



ND1750

ND1950

Integrated Thin Client
Network Display

USER'S GUIDE

www.planar.com

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Preface

This manual is designed to assist users in setting up and using the Integrated Thin Client Network Display (Network Display). Information in this document has been carefully checked for accuracy; however, no guarantee is given to the correctness of the contents. The information in this document is subject to change without notice. This document contains proprietary information protected by copyright. All rights are reserved. No part of this manual may be reproduced by any mechanical, electronic or other means, in any form, without prior permission of the manufacturer.

FCC Statement Warning

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reposition or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced monitor technician for help.

Warning

Use only shielded signal cables to connect I/O devices to this equipment. You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.

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

Canadian DOC Notice



This Class B digital apparatus complies with Canadian ICES-003.
Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

Important Safety Instructions

Please read the following instructions carefully. This manual should be retained for future use.

1. To clean the Network Display screen;
 - Power off the Network Display and unplug the AC Cord.
 - Spray a non-solvent cleaning solution onto a soft cloth.
 - Gently clean the screen with dampened cloth.
2. Do not place the Network Display near a window. Exposing the display to rain water, moisture or sunlight can severely damage it.
3. Do not apply pressure to the LCD screen. Excess pressure may cause permanent damage to the display.
4. Do not remove the cover or attempt to service this unit yourself. Servicing of any nature should be performed by an authorized technician.
5. Store (not connected to the AC power source) the Network Display in a room with a room temperature of $-20^{\circ} \sim 60^{\circ}\text{C}$ (or $-4^{\circ} \sim 140^{\circ}\text{F}$). Storing the Network Display outside this range could result in permanent damage.
6. If any of the following occurs, immediately unplug your monitor and call an authorized technician.
 - AC Power cable is frayed or damaged.
 - Liquid is spilled into the Network Display or it has been exposed to rain.
 - LCD display or the Network Display case is damaged.
7. Only use the supplied main lead (AC Power Cord) to connect the monitor. For a nominal current up to 6A and a device weight above 3 kg, a line not lighter than H05VV-F, 3G, 0.75 mm² must be used.

Important Recycle Instruction:



LAMP(S) INSIDE THIS PRODUCT CONTAIN MERCURY AND MUST BE RECYCLED OR DISPOSED OF ACCORDING TO LOCAL, STATE OR FEDERAL LAWS. FOR MORE INFORMATION, CONTACT THE ELECTRONIC INDUSTRIES ALLIANCE AT WWW.EIAE.ORG. FOR LAMP SPECIFIC DISPOSAL INFORMATION CHECK WWW.LAMPRECYCLE.ORG.



Contains Mercury, Dispose of Properly

Installation

Unpacking

Before unpacking the Network Display, prepare a suitable workspace for your Monitor and computer. You need a stable and clean surface near a wall power outlet. Make sure that Network Display has enough space around it for sufficient airflow. Though the Network Display uses very little power, some ventilation is needed to ensure that the Monitor does not become too hot.

After you unpack the Network Display, make sure that the following items were included in the box:

- Network Display
- User's Guide
- Desk Stand Base
- Power Cord
- USB Keyboard
- PS2 Mouse

If you find that any of these items are missing or appear damaged, contact Planar immediately.

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Desktop Installation

Connecting the Network Display and Base

When you open the box to take the base and put on the desk first. Then connect the Network Display and base please.(See fig.1-1)

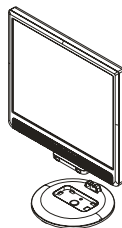


Figure 1-1

Viewing Angle Adjustment

The Network Display is designed to allow users to have a comfortable viewing angle. The viewing angle can be adjusted from -5° to $+20^{\circ}$.(See fig. 1-2)

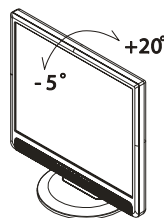


Figure 1-2

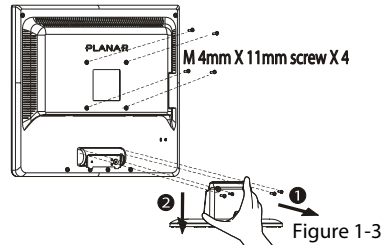
Warning

Do not force the Network Display over its maximum viewing angle settings as stated above. Attempting to do so will result in damaging the Network Display and Display Stand.

Alternate Mounting Solutions

Detaching Network Display from Its Stand

Unscrew screws ❶ the swivel base support column and pull down ❷ the hinge to release.



Interface for Arm/ Wall Mount Applications

Before installing to mounting device, please refer to Fig.1-3.

The rear of this LCD display has four integrated 4 mm, 0.7 pitch threaded nuts, as well as four 5 mm access holes in the plastic covering as illustrated in Figure 1-4. These specifications meet the VESA Flat Panel Monitor Physical Mounting Interface Standard (paragraphs 2.1 and 2.1.3, version 1, dated 13 November 1997).

Note: M4mm x 11mm (L) screws should be used for a 3mm thick mounting plate application. Thicker plates should use appropriately longer screws. The screw threads should extend between 8 and 10 mm beyond the display surface of the mounting plate. Follow the mounting device manufacturer's recommendations.

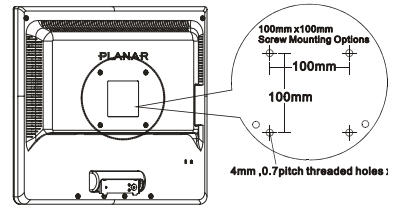


Figure 1-4

Connecting the Display to Your Network

1. Make sure the AC Power Cord is disconnected
2. Connect one end of the Ethernet cable to the Network Display's Ethernet (ENET) port. (See Fig 1-5)
3. Verify that the other end of the Ethernet cable is connected to your LAN/WAN network.
4. Make sure connections are secure and that the Ethernet connectors have "clicked" into place.

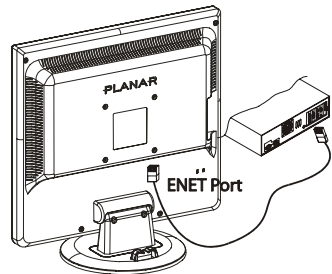



Figure 1-5

Connecting User Devices

1. USB devices such as the Keyboard can be connected to ports on the side or bottom (See Fig. 1-6 and Figure 1-7)
2. The unit may be secured through the use of Kensington locking devices. (See Figure 1-6)
3. The Headset/Handset port (RJ22)  is reserved for future use with VOIP software support tools. It is designed for connection to analog telephone headsets or handsets. We recommend only the use of a UL or other safety agency approved device.

Caution: This is not a telephone modem connection and should not be connected to a telephone line. Damage to the unit might occur.

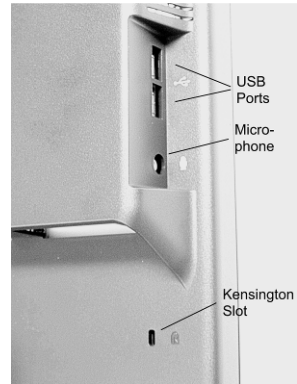


Figure 1-6

4. The PS2 Mouse connects to the PS2 connector on the right end of the keyboard.



5. A stereo headphone may be connected to the front of the Network Display

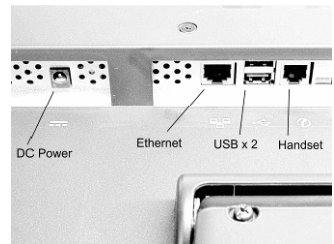


Figure 1-7

Connecting the AC Power

1. Connect the power cord to the AC adapter (See Fig. 1-8)
2. Connect the AC adapter's DC output connector to the DC Power Jack of the display.
3. Connect the power cord to a 100-240 VAC, 50/60Hz power source.

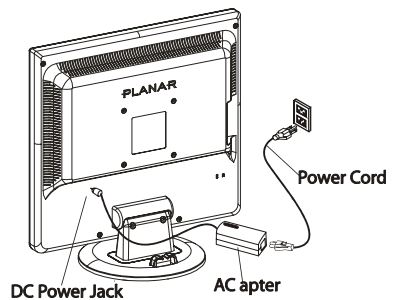


Figure 1-8

Setting Up the Network Display

1. Make sure the AC power cord is connected to the Power Adapter.
2. Press the Network Display's power switch, located on the bezel of the monitor. (See Figure 2-1)
3. After power-on, the thin client will boot and commence a series of tests and communication checks which will be shown in the System Information Event Log.
4. For the Network Display to properly connect to your network and applications servers, the Network Display and your network environment must be appropriately configured. Please contact your Information Technology specialist for further details.
5. A detailed User Guide and Administrators Guide for the Wyse Thin Client Operating System (WTOS) may be obtained at <http://www.planar.com/support/> for this product model number.

Display Controls

User Controls

A brief description and the location of all Network Display functions controls and indicators:

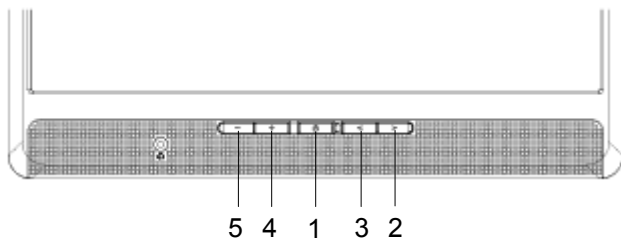







Figure 2-1

1		Power Control - LED Modes are changed by pressing the Power Control Button (Please refer to Figure 2-2)
2		Brightness Function / Adjust increase
3		Brightness Function / Adjust decrease
4		Audio Volume Function / Adjust increase
5		Audio Volume Function / Adjust decrease

Power Modes

The Network Display has three modes of operation.

Figure 2-2



The following assumes the AC Power Adapter is connected to the display and an AC power source.

	Power Mode	LED	Operation Description
1	Off	Dark	<ul style="list-style-type: none"> Power button is pressed for 3 Sec while in Standby mode (Thin client is switched off) Power button is pressed for 3 Sec while in Run mode (Thin client and display are switched off) <p>Caution: Be very careful to not turn off the Display while the operating system is downloading a software update!</p>
2	Run	Green	<ul style="list-style-type: none"> If the Power button is momentarily pressed when in the Off mode the display is powered and the thin client will boot. If the Power button is momentarily pressed while in Standby mode, the display returns to Run mode.
3	Standby	Yellow	<ul style="list-style-type: none"> If the Power button is momentarily pressed while in Run mode the display is turned off while the Thin Client continues to operate. This mode can be used for privacy or to conserve power.

Adjusting the Display

The monitor has four function control buttons designed for comfortable viewing and listening.

Function Description

Icon	Function	Function Description
	Brightness	The brightness of the display may be varied.
	Audio Volume	The volume of the speakers and headphone may be varied.

Technical Information

Specifications

LCD Panel	ND1750	ND1950
Size	17" SXGA	19" SXGA
Display Type	Active matrix color TFT LCD	Active matrix color TFT LCD
Resolution	1280 x 1024	1280 x 1024
Display Dot	1280 x (RGB) x 1024	1280 x (RGB) x 1024
Aspect Ratio	5:4	5:4
Display Area , mm (H x V)	337.92 mm (H) x 270.34 mm (V)	376.32 mm (H) x 301.6 mm (V)
Displayed Colors	Up to 16.2M with FRC or Dithering	Up to 16.2M with FRC or Dithering
Brightness	300 cd/m ² (typical)	300 cd/m ² (typical)
Contrast Ratio	800:1 (typical)	800:1 (typical)
Response Time	5ms (typical)	5ms (typical)
Color Temperature	6500°K, Factory Calibrated	6500°K, Factory Calibrated

Controls

Power Switch (Momentary)	Power Mode control with LED indicator
Brightness	2 buttons
Audio	2 buttons

Audio

Input	Microphone Level, Monophonic
Speaker Output	0.5W + 0.5W

OSD

Brightness	Digital
Volume	Digital

Power Management

Power Mode	Power Consumption*	Power LED Color
Run	60 W maximum (DC output, 12V/5A) ND1750: 36 W, typical ND1950: 40 W, typical	Green
Standby	12 W maximum 10 W typical	Yellow
Off	1 W maximum	Dark

External Connections		
Power Input (DC input)	DC Socket, 12V, 5A (Center Positive)	
GigaBit Ethernet port	RJ45	
USB ports	4 x USB connectors, Type A Receptacles	
Headphone	3.5mm Stereo Jack	
Microphone	3.5mm Mono Jack, Pink	
Headset	RJ22 (4P4C, Reserved for Future VOIP Software Support)	
Environment		
Operating Condition:	Temperature	5°C to 40°C/41°F to 104°F
	Relative Humidity	20% to 80%
Storage Condition:	Temperature	-20°C to 60° C/-4°F to 140° F
	Relative Humidity	5% to 85%
Power Supply (AC Input)		
Input Voltage	Single phase, 100 ~ 240VAC, 50 / 60 Hz	
Input Current	1.5 A maximum	

Size and Weight	ND1750	ND1950
Dimensions	367 (W) x 384 (H) x 199 (D) mm	413 (W) x 418 (H) x 222 (D) mm
Net Weight	4.5 kg	4.6 kg
Gross Weight	7.7 kg	8.0 kg

Supported Display Resolutions

If the selected timing is NOT included in table below, the Network Display will use the most suitable available timing.

Mode	Resolution (Horizontal X Vertical)
SXGA	1280 X 1024
XGA	1024 X 768
SVGA	800 X 600
VGA	640 X 480

Troubleshooting

This Network Display has been pre-adjusted using factory standards.


PROBLEM There is no image on Network Display

If there's no image on the Network Display, please perform the following steps:

1. Verify that the power cord is connected to a proper source of power.
2. Verify that the power cord is fully connected to the Power Adapter and that the Power Adapter cord is fully connected to the DC connector on the rear of the Display. The LED on the Power Adapter should be green.
3. Verify that the Power Indicator on the Network Display is green.
4. Turn off the Network Display and then turn it back on again.

PROBLEM The displayed image is dim.

If the displayed image on the Display appears too dim:

1. Press the Brightness Control  to increase the brightness.

PROBLEM The Network Display will not connect to your network.

If the Network Display will not connect to your network, please perform the following steps:

1. Verify that the Ethernet connector is properly connected to your network and to the Display.
2. Verify that your network is live and properly configured for use with the network display.

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020-0689-00A