

# OWNER'S MANUAL DIGITAL SIGNAGE MEDIA PLAYER

Please read this manual carefully before operating your set and retain it for future reference.

**DIGITAL SIGNAGE MEDIA PLAYER** NC1000

NC2000

www.lgsupersign.com www.LGsolutions.com

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## **Specifications**

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#### **General Specifications**

 Product specifications may change without prior notice to improve performance.

Dimensions 250 mm (W) x 220 mm (H) x 45 mm (D) (only Set)

Weight 1.321 kg (only Set)

CPU Intel ATOM Processor 330 1.6 GHz(Dual Core), FSB 533 MHz

Chip Set Nvidia MCP7A-I ON

Main Memory DDR3 1066 SODIMM type 1 GB, 2 GB

Secondary Storage Device SATA SSD 8 GB, 16 GB, 32 GB

O/S Windows Embedded Standard

		SSD			
		8G	16G	32G	
חחח	1GB	NC1000-BAAB	NC1000-CAAB	NC1000-DAAB NC1000-DABB	
אטט	2GB	NC1000-BABB	NC1000-CABB	NC1000-DABB	

#### Multi I/O Port

(Digital Audio Out)

Serial Port	One external RS-232 Serial port
USB Port	Hi-Speed USB 2.0 port 480 Mbps rate (x5)
LAN Port	Realtek RTL8103E 10/100 Mbps Ethernet controller
VGA / HDMI	Nvidia MCP7A-ION integrated Graphic chipset
4-in-1 Card	Secure Digital (SD) / MultiMedia Card (MMC/MMC4.0) / Memory Stick (MS/MS-Pro) / xD Memory Card
PCI Express Card Slot	Supported
LINE OUT	Supported
SPDIF	5.1 Channel Supported (depending on source signal)

### **Operational Specifications**

Resolution	Maximum Resolution	1920 x 1080 @	60 Hz		
	Recommended Resolution	1920 x 1080 @	60 Hz		
Power	Rated Voltage	AC 100-240 V~	, 50 / 60 Hz, 1.2 A		
Sound Output Wattage	RMS Audio Output 10 W + 10	0 W (R + L): When	n connected to the n	nonitor (model	name:M4224C)
Operating Condition		Syn	c (H/V)	Video	LED
	Normal Mode	0	n/On	Active	On
	Deep Sleep Mode (Set = Off)	0	ff/Off	Off	Off
Operating Conditions	Operating Conditions	Temperature	5 ℃ to 35 ℃	Humidity	10 % to 80 %
	Storage Conditions	Temperature	-20 °C to 60 °C	Humidity	5 % to 95 %

### Included in the Box

#### **Basic Components**

The NC1000 with the following components. Please check that these components have been included prior to installation.



#### **Attention**

• These illustrations may differ from your product and are subject to change.

#### **Optional Items**

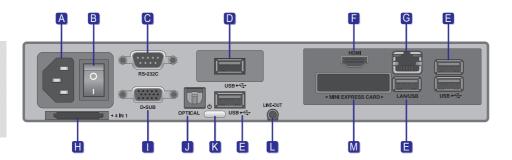
The following items are supported by the NC1000, but are not provided with the product.

Please purchase optional items as needed.

• HDMI cable, D-sub cable, LINE-OUT cable, fiber optic cable, LAN cable, mouse, keyboard.

# Connections

### **Back Panel**



Number	Connection	Description
A	Power Cable In	For the power cable.
В	Power Switch	Provides power to the NC1000.
C	RS-232C Out	For the RS-232C cable.
D	USB Wireless Modem In	For a USB-type wireless modem.
<b>=</b>	USB In	For USB-type devices, including memory, hard disk, CD-ROM, keyboard, and mouse.
F	HDMI Out	For an HDMI-compatible monitor.
G	LAN Connector	For a LAN cable.
H	4 IN 1 Multi-Card Slot	Accommodates memory cards for storing video or reading images. Supported cards include Secure Digital (SD), MultiMedia (MMC/MMC4.0), Memory Stick (MS/MS-Pro), and xD Memory Cards.
	D-sub Out	For the monitor's RGB video in.
J	OPTICAL Out	For an optical cable for digital audio transfer.
K	NC1000 Power Button	Turns NC1000 on.
	LINE-OUT Connector	For a LINE-OUT cable for analog audio transfer.
M	PCI MINI EXPRESS Card Slot	Provided for PCI Mini Express Cards.

### Installation

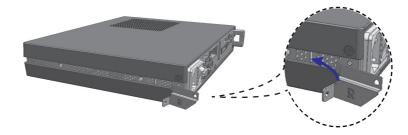
We recommend you to use the items provided with your NC1000 and follow our instructions for integrating the product with your monitor in order to ensure the correct results.



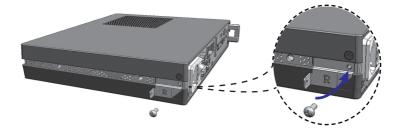
#### Attention -

The illustrations shown are to guide your integration and may differ from your product.

Place the handle into the slots on the side of the product.



Use screws to secure the handle.



Place the rail in the slots on the side of the product.



#### Warning

• Be careful of sharp edges on the rail and the handle.

4 As shown below, use screws to secure the Box Guide in the four slots at the back of the monitor.

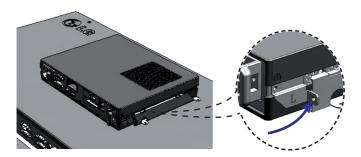


5 Attach the Box Guide to the rail slots, and press it upward.





6 Use screws to secure the player and the Box Guide as shown below.



In order to watch video on a monitor, you need to use a D-sub cable or an HDMI cable to connect the NC1000 to a monitor.

#### ▲ Attention —

- D-sub, HDMI, LINE-OUT, OPTICAL, and LAN cables are not included with the NC1000. If the cables were not provided with your monitor, you may need to purchase them separately.
- After all required cables are connected, configure SET ID to 1 for the first monitor connected to the NC1000. The SET ID for one of the connected monitors should be configured to 1.
- To configure the SET ID, please refer to the owner's manual for your monitor.
- Monitors used with NC1000 should support LG RS-232C protocols. The brightness, resolution, sound, and other features of an LG RS-232C protocol-enabled monitor can be controlled by SuperSign Manager software.

#### Note —

• A SET ID is a reference number for the monitor that can be set to the user's preference. The monitor SET ID is used by the SuperSign Manager software to identify monitors.

#### Connecting a Monitor with D-sub Cable



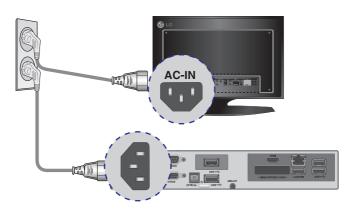
#### Attention -

• A D-sub cable connection does not include an audio signal. For audio, you need to connect a LINE-OUT or OPTICAL cable.

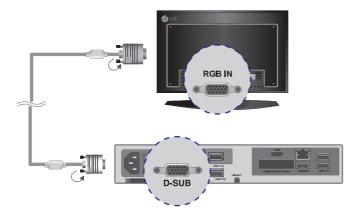
#### Note -

D-sub cables are also known as RGB cables.

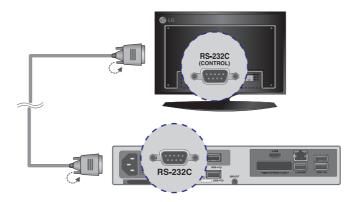
Connect the appropriate power cables to a monitor and NC1000 respectively.



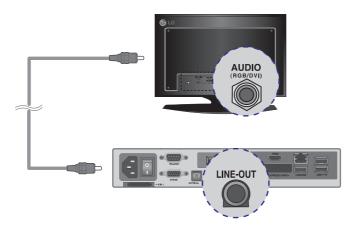
2 Connect the D-sub port of NC1000 and RGB-IN port of the monitor with a D-sub cable.



3 Connect NC1000 (OUT) to the monitor (IN) with an RS-232C cable.



4 Connect the NC1000 to the monitor with a LINE-OUT cable.



5 Connect a LAN cable to the NC1000.



#### Connecting a Monitor with an HDMI Cable

HDMI connections allow digital video and audio signals to be transferred with one cable.

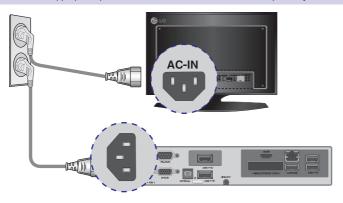
HDMI cable connections do not require an additional audio in cable.

#### - 🔦 Note

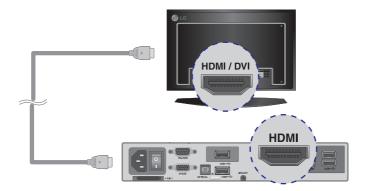
• In and Out signals are not differentiated when using HDMI cables.

#### Attention

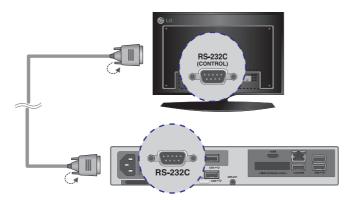
- The monitor to connect with NC1000 should have the HDMI in for the HDMI connection.
- To use the HDMI device, you need to activate the HDMI device in Microsoft Windows Embedded Standard, the
  operating system of the NC1000. The procedures for activating and deactivating HDMI devices are described below.
- 1 Connect the appropriate power cables to a monitor and NC1000 respectively.



2 Connect NC1000 to a monitor with an HDMI cable.



3 Connect NC1000 (OUT) to the monitor (IN) with an RS-232C cable.



4 Connect a LAN cable to NC1000.



#### Connecting/Disconnecting HDMI in Windows

#### **Connecting HDMI**

Move to the desktop of the monitor connected to the NC1000.

- Click the **\*\*Bisian\*\*** button in the lower left of the screen.
- 2 Select Start > Control Panel > Sounds and Audio Devices > Audio.
- Select Play Sounds > NVIDIA High Definition Audio from the list and click OK.

#### **Disconnecting HDMI**

Move to the desktop of the monitor connected to the NC1000.

- Click the **\*\*Star\*\*** button in the lower left of the screen.
- Select Start > Control Panel > Sounds and Audio Devices > Audio. 2
- Select Play Sounds > Realtek HD Audio output from the list and click OK.

- Attention
- If you do not reset after disconnecting the HDMI cable from the NC1000, the sound will not work.
- In order for the sound to work properly, stop playing the content and restart the NC1000.

#### Connection to Multiple Monitors

Each NC1000 can accommodate up to 25 monitors for video playback. (SET ID: 1 to 25)

- 1 Connect the NC1000's **D-sub OUT** to the **D-sub IN** of the first monitor, which has **SET ID = 1**.
- 2 Connect other monitors with **D-sub** cables as shown below (**IN/OUT** separated).



- 3 Connect the NC1000's RS-232C OUT to the RS-232C IN of the first monitor, which has SET ID = 1.
- 4 Connect other monitors with RS-232C cables as shown below (IN/OUT separated).



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#### Attention

- You may want to purchase additional RS-232C cables to use several monitors together.
- You cannot use multiple monitors with the HDMI cable.

### **Specifications**

#### Attention

• Product specifications may change without prior notice to improve performance.

#### **General Specifications**

**Dimensions** 99.8 mm (W) x 183.3 mm (H) x 28.4 mm (D) (only Set)

0.215 kg (only Set) Weight

**CPU** Intel ATOM Processor 330 1.6 GHz(Dual Core), FSB 533 MHz

Chip Set Nvidia MCP7A-I ON

Main Memory DDR3 1066 SODIMM type 1 GB, 2 GB

Secondary Storage

Device

SATA SSD 8 GB. 16 GB. 32 GB

O/S Windows Embedded Standard

		SSD			
		ออบ			
		8G	16G	32G	
	1GB	NC2000-BAAB	NC2000-CAAB NC2000-CABB	NC2000-DAAB	
אטע	2GB	NC2000-BABB	NC2000-CABB	NC2000-DABB	

#### Multi I/O port

Serial Port N/A

**USB Port** Hi-Speed USB 2.0 port 480 Mbps rate (x3)

LAN Port Realtek RTL8103E 10/100 Mbps Ethernet controller

VGA / HDMI Nvidia MCP7A-ION integrated Graphic chipset

N/A 4-in-1 Card

Supported PCI Express Card Slot

N/A LINE OUT **SPDIF** N/A

(Digital Audio Out)

#### **Operational Specifications**

Resolution	Maximum Resolution 1920 x 1080 @ 60 Hz				
	Recommended Resolution	1920 x 1080 @	60 Hz		
Power	Rated Voltage	DC 12 V / 3.5 A			
Sound Output Wattage	N/A				
Operating Condition		Syn	c (H/V)	Video	LED
	Normal Mode	0	n/On	Active	On
	Deep Sleep Mode (Set = Off)	0	ff/Off	Off	Off
Operating Conditions	Operating Conditions	Temperature	5 ℃ to 35 ℃	Humidity	10 % to 80 %
	Storage Conditions	Temperature	-20 °C to 60 °C	Humidity	5 % to 95 %

### Included in the Box

#### **Basic Components**

The NC2000 consists of the following components. Please check that these components have been included prior to installation.







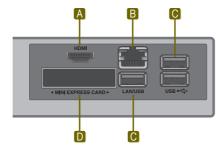


#### **Attention**

• These illustrations may differ from your product and are subject to change.

# Connections

### **Back Panel**



Number	Connection	Description
A HDMI Out Fo		For an HDMI-compatible monitor.
В	LAN Connector	For a LAN cable.
C USB In		For USB-type devices, including memory, hard disk, CD-ROM, keyboard, and mouse.
D	PCI MINI EXPRESS Card Slot	Provided for PCI Mini Express Cards.

### Installation

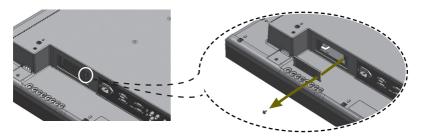
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#### Attention -

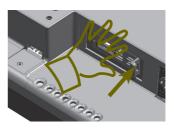
The illustrations shown are to guide your integration and may differ from your product.

Remove the screw and Metal cover.



Attach the Box Guide to the rail slots, and press it upward.

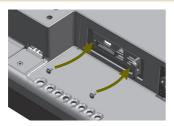






If card does not become fully inserted into the insertion direction. Hit by hand carefully to make fully connected.

Use screws to secure the player and the Box Guide as shown below.





Make sure to read the Important Precautions before using the product.

Keep the User's Guide(CD) in an accessible place for furture reference.

The model and serial number of the SET is located on the back and one side of the SET. Record it below should you ever need service.

MODEL \_\_\_\_\_SERIAL

WARNING - This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

Temporary noise is normal when powering ON or OFF this device.