IRIX P.O.S. Terminal

User Manual

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POSitve Systems
Falderbaumstresse 12
34123 Kassel-Waldau.
Germany

POSitive Systems
Blas Parera 476
1609 Boulogne
Buenos Aires, Argentina

e-mail: support@positivesystems.com
http://www.positivesystems.com

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Technical Support

If you have problems or difficulties in using the system, or setting up the relevant devices, and applications that are not explained in this manual, please contact our service engineer for service, or send email to support@positivesystems.com .

Returning your equipment for Service & Technical Support

If you require servicing, contact the dealer from whom you purchased the product for service information. You can help assure efficient servicing of your product by following these guidelines:
- A list of your name, address, telephone, facsimile number, or email address where you may be reached during the day
- Description of you peripheral attachments
- Description of your software (operating system, version, application software, etc.) and BIOS configuration
- Description of the symptoms (Extract wording any message)

For updated BIOS, drivers, manuals, or product information, please visit us at www.positivesystems.com

WARNING

Never handle the equipment in the following manners, as it may break, become out of order, or overheat causing smoke and resulting in fire or electric shock.
If the equipment is used in an abnormal condition, then problems such as smoke emission, abnormal odor / noise, and fire can result. If an abnormal condition exists, be sure to disconnect the power plug from the plug socket, and contact your dealer.

- Do not allow the equipment to receive strong impacts or shocks, such as kicking, stomping, hitting, dropping, and the like.
- Install the equipment in a well-ventilated place.
- Do not connect / disconnect a power cord or a data cable, while holding the cable. Do not pull, install, use, or carry the equipment in such a manner that force will be applied to the cables.

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- Do not drop or insert any foreign substances, such as clips or pins, into the equipment.
- Do not spill any liquid or spray any chemical-containing liquid over the equipment. If any liquid is spilled on it, turn off the power, disconnect the power cable and power cord from the plug socket, and contact your dealer.
- Use the equipment only with an approved commercial power supply and AC adapter as specified below. Negligence of this may result in fire, electric shock, or problems.
- If you drop or break the AC adapter, or if water or the like gets inside it, unplug it immediately from the socket and contact your dealer.
- Do not damage, break, process, bend / pull by force, or twist an AC adapter cord. Also, do not put a heavy element on it or heat it. The AC adapter cord could be broken, resulting in fire, electric shock, or trouble. If the AC adapter cord is damaged, contact your dealer.
- Do not connect / disconnect the AC adapter with wet hands.
- Do not overload a single electrical outlet, using a table tap or a current tap socket.

Precautions for installation

- Do not use or store the equipment in a place exposed to fire, moisture, or direct sunshine, or in a place near a heater or thermal device where the prescribed operating temperature and humidity are not met, or in a place exposed too much oil, iron powder, or dust. The equipment may become out of order, emit smoke, or catch fire.
- Do not install or use the equipment in a place like a laboratory where chemical reactions are expected, or in a place where salt or gases are contained in the air. There is a danger of fire or electric shock.

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- Install the equipment on a flat table using support for tables or against the wall using VESA support
- Do not place anything on the equipment or leave small objects, like a clip or pin, around it. A foreign object could cause trouble if it gets inside.
- Do not use the equipment near a radio or TV receiver. Do not share the power from a plug socket where a radio or TV receiver is connected. It may cause a reception problem.
- Use the equipment only at the specified power supply, voltage and frequency. Otherwise, it may emit smoke and catch fire or cause other problems.
- Confirm that a plug socket used for connection has sufficient capacity.
- Avoid connecting a power cable to a plug socket shared by other devices or extending the wiring too far. It may result in the cable catching fire or a power outage. Also, do not step on or apply an excessive force (Pull, load) to the cable, and do not use the equipment with such a force applied to it.
- Never connect a grounding cable (Frame ground) to a gas pipe. There is a danger of explosion. When connecting or disconnecting the grounding cable, be sure to disconnect the power cable and the power plug from the plug socket.
- When connecting/disconnecting the cables, be sure to turn off the power first. Always do this holding the connectors and not by pulling the cables. Pulling the cable itself could cause it to snap or become damaged.
- Use the equipment in an environment where there is a plug socket near the main body and you can easily disconnect the power plug from it, to shut off the power.

Table of contents

Chapter 1
Introduction of
IRIX

Overview

The **IRIX** is a complete Point Of Sale terminal, integrating –in a very compact design– a 15″ TFT LCD Touch Panel in an IPC (Industrial PC). This manual provides informations on the physical features, hardware setup and software installation.

The **IRIX** is a perfect Point of Sales Terminal, especially for those areas where the good looking and place saving is very essential.

Highlights

- 15″ TFT Color Panel (SVGA)
- Touch –Panel with resistive membrane.
- Integrated single all-in-one low power industrial PC (IPC).
- Cold running system (no fans, no noise, no moving parts, no ventilation holes).
- Ultra Compact Design.
- USB & Network bootable.
- Wide DC operation (8-14 V)
- Splash proof design.
- Modular (optional peripherals attachable.)

The core of the **IRIX** is a new generation Industrial PC Systems Board. This board is able to support from 600 MHz CPUs up to 1.5 GHz, and includes 10/100M MII interface network port, a Mini PCI expansion bus and a 4MB PCI-VGA controller that can support both LCD's and CRT's simultaneously or independently.

This CPU has
- 6 serial ports:
    - 2 for internal use (eventually it could be use for external use too).
    - 4 serial ports RS-232C RJ 48 10 pos (1 serial port with 5/12 v option).
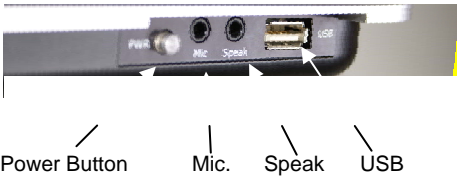   - 1 serial port RS-232C RJ 45 6 pos (pole display use).

- 1 USB portsfor internal use.
- 3 USB ports.
- Lan 10/100

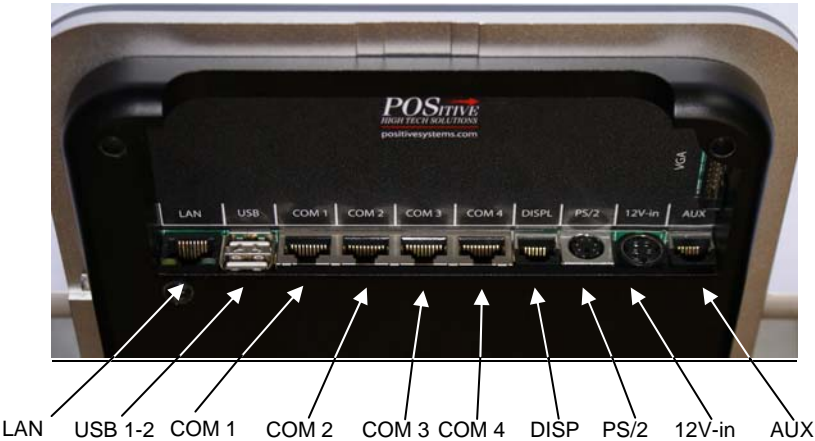Power management is also featured to lower the rate of consumption.

Layout
Front

The side Panel

Power Button   Mic.   Speak   USB

The back Panel

LAN   USB 1-2 COM 1   COM 2   COM 3 COM 4   DISP   PS/2   12V-in   AUX

Specifications

CPU:

- Intel Celeron M.
- Chipset Intel 852GME+ICH4
- 512 MB RAM on SoDIMM Socket
- Ethernet: Intel 82562 10/100 Lan Port
- 1 VGA output (Works simultaneously with LCD panel)
- Graphics: Intel 852GME VGA integrated up to 32 MB shared
- 80 GB 2.5″ Toshiba HDD + 4Gb Compact Flash
- 4 Serial Ports with 10 Pin Rj-48 jack connectors.
- 1 Serial Port with 6 Pin RJ-45 jack connector
- 1 Keyboard & Mouse PS/2 port (using provided splitter cable)
- On-board buzzer and LED indicator
- Flash BIOS with easy upgrade utility
- On-board Audio
- 3 USB Ports
- Single +5v operation
- EMI considered on every output signals

TOUCH PANEL:

- Analog resistive type, 15″ active area touch panel, dot resolution @ 3mm, rhombus layout.
- Heavy-Duty 2mm glass.

DISPLAY:

- Active Matrix 15″ TFT LCD (SVGA) resolution 1024 x 768 RGB.

POWER REQUIREMENTS:

- 8-14 volt DC input, 17 watts.

DIMENSIONS:

- W: 270mm, L: 240mm, H: 200mm

WEIGTH:

- 4,7 Kg. including table VESA support.

ATTACHABLE MODULES:

- Magnetic Card Reader (MCR).
- Keyboard modules.
- Numeric keypad.
- Chip Card Reader
- Various mechanical keyboards.
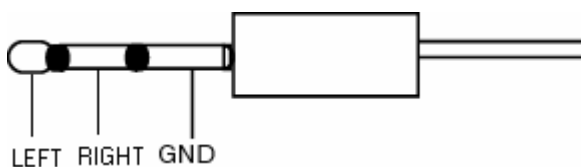- Compact Flash Reader.
- External HDD
- External Floppy
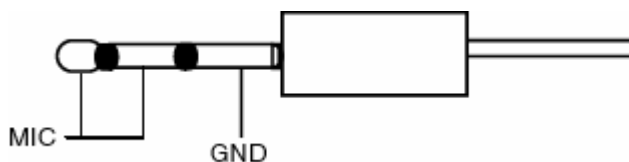
Chapter 2
Hardware Description

PW IN Jack

The DC Mini Din plug of the power supply included with
your **IRIX** must be connected to the **PW IN** jack located
on the back panel. An interlock plug must be connected to
the power supply and to the nearest AC outlet.

L.O (Line Out)

Stereo audio output for headphones or speakers.

LEFT RIGHT GND

MIC (Microphone)

Mono audio input for microphone.
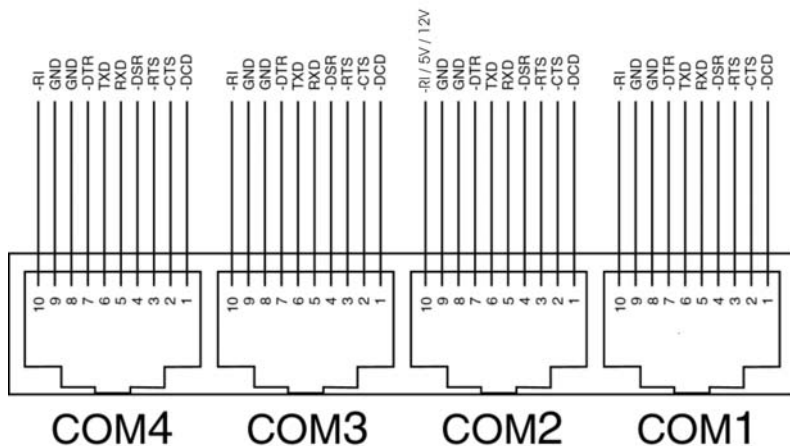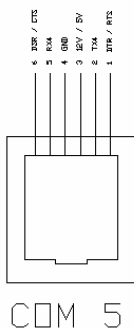

MIC —   GND

Serial Ports

The 10 Pin RJ jacks labeled **COM1-4** on the back panel of the **IRIX** can be used for any standard serial device.
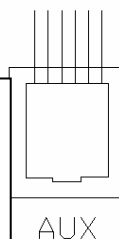The **COM-3** can be used in RS-485 mode (modifying a jumper P1-P2 inside).
Note: the serial port RJ jacks have **10** Pins and must be

Com 5 is available just when the internal one is not used for touch or any other device.

AUX can be conected to COM5, COM6 or any USB port if they are not used internally.
The Pin Out is not defined, then it could be defined as port for futures features o customer special requirements.
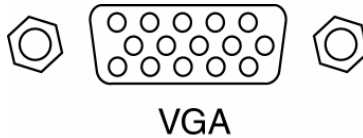
USB (Universal Serial Bus)

The **IRIX** has 3 port USB connector. Any USB device can
attach with plug-and-play supported.
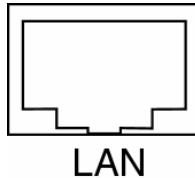The connectivity is standart international pattern.

VGA (Monitor output)

A standard VGA color monitor can be connected to the monitor output labeled **VGA** on the back panel of the **IRIX**. When a monitor is connected to the **IRIX**, the TFT LCD touch panel and the external monitor work simultaneously.

VGA

LAN Ethernet

It is possible to connect the **IRIX** to a local area network. This is carried out using a UTP cable connected to the RJ45 connector labeled **LAN** on the back panel of the terminal.

LAN

PS/2 Port

Keyboards and other PS/2 devices can be connected to the jack labeled **PS/2**. Some PS/2 devices use this jack to draw power apart from data transmission. If this is the case, make sure the device's requirements do not exceed 100 mA of continuous power.
Both keyboard and external mouse connection is available with an external split cable.

PS/2