

User Guide

20" Widescreen LED Monitor

INSIGNIA™

NS-20EM50A13



Contents

Introduction	1
Safety Precautions	1
WARNINGS:	1
Features	1
Package contents	1
Front view	1
Rear view	1
Setting up your monitor	2
Installing the stand base	2
Stand removal for mounting the monitor	2
Making connections	2
Using the on screen display (OSD)	3
Maintaining	3
Care	3
Safety Tips	3
Troubleshooting	3
Troubleshooting questions	3
Specifications	5
Supported Timing Modes	6
Legal notices	6
One-year limited warranty	7

20" Widescreen LED Monitor

Introduction

Congratulations on your purchase of this high-resolution multi-scan color monitor. This color monitor represents the state of the art in monitor design, and is designed for reliable and trouble-free performance. Please read this guide thoroughly before installation.

Safety Precautions

This monitor is manufactured and tested on the principle that a user's safety comes first. However, improper use or installation may result in danger to the monitor as well as to the user. Carefully go over the following WARNINGS before installation and keep this guide handy.

WARNINGS:

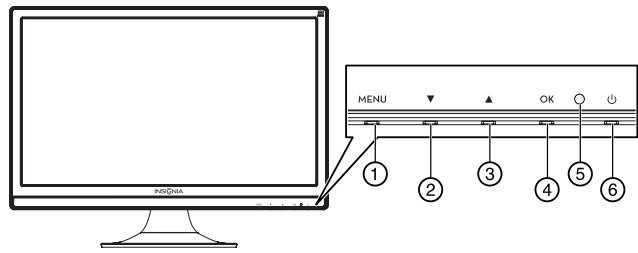
- This monitor should be operated only at the correct power sources indicated on the label on the back of the monitor. If you're unsure of the power supply in your residence, consult your local dealer or power company.
- Do not try to repair the monitor yourself as it contains no user serviceable parts. The monitor should only be repaired by a qualified technician.
- Do not remove the monitor cabinet. There are high-voltage parts inside that may cause electric shock to human bodies, even when the power cord is disconnected.
- Stop using the monitor if the cabinet is damaged. Have it checked by a service technician.
- Put your monitor only in a clean, dry environment. Unplug the monitor immediately if gets wet and consult your service technician.
- Always unplug the monitor before cleaning it. Clean the cabinet with a clean, dry cloth. Apply non-ammonia based cleaner onto the cloth, not directly onto the glass screen.
- Keep the monitor away from magnetic objects, motors, TV sets, and transformers.
- Do not place heavy objects on the cable or power cord.
- For PLUG CABLE EQUIPMENT, the outlet shall be installed near the equipment and shall be easily accessible.
- Due to safety concerns, if the VESA mounting kit is purchased separately, please make sure that the mounting kit is UL-Listed, and replaceable only by service personnel.

Features

Package contents

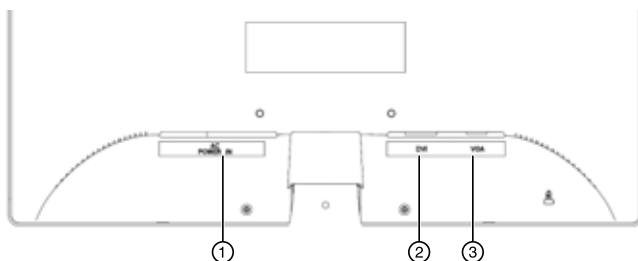
- 20" Widescreen LED monitor
- Power cable
- VGA cable
- Quick Setup Guide

Front view



#	Component	Description
1	MENU	Press to open the on screen display (OSD) menu and enter menu mode. Press again to exit the OSD and return to display mode.
2	▼	In menu mode, press to scroll down or decrease settings in the OSD menus. In normal operation, press to access the <i>Contrast/Brightness/Backlight</i> menu.
3	▲	In menu mode, press to scroll up or increase settings in the OSD menus. In normal operation, press to access Color Vision mode.
4	OK	In menu mode, press to confirm a selection or setting in the OSD menus. In normal operation, press and hold for three seconds to auto adjust the image. Press to enter the input select menu. You can choose VGA or DVI.
5	LED indicator	Turns blue when the monitor is on. Turns off when the monitor is turned off.
6	Power On/Off	Press to turn the monitor on. Press again to turn the monitor off.
	▼ + ▲	In normal operation, press simultaneously to reset contrast and backlight.
	MENU + ▼	In normal operation, press simultaneously to lock/unlock the power button functionality. (So the monitor cannot be turned on or off with the Power button.)
	MENU + ▲	In normal operation, press simultaneously to lock/unlock the MENU button functionality. (So you cannot access the OSD menus by pressing the MENU button.)
	MENU + OK	In normal operation, press simultaneously to switch between similar PC timings (for example 720 x 400 @70 Hz and 640 x 400 @ 70 Hz).

Rear view



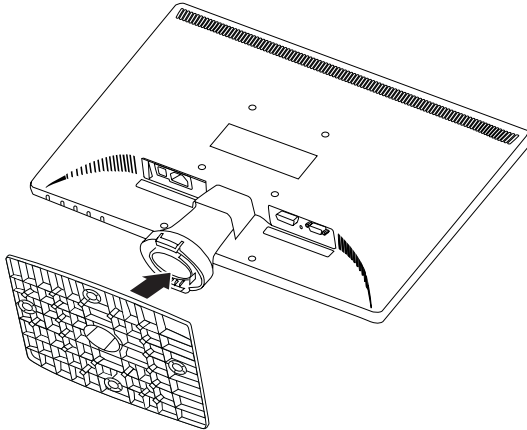
#	Item	Description
1	Power connector	Plug the AC power cord into this connector.
2	DVI jack	Plug an optional DVI connector into this jack.
3	VGA jack	Plug the VGA connector into this jack.

Setting up your monitor

Installing the stand base

To install the stand base:

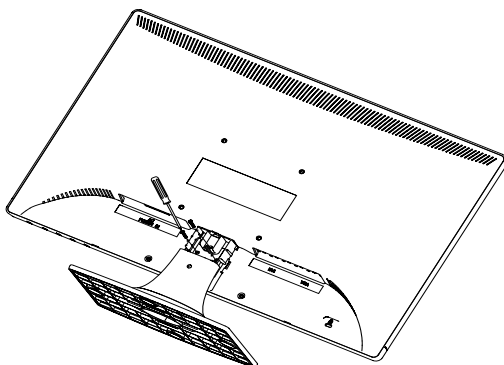
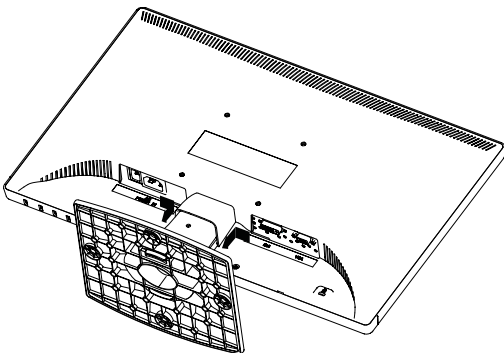
- 1 Remove the monitor from the box and lay it face down on a table, with a soft cloth or towel beneath it to protect the screen.
- 2 Insert the base into the stand column until it clicks into place.



Stand removal for mounting the monitor

To remove the stand base:

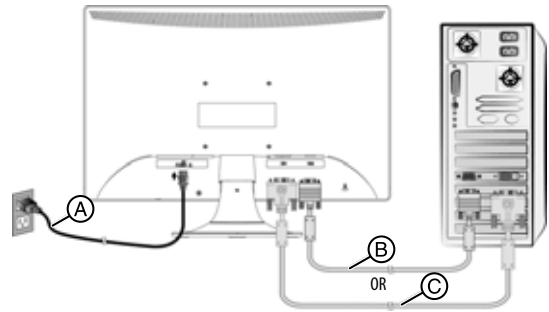
- 1 Lay the monitor face down on a table, with a soft cloth or towel beneath it, to protect the screen.
- 2 Squeeze the sides of the column cover and pull to remove it.
- 3 Using a Phillips screwdriver, remove the three screws that secure the column to the monitor.
- 4 Wiggle the column loose from the monitor.



Making connections

To connect your monitor:

- 1 Connect the power cord (A) to the monitor, then to a properly grounded AC outlet.



- 2 Make sure that both the monitor and the computer are powered OFF. Connect the VGA cable (B) to the computer, then to the monitor.

-OR-

Connect a DVI cable (not included)(C) from the DVI output of the computer to the DVI input of the monitor. If your PC has an HDMI output, you can use an HDMI to DVI cable (not included).

- 3 Turn on the computer, then the monitor.
- 4 If you are using Windows, you may need to set the resolution and refresh rate (example: 1600 x 900 @ 60 Hz).

• Windows 7:

- 1 Click the Start button and select **Control Panel**.
- 2 Under **Appearance and Personalization**, click **Adjust screen resolution**.
- 3 Click the drop-down list next to **Resolution**, move the slider to the resolution you want, then click **Apply**.
- 4 Click **Keep** to use the new resolution, or click **Revert** to go back to the previous resolution.

• Windows Vista:

- 1 Click the **Start** button and select **Control Panel**.
- 2 Click **Appearance and Personalization**, then click **Display Settings**.
- 3 Under **Resolution**, move the slider to the resolution you want, then click **Apply**.

• Windows XP:

- 1 Right-click on your desktop and select **Properties**.
- 2 Click the **Settings** tab at the top of the window.
- 3 Under **Resolution**, move the slider to the resolution you want, then click **Apply**.

-OR-

If you are using a Mac you may need to set the resolution.

- Open the *Apple* menu and select **System Preferences**.
- Click **Displays**, then click **Display**.
- Select the appropriate resolution from the **Resolutions** list.

Using the on screen display (OSD)

To use the on screen display (OSD) menus:

- 1 Press the **MENU** button to open the menus. The *Main Menu* opens.



- 2 Press **▼** or **▲** to select a menu item, then press **OK** to go to that sub-menu. You can select:
 - **Auto Image Adjust**—automatically adjusts Horizontal Position, Vertical Position, Phase (Fine Tune) and Clock (H.Size) of the screen (available only with VGA cable (analog) connections)
 - **Contrast/Brightness**
 - **Contrast**
 - **Brightness**
 - **Backlight**
 - **Input Select**
 - **Color Adjust**
 - **Warm**—Emphasis on the red end of the spectrum.
 - **Normal**—No emphasis.
 - **Cool**—Emphasis on the blue end of the spectrum.
 - **User Color**—to manually adjust the color levels. Press **OK** to select the color to adjust.
 - **Information**—to display information on the current input signal.
 - **Manual Image Adjust**
 - **Horizontal Size**
 - **H./V. Position**
 - **H. Position**
 - **V. Position**
 - **Fine Tune**—to fine tune the phase and clock.
 - **Sharpness**—to adjust the clarity of a non-WXGA+ (1600x900) image.
 - **Video Mode Adjust**—select **Full Screen**, **Over Screen**, or **Aspect Ratio**.
 - **Color Vision Mode**—to select a preset display environment. You can select **Standard**, **Game**, **Cinema**, **Scenery**, **Text**, or **ECO**.

- **Setup Menu**
 - **Language Select**
 - **OSD Position**
 - **H. Position**
 - **V. Position**
 - **OSD Time Out**—to automatically turn off the OSD after a preset period of time.
 - **Memory Recall**—to reset all settings to factory default. Press **OK**.
- 3 When the sub-menu opens, press **▼** or **▲** to go to the item you want to adjust, then press **OK** to select that item.
- 4 Press **▼** or **▲** to adjust the item you selected, then press **MENU** to exit the menu.

Maintaining

Care

- Avoid exposing your monitor to direct sunlight or other heat source. Place your monitor away from the sun to reduce glare.
- Put your monitor in a well ventilated area.
- Do not place any heavy things on top of your monitor.
- Make certain your monitor is installed in a clean and moisture-free area.
- Keep your monitor away from magnets, motors, transformers, speakers, and TV sets.

Safety Tips

- If smoke, abnormal noise, or odor came out of your monitor, you should remove the power cord immediately and call your service center.
- Never remove the back cover of your monitor cabinet. The display unit inside contains high-voltage parts and may cause an electric shock.
- Never try to repair your monitor yourself. Always call your service center or a qualified technician to fix it.

Troubleshooting

Troubleshooting questions

How do I connect my monitor to two computer systems?

- 1 Connect the power cord to the monitor, then to a properly grounded AC outlet.
- 2 Make sure that the monitor and both computers are turned OFF. Connect the included VGA cable to the VGA output jack on one of the computers, then to the VGA input jack on the monitor.
- 3 Connect a DVI cable (not included) from the DVI output jack on the other computer to the DVI input jack on the monitor.
OR
If your PC has an HDMI output, you can use an HDMI to DVI cable (not included).
- 4 Turn ON your computers and monitor. The monitor's blue power LED turns ON.

- 5 You may need to set the resolution and refresh rate on both computers (example: 1600 x 900 @ 60 Hz).

How do I connect two monitors to one computer system?

- 1 Connect the power cord to both monitors, then to properly grounded AC outlets.
- 2 Make sure that both monitors and the computer are turned OFF. Connect VGA cables to the VGA output jacks on the computer, then to the VGA input jack on each monitor.

OR

Connect DVI cables to the DVI output jacks on the computer, then to the DVI input jack on each monitor.

OR

Use a VGA cable connection between one monitor and the computer, and a DVI cable connection between the other monitor and the computer.

Note

If your PC has an HDMI output, you can use an HDMI to DVI cable (not included).

- 3 Turn ON your computer and monitors. The monitor's blue power LED turns ON.
- 4 You will need to choose if you would like your screen to be a duplication of the other monitor or an extension.

Note

You may also need to set the resolution and refresh rate on both computers (example: 1600 x 900 @ 60 Hz).

How do I set the refresh rate of my display?

Windows 7:

- 1 Click the **Start** button, then select **Control Panel**.
- 2 Under **Appearance and Personalization**, click **Display**.
- 3 Click **Adjust** screen resolution on the left of the screen.
- 4 Click **Advanced Setting**.
- 5 Click the **Monitor** tab, then click the drop-down list under **Screen refresh rate** and select your desired refresh rate.
- 6 Click **OK**.
- 7 Click **OK** to exit out of the *Display Settings* window

Windows Vista:

- 1 Click the **Start** button and select **Control Panel**.
- 2 Click **Appearance and Personalization**, then click **Personalization**.
- 3 Click **Display Settings**.
- 4 Click the **Advanced Setting** button.
- 5 Click the **Monitor** tab, then click the drop-down list under **Screen refresh rate** and select your desired refresh rate.
- 6 Click **OK**.
- 7 Click **OK** to close the *Display Settings* window.

Windows XP:

- 1 Right-click on your desktop, then select **Properties**.
- 2 Click the **Settings** tab at the top of the window.
- 3 Click the **Advanced** button.
- 4 Click the **Monitor** tab, then click the drop-down list under **Screen refresh rate** and select your desired refresh rate.
- 5 Click **OK**.
- 6 Click **OK** to close the *Display Settings* window.

Mac:

- 1 Open the *Apple* menu, then select **System Preferences**.
- 2 Click **Displays** under **Hardware**, then click **Display**.
- 3 Click the drop-down list beside **Refresh Rate**, then select your desired refresh rate.

For more information, refer to the *User Manual* that came with your computer or your graphics card.

My picture is not filling the screen. I have black bars around my picture.

This is due to the aspect ratio. Different sources and software programs may be presented in different aspect ratios. Try changing the appearance of the screen... (cross-reference to Manual Image Adjust section of the manual.)

The image is out of focus.

You may need to adjust your resolution. (Add cross-reference to adjusting resolution section of the manual.)

How do I extend my display to a second monitor?

Windows 7:

- 1 Right-click on your desktop, then click **Screen resolution**.
- 2 Click the **Multiple displays** dropdown and select **Extend these displays**.
- 3 Click **OK**.
- 4 Click **Keep** to use the extended display, or click **Revert** to go back to the previous setting.

Windows Vista:

- 1 Right-click on your desktop, then click **Personalize**.
- 2 Click **Display Settings**.
- 3 Click the large dropdown menu choose **2**. (Default Monitor), then click the **Extend the desktop to this monitor** check box.
- 4 Drag the monitor icons to match the way you have your monitors setup on your desk.

Note

To be sure which monitor is 1 or 2 click the **Identify Monitors** button.

- 5 Click **OK**.
- 6 Click **Yes** to use the extended display, or click **No** to go back to the previous setting.

Windows XP:

- 1 Right-click on your desktop, then click **Properties**.
- 2 Click the **Display** dropdown menu and select **2**. (Default Monitor), then click the **Extend my Windows desktop onto this monitor** check box.
- 3 Drag the monitor icons to match the way you have your monitors setup on your desk.

Note

To be sure which monitor is 1 or 2 click the **Identify** button.

- 4 Click **OK**.
- 5 Click **Yes** to use the extended display, or click **No** to go back to the previous setting.

Mac:

- 1 Open the *Apple* menu, then select **System Preferences**.
- 2 Click **Displays** under Hardware, then click **Arrangement**.
- 3 Drag the monitor icons to match the way you have your monitors setup on your desk.
- 4 Close the *Displays* window.

How do I duplicate my screen to a second monitor?

Windows 7:

- 1 Right-click on your desktop, then click **Screen resolution**.
- 2 Click the **Multiple displays** dropdown and select **Duplicate these displays**.
- 3 Click **OK**.
- 4 Click **Keep** to use the extended display, or click **Revert** to go back to the previous setting.

Windows Vista:

- 1 Right-click on your desktop, then click **Personalize**.
- 2 Click **Connect to a projector or other external display**. The Windows Mobility Center opens.
- 3 Click **Connect display**. The new display is detected.
- 4 Select **Duplicate my desktop on all display (mirrored)**, then click **OK**.
- 5 Close the Windows Mobility Center window and the Control Panel.

Windows XP:

- 1 Right-click on the desktop, then click the control panel for your video card (if available).
- 2 Set the display mode on the video card control panel.

Mac:

- 1 Open the *Apple* menu, then select **System Preferences**.
- 2 Click **Displays** under **Hardware**, then click **Arrangement**.
- 3 Check the **Mirror Displays** box.
- 4 Close the *Displays* window.

My power cord or VGA cable is damaged or missing. Can I get a replacement?

Yes, power cords or VGA cables are available. Contact Insignia Customer Support at 1-877-467-4289 or www.insigniaproducts.com

Symptom	Possible Solutions
No power	<ul style="list-style-type: none"> • Make sure A/C power cord is securely connected to the power adapter and the power supply is firmly connected to the monitor. • Plug another electrical device into the power outlet to verify that the outlet is supplying proper voltage. • Make sure a VGA or DVI cable is installed. • Check to see if the blue power LED is ON. • Make sure that the computer is turned ON.
Power on but no screen image	<ul style="list-style-type: none"> • Make sure the VGA cable supplied with the monitor, or DVI cable (not included) is tightly secured to the VGA or DVI output port on back of the computer. If not, tightly secure it. • Adjust the brightness. See "Using the on screen display (OSD)" on page 3.
Wrong or abnormal colors	<ul style="list-style-type: none"> • If any colors (red, green, blue) are missing, check the VGA or DVI cable to make sure it is securely connected. Loose or broken pins in the cable connector could cause an improper connection. • Connect the monitor to another computer. • Make sure that the VGA or DVI cable you are using is not damaged or broken. • Try adjusting the colors on your monitor, see Color Adjust under Using the On Screen Display (OSD). (Make sure to cross-reference or hyperlink the text to this section in the manual). See "Using the on screen display (OSD)" on page 3.

Specifications

Note: Product specifications are subject to change without notice.

LCD Panel	20" (50.8 cm) TFT
Power Management	Energy Star Compliant VESA DPMS compatible <1 W
Display Resolution	WXGA+ 1600 x 900 max. Vertical Frequency 60Hz max.
Pixel Dimensions	0.2768 x 0.2768 mm
LCD Display Color	16.7 M
Tilt	-5° ~ 20°
Active Display Area	17.43 x 9.81 inches (442.8 x 249.07 mm)
Temperature	Operating: 32° F ~ 104° F (0° C ~ +40° C) Storage: -4° F ~ 140° F (-20° C ~ +60° C)
Compliance	cULus, FCC-B, Energy Star
Power	Input voltage AC 100-240 V

Supported Timing Modes

VGA	720 x 400 @ 70 Hz
VGA	640 x 480 @ 60 Hz
MAC	640 x 480 @ 67 Hz
VESA	640 x 480 @ 72 Hz
VESA	640 x 480 @ 75 Hz
VESA	800 x 600 @ 56 Hz
VESA	800 x 600 @ 60 Hz
VESA	800 x 600 @ 72 Hz
VESA	800 x 600 @ 75 Hz
MAC	832 x 624 @ 75 Hz
VESA	1024 x 768 @ 60 Hz
VESA	1024 x 768 @ 70 Hz
VESA	1024 x 768 @ 75 Hz
VESA	1152 x 864 @ 75 Hz
MAC	1152 x 870 @ 75 Hz
VESA	1280 x 720 @ 60 Hz
VESA	1280 x 960 @ 60 Hz
VESA	1280 x 1024 @ 60 Hz
VESA	1280 x 1024 @ 75 Hz
VESA	1440 x 900 @ 60 Hz
VESA	1440 x 900 @ 75 Hz
VESA	1600 x 900 @ 60 Hz

Caution

Do not set the graphic card in your computer to exceed these maximum refresh rates. Doing so may result in permanent damage to your monitor.

Legal notices

FCC Part 15

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

This equipment has been tested and found to comply within 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 instructions, 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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and 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 technician for help.

FCC warning

Changes or modifications not expressly approved by the party responsible for compliance with the FCC Rules could void the user's authority to operate this equipment.

Note

If necessary, shielded interface cables and AC power cord must be used to meet the emission level limits.

One-year limited warranty

Insignia Products ("Insignia") warrants to you, the original purchaser of this new **NS-20EM50A13** ("Product"), that the Product shall be free of defects in the original manufacture of the material or workmanship for a period of one (1) year from the date of your purchase of the Product ("Warranty Period"). This Product must be purchased from an authorized dealer of Insignia brand products and packaged with this warranty statement. This warranty does not cover refurbished Product. If you notify Insignia during the Warranty Period of a defect covered by this warranty that requires service, terms of this warranty apply.

How long does the coverage last?

The Warranty Period lasts for 1 year (365 days) from the date you purchased the Product. The purchase date is printed on the receipt you received with the Product.

What does this warranty cover?

During the Warranty Period, if the original manufacture of the material or workmanship of the Product is determined to be defective by an authorized Insignia repair center or store personnel, Insignia will (at its sole option): (1) repair the Product with new or rebuilt parts; or (2) replace the Product at no charge with new or rebuilt comparable products or parts. Products and parts replaced under this warranty become the property of Insignia and are not returned to you. If service of Products or parts are required after the Warranty Period expires, you must pay all labor and parts charges. This warranty lasts as long as you own your Insignia Product during the Warranty Period. Warranty coverage terminates if you sell or otherwise transfer the Product.

How to obtain warranty service?

If you purchased the Product at a retail store location, take your original receipt and the Product to the store you purchased it from. Make sure that you place the Product in its original packaging or packaging that provides the same amount of protection as the original packaging. If you purchased the Product from an online web site, mail your original receipt and the Product to the address listed on the web site. Make sure that you put the Product in its original packaging or packaging that provides the same amount of protection as the original packaging.

To obtain in-home warranty service for a television with a screen 25 inches or larger, call 1-888-BESTBUY. Call agents will diagnose and correct the issue over the phone or will have an Insignia-approved repair person dispatched to your home.

Where is the warranty valid?

This warranty is valid only to the original purchaser of the product in the United States, Canada, and Mexico.

What does the warranty not cover?

This warranty does not cover:

- Customer instruction
- Installation
- Set up adjustments
- Cosmetic damage
- Damage due to acts of God, such as lightning strikes
- Accident
- Misuse
- Abuse
- Negligence
- Commercial use
- Modification of any part of the Product, including the antenna
- Plasma display panel damaged by static (non-moving) images applied for lengthy periods (burn-in).

This warranty also does not cover:

- Damage due to incorrect operation or maintenance
- Connection to an incorrect voltage supply
- Attempted repair by anyone other than a facility authorized by Insignia to service the Product
- Products sold as is or with all faults
- Consumables, such as fuses or batteries
- Products where the factory applied serial number has been altered or removed

REPAIR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS YOUR EXCLUSIVE REMEDY. INSIGNIA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR THE BREACH OF ANY EXPRESS OR IMPLIED WARRANTY ON THIS PRODUCT, INCLUDING, BUT NOT LIMITED TO, LOST DATA, LOSS OF USE OF YOUR PRODUCT, LOST BUSINESS OR LOST PROFITS. INSIGNIA PRODUCTS MAKES NO OTHER EXPRESS WARRANTIES WITH RESPECT TO THE PRODUCT, ALL EXPRESS AND IMPLIED WARRANTIES FOR THE PRODUCT, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF AND CONDITIONS OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE WARRANTY PERIOD SET FORTH ABOVE AND NO WARRANTIES, WHETHER EXPRESS OR IMPLIED, WILL APPLY AFTER THE WARRANTY PERIOD. SOME STATES, PROVINCES AND JURISDICTIONS DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS, WHICH VARY FROM STATE TO STATE OR PROVINCE TO PROVINCE.

Contact Insignia:

For customer service please call 1-877-467-4289
www.insigniaproducts.com

Distributed by Best Buy Purchasing, LLC
7601 Penn Avenue South, Richfield, Minnesota, U.S.A.
55423-3645

© 2012 BBY Solutions, Inc.

All rights reserved. INSIGNIA is a trademark of BBY Solutions, Inc. Registered in some countries. All other products and brand names are trademarks of their respective owners.

INSIGNIA

www.insigniaproducts.com (877) 467-4289

Distributed by Best Buy Purchasing, LLC
7601 Penn Avenue South, Richfield, MN 55423-3645 USA
© 2012 BBY Solutions, Inc.

All rights reserved. INSIGNIA is a trademark of BBY Solutions, Inc. Registered in some countries.
All other products and brand names are trademarks of their respective owners.

ENGLISH
12-0349