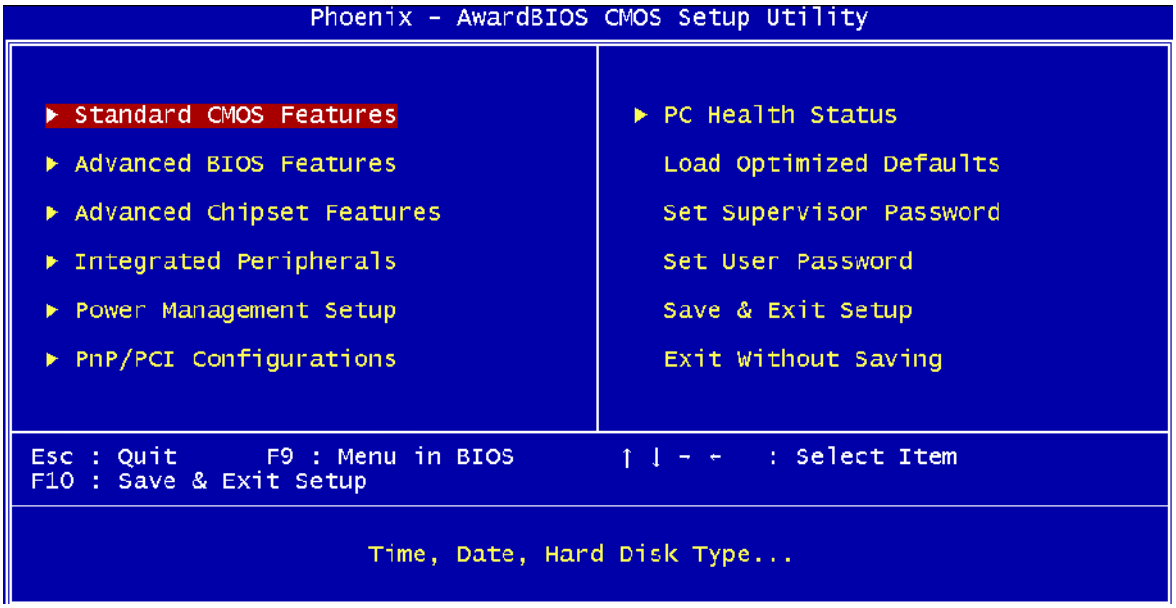


Figure 2-52

Standard CMOS Features
Use this menu for basic system configuration.
Advanced BIOS Features
Use this menu to configure the advanced system settings.
Advanced Chipset Features
Use this menu to configure the chipset register settings and optimise system performance.
Integrated Peripherals
Use this menu to specify the setup for the integrated peripherals.
Power Management Setup
Use this menu to specify the settings for energy saving management.

PnP/PCI Configurations

This option is present if the system supports Plug and Play and PCI configuration.

PC Health Status

Displays the parameters of the CPU, cooling system, fan speed and system voltage values.

Load Optimised Defaults

Use this menu to load the default values, that is, the values that are configured in the factory to obtain the best performance.

The manufacturer has designed a modifiable BIOS so as to improve the system performance. The factory values are those present by default for each of the various options.

Set Supervisor Password

Allows the user to change, enable or disable passwords.

Set Password

Changes, enables or disables the password. Can be used to restrict access to the BIOS setup program.

Save & Exit Setup

Save the changes made and exit from the BIOS Setup program.

Exit Without Saving

Ignores all the changes made and exits from the BIOS setup program.

3. DISASSEMBLING/REASSEMBLING PARTS

3.1 INTRODUCTION

This Chapter describes all the procedures for disassembling and replacing the modules of the Explor@ VX system.

These procedures describe the operations to be carried out in the field by Service personnel for correct maintenance of the systems.

CAUTION! *Before proceeding to disassemble the modules, you must switch off the system and remove the power cable from the electrical socket.*

3.2 REMOVING THE REAR COVER

To remove the rear cover, proceed as follows:

- Loosen manually the two screws **A** positioned at the sides of the rear cover.

Figure 3-1

- To reassemble, follow the procedure in reverse order.

3.3 REMOVING THE FAN (ONLY FOR THE EXPLOR@VX MODEL FAN)

To replace the fan, proceed as follows:

- Remove the rear cover as described in Chapter 3.2
- Remove the 2 screws **A**.

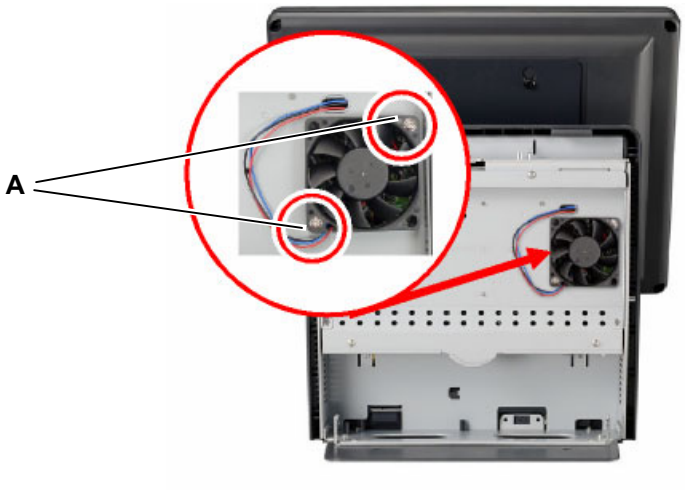


Figure 3-2

- Disconnect the connector **B** from the motherboard.

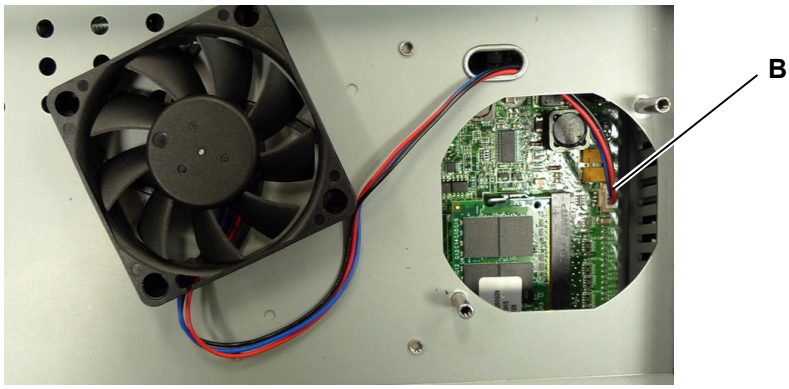


Figure 3-3

- Replace the fan with a model having the same specifications.
- To reassemble, follow the procedure in reverse order.

3.4 REMOVING THE MOTHERBOARD

To remove the motherboard, proceed as follows:

- Remove the rear cover as described in Chapter 3.2
- Remove the metal cover protecting the motherboard by removing the 4 screws **A**.

Figure 3-4

- Disconnect the cables indicated by the arrows
- If a fan is present, disconnect also connector **C**
- Remove the motherboard and support unit by removing the 2 screws **B**.

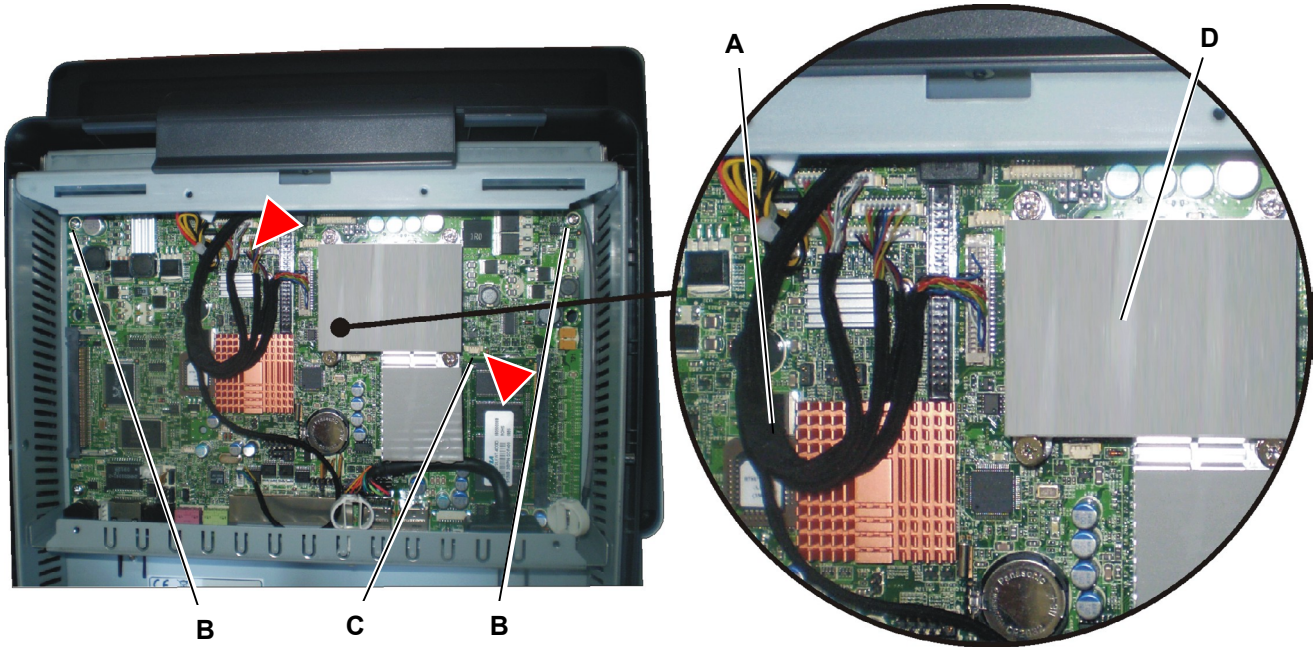


Figure 3-5

- To reassemble, follow the procedure in reverse order.

CAUTION: When reassembling, make sure that the sheath of the cables coming out of the video does not get caught between dissipator **D** and the metal cover. The enlarged view shows the correct position for the sheath (**E**).

3.5 REMOVING THE HEAT DISSIPATOR ON THE MOTHERBOARD

To replace the dissipator, proceed as follows:

- Remove the rear cover as described in Chapter 3.2 and the metal cover of the motherboard.
- Remove the 4 screws **A**.

Figure 3-6

- Replace the heat dissipator.
- To reassemble, follow the procedure in reverse order.

3.6 REMOVING THE SDRAM MEMORY

To replace the SDRAM memory, proceed as follows:

- Remove the rear cover as described in Chapter 3.2 and the metal cover of the motherboard.
- Remove the memory from the slot, extracting it upwards.

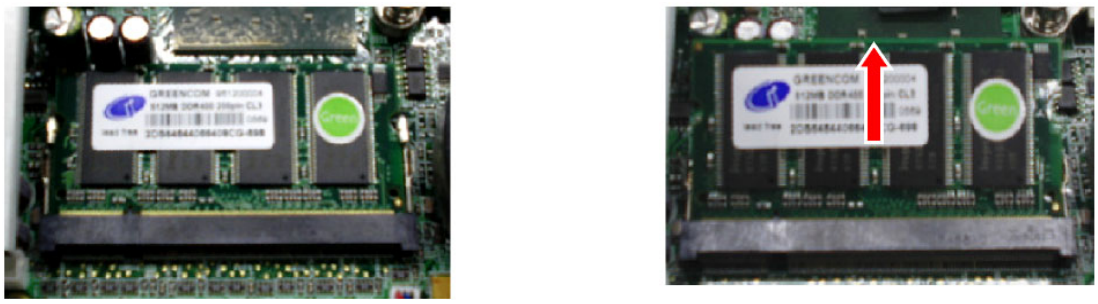


Figure 3-7

- Insert the new memory bank, exercising a slight pressure from up downwards.

3.7 REMOVING THE REAR SCREEN

To remove the rear screen, proceed as follows:

- Remove the screws **A** and the LCD signal connector.

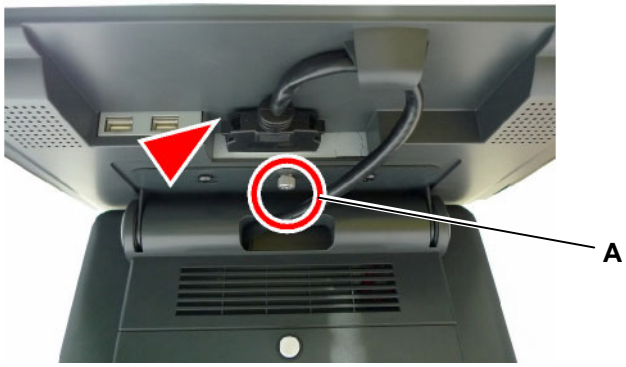


Figure 3-8

- Loosen the 4 screws **B** and extract the LCD monitor, sliding it upwards.

Figure 3-9

- Remove the 4 crosshead screws **C** and screws **D.** Support the monitor with one hand to prevent it from falling when the last clamp screws are removed.

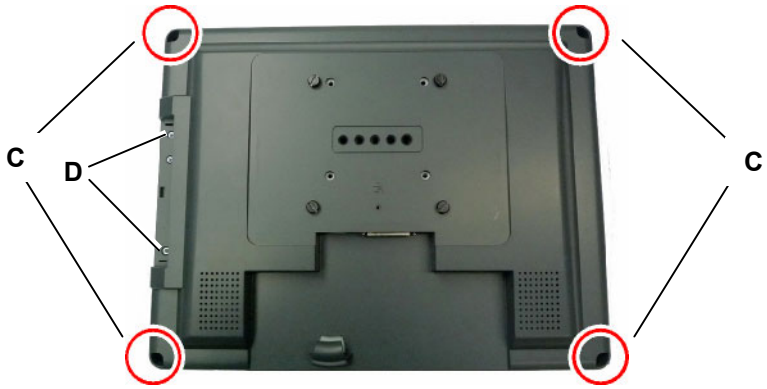


Figure 3-10

- To reassemble, follow the procedure in reverse order.

3.8 REMOVING THE LCD SCREEN

To replace the LCD screen, proceed as follows:

- Remove the rear screen as described in Chapter 3.7
- Disconnect the cables indicated by the arrows

Figure 3-11

- Remove the 4 screws **A** located on the sides of the screen.

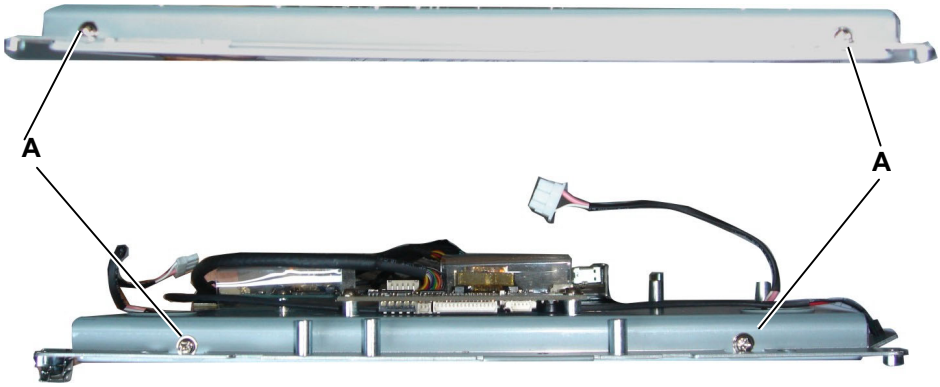


Figure 3-12

- To reassemble, follow the procedure in reverse order.

3.9 REMOVING THE TOUCHSCREEN CONTROL CARD

To replace the touchscreen control card, proceed as follows:

- Remove the rear screen as described in Chapter 3.7
- Disconnect the connectors indicated by the arrow and the 3 screws **A**

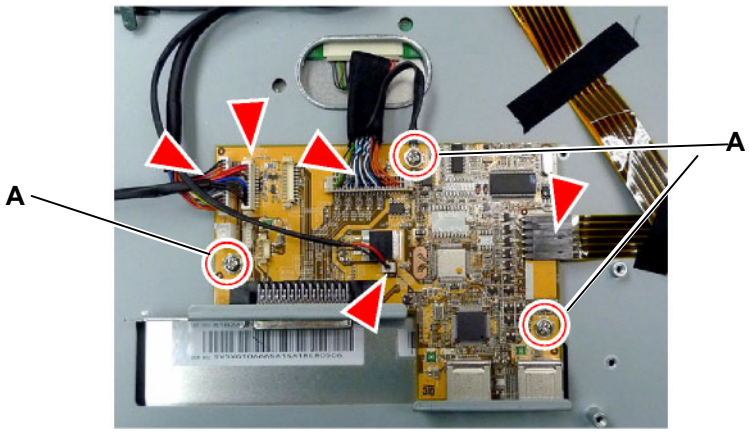


Figure 3-13

- To reassemble, follow the procedure in reverse order.

3.10 REMOVING THE LCD MONITOR INVERTER

To replace the inverter of the LCD monitor, proceed as follows:

- Remove the rear screen as described in Chapter 3.7
- Disconnect the connectors indicated by the arrow and the 2 screws **A**

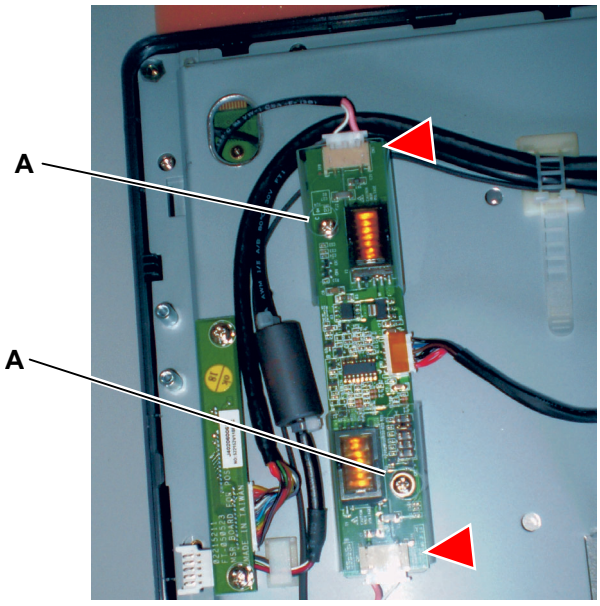


Figure 3-14

- To reassemble, follow the procedure in reverse order.

3.11 REMOVING THE SPEAKERS

To replace the speakers, proceed as follows:

- Remove the rear screen as described in Chapter 3.7
- Disconnect the connector indicated by an arrow and the 4 screws **A**

Figure 3-15

- To reassemble, follow the procedure in reverse order.

3.12 REPLACING THE HARD DISK

To replace the hard disk, proceed as follows:

- Remove the cover protecting the hard disk by loosening the screws **A**.

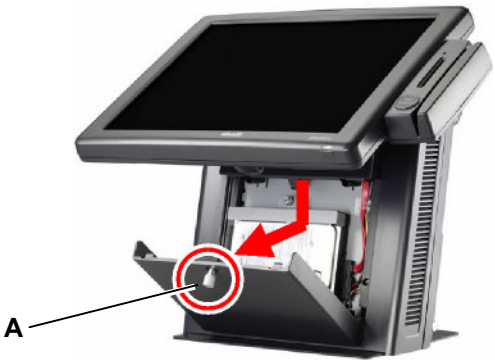


Figure 3-16

- Disconnect the cable **A** and screw **C** of the metal bracket securing the hard disk.

3.5” HARD DISK

Figure 3-17

- Replace the hard disk and reassemble and close the front cover.

Figure 3-18

3.13 REMOVING THE POWER CABLE

To replace the power cable, proceed as follows:

- Remove the rear cover as described in Chapter 3.2
- Disconnect the power cable.

Figure 3-19

- Insert the new cable for the external power unit passing it through the hole present in the metal cover

Figure 3-20

- To reassemble, follow the procedure in reverse order.

UPDATING STATUS

DATE	UPDATED PAGES	PAGES	CODE
09/2009	1st EDITION	63	XZAC8717