Winlinx Family

Mobile Thin Client Terminal

Hardware User's Guide

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CONTENTS

INTRODUCTION

OVERVIEW 1

FEATURES 2

Optional Features 2

INSTALLATION

SITE REQUIREMENTS 3

PRECAUTIONS & SAFETY REQUIREMENTS 3

WARNING 4

WALL MOUNTING 4

CONNECTING THE THIN CLIENT 5

Rear Panel Overview 5

TROUBLE SHOOTING 6

SPECIFICATION

HARDWARE 7

MECHANICAL 7

ENVIRONMENTAL 7

ELECTRICAL 8

INTERFACE 8

CONNECTORS & CABLING INFORMATION

CONNECTORS 9

COM1 / COM2 Ports 9

Printer Port (Parallel) 10

10/100BASE-T LAN Interface 10
Video Port 11
Mouse / Keyboard Port..... 11
Audio / Microphone Port 11
CABLING REQUIREMENTS..... 12
10/100BASE-T Cabling 12
COM1/COM2 (Serial Port) Cabling..... 13
Printer Cabling..... 14

Chapter-1

INTRODUCTION

OVERVIEW

Thank you for purchasing Mobile Thin Client Terminal for Windows.

Figure 1 Mobile Thin Client Terminal

FEATURES

The Winlinx Thin Client terminal:

- utilizes an industry standard 200MHz Cyrix MediaGXm MMX high speed processor with 64MB DIMM memory (expandable to 128MB)
- offers high speed windows performance.
- provides secure access to network resources.
- provides extremely low administration costs.
- supports high resolution up to 1280x1024, 256 colours.
- has a 10/100Base-T Ethernet port.
- has dual high-speed serial ports and a parallel port.
- 16 bit Stereo Line output
- microphone input.
- 3.5" Hard Disk drive.

Optional Features[i]

- External wireless modem connectivity

Note: In an endeavor to provide a better product to you, the customer, our Company pursues continuous development of software and hardware features. As a result the product you received may have features additional to those contained and described within this guide. For the latest information visit our web site at http://www.vxl.net

[i] Some of the options are mutually exclusive. Only certain combinations of the optional features are possible.

Chapter-2

INSTALLATION

The Thin Client carton contains:

- Thin Client unit
- DC inlet & outlet Plug
- Earth wire
- Mouse
- Hardware User's Guide (which you are currently reading)

Note: Trans-shipment should be done in original packing to avoid damage during transit. Please retain the original carton and packaging material for future use.

SITE REQUIREMENTS

- 12V DC ⎓ 6A battery connection.
- Protective earth connection
- A table or desk of suitable size for placing the Thin Client.
- Suitable place for the Thin Client, such that it
  - can be kept nearest to the battery, to provide user easy accessibility to the connection in case of emergencies.
  - is well ventilated with clean, dry and dust free air to maintain proper operating temperature.

PRECAUTIONS & SAFETY REQUIREMENTS

- Always provide minimum space of 4 inches (10cm) around the Thin Client for convection cooling.
- Always switch off the Thin Client before removing or attaching the battery connection or cables.
- Ensure that the chassis has a **reliable earth connection**.

WARNING

The wires in this power cable are colored in accordance with the following code :-

+12V	-	**YELLOW**
12V GND	-	**BLUE**
+5V	-	**RED**
5V GND	-	**BLACK**
	-	**YELLOW / GREEN**

Do not reverse or short circuit the output & input terminals.

WALL MOUNTING

The Mobile Thin Client can be mounted on the wall. This allows better utilization of space. When the unit is to be wall mounted, the rubber bushes on the bottom side have to be removed, as shown in the figure below.

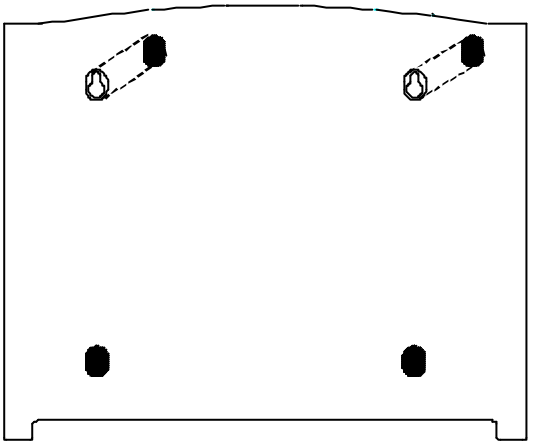


Figure 2 Bottom View of the Thin Client

CONNECTING THE THIN CLIENT

Before connecting any cables, ensure that the power switch located on the front panel is in OFF position.

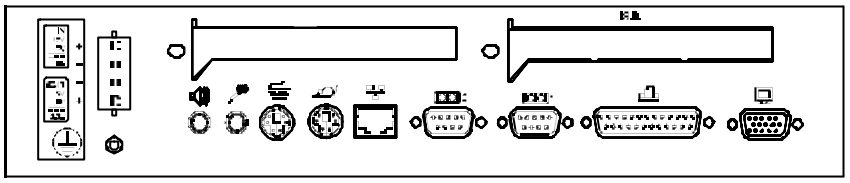


Figure 3 Rear Panel of the Thin Client with 16 Bit Stereo output

Rear Panel Overview

The following table gives the connector symbols printed on the back panel and corresponding external cable connection.

Connector Symbol	Connection Cable
IN	DC power input 12V D.C ⎓ 6A
OUT	DC power output 5V D.C ⎓ 2.2A
	Monitor Video
	PS/2 Keyboard
	PS/2 Mouse
	10/100Base-T

Connector Symbol	Connection Cable
1	Serial COM1
2	Serial COM2
	Parallel Printer
	16 Bit Stereo line output
	Microphone input

Refer to "Appendix-B, Connectors & Cabling Information" for more details about the connectors and cables.

TROUBLE SHOOTING

The following is a list of general problems and their solutions.

1) When switched on, Power LED does not glow
   - Ensure that the battery is properly connected.
2) Power LED glows but no display
   - Check whether the monitor video cable is properly plugged.
3) Mouse (or Keyboard) is not working
   - Check whether the mouse (or keyboard) connector is properly plugged.
   - Ensure that the keyboard and mouse connectors are not interchanged.

Appendix-A
SPECIFICATIONS

HARDWARE

Processor	Cyrix Media GX MMX 200MHz
VGA Memory	Shared Video Memory upto 2.5MB display RAM
RAM	64MB
Power Management	VESA display power management

MECHANICAL

Height	70 mm
Width	348 mm
Depth	328 mm
Weight	4.5 Kg (max)

Provision for wall mounting

ENVIRONMENTAL

Operating Temperature	+ 5^{o} C to +30^{o} C
Storage Temperature	- 20^{o} C to +65^{o} C
Humidity	20% to 90% RH non condensing

ELECTRICAL

Power Inlet	12V D.C. ⎓ 6A ± 10%
Power Outlet	5V D.C. ⎓ 2.2A
Power	60 W max

INTERFACE

- **COM1/COM2 Serial Ports**

– RS232C compatible operating at 115.2K baud maximum

- **10/100Base-T Port**

– LAN interface

- **Printer Port (Parallel)**

– Centronics compatible, 25 pin D-type female

- **Mouse / Keyboard Port**

– PS/2 compatible

- **Video Port**

– SVGA compatible supporting 1024 x 768, 800x600, 640x480 resolutions, 256 colors.

- **Audio Port**

– SB16 compatible stereo sound

– Microphone input.

Appendix-B

CONNECTORS & CABLING INFORMATION

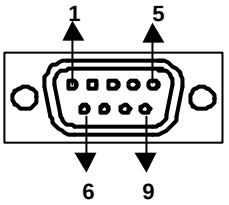
CONNECTORS

The following tables provide pin details for the Thin Client connectors. Refer to the chapter INSTALLATION for the location of the connectors on the back panel.

COM1 / COM2 Ports

9 Pin D-Type Male Connector

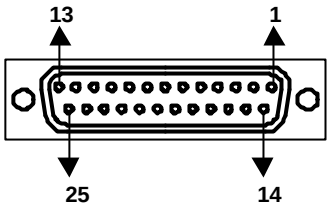
Pin	Signal	Description
1	DCD	Data Carrier Detect
2	RXD	Receive Data
3	TXD	Transmit Data
4	DTR	Data Terminal Ready
5	GND	Signal Ground
6	DSR	Data Set Ready
7	RTS	Request To Send
8	CTS	Clear To Send
9	NC	Not Connected



Printer Port (Parallel)

25 Pin D-type Female connector.

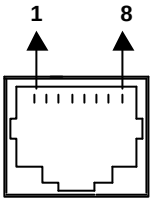
Pin	Signal
1	STROBE
2 - 9	DATA 0 - 7
10	ACKNOWLEDGE
11	BUSY
12	PAPER END
15	ERROR
18 - 25	GROUND



10/100BASE-T LAN Interface

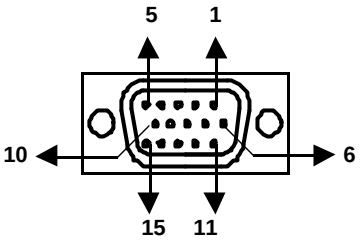
RJ-45 Modular 8 pin jack

Pin	Signal
1	TXD+
2	TXD-
3	RXD+
6	RXD-



Video Port

15 Pin D-type Female Connector



Pin	Signal
1	Red
2	Green
3	Blue
4	No Connection
5	GND

Pin	Signal
6	Red return GND
7	Green return GND
8	Blue return GND
9	No Connection
10	No Connection

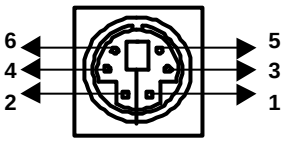
Pin	Signal
11	No Connection
12	No Connection
13	Horizontal Sync
14	Vertical Sync
15	No Connection

Mouse / Keyboard Port

PS/2 Mouse / Keyboard Connector

Pin	Signal
1	Mouse / KBD data
2	NC
3	GND

Pin	Signal
4	VCC
5	Mouse / KBD Clock
6	NC



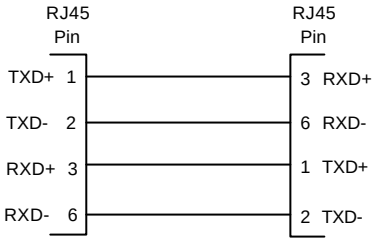
Audio / Microphone Port

Standard Audio jacks.

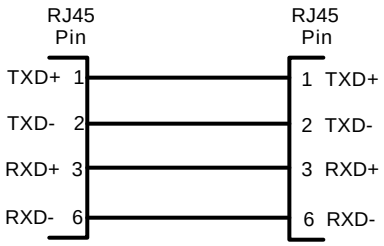
CABLING REQUIREMENTS

10/100BASE-T Cabling

Cross Connection - (Without Hub)



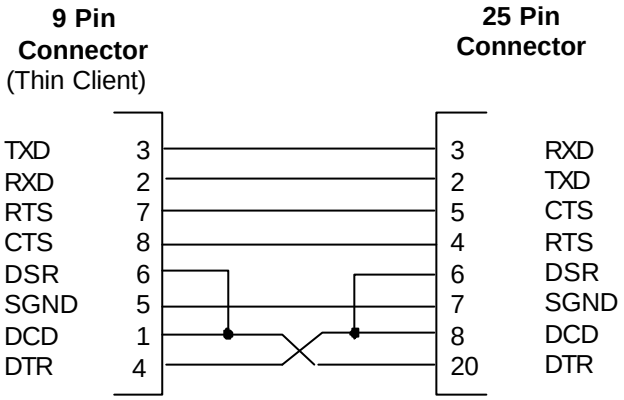
Straight Connection - (With Hub)



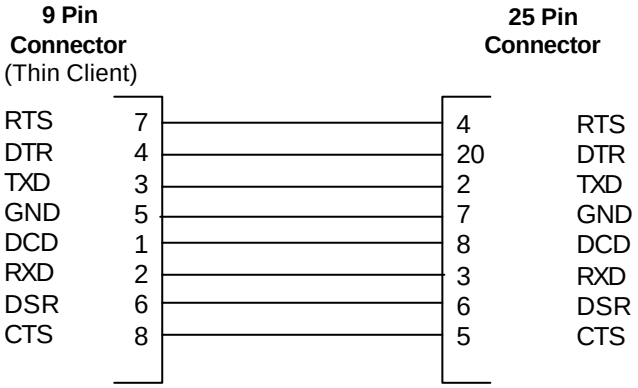
COM1/COM2 (Serial Port) Cabling

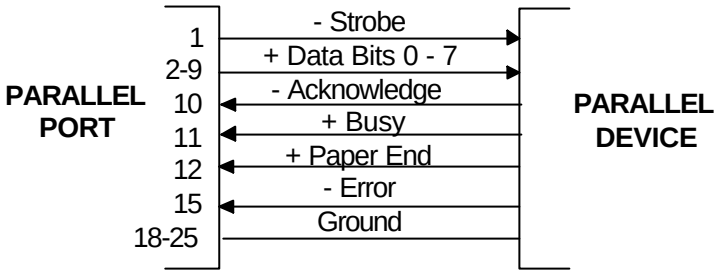
Serial devices like modems and printers use 25 pin D-type connector for RS232 connections. In order to connect RS232 device with 25 pin connector, 9 pin connector signals are to be converted to 25 pin connector. The diagram below shows their respective connections.

9 Pin to 25 Pin Cross Connection



9 Pin to 25 Pin Straight Connection



Printer Cabling

The table below gives the pin connections of the Standard Centronics parallel cable. Some manufacturers have changed pin functions or polarity on their printers, for such printers custom cables may be necessary. For details Refer to your printer manual for interfacing details.